Appendix A

Notice of Preparation, Initial Study, and Scoping Comments

ESA

A-1 Notice of Preparation (NOP)

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION

DATE: October 30, 2015

PROJECT TITLE: Willowbrook Transit Oriented District Specific Plan
County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

PROJECT LOCATION: The Specific Plan area is located in the unincorporated community of Willowbrook within Los Angeles County. It is located along the I-105 Freeway and includes the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and the City of Compton to the east.

The County of Los Angeles is the lead agency and, after conducting an Initial Study for the Project, has determined that it will prepare an Environmental Impact Report (EIR). In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to responsible agencies, interested parties, and trustee agencies responsible for natural resources that may be affected by the Project.

PROJECT LOCATION AND ENVIRONMENTAL SETTING

The Specific Plan area generally encompasses a half mile radius south of the Willowbrook/Rosa Parks Metro station, which is a major transfer point between the Metro Blue Line and Green Line. At the station, the Green Line is located in the median of the I-105 Freeway (Glenn Anderson). The Specific Plan area totals 312 acres. Major activity centers within the Specific Plan area are the Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King Jr. Center for Public Health. See attached project boundary map.

North of the Specific Plan area is predominantly residential with some commercial uses. The City of Lynwood is directly adjacent to the Specific Plan's eastern border and land uses are manufacturing, public uses and commercial. South and west of the Specific Plan area is predominantly residential.

PROJECT SUMMARY

The Specific Plan has been prepared to introduce a transit oriented development (TOD) pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicles miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects.

The Specific Plan would facilitate development by rezoning and amending General Plan land uses to include mixed uses, increased residential densities, and additional neighborhood-serving retail uses. A key part of the Specific Plan is also to preserve existing residential uses in certain areas. The proposed zoning includes: Mixed Use 1 (MU-1); Mixed Use 2 (MU-2); MLK Medical; Drew Educational; Imperial Commercial; Willowbrook Residential 1; Willowbrook Residential 2; Willowbrook Residential 3; and Open Space (O-S). Overall, the Specific Plan would accommodate an additional 1,734 dwelling units and 2,630,306 square feet of non-residential land use.

The Specific Plan would largely maintain the existing street system in its current configuration, with some improvements designed to improve access, circulation, and walkability. Road diets would also be used to aid the circulation system.

The Specific Plan would improve pedestrian circulation by connecting all major activity areas through sidewalk and intersection improvements. In addition, a combination of Class I, Class II, Class III and potentially Class IV facilities would provide a connected and integrated bicycle network throughout the Specific Plan area that connects activity centers and neighborhoods to the Willowbrook/Rosa Parks Station and adjacent communities. Bicycle amenities would be provided at appropriate locations such as bicycle stations.

In 2012, Los Angeles County prepared the *MLK Medical Center Campus Master Plan & the Willowbrook MLK Wellness Community Vision* to guide the development of the campus. It is the County's intent that the Specific Plan serve as the regulatory document for the buildout of the campus. Future development within the campus will be required to comply with the provisions of the Specific Plan; all subsequent development within the campus will be subject to the mitigation requirements of the EIR being prepared for the Specific Plan.

The draft Specific Plan is available for viewing at http://planning.lacounty.gov/willowbrook/tod.

POTENTIAL PROJECT IMPACTS: Based on the Initial Study determination, an EIR is necessary for the proposed Project. Based on a preliminary assessment of potential environmental impacts that may occur as a result of the Project, the areas of potential environmental impact to be addressed in the Programmatic EIR will include at least the following:

Potential Hazards

- Geology/Soils
- Noise
- Hazards/Hazardous Materials

Potential Impacts to Resources

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use/Planning

Potential Impacts to Services

- Transportation/Traffic

- Public Services
- Recreation
- Utilities/Services
- Population/Housing

The only environmental factors that were not found to be potentially affected are Agriculture/Forest Resources, Biological Resources, and Mineral Resources. There are multiple mandatory findings of significance. In addition, environmental issues that do not rise to the level of significant impacts will be addressed in the EIR in a separate section entitled "Impacts Found to Be Less Than Significant."

NOTICE OF PREPARATION REVIEW AND COMMENTS

The NOP is being distributed to solicit written comments regarding the scope and content of the environmental analysis to be included in the EIR. The County has prepared this NOP in accordance with the State CEQA Guidelines.

The review period for this NOP is from **October 30, 2015 to November 30, 2015**. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than **November 30, 2015**. Please direct all written comments to the following address:

Connie Chung, AICP
County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, California 90012
Telephone: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

SCOPING MEETING

To assist in local participation, a Scoping Meeting will be held to present the proposed project and to solicit suggestions from the public and responsible agencies on the content of the Draft EIR. The Scoping Meeting will be held at the MLK H. Claude Hudson Auditorium, Martin Luther King, Jr. Medical Center, 12021 S. Wilmington Avenue, Los Angeles, CA, 90059, on **November 21, 2015, from 10:00 am to 12:00 pm.**

REVIEW MATERIALS

Additional copies of this NOP are available for public review on the Department of Regional Planning website: http://planning.lacounty.gov/willowbrook/TOD as well as at the following libraries:

Willowbrook Library
11838 Wilmington Ave
Los Angeles, CA 90059

Mark Twain Public Library
9621 S Figueroa St
Los Angeles, CA 90003

Compton Library
240 W Compton Blvd
Compton, CA 90220

Los Angeles Public Library - Alma Reaves Woods - Watts Branch
10205 Compton Ave
Los Angeles, CA 90002

A C Bilbrew Library (Temporary Location)
12603 S Broadway
Los Angeles, CA 90061

Hollydale Library
12000 Garfield Ave
South Gate, CA 90280

A-2 Initial Study

Environmental Checklist Form (Initial Study)

County of Los Angeles, Department of Regional Planning

Project title: Willowbrook Transit Oriented District (TOD) Specific Plan/ Project No. R2015-02007/ Case Nos. RADV T201500004, RENV T201500136, RPA T201500005, RSP T201500001, RZC T201500006

Lead agency name and address: Los Angeles County, 320 West Temple Street, Los Angeles, CA 90012

Contact Person and phone number: Connie Chung, AICP, (213) 974-6417

Project sponsor's name and address: Los Angeles County, 320 West Temple Street, Los Angeles, CA 90012

Project location: The Specific Plan area is located in the Willowbrook community, which is an unincorporated community within Los Angeles County. It is located along the I-105 Freeway at the Wilmington Avenue interchange, and at the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and City of Compton to the east (**Figure 1, Regional Location**).

The proposed Specific Plan area is focused on lands around the Willowbrook/Rosa Parks Station. The Willowbrook/Rosa Parks Station is a major transfer point between the Metro Blue Line and Green Line. At the station, the Green Line is located in the median of the I-105 Freeway (Glenn Anderson), which is an above grade freeway location; and access to the Blue Line is at grade, below the Green Line. The Specific Plan generally encompasses a half mile radius south of the station (**Figure 2, Project Location**).

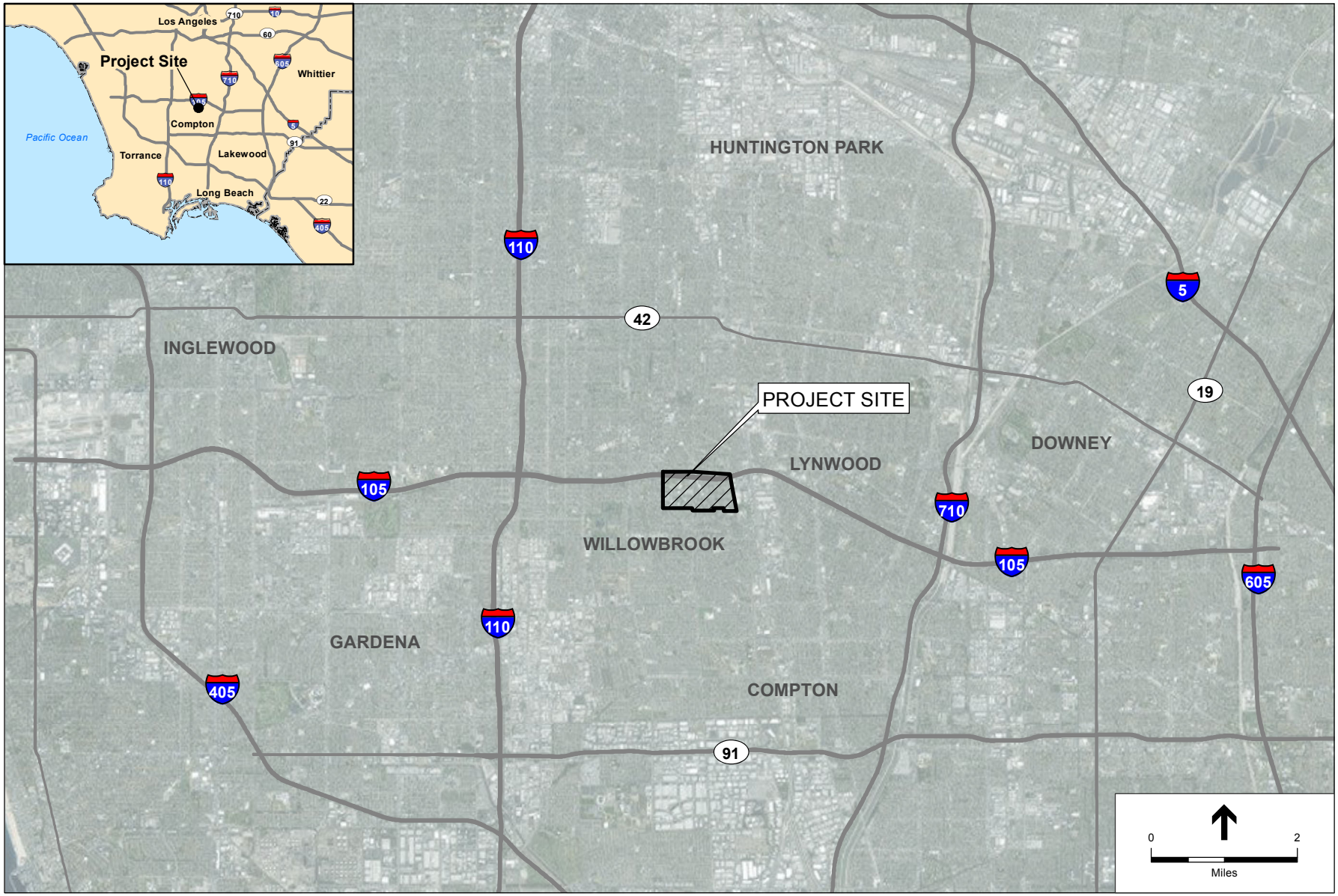
APN: Various *USGS Quad*: Southgate

Gross Acreage: The Specific Plan area totals 312 acres.

General plan designations: Major Commercial, Residential (low, low/medium, medium and high density), Open Space, Public and Semi-Public Facilities and Transportation (**Figure 3, Existing General Plan Designations**)

Community/Area wide Plan designation: Willowbrook/Los Angeles County General Plan Metro Planning Area

Zoning: C-2 (neighborhood commercial), C-3 (unlimited commercial), M-1 (light manufacturing), MXD (mixed use development), R-1 (Single-family residence), R-2 (two-family residence), and R-3 (limited multiple residence) (**Figure 4, Existing Zoning**)

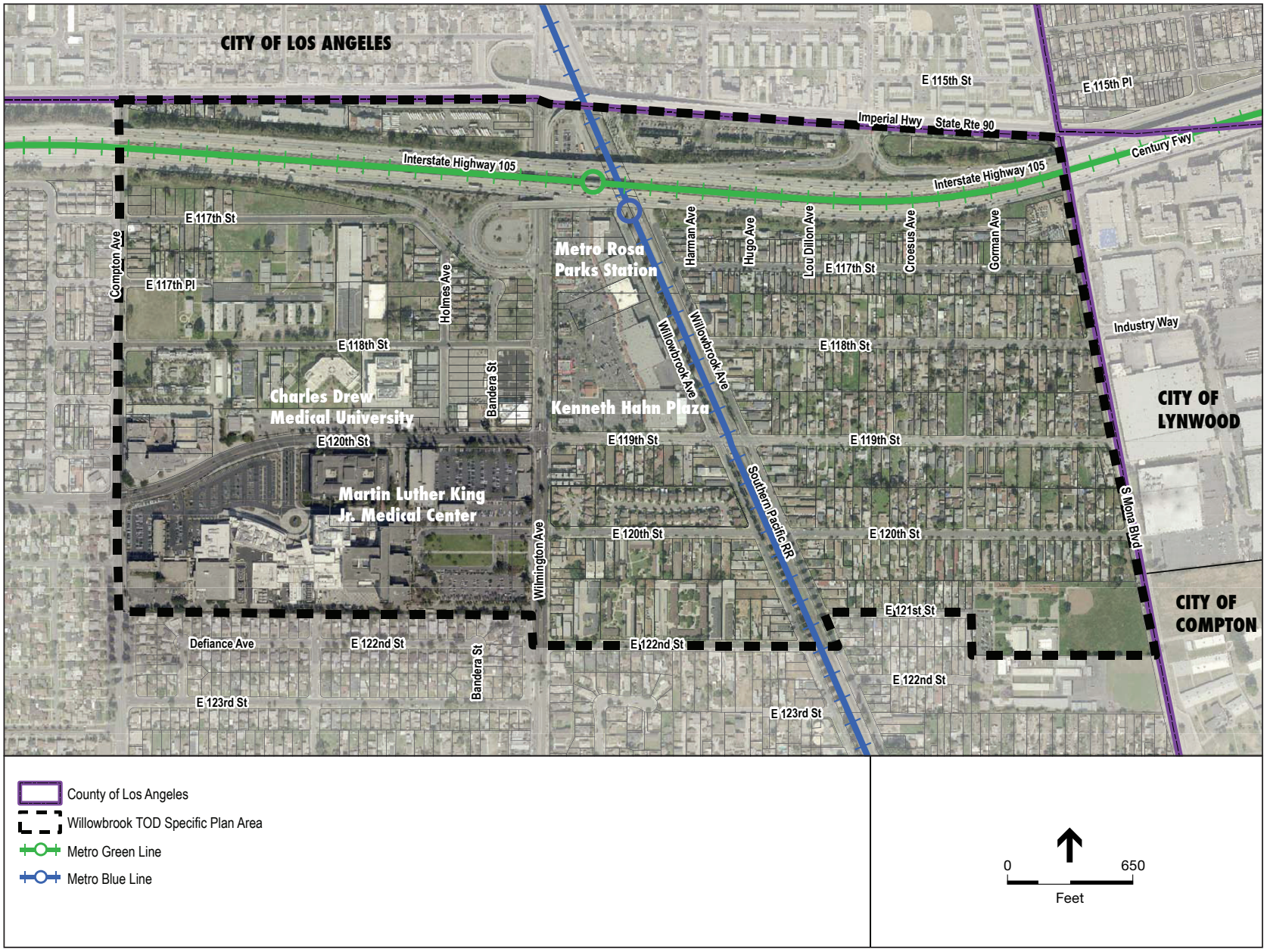


SOURCE: ESRI

Willowbrook TOD Specific Plan . 130631

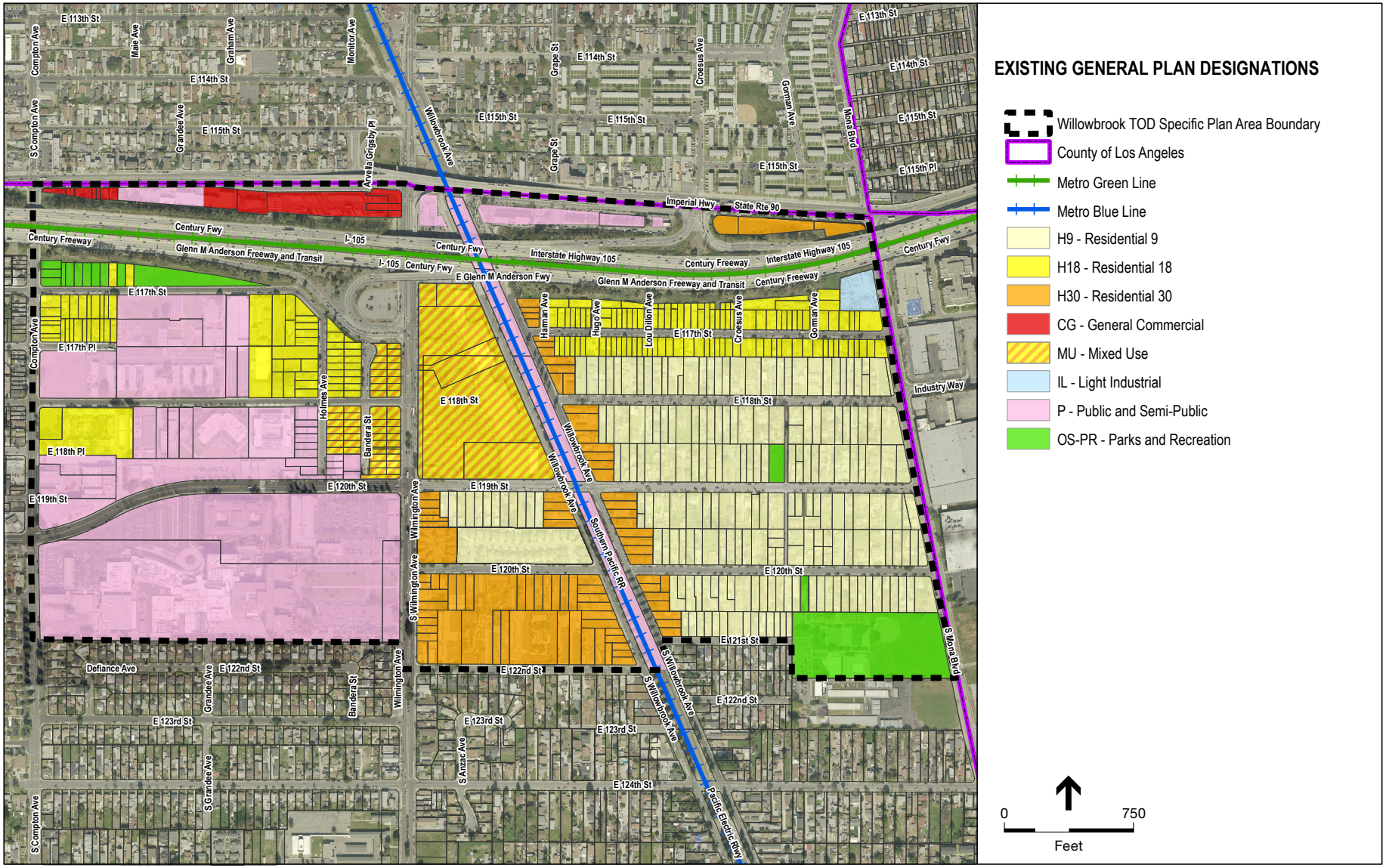
Figure 1

Regional Location



SOURCE: Willowbrook TOD Specific Plan

Figure 2
Project Location

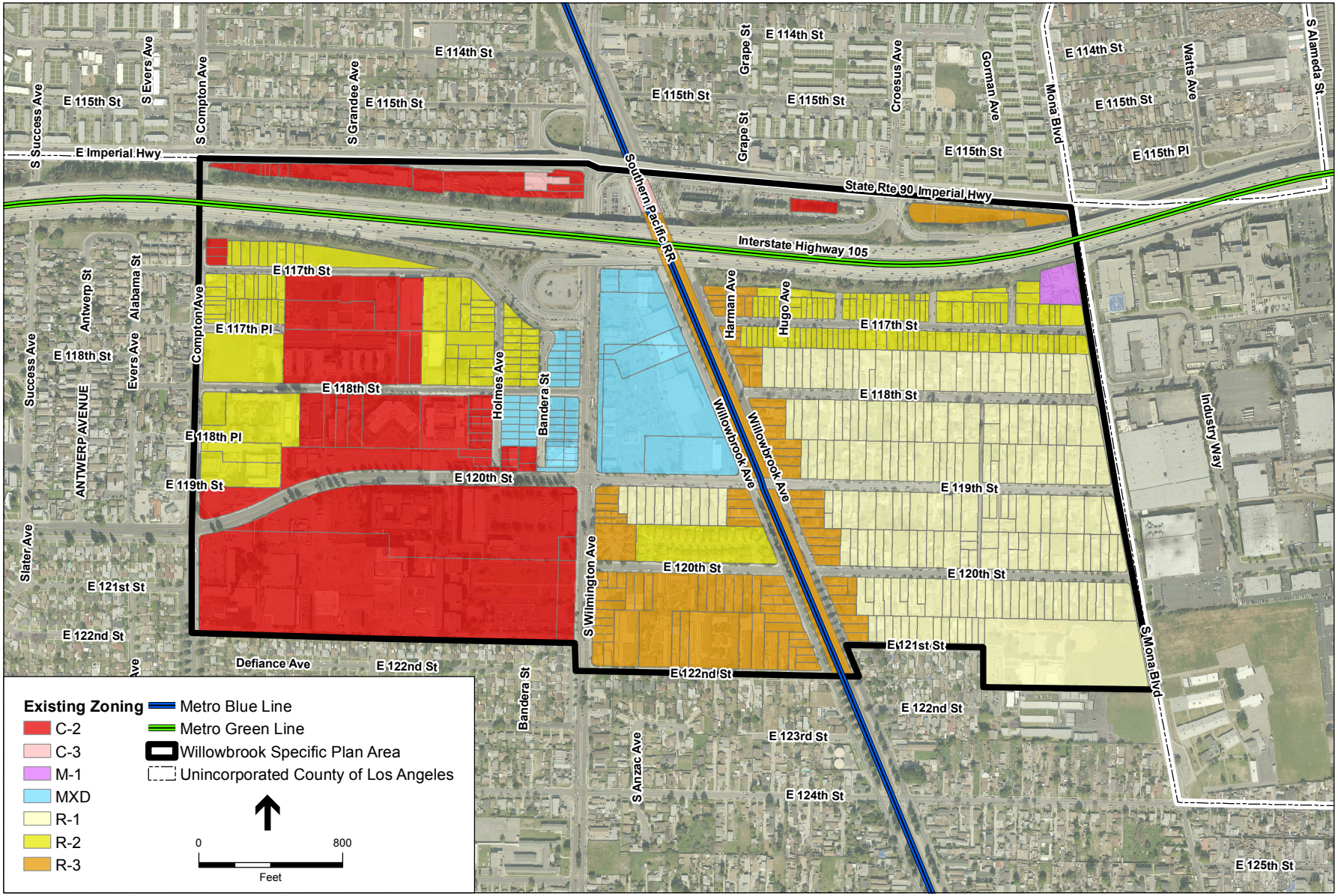


SOURCE: Willowbrook TOD Specific Plan

Willowbrook TOD Specific Plan . 130631

Figure 3

Existing General Plan Designations



SOURCE: ESRI

Willowbrook TOD Specific Plan . 130631

Figure 4

Existing Zoning

Description of project: The proposed Specific Plan is a County-initiated, Los Angeles County Metropolitan Transit Authority (Metro) grant-funded planning document that has been prepared to introduce a transit oriented development pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicle miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects.

The proposed Specific Plan would facilitate development by rezoning and amending the General Plan land uses of parcels within a half mile radius south of the Willowbrook/Rosa Parks Station to include mixed uses, increased housing densities, and additional neighborhood-serving retail uses. The proposed zoning as shown on **Figure 5** includes: Mixed Use 1 (MU-1); Mixed Use 2 (MU-2); MLK Medical; Drew Educational; Imperial Commercial; Willowbrook Residential 1; Willowbrook Residential 2; Willowbrook Residential 3; and Open Space (O-S). **Table 1** shows the increase in development that would result from build out of the proposed Specific Plan. **Table 2** shows the existing acreage, zoning and land uses that would be revised by implementation of the proposed Specific Plan.

TABLE 1
DEVELOPMENT GENERATED FROM BUILDOUT OF THE PROPOSED SPECIFIC PLAN

	Residential Units	Non-Residential (SF)
Buildout of Proposed Specific Plan Zoning	2,702	4,540,830
Existing Development	968	1,910,524
Net New Development	**1,734**	**2,630,306**

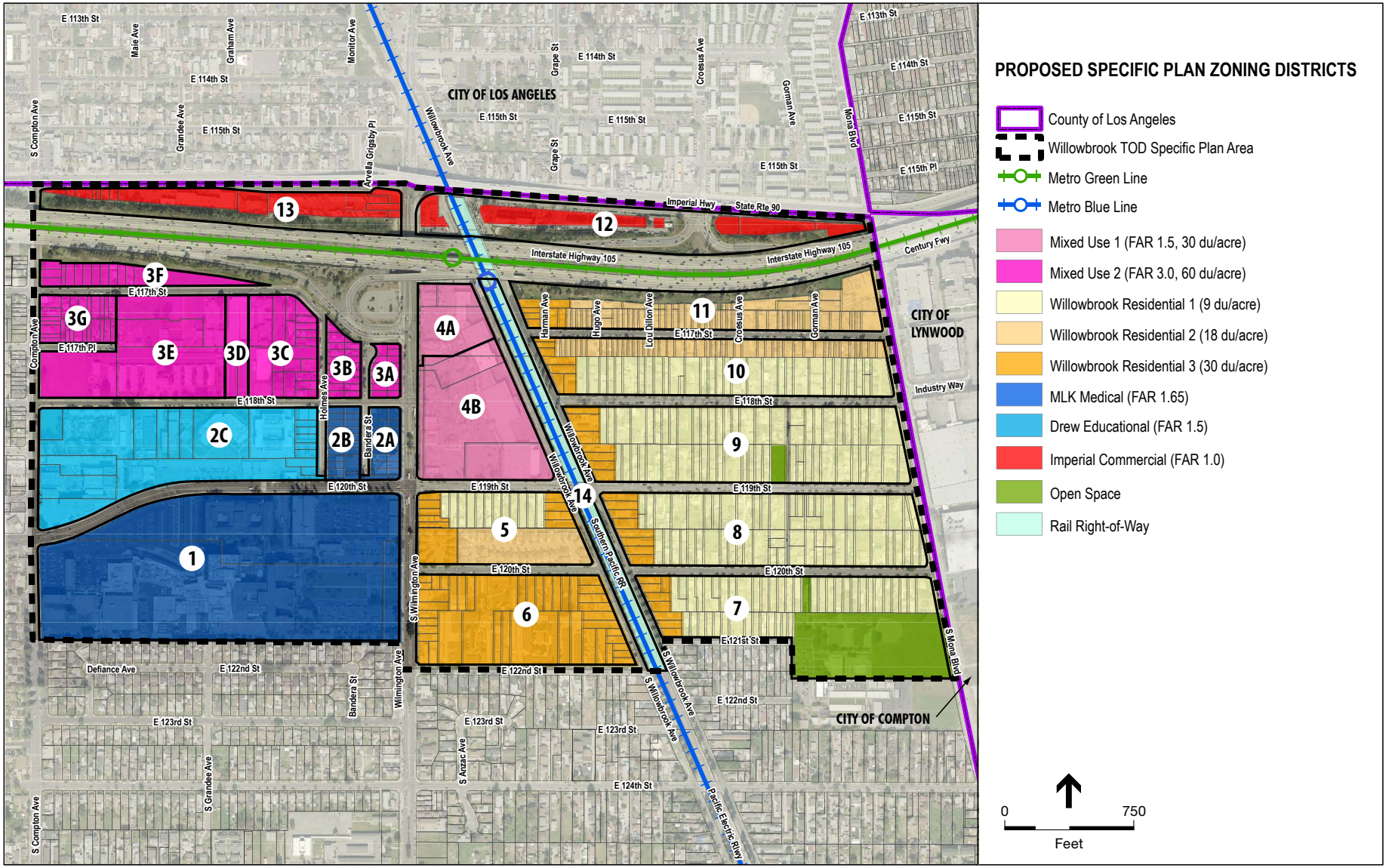
SOURCE: The Arroyo Group, 2015.

Specific Plan Subareas - Existing Uses

The existing land uses within the Specific Plan area include the Martin Luther King, Jr. (MLK) Medical Center Campus, Charles R. Drew University of Medicine and Science (CDU), Kenneth Hahn Plaza, Willowbrook Library, and the MLK Center for Public Health. The Specific Plan area is divided into seven distinct subareas that support a range of land uses, as described below and shown in **Figure 6**.

MLK Medical Center and Associated Facilities: The medical center campus is bound by Wilmington Avenue to the east, E. 120th Street to the north, Compton Avenue to the west, and a residential neighborhood to the south. The approximately 38-acre campus includes the MLK Community Hospital, which serves approximately 1.2 million residents throughout South Los Angeles including Compton, Inglewood, Watts, Willowbrook and Lynwood. In addition, the MLK Center for Public Health is adjacent to the hospital and is operated by the County of Los Angeles.

In 2011, Los Angeles County certified an environmental impact report for the MLK Medical Center Campus Redevelopment Project, Tiers I and II. Tier I development consisted of the MLK Multi-Service Ambulatory Care Center which has been developed, and is now part of the Specific Plan area's existing setting. Tier II programmatically considered mixed-use development including: medical office, commercial, retail, office space, recreation, and multi-family residential uses.



SOURCE: Willowbrook TOD Specific Plan

Figure 5
Proposed Zoning

TABLE 2
SUMMARY OF SPECIFIC PLAN ZONING AND GENERAL PLAN LAND USE AMENDMENTS

Subarea	Group	Existing Zoning and Land Use	Existing Residential Units	Existing Non-Residential (SF)	Proposed Zoning and Land Use	Capacity for Residential Units	Capacity for Non-Residential (SF)
MLK	1	Public	-	890,891	MLK Medical	100	2,139,413
MLK	2A	Public/Parking	-	33,000	MLK Medical	-	55,084
MLK	2B	Public/Parking	-	5,960	MLK Medical	-	5,960
CDU	2C	Institutional/Vacant/Public	49	477,842	Drew Educational	119	722,990
Northwest	3A	Vacant	-	-	Mixed Use 2	105	8,939
Northwest	3B	Single Family Residential/Vacant	19	-	Mixed Use 2	83	56,865
Northwest	3C	Public/Residential/Vacant.	30	16,816	Mixed Use 2	255	173,065
Northwest	3D	Institutional	-	150,000	Mixed Use 2	-	351,610
Northwest	3E	Vacant/Public	-	86,684	Mixed Use 2	553	375,433
Northwest	3F	Residential/Vacant	4	-	Mixed Use 2	145	98,494
Northwest	3G	Residential/Vacant	24	3,359	Mixed Use 2	134	91,373
Kenneth Hahn	4A	Retail/Commercial	-	49,447	Mixed Use 1	48	40,761
Kenneth Hahn	4B	Retail/Commercial	-	139,839	Mixed Use 1	264	179,355
Residential	5	Residential/Vacant/Religious	83	1,900	Willowbrook Residential	96	1,900
Residential	6	Residential/Vacant	272	-	Willowbrook Residential 3	278	-
Residential	7	Residential/Open Space	70	16,728	Willowbrook Residential 1	70	16,728
Residential	8	Residential/Vacant	99	-	Willowbrook Residential 1	102	-
Residential	9	Residential/Vacant	116	0	Willowbrook Residential 1	120	-
Residential	10	Residential//Vacant/Religious	129	2,112	Willowbrook Residential 1	132	2,112
Residential	11	Residential/Vacant/Industrial	67	-	Willowbrook Residential 2	91	-
Imperial Highway Corridor	12	Vacant/Rail Right-of-Way/Park and Ride	-	-	Imperial Commercial	-	55,281
Imperial Highway Corridor	13	Parking/Institutional/Public/Retail/ Commercial, Residential	6	35,945	Imperial Commercial	6	115,467
Metro Station	14	Rail Right-of-Way	-	-	Rail Right-of-Way	-	-
Totals			968	1,910,524		2,702	4,540,830

In 2012, Los Angeles County prepared a MLK Medical Center Campus Master Plan & the Willowbrook MLK Wellness Community Vision to guide Tier II development of the campus. The master plan and community vision were not formally adopted by the Los Angeles County Board of Supervisors, and it is the County's intent that the Willowbrook TOD Specific Plan serve as the regulatory document for buildout of the campus. Thus, while the master plan and community vision provides a guiding framework for buildout of the medical campus, future development within the campus will be required to comply with the provisions of the Willowbrook TOD Specific Plan. While the construction of the MLK Community Hospital was subject to the mitigation measures of the 2011 EIR, all subsequent development within the campus will be subject to the mitigation requirements of the EIR being prepared for the Willowbrook TOD Specific Plan.

CDU: Immediately north of the MLK Medical Center campus are CDU and the King/Drew Magnet High School. The high school is a four story building on the northeast corner of Compton Avenue and 120th Street and is a part of the Los Angeles Unified School District system. These institutions are bounded by Holmes Avenue to the east, Compton Avenue to the west, 120th Street to the south and 118th Street to the north.

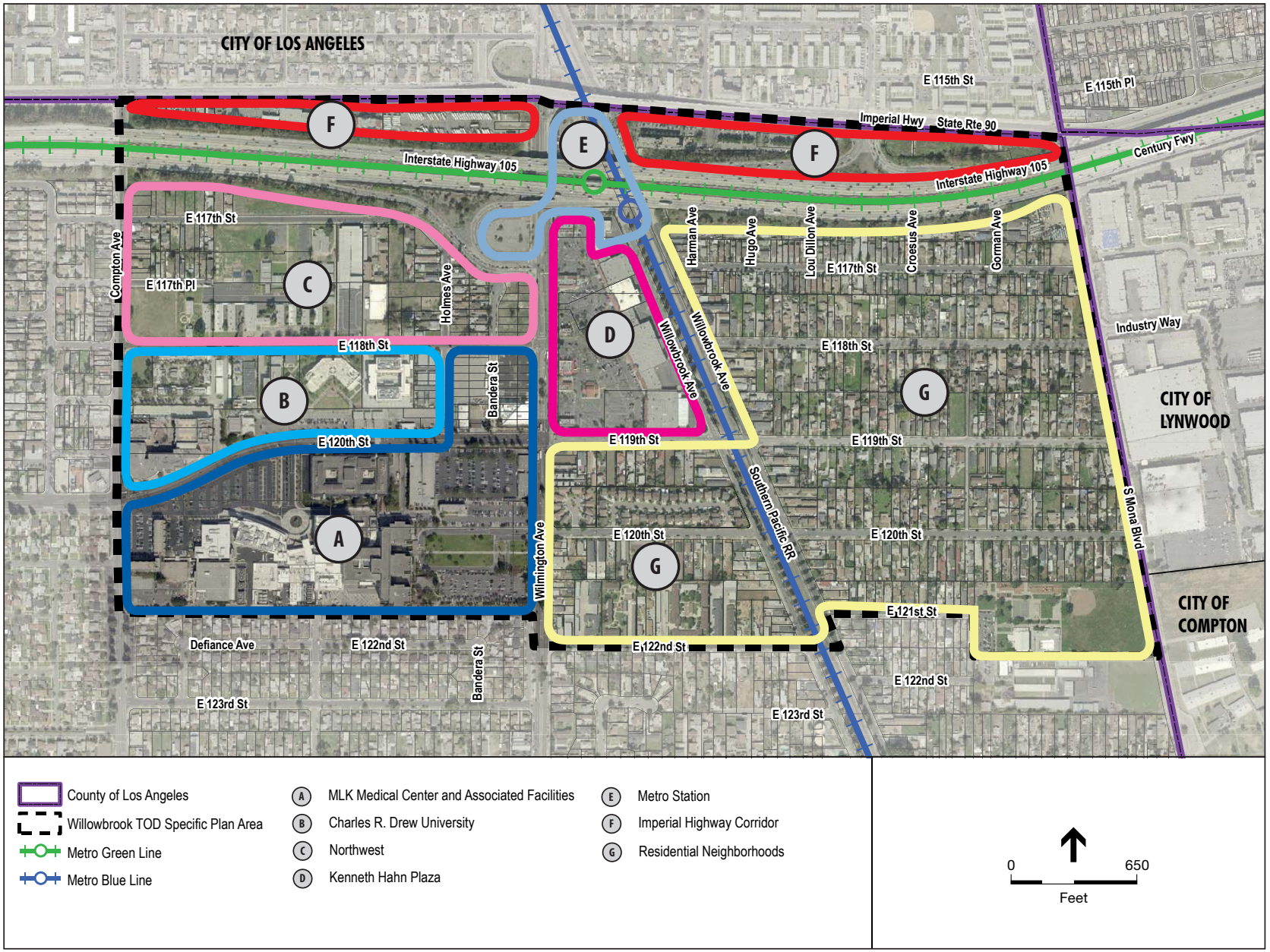
Northwest: The northwest subarea encompasses a variety of uses, including educational, retail, residential and institutional. Several vacant lots, owned by the Los Angeles County Community Development Commission (CDC), are located along E. 117th Street. A large vacant site on the northeast corner of E. 118th Street and Compton Avenue is owned by the Compton Unified School District. The educational uses include Lincoln-Drew Elementary School, a part of the Compton Unified School District (CUSD), and the Barack Obama Charter School (an Ingenium Charter School), which are both located north of E. 118th Street. CDU also owns and operates a two-story parking garage and parking lot in this subarea. Other uses in this subarea include a mini-mart, municipal water well and storage and a mix of single family homes, duplexes and multifamily structures. A mixed-use affordable housing and County public library project will break ground at the corner of Wilmington Avenue and 118th street in 2016.

Kenneth Hahn Plaza: Kenneth Hahn Plaza is a privately owned shopping center with approximately 189,287 square feet of retail/commercial space that is located on County-owned land immediately south of the Willowbrook/Rosa Parks Station, and bound by Wilmington Avenue to the west, 119th Street to the south and Willowbrook Avenue to the east. The anchor tenant is a Food 4 Less grocery store; and other tenants include Rite-Aid, General Discount, DaVita Dialysis Center, McDonalds, Taco Bell, Pizza Hut, and Denny's. The Plaza also includes the Willowbrook Library (soon to be relocated) and a Los Angeles County Sheriff's Department substation.

Metro is acquiring approximately 1.5 acres of land on the northern end of the Plaza for expansion of the Willowbrook/Rosa Parks Station. The rest of the Plaza site is being purchased by the shopping center operator, Kimco.

Metro Station: The Willowbrook/Rosa Parks station is adjacent to Kenneth Hahn Plaza, but is blocked off by a fence. Access to the residential neighborhoods to the east of the rail line is limited. Metro is currently implementing the Willowbrook/Rosa Parks Station Improvement Project, which would improve the existing physical conditions of the station. Specific improvements include lighting, signage, and pedestrian access to and from the surrounding neighborhood.

Imperial Highway Corridor: The uses along Imperial Highway Corridor are generally a mix of auto repair, retail, residential, Metro facilities, and underutilized and vacant lots. A school bus



SOURCE: Willowbrook TOD Specific Plan

Figure 6
Proposed Land Use Subareas

parking lot and a Metro maintenance yard are located to the west of Wilmington Avenue, and a Metro parking lot is located to the east of Wilmington Avenue. A barber shop and auto shop (towing) are located further west, near Compton Avenue. In addition, a few new homes have been built recently, and a vacant site owned by the Housing Authority for the City of Los Angeles is located within this corridor. On the north side of Imperial Highway (and not within the Specific Plan area) is Imperial Courts, a public housing project.

Residential Neighborhoods: Residential areas within the Specific Plan area include a mix of single family homes, duplexes, apartments, and condominiums and townhouses, which comprise just over 30 percent of the total Specific Plan area. The residential area south of Kenneth Hahn Plaza, east of Wilmington Avenue and west of Willowbrook Avenue is primarily multi-family, with a mix of apartments and detached town homes.

The residential area bounded by Mona Boulevard, 105 Freeway, Willowbrook Avenue and 121st Street contains mostly single-family uses, with the exception of the Willowbrook Avenue East frontage along the Metro Blue Line tracks, which is primarily multi-family use.

Specific Plan Subareas - Proposed Zoning

The Specific Plan area proposes new zoning designations, as described below and shown in Figure 5.

Mixed Use 1 (MU-1) (Kenneth Hahn Plaza Subarea): The Mixed Use 1 (MU-1) zone is intended to provide commercial and residential development with an emphasis on neighborhood serving retail, restaurant and service uses. The Specific Plan envisions a large retail or mixed use center, with a neighborhood plaza or community gathering space as a focal point and strong pedestrian connections to the Willowbrook/Rosa Parks Station, as well as the educational and medical campuses to the west. The proposed density for Mixed Use 1 (MU-1) zone is 1.5 floor area ratio (FAR) and 30 dwelling units per acre.

Mixed Use 2 (MU-2) (Northwest Subarea): The Mixed Use 2 (MU-2) zone is intended to provide commercial and residential development with an emphasis on employment generating uses and residential infill development. The area is appropriate for office, business park, or mixed use developments, with a significant open space component and strong pedestrian connections to the Willowbrook/Rosa Parks Station, and the educational and medical campuses to the south.

The Specific Plan would implement a mixed use district with employment generating uses and high-density residential infill within the Northwest Subarea. The employment generating uses are intended for medical back office, laboratory facilities, hospital equipment facility; medical or university support businesses that provide job opportunities. The high-density residential infill would provide housing for current and future workers, students, and residents in the area. The proposed density for Mixed Use 2 (MU-2) zone is 3.0 FAR and 60 dwelling units per acre.

MLK Medical (MLK Medical Center and Associated Facilities Subarea): The MLK Medical zone is established to maintain and promote medical, clinic, medical office, and associated uses such as incidental retail, supportive residential and parking. This subarea includes the MLK Medical Center campus, which includes the Los Angeles County Multi-Service Ambulatory Care Center (MACC) that opened in 2014 and provides outpatient services including general medicine, cardiology, dermatology, dentistry, geriatrics, HIV and AIDS care, neurology, orthopedics and physical therapy. In addition, the campus includes the new MLK Community Hospital, which opened on July 7, 2015 and has a total of 131 beds, including 93 medical/surgical beds, 20 intensive

care beds and 18 obstetrical beds. In addition, the hospital has a 21-bed emergency department. A 50,000 square foot medical office building and a 1,400 car parking garage are also in the planning and design stages within the MLK campus.

The Specific Plan would provide for pedestrian connection improvements between the MLK Medical Center campus and other activity areas. The proposed density for the MLK Medical zone is 1.65 FAR.

Drew Educational (CDU Subarea): The Drew Educational zone is established to meet the existing and future needs of the CDU and King Drew Magnet High School, while ensuring compatibility with adjacent land uses. The CDU master plan includes a pedestrian, bicycle and shuttle circulation network that connects with the major activity centers in the Specific Plan area. The CDU master plan also includes housing opportunities. The proposed housing types include residences for undergraduate students in a dorm-suite setting, shared graduate student housing, and family housing for visiting faculty. The proposed density for Drew Educational zone is 1.5 FAR.

Imperial Commercial (Imperial Highway Corridor Subarea/ Metro Rosa Parks Station Subarea): The Imperial Commercial zone is established to meet the commerce and service needs of community while ensuring compatibility with adjacent land uses. The intent is to maintain and promote commercial uses between Imperial Highway and I-105 Freeway. The Imperial Commercial zone provides for development of a broad range of retail and service uses, as well as freeway-oriented, regional-serving retail, office complexes, and light manufacturing businesses.

This corridor is suited for less intensive, non-residential uses, such as maintenance yards and parking facilities, self-service public storage facilities, and communications equipment buildings. The proposed density for Imperial Commercial zone is 1.0 FAR.

Willowbrook Residential 1 (Residential Neighborhoods Subarea): The Willowbrook Residential 1 zone provides for primarily detached, single-family residences to preserve existing residential uses in certain areas. The proposed density for Residential 1 zone is 9 dwelling units per acre.

Willowbrook Residential 2 (Residential Neighborhoods Subarea): The Willowbrook Residential 2 zone provides for single family residential, while also providing for two-family residences. The intent is to promote the desirable characteristics of low to medium density neighborhoods. The proposed density for Residential 2 zone is 18 dwelling units per acre.

Willowbrook Residential 3 (Residential Neighborhoods Subarea): The Willowbrook Residential 3 zone is established to provide opportunities for developments containing multiple units, such as apartments or condominiums with common open space and other shared amenities. The proposed density for Residential 3 zone is 30 dwelling units per acre.

Parking Reduction Overlay Zone: The Specific Plan establishes a Parking Reduction Overlay zone within which minimum parking requirements are reduced and maximum parking standards are established to provide appropriate parking for each individual development project, and consistent with the projected increased transit use and less need for parking. The parking overlay zone is primarily located within the CDU, Northwest, Kenneth Hahn Plaza and Metro Station Subareas.

Proposed Mobility and Parking

Roadway Network: The roadway system provides the backbone circulation system for all modes of transportation. The existing street system would be largely maintained in its current configuration, with some improvements designed to improve access, circulation, and walkability (**Figure 7, Existing Street Network and Proposed Road Diets**). The major roadways are Wilmington Avenue and Imperial Highway. Secondary roadways are Compton Avenue, Willowbrook Avenue and Mona Boulevard in the north-south direction, and 120th Street/119th Street in the east-west direction. The number of traffic lanes and roadway lane configurations would generally remain the same, except where road diets would be implemented. Road diets reduce the number of car lanes and add bicycle/pedestrian lanes. The following street enhancements, shown in Figure 8, are intended to improve circulation for bicycles and pedestrians in the Specific Plan area.

Road Diet and Bicycle Lanes on 120th Street: As part of the Willowbrook Area Access Improvements Project, a portion of 120th Street between Compton Avenue and Wilmington Avenue would be reduced from four lanes to three lanes, with a bicycle lane in each direction.

Road Diet and Bicycle/Pedestrian Trail on Mona Boulevard: Mona Boulevard from the I-105 Freeway to 124th Street would be converted from a four lane street to a three lane street, and a pedestrian/bicycle trail installed on the west side of the street.

Willowbrook Avenue: The section of Willowbrook Avenue West between the Willowbrook/Rosa Parks Station and 119th Street, would be reduced from two lanes southbound to one lane southbound, and a bicycle path installed on the west side of the street.

Existing Pedestrian Circulation: The key pedestrian routes in the Specific Plan area are shown in **Figure 8, Existing Pedestrian Routes and Proposed Pedestrian Improvements.** The backbone of the pedestrian system is formed by Wilmington Avenue in the north-south direction and 120th/119th Street in the east-west direction. These two backbone corridors connect the major activity areas of the Willowbrook/Rosa Parks Station, the Kenneth Hahn Plaza, and the MLK Medical Center campus. They also cross at the intersection of Wilmington Avenue and 120/119th Street, which is the pedestrian hub of the Specific Plan area. Additional key elements of the pedestrian system are 118th Street between Compton Avenue and Wilmington Avenue, which connects the CDU campus to the rest of the Specific Plan area, Willowbrook Avenue West between 119th Street and the Willowbrook/Rosa Parks Station, providing access from residential areas to the station, and 119th Street between Willowbrook Avenue and Mona Boulevard, which provides access from the residential areas to the activity centers of the Specific Plan area. Mona Boulevard also provides north-south pedestrian access on the east side of the Specific Plan area including access to Mona Park, the MLK Elementary School and the Dr. Ralph Bunche Middle School.

Pedestrian Sidewalk Improvements: Sidewalks currently exist on most streets in the Specific Plan area, although some are narrow or substandard in quality. The Specific Plan would implement improvements to sidewalks as new development occurs in the following locations: the currently unpaved west side of Willowbrook Avenue West between the Metro Station and 119th Street; the sidewalks on Wilmington Avenue between the 1-105 Freeway off-ramps and Imperial Highway would be improved by widening and adding streetscape improvements including better street lighting.

Pedestrian Oriented Intersection Improvements: To enhance the pedestrian environment and to calm traffic, the proposed Specific Plan would implement a number of

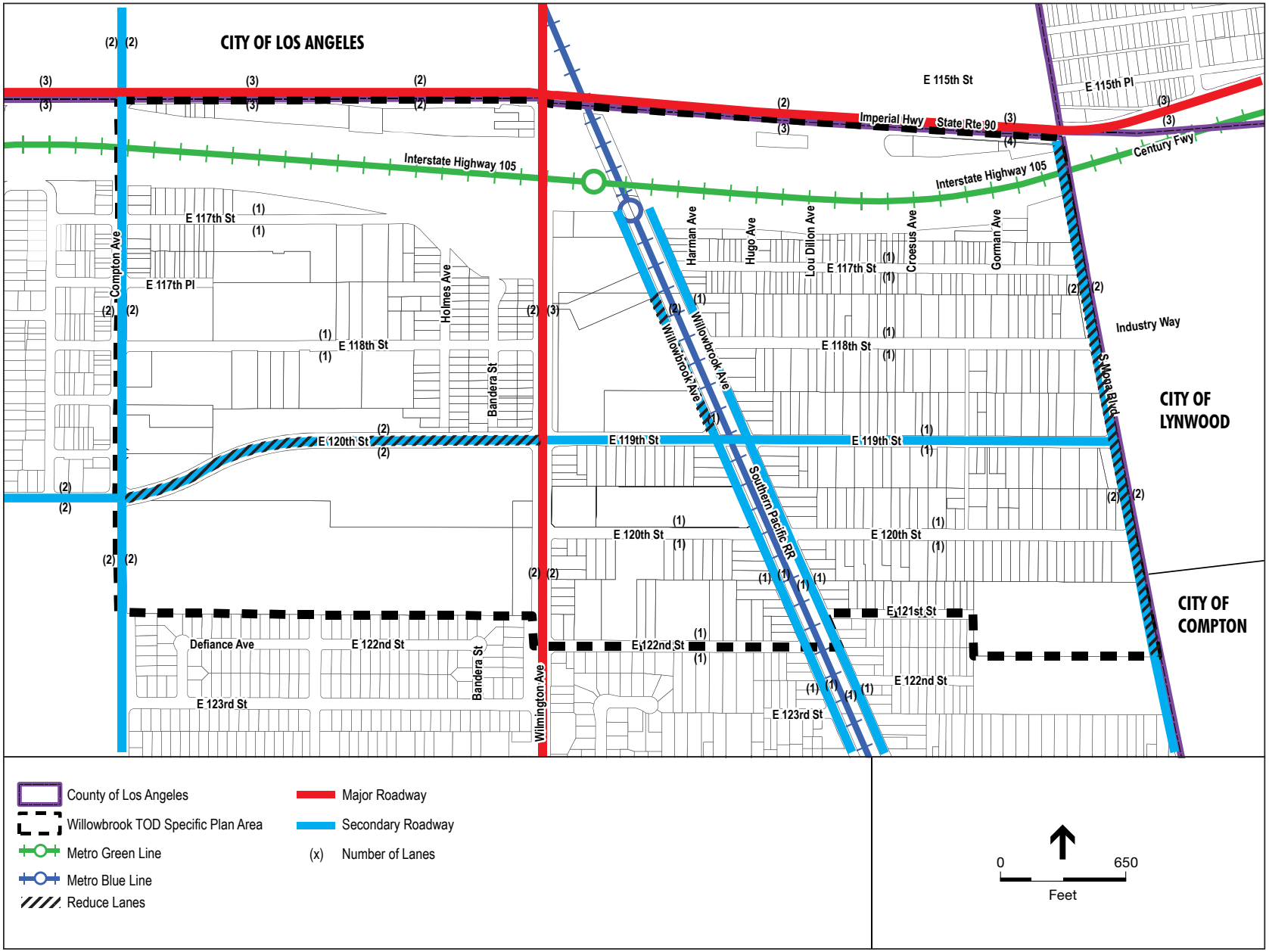
pedestrian oriented intersection improvements, as shown in Figure 9. These include adding high visibility crosswalks at intersections; adding passive pedestrian detection and pedestrian push buttons for crosswalks at traffic signals at intersections; adding countdown pedestrian signals and audio signals to crosswalks at intersections; adding advance stop bars to intersection approaches; adding sidewalk bulb-outs and extensions, or reducing curb returns, on intersection corners where feasible; adding median nose/crossing islands where advantageous and feasible. These measures would facilitate pedestrian circulation, by reducing the width of roadway for pedestrians to cross, providing additional sidewalk space, and making pedestrian crossings more visible to both pedestrians and motorists. The locations for proposed improvements are: Wilmington Avenue and Imperial Highway; Wilmington Avenue and I-105 Eastbound Ramps; Wilmington Avenue and 118th Street; Wilmington Avenue and 120/119th Streets; Wilmington Avenue and 120 Street; Wilmington Avenue and 122nd Street; Willowbrook Avenue West and 119th Street; Willowbrook Avenue East and 119th Street; Mona Avenue and Imperial Highway; Mona Avenue and 119th Street; Mona Avenue and 120th Street; Compton Avenue and Imperial Highway; Compton Avenue and 118th Street; and Compton Avenue and 120th Street.

The type of improvements (Figure 9) would follow the concepts identified in the "Los Angeles County Transit Oriented Districts Access Study". The improvements at Wilmington Avenue and I-105 eastbound ramp would add a crosswalk across Wilmington Avenue to facilitate access to the Willowbrook/Rosa Parks Station. Other specific improvements include new traffic signals at Wilmington Avenue and 122nd Street, and at Mona Avenue and 119th Street, to facilitate pedestrian crossings on long stretches of both streets currently without signalized crosswalks and a signalized pedestrian crosswalk at Mona Avenue and 120th Street, to facilitate pedestrians crossing to the Dr. Ralph Bunche Middle School.

Bicycle Circulation: The Specific Plan Bicycle Network, shown in **Figure 9, Bicycle Network and Key Transit Streets**, includes a combination of Class I, Class II, Class III and Class IV facilities to provide a connected and integrated bicycle network throughout the Specific Plan area that connects activity centers and neighborhoods to the Willowbrook/Rosa Parks station, and provides a network for bicyclists to use safely and efficiently.

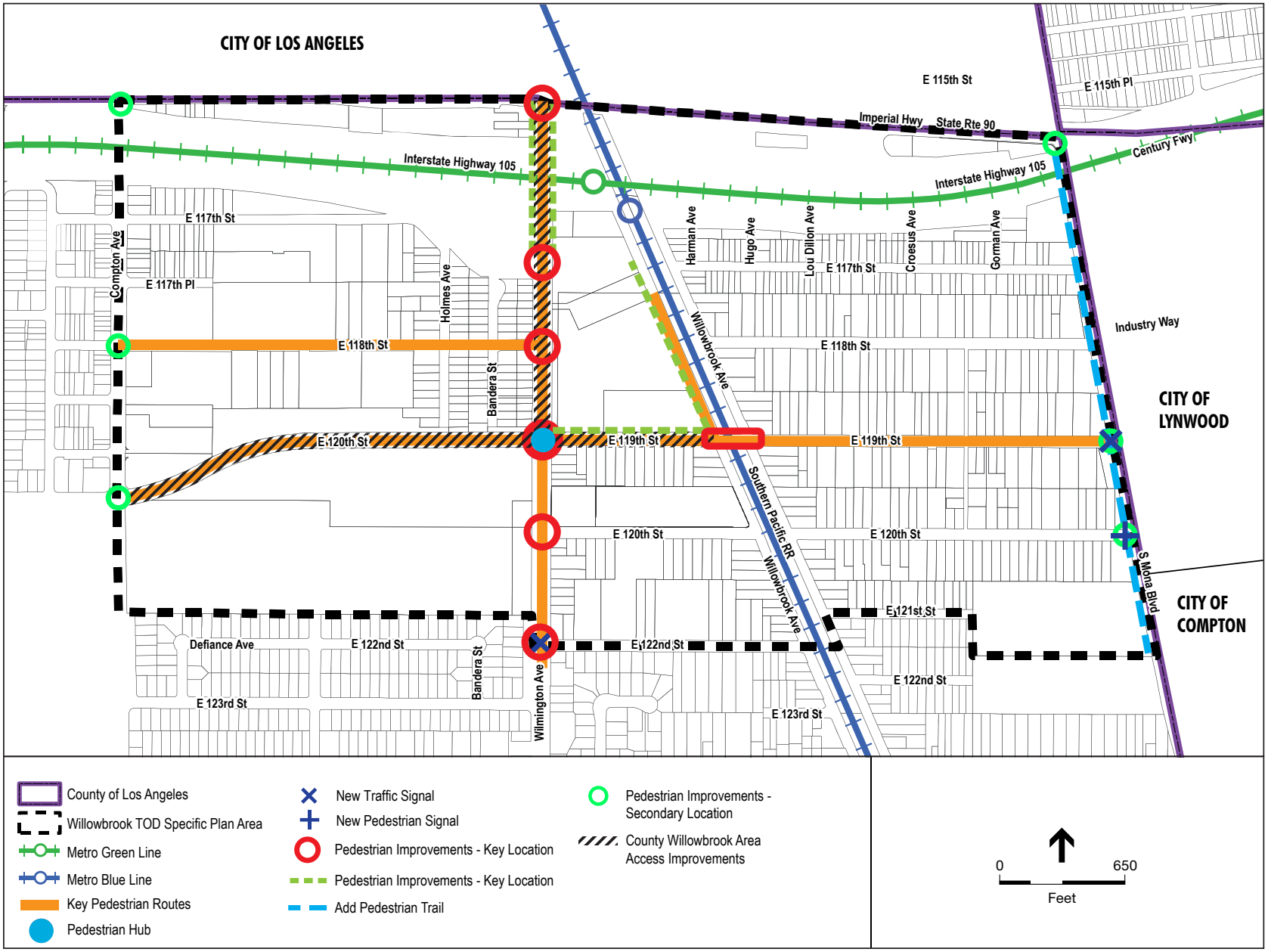
Bicycle Facilities: Class I bicycle paths would be implemented on Willowbrook Avenue West between 119th Street and Imperial Highway to provide access to the rail station, and on Mona Avenue (west side) between Imperial Highway and 119th Street. Class II bicycle lanes would be implemented on 120th Street between Compton Avenue and Wilmington Avenue, on Wilmington Avenue between 124th Street and 120th Street, and on Imperial Highway between Compton Avenue and Mona Avenue.

Not all streets can support bicycle lanes. In these instances, a connected bicycle network is achieved through implementation of Class III bicycle routes. Class III bicycle routes would be implemented on Compton Avenue, Willowbrook Avenue West south of 119th Street, 119th Street between Wilmington Avenue and Mona Avenue, and on 124th Street throughout the Specific Plan area.



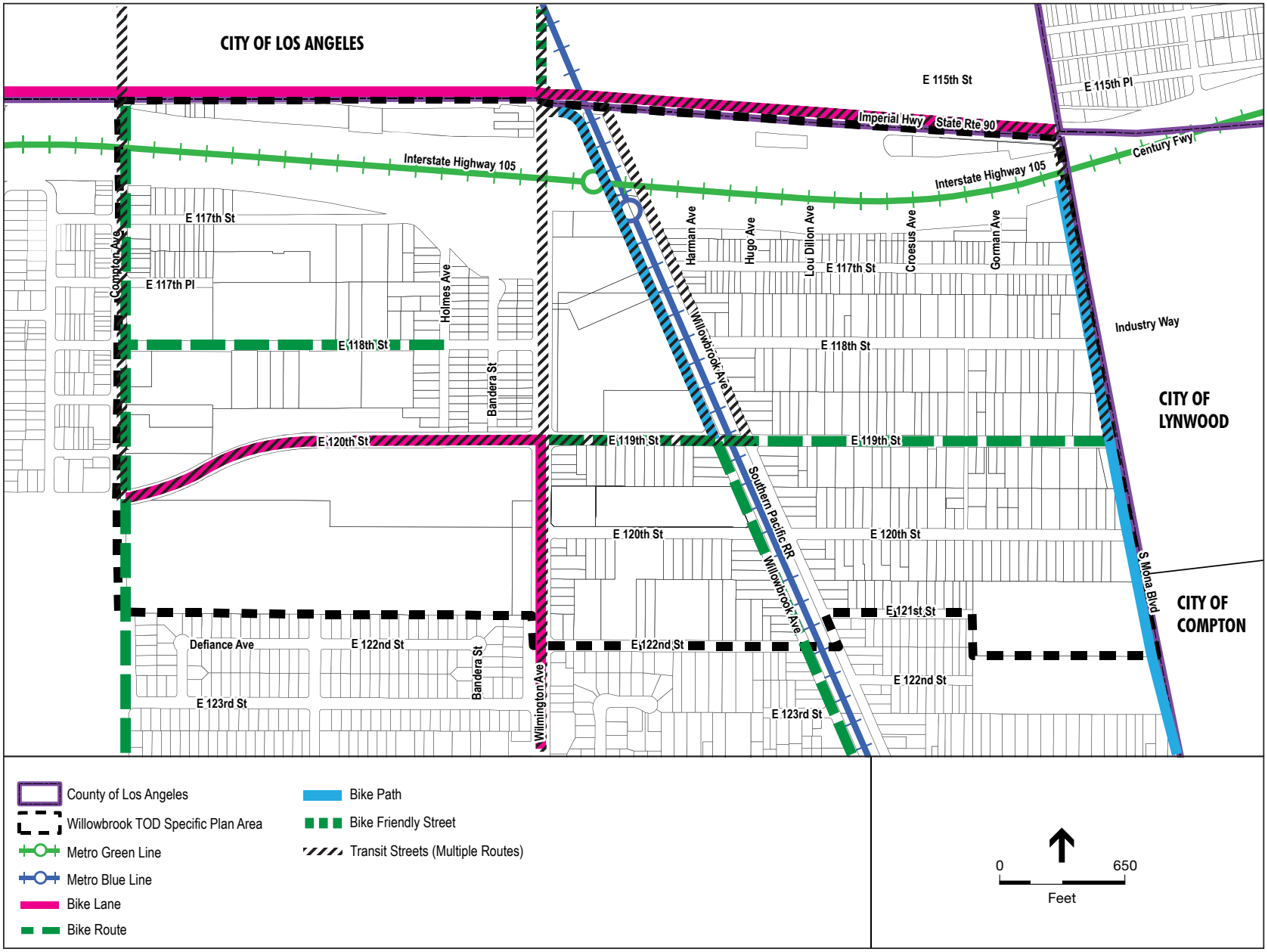
SOURCE: Willowbrook TOD Specific Plan

Figure 7
Existing Street Network and Proposed Road Diets



SOURCE: Willowbrook TOD Specific Plan

Figure 8
Existing Pedestrian Routes and
Proposed Pedestrian Improvements



SOURCE: Willowbrook TOD Specific Plan

Figure 9
Bicycle Network and Key Transit Streets

Bicycle Parking and Stations: Bicycle parking would be provided according to the Los Angeles County Code for all new developments. In addition, bicycle parking would be provided at the Kenneth Hahn Plaza and the Willowbrook/Rosa Parks Station. Bicycle stations include repair facilities and small bicycle shops, bicycle share program facilities and, secure bicycle parking. Bicycle Stations would be provided within the MLK Medical Center campus and the CDU campus, and in the Northwest Subarea of office uses. A Bicycle Share Program would be implemented in the Specific Plan area to encourage the use of bicycling and reduce vehicle trips. Bicycle share programs provide bicycles that can be rented for a period of time and can be picked up or dropped off at any bicycle share facility in an area.

Shuttle Routes: Existing shuttle routes that are operated by the County to serve the MLK Medical Center and CDU campus would continue, and additional shuttle routes would be added to serve new development in the Northwest Subarea and connect the land uses to the Metro Station.

Surrounding land uses and setting: The area surrounding the proposed Specific Plan area is heavily urbanized with residential, commercial and institutional land uses. North of the Specific Plan area is predominately residential with some commercial uses. The City of Lynwood is directly adjacent to the Specific Plan's eastern border and land uses are manufacturing, public uses and commercial. South and west of the Specific Plan area is predominately residential.

Project Requirements

CEQA: The proposed Project will require certification of a CEQA document.

- *County of Los Angeles Board of Supervisors*
- *Certification of an Environmental Impact Report. General Plan Amendment, and Zoning Amendment*

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement): None for the proposed Specific Plan. Future specific development and redevelopment projects pursuant to the proposed Specific Plan would be subject to approvals by various trustee and regulating agencies, including, but not limited to the CDC, Metro, Caltrans, South Coast Air Quality Management District, and the Los Angeles Regional Water Quality Control Board.

Major projects in the area:

Metro Willowbrook/Rosa Parks Station Improvement Project: Metro's Willowbrook/Rosa Parks Station Improvement Project would provide improvements to this station. In addition to the two rail lines, the Station is served by six Metro bus lines as well as several municipal bus lines and community shuttles. Improvements part of the Metro's Willowbrook/Rosa Parks Station Improvement Project include platform extensions and enhancements, upgraded entrances and pedestrian crossings, improved lighting, landscaping and signage throughout the site, and upgrades to the bus, bicycle and park-and-ride facilities. The Final Initial Study/Negative Declaration was prepared May 8, 2015.

Wilmington & 118th Street Senior Housing and Los Angeles County Public Library: A five-story mixed-use building that includes an 8,939-square-foot first-floor space for a County library and public meeting room is planned for 11737-11753 Wilmington Avenue and 11732-11756 Bandera Street. The four upper floors contain 105 apartments for lower-income seniors. The project contains 104 ground-level and underground parking spaces; and the structure has a total floor area of 92,358 square feet on 1.7 gross (1.0 net) acres. Most of the structure is proposed to have a maximum height of 65 feet

above grade, although an architectural feature may extend to a height of 70 feet above grade. This project is scheduled to break ground in 2016. The Mitigated Negative Declaration prepared for this project was adopted by the Regional Planning Commission on February 11, 2015.

DPW Willowbrook Area Access Improvements: The Department of Public Works (DPW) is planning for improvements to the public right-of-way in the vicinity of the MLK Community Hospital. The primary objective of this project is to improve mobility of pedestrians and bicyclists in the area. The project limits are: Wilmington Avenue from Imperial Highway to 480 feet south of 120th Street, 120th Street from Compton Avenue to Wilmington Avenue, 119th Street from Wilmington Avenue to Willowbrook Avenue. The project includes the following improvements: landscape and irrigation throughout the project limits; sidewalk enhancements such as colored concrete unit pavers and curb ramp upgrades; pavement repair and crosswalk enhancements; construction of new raised medians with landscaping; renovation of existing landscaped median; refurbishing existing and providing new site furnishings such as bus shelters, trash receptacles, benches, and bicycle racks; pedestrian lighting; bicycle routes/lanes; wayfinding and monument signage; and traffic signal upgrades. Construction is set to begin the summer of 2016. The Willowbrook Area Access Improvements project was categorically exempt from the provisions of the California Environmental Quality Act. The CEQA exemption was adopted by the Board of Supervisors on April 2, 2013.

Reviewing Agencies:

Responsible Agencies

☐ None
Regional Water Quality Control Board:
☒ Los Angeles Region
☐ Lahontan Region
☐ Coastal Commission
☐ Army Corps of Engineers

Special Reviewing Agencies

☒ None
☐ Santa Monica Mountains Conservancy
☐ National Parks
☐ National Forest
☐ Edwards Air Force Base
☐ Resource Conservation District of Santa Monica Mountains Area
☐ City of Los Angeles Bureau of Sanitation and City of Los Angeles Department of Planning

Regional Significance

☐ None
☒ SCAG Criteria
☐ Air Quality
☐ Water Resources
☐ Santa Monica Mtns. Area

Trustee Agencies

☐ None
☐ State Dept. of Fish and Wildlife
☐ State Dept. of Parks and Recreation
☐ State Lands Commission
☐ University of California (Natural Land and Water Reserves System)

County Reviewing Agencies

☒ DPW:
- Land Development Division (Grading & Drainage)
- Geotechnical & Materials Engineering Division
- Watershed Management Division (NPDES)
- Traffic and Lighting Division
- Environmental Programs Division
- Waterworks Division
- Sewer Maintenance Division

☒ Fire Department
- Forestry, Environmental Division
-Planning Division
- Land Development Unit
- Health Hazmat

☐ Sanitation District
☒ Public Health/Environmental Health Division: Land Use Program (OWTS), Drinking Water Program (Private Wells), Toxics Epidemiology Program (Noise)
☒ Sheriff Department
☒ Parks and Recreation
☐ Subdivision Committee
☐ Beaches and Harbors

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project.

☒ Aesthetics	☒ Greenhouse Gas Emissions	☒ Population/Housing
☐ Agriculture/Forest	☒ Hazards/Hazardous Materials	☒ Public Services
☒ Air Quality	☒ Hydrology/Water Quality	☒ Recreation
☐ Biological Resources	☒ Land Use/Planning	☒ Transportation/Traffic
☒ Cultural Resources	☐ Mineral Resources	☒ Utilities/Services
☒ Energy	☒ Noise	☒ Mandatory Findings of Significance
☒ Geology/Soils		

DETERMINATION: (To be completed by the Lead Department.)
On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature (Prepared by) Date

_____ _____

Signature (Approved by) Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources the Lead Department cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the Lead Department has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level. (Mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced.)

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, an effect has been adequately analyzed in an earlier EIR or negative declaration. (State CEQA Guidelines § 15063(c)(3)(D).) In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7) The explanation of each issue should identify: the significance threshold, if any, used to evaluate each question, and; mitigation measures identified, if any, to reduce the impact to less than significance. Sources of thresholds include the County General Plan, other County planning documents, and County ordinances. Some thresholds are unique to geographical locations.

8) Climate Change Impacts: When determining whether a project's impacts are significant, the analysis should consider, when relevant, the effects of future climate change on : 1) worsening hazardous conditions that pose risks to the project's inhabitants and structures (e.g., floods and wildfires), and 2) worsening the project's impacts on the environment (e.g., impacts on special status species and public health).

1. AESTHETICS

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

Less Than Significant Impact. Typically, a scenic vista is defined as a view of an area that is visually or aesthetically pleasing. Aesthetic components of a scenic vista include (1) scenic quality, (2) sensitivity level, and (3) view access. The Specific Plan area is a flat, level area with no hills and there are no large areas of natural open space. Willowbrook is an urbanized community and, as a result, views in all directions are generally adjacent to urban development and associated roadways and landscaping. The Specific Plan area is not considered to have a high level of sensitivity for scenic vista impacts. Therefore, impacts to scenic vistas would not occur and further discussion of this will not be included in the EIR.

b) Be visible from or obstruct views from a regional riding or hiking trail?	☐	☐	☐	☒

No Impact. The Specific Plan area is located within a fully developed urban area, and is not located in the vicinity of a County regional riding or hiking trail (LA County, 2012). However, the Los Angeles River Trail (a 7 mile bike path from the north side of Griffith Park at Riverside Drive along the Los Angeles River to Barclay Street, north of Downtown LA) is 3 miles to the east of the Specific Plan area. The Los Angeles River Trail is not located in the vicinity of the Specific Plan area and does not have direct or indirect views of the Specific Plan area; thus, the EIR will not include an evaluation of potential impacts related to regional riding or hiking trails and scenic views.

c) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

No impact. The Specific Plan area is not located within or near a designated scenic highway corridor and is not located within view of a state or federal scenic highway. Interstate Highway 105 runs east to west along the northern portion of the project area but is not designated as a scenic highway. The nearest Caltrans-designated Scenic Highway is a portion of Highway 210 (Caltrans, 2015) located approximately 20 miles north of the Specific Plan area. Thus, the Specific Plan area is not visible from this highway, and the project would not result in impacts to scenic resources within view of a state scenic highway. This criterion will not require further analysis in the EIR.

d) Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features?	☒	☐	☐	☐

Potentially Significant Impact. The proposed Specific Plan would allow for redevelopment at an increased intensity; taller buildings, expanded sidewalks, bicycle lanes and bicycle parking facilities, and alterations to the existing street intersections in order to implement a TOD development pattern to the Specific Plan area. New development would be located within walking distance of the existing

Willowbrook/Rosa Parks Station and would include a mix of residential, mixed-use, commercial, and complementing public uses designed for pedestrians while also accommodating vehicular traffic. The proposed Specific Plan is intended to be consistent with the Los Angeles County General Plan goal to strengthen aesthetic character within the area, and would include landscaping and beautification elements. However, these improvements would alter the existing visual character of the area. The EIR will evaluate the planned changes to determine if they would degrade the existing visual character or quality of the Specific Plan area.

e) Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

Potentially significant impact. The proposed infill development and redevelopment, as well as the new pedestrian-friendly light signals and walkway lighting could potentially increase ambient or "spillover" light in the Specific Plan area. In addition, the proposed Specific Plan provides architectural, residential, commercial and mixed-use, parking, landscaping, and street lighting standards. These standards include a prohibition against light fixtures that cause glare or reflect into upper stories of buildings. Chapter 2 of the proposed Specific Plan states that pedestrian-scaled lighting should be provided along all streets in the project area. Light fixtures would adhere to guidelines set forth by the Dark Sky Association to protect the area's view of stars. Light fixtures in the public right-of-way would also follow the Southern California Edison (SCE) standards for maintenance. However, potentially significant impacts related to an increase in ambient and spillover light could occur; thus, potential impacts related to light and glare will be further evaluated in the EIR.

2. AGRICULTURE / FOREST

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

No impact. The Willowbrook area does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (CDOC, 2015). The proposed Specific Plan area consists of a developed urban area that does not contain any farmland uses. Therefore, the proposed Specific Plan would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance to nonagricultural uses. No impacts related to the conversion of farmland to non-agricultural uses would occur; this issue will not be analyzed further in the EIR.

b) Conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract?	☐	☐	☐	☒

No impact. The project area does not contain an agricultural zoning classification or land use designation and is not regulated by a Williamson Act Contract (CDOC, 2013). No impact would occur as a result of the proposed Specific Plan and this issue will not be analyzed further in the EIR.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined in Government Code § 51104(g))?	☐	☐	☐	☒

No impact. Willowbrook is not zoned for forest land or zoned as an area designated for Timberland Protection. No impact would occur as a result of the proposed Specific Plan and this issue will not be analyzed further in the EIR.

d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No impact. See explanation 2c above.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

No impact. See explanation 2c above.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?	☒	☐	☐	☐

Potentially Significant Impact. Willowbrook is located within the South Coast Air Basin, which consists of the urbanized areas of Los Angeles, Riverside, San Bernardino, and Orange Counties. The SCAQMD monitors the Basin for pollutants and is responsible for regulating and controlling emissions, primarily from stationary sources. The Basin is currently under both federal and state non-attainment status for ozone and particulate matter smaller than 10 and 2.5 microns (PM10 and PM2.5, respectively). SCAQMD and the Southern California Association of Governments (SCAG) are responsible for preparing the air quality management plan (AQMP) to address federal and state Clean Air Act requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin and to bring it into attainment with the national and state ambient air quality standards. The most recent AQMP was adopted by the SCAQMD Governing Board on December 12, 2012. On February 19, 2015, the Air Resources Board conducted a public meeting to consider the minor revision to the South Coast 2012 PM2.5 SIP (CARB, 2015).

Implementation of the proposed Specific Plan would generate pollutant emissions during both construction and operation of new developments in the Specific Plan area. During construction, sources of pollutant emissions include heavy off-road equipment as well as on-road motor vehicles and workers' commutes to and from development sites. Construction activities would result in emissions of particulate matter, as well as nitrous oxides (NOx) and volatile organic compounds (VOCs), which are precursors to ozone formation. Additionally, because build out of the proposed Specific Plan project would involve changes in land use intensity and traffic patterns, an increase of air pollutant emissions could occur that may conflict with applicable air quality plans of the SCAQMD. Furthermore, operation of new or altered buildings could increase emissions from new area sources. Overall, the pollutant emissions associated with the proposed Specific Plan project could potentially conflict with SCAQMD's AQMP. Thus, the potential for implementation of the proposed Specific Plan to conflict with or obstruct implementation of the AQMP will be evaluated in the EIR.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐

Potentially Significant Impact. The Basin is currently under both federal and state non-attainment status in ozone and particulate matter smaller than 10 and 2.5 microns (PM10 and PM2.5, respectively). Implementation of the proposed Specific Plan would result in pollutant emissions generated from the construction and operation of new land uses within the Specific Plan area. Construction of new developments and roadway improvements would generally involve activities such as demolition, site preparation, grading, and building construction, which would result in fugitive dust and equipment exhaust

emissions. Construction worker and delivery vehicle trips would also generate temporary pollutant emissions. These construction-related emissions could adversely affect the regional ambient air quality in the Basin and locally within Willowbrook. Additionally, operation of the new land uses in the proposed Specific Plan area may result in increased emissions of air pollutants from new stationary sources and from vehicle trips accessing the Specific Plan area. Thus, the pollutant emissions generated from implementation of the proposed Specific Plan may violate an air quality standard or contribute to an existing or projected air quality violation. Therefore, this impact is considered to be potentially significant and will be analyzed in the EIR. Mitigation measures will be identified if necessary.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ☒ ☐ ☐ ☐

Potentially Significant Impact. As indicated under 3b, short-term construction activities and long-term operation of future developments associated with the proposed Specific Plan may generate emissions that could result in either a violation of an ambient air quality standard or contribute to an existing air quality violation. Due to the elevated concentrations of air pollutants that currently occur in the Basin, when combined with other past, present, or reasonably foreseeable future projects in the area, the net increase of criteria pollutants could cumulatively contribute to the nonattainment designations of pollutants in the Basin. Thus, the EIR will evaluate the potential for the proposed Specific Plan to generate a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment.

d) Expose sensitive receptors to substantial pollutant concentrations? ☒ ☐ ☐ ☐

Potentially Significant Impact. Sensitive receptors are locations where uses or activities result in increased exposure of persons more sensitive to the unhealthful effects of emissions (such as children and the elderly). Examples of land uses that can be classified as sensitive receptors include residences, schools, daycare centers, parks, recreational areas, medical facilities, rest homes, and convalescent care facilities. Sensitive receptors within the Specific Plan area include residential areas, medical facilities, and schools such as King-Drew Magnet High School, CDU, Barack Obama Charter School, and MLK Elementary. Future development pursuant to implementation of the proposed Specific Plan project may expose these existing and/or new sensitive receptors to substantial pollutant concentrations. The EIR will evaluate the potential for construction and operation of the future developments in the Specific Plan area to expose sensitive receptors to substantial pollutant concentrations.

e) Create objectionable odors affecting a substantial number of people? ☐ ☐ ☒ ☐

Less Than Significant Impact. The SCAQMD Air Quality Handbook identifies the following uses as having potential odor issues; wastewater treatment plants, food processing plants, agricultural uses, chemical plants, composting, refineries, landfills, dairies, and fiberglass moldings, none of which are proposed within the Specific Plan. The Specific Plan proposes mixed use commercial and residential development within the project area, which do not involve the types of uses that would emit objectionable odors affecting a substantial number of people. In addition, odors generated by new and existing non-residential land uses in the Specific Plan area are required to be in compliance with SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses.

During construction of future projects allowed under the proposed Specific Plan, emissions from construction equipment, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities may generate odors. However, these odors would be limited and temporary; and thus, are not expected to affect a substantial number of people. Therefore, impacts relating to both operational and construction activity odors would be less than significant, and odors will not be evaluated in the EIR.

4. BIOLOGICAL RESOURCES

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	☐	☐	☐	☒

No Impact. No candidate, sensitive, or special-status species have been identified within or in the vicinity of the Specific Plan area by the California Natural Diversity Database (CNDDB) (CNDDB, 2015). The proposed Specific Plan provides for infill development within an already highly disturbed urban environment. This development would not result in any direct impacts to special-status species or result in any habitat modifications that could indirectly result in a substantial adverse effect on any special-status species. Therefore, the proposed Specific Plan project would not result in impacts on species identified as candidate, sensitive, or special-status, and further analysis of this issue is not required in the EIR.

b) Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?	☐	☐	☐	☒

No Impact. Riparian habitat is lowland habitat associated with the bed and banks of a river, stream, or wash. The nearest river is the Los Angeles River 4 miles east of the eastern most boundary of the Specific Plan area. Compton Creek is located 2 miles west of the western most boundary of the Specific Plan area. Both rivers are concrete-lined and channelized and, therefore, do not have any riparian habitat along its banks. The Specific Plan area is located in an upland area that contains an appreciable amount of impervious surfaces (i.e., asphalt and cemented streets and parking lots and buildings) and nonnative ornamental trees, shrubs, and ground cover and, therefore, riparian habitat is not present. The proposed Specific Plan would involve infill development within an already highly disturbed urban environment and would not involve any changes or alterations to any riparian habitat or other sensitive natural community. Therefore, the proposed Specific Plan project would not result in impacts on riparian habitats and this criterion does not require further analysis in the EIR.

c) Have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by § 404 of the federal Clean Water Act or California Fish & Game code § 1600, et seq. through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

No Impact. As discussed above, the Specific Plan area is a highly disturbed urban environment and no portion of the area contains the proper vegetation (i.e., a preponderance of hydrophytes or "water-loving" plants), soils (i.e., hydric or waterlogged soils), and hydrologic conditions (i.e., inundated either permanently or periodically or saturated during the growing season of the prevalent vegetation) to be defined a wetland according to the U.S. Army Corps of Engineers' (USACE) *Wetlands Delineation Manual* (USACE, 1987). Compton Creek (located approximately 2 miles west of the Specific Plan area) is a concrete-lined and channelized wash. Overall, because the Specific Plan area does not contain nor is located in proximity to a wetland, the proposed Specific Plan project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA) (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Impacts would not occur and this criterion requires no further analysis in the EIR.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

No Impact. The Specific Plan area is within a fully developed urban area. It is sufficiently removed from habitat areas such that it could not provide for the movement of any native resident or migratory fish or wildlife species, nor could it provide an established native resident or migratory wildlife corridor or contain native wildlife nursery sites. Therefore, no impacts would result from implementation of the proposed Specific Plan and no further analysis of this issue is required in the EIR.

e) Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or otherwise contain oak or other unique native trees (junipers, Joshuas, southern California black walnut, etc.)?	☐	☐	☐	☒

No Impact. No oak woodlands or other unique native trees exist within the Specific Plan area. As a result, impacts to oak woodlands or unique native trees would not occur with implementation of the proposed Specific Plan.

f) Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.56, Part 16), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, § 22.56.215), and Sensitive Environmental Resource Areas (SERAs) (L.A. County Code, Title 22, Ch. 22.44, Part 6)?	☐	☐	☐	☒

No Impact. The only local policy or ordinance related to the protection of biological resources that would be applicable to the Specific Plan area is the Oak Tree Ordinance; which establishes that a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree

genus without first obtaining a permit. The proposed Specific Plan would not affect any oak trees located in the project area. Furthermore, implementation of the proposed Specific Plan would adhere to all County ordinances applicable to the Specific Plan area, including the Los Angeles County Oak Tree Ordinance if applicable. The Specific Plan proposes new street tree designations as the project area has an inconsistent palette and pattern of street trees; none of those designations include Oak Trees. As a result, the proposed Specific Plan would not conflict with any local plans or policies protecting biological resources and no impacts are anticipated as a result of the proposed Specific Plan. No further analysis of this issue is required in the EIR.

g) Conflict with the provisions of an adopted state, regional, or local habitat conservation plan?	☐	☐	☐	☒

No Impact. The Specific Plan area is not located within or near a Habitat Conservation Plan, Natural Community Conservation Plan or any other approved local, regional, or state habitat conservation plan. No impact would occur, and this issue will not be discussed further in the EIR.

5. CULTURAL RESOURCES

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?	☒	☐	☐	☐

Potentially Significant Impact. The Specific Plan area includes buildings that have the potential to be considered important historic resources; therefore, the project may cause a substantial adverse change in the significance of a historical resource. The EIR will identify any properties within the Specific Plan area that have been listed as a California Point of Historical Interest, a California Historical Landmark, California Register of Historic Places, or the National Register of Historic Places. In addition, the EIR will evaluate any other properties within the Specific Plan that have the potential to be historic and potential impacts that could occur to these properties by implementation of the proposed Specific Plan.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?	☒	☐	☐	☐

Potentially Significant Impact. The Specific Plan area is urbanized and ground surfaces have been heavily disturbed due to previous development. Therefore, the likelihood of the discovery of surficial archaeological resources is minimal. However, the Specific Plan would result in infill and redevelopment of parcels, where construction could that could disturb native soils and result in inadvertent damage to unknown buried archaeological deposits, resulting in a significant impact. Therefore, potential impacts related to archeological resources will be evaluated in the EIR.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources?	☒	☐	☐	☐

Potentially Significant Impact. The Specific Plan area is underlain by younger Quaternary Alluvium, which consists predominately of loose to dense sands, silty sands, and silts. Clay units are locally present, but become much more dominant adjacent to the Rosecrans Hills nearby (CDOC, 1998). Alluvium is unlikely to contain significant fossils. However, older Quaternary deposits or deposits of the Pleistocene Inglewood Formation (Qi) may lie below the Quaternary Alluvium; both are known to contain vertebrate fossils. Although no paleontological resources are known to exist within the Specific Plan area, there is a possibility that unknown resources may be uncovered during construction activities. It is possible that site demolition and grading activities would involve native soil layers that have not previously been disturbed; as such, there is potential for the proposed Specific Plan to result in impacts to paleontological resources, therefore impacts to paleontological resources will be evaluated in the EIR.

d) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

Potentially Significant Impact. There is no known site within the Specific Plan area that has been used for human burial purposes. Therefore, it is unlikely that human remains would be encountered during construction activities related to the proposed Specific Plan. However, previously unknown buried human remains could be inadvertently disturbed during construction activities, which would result in a significant impact. Thus, potential impacts related to human remains will be discussed in the EIR.

e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	☒	☐	☐	☐

Potentially Significant Impact. Tribal cultural resources can be sites, features, places, cultural landscapes, sacred places, or objects with cultural value to any California Native American Tribe (Public Resources Code 21074). There is no known site within the Specific Plan area that is a tribal cultural resource. Therefore, it is unlikely that any adverse change to a tribal cultural resource would occur due to redevelopment or new development in the Willowbrook Community. However, previously unknown tribal cultural resources could lose significance once redevelopment or development occurs due to the implementation of the proposed Specific Plan, which would result in a significant impact. Thus, potential impacts related to tribal cultural resources will be discussed in the EIR.

6. ENERGY

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Conflict with Los Angeles County Green Building Ordinance (L.A. County Code Title 22, Ch. 22.52, Part 20 and Title 21, § 21.24.440) or Drought Tolerant Landscaping Ordinance (L.A. County Code, Title 21, § 21.24.430 and Title 22, Ch. 22.52, Part 21)?	☐	☐	☐	☒

No Impact. The project includes redevelopment of existing uses and is subject to the requirements of the Los Angeles County Green Building and Drought Tolerant Landscaping Ordinance. The project would comply with these ordinances, which are intended to conserve energy, water, natural resources, and promote a healthier environment (Municipal Code Section 22.52.2100). The Specific Plan incorporates sustainable design guidelines that would not conflict with the Los Angeles County Green Building Ordinance or the Drought Tolerant Landscaping Ordinance. No further discussion of this issue will be included in the EIR.

b) Involve the inefficient use of energy resources (see Appendix F of the CEQA Guidelines)?	☐	☐	☐	☒

No Impact. The Specific Plan is proposed to guide future development and redevelopment in the area and implement TOD land uses. Development projects that are implemented by the proposed Specific Plan would comply with State and County regulations related to energy usage and efficient energy design. Therefore, implementation of the proposed Specific Plan would not result in an inefficient use of energy resources, and no further discussion of this issue will be included in the EIR.

7. GEOLOGY AND SOILS

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known active fault trace? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

No Impact. Seismically-induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude, sense, and nature of fault rupture can vary for different faults or even along different strands of the same fault. Ground rupture is considered more likely along active faults. The Los Angeles Basin contains both active and potentially active faults, and is considered a region of high seismic activity. The Specific Plan area is not located with or adjacent to an Alquist-Priolo Fault Rupture Hazard Zone faults and is therefore unlikely to experience surface fault rupture (CDOC, 2010; DRP, 2014). The closest active fault to the Specific Plan area is the Newport-Inglewood-Rose Canyon Fault, Strike 334, located approximately 3 miles southwest of the Specific Plan area (USGS, 2015). Due to the distance between the Specific Plan area and the active fault, implementation of the proposed Specific Plan would not result in impacts related to the rupture of a known earthquake fault.

ii) Strong seismic ground shaking?	☐	☐	☒	☐

Less Than Significant Impact. As described above, the Los Angeles basin is considered a region of high seismic activity due to the numerous faults that transect the area, including the Hollywood, Newport, and Inglewood Faults (CDOC, 2010). The proposed Specific Plan would include development of new structures and redevelopment of existing structures. Therefore, implementation of the proposed Specific Plan has the potential to expose additional people and structures to strong seismic ground shaking. Ground movement during an earthquake varies depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material.

Los Angeles County's standard approval requirements ensure that all construction complies with the California Building Code and the County's Building Regulations established in the County's Municipal Code. Continued adherence to applicable building codes through the County's building permit process would reduce impacts related to seismic ground shaking to a less than significant level, and this issue requires no further analysis in the EIR.

iii) Seismic-related ground failure, including liquefaction and lateral spreading? ☒ ☐ ☐ ☐

Potentially Significant Impact. Liquefaction can occur as a secondary effect of seismic shaking in areas of saturated, loose, fine-to-medium grained soils where the water table is 40 feet or less below the ground surface. Seismic shaking temporarily eliminates the grain-to-grain support normally provided by the sediment grains. The waters between the grains assume the weight of the overlying material and the sudden increase in pore water pressure results in the soil losing its friction properties. The saturated material (with the frictionless properties of a liquid) will fail to support overlying structures. Liquefaction-related effects include loss of bearing strength, ground oscillations, lateral spreading, and slumping. Liquefaction may occur in water-saturated sediment during moderate to great earthquakes in the project area because the depth of groundwater is approximately 34 feet below the ground surface. Furthermore, a certain depth at an individual site is not necessarily an indicator to the area-wide or regional depth to groundwater, and levels are variable (SWRCB, 2005).

Liquefaction susceptibility reflects the relative resistance of a soil to loss of strength when subjected to ground shaking. Physical properties of soil such as sediment grainsize distribution, compaction, cementation, saturation, and depth govern the degree of resistance to liquefaction. Younger alluvial fan deposits within the South Gate Quadrangle consist largely of sand, silt, and gravel, and lesser occurrences of clay. Most test boreholes drilled in these units report the presence of loose to medium dense sand and silt. Some deposits consist of very loose sand. Where historical ground-water levels are within 40 feet of the surface, as in Willowbrook, these deposits are judged to be susceptible to liquefaction. Historic liquefaction has also been confirmed in the South Gate Quadrangle (CDOC, 1998). Therefore, the potential for liquefaction and lateral spreading is high and further discussion will be included in the EIR.

iv) Landslides? ☐ ☐ ☐ ☒

No Impact. The Specific Plan area is a flat, level area with no hills or cliffs, where the risk of landslides is very low. As a result, impacts related to landslide hazards would not result from implementation of the Specific Plan (CDOC, 1998).

b) Result in substantial soil erosion or the loss of topsoil? ☒ ☐ ☐ ☐

Potentially Significant Impact. The proposed Specific Plan is located within a developed urban area, and development projects implemented by the Specific plan would be developed within areas that are largely covered with impervious surfaces. However, construction activities associated with the Specific Plan, such as roadway, sidewalk, bicycle path, and building development components may include excavation, grading, and other soil-disturbing activities, which have the potential to result in erosion and/or topsoil loss. Therefore, this issue will be analyzed along with potential hydrology and water quality impacts in the EIR.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? ☒ ☐ ☐ ☐

Potentially Significant Impact. As described above, Willowbrook is located on a gently sloping alluvial plain, and the Specific Plan area is a flat, level area with groundwater levels that are approximately 34 feet deep. The Specific Plan area is located in a liquefaction or earthquake-induced landslide area, but due to the flat topography and variable groundwater table, the potential for lateral spreading is also considered very low. In the South Gate Quadrangle, damage attributed to liquefaction was noted in the vicinity of the project area following the 1933 Long Beach Earthquake; it was speculated that the considerable damage in Willowbrook was probably due to the communities' location on formerly marshy ground, particularly in areas along Compton Creek and the former courses of the Los Angeles River (CDOC, 1998). The proposed Specific Plan would implement redevelopment of existing uses and the addition of structures on soils that have historically been known as areas of liquefaction, therefore further impacts associated with unstable soil will be further evaluated in the EIR.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? ☐ ☐ ☒ ☐

Less Than Significant Impact. The Specific Plan area is underlain by young Quaternary Alluvium, which are dominated by loose to moderately dense sandy sediments (CDOC, 1998), which are not typically expansive. Non-engineered artificial fills have not been delineated or mapped in the South Gate Quadrangle. Consequently, no areas are zoned for potential liquefaction relative to artificial fill (CDOC, 1998). The County's building permit process requires submittal of soil investigation reports and structural observation programs (ALPC, 2015) and permits would not be issued unless soil suitability and appropriate construction practices for the proposed structures is confirmed. Therefore, the proposed Specific Plan would result in less than significant impacts related to expansive soils and this issue requires no further analysis in the EIR.

e) Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater? ☐ ☐ ☐ ☒

No Impact. The Specific Plan area is served by a sewer system; septic tanks would not be utilized by the proposed Specific Plan. All development associated with the proposed Specific Plan project would connect to and be served by the existing public sewer system for wastewater discharge and treatment. No impacts would occur as a result of the proposed Specific Plan and this issue requires no further analysis in the EIR.

f) Conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, § 22.56.215) or hillside design standards in the County General Plan Conservation and Open Space Element? ☐ ☐ ☐ ☒

No Impact. The Specific Plan area is not located within a Hillside Management Area or within an area that is subject to hillside design standards. The Specific Plan area is flat land that is not in the vicinity of

a hillside. As a result, the Specific Plan would not conflict with the Hillside Management Area Ordinance or any hillside standards, and will not be discussed further in the EIR.

8. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐

Potentially Significant Impact. Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Construction and operation of development permitted by the proposed Specific Plan would generate GHG emissions, both directly and indirectly. Construction activities are short-term and cease to emit GHGs upon completion. Operation emissions associated with the future developments in the Specific Plan area would include GHG emissions from mobile sources (transportation), energy, water use and treatment, and waste disposal. GHG emissions generated by electricity and natural gas use by future developments are indirect GHG emissions from the energy that is produced off-site. These sources would have the potential to generate GHGs and result in a significant impact on the environment. Therefore, impacts associated with GHG emissions are potentially significant and will be evaluated in the EIR.

b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Potentially Significant Impact. Assembly Bill (AB) 32, signed by Governor Arnold Schwarzenegger in 2006, directs the State of California to reduce statewide GHG emissions to 1990 levels by the year 2020. In accordance with AB 32, ARB developed the Climate Change Scoping Plan (Scoping Plan), which outlines how the state would achieve the necessary GHG emission reductions to achieve this goal (ARB, 2008). On October 6, 2015, the County adopted the Community Climate Action Plan (CCAP) a component of the Air Quality Element in the new General Plan. The CCAP will reduce greenhouse gas emissions generated by community activities and works in conjunction with other sustainability initiatives in the County to reduce carbon emissions by 2020. The CCAP establishes a recent baseline inventory of emissions and identifies a target reduction needed to achieve the State goals. By implementing mandatory actions identified in the CCAP, projects can streamline their quantitative greenhouse gas analysis requirements in CEQA. However, the CCAP analysis is based on the land use densities and intensities specified in the new General Plan. Because the proposed Specific Plan proposes a plan amendment and would likely increase densities, it does not qualify for streamlining. The EIR will need to include both a quantitative and qualitative analysis of greenhouse gas emissions.

9. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials?	☐	☐	☒	☐

Less Than Significant Impact. A hazardous material is defined as any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that a business or the local implementing agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the environment.

There are multiple state and local laws that regulate the storage, use, and disposal of hazardous materials. The Los Angeles County Health and Hazardous Materials Division was designated by the State Secretary for Environmental Protection 1997 as the Certified Unified Program Agency ("CUPA") for the County. The CUPA is the local administrative agency that coordinates the following programs regulating hazardous materials and hazardous wastes: the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, the California Accidental Release Prevention Program ("Cal-ARP"), the Aboveground Storage Tank Program and the Underground Storage Tank Program (LA County, 2011).

Operation of the proposed project provides for increased intensity of residential and non-residential uses on the site. Hazardous materials associated with residential and commercial uses include solvents, cleaning agents, paints, pesticides, batteries, and aerosol cans. The medical facilities and hospital is also a small- and large-quantity generator of hazardous materials such as small medical wastes such as needles to waste oil and mixed oil; oxygenated solvents including acetone, butanol, and ethyl acetate; spent halogenated solvents; and other hazardous materials including batteries, lamps, pesticides, thermostats, mercury, silver and polychlorinated biphenyls. All of the hazardous materials that would be used by the project are subject to existing applicable federal, state, and local regulations. Because the proposed project uses would largely remain the same as under current conditions, substantial changes to the operational characteristics and types of potentially hazardous materials are not anticipated. Normal routine use of these products under project conditions would not result in a significant hazard to residents or workers.

Construction of the new development within the Specific Plan area would involve the routine use, handling, storage, transport, and disposal of hazardous materials such as fuels, paints, and solvents, consistent with applicable federal, state, and local regulations. In compliance with existing federal, state, and local regulations, the amounts of these materials present during construction would be limited and would not pose a significant adverse hazard to workers or the environment. The construction contractor would be required to implement standard BMPs regarding hazardous materials storage, handling, and disposal during construction in compliance with the State General Permit.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset	☒	☐	☐	☐

and accident conditions involving the release of hazardous materials or waste into the environment?

Potentially Significant Impact. The Specific Plan area has long been developed with a variety of urban uses. Roadway improvements and development projects that would occur by implementation of the proposed Specific Plan could unearth unknown contaminants that may be present in soil and/or groundwater from current and/or historic site usage. The potential for the proposed Specific Plan to produce significant impacts to the public during the transportation of hazards or involving the potential release of hazards will be evaluated in the EIR.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses? ☒ ☐ ☐ ☐

Potentially Significant Impact. The Specific Plan area contains existing schools, including King-Drew Magnet High School, Charles R. Drew University of Medicine and Science, Barack Obama Charter School, and Martin Luther King, Jr. Elementary. Other sensitive land uses include residential areas and medical facilities. As described above, the proposed Specific Plan could result in excavation and handling of hazardous materials if unknown contaminants are found during excavation activities. Therefore, the EIR will include an identification of the schools, residential areas, and medical facilities near the Specific Plan area and evaluation of impacts related to the potential release of hazardous materials.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ☒ ☐ ☐ ☐

Potentially Significant Impact. As described above, the Specific Plan area has long been developed for urban uses that could have a history of hazardous material usage or contamination. As described above, the proposed Specific Plan could result in excavation and handling of hazardous materials if unknown contaminants are found during excavation activities, which could create a significant hazard to the public or the environment. Thus, the EIR will include a database search of federal, state, and local governmental databases to identify any hazardous material sites within the Specific Plan area and potential related impacts from implementing the proposed Specific Plan.

e) For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? ☐ ☐ ☐ ☒

No Impact. The proposed Specific Plan area is not located within an airport land use plan or airport approach zone (ALUC, 2015). The nearest public airport is approximately 2 miles south of the Specific Plan area (Compton/Woodley Airport); the Hawthorn Municipal Airport is approximately 5 miles west of the Specific Plan area and Los Angeles International Airport is approximately 10 miles west of the Specific Plan area. Therefore, the potential for the proposed project to result in a safety hazard for people residing or working in the vicinity of an airport will not require further analysis in the EIR.

f) For a project within the vicinity of a private airstrip, ☐ ☐ ☐ ☒

would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed Specific Plan area is not located within the vicinity of a private airstrip. Therefore, the potential for the proposed project to result in a safety hazard for people residing or working in the vicinity of an airport will not require further analysis in the EIR.

g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☒ ☐

Less Than Significant Impact. Existing County development standards would require new development within the Specific Plan to be designed so as not to interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant as a result of the proposed Specific Plan and no further analysis of this criterion is required in the EIR.

h) Expose people or structures to a significant risk of loss, injury or death involving fires, because the project is located:

i) within a Very High Fire Hazard Severity Zone (Zone 4)? ☐ ☐ ☐ ☒

No Impact. The Specific Plan area is located within an urban area that does not contain wildlands, and is not located in an area classified as a Very High Fire Hazard Severity Zone (Cal Fire, 2012). Therefore, impacts related to wildland fires would not occur, and this issue requires no further analysis in the EIR.

ii) within a high fire hazard area with inadequate access? ☐ ☐ ☐ ☒

No Impact. As described above, the Specific Plan area is located within an urban developed area and is not located within an identified wildland fire hazard area. Furthermore, the Specific Plan area currently has adequate access, which would be continued with further development. As a result, impacts related to high fire hazards and inadequate access would not occur, and no further discussion will be included in the EIR.

iii) within an area with inadequate water and pressure to meet fire flow standards? ☐ ☐ ☐ ☒

No Impact. The availability of sufficient water pressure is a basic requirement of the Fire Department (Los Angeles, 2010). Existing fire flows within and near the Specific Plan area are at or above the minimum requirements and impacts related to fire flow would not occur, and no further discussion will be included in the EIR.

iv) within proximity to land uses that have the potential for dangerous fire hazard? ☐ ☐ ☐ ☒

No Impact. The Specific Plan area is not within proximity to land uses that have the potential for a dangerous fire hazard. The Specific Plan area is developed and is not in an area with light fuels or

unpredictable weather conditions. Land uses consist of residential, commercial, industrial, open space, and public uses. These land uses would not generate potential impacts related to a dangerous fire hazard, and no further discussion will be included in the EIR.

i) Does the proposed use constitute a potentially dangerous fire hazard?	☐	☐	☐	☒

No Impact. The proposed Specific Plan would develop and redevelop residential and commercial land uses. None of the uses related to the proposed Specific Plan would constitute a potentially dangerous fire hazard, impacts would not occur, and no further discussion will be included in the EIR.

10. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐

Potentially Significant Impact. Infill and redevelopment that would occur as proposed in the Specific Plan would disturb soils and would utilize equipment and hazardous substances that, if not properly contained, could degrade surrounding water quality. Future development within the Specific Plan area would expand residential, commercial and public uses that would increase the number of residents and the concentration of persons within the area that could increase pollutants such as pesticides, vehicle fuels and oils, and litter; all of which, if not properly contained, could degrade existing water quality. Potential impacts related to water quality standards and waste discharge requirements will be addressed in the EIR.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☒	☐	☐	☐

Potentially Significant Impact. The Specific Plan area receives water from Park Water Company and Golden State Water Company. Infill and redevelopment that would occur with implementation of the Specific Plan would result in population growth; thereby increasing demand on water supplies. The proposed project would add approximately 1,734 residential dwelling units and 2,630,306 square feet of commercial space to the Specific Plan area, and is, therefore required to develop a water supply assessment in accordance with State Senate Bill 610 to demonstrate that an assured water supply is available to support development of the uses proposed in the Specific Plan. The EIR will include a quantification of the water supplies needed for the proposed Specific Plan and an analysis of potential local groundwater impacts that could result.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☒	☐	☐	☐

Potentially Significant Impact. According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 06037C1815F, the Specific Plan area is not located in a flood zone (FEMA, 2008), and no existing surface drainages or rivers are located in the Specific Plan area. The proposed Specific Plan would implement redevelopment and infill development within an already developed and mostly paved urban area. After implementation of the project development, runoff would continue to flow over either paved or

landscaped areas that would eventually be directed toward storm drains. Therefore, the potential for erosion to occur from implementation of the proposed Specific Plan would be extremely low. However, construction of certain project components would expose bare soil that could be subject to erosion, potentially resulting in a significant impact. This issue will be further discussed in the EIR.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐

Less Than Significant Impact. As stated previously, the proposed Specific Plan area is not located in a flood zone and does not contain any streams or rivers. The Specific Plan components include an expansion or reconfiguration of existing urban development in mostly paved areas; therefore, the proposed components would maintain existing drainage patterns, and would not contribute to an increase in impervious surfaces in the Specific Plan area such that increased runoff and flooding on or offsite would result. Impacts related to flooding would be less than significant, and flooding will not be further discussed in the EIR.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☒	☐	☐	☐

Potentially Significant Impact. As stated previously, the Specific Plan components include an expansion or reconfiguration of existing urban development in mostly paved areas; therefore, the proposed components would maintain existing drainage patterns, and would likely not contribute to an increase in impervious surfaces in the Specific Plan area such that increased runoff would exceed the capacity of drainage systems. During construction, existing drainage patterns may be altered temporarily and new sources of runoff could occur. Likewise, the proposed residential and commercial development may alter the amount of runoff that drains from concrete and other building materials, and this may contribute to an excess in stormwater runoff. Impacts related to an increase in runoff and the capacity of drainage systems are potentially significant and will be further discussed in the EIR.

f) Generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality? ☒ ☐ ☐ ☐

Potentially Significant Impact. Development implemented by the proposed project would be required to comply with the NPDES Construction General Permit (NPDES Order No. 2009-0009-DWQ). The Construction General Permit requires the development and implementation of a SWPPP, which identifies erosion, sediment, and non-structural BMPs that would be implemented to reduce construction impacts on storm water quality. During operation, the development projects implemented by the Specific Plan would be required to maintain water quality through development and implementation of Water Quality Management Plans (WQMPs). During operation the development projects implemented by the Specific Plan would be required to comply with the NPDES MS4 Permit (NPDES Order No. R4-2012-0175). The EIR will evaluate potential types and amounts of construction and operation related pollutant sources and the reduction of impacts that would occur through compliance with the required permits. Mitigation measures will be provided, if necessary, to reduce impacts related to water quality.

g) Conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)? ☐ ☐ ☐ ☒

No Impact. The LA County LID ordinance was designed to manage rainfall and stormwater runoff in urban areas through the distribution of small, cost-effective landscape features throughout project sites. Such features include bio-retention/filtration landscape areas, reduced impervious surfaces, and functional landscaping and grading (DPW, 2014). The development projects implemented by the Specific Plan would develop and implement a WQMP as required by the NPDES MS4 Permit that would incorporate structural and non-structural BMPs designed to reduce volume, velocity and pollutant loading of storm water and limit dry weather flows discharging from the site. The NPDES MS4 Permit also requires implementation of LID practices to prevent non-storm water discharges and encourage proper filtration of runoff to reduce the degradation of water quality. Development within the Specific Plan area would comply with Los Angeles County's LID and would incorporate BMPs that are consistent with LID. Impacts regarding conflict with the LID ordinance would not occur, and no further discussion will be included in the EIR.

h) Result in point or nonpoint source pollutant discharges into State Water Resources Control Board-designated Areas of Special Biological Significance? ☐ ☐ ☐ ☒

No Impact. There are no Areas of Special Biological Significance ("ASBS") on-site or within close proximity to the Specific Plan area. The closest ASBS is the Laguna Point to Latigo Point which is approximately 30 miles northwest of the Specific Plan area. This ASBS is the largest of the mainland ASBS in Southern California, with 24 miles of coastline and 11,842 acres of marine habitat (SWRCB, 2014). Thus, impacts associated with discharges into an ASBS would not occur and will not be evaluated further in the EIR.

i) Use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)? ☐ ☐ ☐ ☒

No Impact. Wastewater produced in the project area is currently transported by sewer lines to the City of Los Angeles sewer system (Los Angeles City, 2015). No wastewater treatment systems are proposed within the Specific Plan area. The proposed Specific Plan would not include an on-site wastewater treatment system and impacts would not occur and will not be discussed further in the EIR.

j) Otherwise substantially degrade water quality? ☒ ☐ ☐ ☐

Potentially Significant Impact. The potential water quality impacts from construction and operation of the proposed Specific Plan components will be analyzed in the EIR, as described in threshold "a" above.

k) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, or within a floodway or floodplain? ☐ ☐ ☐ ☒

No Impact. The Specific Plan area is not within a 100-year flood hazard area. According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 06037C1815F, the Specific Plan area is not located in a flood zone (FEMA, 2008), and no existing surface drainages or rivers are located in the Specific Plan area. As a result, no adverse impacts related to flooding are expected as a result of the development of the proposed Specific Plan and this issue warrants no further discussion in the EIR (DWR, 2015).

l) Place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain? ☐ ☐ ☐ ☒

No Impact. See explanation 10k above.

m) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? ☐ ☐ ☒ ☐

Less Than Significant Impact. The Specific Plan area is not near a levee or dam that may fail and expose people or structures to risk (County of Los Angeles, 2015). Impacts would be less than significant and no further discussion is necessary in the EIR.

n) Place structures in areas subject to inundation by seiche, tsunami, or mudflow? ☐ ☐ ☐ ☒

No Impact. The Specific Plan area is not subject to inundation by tsunami as it is located approximately 10.5 miles east of the Pacific Ocean. Seiches occur in semi- or fully enclosed bodies of water when strong winds and/or rapid changes in atmospheric pressure push water from one end of the body of water to the other, resulting in an oscillation back and forth of waves (NOAA, 2015). The dry, Mediterranean climate in the Specific Plan area is not prevalent to dramatic changes in pressure or strong winds such that a seiche would occur, bypassing holding walls and inundating the Specific Plan area. Mudflows are flowing masses of fine-grained earth material with a high degree of fluidity (USGS, 2015), and happen on slopes. The Specific Plan area is developed, relatively flat and does not have enough exposed soils or topography to be a risk of mudflow. Impacts would not occur; these issues will not be evaluated further in the EIR.

11. LAND USE AND PLANNING

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒

No Impact. The proposed Specific Plan is located in an urban developed area, and the proposed project would provide for infill and redevelopment of parcels within the Willowbrook community. This would not physically divide an established community. The Specific Plan would connect activity centers and different parts of Willowbrook so that the community is more connected; not physically divided. The proposed roadway and pedestrian improvements that would be implemented by the Specific Plan are intended to provide improved circulation and cohesion, and do not include any components that would displace existing residences or otherwise physically divide the Willowbrook community. No impacts are anticipated as a result of the proposed Specific Plan.

b) Be inconsistent with the applicable County plans for the subject property including, but not limited to, the General Plan, specific plans, local coastal plans, area plans, and community/neighborhood plans?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project is a Specific Plan that would result in changes to the land use plan and zoning designations. The proposed Specific Plan identifies sites that have the potential for redevelopment or infill development and proposes to rezone land uses of specific parcels within the area to provide for the TOD envisioned by the Specific Plan. The proposed Specific Plan would result in increases in development intensity and changes in land uses that could conflict with an applicable land use plan, policy, or regulation that was adopted for the purpose of avoiding or mitigating an environmental effect. The proposed Specific Plan's compatibility with applicable plans, policies, and regulations will be assessed in the EIR.

c) Be inconsistent with the County zoning ordinance as applicable to the subject property?	☒	☐	☐	☐

Potentially Significant Impact. The proposed project is in the Los Angeles County General Plan Metro Planning Area, the geographic center of Los Angeles County in the unincorporated Willowbrook neighborhood. The proposed project is a Specific Plan that would result in changes to the land use plan and zoning designations. The Specific Plan area's existing zoning includes: C-2 (neighborhood commercial), C-3 (unlimited commercial), M-1 (light manufacturing), MXD (mixed use development), R-1 (Single-family residence), R-2 (two-family residence), and R-3 (limited multiple residence). The Willowbrook TOD Specific Plan establishes zoning for parcels within the Specific Plan boundary as identified in Figure 5, Proposed Zoning. The zones for the Specific Plan area include: Mixed Use 1 (MU-1); Mixed Use 2 (MU-2); MLK Medical; Drew Educational; Imperial Commercial; Willowbrook Residential 1; Willowbrook Residential 2; Willowbrook Residential 3; and Open Space (O-S). Table 1 in the project description shows the additional development that would occur from build out of the proposed Specific Plan. Table 2 in the project description shows the existing acreage, zoning and land uses that would be revised by implementation of the proposed Specific Plan. The proposed Specific Plan's impacts related to consistency with the County zoning ordinance will be assessed in the EIR.

d) Conflict with Hillside Management criteria, Significant Ecological Areas conformance criteria, or other applicable land use criteria?	☐	☐	☐	☒

No Impact. The Specific Plan area is within the urban and developed community of Willowbrook. The Specific Plan area is not located within any habitat conservation plan or natural community conservation plan. Therefore, no impact would occur. This issue will not be addressed further in the EIR.

12. MINERAL RESOURCES

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

No Impact. No significant mineral deposits have been identified within the Specific Plan area (USGS, 2014). As a result, the proposed Specific Plan would not cause a loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No impacts to mineral resources are expected to occur.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

No Impact. See explanation 12a above.

13. NOISE

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project result in:				
a) Exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?	☒	☐	☐	☐

Potentially Significant Impact. Noise levels generated by construction and operation of future development within the Specific Plan area could result in the exposure of persons to or generation of noise levels in excess of standards established in the County of Los Angeles General Plan Noise Element and Noise ordinance. During construction of future development in the Specific Plan area, sensitive receptors that are located nearby a construction site would be exposed to temporary increases in ambient noise levels. Once developed, operational noise levels generated by new developments would include stationary sources (e.g., heating, ventilation, and air conditioning equipment) as well as mobile sources (e.g., traffic noise) within the Specific Plan area. As construction and operational noise levels associated with the Specific Plan area could potentially exceed or violate County noise standards and/or regulations, these potential impacts will be assessed in the EIR.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐

Potentially Significant Impact. During construction activities within the Specific Plan area, people may be exposed to excessive groundborne vibration or groundborne noise levels from the operation of heavy equipment. These impacts would generally only occur for a short duration. However, because existing land uses may be subject to disturbance and/or annoyance by groundborne noise or vibration, potential impacts could occur and this issue will be evaluated in the EIR.

The proposed Specific Plan would implement mixed use commercial and residential development within the project area. These land uses that would be allowed by the proposed Specific Plan do not involve the types of uses that would involve any major sources (mobile or stationary) of vibration, which are more typical of large industrial facilities. Thus, once developed, the operation of the new land uses in the Specific Plan area is not anticipated to generate vibration levels that would adversely affect existing or future sensitive receptors. As a result, operational vibration impacts associated with the proposed Specific Plan would be less than significant and would not require further analysis in the EIR.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas?	☒	☐	☐	☐

Potentially Significant Impact. The proposed Specific Plan would allow for redevelopment at an increased intensity; taller buildings, expanded sidewalks, bicycle lanes and bicycle parking facilities, and alterations to the existing street intersections in order to provide a TOD land use pattern to the Specific

Plan area. Most new development would be located within walking distance of the existing Metro station and would include a mix of residential, mixed-use, commercial, and public uses designed for pedestrians while also accommodating vehicular traffic. Development within the Specific Plan area may result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project primarily from potential increases in traffic noise and operation of the development. Although the Specific Plan's proximity to the Metro Station encourages transit use, development pursuant to the proposed Specific Plan may generate an increase in vehicle trips. As a result, the total net increase in traffic noise levels over existing conditions will be quantified and analyzed in the EIR.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems?	☒	☐	☐	☐

Potentially Significant Impact. Development within the Specific Plan area may result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project during construction of new land use developments. The operation of construction equipment at development sites within the Specific Plan area would result in increased noise levels, which could adversely affect off-site sensitive receptors located nearby. In addition, construction traffic associated with new developments may also result in a temporary or periodic increase in noise levels on the local roadways in the Specific Plan area. As such, potential noise impacts on existing and future sensitive receptors (e.g., hospital and residential uses) from exposure to temporary construction noise levels will evaluated in the EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

No Impact. The Specific Plan area is not located in the jurisdiction of an airport land use compatibility plan, nor is it in an airport approach zone (ALUC, 2015). The nearest public airport is approximately 2 miles south of the Specific Plan area (Compton/Woodley Airport); the Hawthorn Municipal Airport is approximately 5 miles west of the Specific Plan area and Los Angeles International Airport is approximately 10 miles west of the Specific Plan area. Therefore, the proposed Specific Plan would not expose people to excessive noise from an airport, and therefore, this issue area would not be further analyzed in the EIR.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

No Impact. See explanation 13e above.

14. POPULATION AND HOUSING

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☒	☐	☐	☐

Potentially Significant Impact. The proposed Specific Plan would allow for new development and redevelopment at an increased intensity; and would provide taller buildings, expanded sidewalks, bicycle lanes and bicycle facilities, and alterations to the existing street intersections in order to implement a TOD land use pattern to the Specific Plan area. Implementation of the proposed Specific Plan would induce population growth in the area by planning for 1,734 additional residential units and 2,630,306 additional square feet of non-residential space within the Specific Plan area. Therefore, this issue will be discussed further in the EIR.

b) Displace substantial numbers of existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact. The proposed Specific Plan would not result in the permanent displacement of substantial number of existing housing, nor would it result in the displacement of substantial numbers of people. The proposed Specific Plan provides for infill development and redevelopment would include a mix of residential, commercial, industrial, and public uses. Build out of the Specific Plan would provide 1,734 additional residential units within the Specific Plan area. Development projects implemented by the proposed Specific Plan may result in temporary displacement of residents during construction activities. However, development projects would occur sporadically at a parcel by parcel project level, the potential displacement of persons residing on an infill or redevelopment parcel would be short-term, and the project would result in a greater number of residential units to house residents of the area. Therefore, impacts related to displacement of housing or persons that would require replacement housing elsewhere would not occur, and this issue will not be further evaluated in the EIR.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact. See explanation for 14b above.

d) Cumulatively exceed official regional or local population projections?	☒	☐	☐	☐

Potentially Significant Impact. The Specific Plan would increase the number of residential units with the Specific Plan area. Thus, the maximum number of residents would increase with the proposed project; and the project could result in an exceedance of population projections. From 2013 to 2018, population growth

will average 0.8 percent per year in Los Angeles County and the employment growth rate is expected to average 1.6 percent per year (Caltrans, 2013). However, the development pursuant to the proposed Specific Plan would provide additional housing and employment opportunities, which could induce population growth that may cumulatively exceed official population projections. Therefore, impacts related to population projections may occur from implementation of the proposed Specific Plan and analysis will be included in the EIR.

15. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☒	☐	☐	☐

Potentially Significant impact. The proposed Specific Plan would result in redevelopment and infill development that would increase the residential and employee populations in the Specific Plan area that would result in incrementally increased demands for public services and facilities and could, therefore, have the potential to result in a significant impact on the need for new or altered fire, police, recreation or other public facilities. As a result, the proposed Specific Plan's impact on public services will be analyzed in the EIR.

Sheriff protection?	☒	☐	☐	☐

Potentially Significant impact. See explanation 15a above.

Schools?	☒	☐	☐	☐

Potentially Significant impact. See explanation 15a above.

Parks?	☒	☐	☐	☐

Potentially Significant impact. See explanation 15a above.

Libraries?	☒	☐	☐	☐

Potentially Significant impact. See explanation 15a above.

Other public facilities?	☒	☐	☐	☐

Potentially Significant impact. See explanation 15a above.

16. RECREATION

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐	☐	☐

Potentially Significant Impact. Mona Park is located within the southeast Specific Plan area. An increase in population and population density from new proposed residential and commercial uses would increase the use of existing neighborhood and regional parks or other recreation facilities like Mona Park, which could require the construction or expansion of recreation facilities as compared to existing conditions. In addition, the proposed Specific Plan includes pedestrian and bicycle facilities that would be constructed, and as described throughout this Initial Study, could have an adverse effect on the environment. Construction and operation of the new recreational facilities that would be implemented by the proposed Specific Plan will be evaluated in the EIR.

b) Does the project include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment?	☒	☐	☐	☐

Potentially Significant Impact. No new parks or recreational facilities are proposed as part of the Specific Plan project; however, due to the increase in population and population density from the proposed residential and commercial uses, Mona Park may be impacted. The open space strategy of the Specific Plan would improve the park/open space network by using streets and pedestrian connections, bringing these amenities within a reasonable walking and biking distance for the Specific Plan area residents. In addition, the Specific Plan includes generation of new open space and providing varied open spaces that would further improve open space in the Specific Plan area. These components of the Specific Plan may have an adverse physical effect on the environment; and therefore, will be analyzed in the EIR.

c) Would the project interfere with regional open space connectivity?	☐	☐	☐	☒

No Impact. The proposed Specific Plan would not interfere with regional open space connectivity. There is very little open space in the Specific Plan area and the project would enhance open space connectivity by encouraging new development to provide public open space. Open space connectivity would occur by the Specific Plan from implementation of pedestrian connections, common open space areas, plazas and courtyards, and public sidewalks. The open space provided by the Specific Plan would not interfere with any regional open space connectivity. Therefore, project impacts related to open space connectivity would not occur, and further discussion will not be included in the EIR.

17. TRANSPORTATION/TRAFFIC

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐

Potentially Significant Impact. The proposed Specific Plan would implement bicycle lanes and pedestrian improvements, reduced parking requirements, increased development, and road diets, which has the potential to impact traffic patterns. Pedestrian improvements measures would facilitate pedestrian circulation, by reducing the width of roadway for pedestrians to cross, providing additional sidewalk space, and making pedestrian crossings more visible to both pedestrians and motorists. In addition, traffic generated by new uses and increased intensity of existing uses associated with the proposed Specific Plan could potentially have a significant impact on area roadways, including the potential for conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Therefore, potential impacts related to performance of the roadway system in relation to applicable policies and ordinances will be evaluated in the EIR.

b) Conflict with an applicable congestion management program (CMP), including, but not limited to, level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways?	☒	☐	☐	☐

Potentially Significant Impact. See explanation 17a above.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

No Impact. The Specific Plan area is not located in the jurisdiction of an airport land use compatibility plan, nor is it in an airport approach zone (ALUC, 2015). The nearest public airport is approximately 2 miles south of the project area (Compton/Woodley Airport); the Hawthorn Municipal Airport is approximately 5 miles west of the project area and Los Angeles International Airport is approximately 10 miles west of the project area. The proposed Specific Plan components would not result in changes to air traffic patterns or a change in air traffic locations. Therefore, there would be no impact, and further discussion will not be included in the EIR.

d) Substantially increase hazards due to a design	☐	☐	☒	☐

feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The Specific Plan proposes to redesign some intersections and implement road diets that would generally result in lane reduction to add a bicycle lane. A Road Diet involves converting an existing four-lane undivided roadway segment to a three-lane segment consisting of two through lanes and a center two-way left-turn lane. The reduction of lanes allows the roadway cross section to be reallocated for other uses such as bike lanes, pedestrian refuge islands, transit stops, or parking (Department of Transportation, 2015). All development within the Specific Plan would be required meet LA County design standards in relation to protection of pedestrian and bicycle traffic. In addition, the proposed uses within the Specific Plan would be compatible with the surrounding mixed uses in the urban environment. As a result, less than significant impacts would occur from implementation of the proposed Specific Plan, and further discussion will not be included in the EIR.

e) Result in inadequate emergency access? ☐ ☐ ☒ ☐

Less Than Significant Impact. The Specific Plan proposes to redesign some intersections and implement road diets. The number of traffic lanes and roadway lane configurations would generally remain the same, except where road diets would be implemented. Roadway diets, described above in 17d, would generally result in lane reduction to add a bicycle lane. The proposed Specific Plan would involve the reconfiguration of roadways and driveways to residential and commercial properties, and would require the presence of construction equipment and materials adjacent to roadways. The Specific Plan requires that the design of newly configured roadways and development sites to provide adequate emergency access. The changes to roadway patterns and driveways within the Specific Plan area would require construction permits from the County's Public Works Department, which would not allow development activities to result in potential impacts related to emergency access. As a result, impacts would be less than significant.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? ☐ ☐ ☐ ☒

No Impact. The proposed Specific Plan itself is based on the encouragement of TOD. Therefore, the development of the proposed components within the would support alternative transportation, and would be consistent with and further adopted policies, plans, and programs supporting alternative transportation (e.g., taking the Metro, bus turnouts, bicycle racks). A number of pedestrian oriented intersection improvements would be implemented throughout the Specific Plan area. These would be based on a menu of improvements that includes adding high visibility crosswalks at intersections; adding passive pedestrian detection and pedestrian push buttons for crosswalks at traffic signals at intersections; adding countdown pedestrian signals and audio signals to crosswalks at intersections; adding advance stop bars to intersection approaches; adding sidewalk bulb-outs and extensions, or reducing curb returns, on intersection corners where feasible; adding median nose/crossing islands where advantageous and feasible. These measures would facilitate pedestrian circulation, by reducing the width of roadway for pedestrians to cross, providing additional sidewalk space, and making pedestrian crossings more visible to both pedestrians and motorists. Impacts would be less than significant, and this issue requires no further analysis in the EIR

18. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Would the project:				
a) Exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Boards?	☒	☐	☐	☐

Potentially Significant Impact. The proposed Specific Plan would provide for redevelopment and infill development that would increase demand for utilities. This increase in demand has the potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, may require the expansion of water or wastewater treatment facilities, may require the construction of new storm water drainage facilities, and may impact water supplies from existing entitlements and resources. Any deficiencies in the Specific Plan area of utilities and service systems may result in significant impacts on the environment. As a result, impacts related to utilities and service systems will be evaluated in the EIR.

b) Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Potentially Significant Impact. See explanation 18a above.

c) Create drainage system capacity problems, or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Potentially Significant Impact. See explanation 18a above.

d) Have sufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses?	☒	☐	☐	☐

Potentially Significant Impact. See explanation 18a above.

e) Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Potentially Significant Impact. See explanation 18a above.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐

Potentially Significant Impact. See explanation 18a above.

g) Comply with federal, state, and local statutes and regulations related to solid waste?	☒	☐	☐	☐

Potentially Significant Impact. See explanation 18a above.

19. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

Potentially Significant Impact. Based on evaluations and discussions contained in this Initial Study, the proposed Specific Plan may have a significant potential to degrade the quality of the environment, including potential impacts to air quality, land use, population and housing, and traffic. Additional information is required to determine whether the proposed Specific Plan would result in significant impact on the environment.

b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☒	☐

Less Than Significant Impact. The Specific Plan is designed to achieve both short-term and long-term environmental goals by implementing sustainable design guidelines. For example, green buildings are structures that are designed, constructed, renovated, operated and demolished with minimal environmental impacts. The buildings would be sited and designed to maximize the use of sunlight and shade for energy savings, and respect the solar access of adjacent buildings. Buildings would be clustered for shade, and incorporate protective courtyards, recessed windows and doors, and insulated walls. To reduce energy use, the east and west walls of the buildings would be shaded with evergreen trees to reduce summer heat gain. South walls would be shaded with deciduous trees. Walkways and plazas would be designed to collect stormwater where feasible.

To reduce water use and maintenance costs, the majority of the plant materials would be drought tolerant and require relatively low maintenance. Arcades, covered walkways, trellises and passages would be incorporated to provide sheltered areas for pedestrian circulation as well as shade the buildings to reduce energy usage. In addition, the Specific Plan would comply with County regulations that are provided to protect both short and long-term environmental goals. Therefore, the Specific Plan would not result in a disadvantage to long-term environmental goals.

c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects,	☒	☐	☐	☐

the effects of other current projects, and the effects of probable future projects)?

Potentially Significant Impact. The proposed Specific Plan may have a significant potential to degrade the quality of the environment due to multiple potential environmental impacts. In combination with effects of past projects, current projects, and probable future projects, effects of the Specific Plan may be cumulatively considerable. Therefore, cumulative potential impacts will be evaluated for each environmental topic analyzed in the EIR.

d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Potentially Significant Impact. See explanation 19a above.

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Project Description

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A-3 Scoping Comments

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

November 6, 2015

Connie Chung, AICP
County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

Notice of Preparation of a CEQA Document for the
Willowbrook Transit Oriented District Specific Plan

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the CEQA document upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). SCAQMD staff also recommends that the lead agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts

when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the project, including:

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies.
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at Jwong1@aqmd.gov or call me at (909) 396-3176.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

LAC151103-01
Control Number

DEPARTMENT OF TRANSPORTATION
DISTRICT 7-OFFICE OF TRANSPORTATION PLANNING
100 S. MAIN STREET, MS 16
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Serious Drought.
Serious drought.
Help save water!

November 30, 2015

Ms. Connie Chung
Los Angeles County
320 West Temple Street
Los Angeles, CA 90012

RE: Willowbrook TOD Specific Plan
Vic. LA-10 PM R8.899 to R10.296
SCH # 2015101106
IGR/CEQA No. 151108AL-NOP

Dear Ms. Chung:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The Willowbrook TOD Specific Plan would encourage transit oriented development; promote active transportation and improve quality of life for residents; reduce vehicles miles traveled; create community benefits with improvements to the public realm; improve economic vitality and employment opportunities; and streamline the environmental review process for future projects.

The Specific Plan would facilitate development by rezoning and amending General Plan land uses to include mixed uses, increased residential densities, and additional neighborhood serving retail uses. Overall, the Specific Plan would accommodate an additional 1,734 dwelling units and 2,630,306 square feet of non-residential land use. Any net traffic trips from the Specific Plan would contribute traffic impact to the State facilities.

This letter is a follow up to a phone conversation on November 24, 2015 between yourself and Mr. Alan Lin, Caltrans Project Coordinator. Both agencies agree that a Formal Scoping Meeting to discuss the preparation of the traffic analysis, potential traffic impacts, and proposed mitigation on the State facilities is necessary.

Caltrans understands that the current General Plan and new transportation performance measures and CEQA thresholds have not being updated to VMT (Vehicle Miles Traveled) at the time. Caltrans is concerned that when traffic generated by the project, along with cumulative traffic is expected to use an off-ramp that is operating at or near capacity, the additional traffic may potentially exceed the off-ramps capacity and back up onto the mainline freeway.

To assist in evaluating the impacts of this project on State transportation facilities, a traffic study should be prepared prior to preparing the Draft Environmental Impact Report (DEIR). Please refer the project's traffic consultant to Caltrans' traffic study guide Website:

http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf

Listed below are some elements of what is generally expected in the traffic study:

1. Presentations of assumptions and methods used to develop trip generation, trip distribution, choice of travel mode, and assignments of trips to I-105 and all off ramps within the project vicinity including but not limit to westbound (WB) I-105 on/off ramps to/from Imperial Highway, eastbound (EB) I-105 to/from Wilmington Ave., and EB/WB I-105 to/from S Central Ave. The traffic consultant should work with Caltrans to identify and confirm off-ramp study locations and freeway segments prior to the preparation of the traffic study. The traffic study should also analyze the storage for left-turn pocket at on-ramps.

2. An off-ramp queuing analysis should be conducted utilizing the Highway Capacity Manual (HCM). The capacity of the off-ramp should be calculated by the actual length of the off-ramp between the terminuses to the gore point (30 feet per car preferred) with some safety factor or referenced to Highway Design Manual at 23' point (Figure 504.2A Single Lane Freeway Entrance) or any other justified methods approved in advance by Caltrans. The existing queue length should be calculated from the traffic counts and the percent of truck assignments (data from Caltrans) to the ramp with a passenger car equivalent factor of 3.0 (worst case scenario). The analyzed result may need to be calibrated with actual signal timing when necessary. It is also recommended that the Lead Agency determine whether the existing, existing plus project, and project-related plus cumulative traffic are expected to cause long queues on the on and off-ramps. Please include mitigation measures if forecasted vehicle queues are expected to exceed available storage capacity with some safety factor.

3. Project travel modeling should be consistent with other regional and local modeling forecasts and travel data. Caltrans uses the indices to verify the results and any differences or inconsistencies must be thoroughly explained. Please submit modeling assumptions for Caltrans review and comment.

4. Trip generation rates for the project should be based on the nationally recognized recommendations contained in "Trip Generation" manual, 9th edition, published by the Institute of Transportation Engineers (ITE).

5. Analysis of ADT, AM and PM peak-hour volumes for both the existing and future conditions in the affected area with and without project. Utilization of transit lines and vehicles, and of all facilities, should be realistically estimated. Future conditions should include build-out of all projects and any plan-horizon years.

6. The analysis should include existing traffic, traffic generated by the project, cumulative traffic generated from all specific approved developments in the area, and traffic growth other than from the project and developments.

7. A discussion of mitigation measures appropriate to alleviate anticipated traffic impacts should also be included. Any mitigation involving transit or Transportation Demand Management (TDM) should be justified and the results conservatively estimated.

8. A fair share contribution toward pre-established or future improvements on the State Highway System is considered acceptable mitigation. (Please see Appendix "B" of the Guide for more information). Please note that for purposes of determining project share of costs, the number of trips from the project on each traveling segment or element is estimated in the context of forecasted traffic volumes, which include build-out of all approved and not yet approved projects and other sources of growth.

Caltrans encourages the Lead Agency to work with neighboring developing cities such as, the City of Los Angeles, City of Lynwood, and the City of Compton, to resolve cumulative significant traffic impacts on the State facilities. A plan to work with the neighboring cities should be discussed in the Specific Plan or a new Resolution/Policy should be passed such as but not limit to the following suggested policy languages:

- The Lead Agency will work with neighboring cities to address cumulative significant traffic impact on freeway I-105, I-110, and I-710, and on/off ramps as a result of build out of the Specific Plan.

- The Lead Agency will continue to work with Caltrans to identify potential cumulative traffic impact and mitigation measures.

- The Lead Agency will form a fair share fee program working with neighboring cities to improve the State facilities.

- The Lead Agency's existing traffic impact fees will include any State facility improvement as part of the cumulative traffic impact. Procuring funds toward freeway segments, freeway interchanges, freeway on/off-ramps, as well as for bus and rail transit facilities will be in the goals of the Lead Agency.

Although we expect to receive the DEIR from the State Clearinghouse, if you would like to expedite the review process or receive early feedback, please feel free to send a copy of the DEIR directly to our office.

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 151108AL.

Sincerely,

Dianna Watson

DIANNA WATSON
IGR/CEQA Branch Chief
cc: email to Scott Morgan, State Clearinghouse

City of LYNWOOD
A City Meeting Challenges
11330 BULLIS ROAD
LYNWOOD, CALIFORNIA 90262
(310) 603-0220

ALL-AMERICA CITY

November 30, 2015

Connie Chung
County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

Dear Ms. Chung:

COMMENTS TO THE WILLOWBROOK TOD SPECIFIC PLAN

The City of Lynwood Public Works Department appreciates the opportunity to comment on the scope and content of the environmental analysis to be included in the Environmental Impact Report (EIR). The City of Lynwood, whose westernmost border is less than 1 mile from the planned Willowbrook Transit Oriented District Specific Plan, submits the following comments on impacts that we hope will be addressed in the EIR:

- City's Feeder Line to the Willowbrook Blue Line Station – Currently one of the City's bus routes is a feeder line to the Willowbrook Blue Line Station. The City has operated this bus route for over fifteen years to transport Lynwood residents to the Willowbrook Blue Line station along Imperial Highway. The City would like to continue operating this line without interruption or amending its current route.

- Traffic Congestion - The City is concerned with increased traffic volume on Imperial Highway, Mona Boulevard, Industry Way, Lynwood Road, Alameda Street, and State Street. The increased traffic volume could significantly impact vehicular and pedestrian traffic operations. In addition to any other intersections that may be studied, impacts to these intersections should be studied and mitigated: Imperial Highway and State Street; Fernwood Avenue and State Street; and Lynwood Road and State Street.

- Air Quality - The Willowbrook TOD should address the impacts of increased emissions to the City.

- Public Safety Services – The Willowbrook TOD will result in an increase of visitors, residents and employees to the project site and surrounding areas, thereby resulting in an increase in demand for police services. The Willowbrook TOD

should address adequate level of police services to avoid impacts to surrounding areas.

We look forward to reviewing the EIR document and your responses to our comments. Should you have any questions regarding this letter, please call Lorry Hempe of my staff at 310-603-0220, ext. 500 or email her at lhempe@lynwood.ca.us.

Sincerely,

Raul Godinez II, P.E.
Director of Public Works/City Engineer

Cc:
Erika Ramirez, Interim Director of Development Services
J. Arnoldo Beltrán, City Manager

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION

DATE: October 29, 2015

PROJECT TITLE: Willowbrook Transit Oriented District Specific Plan
County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

PROJECT LOCATION: The Specific Plan area is located in the unincorporated community of Willowbrook within Los Angeles County. It is located along the I-105 Freeway and includes the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and the City of Compton to the east.

The County of Los Angeles is the lead agency and, after conducting an Initial Study for the Project, has determined that it will prepare an Environmental Impact Report (EIR). In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to responsible agencies, interested parties, and trustee agencies responsible for natural resources that may be affected by the Project.

PROJECT LOCATION AND ENVIRONMENTAL SETTING

The Specific Plan area generally encompasses a half mile radius south of the Willowbrook/Rosa Parks Metro station, which is a major transfer point between the Metro Blue Line and Green Line. At the station, the Green Line is located in the median of the I-105 Freeway (Glenn Anderson). The Specific Plan area totals 312 acres. Major activity centers within the Specific Plan area are the Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King Jr. Center for Public Health. See attached project boundary map.

North of the Specific Plan area is predominantly residential with some commercial uses. The City of Lynwood is directly adjacent to the Specific Plan's eastern border and land uses are manufacturing, public uses and commercial. South and west of the Specific Plan area is predominantly residential.

PROJECT SUMMARY

The Specific Plan has been prepared to introduce a transit oriented development (TOD) pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicles miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects.

The Specific Plan would facilitate development by rezoning and amending General Plan land uses to include mixed uses, increased residential densities, and additional neighborhood-serving retail uses. A key part of the Specific Plan is also to preserve existing residential uses and densities in certain areas. The proposed zoning includes: Mixed Use 1 (MU-1); Mixed Use 2 (MU-2); MLK Medical; Drew Educational; Imperial Commercial; Willowbrook Residential 1; Willowbrook Residential 2; Willowbrook Residential 3; and Open Space (O-S). Overall, the Specific Plan would accommodate an additional 1,734 dwelling units and 2,630,306 square feet of non-residential land use.

The Specific Plan would largely maintain the existing street system in its current configuration, with some improvements designed to improve access, circulation, and walkability. Road diets would also be used to aid the circulation system.

The Specific Plan would improve pedestrian circulation by connecting all major activity areas through sidewalk and intersection improvements. In addition, a combination of Class I, Class II, Class III and potentially Class IV facilities would provide a connected and integrated bicycle network throughout the Specific Plan area that connects activity centers and neighborhoods to the Willowbrook/Rosa Parks Station and adjacent communities. Bicycle amenities, such as bicycle stations, would be provided at appropriate locations.

In 2012, Los Angeles County prepared the *MLK Medical Center Campus Master Plan & the Willowbrook MLK Wellness Community Vision* to guide the development of the campus. It is the County's intent that the Specific Plan serve as the regulatory document for the buildout of the campus. Future development within the campus will be required to comply with the provisions of the Specific Plan; all subsequent development within the campus will be subject to the mitigation requirements of the EIR being prepared for the Specific Plan.

The draft Specific Plan is available for viewing at http://planning.lacounty.gov/willowbrook/tod.

POTENTIAL PROJECT IMPACTS: Based on the Initial Study determination, an EIR is necessary for the proposed Project. Based on a preliminary assessment of potential environmental impacts that may occur as a result of the Project, the areas of potential environmental impact to be addressed in the Programmatic EIR will include at least the following:

Potential Hazards

- Geology/Soils
- Noise
- Hazards/Hazardous Materials

Potential Impacts to Resources

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use/Planning

Potential Impacts to Services

- Transportation/Traffic

- Public Services
- Recreation
- Utilities/Services
- Population/Housing

The only environmental factors that were not found to be potentially affected are Agriculture/Forest Resources, Biological Resources, and Mineral Resources. There are multiple mandatory findings of significance. In addition, environmental issues that do not rise to the level of significant impacts will be addressed in the EIR in a separate section entitled "Impacts Found to Be Less Than Significant."

NOTICE OF PREPARATION REVIEW AND COMMENTS

The NOP is being distributed to solicit written comments regarding the scope and content of the environmental analysis to be included in the EIR. The County has prepared this NOP in accordance with the State CEQA Guidelines.

The review period for this NOP is from **November 2, 2015 to December 1, 2015**. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than **December 1, 2015**. Please direct all written comments to the following address:

Connie Chung, AICP
County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, California 90012
Telephone: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

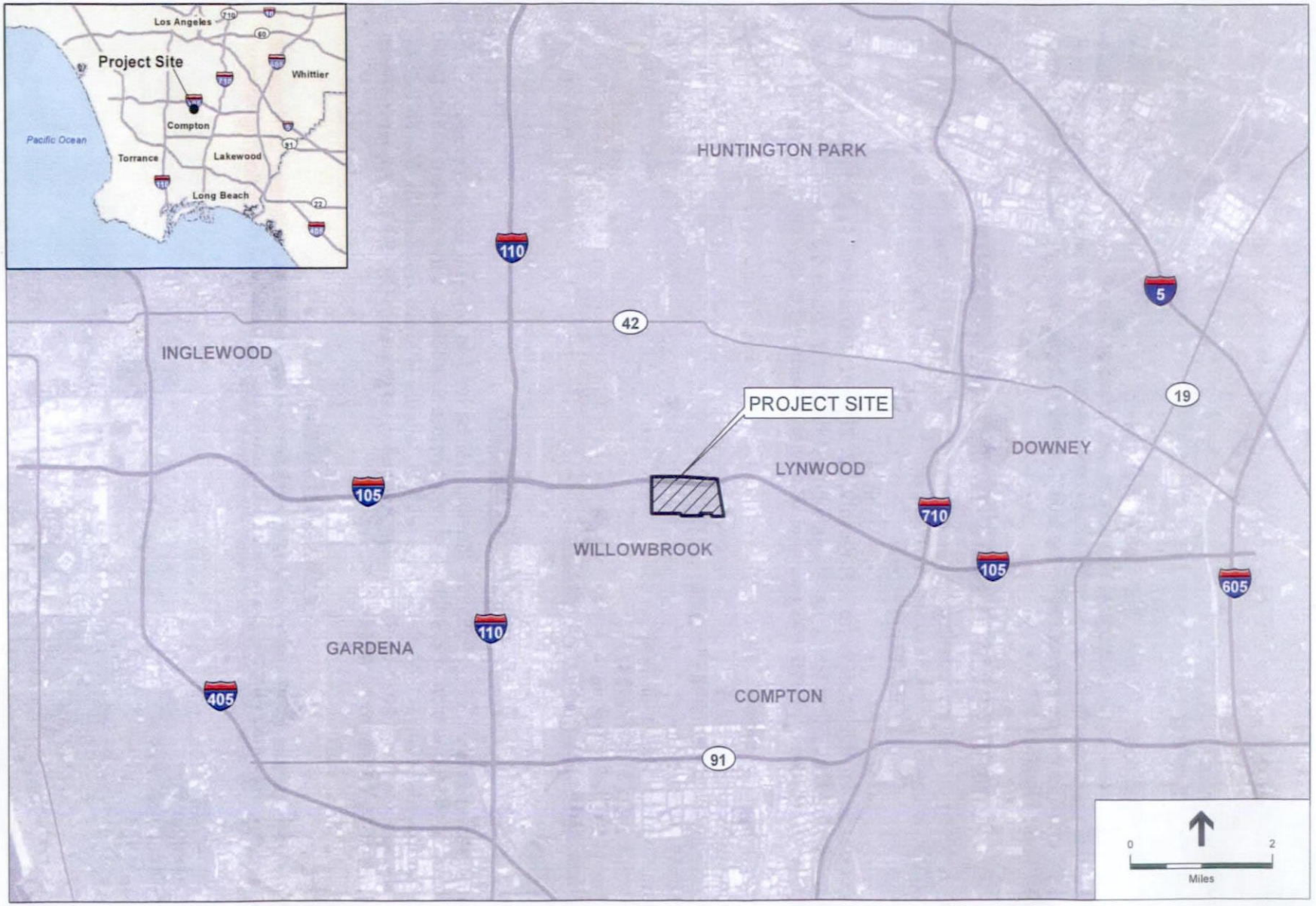
SCOPING MEETING

To assist in local participation, a Scoping Meeting will be held to present the proposed project and to solicit suggestions from the public and responsible agencies on the content of the Draft EIR. The Scoping Meeting will be held at the MLK H. Claude Hudson Auditorium, Martin Luther King, Jr. Medical Center, 12021 S. Wilmington Avenue, Los Angeles, CA, 90059, on **November 21, 2015, from 10:00 am to 12:00 pm.**

REVIEW MATERIALS

Additional copies of this NOP are available for public review on the Department of Regional Planning website: http://planning.lacounty.gov/willowbrook/tod as well as at the following library:

Willowbrook Library
11838 Wilmington Ave
Los Angeles, CA 90059



SOURCE: ESRI

Figure 1
Regional Location

Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

Metro

December 1, 2015

Connie Chung
County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

Email: cchung@planning.lacounty.gov

RE: Willowbrook Transit Oriented District Specific Plan- Unincorporated Community of Willowbrook/County of Los Angeles-Notice of Preparation of Draft Environmental Impact Report

Dear Ms. Chung:

Thank you for the opportunity to comment on the Notice of Preparation of a Draft Environmental Impact Report for the proposed Willowbrook Transit Oriented District Specific Plan (Specific Plan) located in the unincorporated community of Willowbrook within Los Angeles County. The proposed project consists of a Specific Plan that will introduce Transit Oriented Development patterns to the area. The Specific Plan would facilitate development by rezoning and amending General Plan land uses to include mixed uses, increased residential densities, and additional neighborhood-serving retail uses. This letter conveys recommendations from the Los Angeles County Metropolitan Transportation Authority (Metro) concerning issues that are germane to our agency's statutory responsibility in relation to our facilities and services that may be affected by the proposed project.

Several Metro bus lines operate within the Specific Plan area (120, 202, 205, 612, 55/202/355) Metro has standard language that relates to construction activity adjacent to bus transit facilities. Metro recommends that the Specific Plan include language that informs future development activity within the Specific Plan area of Metro's notification procedures and considerations for projects located in close proximity to a Metro facility that may impact Metro bus operations.

The Metro Blue and Green light rail currently operate weekday peak service as often as every five minutes in both directions and that trains may operate, in and out of revenue service, 24 hours a day, seven days a week, in the ROW proximate to the proposed project. Metro has development guidelines that describe the Metro's development project review process and considerations for project siting as it relates to Metro facilities. Metro suggests that the project sponsor include policy language or guidance in the Specific Plan that clearly denotes that development occurring within 100 feet of a Metro facility will require Metro review and approval and compliance with Metro's Development Guidelines. In particular, because of the proximity to the Metro Blue Line, increased traffic at railroad grade crossings must be considered specifically in the Specific Plan. Provisions for transit priority treatments should be considered to make the development welcoming to transit access.

In addition, the Specific Plan has various policies in place that support active transportation and multi-modalism. Metro looks forward to continuing to collaborate with the County to effectuate policies and implementation activities that promote transit supportive communities and reduce pedestrian/bike and bus conflicts. Please continue to collaborate with Metro as such plans are effectuated, including the proposed Willowbrook Avenue West bike path.

In addition, Metro would like to take this opportunity to provide the following specific comments and additional information about improvements planned for the Willowbrook/Rosa Parks station:

- Page 24: Please remove the reference to the cost of the Metro Willowbrook/Rosa Parks Improvement Project. The cost is not accurate and because of ongoing activity related to advancing design and the overall project, the cost should not be memorialized in the Specific Plan.

- Page 24: the renderings included in the plan for the station area are not accurate and do not reflect Metro's current design. Please use images provided below.

- Page 24: The addition of a southern at-grade crossing to the Blue Line is currently being evaluated. Please revise the second paragraph under Specific Plan Strategy as follows: "Another at-grade crossing ~~is planned~~ at the south end of the Blue Line platform, ~~but only across the western tracks. If this crossing could extend eastward across the tracks, it~~ would further enhance connectivity for residents to the east."

- Page87: Please revise reference of the Metro bike station to a Metro Bike Mobility Hub. Additionally, if bike stations are referenced in other contexts in the Plan, consider defining "bike station" to clarify what it entails (storage, valet, rental)

- Page 87: Please note that a shuttle stop may not be provided due to feedback from shuttle operators and a crosswalk to Willowbrook East will not be provided. Please consider replacing the second sentence under "4.6 Transit Circulation" to "These are expected to include expansion of station facilities and the Blue Line platform, a bicycle mobility hub, and improvements to station access."

Thank you for the opportunity to comment on the NOP of the DEIR for the Willowbrook Transit Oriented District Specific Plan. If you have any questions regarding this response, please contact Elizabeth Carvajal at 213-922-3084 or by email at DevReview@metro.net. Metro looks forward to reviewing the Draft EIR. Please send it to the following address:

Willowbrook Transit Oriented District Specific Plan
NOP
Metro Comments
December 1, 2015

Metro Development Review
One Gateway Plaza MS 99-23-4
Los Angeles, CA 90012-2952

Sincerely,

Elizabeth Carvajal
Transportation Planning Manager


ROSA PARKS
CUSTOMER SERVICE CENTER

SOUTHERN CALIFORNIA
ASSOCIATION of
GOVERNMENTS

Main Office

818 West 7th Street

12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

December 1, 2015

Ms. Connie Chung, AICP
County of Los Angeles, Department of Regional Planning
320 West Temple Street
Los Angeles, California 90012
Phone: (213) 974-6417
E-mail: cchung@planning.lacounty.gov

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Willowbrook Transit Oriented District Specific Plan [SCAG NO. IGR8658]

Dear Ms. Chung,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Willowbrook Transit Oriented District Specific Plan ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including its Sustainable Communities Strategy (SCS) component pursuant to SB 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.[1] Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of the regional goals and policies in the RTP/SCS.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Willowbrook Transit Oriented District Specific Plan in Los Angeles County. The proposed project is a Specific Plan that introduces a transit oriented development (TOD) pattern into the area. The Specific Plan accommodates an additional 1,734 dwelling units and 2,630,306 square feet of non-residential land use on 312 acres.

When available, please send environmental documentation to SCAG's *office in Los Angeles or by email to sunl@scag.ca.gov* providing, at a minimum, the full public comment period for review. If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Lijin Sun, Esq., Senior Regional Planner, at (213) 236-1882 or sunl@scag.ca.gov. Thank you.

Sincerely,

Ping Chang

Ping Chang
Program Manager II, Land Use and Environmental Planning

[1] SB 375 amends CEQA to add Chapter 4.2 Implementation of the Sustainable Communities Strategy, which allows for certain CEQA streamlining for projects consistent with the RTP/SCS. Lead agencies (including local jurisdictions) maintain the discretion and will be solely responsible for determining "consistency" of any future project with the SCS. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a finding of consistency under SB 375 for purposes of CEQA streamlining.

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE WILLOWBROOK TRANSIT ORIENTED DISTRICT SPECIFIC PLAN [SCAG NO. IGR8658]

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS.

2012 RTP/SCS GOALS

The SCAG Regional Council adopted the 2012 RTP/SCS in April 2012. The 2012 RTP/SCS links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations (see http://rtpscs.scag.ca.gov). The goals included in the 2012 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2012 RTP/SCS are the following:

SCAG 2012 RTP/SCS GOALS	
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*
RTP/SCS G3:	*Ensure travel safety and reliability for all people and goods in the region*
RTP/SCS G4:	*Preserve and ensure a sustainable regional transportation system*
RTP/SCS G5:	*Maximize the productivity of our transportation system*
RTP/SCS G6:	*Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)*
RTP/SCS G7:	*Actively encourage and create incentives for energy efficiency, where possible*
RTP/SCS G8:	*Encourage land use and growth patterns that facilitate transit and non-motorized transportation*
RTP/SCS G9:	*Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the policy and supportive analysis in a table format. Suggested format is as follows:

SCAG 2012 RTP/SCS GOALS		
	Goal	Analysis
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
etc.		etc.

RTP/SCS STRATEGIES

To achieve the goals of the 2012 RTP/SCS, a wide range of strategies are included in SCS Chapter (starting on page 152) of the RTP/SCS focusing on four key areas: 1) Land Use Actions and Strategies; 2) Transportation Network Actions and Strategies; 3) Transportation Demand Management (TDM) Actions and Strategies and; 4) Transportation System Management (TSM) Actions and Strategies. If applicable to the proposed project, please refer to these strategies as guidance for considering the proposed project within the context of regional goals and policies. To access a listing of the strategies, please visit http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf (Tables 4.3 – 4.7, beginning on page 152).

REGIONAL GROWTH FORECASTS

At the time of this letter, the most recently adopted SCAG forecasts, at the jurisdictional level, consists of the 2020 and 2035 RTP/SCS population, household and employment forecasts. To view them, please visit http://scag.ca.gov/Documents/2012AdoptedGrowthForecastPDF.pdf. The forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts		Adopted County of Los Angeles Forecasts	
	Year 2020	**Year 2035**	**Year 2020**	**Year 2035**
Population	19,663,000	22,091,000	10,404,000	11,353,000
Households	6,458,000	7,325,000	3,513,000	3,852,000
Employment	8,414,000	9,441,000	4,558,000	4,827,000

MITIGATION

SCAG staff recommends that you review the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures for guidance, as appropriate. See Chapter 6 (beginning on page 143) at:
http://rtpscs.scag.ca.gov/Documents/peir/2012/final/Final2012PEIR.pdf

As referenced in Chapter 6, a comprehensive list of example mitigation measures that may be considered as appropriate is included in Appendix G: *Examples of Measures that Could Reduce Impacts from Planning, Development and Transportation Projects.* Appendix G can be accessed at:
http://rtpscs.scag.ca.gov/Documents/peir/2012/final/2012fPEIR_AppendixG_ExampleMeasures.pdf

Transcribed by L. Freeman 12-7-15

Need to fix streets, bus stop, etc. first. Would like to see short-term community improvements.

Homeless issue – [need a] homeless shelter [and] more affordable housing locally [with] short-term strategies for elderly.

What types of shops will come in to the plaza? A dollar store? [Specific] Plan sets the policy for future community [development].

[Regarding] trailers parked on streets, can we designate an area [within the TOD] for trailer [/RV] parking? Answer: Homelessness is a countywide issue and the county is working on the issue from many directions [through many different initiatives]. For the specific plan, areas are identified for new housing.

Railroad tracks [can the plan address the poor condition of railroad crossings]

Need more local jobs, a job training center and more job training.

[Prevent the] displacement of current residents.

Use of renewable energy?

Level of affordability [of new housing] / [Are] Income level restrictions [proposed] ($1500-$2000 per month [would be] too high [for most current residents])

Any community benefits (equity) included?

Have information (maps, etc) available in hard copy.

Public Input Form
Scoping Meeting
Willowbrook TOD Specific Plan

County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

November 21, 2015

This form allows you to make comments on what you believe should be addressed in the Environmental Impact Report (EIR) for the above project. You may submit your written comments at this scoping meeting or by mail to the Lead Agency Contact listed below. Written comments on the Notice of Preparation (NOP) for the EIR will be accepted until **December 1, 2015.**

Comments: WHAT Clear differences Will the new expansion be Compared From Now to then. -Where Specifically will the new Housing be, business in the existing Shopping CENTER be located.

Potholes. MOVING Bus Stops From 122nd (the LINK) WHAT Specific Visual Effects are We looking To SEE.

The railroad tracks @ 119th & Willowbrook are TORN UP. - MAJOR potholes TEARING up MY CAR.

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: JACQUELINE Alridge

Address: 2031 E. 122nd St. #217

City/State/ZIP: Compton, CA. 90222

Email:

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

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Comments: Please work with the Community

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: Ruby Kiwanuka

Address: 1920 E. Elsegundo Apt 10

City/State/ZIP: Compton Ca. 90222

Email:

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

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Comments: I like the idea of jobs coming to the community and hope the jobs will be offered to residents

---

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: _____

Address: _____

City/State/ZIP: _____

Email: _____

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

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Comments: I think it would be good that the Commuty bus should pick up on streets where senior's and disable people live in, can be pick up and taken to places around them

---

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: Gwendolyn Paschal

Address: 2019 E 122 St #229

City/State/ZIP: Compton, Ca. 90222

Email: GwendolynPaschal@gmail.com

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

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Comments:
bueno lo que se adicho agui
Esta pa tosdos se para vien
de la comodidad para mi
Todos los Prollectos son
Escelente
que losduenos de donde vivimos
agan areglos en que no
los cobren tanta Renta

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: EVA Guillen
Address: 11916 wilowbrook AV
City/State/ZIP: los Angeles CA 90059
Email:
323-811-8800

Lead Agency Contact:

11-21-2015

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

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Comments: mi pregunta es cual es la fecha cuando van a comensar el cambio y comensar q apoyo necesitan para q no solo quede como un proyecto olvidado

---

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: Rosa M. Del Rio

Address: 12049 S. Willowbrook Ave

City/State/ZIP: #2 Compton Cal 90222

Email:

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

Public Input Form
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Comments: Mi comentario es que mi Dirección es 11682 willowBrook Muy cerca de los nuevos proyectos que van a iniciar yo también yo de bajos recursos, pero todo por el bien de mi cumunidad, estoy emocionada y Ansiosa por ver como se va a ver, y tengo ganas de trabajar Muy de cerca en estos proyectos mi nombre es Martha Zepeda (323) 567-2831

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: Martha Zepeda

Address: 11682 willowBrook Ave

City/State/ZIP: Los Angeles CA 90059

Email: _____

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

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Comments: nos Ase falta un Semaforo O un paso peatonal en el nuevo parque Haper es ta por 19 y mona por que para y pasa niños para la Escuela y pasan carros rapidos y Parte Mona pueden poner para que patine los Niños y Maquinas para Aser Ejercisio

---

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: Juanita Ortega

Address: _____

City/State/ZIP: _____

Email: _____

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

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Comments: I think that they are doing fine with all the progress. all efforts are going pretty well. And the Securities are excellent. Tracks needs to be done. Pot holes everywhere. Jobs in the Community.

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: Sharon Steward

Address: 2604 E. El Segundo Blvd.

City/State/ZIP: Compton CA. 90222

Email:

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
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Comments: To whom it may concern i hazit reside in compton for many yrs i notice alot of homeless people living on bus stop & laying on grounds and stuff. it sadden me. We need a place for the community thats homeless i see it everywhere even laying on compton court grounds tents and stuff or that matter. i think personally they should make lille houses. for the homeless i seen on CBS where they put little house in locations somethings needs to be done. find a location that allows you to help those that less fortunate all thought i share my thought

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: hazit Garrett

Address: 1024 West Reeve St

City/State/ZIP: compton ca. 90220

Email: hazit garrett @ gmail.com

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
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Comments: Hello, My name is Lucinda Ryder I live at 12023 S. Willowbrook Ave. Back House. I worked at Rite Aid in our Shoping Center for almost 15 years or longer and have just found out I'm very Sick With Cancer of Bladder & Colon and Cannot work anymoreLonger, I go to the hospital & doctor more then I am at home & I find myself with no Income at this time, so I dont have food alot of the time, and I go to the Church to

(over)

Please include your contact/mailing information. We will notify you when the draft EIR is completed and available for review. We will also notify you of public hearings related to this project.

Name: _____

Address: _____

City/State/ZIP: _____

Email: _____

Lead Agency Contact:

Ms. Connie Chung
County of Los Angeles, Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012
Tel: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

recive free food and I find myself not eating because I can't walk down the street to reaive it, Because I dont have a Car or family to get so like now I dont eat And keep loseing weight I have one son who work here at this hospalal his name is Wayne Fatherree. And I was wondering if there is some way for me to Obtaine this food other then coming down because I hurt so very bad at times And I m down to 56 pounds now And Doctors are still trying to find out the reasons for this. I dont mean to be a problem but I just need a bit of help Im trying to get my S.S. But it takes time for this to happen So Im just asking for a little Bit of help till then or make I'll get well enough to go Back to work. thank you

Son very much.

Lucinda Ryder

An god bless you
for all your help.

Appendix B

Air Quality and Greenhouse Gas Emissions Data Worksheets

ESA

Willowbrook Specific Plan

Appendix B, Air Quality Worksheets and Greenhouse Gas Emissions Data Worksheets

Construction Emissions

- CalEEMod Construction Model Input Assumptions
- CalEEMod Output (Summer)- Non-Residenitial
- CalEEMod Output (Winter)- Non-Residenitial
- CalEEMod Output (Annual)- Non-Residenitial

- CalEEMod Output (Summer)- Residential
- CalEEMod Output (Winter)- Residential
- CalEEMod Output (Annual)- Residential

Operational Emissions

- CalEEMod Output (Summer)
- CalEEMod Output (Winter)
- CalEEMod Output (Annual)
- CalEEMod Output (Summer)- Hospital LST
- CalEEMod Output (Winter)- Hospital LST
- CalEEMod Title 24 Conversion

Appendix B, Air Quality Worksheets and Greenhouse Gas Emissions Data Worksheets

Construction Emissions

- CalEEMod Construction Model Input Assumptions
- CalEEMod Output (Summer)- Non-Residenitial
- CalEEMod Output (Winter)- Non-Residential
- CalEEMod Output (Annual)- Non-Residential

- CalEEMod Output (Summer)- Residential
- CalEEMod Output (Winter)- Residential
- CalEEMod Output (Annual)- Residential

Willowbrook last updated:
Draft Environmental Impact Report 2/8/2017
Air Quality and Greenhouse Gas Assessment

Modeling Assumption for Air Quality Construction Emissions- Maximum Day Assumptions

Land Use	CalEEMod Land Use Type	Units	
Residential	Mid-Rise Apartment	105 DU	105,000 sf
Non-residential	General Office Building	172.0 KSF	172,000 sf

CalEEMod Construction Phase	Start Date	End Date	No. Work Days	No. of Simultaneous Projects	Demo (KSF)
Demolition	1/2/2018	1/2/2018	1	5	20
Grading	1/2/2018	2/12/2018	30	5	
Building Construction- Residential	1/2/2017	6/18/2017	120	10	
Paving	1/2/2017	1/29/2017	20	10	
Architectural Coating	1/2/2017	1/29/2017	20	10	
Building Construction- Non- Residential	1/2/2017	9/10/2017	180	4	
Paving	1/2/2017	2/10/2017	30	4	
Architectural Coating	1/2/2017	2/10/2017	30	4	

Modeling Assumption for Construction Greenhouse Gas Emissions- Maximum Annual Assumptions

Land Use	CalEEMod Land Use Type	Units	
Residential	Mid-Rise Apartment	420 DU	420,000 sf
Non-Residential	General Office Building	227.0 KSF	227,000 sf

CalEEMod Construction Phase	Start Date	End Date	No. Work Days	No. of Simultaneous Projects	Demo (KSF)
Demolition	1/2/2018	12/31/2018	260	2	227
Grading	1/2/2018	12/31/2018	260	2	
Building Construction- Residential	1/2/2018	12/31/2018	260	10	
Paving	1/2/2017	5/21/2018	100	10	
Architectural Coating	1/2/2017	1/2/2018	260	10	
Building Construction- Non- Residential	1/2/2018	9/10/2018	260	4	
Paving	1/2/2018	2/12/2018	200	4	
Architectural Coating	1/2/2018	2/10/2018	260	4	

Willowbrook Specific Plan- Non- Residential

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	172.00	1000sqft	3.95	172,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Commercial

Construction Phase - Maximum Emission Scenario

Off-road Equipment - 4 projects

Off-road Equipment - 4 Projects

Off-road Equipment - 5 Projects

Off-road Equipment - 4 Projects

Demolition - 20,000 square foot demolished max day.

Grading - 10 acres graded max day

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	18.00	30.00
tblConstructionPhase	NumDays	230.00	180.00
tblConstructionPhase	NumDays	18.00	30.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	WorkerTripNumber	80.00	20.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	71.3387	163.3822	132.6317	0.2131	1.1405	9.9821	11.1226	0.3065	9.3597	9.6663	0.0000	20,928.6217	20,928.6217	5.0332	0.0000	21,054.4529
Maximum	**71.3387**	**163.3822**	**132.6317**	**0.2131**	**1.1405**	**9.9821**	**11.1226**	**0.3065**	**9.3597**	**9.6663**	**0.0000**	**20,928.6217**	**20,928.6217**	**5.0332**	**0.0000**	**21,054.4529**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	71.3387	163.3822	132.6317	0.2131	1.1405	9.9821	11.1226	0.3065	9.3597	9.6663	0.0000	20,928.6217	20,928.6217	5.0332	0.0000	21,054.4529
Maximum	**71.3387**	**163.3822**	**132.6317**	**0.2131**	**1.1405**	**9.9821**	**11.1226**	**0.3065**	**9.3597**	**9.6663**	**0.0000**	**20,928.6217**	**20,928.6217**	**5.0332**	**0.0000**	**21,054.4529**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/2/2018	9/10/2018	5	180	
2	Paving	Paving	1/2/2018	2/12/2018	5	30	
3	Architectural Coating	Architectural Coating	1/2/2018	2/12/2018	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 258,000; Non-Residential Outdoor: 86,000; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	4	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	4	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	6.00	9	0.56
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	8	6.00	132	0.36
Paving	Rollers	8	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating	Air Compressors	4	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	36	55.00	28.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	32	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.7180	93.5601	70.3217	0.1077		5.9995	5.9995		5.6397	5.6397		10,483.7405	10,483.7405	2.5685		10,547.9531
Total	**10.7180**	**93.5601**	**70.3217**	**0.1077**		**5.9995**	**5.9995**		**5.6397**	**5.6397**		**10,483.7405**	**10,483.7405**	**2.5685**		**10,547.9531**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1191	3.3932	0.8450	7.3300e-003	0.1792	0.0248	0.2040	0.0516	0.0237	0.0753		780.2425	780.2425	0.0531		781.5701
Worker	0.2964	0.2125	2.7597	6.7400e-003	0.6148	4.9000e-003	0.6197	0.1630	4.5200e-003	0.1676		670.6434	670.6434	0.0229		671.2151
Total	**0.4155**	**3.6056**	**3.6047**	**0.0141**	**0.7940**	**0.0297**	**0.8237**	**0.2146**	**0.0282**	**0.2429**		**1,450.8859**	**1,450.8859**	**0.0760**		**1,452.7852**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.7180	93.5601	70.3217	0.1077		5.9995	5.9995		5.6397	5.6397	0.0000	10,483.7405	10,483.7405	2.5685		10,547.9531
Total	**10.7180**	**93.5601**	**70.3217**	**0.1077**		**5.9995**	**5.9995**		**5.6397**	**5.6397**	**0.0000**	**10,483.7405**	**10,483.7405**	**2.5685**		**10,547.9531**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1191	3.3932	0.8450	7.3300e-003	0.1792	0.0248	0.2040	0.0516	0.0237	0.0753		780.2425	780.2425	0.0531		781.5701
Worker	0.2964	0.2125	2.7597	6.7400e-003	0.6148	4.9000e-003	0.6197	0.1630	4.5200e-003	0.1676		670.6434	670.6434	0.0229		671.2151
Total	**0.4155**	**3.6056**	**3.6047**	**0.0141**	**0.7940**	**0.0297**	**0.8237**	**0.2146**	**0.0282**	**0.2429**		**1,450.8859**	**1,450.8859**	**0.0760**		**1,452.7852**

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.6957	58.0738	49.7330	0.0757		3.3479	3.3479		3.0871	3.0871		7,490.2021	7,490.2021	2.2689		7,546.9249
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.6957**	**58.0738**	**49.7330**	**0.0757**		**3.3479**	**3.3479**		**3.0871**	**3.0871**		**7,490.2021**	**7,490.2021**	**2.2689**		**7,546.9249**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1078	0.0773	1.0035	2.4500e-003	0.2236	1.7800e-003	0.2253	0.0593	1.6400e-003	0.0609		243.8703	243.8703	8.3200e-003		244.0782
Total	**0.1078**	**0.0773**	**1.0035**	**2.4500e-003**	**0.2236**	**1.7800e-003**	**0.2253**	**0.0593**	**1.6400e-003**	**0.0609**		**243.8703**	**243.8703**	**8.3200e-003**		**244.0782**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.6957	58.0738	49.7330	0.0757		3.3479	3.3479		3.0871	3.0871	0.0000	7,490.2021	7,490.2021	2.2689		7,546.9249
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.6957**	**58.0738**	**49.7330**	**0.0757**		**3.3479**	**3.3479**		**3.0871**	**3.0871**	**0.0000**	**7,490.2021**	**7,490.2021**	**2.2689**		**7,546.9249**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1078	0.0773	1.0035	2.4500e-003	0.2236	1.7800e-003	0.2253	0.0593	1.6400e-003	0.0609		243.8703	243.8703	8.3200e-003		244.0782
Total	**0.1078**	**0.0773**	**1.0035**	**2.4500e-003**	**0.2236**	**1.7800e-003**	**0.2253**	**0.0593**	**1.6400e-003**	**0.0609**		**243.8703**	**243.8703**	**8.3200e-003**		**244.0782**

3.4 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	53.1480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.1945	8.0230	7.4168	0.0119		0.6022	0.6022		0.6022	0.6022		1,125.7942	1,125.7942	0.1070		1,128.4685
Total	**54.3425**	**8.0230**	**7.4168**	**0.0119**		**0.6022**	**0.6022**		**0.6022**	**0.6022**		**1,125.7942**	**1,125.7942**	**0.1070**		**1,128.4685**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0425	0.5519	1.3500e-003	0.1230	9.8000e-004	0.1239	0.0326	9.0000e-004	0.0335		134.1287	134.1287	4.5700e-003		134.2430
Total	**0.0593**	**0.0425**	**0.5519**	**1.3500e-003**	**0.1230**	**9.8000e-004**	**0.1239**	**0.0326**	**9.0000e-004**	**0.0335**		**134.1287**	**134.1287**	**4.5700e-003**		**134.2430**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	53.1480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.1945	8.0230	7.4168	0.0119		0.6022	0.6022		0.6022	0.6022	0.0000	1,125.7942	1,125.7942	0.1070		1,128.4685
Total	**54.3425**	**8.0230**	**7.4168**	**0.0119**		**0.6022**	**0.6022**		**0.6022**	**0.6022**	**0.0000**	**1,125.7942**	**1,125.7942**	**0.1070**		**1,128.4685**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0593	0.0425	0.5519	1.3500e-003	0.1230	9.8000e-004	0.1239	0.0326	9.0000e-004	0.0335		134.1287	134.1287	4.5700e-003		134.2430
Total	**0.0593**	**0.0425**	**0.5519**	**1.3500e-003**	**0.1230**	**9.8000e-004**	**0.1239**	**0.0326**	**9.0000e-004**	**0.0335**		**134.1287**	**134.1287**	**4.5700e-003**		**134.2430**

Willowbrook Specific Plan- Non- Residential

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	172.00	1000sqft	3.95	172,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Commercial

Construction Phase - Maximum Emission Scenario

Off-road Equipment - 4 projects

Off-road Equipment - 4 Projects

Off-road Equipment - 5 Projects

Off-road Equipment - 4 Projects

Demolition - 20,000 square foot demolished max day.

Grading - 10 acres graded max day

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	18.00	30.00
tblConstructionPhase	NumDays	230.00	180.00
tblConstructionPhase	NumDays	18.00	30.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	WorkerTripNumber	80.00	20.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	71.3844	163.4196	132.3148	0.2122	1.1405	9.9825	11.1229	0.3065	9.3601	9.6666	0.0000	20,838.8389	20,838.8389	5.0349	0.0000	20,964.7117
Maximum	**71.3844**	**163.4196**	**132.3148**	**0.2122**	**1.1405**	**9.9825**	**11.1229**	**0.3065**	**9.3601**	**9.6666**	**0.0000**	**20,838.8389**	**20,838.8389**	**5.0349**	**0.0000**	**20,964.7117**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	71.3844	163.4196	132.3148	0.2122	1.1405	9.9825	11.1229	0.3065	9.3601	9.6666	0.0000	20,838.8389	20,838.8389	5.0349	0.0000	20,964.7117
Maximum	**71.3844**	**163.4196**	**132.3148**	**0.2122**	**1.1405**	**9.9825**	**11.1229**	**0.3065**	**9.3601**	**9.6666**	**0.0000**	**20,838.8389**	**20,838.8389**	**5.0349**	**0.0000**	**20,964.7117**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/2/2018	9/10/2018	5	180	
2	Paving	Paving	1/2/2018	2/12/2018	5	30	
3	Architectural Coating	Architectural Coating	1/2/2018	2/12/2018	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 258,000; Non-Residential Outdoor: 86,000; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	4	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Building Construction	Generator Sets	4	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	6.00	9	0.56
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	8	6.00	132	0.36
Paving	Rollers	8	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating	Air Compressors	4	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	36	55.00	28.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	32	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.7180	93.5601	70.3217	0.1077		5.9995	5.9995		5.6397	5.6397		10,483.7405	10,483.7405	2.5685		10,547.9531
Total	**10.7180**	**93.5601**	**70.3217**	**0.1077**		**5.9995**	**5.9995**		**5.6397**	**5.6397**		**10,483.7405**	**10,483.7405**	**2.5685**		**10,547.9531**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1244	3.3988	0.9380	7.1200e-003	0.1792	0.0252	0.2044	0.0516	0.0241	0.0757		758.1180	758.1180	0.0571		759.5443
Worker	0.3222	0.2328	2.4975	6.3000e-003	0.6148	4.9000e-003	0.6197	0.1630	4.5200e-003	0.1676		627.3736	627.3736	0.0214		627.9088
Total	**0.4466**	**3.6316**	**3.4356**	**0.0134**	**0.7940**	**0.0301**	**0.8241**	**0.2146**	**0.0286**	**0.2432**		**1,385.4916**	**1,385.4916**	**0.0785**		**1,387.4530**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	10.7180	93.5601	70.3217	0.1077		5.9995	5.9995		5.6397	5.6397	0.0000	10,483.7405	10,483.7405	2.5685		10,547.9531
Total	**10.7180**	**93.5601**	**70.3217**	**0.1077**		**5.9995**	**5.9995**		**5.6397**	**5.6397**	**0.0000**	**10,483.7405**	**10,483.7405**	**2.5685**		**10,547.9531**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1244	3.3988	0.9380	7.1200e-003	0.1792	0.0252	0.2044	0.0516	0.0241	0.0757		758.1180	758.1180	0.0571		759.5443
Worker	0.3222	0.2328	2.4975	6.3000e-003	0.6148	4.9000e-003	0.6197	0.1630	4.5200e-003	0.1676		627.3736	627.3736	0.0214		627.9088
Total	**0.4466**	**3.6316**	**3.4356**	**0.0134**	**0.7940**	**0.0301**	**0.8241**	**0.2146**	**0.0286**	**0.2432**		**1,385.4916**	**1,385.4916**	**0.0785**		**1,387.4530**

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.6957	58.0738	49.7330	0.0757		3.3479	3.3479		3.0871	3.0871		7,490.2021	7,490.2021	2.2689		7,546.9249
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.6957**	**58.0738**	**49.7330**	**0.0757**		**3.3479**	**3.3479**		**3.0871**	**3.0871**		**7,490.2021**	**7,490.2021**	**2.2689**		**7,546.9249**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0846	0.9082	2.2900e-003	0.2236	1.7800e-003	0.2253	0.0593	1.6400e-003	0.0609		228.1358	228.1358	7.7800e-003		228.3305
Total	**0.1172**	**0.0846**	**0.9082**	**2.2900e-003**	**0.2236**	**1.7800e-003**	**0.2253**	**0.0593**	**1.6400e-003**	**0.0609**		**228.1358**	**228.1358**	**7.7800e-003**		**228.3305**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.6957	58.0738	49.7330	0.0757		3.3479	3.3479		3.0871	3.0871	0.0000	7,490.2021	7,490.2021	2.2689		7,546.9249
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.6957**	**58.0738**	**49.7330**	**0.0757**		**3.3479**	**3.3479**		**3.0871**	**3.0871**	**0.0000**	**7,490.2021**	**7,490.2021**	**2.2689**		**7,546.9249**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0846	0.9082	2.2900e-003	0.2236	1.7800e-003	0.2253	0.0593	1.6400e-003	0.0609		228.1358	228.1358	7.7800e-003		228.3305
Total	**0.1172**	**0.0846**	**0.9082**	**2.2900e-003**	**0.2236**	**1.7800e-003**	**0.2253**	**0.0593**	**1.6400e-003**	**0.0609**		**228.1358**	**228.1358**	**7.7800e-003**		**228.3305**

3.4 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	53.1480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.1945	8.0230	7.4168	0.0119		0.6022	0.6022		0.6022	0.6022		1,125.7942	1,125.7942	0.1070		1,128.4685
Total	**54.3425**	**8.0230**	**7.4168**	**0.0119**		**0.6022**	**0.6022**		**0.6022**	**0.6022**		**1,125.7942**	**1,125.7942**	**0.1070**		**1,128.4685**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0644	0.0466	0.4995	1.2600e-003	0.1230	9.8000e-004	0.1239	0.0326	9.0000e-004	0.0335		125.4747	125.4747	4.2800e-003		125.5818
Total	**0.0644**	**0.0466**	**0.4995**	**1.2600e-003**	**0.1230**	**9.8000e-004**	**0.1239**	**0.0326**	**9.0000e-004**	**0.0335**		**125.4747**	**125.4747**	**4.2800e-003**		**125.5818**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	53.1480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.1945	8.0230	7.4168	0.0119		0.6022	0.6022		0.6022	0.6022	0.0000	1,125.7942	1,125.7942	0.1070		1,128.4685
Total	**54.3425**	**8.0230**	**7.4168**	**0.0119**		**0.6022**	**0.6022**		**0.6022**	**0.6022**	**0.0000**	**1,125.7942**	**1,125.7942**	**0.1070**		**1,128.4685**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0644	0.0466	0.4995	1.2600e-003	0.1230	9.8000e-004	0.1239	0.0326	9.0000e-004	0.0335		125.4747	125.4747	4.2800e-003		125.5818
Total	**0.0644**	**0.0466**	**0.4995**	**1.2600e-003**	**0.1230**	**9.8000e-004**	**0.1239**	**0.0326**	**9.0000e-004**	**0.0335**		**125.4747**	**125.4747**	**4.2800e-003**		**125.5818**

Willowbrook Specific Plan- Non-Residential GHG

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	227.00	1000sqft	5.21	227,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Defaults

Construction Phase - Max case scenario

Off-road Equipment -

Off-road Equipment - 4 projects per day

Off-road Equipment - 4 projects per day

Off-road Equipment - 4 projects per day

Grading - 50 acres Graded

Demolition -

Architectural Coating -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	100	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	200.00
tblConstructionPhase	PhaseEndDate	2/16/2023	12/31/2018
tblConstructionPhase	PhaseEndDate	9/30/2021	12/31/2018
tblConstructionPhase	PhaseEndDate	2/17/2022	10/8/2018
tblConstructionPhase	PhaseStartDate	2/18/2022	1/2/2018
tblConstructionPhase	PhaseStartDate	10/2/2020	1/2/2018
tblConstructionPhase	PhaseStartDate	10/1/2021	1/2/2018
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	12.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblTripsAndVMT	WorkerTripNumber	60.00	15.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	3.3479	20.8651	16.7817	0.0274	0.1723	1.2461	1.4184	0.0465	1.1685	1.2149	0.0000	2,457.9638	2,457.9638	0.5879	0.0000	2,472.6610
Maximum	**3.3479**	**20.8651**	**16.7817**	**0.0274**	**0.1723**	**1.2461**	**1.4184**	**0.0465**	**1.1685**	**1.2149**	**0.0000**	**2,457.9638**	**2,457.9638**	**0.5879**	**0.0000**	**2,472.6610**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	3.3479	20.8651	16.7817	0.0274	0.1723	1.2461	1.4184	0.0465	1.1685	1.2149	0.0000	2,457.9612	2,457.9612	0.5879	0.0000	2,472.6583
Maximum	**3.3479**	**20.8651**	**16.7817**	**0.0274**	**0.1723**	**1.2461**	**1.4184**	**0.0465**	**1.1685**	**1.2149**	**0.0000**	**2,457.9612**	**2,457.9612**	**0.5879**	**0.0000**	**2,472.6583**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/2/2018	12/31/2018	5	260	
2	Paving	Paving	1/2/2018	10/8/2018	5	200	
3	Architectural Coating	Architectural Coating	1/2/2018	12/31/2018	5	260	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 340,500; Non-Residential Outdoor: 113,500; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	4	6.00	78	0.48
Building Construction	Cranes	4	7.00	231	0.29
Building Construction	Forklifts	12	8.00	89	0.20
Paving	Pavers	8	8.00	130	0.42
Paving	Rollers	8	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	12	7.00	97	0.37
Building Construction	Generator Sets	4	8.00	84	0.74
Paving	Paving Equipment	8	8.00	132	0.36
Building Construction	Welders	4	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	4	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	36	73.00	37.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	24	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3933	12.1628	9.1418	0.0140		0.7799	0.7799		0.7332	0.7332	0.0000	1,236.3896	1,236.3896	0.3029	0.0000	1,243.9625
Total	**1.3933**	**12.1628**	**9.1418**	**0.0140**		**0.7799**	**0.7799**		**0.7332**	**0.7332**	**0.0000**	**1,236.3896**	**1,236.3896**	**0.3029**	**0.0000**	**1,243.9625**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0208	0.5947	0.1532	1.2400e-003	0.0303	4.2900e-003	0.0346	8.7500e-003	4.1000e-003	0.0129	0.0000	120.1460	120.1460	8.5500e-003	0.0000	120.3598
Worker	0.0504	0.0413	0.4429	1.1100e-003	0.1041	8.5000e-004	0.1050	0.0277	7.8000e-004	0.0284	0.0000	99.8825	99.8825	3.4100e-003	0.0000	99.9677
Total	**0.0713**	**0.6360**	**0.5961**	**2.3500e-003**	**0.1344**	**5.1400e-003**	**0.1396**	**0.0364**	**4.8800e-003**	**0.0413**	**0.0000**	**220.0285**	**220.0285**	**0.0120**	**0.0000**	**220.3275**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3933	12.1628	9.1418	0.0140		0.7799	0.7799		0.7332	0.7332	0.0000	1,236.3882	1,236.3882	0.3029	0.0000	1,243.9610
Total	**1.3933**	**12.1628**	**9.1418**	**0.0140**		**0.7799**	**0.7799**		**0.7332**	**0.7332**	**0.0000**	**1,236.3882**	**1,236.3882**	**0.3029**	**0.0000**	**1,243.9610**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0208	0.5947	0.1532	1.2400e-003	0.0303	4.2900e-003	0.0346	8.7500e-003	4.1000e-003	0.0129	0.0000	120.1460	120.1460	8.5500e-003	0.0000	120.3598
Worker	0.0504	0.0413	0.4429	1.1100e-003	0.1041	8.5000e-004	0.1050	0.0277	7.8000e-004	0.0284	0.0000	99.8825	99.8825	3.4100e-003	0.0000	99.9677
Total	**0.0713**	**0.6360**	**0.5961**	**2.3500e-003**	**0.1344**	**5.1400e-003**	**0.1396**	**0.0364**	**4.8800e-003**	**0.0413**	**0.0000**	**220.0285**	**220.0285**	**0.0120**	**0.0000**	**220.3275**

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.6575	7.0084	5.9186	9.1200e-003		0.3825	0.3825		0.3519	0.3519	0.0000	832.4649	832.4649	0.2592	0.0000	838.9439
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.6575**	**7.0084**	**5.9186**	**9.1200e-003**		**0.3825**	**0.3825**		**0.3519**	**0.3519**	**0.0000**	**832.4649**	**832.4649**	**0.2592**	**0.0000**	**838.9439**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9700e-003	6.5200e-003	0.0700	1.7000e-004	0.0165	1.3000e-004	0.0166	4.3700e-003	1.2000e-004	4.4900e-003	0.0000	15.7875	15.7875	5.4000e-004	0.0000	15.8010
Total	**7.9700e-003**	**6.5200e-003**	**0.0700**	**1.7000e-004**	**0.0165**	**1.3000e-004**	**0.0166**	**4.3700e-003**	**1.2000e-004**	**4.4900e-003**	**0.0000**	**15.7875**	**15.7875**	**5.4000e-004**	**0.0000**	**15.8010**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.6575	7.0084	5.9186	9.1200e-003		0.3825	0.3825		0.3519	0.3519	0.0000	832.4639	832.4639	0.2592	0.0000	838.9429
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.6575**	**7.0084**	**5.9186**	**9.1200e-003**		**0.3825**	**0.3825**		**0.3519**	**0.3519**	**0.0000**	**832.4639**	**832.4639**	**0.2592**	**0.0000**	**838.9429**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9700e-003	6.5200e-003	0.0700	1.7000e-004	0.0165	1.3000e-004	0.0166	4.3700e-003	1.2000e-004	4.4900e-003	0.0000	15.7875	15.7875	5.4000e-004	0.0000	15.8010
Total	**7.9700e-003**	**6.5200e-003**	**0.0700**	**1.7000e-004**	**0.0165**	**1.3000e-004**	**0.0166**	**4.3700e-003**	**1.2000e-004**	**4.4900e-003**	**0.0000**	**15.7875**	**15.7875**	**5.4000e-004**	**0.0000**	**15.8010**

3.4 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0522					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1553	1.0430	0.9642	1.5500e-003		0.0783	0.0783		0.0783	0.0783	0.0000	132.7694	132.7694	0.0126	0.0000	133.0848
Total	**1.2074**	**1.0430**	**0.9642**	**1.5500e-003**		**0.0783**	**0.0783**		**0.0783**	**0.0783**	**0.0000**	**132.7694**	**132.7694**	**0.0126**	**0.0000**	**133.0848**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0104	8.4800e-003	0.0910	2.3000e-004	0.0214	1.7000e-004	0.0216	5.6800e-003	1.6000e-004	5.8400e-003	0.0000	20.5238	20.5238	7.0000e-004	0.0000	20.5413
Total	**0.0104**	**8.4800e-003**	**0.0910**	**2.3000e-004**	**0.0214**	**1.7000e-004**	**0.0216**	**5.6800e-003**	**1.6000e-004**	**5.8400e-003**	**0.0000**	**20.5238**	**20.5238**	**7.0000e-004**	**0.0000**	**20.5413**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0522					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1553	1.0430	0.9642	1.5500e-003		0.0783	0.0783		0.0783	0.0783	0.0000	132.7693	132.7693	0.0126	0.0000	133.0847
Total	**1.2074**	**1.0430**	**0.9642**	**1.5500e-003**		**0.0783**	**0.0783**		**0.0783**	**0.0783**	**0.0000**	**132.7693**	**132.7693**	**0.0126**	**0.0000**	**133.0847**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0104	8.4800e-003	0.0910	2.3000e-004	0.0214	1.7000e-004	0.0216	5.6800e-003	1.6000e-004	5.8400e-003	0.0000	20.5238	20.5238	7.0000e-004	0.0000	20.5413
Total	**0.0104**	**8.4800e-003**	**0.0910**	**2.3000e-004**	**0.0214**	**1.7000e-004**	**0.0216**	**5.6800e-003**	**1.6000e-004**	**5.8400e-003**	**0.0000**	**20.5238**	**20.5238**	**7.0000e-004**	**0.0000**	**20.5413**

Willowbrook Specific Plan- Demolition, Grading, and Residential

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	105.00	Dwelling Unit	2.76	105,000.00	300

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Maximum Emission Scenario

Off-road Equipment - 10 projects

Off-road Equipment - 10 Projects

Off-road Equipment - 5 Projects

Off-road Equipment - 5 Projects

Off-road Equipment - 10 Projects

Demolition - 20,000 square foot demolished max day.

Grading - 10 acres graded max day

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	220.00	120.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	6.00	30.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	11/3/2017	1/29/2018
tblConstructionPhase	PhaseEndDate	9/8/2017	6/18/2018
tblConstructionPhase	PhaseEndDate	2/10/2017	1/2/2018
tblConstructionPhase	PhaseEndDate	3/24/2017	2/12/2018
tblConstructionPhase	PhaseEndDate	10/6/2017	1/29/2018
tblConstructionPhase	PhaseStartDate	10/7/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	3/25/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	1/2/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	2/11/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	9/9/2017	1/2/2018
tblGrading	AcresOfGrading	75.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	20.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	20.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	15.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	30.00
tblProjectCharacteristics	OperationalYear	2018	2019

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	104.9297	643.6393	446.2509	0.8005	55.7685	35.7575	91.5260	21.0756	33.6222	54.6978	0.0000	78,617.6198	78,617.6198	17.6689	0.0000	79,059.3430
Maximum	**104.9297**	**643.6393**	**446.2509**	**0.8005**	**55.7685**	**35.7575**	**91.5260**	**21.0756**	**33.6222**	**54.6978**	**0.0000**	**78,617.6198**	**78,617.6198**	**17.6689**	**0.0000**	**79,059.3430**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	104.9297	643.6393	446.2509	0.8005	25.1764	35.7575	60.9339	9.1378	33.6222	42.7600	0.0000	78,617.6198	78,617.6198	17.6689	0.0000	79,059.3430
Maximum	**104.9297**	**643.6393**	**446.2509**	**0.8005**	**25.1764**	**35.7575**	**60.9339**	**9.1378**	**33.6222**	**42.7600**	**0.0000**	**78,617.6198**	**78,617.6198**	**17.6689**	**0.0000**	**79,059.3430**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.86**	**0.00**	**33.42**	**56.64**	**0.00**	**21.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2018	1/2/2018	5	1	
2	Grading	Grading	1/2/2018	2/12/2018	5	30	
3	Building Construction	Building Construction	1/2/2018	6/18/2018	5	120	
4	Paving	Paving	1/2/2018	1/29/2018	5	20	
5	Architectural Coating	Architectural Coating	1/2/2018	1/29/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 212,625; Residential Outdoor: 70,875; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	5	8.00	81	0.73
Demolition	Rubber Tired Dozers	5	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	15	8.00	97	0.37
Grading	Graders	5	8.00	187	0.41
Grading	Rubber Tired Dozers	5	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	10	7.00	97	0.37
Building Construction	Cranes	10	8.00	231	0.29
Building Construction	Forklifts	20	7.00	89	0.20
Building Construction	Generator Sets	10	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	10	6.00	97	0.37
Building Construction	Welders	30	8.00	46	0.45
Paving	Cement and Mortar Mixers	10	8.00	9	0.56
Paving	Pavers	10	8.00	130	0.42
Paving	Paving Equipment	10	8.00	132	0.36
Paving	Rollers	20	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	10	8.00	97	0.37
Architectural Coating	Air Compressors	10	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	25	63.00	0.00	91.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	20	50.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	80	76.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	60	150.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	10	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6871	0.0000	19.6871	2.9808	0.0000	2.9808			0.0000			0.0000
Off-Road	12.4188	121.8204	75.5537	0.1206		7.1822	7.1822		6.7145	6.7145		11,955.8293	11,955.8293	3.0289		12,031.5523
Total	**12.4188**	**121.8204**	**75.5537**	**0.1206**	**19.6871**	**7.1822**	**26.8693**	**2.9808**	**6.7145**	**9.6953**		**11,955.8293**	**11,955.8293**	**3.0289**		**12,031.5523**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7890	28.0189	5.1885	0.0723	1.5902	0.1077	1.6980	0.4358	0.1031	0.5389		7,796.7544	7,796.7544	0.5333		7,810.0856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3395	0.2434	3.1611	7.7200e-003	0.7042	5.6100e-003	0.7098	0.1868	5.1700e-003	0.1919		768.1915	768.1915	0.0262		768.8464
Total	**1.1284**	**28.2623**	**8.3496**	**0.0800**	**2.2944**	**0.1133**	**2.4078**	**0.6226**	**0.1082**	**0.7308**		**8,564.9459**	**8,564.9459**	**0.5594**		**8,578.9320**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6780	0.0000	7.6780	1.1625	0.0000	1.1625			0.0000			0.0000
Off-Road	12.4188	121.8204	75.5537	0.1206		7.1822	7.1822		6.7145	6.7145	0.0000	11,955.8293	11,955.8293	3.0289		12,031.5523
Total	**12.4188**	**121.8204**	**75.5537**	**0.1206**	**7.6780**	**7.1822**	**14.8602**	**1.1625**	**6.7145**	**7.8770**	**0.0000**	**11,955.8293**	**11,955.8293**	**3.0289**		**12,031.5523**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7890	28.0189	5.1885	0.0723	1.5902	0.1077	1.6980	0.4358	0.1031	0.5389		7,796.7544	7,796.7544	0.5333		7,810.0856
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3395	0.2434	3.1611	7.7200e-003	0.7042	5.6100e-003	0.7098	0.1868	5.1700e-003	0.1919		768.1915	768.1915	0.0262		768.8464
Total	**1.1284**	**28.2623**	**8.3496**	**0.0800**	**2.2944**	**0.1133**	**2.4078**	**0.6226**	**0.1082**	**0.7308**		**8,564.9459**	**8,564.9459**	**0.5594**		**8,578.9320**

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					30.4639	0.0000	30.4639	16.5893	0.0000	16.5893			0.0000			0.0000
Off-Road	10.7574	121.4474	51.9021	0.1031		5.8415	5.8415		5.3742	5.3742		10,387.3330	10,387.3330	3.2337		10,468.1759
Total	**10.7574**	**121.4474**	**51.9021**	**0.1031**	**30.4639**	**5.8415**	**36.3054**	**16.5893**	**5.3742**	**21.9635**		**10,387.3330**	**10,387.3330**	**3.2337**		**10,468.1759**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2694	0.1932	2.5088	6.1300e-003	0.5589	4.4500e-003	0.5633	0.1482	4.1100e-003	0.1523		609.6758	609.6758	0.0208		610.1955
Total	**0.2694**	**0.1932**	**2.5088**	**6.1300e-003**	**0.5589**	**4.4500e-003**	**0.5633**	**0.1482**	**4.1100e-003**	**0.1523**		**609.6758**	**609.6758**	**0.0208**		**610.1955**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.8809	0.0000	11.8809	6.4698	0.0000	6.4698			0.0000			0.0000
Off-Road	10.7574	121.4474	51.9021	0.1031		5.8415	5.8415		5.3742	5.3742	0.0000	10,387.3330	10,387.3330	3.2337		10,468.1759
Total	**10.7574**	**121.4474**	**51.9021**	**0.1031**	**11.8809**	**5.8415**	**17.7224**	**6.4698**	**5.3742**	**11.8440**	**0.0000**	**10,387.3330**	**10,387.3330**	**3.2337**		**10,468.1759**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2694	0.1932	2.5088	6.1300e-003	0.5589	4.4500e-003	0.5633	0.1482	4.1100e-003	0.1523		609.6758	609.6758	0.0208		610.1955
Total	**0.2694**	**0.1932**	**2.5088**	**6.1300e-003**	**0.5589**	**4.4500e-003**	**0.5633**	**0.1482**	**4.1100e-003**	**0.1523**		**609.6758**	**609.6758**	**0.0208**		**610.1955**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	29.1272	207.0767	157.1830	0.2501		12.5748	12.5748		12.0509	12.0509		23,297.7592	23,297.7592	5.0189		23,423.2321
Total	**29.1272**	**207.0767**	**157.1830**	**0.2501**		**12.5748**	**12.5748**		**12.0509**	**12.0509**		**23,297.7592**	**23,297.7592**	**5.0189**		**23,423.2321**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0468	1.3330	0.3320	2.8800e-003	0.0704	9.7400e-003	0.0801	0.0203	9.3200e-003	0.0296		306.5238	306.5238	0.0209		307.0454
Worker	0.4095	0.2936	3.8134	9.3100e-003	0.8495	6.7700e-003	0.8563	0.2253	6.2400e-003	0.2315		926.7073	926.7073	0.0316		927.4972
Total	**0.4563**	**1.6266**	**4.1453**	**0.0122**	**0.9199**	**0.0165**	**0.9364**	**0.2456**	**0.0156**	**0.2611**		**1,233.2311**	**1,233.2311**	**0.0525**		**1,234.5426**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	29.1272	207.0767	157.1830	0.2501		12.5748	12.5748		12.0509	12.0509	0.0000	23,297.7591	23,297.7591	5.0189		23,423.2321
Total	**29.1272**	**207.0767**	**157.1830**	**0.2501**		**12.5748**	**12.5748**		**12.0509**	**12.0509**	**0.0000**	**23,297.7591**	**23,297.7591**	**5.0189**		**23,423.2321**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0468	1.3330	0.3320	2.8800e-003	0.0704	9.7400e-003	0.0801	0.0203	9.3200e-003	0.0296		306.5238	306.5238	0.0209		307.0454
Worker	0.4095	0.2936	3.8134	9.3100e-003	0.8495	6.7700e-003	0.8563	0.2253	6.2400e-003	0.2315		926.7073	926.7073	0.0316		927.4972
Total	**0.4563**	**1.6266**	**4.1453**	**0.0122**	**0.9199**	**0.0165**	**0.9364**	**0.2456**	**0.0156**	**0.2611**		**1,233.2311**	**1,233.2311**	**0.0525**		**1,234.5426**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	14.0462	142.5179	119.7874	0.1784		8.5045	8.5045		7.8357	7.8357		17,742.4299	17,742.4299	5.4186		17,877.8960
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**14.0462**	**142.5179**	**119.7874**	**0.1784**		**8.5045**	**8.5045**		**7.8357**	**7.8357**		**17,742.4299**	**17,742.4299**	**5.4186**		**17,877.8960**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8082	0.5795	7.5264	0.0184	1.6767	0.0134	1.6900	0.4447	0.0123	0.4570		1,829.0275	1,829.0275	0.0624		1,830.5866
Total	**0.8082**	**0.5795**	**7.5264**	**0.0184**	**1.6767**	**0.0134**	**1.6900**	**0.4447**	**0.0123**	**0.4570**		**1,829.0275**	**1,829.0275**	**0.0624**		**1,830.5866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	14.0462	142.5179	119.7874	0.1784		8.5045	8.5045		7.8357	7.8357	0.0000	17,742.4299	17,742.4299	5.4186		17,877.8959
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**14.0462**	**142.5179**	**119.7874**	**0.1784**		**8.5045**	**8.5045**		**7.8357**	**7.8357**	**0.0000**	**17,742.4299**	**17,742.4299**	**5.4186**		**17,877.8959**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8082	0.5795	7.5264	0.0184	1.6767	0.0134	1.6900	0.4447	0.0123	0.4570		1,829.0275	1,829.0275	0.0624		1,830.5866
Total	**0.8082**	**0.5795**	**7.5264**	**0.0184**	**1.6767**	**0.0134**	**1.6900**	**0.4447**	**0.0123**	**0.4570**		**1,829.0275**	**1,829.0275**	**0.0624**		**1,830.5866**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.8506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.9863	20.0575	18.5420	0.0297		1.5056	1.5056		1.5056	1.5056		2,814.4854	2,814.4854	0.2674		2,821.1713
Total	**35.8369**	**20.0575**	**18.5420**	**0.0297**		**1.5056**	**1.5056**		**1.5056**	**1.5056**		**2,814.4854**	**2,814.4854**	**0.2674**		**2,821.1713**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	**0.0808**	**0.0580**	**0.7526**	**1.8400e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**182.9028**	**182.9028**	**6.2400e-003**		**183.0587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.8506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.9863	20.0575	18.5420	0.0297		1.5056	1.5056		1.5056	1.5056	0.0000	2,814.4854	2,814.4854	0.2674		2,821.1713
Total	**35.8369**	**20.0575**	**18.5420**	**0.0297**		**1.5056**	**1.5056**		**1.5056**	**1.5056**	**0.0000**	**2,814.4854**	**2,814.4854**	**0.2674**		**2,821.1713**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587
Total	**0.0808**	**0.0580**	**0.7526**	**1.8400e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**182.9028**	**182.9028**	**6.2400e-003**		**183.0587**

Willowbrook Specific Plan- Demolition, Grading, and Residential

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	105.00	Dwelling Unit	2.76	105,000.00	300

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Maximum Emission Scenario

Off-road Equipment - 10 projects

Off-road Equipment - 10 Projects

Off-road Equipment - 5 Projects

Off-road Equipment - 5 Projects

Off-road Equipment - 10 Projects

Demolition - 20,000 square foot demolished max day.

Grading - 10 acres graded max day

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	220.00	120.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	6.00	30.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	11/3/2017	1/29/2018
tblConstructionPhase	PhaseEndDate	9/8/2017	6/18/2018
tblConstructionPhase	PhaseEndDate	2/10/2017	1/2/2018
tblConstructionPhase	PhaseEndDate	3/24/2017	2/12/2018
tblConstructionPhase	PhaseEndDate	10/6/2017	1/29/2018
tblConstructionPhase	PhaseStartDate	10/7/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	3/25/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	1/2/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	2/11/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	9/9/2017	1/2/2018
tblGrading	AcresOfGrading	75.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	20.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	20.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	15.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	30.00
tblProjectCharacteristics	OperationalYear	2018	2019

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	105.1216	644.1633	445.0385	0.7963	55.7685	35.7598	91.5283	21.0756	33.6244	54.7000	0.0000	78,190.5705	78,190.5705	17.6857	0.0000	78,632.7131
Maximum	**105.1216**	**644.1633**	**445.0385**	**0.7963**	**55.7685**	**35.7598**	**91.5283**	**21.0756**	**33.6244**	**54.7000**	**0.0000**	**78,190.5705**	**78,190.5705**	**17.6857**	**0.0000**	**78,632.7131**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	105.1216	644.1633	445.0385	0.7963	25.1764	35.7598	60.9362	9.1378	33.6244	42.7622	0.0000	78,190.5705	78,190.5705	17.6857	0.0000	78,632.7130
Maximum	**105.1216**	**644.1633**	**445.0385**	**0.7963**	**25.1764**	**35.7598**	**60.9362**	**9.1378**	**33.6244**	**42.7622**	**0.0000**	**78,190.5705**	**78,190.5705**	**17.6857**	**0.0000**	**78,632.7130**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.86**	**0.00**	**33.42**	**56.64**	**0.00**	**21.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2018	1/2/2018	5	1	
2	Grading	Grading	1/2/2018	2/12/2018	5	30	
3	Building Construction	Building Construction	1/2/2018	6/18/2018	5	120	
4	Paving	Paving	1/2/2018	1/29/2018	5	20	
5	Architectural Coating	Architectural Coating	1/2/2018	1/29/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 212,625; Residential Outdoor: 70,875; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	5	8.00	81	0.73
Demolition	Rubber Tired Dozers	5	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	15	8.00	97	0.37
Grading	Graders	5	8.00	187	0.41
Grading	Rubber Tired Dozers	5	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	10	7.00	97	0.37
Building Construction	Cranes	10	8.00	231	0.29
Building Construction	Forklifts	20	7.00	89	0.20
Building Construction	Generator Sets	10	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	10	6.00	97	0.37
Building Construction	Welders	30	8.00	46	0.45

Paving	Cement and Mortar Mixers	10	8.00	9	0.56
Paving	Pavers	10	8.00	130	0.42
Paving	Paving Equipment	10	8.00	132	0.36
Paving	Rollers	20	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	10	8.00	97	0.37
Architectural Coating	Air Compressors	10	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	25	63.00	0.00	91.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	20	50.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	80	76.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	60	150.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	10	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6871	0.0000	19.6871	2.9808	0.0000	2.9808			0.0000			0.0000
Off-Road	12.4188	121.8204	75.5537	0.1206		7.1822	7.1822		6.7145	6.7145		11,955.8293	11,955.8293	3.0289		12,031.5523
Total	**12.4188**	**121.8204**	**75.5537**	**0.1206**	**19.6871**	**7.1822**	**26.8693**	**2.9808**	**6.7145**	**9.6953**		**11,955.8293**	**11,955.8293**	**3.0289**		**12,031.5523**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8124	28.4101	5.6269	0.0710	1.5902	0.1098	1.7001	0.4358	0.1051	0.5409		7,656.8973	7,656.8973	0.5579		7,670.8439
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3691	0.2666	2.8608	7.2200e-003	0.7042	5.6100e-003	0.7098	0.1868	5.1700e-003	0.1919		718.6279	718.6279	0.0245		719.2410
Total	**1.1815**	**28.6767**	**8.4877**	**0.0782**	**2.2944**	**0.1154**	**2.4099**	**0.6226**	**0.1102**	**0.7328**		**8,375.5252**	**8,375.5252**	**0.5824**		**8,390.0849**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6780	0.0000	7.6780	1.1625	0.0000	1.1625			0.0000			0.0000
Off-Road	12.4188	121.8204	75.5537	0.1206		7.1822	7.1822		6.7145	6.7145	0.0000	11,955.8293	11,955.8293	3.0289		12,031.5523
Total	**12.4188**	**121.8204**	**75.5537**	**0.1206**	**7.6780**	**7.1822**	**14.8602**	**1.1625**	**6.7145**	**7.8770**	**0.0000**	**11,955.8293**	**11,955.8293**	**3.0289**		**12,031.5523**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8124	28.4101	5.6269	0.0710	1.5902	0.1098	1.7001	0.4358	0.1051	0.5409		7,656.8973	7,656.8973	0.5579		7,670.8439
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3691	0.2666	2.8608	7.2200e-003	0.7042	5.6100e-003	0.7098	0.1868	5.1700e-003	0.1919		718.6279	718.6279	0.0245		719.2410
Total	**1.1815**	**28.6767**	**8.4877**	**0.0782**	**2.2944**	**0.1154**	**2.4099**	**0.6226**	**0.1102**	**0.7328**		**8,375.5252**	**8,375.5252**	**0.5824**		**8,390.0849**

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					30.4639	0.0000	30.4639	16.5893	0.0000	16.5893			0.0000			0.0000
Off-Road	10.7574	121.4474	51.9021	0.1031		5.8415	5.8415		5.3742	5.3742		10,387.3330	10,387.3330	3.2337		10,468.1759
Total	**10.7574**	**121.4474**	**51.9021**	**0.1031**	**30.4639**	**5.8415**	**36.3054**	**16.5893**	**5.3742**	**21.9635**		**10,387.3330**	**10,387.3330**	**3.2337**		**10,468.1759**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2929	0.2116	2.2705	5.7300e-003	0.5589	4.4500e-003	0.5633	0.1482	4.1100e-003	0.1523		570.3396	570.3396	0.0195		570.8262
Total	**0.2929**	**0.2116**	**2.2705**	**5.7300e-003**	**0.5589**	**4.4500e-003**	**0.5633**	**0.1482**	**4.1100e-003**	**0.1523**		**570.3396**	**570.3396**	**0.0195**		**570.8262**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.8809	0.0000	11.8809	6.4698	0.0000	6.4698			0.0000			0.0000
Off-Road	10.7574	121.4474	51.9021	0.1031		5.8415	5.8415		5.3742	5.3742	0.0000	10,387.3330	10,387.3330	3.2337		10,468.1759
Total	**10.7574**	**121.4474**	**51.9021**	**0.1031**	**11.8809**	**5.8415**	**17.7224**	**6.4698**	**5.3742**	**11.8440**	**0.0000**	**10,387.3330**	**10,387.3330**	**3.2337**		**10,468.1759**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2929	0.2116	2.2705	5.7300e-003	0.5589	4.4500e-003	0.5633	0.1482	4.1100e-003	0.1523		570.3396	570.3396	0.0195		570.8262
Total	**0.2929**	**0.2116**	**2.2705**	**5.7300e-003**	**0.5589**	**4.4500e-003**	**0.5633**	**0.1482**	**4.1100e-003**	**0.1523**		**570.3396**	**570.3396**	**0.0195**		**570.8262**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	29.1272	207.0767	157.1830	0.2501		12.5748	12.5748		12.0509	12.0509		23,297.7592	23,297.7592	5.0189		23,423.2321
Total	**29.1272**	**207.0767**	**157.1830**	**0.2501**		**12.5748**	**12.5748**		**12.0509**	**12.0509**		**23,297.7592**	**23,297.7592**	**5.0189**		**23,423.2321**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0489	1.3353	0.3685	2.8000e-003	0.0704	9.8900e-003	0.0803	0.0203	9.4600e-003	0.0297		297.8321	297.8321	0.0224		298.3924
Worker	0.4453	0.3216	3.4511	8.7100e-003	0.8495	6.7700e-003	0.8563	0.2253	6.2400e-003	0.2315		866.9162	866.9162	0.0296		867.6558
Total	**0.4941**	**1.6569**	**3.8196**	**0.0115**	**0.9199**	**0.0167**	**0.9366**	**0.2456**	**0.0157**	**0.2613**		**1,164.7483**	**1,164.7483**	**0.0520**		**1,166.0481**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	29.1272	207.0767	157.1830	0.2501		12.5748	12.5748		12.0509	12.0509	0.0000	23,297.7591	23,297.7591	5.0189		23,423.2321
Total	**29.1272**	**207.0767**	**157.1830**	**0.2501**		**12.5748**	**12.5748**		**12.0509**	**12.0509**	**0.0000**	**23,297.7591**	**23,297.7591**	**5.0189**		**23,423.2321**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0489	1.3353	0.3685	2.8000e-003	0.0704	9.8900e-003	0.0803	0.0203	9.4600e-003	0.0297		297.8321	297.8321	0.0224		298.3924
Worker	0.4453	0.3216	3.4511	8.7100e-003	0.8495	6.7700e-003	0.8563	0.2253	6.2400e-003	0.2315		866.9162	866.9162	0.0296		867.6558
Total	**0.4941**	**1.6569**	**3.8196**	**0.0115**	**0.9199**	**0.0167**	**0.9366**	**0.2456**	**0.0157**	**0.2613**		**1,164.7483**	**1,164.7483**	**0.0520**		**1,166.0481**

3.5 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	14.0462	142.5179	119.7874	0.1784		8.5045	8.5045		7.8357	7.8357		17,742.4299	17,742.4299	5.4186		17,877.8960
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**14.0462**	**142.5179**	**119.7874**	**0.1784**		**8.5045**	**8.5045**		**7.8357**	**7.8357**		**17,742.4299**	**17,742.4299**	**5.4186**		**17,877.8960**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8788	0.6348	6.8114	0.0172	1.6767	0.0134	1.6900	0.4447	0.0123	0.4570		1,711.0188	1,711.0188	0.0584		1,712.4785
Total	**0.8788**	**0.6348**	**6.8114**	**0.0172**	**1.6767**	**0.0134**	**1.6900**	**0.4447**	**0.0123**	**0.4570**		**1,711.0188**	**1,711.0188**	**0.0584**		**1,712.4785**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	14.0462	142.5179	119.7874	0.1784		8.5045	8.5045		7.8357	7.8357	0.0000	17,742.4299	17,742.4299	5.4186		17,877.8959
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**14.0462**	**142.5179**	**119.7874**	**0.1784**		**8.5045**	**8.5045**		**7.8357**	**7.8357**	**0.0000**	**17,742.4299**	**17,742.4299**	**5.4186**		**17,877.8959**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8788	0.6348	6.8114	0.0172	1.6767	0.0134	1.6900	0.4447	0.0123	0.4570		1,711.0188	1,711.0188	0.0584		1,712.4785
Total	**0.8788**	**0.6348**	**6.8114**	**0.0172**	**1.6767**	**0.0134**	**1.6900**	**0.4447**	**0.0123**	**0.4570**		**1,711.0188**	**1,711.0188**	**0.0584**		**1,712.4785**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.8506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.9863	20.0575	18.5420	0.0297		1.5056	1.5056		1.5056	1.5056		2,814.4854	2,814.4854	0.2674		2,821.1713
Total	**35.8369**	**20.0575**	**18.5420**	**0.0297**		**1.5056**	**1.5056**		**1.5056**	**1.5056**		**2,814.4854**	**2,814.4854**	**0.2674**		**2,821.1713**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	**0.0879**	**0.0635**	**0.6811**	**1.7200e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**171.1019**	**171.1019**	**5.8400e-003**		**171.2479**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.8506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.9863	20.0575	18.5420	0.0297		1.5056	1.5056		1.5056	1.5056	0.0000	2,814.4854	2,814.4854	0.2674		2,821.1713
Total	**35.8369**	**20.0575**	**18.5420**	**0.0297**		**1.5056**	**1.5056**		**1.5056**	**1.5056**	**0.0000**	**2,814.4854**	**2,814.4854**	**0.2674**		**2,821.1713**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479
Total	**0.0879**	**0.0635**	**0.6811**	**1.7200e-003**	**0.1677**	**1.3400e-003**	**0.1690**	**0.0445**	**1.2300e-003**	**0.0457**		**171.1019**	**171.1019**	**5.8400e-003**		**171.2479**

Willowbrook Specific Plan- Demolition, Grading, and Residential GHG

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	420.00	Dwelling Unit	11.05	420,000.00	1201

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Max case scenario

Off-road Equipment -

Off-road Equipment - 10 projects per day

Off-road Equipment - 10 projects per day

Off-road Equipment - 2 Projects Per day

Off-road Equipment - 2 Projects Per day

Off-road Equipment - 10 Projects per Day

Grading - 50 acres Graded

Demolition -

Architectural Coating -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_Residential_Exterior	283500	0
tblAreaCoating	Area_Residential_Interior	850500	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	300.00	260.00
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	30.00	260.00
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	10/4/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	10/4/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	10/4/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	10/4/2018	12/31/2018
tblConstructionPhase	PhaseEndDate	10/4/2018	5/21/2018
tblConstructionPhase	PhaseStartDate	10/5/2018	1/2/2018
tblConstructionPhase	PhaseStartDate	10/5/2018	1/2/2018
tblConstructionPhase	PhaseStartDate	10/5/2018	1/2/2018
tblConstructionPhase	PhaseStartDate	10/5/2018	1/2/2018
tblConstructionPhase	PhaseStartDate	10/5/2018	1/2/2018
tblGrading	AcresOfGrading	1,300.00	50.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	30.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	20.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	20.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	30.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	20.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	10.00
tblProjectCharacteristics	OperationalYear	2018	2020

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	8.6660	68.3786	50.7735	0.0858	2.4482	3.8239	6.2721	1.0790	3.5785	4.6575	0.0000	7,705.5173	7,705.5173	1.8590	0.0000	7,751.9912
Maximum	**8.6660**	**68.3786**	**50.7735**	**0.0858**	**2.4482**	**3.8239**	**6.2721**	**1.0790**	**3.5785**	**4.6575**	**0.0000**	**7,705.5173**	**7,705.5173**	**1.8590**	**0.0000**	**7,751.9912**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	8.6660	68.3785	50.7734	0.0858	1.4087	3.8239	5.2327	0.5419	3.5785	4.1204	0.0000	7,705.5091	7,705.5091	1.8590	0.0000	7,751.9830
Maximum	**8.6660**	**68.3785**	**50.7734**	**0.0858**	**1.4087**	**3.8239**	**5.2327**	**0.5419**	**3.5785**	**4.1204**	**0.0000**	**7,705.5091**	**7,705.5091**	**1.8590**	**0.0000**	**7,751.9830**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**42.46**	**0.00**	**16.57**	**49.77**	**0.00**	**11.53**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/2/2018	12/31/2018	5	260	
2	Building Construction	Building Construction	1/2/2018	12/31/2018	5	260	
3	Demolition	Demolition	1/2/2018	12/31/2018	5	260	
4	Grading	Grading	1/2/2018	12/31/2018	5	260	
5	Paving	Paving	1/2/2018	5/21/2018	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 50

Acres of Paving: 0

Residential Indoor: 850,500; Residential Outdoor: 283,500; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	10	6.00	78	0.48
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Building Construction	Cranes	10	7.00	231	0.29
Building Construction	Forklifts	30	8.00	89	0.20
Demolition	Excavators	6	8.00	158	0.38
Paving	Pavers	20	8.00	130	0.42
Paving	Rollers	20	8.00	80	0.38
Demolition	Rubber Tired Dozers	4	8.00	247	0.40
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	30	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Building Construction	Generator Sets	10	8.00	84	0.74
Grading	Graders	2	8.00	187	0.41
Paving	Paving Equipment	20	8.00	132	0.36
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	10	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	10	60.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	90	302.00	45.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	12	30.00	0.00	1,032.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	60	150.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3882	2.6075	2.4105	3.8600e-003		0.1957	0.1957		0.1957	0.1957	0.0000	331.9236	331.9236	0.0315	0.0000	332.7121
Total	**1.7022**	**2.6075**	**2.4105**	**3.8600e-003**		**0.1957**	**0.1957**		**0.1957**	**0.1957**	**0.0000**	**331.9236**	**331.9236**	**0.0315**	**0.0000**	**332.7121**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0415	0.0339	0.3640	9.1000e-004	0.0856	6.9000e-004	0.0863	0.0227	6.4000e-004	0.0234	0.0000	82.0952	82.0952	2.8000e-003	0.0000	82.1653
Total	**0.0415**	**0.0339**	**0.3640**	**9.1000e-004**	**0.0856**	**6.9000e-004**	**0.0863**	**0.0227**	**6.4000e-004**	**0.0234**	**0.0000**	**82.0952**	**82.0952**	**2.8000e-003**	**0.0000**	**82.1653**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3882	2.6075	2.4105	3.8600e-003		0.1957	0.1957		0.1957	0.1957	0.0000	331.9232	331.9232	0.0315	0.0000	332.7117
Total	**1.7022**	**2.6075**	**2.4105**	**3.8600e-003**		**0.1957**	**0.1957**		**0.1957**	**0.1957**	**0.0000**	**331.9232**	**331.9232**	**0.0315**	**0.0000**	**332.7117**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0415	0.0339	0.3640	9.1000e-004	0.0856	6.9000e-004	0.0863	0.0227	6.4000e-004	0.0234	0.0000	82.0952	82.0952	2.8000e-003	0.0000	82.1653
Total	**0.0415**	**0.0339**	**0.3640**	**9.1000e-004**	**0.0856**	**6.9000e-004**	**0.0863**	**0.0227**	**6.4000e-004**	**0.0234**	**0.0000**	**82.0952**	**82.0952**	**2.8000e-003**	**0.0000**	**82.1653**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4833	30.4070	22.8546	0.0350		1.9498	1.9498		1.8329	1.8329	0.0000	3,090.9741	3,090.9741	0.7573	0.0000	3,109.9062
Total	**3.4833**	**30.4070**	**22.8546**	**0.0350**		**1.9498**	**1.9498**		**1.8329**	**1.8329**	**0.0000**	**3,090.9741**	**3,090.9741**	**0.7573**	**0.0000**	**3,109.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0254	0.7233	0.1864	1.5100e-003	0.0369	5.2100e-003	0.0421	0.0106	4.9900e-003	0.0156	0.0000	146.1235	146.1235	0.0104	0.0000	146.3835
Worker	0.2087	0.1707	1.8323	4.5800e-003	0.4307	3.5000e-003	0.4342	0.1144	3.2200e-003	0.1176	0.0000	413.2127	413.2127	0.0141	0.0000	413.5652
Total	**0.2340**	**0.8940**	**2.0187**	**6.0900e-003**	**0.4676**	**8.7100e-003**	**0.4763**	**0.1250**	**8.2100e-003**	**0.1333**	**0.0000**	**559.3362**	**559.3362**	**0.0245**	**0.0000**	**559.9487**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4833	30.4070	22.8545	0.0350		1.9498	1.9498		1.8329	1.8329	0.0000	3,090.9704	3,090.9704	0.7573	0.0000	3,109.9025
Total	**3.4833**	**30.4070**	**22.8545**	**0.0350**		**1.9498**	**1.9498**		**1.8329**	**1.8329**	**0.0000**	**3,090.9704**	**3,090.9704**	**0.7573**	**0.0000**	**3,109.9025**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0254	0.7233	0.1864	1.5100e-003	0.0369	5.2100e-003	0.0421	0.0106	4.9900e-003	0.0156	0.0000	146.1235	146.1235	0.0104	0.0000	146.3835
Worker	0.2087	0.1707	1.8323	4.5800e-003	0.4307	3.5000e-003	0.4342	0.1144	3.2200e-003	0.1176	0.0000	413.2127	413.2127	0.0141	0.0000	413.5652
Total	**0.2340**	**0.8940**	**2.0187**	**6.0900e-003**	**0.4676**	**8.7100e-003**	**0.4763**	**0.1250**	**8.2100e-003**	**0.1333**	**0.0000**	**559.3362**	**559.3362**	**0.0245**	**0.0000**	**559.9487**

3.4 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1117	0.0000	0.1117	0.0169	0.0000	0.0169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.9669	9.9639	5.7991	0.0101		0.5040	0.5040		0.4693	0.4693	0.0000	913.2260	913.2260	0.2516	0.0000	919.5161
Total	**0.9669**	**9.9639**	**5.7991**	**0.0101**	**0.1117**	**0.5040**	**0.6157**	**0.0169**	**0.4693**	**0.4862**	**0.0000**	**913.2260**	**913.2260**	**0.2516**	**0.0000**	**919.5161**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5300e-003	0.1640	0.0305	4.1000e-004	8.8700e-003	6.2000e-004	9.4900e-003	2.4400e-003	5.9000e-004	3.0200e-003	0.0000	39.8046	39.8046	2.8000e-003	0.0000	39.8746
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0207	0.0170	0.1820	4.5000e-004	0.0428	3.5000e-004	0.0431	0.0114	3.2000e-004	0.0117	0.0000	41.0476	41.0476	1.4000e-003	0.0000	41.0826
Total	**0.0253**	**0.1810**	**0.2125**	**8.6000e-004**	**0.0517**	**9.7000e-004**	**0.0526**	**0.0138**	**9.1000e-004**	**0.0147**	**0.0000**	**80.8523**	**80.8523**	**4.2000e-003**	**0.0000**	**80.9572**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0436	0.0000	0.0436	6.6000e-003	0.0000	6.6000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.9669	9.9638	5.7990	0.0101		0.5040	0.5040		0.4693	0.4693	0.0000	913.2249	913.2249	0.2516	0.0000	919.5150
Total	**0.9669**	**9.9638**	**5.7990**	**0.0101**	**0.0436**	**0.5040**	**0.5476**	**6.6000e-003**	**0.4693**	**0.4759**	**0.0000**	**913.2249**	**913.2249**	**0.2516**	**0.0000**	**919.5150**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5300e-003	0.1640	0.0305	4.1000e-004	8.8700e-003	6.2000e-004	9.4900e-003	2.4400e-003	5.9000e-004	3.0200e-003	0.0000	39.8046	39.8046	2.8000e-003	0.0000	39.8746
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0207	0.0170	0.1820	4.5000e-004	0.0428	3.5000e-004	0.0431	0.0114	3.2000e-004	0.0117	0.0000	41.0476	41.0476	1.4000e-003	0.0000	41.0826
Total	**0.0253**	**0.1810**	**0.2125**	**8.6000e-004**	**0.0517**	**9.7000e-004**	**0.0526**	**0.0138**	**9.1000e-004**	**0.0147**	**0.0000**	**80.8523**	**80.8523**	**4.2000e-003**	**0.0000**	**80.9572**

3.5 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5923	0.0000	1.5923	0.8635	0.0000	0.8635	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3234	15.4757	9.1232	0.0161		0.6848	0.6848		0.6300	0.6300	0.0000	1,472.8610	1,472.8610	0.4585	0.0000	1,484.3241
Total	**1.3234**	**15.4757**	**9.1232**	**0.0161**	**1.5923**	**0.6848**	**2.2770**	**0.8635**	**0.6300**	**1.4935**	**0.0000**	**1,472.8610**	**1,472.8610**	**0.4585**	**0.0000**	**1,484.3241**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0276	0.0226	0.2427	6.1000e-004	0.0571	4.6000e-004	0.0575	0.0152	4.3000e-004	0.0156	0.0000	54.7302	54.7302	1.8700e-003	0.0000	54.7768
Total	**0.0276**	**0.0226**	**0.2427**	**6.1000e-004**	**0.0571**	**4.6000e-004**	**0.0575**	**0.0152**	**4.3000e-004**	**0.0156**	**0.0000**	**54.7302**	**54.7302**	**1.8700e-003**	**0.0000**	**54.7768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6210	0.0000	0.6210	0.3368	0.0000	0.3368	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3234	15.4757	9.1232	0.0161		0.6848	0.6848		0.6300	0.6300	0.0000	1,472.8593	1,472.8593	0.4585	0.0000	1,484.3223
Total	**1.3234**	**15.4757**	**9.1232**	**0.0161**	**0.6210**	**0.6848**	**1.3058**	**0.3368**	**0.6300**	**0.9668**	**0.0000**	**1,472.8593**	**1,472.8593**	**0.4585**	**0.0000**	**1,484.3223**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0276	0.0226	0.2427	6.1000e-004	0.0571	4.6000e-004	0.0575	0.0152	4.3000e-004	0.0156	0.0000	54.7302	54.7302	1.8700e-003	0.0000	54.7768
Total	**0.0276**	**0.0226**	**0.2427**	**6.1000e-004**	**0.0571**	**4.6000e-004**	**0.0575**	**0.0152**	**4.3000e-004**	**0.0156**	**0.0000**	**54.7302**	**54.7302**	**1.8700e-003**	**0.0000**	**54.7768**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.8219	8.7605	7.3982	0.0114		0.4781	0.4781		0.4398	0.4398	0.0000	1,040.5811	1,040.5811	0.3240	0.0000	1,048.6798
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.8219**	**8.7605**	**7.3982**	**0.0114**		**0.4781**	**0.4781**		**0.4398**	**0.4398**	**0.0000**	**1,040.5811**	**1,040.5811**	**0.3240**	**0.0000**	**1,048.6798**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0399	0.0326	0.3500	8.7000e-004	0.0823	6.7000e-004	0.0830	0.0219	6.2000e-004	0.0225	0.0000	78.9377	78.9377	2.6900e-003	0.0000	79.0051
Total	**0.0399**	**0.0326**	**0.3500**	**8.7000e-004**	**0.0823**	**6.7000e-004**	**0.0830**	**0.0219**	**6.2000e-004**	**0.0225**	**0.0000**	**78.9377**	**78.9377**	**2.6900e-003**	**0.0000**	**79.0051**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.8219	8.7604	7.3982	0.0114		0.4781	0.4781		0.4398	0.4398	0.0000	1,040.5799	1,040.5799	0.3240	0.0000	1,048.6786
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.8219**	**8.7604**	**7.3982**	**0.0114**		**0.4781**	**0.4781**		**0.4398**	**0.4398**	**0.0000**	**1,040.5799**	**1,040.5799**	**0.3240**	**0.0000**	**1,048.6786**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0399	0.0326	0.3500	8.7000e-004	0.0823	6.7000e-004	0.0830	0.0219	6.2000e-004	0.0225	0.0000	78.9377	78.9377	2.6900e-003	0.0000	79.0051
Total	**0.0399**	**0.0326**	**0.3500**	**8.7000e-004**	**0.0823**	**6.7000e-004**	**0.0830**	**0.0219**	**6.2000e-004**	**0.0225**	**0.0000**	**78.9377**	**78.9377**	**2.6900e-003**	**0.0000**	**79.0051**

Appendix B, Air Quality Worksheets and Greenhouse Gas Emissions Data Worksheets

Operational Emissions

- CalEEMod Output (Summer)
- CalEEMod Output (Winter)
- CalEEMod Output (Annual)
- CalEEMod Output (Summer)- Hospital LST
- CalEEMod Output (Winter)- Hospital LST

Willowbrook Specific Plan- Demolition, Grading, and Residential

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	385.34	1000sqft	8.85	385,337.00	0
Hospital	1.12	1000sqft	0.03	1,118.00	0
Medical Office Building	3.74	1000sqft	0.09	3,736.00	0
Medical Office Building	35.43	1000sqft	0.81	35,427.00	0
Office Park	224.32	1000sqft	5.15	224,317.00	0
Research & Development	98.51	1000sqft	2.26	98,506.00	0
User Defined Commercial	295.15	User Defined Unit	0.00	295,148.00	0
Library	8.94	1000sqft	0.21	8,939.00	0
Place of Worship	26.43	1000sqft	0.61	26,428.00	0
University/College (4Yr)	825.00	Student	3.48	151,632.91	0
General Light Industry	2.21	1000sqft	0.05	2,215.00	0
Enclosed Parking with Elevator	225.93	1000sqft	5.19	225,926.00	0
Fast Food Restaurant with Drive Thru	2.70	1000sqft	0.06	2,696.00	0
High Turnover (Sit Down Restaurant)	7.09	1000sqft	0.16	7,086.00	0
Apartments Mid Rise	1,585.00	Dwelling Unit	41.71	1,585,000.00	4533
Apartments Mid Rise	105.00	Dwelling Unit	2.76	105,000.00	300
Single Family Housing	262.00	Dwelling Unit	85.06	471,600.00	749
Regional Shopping Center	30.83	1000sqft	0.71	30,830.00	0
Strip Mall	81.57	1000sqft	1.87	81,572.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Energy Use - Title 24 Conversion to 2016 Standards

Water And Wastewater - User Defined Commercial= Institution

Solid Waste - User Defined Commercial= Institution

Construction Off-road Equipment Mitigation -

Area Mitigation - Default

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	LightingElect	2.63	2.50
tblEnergyUse	LightingElect	8.13	7.72
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	3.88	3.69
tblEnergyUse	LightingElect	8.13	7.72
tblEnergyUse	LightingElect	5.44	5.17
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	3.88	3.69

tblEnergyUse	LightingElect	3.84	3.65
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	6.43	6.11
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	1,608.84	1,158.36
tblEnergyUse	LightingElect	6.43	6.11
tblEnergyUse	LightingElect	3.48	3.31
tblEnergyUse	LightingElect	0.00	3.04
tblEnergyUse	NT24E	0.00	5.75
tblEnergyUse	NT24NG	0.00	4.45
tblEnergyUse	T24E	297.91	214.50
tblEnergyUse	T24E	3.92	3.72
tblEnergyUse	T24E	8.50	8.08
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.82	4.58
tblEnergyUse	T24E	8.50	8.08
tblEnergyUse	T24E	10.44	9.92
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.82	4.58
tblEnergyUse	T24E	5.89	5.60
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.20	3.99
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	502.24	361.61
tblEnergyUse	T24E	4.20	3.99
tblEnergyUse	T24E	3.18	3.02
tblEnergyUse	T24E	0.00	2.24
tblEnergyUse	T24NG	10,118.57	7,285.37
tblEnergyUse	T24NG	0.00	9.57

tblEnergyUse	T24NG	43.19	41.03
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	10.07	9.57
tblEnergyUse	T24NG	43.19	41.03
tblEnergyUse	T24NG	55.22	52.46
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	10.07	9.57
tblEnergyUse	T24NG	9.65	9.17
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	1.16	1.10
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	26,696.95	19,221.80
tblEnergyUse	T24NG	1.16	1.10
tblEnergyUse	T24NG	26.63	25.30
tblEnergyUse	T24NG	0.00	13.02
tblFleetMix	FleetMixLandUseSubType	General Office Building	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	Hospital	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	Medical Office Building	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Medical Office Building	Fast Food Restaurant with Drive Thru
tblFleetMix	FleetMixLandUseSubType	Office Park	General Light Industry
tblFleetMix	FleetMixLandUseSubType	Research & Development	General Office Building
tblFleetMix	FleetMixLandUseSubType	User Defined Commercial	High Turnover (Sit Down Restaurant)
tblFleetMix	FleetMixLandUseSubType	Library	Hospital
tblFleetMix	FleetMixLandUseSubType	Place of Worship	Library
tblFleetMix	FleetMixLandUseSubType	University/College (4Yr)	Medical Office Building
tblFleetMix	FleetMixLandUseSubType	General Light Industry	Medical Office Building
tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Office Park
tblFleetMix	FleetMixLandUseSubType	Fast Food Restaurant with Drive Thru	Place of Worship

tblFleetMix	FleetMixLandUseSubType	High Turnover (Sit Down Restaurant)	Regional Shopping Center
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Research & Development
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Single Family Housing
tblFleetMix	FleetMixLandUseSubType	Single Family Housing	Strip Mall
tblFleetMix	FleetMixLandUseSubType	Regional Shopping Center	University/College (4Yr)
tblFleetMix	FleetMixLandUseSubType	Strip Mall	User Defined Commercial
tblLandUse	BuildingSpaceSquareFeet	385,340.00	385,337.00
tblLandUse	BuildingSpaceSquareFeet	1,120.00	1,118.00
tblLandUse	BuildingSpaceSquareFeet	3,740.00	3,736.00
tblLandUse	BuildingSpaceSquareFeet	35,430.00	35,427.00
tblLandUse	BuildingSpaceSquareFeet	224,320.00	224,317.00
tblLandUse	BuildingSpaceSquareFeet	98,510.00	98,506.00
tblLandUse	BuildingSpaceSquareFeet	0.00	295,148.00
tblLandUse	BuildingSpaceSquareFeet	8,940.00	8,939.00
tblLandUse	BuildingSpaceSquareFeet	26,430.00	26,428.00
tblLandUse	BuildingSpaceSquareFeet	2,210.00	2,215.00
tblLandUse	BuildingSpaceSquareFeet	225,930.00	225,926.00
tblLandUse	BuildingSpaceSquareFeet	2,700.00	2,696.00
tblLandUse	BuildingSpaceSquareFeet	7,090.00	7,086.00
tblLandUse	BuildingSpaceSquareFeet	81,570.00	81,572.00
tblLandUse	LandUseSquareFeet	385,340.00	385,337.00
tblLandUse	LandUseSquareFeet	1,120.00	1,118.00
tblLandUse	LandUseSquareFeet	3,740.00	3,736.00
tblLandUse	LandUseSquareFeet	35,430.00	35,427.00
tblLandUse	LandUseSquareFeet	224,320.00	224,317.00
tblLandUse	LandUseSquareFeet	98,510.00	98,506.00
tblLandUse	LandUseSquareFeet	0.00	295,148.00
tblLandUse	LandUseSquareFeet	8,940.00	8,939.00
tblLandUse	LandUseSquareFeet	26,430.00	26,428.00

tblLandUse	LandUseSquareFeet	2,210.00	2,215.00
tblLandUse	LandUseSquareFeet	225,930.00	225,926.00
tblLandUse	LandUseSquareFeet	2,700.00	2,696.00
tblLandUse	LandUseSquareFeet	7,090.00	7,086.00
tblLandUse	LandUseSquareFeet	81,570.00	81,572.00
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.00	7.49
tblVehicleTrips	ST_TR	6.39	4.70
tblVehicleTrips	ST_TR	722.03	207.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.46	8.82
tblVehicleTrips	ST_TR	158.37	81.27
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	46.55	42.20
tblVehicleTrips	ST_TR	8.96	25.80
tblVehicleTrips	ST_TR	1.64	10.04
tblVehicleTrips	ST_TR	10.37	6.83
tblVehicleTrips	ST_TR	49.97	26.88
tblVehicleTrips	ST_TR	1.90	6.51
tblVehicleTrips	ST_TR	9.91	5.56
tblVehicleTrips	ST_TR	42.04	17.71
tblVehicleTrips	ST_TR	1.30	1.45
tblVehicleTrips	SU_TR	5.86	4.70
tblVehicleTrips	SU_TR	542.72	207.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	8.82
tblVehicleTrips	SU_TR	131.84	81.27
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	25.49	42.20

tblVehicleTrips	SU_TR	1.55	25.80
tblVehicleTrips	SU_TR	0.76	10.04
tblVehicleTrips	SU_TR	36.63	6.83
tblVehicleTrips	SU_TR	25.24	26.88
tblVehicleTrips	SU_TR	1.11	6.51
tblVehicleTrips	SU_TR	8.62	5.56
tblVehicleTrips	SU_TR	20.43	17.71
tblVehicleTrips	SU_TR	0.00	1.45
tblVehicleTrips	WD_TR	6.65	4.70
tblVehicleTrips	WD_TR	496.12	207.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.03	8.82
tblVehicleTrips	WD_TR	127.15	81.27
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	56.24	42.20
tblVehicleTrips	WD_TR	36.13	25.80
tblVehicleTrips	WD_TR	11.42	10.04
tblVehicleTrips	WD_TR	9.11	6.83
tblVehicleTrips	WD_TR	42.70	26.88
tblVehicleTrips	WD_TR	8.11	6.51
tblVehicleTrips	WD_TR	9.52	5.56
tblVehicleTrips	WD_TR	44.32	17.71
tblVehicleTrips	WD_TR	1.71	1.45
tblWater	IndoorWaterUseRate	0.00	48,436,770.74

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,036.0595	77.4207	2,013.2653	4.7335		279.0998	279.0998		279.0998	279.0998	34,114.3168	65,846.4675	99,960.7843	102.0145	2.3154	103,201.1460
Energy	1.5437	13.5528	8.2649	0.0842		1.0665	1.0665		1.0665	1.0665		16,839.8809	16,839.8809	0.3228	0.3087	16,939.9519
Mobile	42.5780	194.5746	545.2927	2.2843	150.1971	1.5786	151.7757	41.3712	1.4662	42.8374		233,181.8548	233,181.8548	9.8307		233,427.6228
Total	**1,080.1812**	**285.5481**	**2,566.8228**	**7.1020**	**150.1971**	**281.7450**	**431.9421**	**41.3712**	**281.6325**	**323.0037**	**34,114.3168**	**315,868.2031**	**349,982.5199**	**112.1679**	**2.6242**	**353,568.7207**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,036.0595	77.4207	2,013.2653	4.7335		279.0998	279.0998		279.0998	279.0998	34,114.3168	65,846.4675	99,960.7843	102.0145	2.3154	103,201.1460
Energy	1.5437	13.5528	8.2649	0.0842		1.0665	1.0665		1.0665	1.0665		16,839.8809	16,839.8809	0.3228	0.3087	16,939.9519
Mobile	42.5780	194.5746	545.2927	2.2843	150.1971	1.5786	151.7757	41.3712	1.4662	42.8374		233,181.8548	233,181.8548	9.8307		233,427.6228
Total	**1,080.1812**	**285.5481**	**2,566.8228**	**7.1020**	**150.1971**	**281.7450**	**431.9421**	**41.3712**	**281.6325**	**323.0037**	**34,114.3168**	**315,868.2031**	**349,982.5199**	**112.1679**	**2.6242**	**353,568.7207**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	42.5780	194.5746	545.2927	2.2843	150.1971	1.5786	151.7757	41.3712	1.4662	42.8374		233,181.8548	233,181.8548	9.8307		233,427.6228
Unmitigated	42.5780	194.5746	545.2927	2.2843	150.1971	1.5786	151.7757	41.3712	1.4662	42.8374		233,181.8548	233,181.8548	9.8307		233,427.6228

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	7,449.50	7,449.50	7449.50	25,456,073	25,456,073
Apartments Mid Rise	493.50	493.50	493.50	1,686,364	1,686,364
Enclosed Parking with Elevator	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	558.90	558.90	558.90	588,179	588,179
General Light Industry	0.00	0.00	0.00		
General Office Building	3,398.70	3,398.70	3398.70	10,948,776	10,948,776
High Turnover (Sit Down Restaurant)	576.20	576.20	576.20	785,269	785,269
Hospital	0.00	0.00	0.00		
Library	377.27	377.27	377.27	952,483	952,483
Medical Office Building	96.49	96.49	96.49	250,287	250,287
Medical Office Building	914.09	914.09	914.09	2,371,031	2,371,031
Office Park	2,252.17	2,252.17	2252.17	7,609,305	7,609,305
Place of Worship	180.52	180.52	180.52	385,005	385,005
Regional Shopping Center	828.71	828.71	828.71	1,792,371	1,792,371
Research & Development	641.30	641.30	641.30	2,166,729	2,166,729
Single Family Housing	1,456.72	1,456.72	1456.72	4,977,834	4,977,834
Strip Mall	1,444.60	1,444.60	1444.60	2,748,498	2,748,498
University/College (4Yr)	1,196.25	1,196.25	1196.25	3,593,401	3,593,401
User Defined Commercial	0.00	0.00	0.00		
Total	21,864.93	21,864.93	21,864.93	66,311,604	66,311,604

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0
User Defined Commercial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Fast Food Restaurant with Drive Thru	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
General Light Industry	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
General Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Hospital	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Library	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Medical Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Medical Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Office Park	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Place of Worship	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Research & Development	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Single Family Housing	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Strip Mall	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
University/College (4Yr)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
User Defined Commercial	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5437	13.5528	8.2649	0.0842		1.0665	1.0665		1.0665	1.0665		16,839.8809	16,839.8809	0.3228	0.3087	16,939.9519
NaturalGas Unmitigated	1.5437	13.5528	8.2649	0.0842		1.0665	1.0665		1.0665	1.0665		16,839.8809	16,839.8809	0.3228	0.3087	16,939.9519

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3932.28	0.0424	0.3624	0.1542	2.3100e-003		0.0293	0.0293		0.0293	0.0293		462.6217	462.6217	8.8700e-003	8.4800e-003	465.3708
Apartments Mid Rise	59358.8	0.6401	5.4703	2.3278	0.0349		0.4423	0.4423		0.4423	0.4423		6,983.3848	6,983.3848	0.1339	0.1280	7,024.8836
Enclosed Parking with Elevator	5923.59	0.0639	0.5807	0.4878	3.4800e-003		0.0441	0.0441		0.0441	0.0441		696.8934	696.8934	0.0134	0.0128	701.0347
Fast Food Restaurant with Drive Thru	1690.06	0.0182	0.1657	0.1392	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.8305	198.8305	3.8100e-003	3.6500e-003	200.0121
General Light Industry	106.017	1.1400e-003	0.0104	8.7300e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		12.4725	12.4725	2.4000e-004	2.3000e-004	12.5467
General Office Building	10514.9	0.1134	1.0309	0.8659	6.1900e-003		0.0784	0.0784		0.0784	0.0784		1,237.0529	1,237.0529	0.0237	0.0227	1,244.4041
High Turnover (Sit Down Restaurant)	4442.05	0.0479	0.4355	0.3658	2.6100e-003		0.0331	0.0331		0.0331	0.0331		522.5939	522.5939	0.0100	9.5800e-003	525.6994
Hospital	190.764	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003		22.4429	22.4429	4.3000e-004	4.1000e-004	22.5763
Library	427.847	4.6100e-003	0.0420	0.0352	2.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003		50.3350	50.3350	9.6000e-004	9.2000e-004	50.6341
Medical Office Building	101.947	1.1000e-003	9.9900e-003	8.4000e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		11.9937	11.9937	2.3000e-004	2.2000e-004	12.0650

Medical Office Building	966.72	0.0104	0.0948	0.0796	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003		113.7318	113.7318	2.1800e-003	2.0900e-003	114.4077
Office Park	5752.35	0.0620	0.5640	0.4737	3.3800e-003		0.0429	0.0429		0.0429	0.0429		676.7469	676.7469	0.0130	0.0124	680.7684
Place of Worship	1264.92	0.0136	0.1240	0.1042	7.4000e-004		9.4200e-003	9.4200e-003		9.4200e-003	9.4200e-003		148.8146	148.8146	2.8500e-003	2.7300e-003	149.6989
Regional Shopping Center	134.301	1.4500e-003	0.0132	0.0111	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003		15.8001	15.8001	3.0000e-004	2.9000e-004	15.8940
Research & Development	4714.79	0.0509	0.4622	0.3883	2.7700e-003		0.0351	0.0351		0.0351	0.0351		554.6817	554.6817	0.0106	0.0102	557.9779
Single Family Housing	18380.1	0.1982	1.6939	0.7208	0.0108		0.1370	0.1370		0.1370	0.1370		2,162.3593	2,162.3593	0.0415	0.0396	2,175.2091
Strip Mall	355.341	3.8300e-003	0.0348	0.0293	2.1000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003		41.8048	41.8048	8.0000e-004	7.7000e-004	42.0533
University/College (4Yr)	10755.6	0.1160	1.0545	0.8858	6.3300e-003		0.0801	0.0801		0.0801	0.0801		1,265.3589	1,265.3589	0.0243	0.0232	1,272.8783
User Defined Commercial	14126.7	0.1524	1.3850	1.1634	8.3100e-003		0.1053	0.1053		0.1053	0.1053		1,661.9615	1,661.9615	0.0319	0.0305	1,671.8377
Total		**1.5437**	**13.5528**	**8.2649**	**0.0842**		**1.0665**	**1.0665**		**1.0665**	**1.0665**		**16,839.8809**	**16,839.8809**	**0.3228**	**0.3088**	**16,939.9519**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3.93228	0.0424	0.3624	0.1542	2.3100e-003		0.0293	0.0293		0.0293	0.0293		462.6217	462.6217	8.8700e-003	8.4800e-003	465.3708
Apartments Mid Rise	59.3588	0.6401	5.4703	2.3278	0.0349		0.4423	0.4423		0.4423	0.4423		6,983.3848	6,983.3848	0.1339	0.1280	7,024.8836
Enclosed Parking with Elevator	5.92359	0.0639	0.5807	0.4878	3.4800e-003		0.0441	0.0441		0.0441	0.0441		696.8934	696.8934	0.0134	0.0128	701.0347
Fast Food Restaurant with Drive Thru	1.69006	0.0182	0.1657	0.1392	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.8305	198.8305	3.8100e-003	3.6500e-003	200.0121
General Light Industry	0.106017	1.1400e-003	0.0104	8.7300e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		12.4725	12.4725	2.4000e-004	2.3000e-004	12.5467
General Office Building	10.5149	0.1134	1.0309	0.8659	6.1900e-003		0.0784	0.0784		0.0784	0.0784		1,237.0529	1,237.0529	0.0237	0.0227	1,244.4041
High Turnover (Sit Down Restaurant)	4.44205	0.0479	0.4355	0.3658	2.6100e-003		0.0331	0.0331		0.0331	0.0331		522.5939	522.5939	0.0100	9.5800e-003	525.6994
Hospital	0.190764	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003		22.4429	22.4429	4.3000e-004	4.1000e-004	22.5763

Library	0.427847	4.6100e-003	0.0420	0.0352	2.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003		50.3350	50.3350	9.6000e-004	9.2000e-004	50.6341
Medical Office Building	0.101947	1.1000e-003	9.9900e-003	8.4000e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		11.9937	11.9937	2.3000e-004	2.2000e-004	12.0650
Medical Office Building	0.96672	0.0104	0.0948	0.0796	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003		113.7318	113.7318	2.1800e-003	2.0900e-003	114.4077
Office Park	5.75235	0.0620	0.5640	0.4737	3.3800e-003		0.0429	0.0429		0.0429	0.0429		676.7469	676.7469	0.0130	0.0124	680.7684
Place of Worship	1.26492	0.0136	0.1240	0.1042	7.4000e-004		9.4200e-003	9.4200e-003		9.4200e-003	9.4200e-003		148.8146	148.8146	2.8500e-003	2.7300e-003	149.6989
Regional Shopping Center	0.134301	1.4500e-003	0.0132	0.0111	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003		15.8001	15.8001	3.0000e-004	2.9000e-004	15.8940
Research & Development	4.71479	0.0509	0.4622	0.3883	2.7700e-003		0.0351	0.0351		0.0351	0.0351		554.6817	554.6817	0.0106	0.0102	557.9779
Single Family Housing	18.3801	0.1982	1.6939	0.7208	0.0108		0.1370	0.1370		0.1370	0.1370		2,162.3593	2,162.3593	0.0415	0.0396	2,175.2091
Strip Mall	0.355341	3.8300e-003	0.0348	0.0293	2.1000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003		41.8048	41.8048	8.0000e-004	7.7000e-004	42.0533
University/College (4Yr)	10.7556	0.1160	1.0545	0.8858	6.3300e-003		0.0801	0.0801		0.0801	0.0801		1,265.3589	1,265.3589	0.0243	0.0232	1,272.8783
User Defined Commercial	14.1267	0.1524	1.3850	1.1634	8.3100e-003		0.1053	0.1053		0.1053	0.1053		1,661.9615	1,661.9615	0.0319	0.0305	1,671.8377
Total		**1.5437**	**13.5528**	**8.2649**	**0.0842**		**1.0665**	**1.0665**		**1.0665**	**1.0665**		**16,839.8809**	**16,839.8809**	**0.3228**	**0.3088**	**16,939.9519**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,036.0595	77.4207	2,013.2653	4.7335		279.0998	279.0998		279.0998	279.0998	34,114.3168	65,846.4675	99,960.7843	102.0145	2.3154	103,201.1460
Unmitigated	1,036.0595	77.4207	2,013.2653	4.7335		279.0998	279.0998		279.0998	279.0998	34,114.3168	65,846.4675	99,960.7843	102.0145	2.3154	103,201.1460

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.1642					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	69.7085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	954.3351	75.5654	1,852.1458	4.7250		278.2063	278.2063		278.2063	278.2063	34,114.3168	65,556.0000	99,670.3168	101.7355	2.3154	102,903.7044
Landscaping	4.8518	1.8553	161.1195	8.5200e-003		0.8936	0.8936		0.8936	0.8936		290.4675	290.4675	0.2790		297.4416
Total	**1,036.0595**	**77.4207**	**2,013.2653**	**4.7335**		**279.0998**	**279.0998**		**279.0998**	**279.0998**	**34,114.3168**	**65,846.4675**	**99,960.7843**	**102.0145**	**2.3154**	**103,201.1460**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.1642					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	69.7085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	954.3351	75.5654	1,852.1458	4.7250		278.2063	278.2063		278.2063	278.2063	34,114.3168	65,556.0000	99,670.3168	101.7355	2.3154	102,903.7044
Landscaping	4.8518	1.8553	161.1195	8.5200e-003		0.8936	0.8936		0.8936	0.8936		290.4675	290.4675	0.2790		297.4416
Total	**1,036.0595**	**77.4207**	**2,013.2653**	**4.7335**		**279.0998**	**279.0998**		**279.0998**	**279.0998**	**34,114.3168**	**65,846.4675**	**99,960.7843**	**102.0145**	**2.3154**	**103,201.1460**

Willowbrook Specific Plan- Demolition, Grading, and Residential

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	385.34	1000sqft	8.85	385,337.00	0
Hospital	1.12	1000sqft	0.03	1,118.00	0
Medical Office Building	3.74	1000sqft	0.09	3,736.00	0
Medical Office Building	35.43	1000sqft	0.81	35,427.00	0
Office Park	224.32	1000sqft	5.15	224,317.00	0
Research & Development	98.51	1000sqft	2.26	98,506.00	0
User Defined Commercial	295.15	User Defined Unit	0.00	295,148.00	0
Library	8.94	1000sqft	0.21	8,939.00	0
Place of Worship	26.43	1000sqft	0.61	26,428.00	0
University/College (4Yr)	825.00	Student	3.48	151,632.91	0
General Light Industry	2.21	1000sqft	0.05	2,215.00	0
Enclosed Parking with Elevator	225.93	1000sqft	5.19	225,926.00	0
Fast Food Restaurant with Drive Thru	2.70	1000sqft	0.06	2,696.00	0
High Turnover (Sit Down Restaurant)	7.09	1000sqft	0.16	7,086.00	0
Apartments Mid Rise	1,585.00	Dwelling Unit	41.71	1,585,000.00	4533
Apartments Mid Rise	105.00	Dwelling Unit	2.76	105,000.00	300
Single Family Housing	262.00	Dwelling Unit	85.06	471,600.00	749
Regional Shopping Center	30.83	1000sqft	0.71	30,830.00	0
Strip Mall	81.57	1000sqft	1.87	81,572.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Energy Use - Title 24 Conversion to 2016 Standards

Water And Wastewater - User Defined Commercial= Institution

Solid Waste - User Defined Commercial= Institution

Construction Off-road Equipment Mitigation -

Area Mitigation - Default

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	LightingElect	2.63	2.50
tblEnergyUse	LightingElect	8.13	7.72
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	3.88	3.69
tblEnergyUse	LightingElect	8.13	7.72
tblEnergyUse	LightingElect	5.44	5.17
tblEnergyUse	LightingElect	3.20	3.04

tblEnergyUse	LightingElect	3.88	3.69
tblEnergyUse	LightingElect	3.84	3.65
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	6.43	6.11
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	1,608.84	1,158.36
tblEnergyUse	LightingElect	6.43	6.11
tblEnergyUse	LightingElect	3.48	3.31
tblEnergyUse	LightingElect	0.00	3.04
tblEnergyUse	NT24E	0.00	5.75
tblEnergyUse	NT24NG	0.00	4.45
tblEnergyUse	T24E	297.91	214.50
tblEnergyUse	T24E	3.92	3.72
tblEnergyUse	T24E	8.50	8.08
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.82	4.58
tblEnergyUse	T24E	8.50	8.08
tblEnergyUse	T24E	10.44	9.92
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.82	4.58
tblEnergyUse	T24E	5.89	5.60
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.20	3.99
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	502.24	361.61
tblEnergyUse	T24E	4.20	3.99
tblEnergyUse	T24E	3.18	3.02
tblEnergyUse	T24E	0.00	2.24
tblEnergyUse	T24NG	10,118.57	7,285.37

tblEnergyUse	T24NG	0.00	9.57
tblEnergyUse	T24NG	43.19	41.03
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	10.07	9.57
tblEnergyUse	T24NG	43.19	41.03
tblEnergyUse	T24NG	55.22	52.46
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	10.07	9.57
tblEnergyUse	T24NG	9.65	9.17
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	1.16	1.10
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	26,696.95	19,221.80
tblEnergyUse	T24NG	1.16	1.10
tblEnergyUse	T24NG	26.63	25.30
tblEnergyUse	T24NG	0.00	13.02
tblFleetMix	FleetMixLandUseSubType	General Office Building	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	Hospital	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	Medical Office Building	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Medical Office Building	Fast Food Restaurant with Drive Thru
tblFleetMix	FleetMixLandUseSubType	Office Park	General Light Industry
tblFleetMix	FleetMixLandUseSubType	Research & Development	General Office Building
tblFleetMix	FleetMixLandUseSubType	User Defined Commercial	High Turnover (Sit Down Restaurant)
tblFleetMix	FleetMixLandUseSubType	Library	Hospital
tblFleetMix	FleetMixLandUseSubType	Place of Worship	Library
tblFleetMix	FleetMixLandUseSubType	University/College (4Yr)	Medical Office Building
tblFleetMix	FleetMixLandUseSubType	General Light Industry	Medical Office Building
tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Office Park

tblFleetMix	FleetMixLandUseSubType	Fast Food Restaurant with Drive Thru	Place of Worship
tblFleetMix	FleetMixLandUseSubType	High Turnover (Sit Down Restaurant)	Regional Shopping Center
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Research & Development
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Single Family Housing
tblFleetMix	FleetMixLandUseSubType	Single Family Housing	Strip Mall
tblFleetMix	FleetMixLandUseSubType	Regional Shopping Center	University/College (4Yr)
tblFleetMix	FleetMixLandUseSubType	Strip Mall	User Defined Commercial
tblLandUse	BuildingSpaceSquareFeet	385,340.00	385,337.00
tblLandUse	BuildingSpaceSquareFeet	1,120.00	1,118.00
tblLandUse	BuildingSpaceSquareFeet	3,740.00	3,736.00
tblLandUse	BuildingSpaceSquareFeet	35,430.00	35,427.00
tblLandUse	BuildingSpaceSquareFeet	224,320.00	224,317.00
tblLandUse	BuildingSpaceSquareFeet	98,510.00	98,506.00
tblLandUse	BuildingSpaceSquareFeet	0.00	295,148.00
tblLandUse	BuildingSpaceSquareFeet	8,940.00	8,939.00
tblLandUse	BuildingSpaceSquareFeet	26,430.00	26,428.00
tblLandUse	BuildingSpaceSquareFeet	2,210.00	2,215.00
tblLandUse	BuildingSpaceSquareFeet	225,930.00	225,926.00
tblLandUse	BuildingSpaceSquareFeet	2,700.00	2,696.00
tblLandUse	BuildingSpaceSquareFeet	7,090.00	7,086.00
tblLandUse	BuildingSpaceSquareFeet	81,570.00	81,572.00
tblLandUse	LandUseSquareFeet	385,340.00	385,337.00
tblLandUse	LandUseSquareFeet	1,120.00	1,118.00
tblLandUse	LandUseSquareFeet	3,740.00	3,736.00
tblLandUse	LandUseSquareFeet	35,430.00	35,427.00
tblLandUse	LandUseSquareFeet	224,320.00	224,317.00
tblLandUse	LandUseSquareFeet	98,510.00	98,506.00
tblLandUse	LandUseSquareFeet	0.00	295,148.00
tblLandUse	LandUseSquareFeet	8,940.00	8,939.00

tblLandUse	LandUseSquareFeet	26,430.00	26,428.00
tblLandUse	LandUseSquareFeet	2,210.00	2,215.00
tblLandUse	LandUseSquareFeet	225,930.00	225,926.00
tblLandUse	LandUseSquareFeet	2,700.00	2,696.00
tblLandUse	LandUseSquareFeet	7,090.00	7,086.00
tblLandUse	LandUseSquareFeet	81,570.00	81,572.00
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.00	7.49
tblVehicleTrips	ST_TR	6.39	4.70
tblVehicleTrips	ST_TR	722.03	207.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.46	8.82
tblVehicleTrips	ST_TR	158.37	81.27
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	46.55	42.20
tblVehicleTrips	ST_TR	8.96	25.80
tblVehicleTrips	ST_TR	1.64	10.04
tblVehicleTrips	ST_TR	10.37	6.83
tblVehicleTrips	ST_TR	49.97	26.88
tblVehicleTrips	ST_TR	1.90	6.51
tblVehicleTrips	ST_TR	9.91	5.56
tblVehicleTrips	ST_TR	42.04	17.71
tblVehicleTrips	ST_TR	1.30	1.45
tblVehicleTrips	SU_TR	5.86	4.70
tblVehicleTrips	SU_TR	542.72	207.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	8.82
tblVehicleTrips	SU_TR	131.84	81.27
tblVehicleTrips	SU_TR	8.91	0.00

tblVehicleTrips	SU_TR	25.49	42.20
tblVehicleTrips	SU_TR	1.55	25.80
tblVehicleTrips	SU_TR	0.76	10.04
tblVehicleTrips	SU_TR	36.63	6.83
tblVehicleTrips	SU_TR	25.24	26.88
tblVehicleTrips	SU_TR	1.11	6.51
tblVehicleTrips	SU_TR	8.62	5.56
tblVehicleTrips	SU_TR	20.43	17.71
tblVehicleTrips	SU_TR	0.00	1.45
tblVehicleTrips	WD_TR	6.65	4.70
tblVehicleTrips	WD_TR	496.12	207.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.03	8.82
tblVehicleTrips	WD_TR	127.15	81.27
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	56.24	42.20
tblVehicleTrips	WD_TR	36.13	25.80
tblVehicleTrips	WD_TR	11.42	10.04
tblVehicleTrips	WD_TR	9.11	6.83
tblVehicleTrips	WD_TR	42.70	26.88
tblVehicleTrips	WD_TR	8.11	6.51
tblVehicleTrips	WD_TR	9.52	5.56
tblVehicleTrips	WD_TR	44.32	17.71
tblVehicleTrips	WD_TR	1.71	1.45
tblWater	IndoorWaterUseRate	0.00	48,436,770.74

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,036.0595	77.4207	2,013.2653	4.7335		279.0998	279.0998		279.0998	279.0998	34,114.3168	65,846.4675	99,960.7843	102.0145	2.3154	103,201.1460
Energy	1.5437	13.5528	8.2649	0.0842		1.0665	1.0665		1.0665	1.0665		16,839.8809	16,839.8809	0.3228	0.3087	16,939.9519
Mobile	40.2615	197.5413	509.4156	2.1633	150.1971	1.5853	151.7824	41.3712	1.4726	42.8438		220,998.0141	220,998.0141	9.8455		221,244.1505
Total	**1,077.8647**	**288.5148**	**2,530.9457**	**6.9810**	**150.1971**	**281.7517**	**431.9488**	**41.3712**	**281.6389**	**323.0101**	**34,114.3168**	**303,684.3625**	**337,798.6793**	**112.1827**	**2.6242**	**341,385.2484**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,036.0595	77.4207	2,013.2653	4.7335		279.0998	279.0998		279.0998	279.0998	34,114.3168	65,846.4675	99,960.7843	102.0145	2.3154	103,201.1460
Energy	1.5437	13.5528	8.2649	0.0842		1.0665	1.0665		1.0665	1.0665		16,839.8809	16,839.8809	0.3228	0.3087	16,939.9519
Mobile	40.2615	197.5413	509.4156	2.1633	150.1971	1.5853	151.7824	41.3712	1.4726	42.8438		220,998.0141	220,998.0141	9.8455		221,244.1505
Total	**1,077.8647**	**288.5148**	**2,530.9457**	**6.9810**	**150.1971**	**281.7517**	**431.9488**	**41.3712**	**281.6389**	**323.0101**	**34,114.3168**	**303,684.3625**	**337,798.6793**	**112.1827**	**2.6242**	**341,385.2484**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	40.2615	197.5413	509.4156	2.1633	150.1971	1.5853	151.7824	41.3712	1.4726	42.8438		220,998.0141	220,998.0141	9.8455		221,244.1505
Unmitigated	40.2615	197.5413	509.4156	2.1633	150.1971	1.5853	151.7824	41.3712	1.4726	42.8438		220,998.0141	220,998.0141	9.8455		221,244.1505

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	7,449.50	7,449.50	7449.50	25,456,073	25,456,073
Apartments Mid Rise	493.50	493.50	493.50	1,686,364	1,686,364
Enclosed Parking with Elevator	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	558.90	558.90	558.90	588,179	588,179
General Light Industry	0.00	0.00	0.00		
General Office Building	3,398.70	3,398.70	3398.70	10,948,776	10,948,776
High Turnover (Sit Down Restaurant)	576.20	576.20	576.20	785,269	785,269
Hospital	0.00	0.00	0.00		
Library	377.27	377.27	377.27	952,483	952,483
Medical Office Building	96.49	96.49	96.49	250,287	250,287
Medical Office Building	914.09	914.09	914.09	2,371,031	2,371,031
Office Park	2,252.17	2,252.17	2252.17	7,609,305	7,609,305
Place of Worship	180.52	180.52	180.52	385,005	385,005
Regional Shopping Center	828.71	828.71	828.71	1,792,371	1,792,371
Research & Development	641.30	641.30	641.30	2,166,729	2,166,729
Single Family Housing	1,456.72	1,456.72	1456.72	4,977,834	4,977,834
Strip Mall	1,444.60	1,444.60	1444.60	2,748,498	2,748,498
University/College (4Yr)	1,196.25	1,196.25	1196.25	3,593,401	3,593,401
User Defined Commercial	0.00	0.00	0.00		
Total	21,864.93	21,864.93	21,864.93	66,311,604	66,311,604

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0
User Defined Commercial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Fast Food Restaurant with Drive Thru	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
General Light Industry	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
General Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Hospital	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Library	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Medical Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Medical Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Office Park	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Place of Worship	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Research & Development	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Single Family Housing	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Strip Mall	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
University/College (4Yr)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
User Defined Commercial	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5437	13.5528	8.2649	0.0842		1.0665	1.0665		1.0665	1.0665		16,839.8809	16,839.8809	0.3228	0.3087	16,939.9519
NaturalGas Unmitigated	1.5437	13.5528	8.2649	0.0842		1.0665	1.0665		1.0665	1.0665		16,839.8809	16,839.8809	0.3228	0.3087	16,939.9519

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3932.28	0.0424	0.3624	0.1542	2.3100e-003		0.0293	0.0293		0.0293	0.0293		462.6217	462.6217	8.8700e-003	8.4800e-003	465.3708
Apartments Mid Rise	59358.8	0.6401	5.4703	2.3278	0.0349		0.4423	0.4423		0.4423	0.4423		6,983.3848	6,983.3848	0.1339	0.1280	7,024.8836
Enclosed Parking with Elevator	5923.59	0.0639	0.5807	0.4878	3.4800e-003		0.0441	0.0441		0.0441	0.0441		696.8934	696.8934	0.0134	0.0128	701.0347
Fast Food Restaurant with Drive Thru	1690.06	0.0182	0.1657	0.1392	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.8305	198.8305	3.8100e-003	3.6500e-003	200.0121
General Light Industry	106.017	1.1400e-003	0.0104	8.7300e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		12.4725	12.4725	2.4000e-004	2.3000e-004	12.5467
General Office Building	10514.9	0.1134	1.0309	0.8659	6.1900e-003		0.0784	0.0784		0.0784	0.0784		1,237.0529	1,237.0529	0.0237	0.0227	1,244.4041
High Turnover (Sit Down Restaurant)	4442.05	0.0479	0.4355	0.3658	2.6100e-003		0.0331	0.0331		0.0331	0.0331		522.5939	522.5939	0.0100	9.5800e-003	525.6994
Hospital	190.764	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003		22.4429	22.4429	4.3000e-004	4.1000e-004	22.5763
Library	427.847	4.6100e-003	0.0420	0.0352	2.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003		50.3350	50.3350	9.6000e-004	9.2000e-004	50.6341
Medical Office Building	101.947	1.1000e-003	9.9900e-003	8.4000e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		11.9937	11.9937	2.3000e-004	2.2000e-004	12.0650

Medical Office Building	966.72	0.0104	0.0948	0.0796	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003		113.7318	113.7318	2.1800e-003	2.0900e-003	114.4077
Office Park	5752.35	0.0620	0.5640	0.4737	3.3800e-003		0.0429	0.0429		0.0429	0.0429		676.7469	676.7469	0.0130	0.0124	680.7684
Place of Worship	1264.92	0.0136	0.1240	0.1042	7.4000e-004		9.4200e-003	9.4200e-003		9.4200e-003	9.4200e-003		148.8146	148.8146	2.8500e-003	2.7300e-003	149.6989
Regional Shopping Center	134.301	1.4500e-003	0.0132	0.0111	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003		15.8001	15.8001	3.0000e-004	2.9000e-004	15.8940
Research & Development	4714.79	0.0509	0.4622	0.3883	2.7700e-003		0.0351	0.0351		0.0351	0.0351		554.6817	554.6817	0.0106	0.0102	557.9779
Single Family Housing	18380.1	0.1982	1.6939	0.7208	0.0108		0.1370	0.1370		0.1370	0.1370		2,162.3593	2,162.3593	0.0415	0.0396	2,175.2091
Strip Mall	355.341	3.8300e-003	0.0348	0.0293	2.1000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003		41.8048	41.8048	8.0000e-004	7.7000e-004	42.0533
University/College (4Yr)	10755.6	0.1160	1.0545	0.8858	6.3300e-003		0.0801	0.0801		0.0801	0.0801		1,265.3589	1,265.3589	0.0243	0.0232	1,272.8783
User Defined Commercial	14126.7	0.1524	1.3850	1.1634	8.3100e-003		0.1053	0.1053		0.1053	0.1053		1,661.9615	1,661.9615	0.0319	0.0305	1,671.8377
Total		**1.5437**	**13.5528**	**8.2649**	**0.0842**		**1.0665**	**1.0665**		**1.0665**	**1.0665**		**16,839.8809**	**16,839.8809**	**0.3228**	**0.3088**	**16,939.9519**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	59.3588	0.6401	5.4703	2.3278	0.0349		0.4423	0.4423		0.4423	0.4423		6,983.3848	6,983.3848	0.1339	0.1280	7,024.8836
Apartments Mid Rise	3.93228	0.0424	0.3624	0.1542	2.3100e-003		0.0293	0.0293		0.0293	0.0293		462.6217	462.6217	8.8700e-003	8.4800e-003	465.3708
Enclosed Parking with Elevator	5.92359	0.0639	0.5807	0.4878	3.4800e-003		0.0441	0.0441		0.0441	0.0441		696.8934	696.8934	0.0134	0.0128	701.0347
Fast Food Restaurant with Drive Thru	1.69006	0.0182	0.1657	0.1392	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.8305	198.8305	3.8100e-003	3.6500e-003	200.0121
General Light Industry	0.106017	1.1400e-003	0.0104	8.7300e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		12.4725	12.4725	2.4000e-004	2.3000e-004	12.5467
General Office Building	10.5149	0.1134	1.0309	0.8659	6.1900e-003		0.0784	0.0784		0.0784	0.0784		1,237.0529	1,237.0529	0.0237	0.0227	1,244.4041
High Turnover (Sit Down Restaurant)	4.44205	0.0479	0.4355	0.3658	2.6100e-003		0.0331	0.0331		0.0331	0.0331		522.5939	522.5939	0.0100	9.5800e-003	525.6994
Hospital	0.190764	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003		22.4429	22.4429	4.3000e-004	4.1000e-004	22.5763
Library	0.427847	4.6100e-003	0.0420	0.0352	2.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003		50.3350	50.3350	9.6000e-004	9.2000e-004	50.6341

Medical Office Building	0.101947	1.1000e-003	9.9900e-003	8.4000e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004		11.9937	11.9937	2.3000e-004	2.2000e-004	12.0650
Medical Office Building	0.96672	0.0104	0.0948	0.0796	5.7000e-004		7.2000e-003	7.2000e-003		7.2000e-003	7.2000e-003		113.7318	113.7318	2.1800e-003	2.0900e-003	114.4077
Office Park	5.75235	0.0620	0.5640	0.4737	3.3800e-003		0.0429	0.0429		0.0429	0.0429		676.7469	676.7469	0.0130	0.0124	680.7684
Place of Worship	1.26492	0.0136	0.1240	0.1042	7.4000e-004		9.4200e-003	9.4200e-003		9.4200e-003	9.4200e-003		148.8146	148.8146	2.8500e-003	2.7300e-003	149.6989
Regional Shopping Center	0.134301	1.4500e-003	0.0132	0.0111	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003		15.8001	15.8001	3.0000e-004	2.9000e-004	15.8940
Research & Development	4.71479	0.0509	0.4622	0.3883	2.7700e-003		0.0351	0.0351		0.0351	0.0351		554.6817	554.6817	0.0106	0.0102	557.9779
Single Family Housing	18.3801	0.1982	1.6939	0.7208	0.0108		0.1370	0.1370		0.1370	0.1370		2,162.3593	2,162.3593	0.0415	0.0396	2,175.2091
Strip Mall	0.355341	3.8300e-003	0.0348	0.0293	2.1000e-004		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003		41.8048	41.8048	8.0000e-004	7.7000e-004	42.0533
University/College (4Yr)	10.7556	0.1160	1.0545	0.8858	6.3300e-003		0.0801	0.0801		0.0801	0.0801		1,265.3589	1,265.3589	0.0243	0.0232	1,272.8783
User Defined Commercial	14.1267	0.1524	1.3850	1.1634	8.3100e-003		0.1053	0.1053		0.1053	0.1053		1,661.9615	1,661.9615	0.0319	0.0305	1,671.8377
Total		**1.5437**	**13.5528**	**8.2649**	**0.0842**		**1.0665**	**1.0665**		**1.0665**	**1.0665**		**16,839.8809**	**16,839.8809**	**0.3228**	**0.3088**	**16,939.9519**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,036.0595	77.4207	2,013.2653	4.7335		279.0998	279.0998		279.0998	279.0998	34,114.3168	65,846.4675	99,960.7843	102.0145	2.3154	103,201.1460
Unmitigated	1,036.0595	77.4207	2,013.2653	4.7335		279.0998	279.0998		279.0998	279.0998	34,114.3168	65,846.4675	99,960.7843	102.0145	2.3154	103,201.1460

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.1642					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	69.7085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	954.3351	75.5654	1,852.1458	4.7250		278.2063	278.2063		278.2063	278.2063	34,114.3168	65,556.0000	99,670.3168	101.7355	2.3154	102,903.7044
Landscaping	4.8518	1.8553	161.1195	8.5200e-003		0.8936	0.8936		0.8936	0.8936		290.4675	290.4675	0.2790		297.4416
Total	**1,036.0595**	**77.4207**	**2,013.2653**	**4.7335**		**279.0998**	**279.0998**		**279.0998**	**279.0998**	**34,114.3168**	**65,846.4675**	**99,960.7843**	**102.0145**	**2.3154**	**103,201.1460**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.1642					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	69.7085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	954.3351	75.5654	1,852.1458	4.7250		278.2063	278.2063		278.2063	278.2063	34,114.3168	65,556.0000	99,670.3168	101.7355	2.3154	102,903.7044
Landscaping	4.8518	1.8553	161.1195	8.5200e-003		0.8936	0.8936		0.8936	0.8936		290.4675	290.4675	0.2790		297.4416
Total	**1,036.0595**	**77.4207**	**2,013.2653**	**4.7335**		**279.0998**	**279.0998**		**279.0998**	**279.0998**	**34,114.3168**	**65,846.4675**	**99,960.7843**	**102.0145**	**2.3154**	**103,201.1460**

Willowbrook Specific Plan- Demolition, Grading, and Residential

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	385.34	1000sqft	8.85	385,337.00	0
Hospital	1.12	1000sqft	0.03	1,118.00	0
Medical Office Building	3.74	1000sqft	0.09	3,736.00	0
Medical Office Building	35.43	1000sqft	0.81	35,427.00	0
Office Park	224.32	1000sqft	5.15	224,317.00	0
Research & Development	98.51	1000sqft	2.26	98,506.00	0
User Defined Commercial	295.15	User Defined Unit	0.00	295,148.00	0
Library	8.94	1000sqft	0.21	8,939.00	0
Place of Worship	26.43	1000sqft	0.61	26,428.00	0
University/College (4Yr)	825.00	Student	3.48	151,632.91	0
General Light Industry	2.21	1000sqft	0.05	2,215.00	0
Enclosed Parking with Elevator	225.93	1000sqft	5.19	225,926.00	0
Fast Food Restaurant with Drive Thru	2.70	1000sqft	0.06	2,696.00	0
High Turnover (Sit Down Restaurant)	7.09	1000sqft	0.16	7,086.00	0
Apartments Mid Rise	1,585.00	Dwelling Unit	41.71	1,585,000.00	4533
Apartments Mid Rise	105.00	Dwelling Unit	2.76	105,000.00	300
Single Family Housing	262.00	Dwelling Unit	85.06	471,600.00	749
Regional Shopping Center	30.83	1000sqft	0.71	30,830.00	0
Strip Mall	81.57	1000sqft	1.87	81,572.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Energy Use - Title 24 Conversion to 2016 Standards

Water And Wastewater - User Defined Commercial= Institution

Solid Waste - User Defined Commercial= Institution

Construction Off-road Equipment Mitigation -

Area Mitigation - Default

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	50	0
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	50	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	LightingElect	2.63	2.50
tblEnergyUse	LightingElect	8.13	7.72
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	3.88	3.69
tblEnergyUse	LightingElect	8.13	7.72
tblEnergyUse	LightingElect	5.44	5.17
tblEnergyUse	LightingElect	3.20	3.04

tblEnergyUse	LightingElect	3.88	3.69
tblEnergyUse	LightingElect	3.84	3.65
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	6.43	6.11
tblEnergyUse	LightingElect	3.20	3.04
tblEnergyUse	LightingElect	1,608.84	1,158.36
tblEnergyUse	LightingElect	6.43	6.11
tblEnergyUse	LightingElect	3.48	3.31
tblEnergyUse	LightingElect	0.00	3.04
tblEnergyUse	NT24E	0.00	5.75
tblEnergyUse	NT24NG	0.00	4.45
tblEnergyUse	T24E	297.91	214.50
tblEnergyUse	T24E	3.92	3.72
tblEnergyUse	T24E	8.50	8.08
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.82	4.58
tblEnergyUse	T24E	8.50	8.08
tblEnergyUse	T24E	10.44	9.92
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.82	4.58
tblEnergyUse	T24E	5.89	5.60
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	4.20	3.99
tblEnergyUse	T24E	2.36	2.24
tblEnergyUse	T24E	502.24	361.61
tblEnergyUse	T24E	4.20	3.99

tblEnergyUse	T24E	3.18	3.02
tblEnergyUse	T24E	0.00	2.24
tblEnergyUse	T24NG	10,118.57	7,285.37
tblEnergyUse	T24NG	0.00	9.57
tblEnergyUse	T24NG	43.19	41.03
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	10.07	9.57
tblEnergyUse	T24NG	43.19	41.03
tblEnergyUse	T24NG	55.22	52.46
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	10.07	9.57
tblEnergyUse	T24NG	9.65	9.17
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	1.16	1.10
tblEnergyUse	T24NG	13.71	13.02
tblEnergyUse	T24NG	26,696.95	19,221.80
tblEnergyUse	T24NG	1.16	1.10
tblEnergyUse	T24NG	26.63	25.30
tblEnergyUse	T24NG	0.00	13.02
tblFleetMix	FleetMixLandUseSubType	General Office Building	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	Hospital	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	Medical Office Building	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Medical Office Building	Fast Food Restaurant with Drive Thru
tblFleetMix	FleetMixLandUseSubType	Office Park	General Light Industry
tblFleetMix	FleetMixLandUseSubType	Research & Development	General Office Building
tblFleetMix	FleetMixLandUseSubType	User Defined Commercial	High Turnover (Sit Down Restaurant)
tblFleetMix	FleetMixLandUseSubType	Library	Hospital
tblFleetMix	FleetMixLandUseSubType	Place of Worship	Library
tblFleetMix	FleetMixLandUseSubType	University/College (4Yr)	Medical Office Building

tblFleetMix	FleetMixLandUseSubType	General Light Industry	Medical Office Building
tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Office Park
tblFleetMix	FleetMixLandUseSubType	Fast Food Restaurant with Drive Thru	Place of Worship
tblFleetMix	FleetMixLandUseSubType	High Turnover (Sit Down Restaurant)	Regional Shopping Center
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Research & Development
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Single Family Housing
tblFleetMix	FleetMixLandUseSubType	Single Family Housing	Strip Mall
tblFleetMix	FleetMixLandUseSubType	Regional Shopping Center	University/College (4Yr)
tblFleetMix	FleetMixLandUseSubType	Strip Mall	User Defined Commercial
tblLandUse	BuildingSpaceSquareFeet	385,340.00	385,337.00
tblLandUse	BuildingSpaceSquareFeet	1,120.00	1,118.00
tblLandUse	BuildingSpaceSquareFeet	3,740.00	3,736.00
tblLandUse	BuildingSpaceSquareFeet	35,430.00	35,427.00
tblLandUse	BuildingSpaceSquareFeet	224,320.00	224,317.00
tblLandUse	BuildingSpaceSquareFeet	98,510.00	98,506.00
tblLandUse	BuildingSpaceSquareFeet	0.00	295,148.00
tblLandUse	BuildingSpaceSquareFeet	8,940.00	8,939.00
tblLandUse	BuildingSpaceSquareFeet	26,430.00	26,428.00
tblLandUse	BuildingSpaceSquareFeet	2,210.00	2,215.00
tblLandUse	BuildingSpaceSquareFeet	225,930.00	225,926.00
tblLandUse	BuildingSpaceSquareFeet	2,700.00	2,696.00
tblLandUse	BuildingSpaceSquareFeet	7,090.00	7,086.00
tblLandUse	BuildingSpaceSquareFeet	81,570.00	81,572.00
tblLandUse	LandUseSquareFeet	385,340.00	385,337.00
tblLandUse	LandUseSquareFeet	1,120.00	1,118.00
tblLandUse	LandUseSquareFeet	3,740.00	3,736.00
tblLandUse	LandUseSquareFeet	35,430.00	35,427.00
tblLandUse	LandUseSquareFeet	224,320.00	224,317.00
tblLandUse	LandUseSquareFeet	98,510.00	98,506.00

tblLandUse	LandUseSquareFeet	0.00	295,148.00
tblLandUse	LandUseSquareFeet	8,940.00	8,939.00
tblLandUse	LandUseSquareFeet	26,430.00	26,428.00
tblLandUse	LandUseSquareFeet	2,210.00	2,215.00
tblLandUse	LandUseSquareFeet	225,930.00	225,926.00
tblLandUse	LandUseSquareFeet	2,700.00	2,696.00
tblLandUse	LandUseSquareFeet	7,090.00	7,086.00
tblLandUse	LandUseSquareFeet	81,570.00	81,572.00
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.00	7.49
tblVehicleTrips	ST_TR	6.39	4.70
tblVehicleTrips	ST_TR	722.03	207.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.46	8.82
tblVehicleTrips	ST_TR	158.37	81.27
tblVehicleTrips	ST_TR	10.18	0.00
tblVehicleTrips	ST_TR	46.55	42.20
tblVehicleTrips	ST_TR	8.96	25.80
tblVehicleTrips	ST_TR	1.64	10.04
tblVehicleTrips	ST_TR	10.37	6.83
tblVehicleTrips	ST_TR	49.97	26.88
tblVehicleTrips	ST_TR	1.90	6.51
tblVehicleTrips	ST_TR	9.91	5.56
tblVehicleTrips	ST_TR	42.04	17.71
tblVehicleTrips	ST_TR	1.30	1.45
tblVehicleTrips	SU_TR	5.86	4.70
tblVehicleTrips	SU_TR	542.72	207.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	8.82

tblVehicleTrips	SU_TR	131.84	81.27
tblVehicleTrips	SU_TR	8.91	0.00
tblVehicleTrips	SU_TR	25.49	42.20
tblVehicleTrips	SU_TR	1.55	25.80
tblVehicleTrips	SU_TR	0.76	10.04
tblVehicleTrips	SU_TR	36.63	6.83
tblVehicleTrips	SU_TR	25.24	26.88
tblVehicleTrips	SU_TR	1.11	6.51
tblVehicleTrips	SU_TR	8.62	5.56
tblVehicleTrips	SU_TR	20.43	17.71
tblVehicleTrips	SU_TR	0.00	1.45
tblVehicleTrips	WD_TR	6.65	4.70
tblVehicleTrips	WD_TR	496.12	207.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.03	8.82
tblVehicleTrips	WD_TR	127.15	81.27
tblVehicleTrips	WD_TR	13.22	0.00
tblVehicleTrips	WD_TR	56.24	42.20
tblVehicleTrips	WD_TR	36.13	25.80
tblVehicleTrips	WD_TR	11.42	10.04
tblVehicleTrips	WD_TR	9.11	6.83
tblVehicleTrips	WD_TR	42.70	26.88
tblVehicleTrips	WD_TR	8.11	6.51
tblVehicleTrips	WD_TR	9.52	5.56
tblVehicleTrips	WD_TR	44.32	17.71
tblVehicleTrips	WD_TR	1.71	1.45
tblWater	IndoorWaterUseRate	0.00	48,436,770.74

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	26.5649	1.1765	43.2918	0.0601		3.5893	3.5893		3.5893	3.5893	386.8499	776.3310	1,163.1808	1.1853	0.0263	1,200.6377
Energy	0.2817	2.4734	1.5083	0.0154		0.1946	0.1946		0.1946	0.1946	0.0000	17,956.9929	17,956.9929	0.4117	0.1252	18,004.6056
Mobile	7.1721	36.5394	94.2366	0.3996	26.8705	0.2875	27.1580	7.4153	0.2670	7.6823	0.0000	37,028.4312	37,028.4312	1.6140	0.0000	37,068.7816
Waste						0.0000	0.0000		0.0000	0.0000	537.3719	0.0000	537.3719	31.7578	0.0000	1,331.3161
Water						0.0000	0.0000		0.0000	0.0000	111.7205	3,527.4506	3,639.1710	11.5581	0.2882	4,014.0007
Total	**34.0187**	**40.1893**	**139.0367**	**0.4751**	**26.8705**	**4.0714**	**30.9419**	**7.4153**	**4.0509**	**11.4663**	**1,035.9422**	**59,289.2057**	**60,325.1479**	**46.5268**	**0.4397**	**61,619.3417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	26.5649	1.1765	43.2918	0.0601		3.5893	3.5893		3.5893	3.5893	386.8499	776.3310	1,163.1808	1.1853	0.0263	1,200.6377
Energy	0.2817	2.4734	1.5083	0.0154		0.1946	0.1946		0.1946	0.1946	0.0000	17,956.9929	17,956.9929	0.4117	0.1252	18,004.6056
Mobile	7.1721	36.5394	94.2366	0.3996	26.8705	0.2875	27.1580	7.4153	0.2670	7.6823	0.0000	37,028.4312	37,028.4312	1.6140	0.0000	37,068.7816
Waste						0.0000	0.0000		0.0000	0.0000	537.3719	0.0000	537.3719	31.7578	0.0000	1,331.3161
Water						0.0000	0.0000		0.0000	0.0000	111.7205	3,527.4506	3,639.1710	11.5581	0.2882	4,014.0007
Total	**34.0187**	**40.1893**	**139.0367**	**0.4751**	**26.8705**	**4.0714**	**30.9419**	**7.4153**	**4.0509**	**11.4663**	**1,035.9422**	**59,289.2057**	**60,325.1479**	**46.5268**	**0.4397**	**61,619.3417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.1721	36.5394	94.2366	0.3996	26.8705	0.2875	27.1580	7.4153	0.2670	7.6823	0.0000	37,028.4312	37,028.4312	1.6140	0.0000	37,068.7816
Unmitigated	7.1721	36.5394	94.2366	0.3996	26.8705	0.2875	27.1580	7.4153	0.2670	7.6823	0.0000	37,028.4312	37,028.4312	1.6140	0.0000	37,068.7816

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	7,449.50	7,449.50	7449.50	25,456,073	25,456,073
Apartments Mid Rise	493.50	493.50	493.50	1,686,364	1,686,364
Enclosed Parking with Elevator	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	558.90	558.90	558.90	588,179	588,179
General Light Industry	0.00	0.00	0.00		
General Office Building	3,398.70	3,398.70	3398.70	10,948,776	10,948,776
High Turnover (Sit Down Restaurant)	576.20	576.20	576.20	785,269	785,269
Hospital	0.00	0.00	0.00		
Library	377.27	377.27	377.27	952,483	952,483
Medical Office Building	96.49	96.49	96.49	250,287	250,287
Medical Office Building	914.09	914.09	914.09	2,371,031	2,371,031
Office Park	2,252.17	2,252.17	2252.17	7,609,305	7,609,305
Place of Worship	180.52	180.52	180.52	385,005	385,005
Regional Shopping Center	828.71	828.71	828.71	1,792,371	1,792,371
Research & Development	641.30	641.30	641.30	2,166,729	2,166,729
Single Family Housing	1,456.72	1,456.72	1456.72	4,977,834	4,977,834
Strip Mall	1,444.60	1,444.60	1444.60	2,748,498	2,748,498
University/College (4Yr)	1,196.25	1,196.25	1196.25	3,593,401	3,593,401
User Defined Commercial	0.00	0.00	0.00		
Total	21,864.93	21,864.93	21,864.93	66,311,604	66,311,604

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Fast Food Restaurant with Drive Th	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Re	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Office Park	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Research & Development	16.60	8.40	6.90	33.00	48.00	19.00	82	15	3
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0
User Defined Commercial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Fast Food Restaurant with Drive Thru	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
General Light Industry	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
General Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Hospital	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Library	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Medical Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Medical Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Office Park	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Place of Worship	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Research & Development	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Single Family Housing	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Strip Mall	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
University/College (4Yr)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
User Defined Commercial	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15,168.9618	15,168.9618	0.3583	0.0741	15,200.0066
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15,168.9618	15,168.9618	0.3583	0.0741	15,200.0066
NaturalGas Mitigated	0.2817	2.4734	1.5083	0.0154		0.1946	0.1946		0.1946	0.1946	0.0000	2,788.0311	2,788.0311	0.0534	0.0511	2,804.5990
NaturalGas Unmitigated	0.2817	2.4734	1.5083	0.0154		0.1946	0.1946		0.1946	0.1946	0.0000	2,788.0311	2,788.0311	0.0534	0.0511	2,804.5990

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.43528e+006	7.7400e-003	0.0661	0.0281	4.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	76.5922	76.5922	1.4700e-003	1.4000e-003	77.0474
Apartments Mid Rise	2.1666e+007	0.1168	0.9983	0.4248	6.3700e-003		0.0807	0.0807		0.0807	0.0807	0.0000	1,156.1777	1,156.1777	0.0222	0.0212	1,163.0483
Enclosed Parking with Elevator	2.16211e+006	0.0117	0.1060	0.0890	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	115.3785	115.3785	2.2100e-003	2.1200e-003	116.0642
Fast Food Restaurant with Drive Thru	616872	3.3300e-003	0.0302	0.0254	1.8000e-004		2.3000e-003	2.3000e-003		2.3000e-003	2.3000e-003	0.0000	32.9186	32.9186	6.3000e-004	6.0000e-004	33.1143
General Light Industry	38696	2.1000e-004	1.9000e-003	1.5900e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0650	2.0650	4.0000e-005	4.0000e-005	2.0772
General Office Building	3.83796e+006	0.0207	0.1881	0.1580	1.1300e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.8080	204.8080	3.9300e-003	3.7500e-003	206.0251
High Turnover (Sit Down Restaurant)	1.62135e+006	8.7400e-003	0.0795	0.0668	4.8000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	86.5213	86.5213	1.6600e-003	1.5900e-003	87.0354
Hospital	69629	3.8000e-004	3.4100e-003	2.8700e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7157	3.7157	7.0000e-005	7.0000e-005	3.7378
Library	156164	8.4000e-004	7.6600e-003	6.4300e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3335	8.3335	1.6000e-004	1.5000e-004	8.3831
Medical Office Building	352853	1.9000e-003	0.0173	0.0145	1.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	18.8296	18.8296	3.6000e-004	3.5000e-004	18.9415

Medical Office Building	37210.6	2.0000e-004	1.8200e-003	1.5300e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9857	1.9857	4.0000e-005	4.0000e-005	1.9975
Office Park	2.09961e+006	0.0113	0.1029	0.0865	6.2000e-004		7.8200e-003	7.8200e-003		7.8200e-003	7.8200e-003	0.0000	112.0430	112.0430	2.1500e-003	2.0500e-003	112.7089
Place of Worship	461697	2.4900e-003	0.0226	0.0190	1.4000e-004		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	24.6379	24.6379	4.7000e-004	4.5000e-004	24.7843
Regional Shopping Center	49019.7	2.6000e-004	2.4000e-003	2.0200e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.6159	2.6159	5.0000e-005	5.0000e-005	2.6314
Research & Development	1.7209e+006	9.2800e-003	0.0844	0.0709	5.1000e-004		6.4100e-003	6.4100e-003		6.4100e-003	6.4100e-003	0.0000	91.8338	91.8338	1.7600e-003	1.6800e-003	92.3795
Single Family Housing	6.70872e+006	0.0362	0.3091	0.1315	1.9700e-003		0.0250	0.0250		0.0250	0.0250	0.0000	358.0028	358.0028	6.8600e-003	6.5600e-003	360.1303
Strip Mall	129699	7.0000e-004	6.3600e-003	5.3400e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.9213	6.9213	1.3000e-004	1.3000e-004	6.9624
University/College (4Yr)	3.92578e+006	0.0212	0.1924	0.1617	1.1500e-003		0.0146	0.0146		0.0146	0.0146	0.0000	209.4944	209.4944	4.0200e-003	3.8400e-003	210.7393
User Defined Commercial	5.15624e+006	0.0278	0.2528	0.2123	1.5200e-003		0.0192	0.0192		0.0192	0.0192	0.0000	275.1564	275.1564	5.2700e-003	5.0400e-003	276.7915
Total		**0.2817**	**2.4734**	**1.5083**	**0.0154**		**0.1946**	**0.1946**		**0.1946**	**0.1946**	**0.0000**	**2,788.0312**	**2,788.0312**	**0.0534**	**0.0511**	**2,804.5990**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.43528e+006	7.7400e-003	0.0661	0.0281	4.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	76.5922	76.5922	1.4700e-003	1.4000e-003	77.0474
Apartments Mid Rise	2.1666e+007	0.1168	0.9983	0.4248	6.3700e-003		0.0807	0.0807		0.0807	0.0807	0.0000	1,156.1777	1,156.1777	0.0222	0.0212	1,163.0483
Enclosed Parking with Elevator	2.16211e+006	0.0117	0.1060	0.0890	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003	0.0000	115.3785	115.3785	2.2100e-003	2.1200e-003	116.0642
Fast Food Restaurant with Drive Thru	616872	3.3300e-003	0.0302	0.0254	1.8000e-004		2.3000e-003	2.3000e-003		2.3000e-003	2.3000e-003	0.0000	32.9186	32.9186	6.3000e-004	6.0000e-004	33.1143
General Light Industry	38696	2.1000e-004	1.9000e-003	1.5900e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0650	2.0650	4.0000e-005	4.0000e-005	2.0772
General Office Building	3.83796e+006	0.0207	0.1881	0.1580	1.1300e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.8080	204.8080	3.9300e-003	3.7500e-003	206.0251
High Turnover (Sit Down Restaurant)	1.62135e+006	8.7400e-003	0.0795	0.0668	4.8000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	86.5213	86.5213	1.6600e-003	1.5900e-003	87.0354
Hospital	69629	3.8000e-004	3.4100e-003	2.8700e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7157	3.7157	7.0000e-005	7.0000e-005	3.7378
Library	156164	8.4000e-004	7.6600e-003	6.4300e-003	5.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	8.3335	8.3335	1.6000e-004	1.5000e-004	8.3831

Medical Office Building	352853	1.9000e-003	0.0173	0.0145	1.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	18.8296	18.8296	3.6000e-004	3.5000e-004	18.9415
Medical Office Building	37210.6	2.0000e-004	1.8200e-003	1.5300e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	1.9857	1.9857	4.0000e-005	4.0000e-005	1.9975
Office Park	2.09961e+006	0.0113	0.1029	0.0865	6.2000e-004		7.8200e-003	7.8200e-003		7.8200e-003	7.8200e-003	0.0000	112.0430	112.0430	2.1500e-003	2.0500e-003	112.7089
Place of Worship	461697	2.4900e-003	0.0226	0.0190	1.4000e-004		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	24.6379	24.6379	4.7000e-004	4.5000e-004	24.7843
Regional Shopping Center	49019.7	2.6000e-004	2.4000e-003	2.0200e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.6159	2.6159	5.0000e-005	5.0000e-005	2.6314
Research & Development	1.7209e+006	9.2800e-003	0.0844	0.0709	5.1000e-004		6.4100e-003	6.4100e-003		6.4100e-003	6.4100e-003	0.0000	91.8338	91.8338	1.7600e-003	1.6800e-003	92.3795
Single Family Housing	6.70872e+006	0.0362	0.3091	0.1315	1.9700e-003		0.0250	0.0250		0.0250	0.0250	0.0000	358.0028	358.0028	6.8600e-003	6.5600e-003	360.1303
Strip Mall	129699	7.0000e-004	6.3600e-003	5.3400e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.9213	6.9213	1.3000e-004	1.3000e-004	6.9624
University/College (4Yr)	3.92578e+006	0.0212	0.1924	0.1617	1.1500e-003		0.0146	0.0146		0.0146	0.0146	0.0000	209.4944	209.4944	4.0200e-003	3.8400e-003	210.7393
User Defined Commercial	5.15624e+006	0.0278	0.2528	0.2123	1.5200e-003		0.0192	0.0192		0.0192	0.0192	0.0000	275.1564	275.1564	5.2700e-003	5.0400e-003	276.7915
Total		**0.2817**	**2.4734**	**1.5083**	**0.0154**		**0.1946**	**0.1946**		**0.1946**	**0.1946**	**0.0000**	**2,788.0312**	**2,788.0312**	**0.0534**	**0.0511**	**2,804.5990**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	422667	235.4093	5.5600e-003	1.1500e-003	235.8911
Apartments Mid Rise	6.38026e+006	3,553.5589	0.0839	0.0174	3,560.8316
Enclosed Parking with Elevator	1.44819e+006	806.5837	0.0191	3.9400e-003	808.2345
Fast Food Restaurant with Drive Thru	118516	66.0089	1.5600e-003	3.2000e-004	66.1440
General Light Industry	24431.5	13.6074	3.2000e-004	7.0000e-005	13.6352
General Office Building	4.96699e+006	2,766.4246	0.0653	0.0135	2,772.0863

High Turnover (Sit Down Restaurant)	311501	173.4938	4.1000e-003	8.5000e-004	173.8489
Hospital	25311.5	14.0975	3.3000e-004	7.0000e-005	14.1264
Library	98597.2	54.9148	1.3000e-003	2.7000e-004	55.0272
Medical Office Building	456654	254.3387	6.0100e-003	1.2400e-003	254.8593
Medical Office Building	48157	26.8216	6.3000e-004	1.3000e-004	26.8765
Office Park	3.14941e+006	1,754.1006	0.0414	8.5700e-003	1,757.6906
Place of Worship	291501	162.3548	3.8300e-003	7.9000e-004	162.6870
Regional Shopping Center	410964	228.8911	5.4100e-003	1.1200e-003	229.3595
Research & Development	1.08652e+006	605.1505	0.0143	2.9600e-003	606.3890
Single Family Housing	2.1485e+006	1,196.6316	0.0283	5.8500e-003	1,199.0806
Strip Mall	1.08735e+006	605.6148	0.0143	2.9600e-003	606.8542
University/College (4Yr)	1.5042e+006	837.7807	0.0198	4.0900e-003	839.4953
User Defined Commercial	3.25548e+006	1,813.1785	0.0428	8.8600e-003	1,816.8894
Total		**15,168.9618**	**0.3583**	**0.0741**	**15,200.0066**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	422667	235.4093	5.5600e-003	1.1500e-003	235.8911
Apartments Mid Rise	6.38026e+006	3,553.5589	0.0839	0.0174	3,560.8316
Enclosed Parking with Elevator	1.44819e+006	806.5837	0.0191	3.9400e-003	808.2345
Fast Food Restaurant with	118516	66.0089	1.5600e-003	3.2000e-004	66.1440

General Light Industry	24431.5	13.6074	3.2000e-004	7.0000e-005	13.6352
General Office Building	4.96699e+006	2,766.4246	0.0653	0.0135	2,772.0863
High Turnover (Sit Down Restaurant)	311501	173.4938	4.1000e-003	8.5000e-004	173.8489
Hospital	25311.5	14.0975	3.3000e-004	7.0000e-005	14.1264
Library	98597.2	54.9148	1.3000e-003	2.7000e-004	55.0272
Medical Office Building	456654	254.3387	6.0100e-003	1.2400e-003	254.8593
Medical Office Building	48157	26.8216	6.3000e-004	1.3000e-004	26.8765
Office Park	3.14941e+006	1,754.1006	0.0414	8.5700e-003	1,757.6906
Place of Worship	291501	162.3548	3.8300e-003	7.9000e-004	162.6870
Regional Shopping Center	410964	228.8911	5.4100e-003	1.1200e-003	229.3595
Research & Development	1.08652e+006	605.1505	0.0143	2.9600e-003	606.3890
Single Family Housing	2.1485e+006	1,196.6316	0.0283	5.8500e-003	1,199.0806
Strip Mall	1.08735e+006	605.6148	0.0143	2.9600e-003	606.8542
University/College (4Yr)	1.5042e+006	837.7807	0.0198	4.0900e-003	839.4953
User Defined Commercial	3.25548e+006	1,813.1785	0.0428	8.8600e-003	1,816.8894
Total		**15,168.9618**	**0.3583**	**0.0741**	**15,200.0066**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	26.5649	1.1765	43.2918	0.0601		3.5893	3.5893		3.5893	3.5893	386.8499	776.3310	1,163.1808	1.1853	0.0263	1,200.6377
Unmitigated	26.5649	1.1765	43.2918	0.0601		3.5893	3.5893		3.5893	3.5893	386.8499	776.3310	1,163.1808	1.1853	0.0263	1,200.6377

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.3075					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.7218					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	11.9292	0.9446	23.1518	0.0591		3.4776	3.4776		3.4776	3.4776	386.8499	743.3925	1,130.2424	1.1537	0.0263	1,166.9084
Landscaping	0.6065	0.2319	20.1399	1.0700e-003		0.1117	0.1117		0.1117	0.1117	0.0000	32.9385	32.9385	0.0316	0.0000	33.7293
Total	**26.5649**	**1.1765**	**43.2918**	**0.0601**		**3.5893**	**3.5893**		**3.5893**	**3.5893**	**386.8499**	**776.3310**	**1,163.1808**	**1.1853**	**0.0263**	**1,200.6377**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.3075					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.7218					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	11.9292	0.9446	23.1518	0.0591		3.4776	3.4776		3.4776	3.4776	386.8499	743.3925	1,130.2424	1.1537	0.0263	1,166.9084
Landscaping	0.6065	0.2319	20.1399	1.0700e-003		0.1117	0.1117		0.1117	0.1117	0.0000	32.9385	32.9385	0.0316	0.0000	33.7293
Total	**26.5649**	**1.1765**	**43.2918**	**0.0601**		**3.5893**	**3.5893**		**3.5893**	**3.5893**	**386.8499**	**776.3310**	**1,163.1808**	**1.1853**	**0.0263**	**1,200.6377**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3,639.1710	11.5581	0.2882	4,014.0007
Unmitigated	3,639.1710	11.5581	0.2882	4,014.0007

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	110.11 / 69.4174	1,263.0182	3.6170	0.0907	1,380.4765
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0.819541 / 0.0523111	6.5272	0.0269	6.6000e-004	7.3955
General Light Industry	0.511062 / 0	3.8685	0.0167	4.1000e-004	4.4096
General Office Building	68.4879 / 41.9765	778.1597	2.2496	0.0564	851.2029
High Turnover (Sit Down Restaurant)	2.15205 / 0.137365	17.1399	0.0705	1.7400e-003	19.4201
Hospital	0.140538 / 0.0267692	1.2294	4.6100e-003	1.1000e-004	1.3786
Library	0.279723 / 0.437515	4.8246	9.2300e-003	2.4000e-004	5.1263
Medical Office Building	4.91507 / 0.936204	42.9975	0.1611	3.9800e-003	48.2132
Office Park	39.8692 / 24.436	452.9942	1.3095	0.0328	495.5152
Place of Worship	0.826966 / 1.29346	14.2634	0.0273	7.0000e-004	15.1553
Regional Shopping Center	2.28366 / 1.39966	25.9469	0.0750	1.8800e-003	28.3824
Research & Development	48.4368 / 0	366.6397	1.5866	0.0390	417.9221
Single Family Housing	17.0704 / 10.7617	195.8052	0.5607	0.0141	214.0147
Strip Mall	6.0421 / 3.70322	68.6503	0.1985	4.9700e-003	75.0943
University/College (4Yr)	1.76641 / 2.76284	30.4668	0.0583	1.5100e-003	32.3719
User Defined Commercial	48.4368 / 0	366.6397	1.5866	0.0390	417.9221
Total		**3,639.1710**	**11.5581**	**0.2882**	**4,014.0007**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	110.11 / 69.4174	1,263.0182	3.6170	0.0907	1,380.4765
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0.819541 / 0.0523111	6.5272	0.0269	6.6000e-004	7.3955
General Light Industry	0.511062 / 0	3.8685	0.0167	4.1000e-004	4.4096
General Office Building	68.4879 / 41.9765	778.1597	2.2496	0.0564	851.2029
High Turnover (Sit Down Restaurant)	2.15205 / 0.137365	17.1399	0.0705	1.7400e-003	19.4201
Hospital	0.140538 / 0.0267692	1.2294	4.6100e-003	1.1000e-004	1.3786
Library	0.279723 / 0.437515	4.8246	9.2300e-003	2.4000e-004	5.1263
Medical Office Building	4.91507 / 0.936204	42.9975	0.1611	3.9800e-003	48.2132
Office Park	39.8692 / 24.436	452.9942	1.3095	0.0328	495.5152
Place of Worship	0.826966 / 1.29346	14.2634	0.0273	7.0000e-004	15.1553
Regional Shopping Center	2.28366 / 1.39966	25.9469	0.0750	1.8800e-003	28.3824
Research & Development	48.4368 / 0	366.6397	1.5866	0.0390	417.9221
Single Family Housing	17.0704 / 10.7617	195.8052	0.5607	0.0141	214.0147
Strip Mall	6.0421 / 3.70322	68.6503	0.1985	4.9700e-003	75.0943
University/College (4Yr)	1.76641 / 2.76284	30.4668	0.0583	1.5100e-003	32.3719
User Defined Commercial	48.4368 / 0	366.6397	1.5866	0.0390	417.9221
Total		**3,639.1710**	**11.5581**	**0.2882**	**4,014.0007**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	537.3719	31.7578	0.0000	1,331.3161
Unmitigated	537.3719	31.7578	0.0000	1,331.3161

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	777.4	157.8052	9.3260	0.0000	390.9556
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	31.1	6.3130	0.3731	0.0000	15.6402
General Light Industry	2.74	0.5562	0.0329	0.0000	1.3780
General Office Building	358.37	72.7459	4.2992	0.0000	180.2248
High Turnover (Sit Down Restaurant)	84.37	17.1264	1.0121	0.0000	42.4298
Hospital	12.1	2.4562	0.1452	0.0000	6.0851
Library	8.23	1.6706	0.0987	0.0000	4.1389
Medical Office Building	423.04	85.8733	5.0750	0.0000	212.7475
Office Park	208.62	42.3480	2.5027	0.0000	104.9153
Place of Worship	150.65	30.5806	1.8073	0.0000	75.7621
Regional Shopping Center	32.37	6.5708	0.3883	0.0000	16.2789
Research & Development	7.49	1.5204	0.0899	0.0000	3.7667
Single Family Housing	307.09	62.3365	3.6840	0.0000	154.4360
Strip Mall	85.65	17.3862	1.0275	0.0000	43.0735
University/College (4Yr)	150.56	30.5623	1.8062	0.0000	75.7169
User Defined Commercial	7.49	1.5204	0.0899	0.0000	3.7667
Total		**537.3719**	**31.7578**	**0.0000**	**1,331.3161**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	777.4	157.8052	9.3260	0.0000	390.9556
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	31.1	6.3130	0.3731	0.0000	15.6402
General Light Industry	2.74	0.5562	0.0329	0.0000	1.3780
General Office Building	358.37	72.7459	4.2992	0.0000	180.2248
High Turnover (Sit Down Restaurant)	84.37	17.1264	1.0121	0.0000	42.4298
Hospital	12.1	2.4562	0.1452	0.0000	6.0851
Library	8.23	1.6706	0.0987	0.0000	4.1389
Medical Office Building	423.04	85.8733	5.0750	0.0000	212.7475
Office Park	208.62	42.3480	2.5027	0.0000	104.9153
Place of Worship	150.65	30.5806	1.8073	0.0000	75.7621
Regional Shopping Center	32.37	6.5708	0.3883	0.0000	16.2789
Research & Development	7.49	1.5204	0.0899	0.0000	3.7667
Single Family Housing	307.09	62.3365	3.6840	0.0000	154.4360
Strip Mall	85.65	17.3862	1.0275	0.0000	43.0735
University/College (4Yr)	150.56	30.5623	1.8062	0.0000	75.7169
User Defined Commercial	7.49	1.5204	0.0899	0.0000	3.7667
Total		**537.3719**	**31.7578**	**0.0000**	**1,331.3161**

Willowbrook Specific Plan- Hospital Scenario (LST)

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	312.00	1000sqft	7.16	312,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Vehicle Trips -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.1807	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Energy	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
Mobile	9.2035	48.6894	127.9076	0.4169	33.9871	0.4920	34.4790	9.0939	0.4629	9.5568		42,320.0932	42,320.0932	2.2665		42,376.7552
Total	**15.9838**	**54.1402**	**132.5182**	**0.4496**	**33.9871**	**0.9063**	**34.8934**	**9.0939**	**0.8773**	**9.9712**		**48,860.8480**	**48,860.8480**	**2.3920**	**0.1199**	**48,956.3827**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.1807	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Energy	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
Mobile	9.2035	48.6894	127.9076	0.4169	33.9871	0.4920	34.4790	9.0939	0.4629	9.5568		42,320.0932	42,320.0932	2.2665		42,376.7552
Total	**15.9838**	**54.1402**	**132.5182**	**0.4496**	**33.9871**	**0.9063**	**34.8934**	**9.0939**	**0.8773**	**9.9712**		**48,860.8480**	**48,860.8480**	**2.3920**	**0.1199**	**48,956.3827**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.2035	48.6894	127.9076	0.4169	33.9871	0.4920	34.4790	9.0939	0.4629	9.5568		42,320.0932	42,320.0932	2.2665		42,376.7552
Unmitigated	9.2035	48.6894	127.9076	0.4169	33.9871	0.4920	34.4790	9.0939	0.4629	9.5568		42,320.0932	42,320.0932	2.2665		42,376.7552

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	4,124.64	3,176.16	2779.92	14,720,523	14,720,523
Total	4,124.64	3,176.16	2,779.92	14,720,523	14,720,523

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
NaturalGas Unmitigated	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hospital	55595.8	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
Total		**0.5996**	**5.4506**	**4.5785**	**0.0327**		**0.4142**	**0.4142**		**0.4142**	**0.4142**		**6,540.6865**	**6,540.6865**	**0.1254**	**0.1199**	**6,579.5546**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hospital	55.5958	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
Total		**0.5996**	**5.4506**	**4.5785**	**0.0327**		**0.4142**	**0.4142**		**0.4142**	**0.4142**		**6,540.6865**	**6,540.6865**	**0.1254**	**0.1199**	**6,579.5546**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.1807	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Unmitigated	6.1807	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0500e-003	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Total	**6.1807**	**3.0000e-004**	**0.0322**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0683**	**0.0683**	**1.9000e-004**		**0.0729**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0500e-003	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Total	**6.1807**	**3.0000e-004**	**0.0322**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0683**	**0.0683**	**1.9000e-004**		**0.0729**

Willowbrook Specific Plan- Hospital Scenario (LST)

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	312.00	1000sqft	7.16	312,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Vehicle Trips -

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	ConstructionPhaseStartDate	2/6/2017 2:32:22 PM	2/6/2017 12:00:00 AM
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.1807	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Energy	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
Mobile	9.5358	47.2851	136.3961	0.4397	33.9871	0.4891	34.4762	9.0939	0.4602	9.5541		44,606.3221	44,606.3221	2.2855		44,663.4595
Total	**16.3160**	**52.7360**	**141.0067**	**0.4724**	**33.9871**	**0.9035**	**34.8906**	**9.0939**	**0.8746**	**9.9685**		**51,147.0769**	**51,147.0769**	**2.4110**	**0.1199**	**51,243.0870**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.1807	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Energy	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
Mobile	9.5358	47.2851	136.3961	0.4397	33.9871	0.4891	34.4762	9.0939	0.4602	9.5541		44,606.3221	44,606.3221	2.2855		44,663.4595
Total	**16.3160**	**52.7360**	**141.0067**	**0.4724**	**33.9871**	**0.9035**	**34.8906**	**9.0939**	**0.8746**	**9.9685**		**51,147.0769**	**51,147.0769**	**2.4110**	**0.1199**	**51,243.0870**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5358	47.2851	136.3961	0.4397	33.9871	0.4891	34.4762	9.0939	0.4602	9.5541		44,606.3221	44,606.3221	2.2855		44,663.4595
Unmitigated	9.5358	47.2851	136.3961	0.4397	33.9871	0.4891	34.4762	9.0939	0.4602	9.5541		44,606.3221	44,606.3221	2.2855		44,663.4595

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hospital	4,124.64	3,176.16	2779.92	14,720,523	14,720,523
Total	4,124.64	3,176.16	2,779.92	14,720,523	14,720,523

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hospital	16.60	8.40	6.90	64.90	16.10	19.00	73	25	2

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hospital	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
NaturalGas Unmitigated	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hospital	55595.8	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
Total		**0.5996**	**5.4506**	**4.5785**	**0.0327**		**0.4142**	**0.4142**		**0.4142**	**0.4142**		**6,540.6865**	**6,540.6865**	**0.1254**	**0.1199**	**6,579.5546**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hospital	55.5958	0.5996	5.4506	4.5785	0.0327		0.4142	0.4142		0.4142	0.4142		6,540.6865	6,540.6865	0.1254	0.1199	6,579.5546
Total		**0.5996**	**5.4506**	**4.5785**	**0.0327**		**0.4142**	**0.4142**		**0.4142**	**0.4142**		**6,540.6865**	**6,540.6865**	**0.1254**	**0.1199**	**6,579.5546**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.1807	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Unmitigated	6.1807	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0500e-003	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Total	**6.1807**	**3.0000e-004**	**0.0322**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0683**	**0.0683**	**1.9000e-004**		**0.0729**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.1776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0500e-003	3.0000e-004	0.0322	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0683	0.0683	1.9000e-004		0.0729
Total	**6.1807**	**3.0000e-004**	**0.0322**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0683**	**0.0683**	**1.9000e-004**		**0.0729**

Willowbrook

Air Quality Assessment

Title 24 Energy Savings Adjustment

Project Energy Use Factors Adjustment

Nonresidential % savings over Title 24 (2013) =	5.0%
Residential % savings over Title 24 (2013) =	28.0%

	T24 Electricity	NT24 Electricity	Lighting Electricity	T24 NG	NT24 NG
Title 24 (2013 - CalEEMod Default)					
Project Nonresidential Land Uses					
Enclosed Parking with Elevator	3.92	0.19	2.63	10.07	-
Fast Food Restaurant with Drive thru	8.5	28.16	8.13	43.19	187.78
General Light Industry (Fire Station)	2.36	5.75	3.2	13.71	4.45
General Office Building	4.82	4.62	3.88	10.07	0.39
High Turnover (Sit Down Restaurant)	8.5	28.16	8.13	43.19	187.78
Hospital	10.44	7.55	5.44	55.22	9.82
Library	2.36	5.75	3.2	13.71	4.45
Medical Office Building	4.82	4.62	3.88	10.07	0.39
Office Park	5.89	4.79	3.84	9.65	0.19
Place of Worship	2.36	5.75	3.2	13.71	4.45
Regional Shopping Center	4.2	3.23	6.43	1.16	0.49
Research and Development	2.36	5.75	3.20	13.71	4.45
Strip Mall	4.20	3.23	6.43	1.16	0.49
University/College (4yr)	3.18	3.59	3.48	26.63	0.59
User Defined Commercial (Institution)	2.36	5.75	3.20	13.71	4.45
Project Residential Land Uses					
Apartment Mid Rise	297.91	3,277.06	741.44	10,118.57	6,384.00
Single Family Housing	502.24	6,680.41	1,608.84	26,696.95	6,384.00
Title 24 (2016)					
Project Nonresidential Land Uses					
Enclosed Parking with Elevator	3.72	0.19	2.50	9.57	-
Fast Food Restaurant with Drive thru	8.08	28.16	7.72	41.03	187.78
General Light Industry (Fire Station)	2.24	5.75	3.04	13.02	4.45
General Office Building	4.58	4.62	3.69	9.57	0.39
High Turnover (Sit Down Restaurant)	8.08	28.16	7.72	41.03	187.78
Hospital	9.92	7.55	5.17	52.46	9.82
Library	2.24	5.75	3.04	13.02	4.45
Medical Office Building	4.58	4.62	3.69	9.57	0.39
Office Park	5.60	4.79	3.65	9.17	0.19
Place of Worship	2.24	5.75	3.04	13.02	4.45
Regional Shopping Center	3.99	3.23	6.11	1.10	0.49
Research and Development	2.24	5.75	3.04	13.02	4.45
Strip Mall	3.99	3.23	6.11	1.10	0.49
University/College (4yr)	3.02	3.59	3.31	25.30	0.59
User Defined Commercial (Institution)	2.24	5.75	3.04	13.02	4.45
0					
Project Residential Land Uses					
Apartment Mid Rise	214.50	3,277.06	533.84	7,285.37	6,384.00
Single Family Housing	361.61	6,680.41	1,158.36	19,221.80	6,384.00

Sources:

California Emissions Estimator Model (CalEEMod), version 2016.3.1.

California Energy Commission, Adoption Hearing, 2016 Building Energy Efficiency Standards, June 10, 2015. Available: http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf. Accessed December 2016.

Appendix C

Cultural Resources Correspondence and Record Searches

ESA

C-1 SB18 Consultation Correspondence

Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

☐ **CEQA Tribal Consultation List (AB 52)** – ***Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2***

☒ **General Plan (SB 18)** - ***Per Government Code § 65352.3.***

Local Action Type:

___ **General Plan** ___ **General Plan Element** ___ **General Plan Amendment**

✔ **Specific Plan** ___ **Specific Plan Amendment** ___ **Pre-planning Outreach Activity**

Required Information

Project Title: Willowbrook Transit Oriented District Specific Plan

Local Government/Lead Agency: Los Angeles County Department of Regional Planning

Contact Person: Leon Freeman

Street Address: 320 West Temple Street, 13th Floor

City: Los Angeles **Zip:** 90012

Phone: 213-974-6406 **Fax:**

Email: LFreeman@planning.lacounty.gov

Specific Area Subject to Proposed Action

County: Los Angeles **City/Community:** Willowbrook (Uninc)

Project Description:

The proposed Specific Plan is a planning document that has been prepared to introduce a transit oriented development pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicle miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects.The proposed Specific Plan would facilitate development by rezoning and amending the General Plan land uses of parcels within a half mile radius south of the Willowbrook/Rosa Parks Station to include mixed uses, increased housing densities, and additional neighborhood-serving retail uses.

Additional Request

☒ **Sacred Lands File Search** - ***Required Information:***

USGS Quadrangle Name(s): Southgate

Township: **Range:** **Section(s):**

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 - Fax

February 2, 2016

Leon Freeman
Los Angeles County Department of Regional Planning

Sent via e-mail: lfreeman@planning.lacounty.gov

RE: Proposed Willowbrook Transit Oriented District Specific Plan Project, Community of Willowbrook; South Gate USGS Quadrangle, Los Angeles County, California

Dear Mr. Freeman:

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans. Attached is a consultation list of tribes traditionally and culturally affiliated with the area that may have cultural places located within the boundaries of the project referenced above.

As a part of consultation, the NAHC recommends that local governments conduct record searches through the NAHC and California Historic Resources Information System (CHRIS) to determine if any cultural places are located within the area(s) affected by the proposed action. A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE. Records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of tribal cultural resources.

The list should provide a starting place to locate areas of potential adverse impact within the APE. I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes on the attached list, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

Native American Heritage Commission
Tribal Consultation List
Los Angeles County
2/2/2017

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chariperson
P.O. Box 393 Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
gabrielenoindians@yahoo.com

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626)286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 Gabrielino
Los Angeles, CA, 90012
Phone: (951)807-0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
1999 Avenue of the Stars, Suite 1100 Gabrielino
Los Angeles, CA, 90067
Phone: (626) 676 - 1184

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Government Code Sections 65352.3 and 65362.4 et seq for the proposed Willowbrook Transit Oriented Specific Plan Project, Los Angeles County.

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

February 2, 2017

Linda Candelario, Co-Chairperson
Gabrielino-Tongva Tribe
1999 Avenue of the Stars, Suite 1100
Los Angeles, CA 90067

SUBJECT: SENATE BILL (SB) 18 CONSULTATION (GOVERNMENT CODE §65352.3)
WILLOWBROOK TRANSIT ORIENTED DISTRICT SPECIFIC PLAN
PROJECT NO. R2015-02007–(2)
RSPT201500001 RZCT201500006
RADVT201500004 RENVT201500136
RPAT201500005

The Native American Heritage Commission (NAHC) has identified your tribe as one with traditional lands or cultural places located within the proposed boundary of the above-referenced project. Because this project requires the amendment of the General Plan and adoption of a Specific Plan, it is subject to the SB 18 Tribal Consultation requirements (Government Code Section 65352.3). This letter serves as a formal notification and invitation to consult with the County of Los Angeles on the proposed project identified above.

The project area is located in the Willowbrook community, which is an unincorporated community within Los Angeles County. It is located along the I-105 Freeway at the Wilmington Avenue interchange, and at the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and City of Compton to the east. The project area is bounded by Compton Avenue, Imperial Highway, Mona Boulevard and 121st/122nd Streets. A map depicting the project site location is enclosed for your reference.

Project Description: The proposed Specific Plan is a planning document that has been prepared to introduce a transit oriented development pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicle miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects. The proposed Specific Plan would facilitate development by rezoning and amending the General Plan land uses of parcels within a half mile radius south of the Willowbrook/Rosa Parks Station to include mixed uses, increased housing densities, and additional neighborhood-serving retail uses.

A Sacred Lands File Search conducted by the NAHC did not find the presence of Native American cultural resources sites within the area of potential effect (APE) of the project area. In addition, Native American resources are not recorded in close proximity to the project site. The NAHC has also provided the Los Angeles County Department of Regional Planning with a list of Native

320 West Temple Street ▪ Los Angeles, CA 90012 ▪ 213-974-6411 ▪ Fax: 213-626-0434 ▪ TDD: 213-617-2292

American Tribes with traditional lands or cultural places located within the proposed project site. This letter was sent to each of the listed tribes.

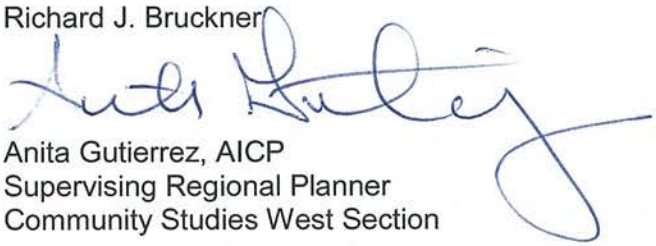
Your participation in this local planning process is important. Pursuant to Government Code Section 65352.3(a)(2), you have 90 days from the receipt of this letter to request consultation with the County of Los Angeles. Please submit your request to the contact information listed below.

Lead Agency Contact Information:

Leon Freeman, Regional Planning Assistant II
Community Studies West Section
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012
Tel: (213) 974-6406
Email: LFreeman@planning.lacounty.gov

Sincerely,

DEPARTMENT OF REGIONAL PLANNING
Richard J. Bruckner



Anita Gutierrez, AICP
Supervising Regional Planner
Community Studies West Section

Encl: Map of Project Location
Notice of Preparation

CC: Gabrieleno Band of Mission Indians – Kizh Nation; Gabrieleno/Tongva San Gabriel Band of Mission Indians; Gabrielino/Tongva Nation; Gabrielino Tongva Indians of California Tribal Council

AG:LF

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION

DATE: October 29, 2015

PROJECT TITLE: Willowbrook Transit Oriented District Specific Plan
County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

PROJECT LOCATION: The Specific Plan area is located in the unincorporated community of Willowbrook within Los Angeles County. It is located along the I-105 Freeway and includes the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and the City of Compton to the east.

The County of Los Angeles is the lead agency and, after conducting an Initial Study for the Project, has determined that it will prepare an Environmental Impact Report (EIR). In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to responsible agencies, interested parties, and trustee agencies responsible for natural resources that may be affected by the Project.

PROJECT LOCATION AND ENVIRONMENTAL SETTING

The Specific Plan area generally encompasses a half mile radius south of the Willowbrook/Rosa Parks Metro station, which is a major transfer point between the Metro Blue Line and Green Line. At the station, the Green Line is located in the median of the I-105 Freeway (Glenn Anderson). The Specific Plan area totals 312 acres. Major activity centers within the Specific Plan area are the Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King Jr. Center for Public Health. See attached project boundary map.

North of the Specific Plan area is predominantly residential with some commercial uses. The City of Lynwood is directly adjacent to the Specific Plan's eastern border and land uses are manufacturing, public uses and commercial. South and west of the Specific Plan area is predominantly residential.

PROJECT SUMMARY

The Specific Plan has been prepared to introduce a transit oriented development (TOD) pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicles miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects.

The Specific Plan would facilitate development by rezoning and amending General Plan land uses to include mixed uses, increased residential densities, and additional neighborhood-serving retail uses. A key part of the Specific Plan is also to preserve existing residential uses and densities in certain areas. The proposed zoning includes: Mixed Use 1 (MU-1); Mixed Use 2 (MU-2); MLK Medical; Drew Educational; Imperial Commercial; Willowbrook Residential 1; Willowbrook Residential 2; Willowbrook Residential 3; and Open Space (O-S). Overall, the Specific Plan would accommodate an additional 1,734 dwelling units and 2,630,306 square feet of non-residential land use.

The Specific Plan would largely maintain the existing street system in its current configuration, with some improvements designed to improve access, circulation, and walkability. Road diets would also be used to aid the circulation system.

The Specific Plan would improve pedestrian circulation by connecting all major activity areas through sidewalk and intersection improvements. In addition, a combination of Class I, Class II, Class III and potentially Class IV facilities would provide a connected and integrated bicycle network throughout the Specific Plan area that connects activity centers and neighborhoods to the Willowbrook/Rosa Parks Station and adjacent communities. Bicycle amenities, such as bicycle stations, would be provided at appropriate locations.

In 2012, Los Angeles County prepared the *MLK Medical Center Campus Master Plan & the Willowbrook MLK Wellness Community Vision* to guide the development of the campus. It is the County's intent that the Specific Plan serve as the regulatory document for the buildout of the campus. Future development within the campus will be required to comply with the provisions of the Specific Plan; all subsequent development within the campus will be subject to the mitigation requirements of the EIR being prepared for the Specific Plan.

The draft Specific Plan is available for viewing at http://planning.lacounty.gov/willowbrook/tod.

POTENTIAL PROJECT IMPACTS: Based on the Initial Study determination, an EIR is necessary for the proposed Project. Based on a preliminary assessment of potential environmental impacts that may occur as a result of the Project, the areas of potential environmental impact to be addressed in the Programmatic EIR will include at least the following:

Potential Hazards

- Geology/Soils
- Noise
- Hazards/Hazardous Materials

Potential Impacts to Resources

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use/Planning

Potential Impacts to Services

- Transportation/Traffic

- Public Services
- Recreation
- Utilities/Services
- Population/Housing

The only environmental factors that were not found to be potentially affected are Agriculture/Forest Resources, Biological Resources, and Mineral Resources. There are multiple mandatory findings of significance. In addition, environmental issues that do not rise to the level of significant impacts will be addressed in the EIR in a separate section entitled "Impacts Found to Be Less Than Significant."

NOTICE OF PREPARATION REVIEW AND COMMENTS

The NOP is being distributed to solicit written comments regarding the scope and content of the environmental analysis to be included in the EIR. The County has prepared this NOP in accordance with the State CEQA Guidelines.

The review period for this NOP is from **November 2, 2015 to December 1, 2015**. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than **December 1, 2015**. Please direct all written comments to the following address:

Connie Chung, AICP
County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, California 90012
Telephone: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

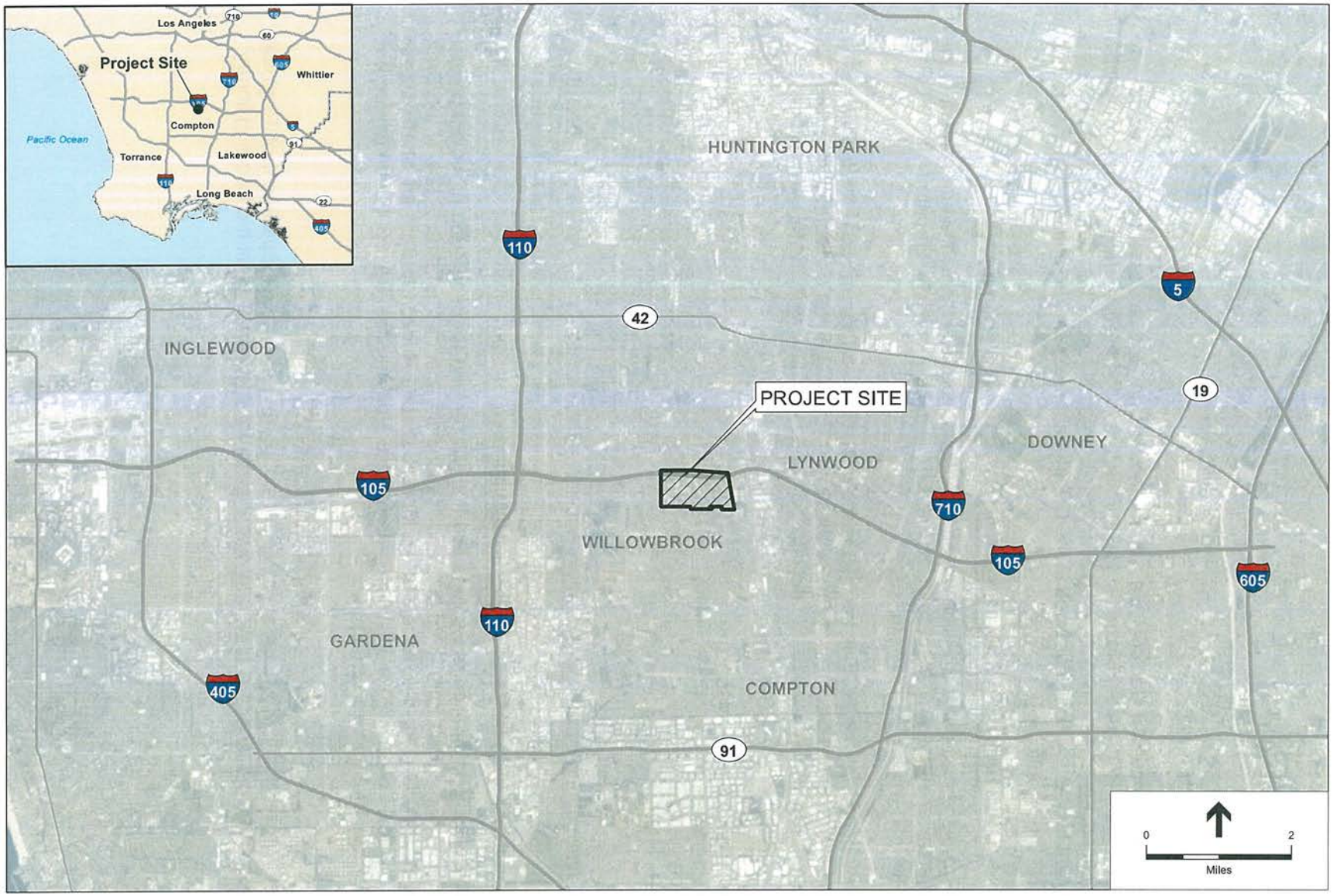
SCOPING MEETING

To assist in local participation, a Scoping Meeting will be held to present the proposed project and to solicit suggestions from the public and responsible agencies on the content of the Draft EIR. The Scoping Meeting will be held at the MLK H. Claude Hudson Auditorium, Martin Luther King, Jr. Medical Center, 12021 S. Wilmington Avenue, Los Angeles, CA, 90059, on **November 21, 2015, from 10:00 am to 12:00 pm.**

REVIEW MATERIALS

Additional copies of this NOP are available for public review on the Department of Regional Planning website: http://planning.lacounty.gov/willowbrook/tod as well as at the following library:

Willowbrook Library
11838 Wilmington Ave
Los Angeles, CA 90059



SOURCE: ESRI

Willowbrook TOD Specific Plan . 130631

Figure 1

Regional Location

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

February 2, 2017

Robert Dorame, Chairperson
Gabrielino Tongva Indians of California Tribal Council
PO Box 490
Bellflower, CA 90707

SUBJECT: SENATE BILL (SB) 18 CONSULTATION (GOVERNMENT CODE §65352.3)
WILLOWBROOK TRANSIT ORIENTED DISTRICT SPECIFIC PLAN
PROJECT NO. R2015-02007–(2)
RSPT201500001 RZCT201500006
RADVT201500004 RENVT201500136
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The project area is located in the Willowbrook community, which is an unincorporated community within Los Angeles County. It is located along the I-105 Freeway at the Wilmington Avenue interchange, and at the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and City of Compton to the east. The project area is bounded by Compton Avenue, Imperial Highway, Mona Boulevard and 121st/122nd Streets. A map depicting the project site location is enclosed for your reference.

Project Description: The proposed Specific Plan is a planning document that has been prepared to introduce a transit oriented development pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicle miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects. The proposed Specific Plan would facilitate development by rezoning and amending the General Plan land uses of parcels within a half mile radius south of the Willowbrook/Rosa Parks Station to include mixed uses, increased housing densities, and additional neighborhood-serving retail uses.

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320 West Temple Street ▪ Los Angeles, CA 90012 ▪ 213-974-6411 ▪ Fax: 213-626-0434 ▪ TDD: 213-617-2292

American Tribes with traditional lands or cultural places located within the proposed project site. This letter was sent to each of the listed tribes.

Your participation in this local planning process is important. Pursuant to Government Code Section 65352.3(a)(2), you have 90 days from the receipt of this letter to request consultation with the County of Los Angeles. Please submit your request to the contact information listed below.

Lead Agency Contact Information:

Leon Freeman, Regional Planning Assistant II
Community Studies West Section
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012
Tel: (213) 974-6406
Email: LFreeman@planning.lacounty.gov

Sincerely,

DEPARTMENT OF REGIONAL PLANNING
Richard J. Bruckner

Anita Gutierrez, AICP
Supervising Regional Planner
Community Studies West Section

Encl: Map of Project Location
Notice of Preparation

CC: Gabrieleno Band of Mission Indians – Kizh Nation; Gabrieleno/Tongva San Gabriel Band of Mission Indians; Gabrielino/Tongva Nation; Gabrielino-Tongva Tribe

AG:LF

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION

DATE: October 29, 2015

PROJECT TITLE: Willowbrook Transit Oriented District Specific Plan
County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

PROJECT LOCATION: The Specific Plan area is located in the unincorporated community of Willowbrook within Los Angeles County. It is located along the I-105 Freeway and includes the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and the City of Compton to the east.

The County of Los Angeles is the lead agency and, after conducting an Initial Study for the Project, has determined that it will prepare an Environmental Impact Report (EIR). In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to responsible agencies, interested parties, and trustee agencies responsible for natural resources that may be affected by the Project.

PROJECT LOCATION AND ENVIRONMENTAL SETTING

The Specific Plan area generally encompasses a half mile radius south of the Willowbrook/Rosa Parks Metro station, which is a major transfer point between the Metro Blue Line and Green Line. At the station, the Green Line is located in the median of the I-105 Freeway (Glenn Anderson). The Specific Plan area totals 312 acres. Major activity centers within the Specific Plan area are the Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King Jr. Center for Public Health. See attached project boundary map.

North of the Specific Plan area is predominantly residential with some commercial uses. The City of Lynwood is directly adjacent to the Specific Plan's eastern border and land uses are manufacturing, public uses and commercial. South and west of the Specific Plan area is predominantly residential.

PROJECT SUMMARY

The Specific Plan has been prepared to introduce a transit oriented development (TOD) pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicles miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects.

The Specific Plan would facilitate development by rezoning and amending General Plan land uses to include mixed uses, increased residential densities, and additional neighborhood-serving retail uses. A key part of the Specific Plan is also to preserve existing residential uses and densities in certain areas. The proposed zoning includes: Mixed Use 1 (MU-1); Mixed Use 2 (MU-2); MLK Medical; Drew Educational; Imperial Commercial; Willowbrook Residential 1; Willowbrook Residential 2; Willowbrook Residential 3; and Open Space (O-S). Overall, the Specific Plan would accommodate an additional 1,734 dwelling units and 2,630,306 square feet of non-residential land use.

The Specific Plan would largely maintain the existing street system in its current configuration, with some improvements designed to improve access, circulation, and walkability. Road diets would also be used to aid the circulation system.

The Specific Plan would improve pedestrian circulation by connecting all major activity areas through sidewalk and intersection improvements. In addition, a combination of Class I, Class II, Class III and potentially Class IV facilities would provide a connected and integrated bicycle network throughout the Specific Plan area that connects activity centers and neighborhoods to the Willowbrook/Rosa Parks Station and adjacent communities. Bicycle amenities, such as bicycle stations, would be provided at appropriate locations.

In 2012, Los Angeles County prepared the *MLK Medical Center Campus Master Plan & the Willowbrook MLK Wellness Community Vision* to guide the development of the campus. It is the County's intent that the Specific Plan serve as the regulatory document for the buildout of the campus. Future development within the campus will be required to comply with the provisions of the Specific Plan; all subsequent development within the campus will be subject to the mitigation requirements of the EIR being prepared for the Specific Plan.

The draft Specific Plan is available for viewing at http://planning.lacounty.gov/willowbrook/tod.

POTENTIAL PROJECT IMPACTS: Based on the Initial Study determination, an EIR is necessary for the proposed Project. Based on a preliminary assessment of potential environmental impacts that may occur as a result of the Project, the areas of potential environmental impact to be addressed in the Programmatic EIR will include at least the following:

Potential Hazards

- Geology/Soils
- Noise
- Hazards/Hazardous Materials

Potential Impacts to Resources

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use/Planning

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- Recreation
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The only environmental factors that were not found to be potentially affected are Agriculture/Forest Resources, Biological Resources, and Mineral Resources. There are multiple mandatory findings of significance. In addition, environmental issues that do not rise to the level of significant impacts will be addressed in the EIR in a separate section entitled "Impacts Found to Be Less Than Significant."

NOTICE OF PREPARATION REVIEW AND COMMENTS

The NOP is being distributed to solicit written comments regarding the scope and content of the environmental analysis to be included in the EIR. The County has prepared this NOP in accordance with the State CEQA Guidelines.

The review period for this NOP is from **November 2, 2015 to December 1, 2015**. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than **December 1, 2015**. Please direct all written comments to the following address:

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County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, California 90012
Telephone: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

SCOPING MEETING

To assist in local participation, a Scoping Meeting will be held to present the proposed project and to solicit suggestions from the public and responsible agencies on the content of the Draft EIR. The Scoping Meeting will be held at the MLK H. Claude Hudson Auditorium, Martin Luther King, Jr. Medical Center, 12021 S. Wilmington Avenue, Los Angeles, CA, 90059, on **November 21, 2015, from 10:00 am to 12:00 pm.**

REVIEW MATERIALS

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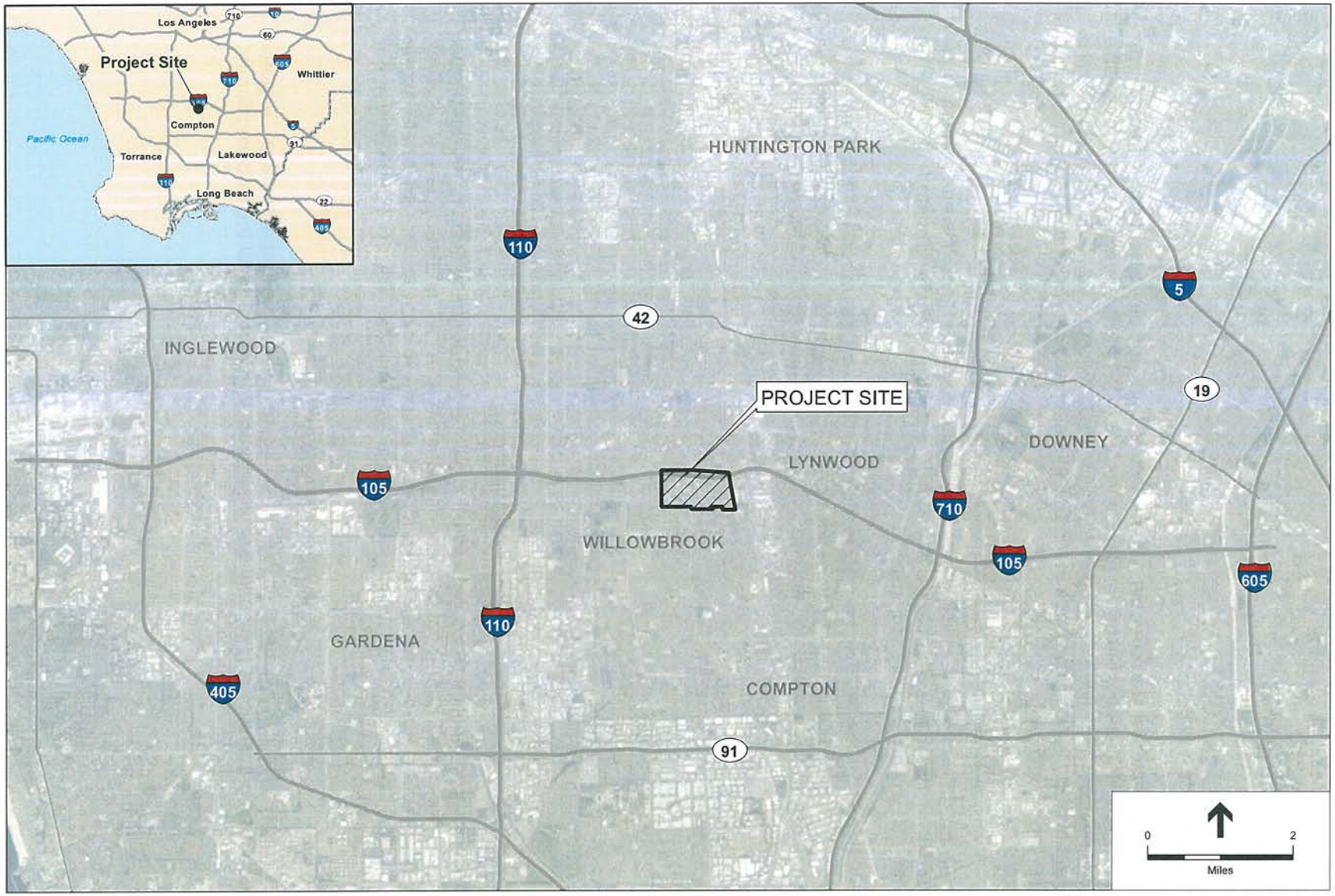

SOURCE: ESRI

Willowbrook TOD Specific Plan . 130631

Figure 1

Regional Location

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

February 2, 2017

Sandonne Goad, Chairperson
Gabrielino/Tongva Nation
106 ½ Judge John Also Street #231
Los Angeles, CA 90012

SUBJECT: SENATE BILL (SB) 18 CONSULTATION (GOVERNMENT CODE §65352.3)
WILLOWBROOK TRANSIT ORIENTED DISTRICT SPECIFIC PLAN
PROJECT NO. R2015-02007–(2)
RSPT201500001 RZCT201500006
RADVT201500004 RENVT201500136
RPAT201500005

The Native American Heritage Commission (NAHC) has identified your tribe as one with traditional lands or cultural places located within the proposed boundary of the above-referenced project. Because this project requires the amendment of the General Plan and adoption of a Specific Plan, it is subject to the SB 18 Tribal Consultation requirements (Government Code Section 65352.3). This letter serves as a formal notification and invitation to consult with the County of Los Angeles on the proposed project identified above.

The project area is located in the Willowbrook community, which is an unincorporated community within Los Angeles County. It is located along the I-105 Freeway at the Wilmington Avenue interchange, and at the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and City of Compton to the east. The project area is bounded by Compton Avenue, Imperial Highway, Mona Boulevard and 121st/122nd Streets. A map depicting the project site location is enclosed for your reference.

Project Description: The proposed Specific Plan is a planning document that has been prepared to introduce a transit oriented development pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicle miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects. The proposed Specific Plan would facilitate development by rezoning and amending the General Plan land uses of parcels within a half mile radius south of the Willowbrook/Rosa Parks Station to include mixed uses, increased housing densities, and additional neighborhood-serving retail uses.

A Sacred Lands File Search conducted by the NAHC did not find the presence of Native American cultural resources sites within the area of potential effect (APE) of the project area. In addition, Native American resources are not recorded in close proximity to the project site. The NAHC has also provided the Los Angeles County Department of Regional Planning with a list of Native

320 West Temple Street ▪ Los Angeles, CA 90012 ▪ 213-974-6411 ▪ Fax: 213-626-0434 ▪ TDD: 213-617-2292

American Tribes with traditional lands or cultural places located within the proposed project site. This letter was sent to each of the listed tribes.

Your participation in this local planning process is important. Pursuant to Government Code Section 65352.3(a)(2), you have 90 days from the receipt of this letter to request consultation with the County of Los Angeles. Please submit your request to the contact information listed below.

Lead Agency Contact Information:

Leon Freeman, Regional Planning Assistant II
Community Studies West Section
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012
Tel: (213) 974-6406
Email: LFreeman@planning.lacounty.gov

Sincerely,

DEPARTMENT OF REGIONAL PLANNING
Richard J. Bruckner

Anita Gutierrez, AICP
Supervising Regional Planner
Community Studies West Section

Encl: Map of Project Location
Notice of Preparation

CC: Gabrieleno Band of Mission Indians – Kizh Nation; Gabrieleno/Tongva San Gabriel Band of Mission Indians; Gabrielino Tongva Indians of California Tribal Council; Gabrielino-Tongva Tribe

AG:LF

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION

DATE: October 29, 2015

PROJECT TITLE: Willowbrook Transit Oriented District Specific Plan
County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

PROJECT LOCATION: The Specific Plan area is located in the unincorporated community of Willowbrook within Los Angeles County. It is located along the I-105 Freeway and includes the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and the City of Compton to the east.

The County of Los Angeles is the lead agency and, after conducting an Initial Study for the Project, has determined that it will prepare an Environmental Impact Report (EIR). In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to responsible agencies, interested parties, and trustee agencies responsible for natural resources that may be affected by the Project.

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PROJECT SUMMARY

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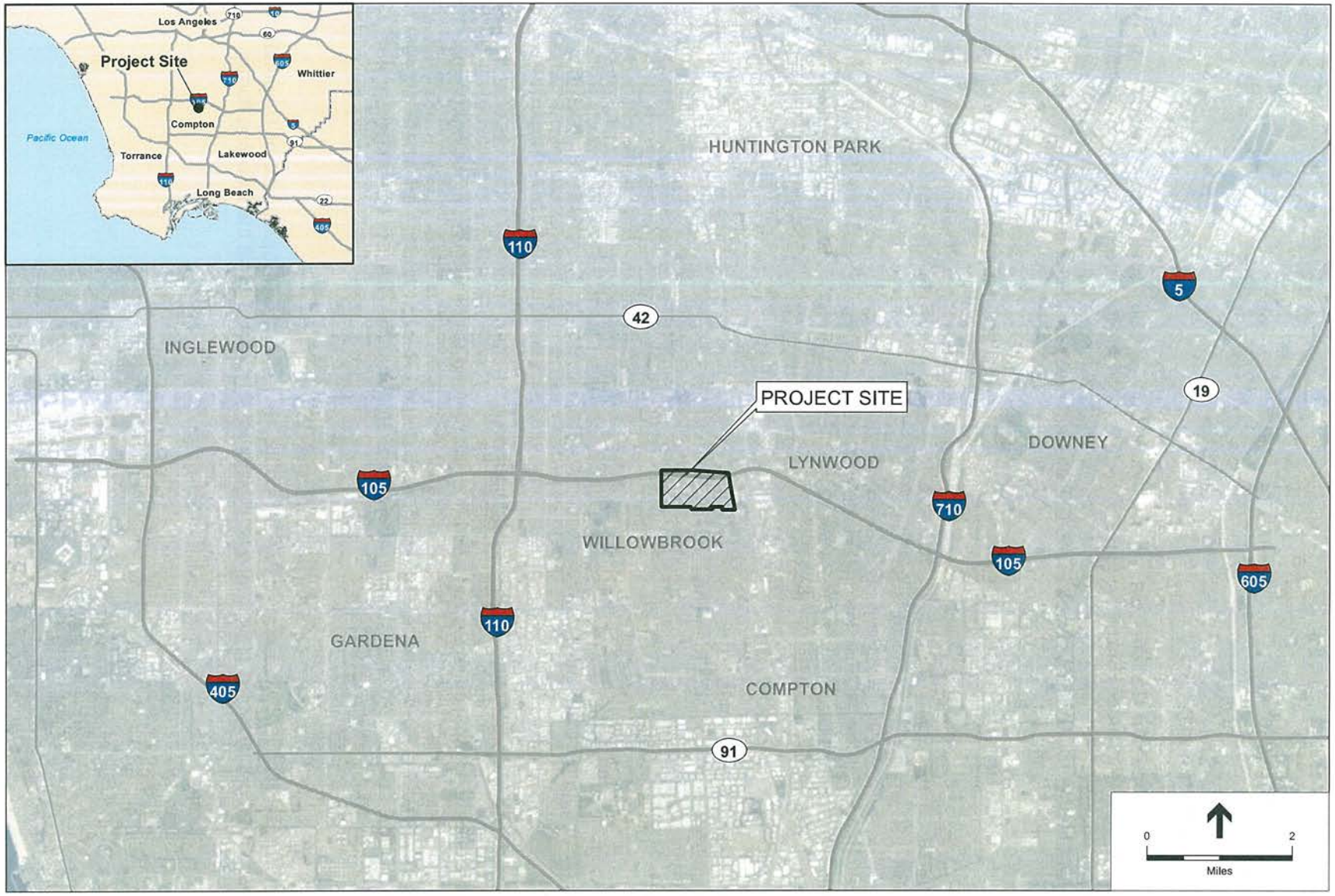

SOURCE: ESRI

Willowbrook TOD Specific Plan . 130631

Figure 1

Regional Location

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

February 2, 2017

Anthony Morales, Chairperson
Gabrieleno/Tongva San Gabriel Band of Mission Indians
PO Box 693
San Gabriel, CA 91778

SUBJECT: SENATE BILL (SB) 18 CONSULTATION (GOVERNMENT CODE §65352.3)
WILLOWBROOK TRANSIT ORIENTED DISTRICT SPECIFIC PLAN
PROJECT NO. R2015-02007–(2)
RSPT201500001 RZCT201500006
RADVT201500004 RENVT201500136
RPAT201500005

The Native American Heritage Commission (NAHC) has identified your tribe as one with traditional lands or cultural places located within the proposed boundary of the above-referenced project. Because this project requires the amendment of the General Plan and adoption of a Specific Plan, it is subject to the SB 18 Tribal Consultation requirements (Government Code Section 65352.3). This letter serves as a formal notification and invitation to consult with the County of Los Angeles on the proposed project identified above.

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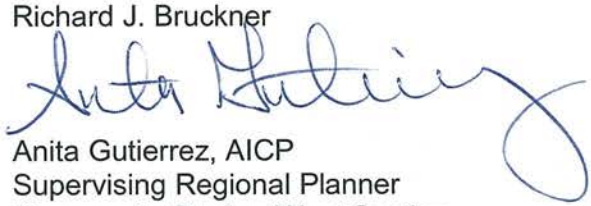
Leon Freeman, Regional Planning Assistant II
Community Studies West Section
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012
Tel: (213) 974-6406
Email: LFreeman@planning.lacounty.gov

Sincerely,

DEPARTMENT OF REGIONAL PLANNING
Richard J. Bruckner



Anita Gutierrez, AICP
Supervising Regional Planner
Community Studies West Section

Encl: Map of Project Location
Notice of Preparation

CC: Gabrieleno Band of Mission Indians – Kizh Nation; Gabrielino/Tongva Nation; Gabrielino Tongva Indians of California Tribal Council; Gabrielino-Tongva Tribe

AG:LF

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION

DATE: October 29, 2015

PROJECT TITLE: Willowbrook Transit Oriented District Specific Plan
County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

PROJECT LOCATION: The Specific Plan area is located in the unincorporated community of Willowbrook within Los Angeles County. It is located along the I-105 Freeway and includes the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and the City of Compton to the east.

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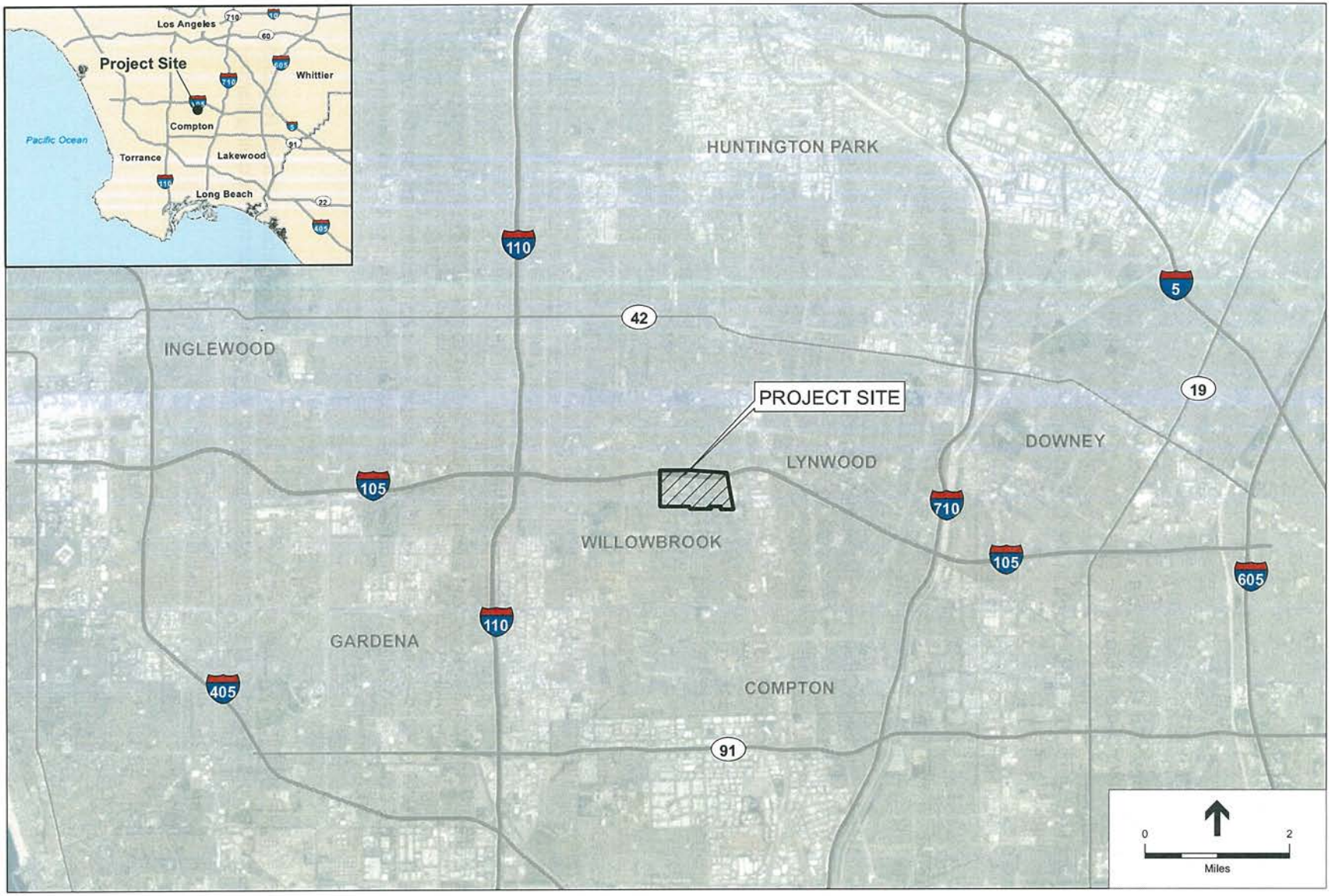

SOURCE: ESRI

Willowbrook TOD Specific Plan . 130631

Figure 1

Regional Location

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

February 2, 2017

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians – Kizh Nation
PO Box 393
Covina, CA 91723

SUBJECT: SENATE BILL (SB) 18 CONSULTATION (GOVERNMENT CODE §65352.3)
WILLOWBROOK TRANSIT ORIENTED DISTRICT SPECIFIC PLAN
PROJECT NO. R2015-02007–(2)
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DATE: October 29, 2015

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County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

PROJECT LOCATION: The Specific Plan area is located in the unincorporated community of Willowbrook within Los Angeles County. It is located along the I-105 Freeway and includes the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and the City of Compton to the east.

The County of Los Angeles is the lead agency and, after conducting an Initial Study for the Project, has determined that it will prepare an Environmental Impact Report (EIR). In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to responsible agencies, interested parties, and trustee agencies responsible for natural resources that may be affected by the Project.

PROJECT LOCATION AND ENVIRONMENTAL SETTING

The Specific Plan area generally encompasses a half mile radius south of the Willowbrook/Rosa Parks Metro station, which is a major transfer point between the Metro Blue Line and Green Line. At the station, the Green Line is located in the median of the I-105 Freeway (Glenn Anderson). The Specific Plan area totals 312 acres. Major activity centers within the Specific Plan area are the Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King Jr. Center for Public Health. See attached project boundary map.

North of the Specific Plan area is predominantly residential with some commercial uses. The City of Lynwood is directly adjacent to the Specific Plan's eastern border and land uses are manufacturing, public uses and commercial. South and west of the Specific Plan area is predominantly residential.

PROJECT SUMMARY

The Specific Plan has been prepared to introduce a transit oriented development (TOD) pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicles miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects.

The Specific Plan would facilitate development by rezoning and amending General Plan land uses to include mixed uses, increased residential densities, and additional neighborhood-serving retail uses. A key part of the Specific Plan is also to preserve existing residential uses and densities in certain areas. The proposed zoning includes: Mixed Use 1 (MU-1); Mixed Use 2 (MU-2); MLK Medical; Drew Educational; Imperial Commercial; Willowbrook Residential 1; Willowbrook Residential 2; Willowbrook Residential 3; and Open Space (O-S). Overall, the Specific Plan would accommodate an additional 1,734 dwelling units and 2,630,306 square feet of non-residential land use.

The Specific Plan would largely maintain the existing street system in its current configuration, with some improvements designed to improve access, circulation, and walkability. Road diets would also be used to aid the circulation system.

The Specific Plan would improve pedestrian circulation by connecting all major activity areas through sidewalk and intersection improvements. In addition, a combination of Class I, Class II, Class III and potentially Class IV facilities would provide a connected and integrated bicycle network throughout the Specific Plan area that connects activity centers and neighborhoods to the Willowbrook/Rosa Parks Station and adjacent communities. Bicycle amenities, such as bicycle stations, would be provided at appropriate locations.

In 2012, Los Angeles County prepared the *MLK Medical Center Campus Master Plan & the Willowbrook MLK Wellness Community Vision* to guide the development of the campus. It is the County's intent that the Specific Plan serve as the regulatory document for the buildout of the campus. Future development within the campus will be required to comply with the provisions of the Specific Plan; all subsequent development within the campus will be subject to the mitigation requirements of the EIR being prepared for the Specific Plan.

The draft Specific Plan is available for viewing at http://planning.lacounty.gov/willowbrook/tod.

POTENTIAL PROJECT IMPACTS: Based on the Initial Study determination, an EIR is necessary for the proposed Project. Based on a preliminary assessment of potential environmental impacts that may occur as a result of the Project, the areas of potential environmental impact to be addressed in the Programmatic EIR will include at least the following:

Potential Hazards

- Geology/Soils
- Noise
- Hazards/Hazardous Materials

Potential Impacts to Resources

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use/Planning

Potential Impacts to Services

- Transportation/Traffic

- Public Services
- Recreation
- Utilities/Services
- Population/Housing

The only environmental factors that were not found to be potentially affected are Agriculture/Forest Resources, Biological Resources, and Mineral Resources. There are multiple mandatory findings of significance. In addition, environmental issues that do not rise to the level of significant impacts will be addressed in the EIR in a separate section entitled "Impacts Found to Be Less Than Significant."

NOTICE OF PREPARATION REVIEW AND COMMENTS

The NOP is being distributed to solicit written comments regarding the scope and content of the environmental analysis to be included in the EIR. The County has prepared this NOP in accordance with the State CEQA Guidelines.

The review period for this NOP is from **November 2, 2015 to December 1, 2015**. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than **December 1, 2015**. Please direct all written comments to the following address:

Connie Chung, AICP
County of Los Angeles
Department of Regional Planning
320 W. Temple Street
Los Angeles, California 90012
Telephone: (213) 974-6417
Fax: (213) 626-0434
Email: cchung@planning.lacounty.gov

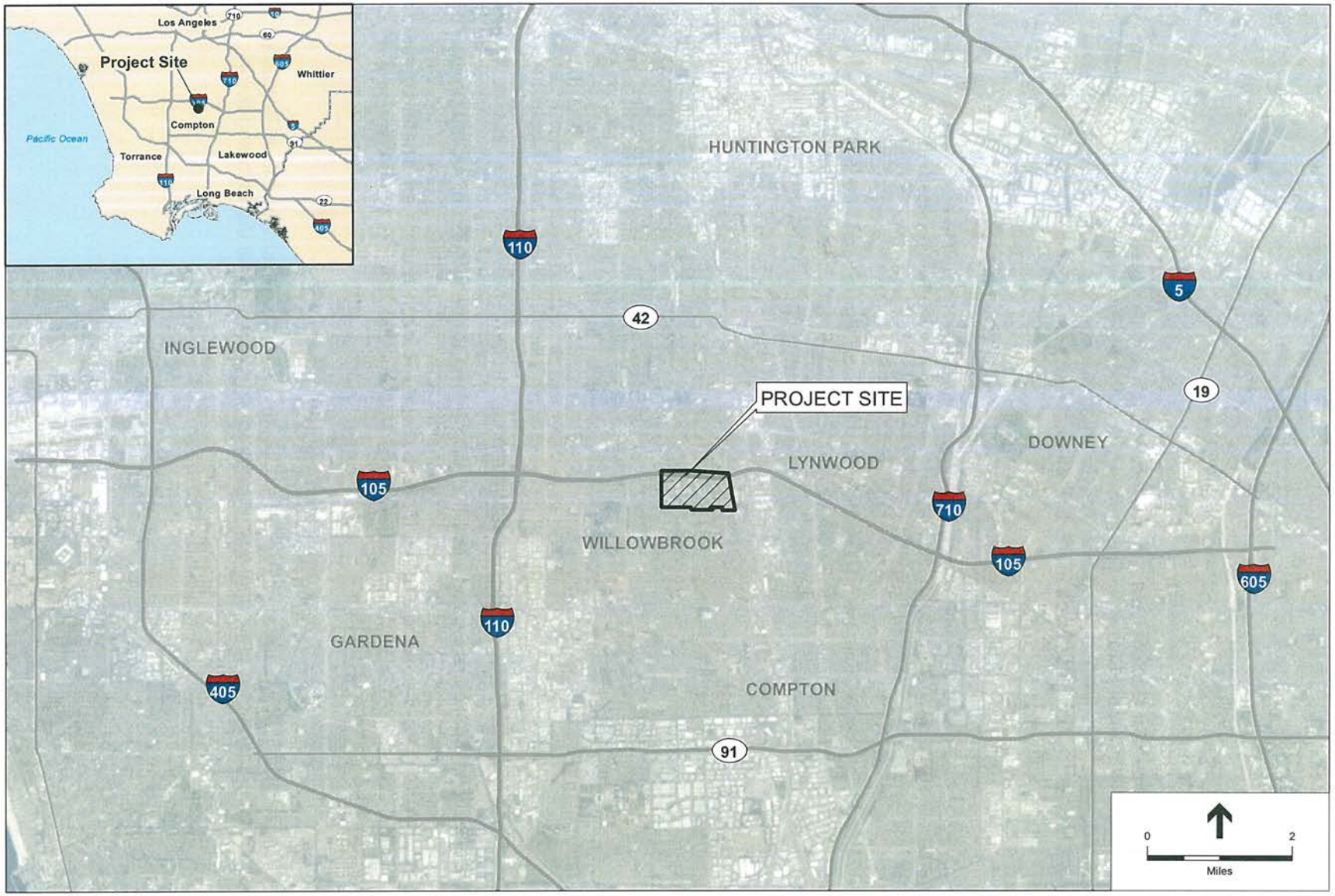
SCOPING MEETING

To assist in local participation, a Scoping Meeting will be held to present the proposed project and to solicit suggestions from the public and responsible agencies on the content of the Draft EIR. The Scoping Meeting will be held at the MLK H. Claude Hudson Auditorium, Martin Luther King, Jr. Medical Center, 12021 S. Wilmington Avenue, Los Angeles, CA, 90059, on **November 21, 2015, from 10:00 am to 12:00 pm.**

REVIEW MATERIALS

Additional copies of this NOP are available for public review on the Department of Regional Planning website: http://planning.lacounty.gov/willowbrook/tod as well as at the following library:

Willowbrook Library
11838 Wilmington Ave
Los Angeles, CA 90059



SOURCE: ESRI

Willowbrook TOD Specific Plan . 130631

Figure 1

Regional Location

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
Recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Dear Leon Freeman
Regional Planning Assistant ll

Subject: SB18 Formal Notification – Willow brook TOD Specific Plan

"The project locale lies in an area where the Ancestral & traditional territories of the Kizh(Kitc) Gabrieleño villages , adjoined and overlapped with each other, at least during the Late Prehistoric and Protohistoric Periods. The homeland of the Kizh (Kitc) Gabrieleños , probably the most influential Native American group in aboriginal southern California (Bean and Smith 1978a:538 https://nrmsecure.dfg.ca.gov/FileHandler.ashx?DocumentID=9497 *), was centered in the Los Angeles Basin, and reached as far east as the San Bernardino-Riverside area. The homeland of the Serranos was primarily the San Bernardino Mountains, including the slopes and lowlands on the north and south flanks. Whatever the linguistic affiliation, Native Americans in and around the project area exhibited similar organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home/ base sites are marked by midden deposits, often with bedrock mortars. During their seasonal rounds to exploit plant resources, small groups would migrate within their traditional territory in search of specific plants and animals. Their gathering strategies often left behind signs of special use sites, usually grinding slicks on bedrock boulders, at the locations of the resources. Therefore, in order to protect our resources we're requesting one of our experienced & certified Native American monitors to be on site during any & all ground disturbances (this includes but is not limited to pavement removal, pot-holing or grubbing, auguring, boring, grading, excavation and trenching).*

In all cases, when the NAHC states there are "No" records of sacred sites" in the subject area; they always refer the contractors back to the Native American Tribes whose tribal territory the project area is in. This is due to the fact, that the NAHC is only aware of general information on each California NA Tribe they are "NOT " the "experts" on our Tribe. Our Elder Committee & Tribal Historians are the experts and is the reason why the NAHC will always refer contractors to the local tribes.

In addition, we are also often told that an area has been previously developed or disturbed and thus there are no concerns for cultural resources and thus minimal impacts would be expected. I have two major recent examples of how similar statements on other projects were proven very inadequate. An archaeological study claimed there would be no impacts to an area adjacent to the Plaza Church at Olvera Street, the original Spanish settlement of Los Angeles, now in downtown Los Angeles. In fact, this site was the Gabrieleno village of Yangna long before it became what it is now today. The new development wrongfully began their construction and they, in the process, dug up and desecrated 118 burials. The area that was dismissed as culturally sensitive was in fact the First Cemetery of Los Angeles where it had been well documented at the Huntington Library that 400 of our Tribe's ancestors were buried there along with the founding families of Los Angeles (Pico's, Sepulveda's, and Alvarado's to name a few). In addition, there was another inappropriate study for the development of a new sports complex at Fedde Middle School in the City of Hawaiian Gardens could commence. Again, a village and burial site were desecrated despite their mitigation measures. Thankfully, we were able to work alongside the school district to quickly and respectfully mitigate a mutually beneficial resolution.

Given all the above, the proper thing to do for your project would be for our Tribe to monitor ground disturbing construction work. Native American monitors and/or consultant can see that cultural resources are treated appropriately from the Native American point of view. Because we are the lineal descendants of the vast area of Los Angeles and Orange Counties, we hold sacred the ability to protect what little of our culture remains. We thank you for taking seriously your role and responsibility in assisting us in preserving our culture.

With respect,

Please contact our office regarding this project to coordinate a Native American Monitor to be present. Thank You

PO Box 393 Covina, CA 91723 www.gabrielenoindians@yahoo.com gabrielenoindians@yahoo.com

Andrew Salas, Chairman
Cell (626) 926-4131
Addendum: clarification regarding some confusions regarding consultation under AB52:

AB52 clearly states that consultation must occur with tribes that claim traditional and cultural affiliation with a project site. Unfortunately, this statement has been left open to interpretation so much that neighboring tribes are claiming affiliation with projects well outside their traditional tribal territory. The territories of our surrounding Native American tribes such as the Luiseno, Chumash, and Cahuilla tribal entities. Each of our tribal territories has been well defined by historians, ethnographers, archaeologists, and ethnographers – a list of resources we can provide upon request. Often, each Tribe as well educates the public on their very own website as to the definition of their tribal boundaries. You may have received a consultation request from another Tribe. However we are responding because your project site lies within our Ancestral tribal territory, which, again, has been well documented. What does Ancestrally or Ancestral mean? The people who were in your family in past times, Of, belonging to, inherited from, or denoting an ancestor or ancestors http://www.thefreedictionary.com/ancestral. . If you have questions regarding the validity of the "traditional and cultural affiliation" of another Tribe, we urge you to contact the Native American Heritage Commission directly. Section 5 section 21080.3.1 (c) states "…the Native American Heritage Commission shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated with the project area." In addition, ***please see the map below.***

CC: NAHC

APPENDIX 1: Map 1-2; Bean and Smith 1978 map.

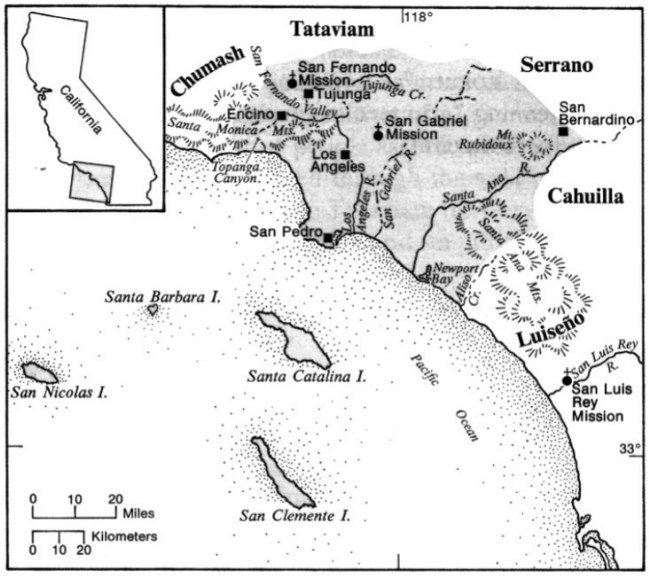


Fig. 1. Tribal territory.

The United States National Museum's Map of Gabrielino Territory:

Bean, Lowell John and Charles R. Smith
1978 Gabrielino IN *Handbook of North American Indians, California,* Vol. 8, edited by R.F. Heizer, Smithsonian Institution Press, Washington, D.C., pp. 538-549

C-2 AB52 Consultation Correspondence

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

January 30, 2017

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians – Kizh Nation
PO Box 393
Covina, CA 91723

RE: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of the Proposed Project pursuant to Public Resources Code (PRC) §21080.3.1.

The Los Angeles County Department of Regional Planning is issuing this formal notification of the proposed project. Below please find a description of the proposed project, a map showing the project location, and our contact information along with the name of our point of contact, pursuant to PRC §21080.3.1(d).

Proposed Project: Willowbrook Transit Oriented District Specific Plan
Project No. R2015-02007–(2)
RSPT201500001 RZCT201500006
RADVT201500004 RENVT201500136
RPAT201500005

Project Description: The proposed Specific Plan is a planning document that has been prepared to introduce a transit oriented development pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicle miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects. The proposed Specific Plan would facilitate development by rezoning and amending the General Plan land uses of parcels within a half mile radius south of the Willowbrook/Rosa Parks Station to include mixed uses, increased housing densities, and additional neighborhood-serving retail uses.

Project Location: The Specific Plan area is located in the Willowbrook community, which is an unincorporated community within Los Angeles County. It is located along the I-105 Freeway at the Wilmington Avenue interchange, and at the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and City of Compton to the east (**Figure 1, Regional Location**). The plan area is bounded by Compton Avenue, Imperial Highway, Mona Boulevard and 121st/122nd Streets.

Lead Agency Contact Information:

Leon Freeman, Regional Planning Assistant II
Community Studies West Section
Department of Regional Planning
320 W. Temple Street, Room 1356
Los Angeles, CA 90012
Tel: (213) 974-6406
Email: LFreeman@planning.lacounty.gov

Pursuant to PRC §21080.3.1(b), you have 30 days from the receipt of this letter to request consultation, in writing, with the Department of Regional Planning. Written request must be submitted to the contact information listed above.

Our office hours are Monday through Thursday, 7:00 a.m. to 5:30 p.m. We are closed on Fridays.

Sincerely,
DEPARTMENT OF REGIONAL PLANNING
Richard J. Bruckner

Anita Gutierrez, AICP
Supervising Regional Planner
Community Studies West Section

Encl: Notice of Preparation, Regional Location Map

AG:LF

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

NOTICE OF PREPARATION

DATE: October 29, 2015

PROJECT TITLE: Willowbrook Transit Oriented District Specific Plan
County Project Number: R2015-02007
Environmental Review Number: RENVT201500136

PROJECT LOCATION: The Specific Plan area is located in the unincorporated community of Willowbrook within Los Angeles County. It is located along the I-105 Freeway and includes the junction of the Metro Blue and Green lines. The project area is approximately 10 miles south of Downtown Los Angeles and is bordered by the City of Los Angeles to the north and the City of Lynwood and the City of Compton to the east.

The County of Los Angeles is the lead agency and, after conducting an Initial Study for the Project, has determined that it will prepare an Environmental Impact Report (EIR). In compliance with Section 15082 of the California Environmental Quality Act (CEQA) Guidelines, the County of Los Angeles is sending this Notice of Preparation (NOP) to responsible agencies, interested parties, and trustee agencies responsible for natural resources that may be affected by the Project.

PROJECT LOCATION AND ENVIRONMENTAL SETTING

The Specific Plan area generally encompasses a half mile radius south of the Willowbrook/Rosa Parks Metro station, which is a major transfer point between the Metro Blue Line and Green Line. At the station, the Green Line is located in the median of the I-105 Freeway (Glenn Anderson). The Specific Plan area totals 312 acres. Major activity centers within the Specific Plan area are the Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King Jr. Center for Public Health. See attached project boundary map.

North of the Specific Plan area is predominantly residential with some commercial uses. The City of Lynwood is directly adjacent to the Specific Plan's eastern border and land uses are manufacturing, public uses and commercial. South and west of the Specific Plan area is predominantly residential.

PROJECT SUMMARY

The Specific Plan has been prepared to introduce a transit oriented development (TOD) pattern to the area, which would promote active transportation and improve quality of life for residents by reducing vehicles miles traveled, improving the public realm, improving economic vitality and employment opportunities, and streamlining the environmental review process for future projects.

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The draft Specific Plan is available for viewing at http://planning.lacounty.gov/willowbrook/tod.

POTENTIAL PROJECT IMPACTS: Based on the Initial Study determination, an EIR is necessary for the proposed Project. Based on a preliminary assessment of potential environmental impacts that may occur as a result of the Project, the areas of potential environmental impact to be addressed in the Programmatic EIR will include at least the following:

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- Noise
- Hazards/Hazardous Materials

Potential Impacts to Resources

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
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- Public Services
- Recreation
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The only environmental factors that were not found to be potentially affected are Agriculture/Forest Resources, Biological Resources, and Mineral Resources. There are multiple mandatory findings of significance. In addition, environmental issues that do not rise to the level of significant impacts will be addressed in the EIR in a separate section entitled "Impacts Found to Be Less Than Significant."

NOTICE OF PREPARATION REVIEW AND COMMENTS

The NOP is being distributed to solicit written comments regarding the scope and content of the environmental analysis to be included in the EIR. The County has prepared this NOP in accordance with the State CEQA Guidelines.

The review period for this NOP is from **November 2, 2015 to December 1, 2015**. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than **December 1, 2015**. Please direct all written comments to the following address:

Connie Chung, AICP
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Los Angeles, California 90012
Telephone: (213) 974-6417
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SCOPING MEETING

To assist in local participation, a Scoping Meeting will be held to present the proposed project and to solicit suggestions from the public and responsible agencies on the content of the Draft EIR. The Scoping Meeting will be held at the MLK H. Claude Hudson Auditorium, Martin Luther King, Jr. Medical Center, 12021 S. Wilmington Avenue, Los Angeles, CA, 90059, on **November 21, 2015, from 10:00 am to 12:00 pm.**

REVIEW MATERIALS

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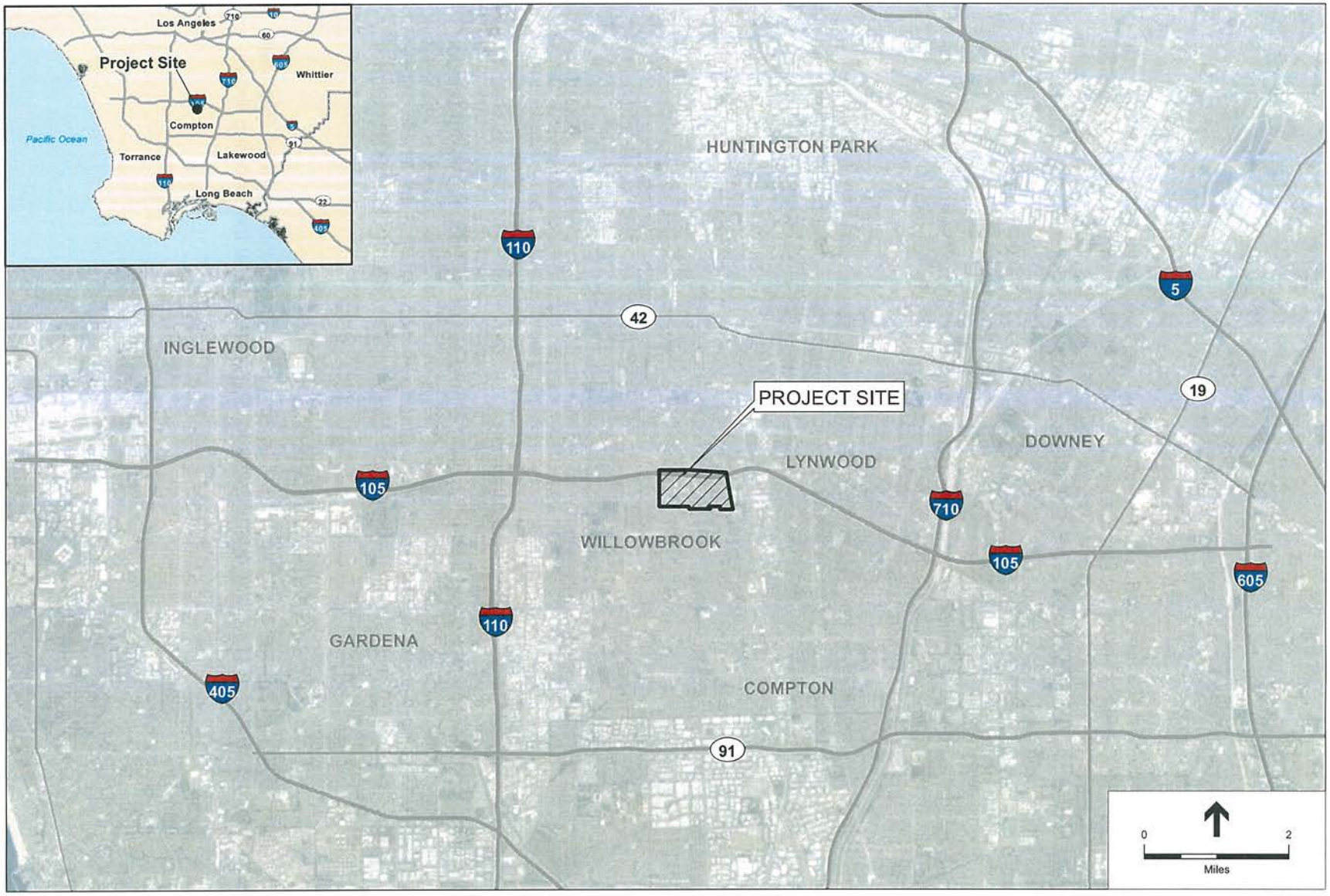


SOURCE: ESRI

Willowbrook TOD Specific Plan . 130631

Figure 1

Regional Location

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

AB 52 - 30-day Consultation Notice

Project name**: Tribal Cultural Resources under the California Environmental Quality Act AB 52 (Gatto, 2014). Formal Notification of the Proposed Project pursuant to Public Resources Code (PRC).**

Dear Leon Freeman,

February 9, 2017

Please find this letter in response to your request for consultation dated January 30, 2017. I have reviewed the project site and do have concerns for cultural resources. Your project lies in an area where the Ancestral territories of the Kizh (Kitc) Gabrieleño's prominent villages adjoined and overlapped with each other, at least during the Late Prehistoric and Protohistoric Periods. The Kizh Gabrieleño were probably the most influential Native American group in aboriginal southern California (Bean and Smith 1978a:538; https://nrmsecure.dfg.ca.gov/FileHandler.ashx?DocumentID=9497**)**. Our homeland was centered in the Los Angeles Basin, and reached as far east as the San Bernardino-Riverside area. The homeland of our neighbors, the Serranos, was primarily the San Bernardino Mountains, including the slopes and lowlands on the north and south flanks. Whatever the linguistic affiliation, Native Americans in and around the project area exhibited similar organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home base sites are marked by midden deposits often with bedrock mortars. During their seasonal rounds to exploit plant resources, small groups would migrate within their traditional territory in search of specific plants and animals. Their gathering strategies of ten left behind signs of special use sites, usually grinding slicks on bedrock boulders, at the locations of the resources.

Due to the project location and the high sensitivity of the area location, we would like to request one of our certified Native American monitors to be on site during any and all ground disturbances (including but not limited to pavement removal, post holing, auguring, boring, grading, excavation and trenching) to protect any cultural resources which may be affected during construction or development. When the Native American Heritage Commission states there are "no records of sacred sites in the project area," they will always refer lead agencies to the respective Native American Tribe. The NAHC is only aware of general information and are not the experts on each California Tribe. Our Elder Committee & Tribal Historians are the experts for our Tribe and are able to provide a more complete history (both written and oral) regarding the location of historic villages, trade routes, cemeteries and sacred/religious sites in the project area. In some instances, the project location may be in an area that has been previously developed and one may question the need for monitoring. Unfortunately, we have numerous examples that we can share where cultural resources including human remains were outright destroyed or at least significantly impacted before a Tribe was present. Please note, if sacred sites haven't been listed with the NAHC, it doesn't mean that they aren't there. Not everyone reports what they know.

The recent implementation of AB52 dictates that lead agencies consult with Native American Tribes who can prove and document traditional and cultural affiliation with the area of said project. Our tribe is connected ancestrally to your project location area. What does "ancestrally" or "ancestral" mean? It simply means the people who were in your family in past times - of, belonging to, inherited from, or denoting an ancestor or ancestors (see http://www.thefreedictionary.com/ancestral). Our main priority is to avoid and protect cultural and biological resources that still exist in our ancestral land for the benefit and education of future generations. We hold strongly to the values of accomplishing this goal without delay or conflicts to the lead agency and project manager.

At your convenience, we are available for consultations via phone or in person. Thank you.

CC: NAHC

With respect,

PO Box 393 Covina, CA 91723 www.gabrielenoindians@yahoo.com gabrielenoindians@yahoo.com

Andrew Salas, Chairman
cell (626)926-4131

PO Box 393 Covina, CA 91723
www.gabrielenoindians@yahoo.com
gabrielenoindians@yahoo.com

From: Leon Freeman
Sent: Monday, April 17, 2017 4:10 PM
To: 'Andy' <gabrielenoindians@yahoo.com>
Cc: Matt Teutimez.Kizh Gabrieleno <matt.teutimez@gmail.com>; Anita Gutierrez <agutierrez@planning.lacounty.gov>
Subject: SB 18 and AB 52 Consultation (Willowbrook TOD Specific Plan)

Dear Chairman Salas,

Thank you engaging in consultation with us regarding the proposed Willowbrook Transit Oriented District Specific Plan, as provided for in SB 18 and AB 52.

The Department of Regional Planning received your letters requesting consultation under SB 18 and AB 52, both dated February 9, 2017, in which you provided background reference information and requested a Kizh Nation certified Native American monitor to be on site during any and all ground disturbances (including but not limited to pavement removal, post holing, auguring, boring, grading, excavation and trenching).

Subsequently, we engaged in consultation via telephone on March 13, 2017, and in-person on April 4, 2017. In our meetings, we discussed potential tribal cultural resources that could be present in the area and your suggested mitigation measures. We also discussed the challenges related to a project-level document versus a plan-level document like the Willowbrook Transit Oriented District Specific Plan, which does not authorize actual ground disturbance or construction. While we are not able to incorporate your suggested mitigations for an on-site monitor for every ground disturbance, we can agree to a mitigation measure that provides for Native American tribes to be contacted if resources are encountered in the project area. This language shall be recommended for inclusion in the project environmental document.

During project-level construction, should prehistoric or historic subsurface cultural resources be discovered, all activity in the vicinity of the find shall stop and a qualified archaeologist will be contacted to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, the archaeologist shall determine, in consultation with the County, and local Native American groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant cultural resources. Methods of avoidance may include, but shall not be limited to, project re-route or re-design, project cancellation, or identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. All significant cultural materials recovered will be, as necessary and at the discretion of the consulting archaeologist and in consultation with local Native American groups expressing interest, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.

We also discussed incorporating some language into the plan document itself that references the historical significance of the early Gabrielinos in Southern California. On April 11, 2017, we provided you with draft text for your input and requested some images to include. The current language is as follows:

Early Peoples
The project site is located within the territory of the native population known as the Gabrielino. Prior to European contact, the Gabrielino occupied a diverse area that included the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers; the Los Angeles basin; and offshore islands. They were hunter-gatherers and lived in permanent communities located near the presence of a stable food supply and some measure of protection from flooding. Community populations generally ranged from 50-100 inhabitants, although larger settlements may have existed. Houses were made of tule mats on a framework of poles. Basketry and steatite vessels were used rather than ceramics; ceramics became common only toward the end of the Mission Period in the nineteenth century.

The Department of Regional Planning met with representatives of the Gabrielino Band of Mission Indians - Kizh Nation, to determine whether known tribal cultural resources are present in the project area. While specific resources have not yet been identified, the project area is proximate to a known early trade route that connected to the coast at San Pedro. Additionally, its characteristics of being relatively near historical water sources and hunting grounds would have been favorable to settlement. As is common in Southern California, it's possible that artifacts with tribal significance could be discovered in the Specific Plan Area in activities that involve ground disturbance. Therefore, these activities should be undertaken with care to adequately protect potential resources.

Please note that under our current schedule constraints, if we do not receive input from you on the historical language **before Monday, April 24, 2017,** we will plan to include the text as indicated.

This concludes our consultation. If you have any questions or need further information, please feel free to contact me.

Again thanks,
Leon

C-3 NAHC Sacred Lands File Search

626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300 phone
213.599.4301 fax

www.esassoc.com

January 26, 2017

Gayle Totton
Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
FAX 916.373.5471

Subject: SLF Search Request for the Willowbrook Transit Oriented Specific Plan Project, Community of Willowbrook, Los Angeles County, California (D130631.00)

Dear Ms. Tutton:

Environmental Science Associates (ESA) is preparing a Program Environmental Impact Report (PEIR) for the proposed Willowbrook Transit Oriented Specific Plan. The Specific Plan area is approximately 312 acres and is located within the northwestern portion of the unincorporated Willowbrook community. The proposed Specific Plan would amend General Plan Land Use designations of several individual parcels to provide consistency with the General Plan policy direction for mixed use parcels along transportation corridors. In addition, the proposed Specific Plan would facilitate transit oriented development by establishing a new Specific Plan zone for the project area. Within the Specific Plan zone, new designations for land uses would be implemented. Further, minor changes/improvements to the existing street system would be implemented to improve access, circulation, and walkability between the major land uses within the Specific Plan area, such as the MLK Medical Center, CDU, Kenneth Hahn Plaza, Willowbrook Library, Martin Luther King, Jr. Center for Public Health, and the Willowbrook/Rosa Parks Metro Station. The specific plan area is currently developed.

The enclosed map shows the specific plan project area located in:

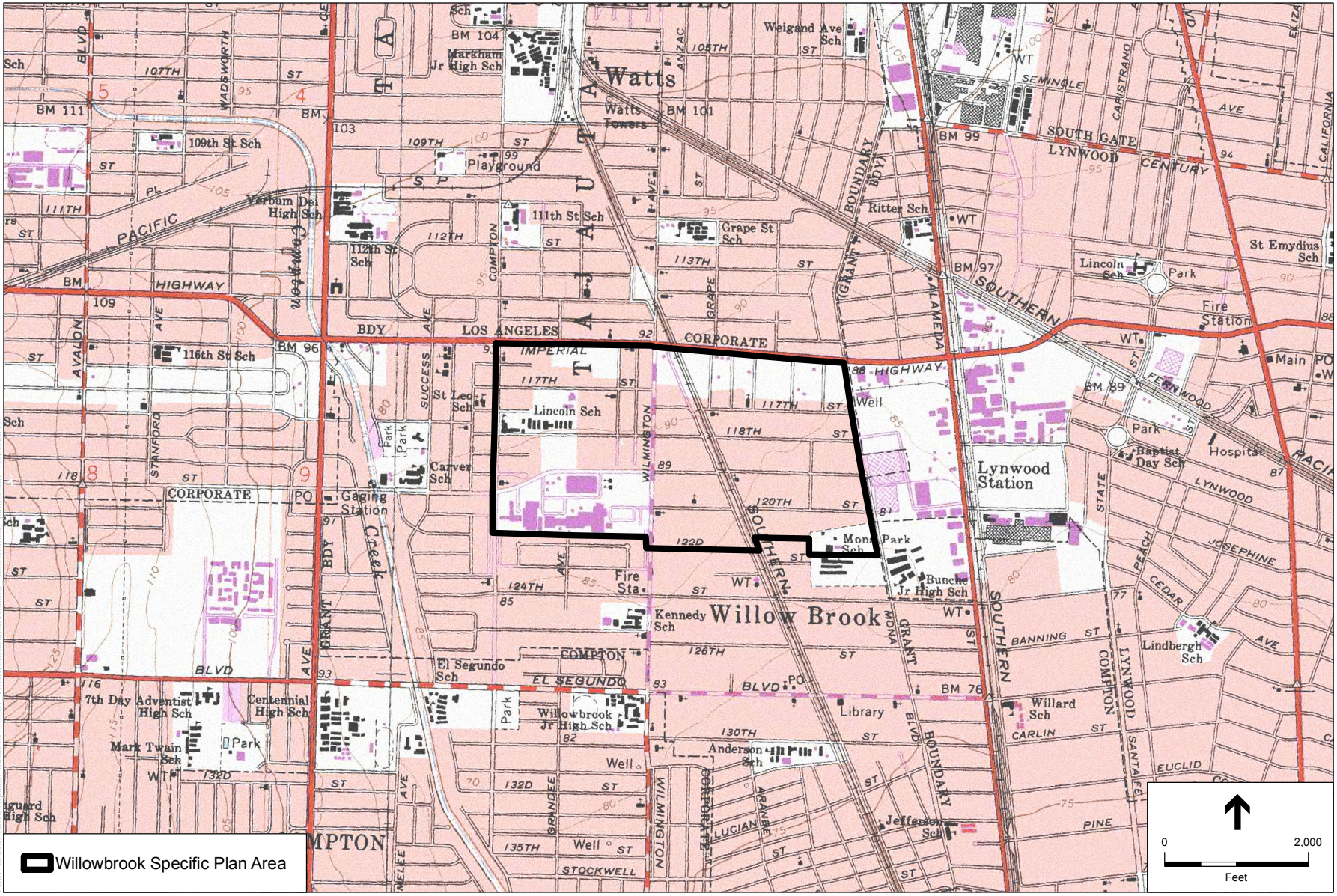
- Un-sectioned area of the South Gate USGS 7.5' Quadrangle, Township 3 South, Range 13 West.

In an effort to provide an adequate appraisal of all potential impacts to cultural resources that may result from the proposed project, ESA is requesting that a records search be conducted for sacred lands or traditional cultural properties that may exist within the specific plan area.

Thank you for your time. To expedite delivery of search results, please email them to aabdelwahed@esassoc.com or fax 949.753.7002. Please contact me at 213.542.6041 or email if you have any questions.

Sincerely,

Arabesque Said-Abdelwahed, MPP
Senior Associate



SOURCE: South Gate and Inglewood Topoquads

Willowbrook Transit Orientated District Specific Plan . D130631

Figure 1

Record Search

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
Fax (916) 373-5471

January 30, 2017

Arabesque Said-Abdelwahed, MMP, Senior Associate
ES Associates

Sent by Email: aabdelwahed@esassoc.com

RE: Proposed Willowbrook Transit Oriented Specific Plan Project, Community of Willowbrook; South Gate USGS Quadrangle, Los Angeles County, California

Dear Ms. Said-Abdelwahed:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

Native American Heritage Commission
Tribal Contact List
Los Angeles County
1/30/2017

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chariperson
P.O. Box 393 Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
gabrielenoindians@yahoo.com

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 Gabrieleno
San Gabriel, CA, 91778
Phone: (626)483-3564
Fax: (626)286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 Gabrielino
Los Angeles, CA, 90012
Phone: (951)807-0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
1999 Avenue of the Stars, Suite 1100 Gabrielino
Los Angeles, CA, 90067
Phone: (626)676-1184

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Willowbrook Transit Oriented Specific Plan Project, Los Angeles County.

C-4 Paleontological Records Search Results

ESA

2121 Alton Parkway
Suite 100
Irvine, CA 92606
949.753.7001 phone
949.753.7002 fax

www.esassoc.com

January 3, 2017

Dr. Sam McLeod
Natural History Museum of Los Angeles County
Vertebrate Paleontology
900 Exposition Blvd.
Los Angeles, CA 90007
213.763.3325

Subject: Request for a Database Search for the Willowbrook Transit Oriented District Specific Plan Project, Community of Willowbrook, Los Angeles County, California (D130631.00)

Dear Dr. McLeod:

Environmental Science Associates (ESA) is preparing a Program Environmental Impact Report (PEIR) for the Willowbrook Transit Oriented District Specific Plan (Project). The Specific Plan is a County-initiated, Los Angeles County Metropolitan Transit Authority (Metro) grant-funded project that is being proposed pursuant to the County General Plan to enhance the transit oriented development pattern, promote active transportation, reduce vehicle miles traveled, and improve the public realm in the Willowbrook area.

The Specific Plan area is approximately 312 acres and is located within the northwestern portion of the Willowbrook community, in unincorporated Los Angeles County. The Specific Plan area generally encompasses parcels located south of Imperial Highway, north of East 122nd Street, east of Compton Avenue, and west of South Mona Boulevard. The Specific Plan contains a range of land uses, including: residential, retail, office, educational, institutional facilities, and service facilities.

The enclosed map shows the Project area located in:

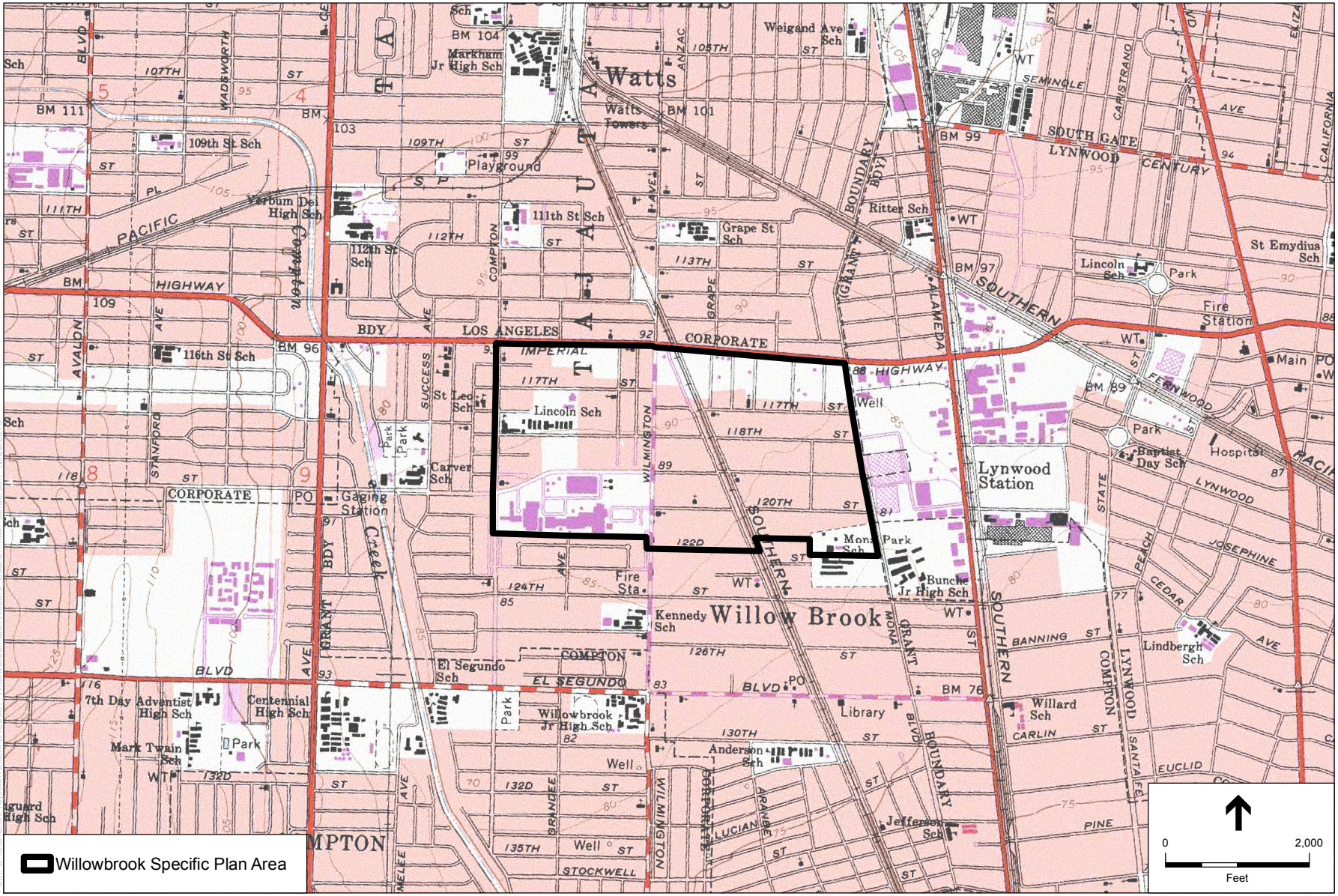
- Un-sectioned area of the South Gate USGS 7.5' Quadrangle, Township 3 South, Range 13 West.

In an effort to provide an adequate appraisal of all potential impacts that may result from the proposed Project, ESA is requesting that a paleontological resource records search be conducted for paleontological resources that may exist within the Project area.

Thank you for your time and cooperation regarding this matter. To expedite the delivery of search results, please email them to aabdelwahed@esassoc.com. Please contact me at 213.599.4300 or email if you have any questions.

Sincerely,

Arabesque Said-Abdelwahed, MPP
Senior Associate



SOURCE: South Gate and Inglewood Topoquads

Willowbrook Transit Orientated District Specific Plan . D130631

Figure 1

Record Search

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

NATURAL HISTORY MUSEUM
LOS ANGELES COUNTY

Vertebrate Paleontology Section
Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

17 January 2017

ESA
2121 Alton Parkway, Suite 100
Irvine, CA 92606

Attn: Arabesque Said-Abdelwahed, Senior Associate

re: Paleontological resources for the proposed Willowbrook Transit Oriented District Specific Plan Project, ESA Project # D130631.00, in the Community of Willowbrook, Los Angeles County, project area

Dear Arabesque:

I have thoroughly searched our paleontology collection records for the locality and specimen data for the proposed Willowbrook Transit Oriented District Specific Plan Project, ESA Project # D130631.00, in the Community of Willowbrook, Los Angeles County, project area as outlined on the portion of the South Gate USGS topographic quadrangle map that you sent to me via e-mail on 3 January 2017. We do not have any vertebrate fossil localities that occur directly within the proposed project area, but we do have localities somewhat nearby from the same type of sediments that probably occur as subsurface deposits in the proposed project area.

The entire proposed project site area has surface deposits composed of younger Quaternary Alluvium, derived as fluvial deposits from the floodplain of the Los Angeles River that currently flows in a concrete channel just to the east and from Compton Creek that currently flows just to the west. These younger Quaternary deposits usually do not contain significant fossil vertebrate remains, at least in the uppermost layers, but the underlying older Quaternary deposits found at varying depths may well contain significant vertebrate fossils. Our closest vertebrate fossil locality from these older Quaternary deposits is probably LACM 4685, southwest of the proposed project area between 135th and 136th Streets just east of Avalon

Boulevard, that produced a fossil specimen of undetermined elephantoid, Proboscidea, from an unstated depth.

Our next closest vertebrate fossil localities from these older Quaternary deposits, LACM 1344, 3266 and 3365, all occurring just south of west of the southern portion of the proposed project area around the Harbor Freeway and Athens on the Hill, produced fossil specimens of mammoth, *Mammuthus*, squirrel, Sciuridae, horse, *Equus*, and pronghorn antelope, *Breameryx*, at depths between 15 and 20 feet below the surface. Just north of west of the northern portion of the proposed project area, at the Harbor Freeway (I-110) between 112th and 113th Streets and along Imperial Highway near Main Street, we have additional older Quaternary localities LACM 1295 and 4206 that produced a typical late Pleistocene fauna including fossil specimens of pond turtle, *Clemmys*, puffin, *Mancalla*, turkey, *Parapavo*, ground sloth, *Paramylodon*, mammoth, *Mammuthus*, dire wolf, *Canis dirus*, rabbit, *Sylvilagus*, squirrel, Sciuridae, deer mouse, *Microtus*, pocket gopher, *Thomomys*, horse, *Equus*, deer, *Cervus*, pronghorn antelope, *Capromeryx*, and bison, *Bison*, at unstated but relatively shallow depths. A little further away but directly south of the proposed project area east of Wilmington Boulevard and north of Artesia Boulevard, we have locality LACM 3382 that produced a fossil specimen of mammoth Mammuthus, at a depth of approximately five feet below the surface.

Shallow excavations in the younger Quaternary Alluvium exposed throughout the proposed project area are unlikely to uncover significant vertebrate fossils. Deeper excavations that extend down into older Quaternary deposits, however, possibly as shallow as five feet in depth, may well encounter significant fossil vertebrate remains. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils collected should be placed in an accredited scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod

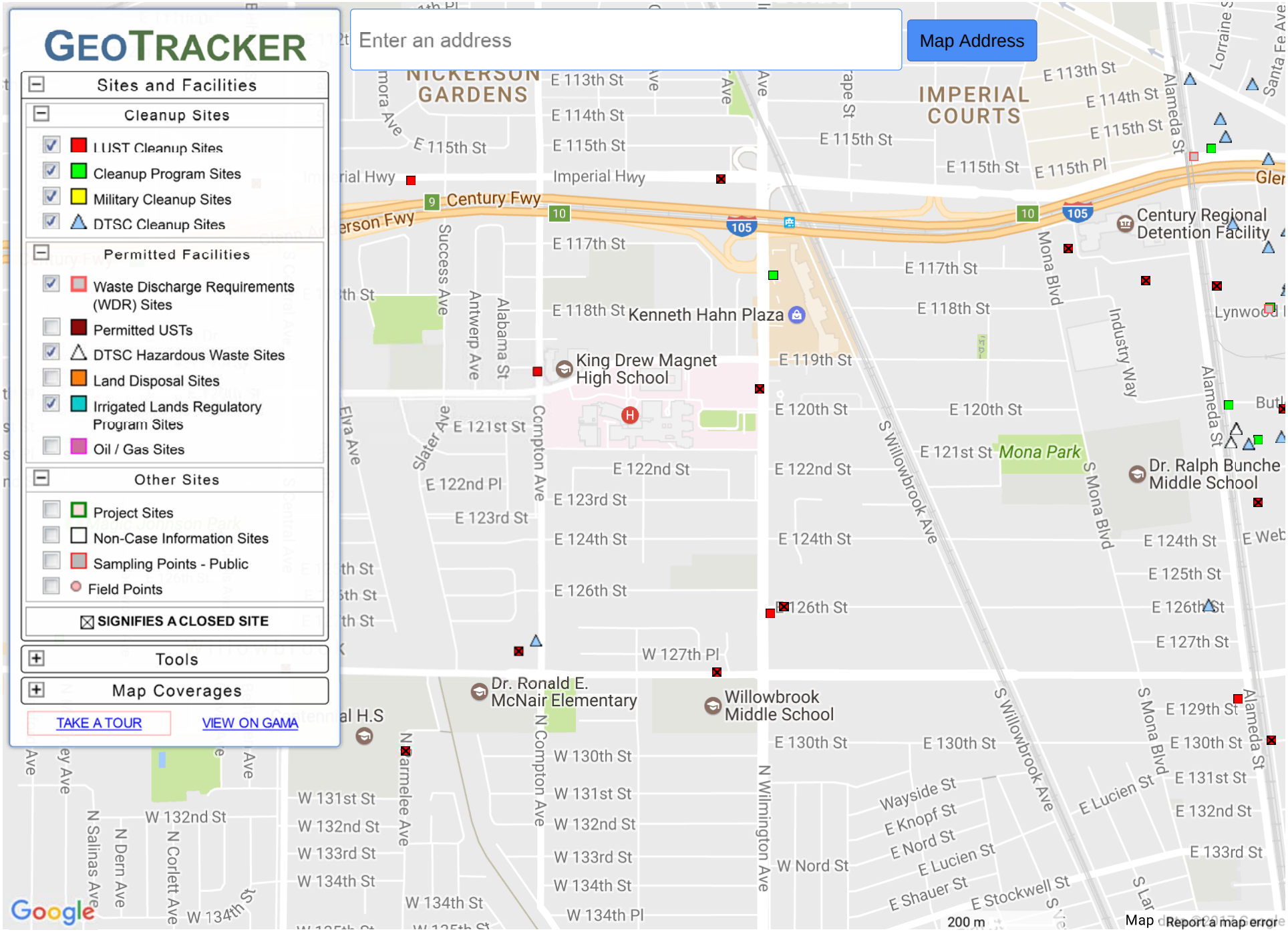
Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice

Appendix D

Hazardous Materials Database Search Results

ESA


GEOTRACKER
Enter an address
Map Address
Sites and Facilities
Cleanup Sites
LUST Cleanup Sites
Cleanup Program Sites
Military Cleanup Sites
DTSC Cleanup Sites
Permitted Facilities
Waste Discharge Requirements (WDR) Sites
Permitted USTs
DTSC Hazardous Waste Sites
Land Disposal Sites
Irrigated Lands Regulatory Program Sites
Oil / Gas Sites
Other Sites
Project Sites
Non-Case Information Sites
Sampling Points - Public
Field Points
SIGNIFIES A CLOSED SITE
Tools
Map Coverages
TAKE A TOUR
VIEW ON GAMA
NICKERSON GARDENS
IMPERIAL COURTS
Century Fwy
Imperial Hwy
Century Regional Detention Facility
Kenneth Hahn Plaza
King Drew Magnet High School
Mona Park
Dr. Ralph Bunche Middle School
Dr. Ronald E. McNair Elementary
Willowbrook Middle School
E 113th St
E 114th St
E 115th St
E 115th Pl
E 117th St
E 118th St
E 119th St
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Success Ave
Antwerp Ave
Alabama St
Slater Ave
Compton Ave
Elva Ave
Mona Blvd
Industry Way
Alameda St
S Willowbrook Ave
N Wilmington Ave
Wayside St
E Knopf St
E Nord St
E Lucien St
E Shauer St
W Nord St
E Stockwell St
N Carmelee Ave
N Salinas Ave
N Dern Ave
N Corlett Ave
Google
200 m
Map data ©2017 Google
Report a map error
SITES CURRENTLY VISIBLE ON MAP

GeoTracker Hazardous Materials Sites List

SITE NAME	GLOBAL ID	SITE_TYPE	STATUS	ADDRESS	CITY	LATITUDE	LONGITUDE
2700 EAST IMPERIAL HIGHWAY, INC	60001258	VOLUNTARY CLEANUP	NO FURTHER ACTION	2700 EAST IMPERIAL HIGHWAY	LYNWOOD	33.92994	-118.22282
3000 EAST IMPERIAL PROJECT	60000653	VOLUNTARY CLEANUP	ACTIVE	3000 EAST IMPERIAL HIGHWAY	LYNWOOD	33.9301082	-118.21771
AAA PLATING & INSPECTION	71002452	EVALUATION	INACTIVE - NEEDS EVALUATION	424 DIXON STREET	COMPTON	33.9213669	-118.22161
BESTWAY TRANSPORTATION	T0603703843	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	575 WEBER ST E	COMPTON	33.92119	-118.219421
BOWMAN PLATING CO., INC.	71002231	VOLUNTARY CLEANUP	ACTIVE	2631 E. 126TH STREET	COMPTON	33.918047	-118.22472
BROWN AND BROWN MACHINE CO.	T0603704185	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	3200 ALAMEDA ST N	COMPTON	33.920782	-118.223135
CALTRANS - WITCO CHEMICAL CO. (FORMER)	T0603701301	CLEANUP PROGRAM SITE	OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	2601 E. IMPERIAL HIGHWAY	LYNWOOD	33.930231	-118.224656
CALTRANS WITCO	60000486	VOLUNTARY CLEANUP	ACTIVE	2601 E. EMPERIAL HWY.	LYNWOOD	33.927589	-118.22282
CHEMICAL TECHNOLOGY LABS	80001543	CORRECTIVE ACTION	ACTIVE	12150 S ALAMEDA ST	LYNWOOD	33.922749	-118.22384
CHEROKEE TRUCKING	19470007	EVALUATION	NO FURTHER ACTION	414 EAST BANNING STREET	COMPTON	33.9177288	-118.2214
CITY OF LYNWOOD REDEVELOPMENT - PHASE II (PLAZA MEXICO EXTENSION)	60001357	EVALUATION	ACTIVE	AREA BETWEEN IMPERIAL HIGHWAY, STATE STREET AND 105 FREEWAY	LYNWOOD	33.9301082	-118.21771
CITY OF LYNWOOD REDEVELOPMENT PHASE I (ALAMEDA TRIANGLE)	60001308	VOLUNTARY CLEANUP	ACTIVE	NORTHEAST CORNER OF ALAMEDA STREET & IMPERIAL HIGHWAY	LYNWOOD	33.9310051	-118.22434
COORDINATED RIDLEY TRUSTS	T0603704449	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	2903 LYNWOOD RD	LYNWOOD	33.9260244	-118.2209999
DV INDUSTRIES, INC.	71002759	TIERED PERMIT	REFER: OTHER AGENCY	2605 INDUSTRY WAY	LYNWOOD	33.9240739	-118.22647
DV INDUSTRIES, INC.	71003813	TIERED PERMIT	REFER: OTHER AGENCY	2588 INDUSTRY WAY	LYNWOOD	33.923565	-118.22808
FLASK CHEMICAL CO.	T0603705067	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	11642 MONA BLVD	LYNWOOD	33.92756	-118.229266
FORMER ATHENS TANK FARM/FORMER UJIMA VILLAGE & APARTMENTS	19290308	VOLUNTARY CLEANUP	ACTIVE	941 EAST 126TH STREET	LOS ANGELES	33.919905	-118.25643
GREG BELL TRUCKING CO	T10000000186	LUST CLEANUP SITE	OPEN - SITE ASSESSMENT	430 WEBER AVE. E.	COMPTON	33.919594	-118.221093
H M GREENFIELD AND SONS INC	T0603703850	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	522 WEBER AVE E	COMPTON	33.9200235	-118.2204768
HOOPER TEXACO SERVICE	T0603704553	LUST CLEANUP SITE	OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	11913 COMPTON AVE S	LOS ANGELES	33.9242817	-118.2463258
IDEAL METALS PROCESSING	T0603704183	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	1437 EL SEGUNDO BLVD W	COMPTON	33.9168329	-118.246922
JESSE BELL	T0603704207	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	1916 126TH ST E	WILLOWBROOK	33.9180075	-118.2383703
KENNETH HAHN PLAZA	SLT43677675	CLEANUP PROGRAM SITE	OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	11700 S. WILMINGTON AVE	LOS ANGELES	33.92683005	-118.2387444
LINDBERGH ELEMENTARY SCHOOL	19880079	SCHOOL	NO FURTHER ACTION	3171-3215 EL SEGUNDO BOULEVARD	LYNWOOD	33.9174	-118.2146
LOGISTICS EXPRESS	T0603704380	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	11711 ALAMEDA ST S	LYNWOOD	33.926699	-118.226745
LYNWOOD FACILITY	WDR100007622	* WDR SITE	ACTIVE - WDR	2801 LYNWOOD ROAD	LYNWOOD	33.92595	-118.22282
LYNWOOD TSI #1	70000022	EVALUATION	INACTIVE - NEEDS EVALUATION	11400, 11410, 11420 SOUTH ALAMEDA AVENUE	LYNWOOD	33.93206	-118.22533
LYNWOOD TSI #2	70000021	EVALUATION	INACTIVE - ACTION REQUIRED	FERNWOOD AVENUE OF THE ALAMEDA TRIANGLE	LYNWOOD	33.931944	-118.22333
MAGNETEK	60000484	VOLUNTARY CLEANUP	ACTIVE	11510 S. ALAMEDA STREET	LYNWOOD	33.930549	-118.22416
MARTIN LUTHER KING JR HOSPITAL	T0603705300	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	12021 WILMINGTON AVE S	WILLOWBROOK	33.9238136	-118.239165
MARTIN METAL FINISHING	SL2043E1562	CLEANUP PROGRAM SITE	OPEN - INACTIVE	12150 SOUTH ALAMEDA ST	LYNWOOD	33.92245893	-118.2231688
MARTIN METAL FINISHING	T0603704973	CLEANUP PROGRAM SITE	OPEN - INACTIVE	12150 ALAMEDA ST S	LYNWOOD	33.9234015	-118.224093
MARTIN METAL FINISHING INC.	80001435	CORRECTIVE ACTION	ACTIVE	12150 S ALAMEDA ST	LYNWOOD	33.9223698	-118.22345
MCWHORTER TECH/ CARGILL CHEM.	T0603701300	CLEANUP PROGRAM SITE	OPEN - INACTIVE	2801 LYNWOOD RD	LYNWOOD	33.9259854	-118.22274
MICHAEL'S FURNITURE MFG. CO.	T0603705063	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	2828 BUTLER AVE	LYNWOOD	33.9232935	-118.2223499
MOBIL (FORMER)	T0603704325	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	1836 IMPERIAL HWY E	LOS ANGELES	33.9294145	-118.2404056
MONTGOMERY WARDS	T0603705101	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	3100 IMPERIAL HWY E	LYNWOOD	33.929226	-118.214942
NATIONAL CYLINDER GAS CO.	80001109	FUDS	INACTIVE - NEEDS EVALUATION		LOS ANGELES	33.9333333	-118.23083
PCCR USA INC.	80001674	CORRECTIVE ACTION	ACTIVE	2801 LYNWOOD RD	LYNWOOD	33.9264383	-118.22219
POLYNT COMPOSITES USA INC	3000252	INSPECTION	NO ACTION	2801 LYNWOOD RD	LYNWOOD	33.9266078	-118.22218
POLYNT COMPOSITES USA INC	CAD076180843	RCRA	UNDERGOING CLOSURE	2801 LYNWOOD RD	LYNWOOD	33.926689	-118.22193
PROCESSES BY MARTIN INC	CAD059794974	RCRA	UNDERGOING CLOSURE	12150 S ALAMEDA ST	LYNWOOD	33.922385	-118.22402
PROCESSES BY MARTIN INC	CAD008275885	RCRA	UNDERGOING CLOSURE	12150 S ALAMEDA ST	LYNWOOD	33.922749	-118.22384
PROCESSES BY MARTIN INC	3000019	INSPECTION	NO ACTION	12150 S ALAMEDA ST	LYNWOOD	33.9225301	-118.22239
PROCESSES BY MARTIN INC	3000983	INSPECTION	NO ACTION	12150 S ALAMEDA ST	LYNWOOD	33.922749	-118.22384
PROPERTY @ 3000 E. IMPERIAL LLC	WDR100001833	* WDR SITE	ACTIVE - WDR	3000 EAST IMPERIAL HIGHWAY	LYNWOOD	33.93011	-118.21773
QUALITY METALS REFINISHING	T0603703831	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	11754 ALAMEDA ST S	LYNWOOD	33.9265404	-118.2244641
S & K PLATING COMPANY	60001461	EVALUATION	INACTIVE - ACTION REQUIRED	2727 NORTH COMPTON AVENUE 2727 NORTH COMPTON AVENUE	COMPTON	33.91712	-118.24638
S&K INDUSTRIES, INC.	71003327	TIERED PERMIT	REFER: OTHER AGENCY	1821 W. EL SEGUNDO BOULEVARD	COMPTON	33.9168469	-118.25165
SHELL #204-4531-4105	T0603701148	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	1150 IMPERIAL HWY E	LOS ANGELES	33.9293006	-118.2553301
TMB OIL	T0603774661	LUST CLEANUP SITE	OPEN - REMEDIATION	1340 IMPERIAL HWY E.	WILLOWBROOK	33.929363	-118.250357
UJIMA VILLAGE APARTMENTS / FORMER ATHENS TANK FARM	SLT4L3741812	CLEANUP PROGRAM SITE	OPEN - REMEDIATION	941 EAST 126TH ST	LOS ANGELES	33.91715274	-118.2616425
UNOCAL #5840	T0603701150	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	611 IMPERIAL HWY E	LOS ANGELES	33.9310716	-118.2646594
USF BESTWAY	T0603761502	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	575 WEBER ST. E.	COMPTON	33.921163	-118.219421
WESTECH LYNWOOD SITE	60002028	VOLUNTARY CLEANUP	ACTIVE	2600 EAST IMPERIAL HIGHWAY	LYNWOOD	33.928237	-118.22396
WESTECH SITE	WDR100039476	* WDR SITE	ACTIVE - WDR	2600 EAST IMPERIAL HIGHWAY	LYNWOOD	33.93002	-118.22521
WESTERN GEAR WORKS	80000673	FUDS	INACTIVE - NEEDS EVALUATION		LOS ANGELES	33.9280555	-118.22222
WESTERN WASTE INDUSTRIAL	T0603703847	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	407 EL SEGUNDO BLVD E	COMPTON	33.9164094	-118.2215112
WILLOW APARTMENTS	SL204DG2390	LUST CLEANUP SITE	OPEN - REMEDIATION	12612 SOUTH WILMINGTON STREET	COMPTON	33.91782048	-118.238833

Appendix E
Noise Modeling

ESA

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Avalon Boulevard n/o Imperial Hwy	40			18350	70.1	67.6	66.1	71.3	68.9	67.3
Avalon Boulevard between Imperial Hwy and Rosecrans Ave	40			17490	69.5	67.2	65.7	70.7	68.4	66.9
Central Avenue between Century Blvd and 108th St	40			28050	71.5	69.2	67.8	72.7	70.5	69.0
Central Avenue between 108th St and 120th St	40			24370	71.3	68.9	67.3	72.5	70.1	68.5
Central Avenue between 120th St and Rosecrans Ave	40			21990	70.5	68.2	66.7	71.7	69.4	67.9
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Avalon Boulevard n/o Imperial Hwy	40			20550	70.6	68.1	66.6	71.8	69.3	67.8
Avalon Boulevard between Imperial Hwy and Rosecrans Ave	40			18710	69.8	67.5	66.0	71.0	68.7	67.2
Central Avenue between Century Blvd and 108th St	40			31770	72.1	69.8	68.3	73.3	71.0	69.5
Central Avenue between 108th St and 120th St	40			27980	71.9	69.5	67.9	73.1	70.7	69.1
Central Avenue between 120th St and Rosecrans Ave	40			25470	71.1	68.8	67.3	72.3	70.0	68.6
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Avalon Boulevard n/o Imperial Hwy	40			21250	70.7	68.3	66.7	71.9	69.5	67.9
Avalon Boulevard between Imperial Hwy and Rosecrans Ave	40			19450	69.9	67.7	66.2	71.1	68.9	67.4
Central Avenue between Century Blvd and 108th St	40			32760	72.2	69.9	68.4	73.4	71.1	69.7
Central Avenue between 108th St and 120th St	40			38110	73.3	70.8	69.3	74.5	72.0	70.5
Central Avenue between 120th St and Rosecrans Ave	40			26630	71.3	69.0	67.5	72.5	70.2	68.8

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Avalon Boulevard n/o Imperial Hwy	0.2	0.6	0.1	0.6
Avalon Boulevard between Imperial Hwy and Rosecrans Ave	0.2	0.5	0.2	0.5
Central Avenue between Century Blvd and 108th St	0.1	0.6	0.2	0.7
Central Avenue between 108th St and 120th St	1.3	1.9	1.4	2.0
Central Avenue between 120th St and Rosecrans Ave	0.2	0.8	0.2	0.9

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Compton Avenue between Century Blvd and 120th St	40			13270	68.7	66.2	64.7	69.9	67.4	65.9
Compton Avenue between 120th St and El Segundo Blvd	40			9810	67.0	64.7	63.2	68.2	65.9	64.4
Wilmington Avenue between Century Blvd and 112th St	35			14800	68.9	66.0	64.2	70.2	67.2	65.4
Wilmington Avenue between 112th St and I-105	35			16670	69.5	66.5	64.7	70.7	67.7	65.9
Wilmington Avenue between I-105 and 119th St	40			22090	72.5	69.3	67.5	73.8	70.5	68.7
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Compton Avenue between Century Blvd and 120th St	40			13390	68.7	66.3	64.7	69.9	67.5	65.9
Compton Avenue between 120th St and El Segundo Blvd	40			10000	67.0	64.8	63.3	68.3	66.0	64.5
Wilmington Avenue between Century Blvd and 112th St	35			16350	69.4	66.4	64.6	70.6	67.6	65.9
Wilmington Avenue between 112th St and I-105	35			17650	69.7	66.7	65.0	70.9	67.9	66.2
Wilmington Avenue between I-105 and 119th St	40			23430	72.8	69.6	67.7	74.0	70.8	68.9
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Compton Avenue between Century Blvd and 120th St	40			17910	70.0	67.5	66.0	71.2	68.7	67.2
Compton Avenue between 120th St and El Segundo Blvd	40			12470	68.0	65.7	64.2	69.2	66.9	65.5
Wilmington Avenue between Century Blvd and 112th St	35			16790	69.5	66.5	64.8	70.7	67.7	66.0
Wilmington Avenue between 112th St and I-105	35			22520	70.8	67.8	66.0	72.0	69.0	67.3
Wilmington Avenue between I-105 and 119th St	40			33740	74.4	71.1	69.3	75.6	72.4	70.5

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Compton Avenue between Century Blvd and 120th St	1.2	1.3	1.3	1.3
Compton Avenue between 120th St and El Segundo Blvd	0.9	1.0	1.0	1.1
Wilmington Avenue between Century Blvd and 112th St	0.1	0.5	0.1	0.6
Wilmington Avenue between 112th St and I-105	1.1	1.3	1.1	1.4
Wilmington Avenue between I-105 and 119th St	1.6	1.9	1.6	1.8

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Wilmington Avenue between 119th St and Rosecrans Ave	40			19700	70.0	67.7	66.2	71.2	68.9	67.4
Mona Boulevard between Imperial Hwy and 119th St	40			9680	69.0	65.7	63.9	70.2	66.9	65.1
Alameda Street between 103rd and Imperial Hwy	40			23840	72.4	69.4	67.7	73.6	70.6	68.9
Alameda Street between Imperial Hwy and Rosecrans Ave	40			20480	71.7	68.7	67.0	72.9	70.0	68.2
103rd Street w/o Central Ave	40			6130	65.3	62.9	61.3	66.5	64.1	62.5
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Wilmington Avenue between 119th St and Rosecrans Ave	40			20300	70.1	67.8	66.4	71.3	69.1	67.6
Mona Boulevard between Imperial Hwy and 119th St	40			9680	69.0	65.7	63.9	70.2	66.9	65.1
Alameda Street between 103rd and Imperial Hwy	40			23930	72.4	69.4	67.7	73.6	70.6	68.9
Alameda Street between Imperial Hwy and Rosecrans Ave	40			20500	71.7	68.8	67.0	73.0	70.0	68.2
103rd Street w/o Central Ave	40			6780	65.8	63.3	61.8	67.0	64.5	63.0
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Wilmington Avenue between 119th St and Rosecrans Ave	40			25450	71.1	68.8	67.3	72.3	70.0	68.6
Mona Boulevard between Imperial Hwy and 119th St	40			10190	69.2	65.9	64.1	70.4	67.2	65.3
Alameda Street between 103rd and Imperial Hwy	40			25660	72.7	69.7	68.0	73.9	70.9	69.2
Alameda Street between Imperial Hwy and Rosecrans Ave	40			20660	71.8	68.8	67.0	73.0	70.0	68.2
103rd Street w/o Central Ave	40			6830	65.8	63.3	61.8	67.0	64.6	63.0

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Wilmington Avenue between 119th St and Rosecrans Ave	0.9	1.1	1.0	1.2
Mona Boulevard between Imperial Hwy and 119th St	0.3	0.3	0.2	0.2
Alameda Street between 103rd and Imperial Hwy	0.3	0.3	0.3	0.3
Alameda Street between Imperial Hwy and Rosecrans Ave	0.0	0.0	0.0	0.0
103rd Street w/o Central Ave	0.1	0.5	0.0	0.5

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
103rd Street between Central Ave and Wilmington Ave	40			10970	67.4	65.2	63.7	68.7	66.4	64.9
103rd Street between Wilmington Ave Alameda St	35			9080	66.8	63.8	62.1	68.0	65.1	63.3
112th Street between Railroad and Mona Blvd	35			990	57.2	54.2	52.5	58.4	55.4	53.7
Imperial Highway between San Pedro St and Avalon Blvd	40			23590	70.1	68.1	66.7	71.3	69.3	67.9
Imperial Highway between Avalon Blvd and Slater Ave	40			32090	71.5	69.4	68.1	72.7	70.7	69.3
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
103rd Street between Central Ave and Wilmington Ave	40			12130	67.9	65.6	64.1	69.1	66.8	65.3
103rd Street between Wilmington Ave Alameda St	35			10100	67.3	64.3	62.6	68.5	65.5	63.8
112th Street between Railroad and Mona Blvd	35			1070	57.5	54.6	52.8	58.7	55.8	54.0
Imperial Highway between San Pedro St and Avalon Blvd	40			25780	70.5	68.5	67.1	71.7	69.7	68.3
Imperial Highway between Avalon Blvd and Slater Ave	40			35370	71.9	69.9	68.5	73.1	71.1	69.7
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
103rd Street between Central Ave and Wilmington Ave	40			12160	67.9	65.6	64.1	69.1	66.8	65.3
103rd Street between Wilmington Ave Alameda St	35			10270	67.4	64.4	62.6	68.6	65.6	63.8
112th Street between Railroad and Mona Blvd	35			2240	60.7	57.8	56.0	62.0	59.0	57.2
Imperial Highway between San Pedro St and Avalon Blvd	40			27660	70.8	68.8	67.4	72.0	70.0	68.6
Imperial Highway between Avalon Blvd and Slater Ave	40			37410	72.1	70.1	68.7	73.3	71.3	69.9

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
103rd Street between Central Ave and Wilmington Ave	0.0	0.4	0.0	0.4
103rd Street between Wilmington Ave Alameda St	0.1	0.5	0.0	0.5
112th Street between Railroad and Mona Blvd	3.2	3.6	3.2	3.5
Imperial Highway between San Pedro St and Avalon Blvd	0.3	0.7	0.3	0.7
Imperial Highway between Avalon Blvd and Slater Ave	0.2	0.6	0.2	0.6

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Imperial Highway between Slater Ave and Wilmington Ave	40			28730	71.6	69.3	67.9	72.8	70.6	69.1
Imperial Highway between Wilmington Ave and Alameda St	40			34110	71.7	69.7	68.3	72.9	70.9	69.5
Imperial Highway e/o Alameda St	40			23650	70.1	68.1	66.7	71.4	69.3	68.0
118th Street between Compton Ave and Wilmington Ave	35			4940	64.2	61.2	59.5	65.4	62.4	60.7
120th Street between San Pedro St and Central Ave	40			13230	69.2	66.5	64.9	70.4	67.7	66.1
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Imperial Highway between Slater Ave and Wilmington Ave	40			28960	71.7	69.4	67.9	72.9	70.6	69.1
Imperial Highway between Wilmington Ave and Alameda St	40			35330	71.9	69.9	68.5	73.1	71.1	69.7
Imperial Highway e/o Alameda St	40			24520	70.3	68.3	66.9	71.5	69.5	68.1
118th Street between Compton Ave and Wilmington Ave	35			13290	68.5	65.5	63.7	69.7	66.7	65.0
120th Street between San Pedro St and Central Ave	40			15120	69.7	67.1	65.4	71.0	68.3	66.7
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Imperial Highway between Slater Ave and Wilmington Ave	40			31340	72.0	69.7	68.2	73.2	70.9	69.5
Imperial Highway between Wilmington Ave and Alameda St	40			43100	72.7	70.7	69.3	74.0	71.9	70.6
Imperial Highway e/o Alameda St	40			25960	70.5	68.5	67.1	71.8	69.7	68.4
118th Street between Compton Ave and Wilmington Ave	35			13850	68.7	65.7	63.9	69.9	66.9	65.1
120th Street between San Pedro St and Central Ave	40			16530	70.1	67.5	65.8	71.3	68.7	67.0

CNEL

Summary	25 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Imperial Highway between Slater Ave and Wilmington Ave	0.3	0.3	0.3	0.4
Imperial Highway between Wilmington Ave and Alameda St	0.8	1.0	0.9	1.1
Imperial Highway e/o Alameda St	0.2	0.4	0.3	0.4
118th Street between Compton Ave and Wilmington Ave	0.2	4.5	0.2	4.5
120th Street between San Pedro St and Central Ave	0.4	1.0	0.3	0.9

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
120th Street between Central Ave and Compton Ave	40			16420	69.2	66.9	65.4	70.4	68.1	66.7
119th Street between Compton Ave and Wilmington Ave	35			14020	68.7	65.7	64.0	69.9	66.9	65.2
119th Street between Wilmington Ave and Willowbrook Ave	35			9660	67.1	64.1	62.4	68.3	65.3	63.6
119th Street between Willowbrook Ave and Mona Blvd	35			6020	65.0	62.1	60.3	66.2	63.3	61.5
El Segundo Boulevard between San Pedro St and Slater Ave	40			25090	70.4	68.4	67.0	71.6	69.6	68.2
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
120th Street between Central Ave and Compton Ave	40			17710	69.5	67.2	65.8	70.7	68.5	67.0
119th Street between Compton Ave and Wilmington Ave	35			14190	68.8	65.8	64.0	70.0	67.0	65.2
119th Street between Wilmington Ave and Willowbrook Ave	35			9660	67.1	64.1	62.4	68.3	65.3	63.6
119th Street between Willowbrook Ave and Mona Blvd	35			6020	65.0	62.1	60.3	66.2	63.3	61.5
El Segundo Boulevard between San Pedro St and Slater Ave	40			28760	71.0	69.0	67.6	72.2	70.2	68.8
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
120th Street between Central Ave and Compton Ave	40			22320	70.5	68.3	66.8	71.7	69.5	68.0
119th Street between Compton Ave and Wilmington Ave	35			19620	70.2	67.2	65.4	71.4	68.4	66.7
119th Street between Wilmington Ave and Willowbrook Ave	35			10270	67.4	64.4	62.6	68.6	65.6	63.8
119th Street between Willowbrook Ave and Mona Blvd	35			6490	65.4	62.4	60.6	66.6	63.6	61.9
El Segundo Boulevard between San Pedro St and Slater Ave	40			29380	71.1	69.1	67.7	72.3	70.3	68.9

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
	Project	Cumulative	Project	Cumulative
Roadway/Segment	Increment	Increment	Increment	Increment
120th Street between Central Ave and Compton Ave	1.0	1.4	1.0	1.3
119th Street between Compton Ave and Wilmington Ave	1.4	1.5	1.5	1.5
119th Street between Wilmington Ave and Willowbrook Ave	0.3	0.3	0.2	0.2
119th Street between Willowbrook Ave and Mona Blvd	0.3	0.3	0.4	0.4
El Segundo Boulevard between San Pedro St and Slater Ave	0.1	0.7	0.1	0.7

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
El Segundo Boulevard between Slater Ave and Wilmington Ave	40			23840	70.8	68.5	67.1	72.0	69.8	68.3
El Segundo Boulevard between Wilmington Ave and Alameda Ave	40			15500	68.9	66.7	65.2	70.2	67.9	66.4
Rosecrans Avenue between San Pedro St and Willowbrook Ave	40			22220	70.5	68.2	66.7	71.7	69.4	68.0
Rosecrans Avenue between Willowbrook Ave and Alameda Ave	40			24330	70.9	68.6	67.1	72.1	69.8	68.4
I-105 between Compton Ave and Mona Blvd	65			101360	80.4	78.8	77.7	81.6	80.0	78.9
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
El Segundo Boulevard between Slater Ave and Wilmington Ave	40			24840	71.0	68.7	67.2	72.2	69.9	68.4
El Segundo Boulevard between Wilmington Ave and Alameda Ave	40			16200	69.1	66.9	65.4	70.3	68.1	66.6
Rosecrans Avenue between San Pedro St and Willowbrook Ave	40			22930	70.6	68.4	66.9	71.9	69.6	68.1
Rosecrans Avenue between Willowbrook Ave and Alameda Ave	40			25040	71.0	68.8	67.3	72.2	70.0	68.5
I-105 between Compton Ave and Mona Blvd	65			111210	80.8	79.2	78.1	82.0	80.4	79.3
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
El Segundo Boulevard between Slater Ave and Wilmington Ave	40			27090	71.4	69.1	67.6	72.6	70.3	68.8
El Segundo Boulevard between Wilmington Ave and Alameda Ave	40			17560	69.5	67.2	65.7	70.7	68.4	66.9
Rosecrans Avenue between San Pedro St and Willowbrook Ave	40			24110	70.9	68.6	67.1	72.1	69.8	68.3
Rosecrans Avenue between Willowbrook Ave and Alameda Ave	40			26410	71.3	69.0	67.5	72.5	70.2	68.7
I-105 between Compton Ave and Mona Blvd	65			114940	80.9	79.4	78.2	82.1	80.6	79.4

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
El Segundo Boulevard between Slater Ave and Wilmington Ave	0.4	0.5	0.4	0.5
El Segundo Boulevard between Wilmington Ave and Alameda Ave	0.3	0.5	0.3	0.5
Rosecrans Avenue between San Pedro St and Willowbrook Ave	0.2	0.4	0.2	0.3
Rosecrans Avenue between Willowbrook Ave and Alameda Ave	0.2	0.4	0.2	0.3
I-105 between Compton Ave and Mona Blvd	0.2	0.6	0.1	0.5

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Roadway/Segment	Speed MPH	Traffic Volumes AM	PM	ADT	Leq ROW	Leq 25 Feet	Leq 50 Feet	CNEL ROW	CNEL 25 Feet	CNEL 50 Feet
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
Existing										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Avalon Boulevard n/o Imperial Hwy	40			18350	70.1	67.6	66.1	71.3	68.9	67.3
Avalon Boulevard between Imperial Hwy and Rosecrans Ave	40			17490	69.5	67.2	65.7	70.7	68.4	66.9
Central Avenue between Century Blvd and 108th St	40			28050	71.5	69.2	67.8	72.7	70.5	69.0
Central Avenue between 108th St and 120th St	40			24370	71.3	68.9	67.3	72.5	70.1	68.5
Central Avenue between 120th St and Rosecrans Ave	40			21990	70.5	68.2	66.7	71.7	69.4	67.9
Existing With Project										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Avalon Boulevard n/o Imperial Hwy	40			19050	70.2	67.8	66.2	71.5	69.0	67.5
Avalon Boulevard between Imperial Hwy and Rosecrans Ave	40			18230	69.6	67.4	65.9	70.9	68.6	67.1
Central Avenue between Century Blvd and 108th St	40			29040	71.7	69.4	67.9	72.9	70.6	69.1
Central Avenue between 108th St and 120th St	40			34500	72.8	70.4	68.8	74.0	71.6	70.0
Central Avenue between 120th St and Rosecrans Ave	40			23150	70.7	68.4	66.9	71.9	69.6	68.1

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	**Project Increment**	**Cumulative Increment**	**Project Increment**	**Cumulative Increment**
Avalon Boulevard n/o Imperial Hwy	0.1	-	0.2	-
Avalon Boulevard between Imperial Hwy and Rosecrans Ave	0.2	-	0.2	-
Central Avenue between Century Blvd and 108th St	0.1	-	0.1	-
Central Avenue between 108th St and 120th St	1.5	-	1.5	-
Central Avenue between 120th St and Rosecrans Ave	0.2	-	0.2	-

	% of ADT			
Vehicle Type	**Day**	**Eve**	**Night**	**Sub total**
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Roadway/Segment	Speed MPH	Traffic Volumes AM	PM	ADT	Leq ROW	Leq 25 Feet	Leq 50 Feet	CNEL ROW	CNEL 25 Feet	CNEL 50 Feet
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
Existing										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Compton Avenue between Century Blvd and 120th St	40			13270	68.7	66.2	64.7	69.9	67.4	65.9
Compton Avenue between 120th St and El Segundo Blvd	40			9810	67.0	64.7	63.2	68.2	65.9	64.4
Wilmington Avenue between Century Blvd and 112th St	35			14800	68.9	66.0	64.2	70.2	67.2	65.4
Wilmington Avenue between 112th St and I-105	35			16670	69.5	66.5	64.7	70.7	67.7	65.9
Wilmington Avenue between I-105 and 119th St	40			22090	72.5	69.3	67.5	73.8	70.5	68.7
Existing With Project										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Compton Avenue between Century Blvd and 120th St	40			17790	69.9	67.5	66.0	71.2	68.7	67.2
Compton Avenue between 120th St and El Segundo Blvd	40			12280	67.9	65.7	64.2	69.1	66.9	65.4
Wilmington Avenue between Century Blvd and 112th St	35			15420	69.1	66.1	64.4	70.3	67.4	65.6
Wilmington Avenue between 112th St and I-105	35			21540	70.6	67.6	65.8	71.8	68.8	67.1
Wilmington Avenue between I-105 and 119th St	40			32400	74.2	71.0	69.1	75.4	72.2	70.4

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	**Project Increment**	**Cumulative Increment**	**Project Increment**	**Cumulative Increment**
Compton Avenue between Century Blvd and 120th St	1.3	-	1.3	-
Compton Avenue between 120th St and El Segundo Blvd	1.0	-	1.0	-
Wilmington Avenue between Century Blvd and 112th St	0.2	-	0.2	-
Wilmington Avenue between 112th St and I-105	1.1	-	1.2	-
Wilmington Avenue between I-105 and 119th St	1.7	-	1.7	-

	% of ADT			
Vehicle Type	**Day**	**Eve**	**Night**	**Sub total**
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

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Roadway/Segment	Speed MPH	Traffic Volumes AM	PM	ADT	Leq ROW	Leq 25 Feet	Leq 50 Feet	CNEL ROW	CNEL 25 Feet	CNEL 50 Feet
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
Existing										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Wilmington Avenue between 119th St and Rosecrans Ave	40			19700	70.0	67.7	66.2	71.2	68.9	67.4
Mona Boulevard between Imperial Hwy and 119th St	40			9680	69.0	65.7	63.9	70.2	66.9	65.1
Alameda Street between 103rd and Imperial Hwy	40			23840	72.4	69.4	67.7	73.6	70.6	68.9
Alameda Street between Imperial Hwy and Rosecrans Ave	40			20480	71.7	68.7	67.0	72.9	70.0	68.2
103rd Street w/o Central Ave	40			6130	65.3	62.9	61.3	66.5	64.1	62.5
Existing With Project										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Wilmington Avenue between 119th St and Rosecrans Ave	40			24850	71.0	68.7	67.2	72.2	69.9	68.4
Mona Boulevard between Imperial Hwy and 119th St	40			10190	69.2	65.9	64.1	70.4	67.2	65.3
Alameda Street between 103rd and Imperial Hwy	40			25570	72.7	69.7	68.0	73.9	70.9	69.2
Alameda Street between Imperial Hwy and Rosecrans Ave	40			20640	71.8	68.8	67.0	73.0	70.0	68.2
103rd Street w/o Central Ave	40			6180	65.4	62.9	61.4	66.6	64.1	62.6

CNEL

Summary Roadway/Segment	25 ft. from ROW Project Increment	25 ft. from ROW Cumulative Increment	50 ft. from ROW Project Increment	50 ft. from ROW Cumulative Increment
Wilmington Avenue between 119th St and Rosecrans Ave	1.0	-	1.0	-
Mona Boulevard between Imperial Hwy and 119th St	0.3	-	0.2	-
Alameda Street between 103rd and Imperial Hwy	0.3	-	0.3	-
Alameda Street between Imperial Hwy and Rosecrans Ave	0.0	-	0.0	-
103rd Street w/o Central Ave	0.0	-	0.1	-

	% of ADT			
Vehicle Type	**Day**	**Eve**	**Night**	**Sub total**
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

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Roadway/Segment	Speed MPH	Traffic Volumes AM	PM	ADT	Leq ROW	Leq 25 Feet	Leq 50 Feet	CNEL ROW	CNEL 25 Feet	CNEL 50 Feet
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
Existing										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
103rd Street between Central Ave and Wilmington Ave	40			10970	67.4	65.2	63.7	68.7	66.4	64.9
103rd Street between Wilmington Ave Alameda St	35			9080	66.8	63.8	62.1	68.0	65.1	63.3
112th Street between Railroad and Mona Blvd	35			990	57.2	54.2	52.5	58.4	55.4	53.7
Imperial Highway between San Pedro St and Avalon Blvd	40			23590	70.1	68.1	66.7	71.3	69.3	67.9
Imperial Highway between Avalon Blvd and Slater Ave	40			32090	71.5	69.4	68.1	72.7	70.7	69.3
Existing With Project										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
103rd Street between Central Ave and Wilmington Ave	40			11000	67.5	65.2	63.7	68.7	66.4	64.9
103rd Street between Wilmington Ave Alameda St	35			9250	66.9	63.9	62.2	68.1	65.1	63.4
112th Street between Railroad and Mona Blvd	35			2160	60.6	57.6	55.9	61.8	58.8	57.1
Imperial Highway between San Pedro St and Avalon Blvd	40			25470	70.5	68.4	67.1	71.7	69.7	68.3
Imperial Highway between Avalon Blvd and Slater Ave	40			34130	71.7	69.7	68.3	72.9	70.9	69.5

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	**Project Increment**	**Cumulative Increment**	**Project Increment**	**Cumulative Increment**
103rd Street between Central Ave and Wilmington Ave	0.0	-	0.0	-
103rd Street between Wilmington Ave Alameda St	0.0	-	0.1	-
112th Street between Railroad and Mona Blvd	3.4	-	3.4	-
Imperial Highway between San Pedro St and Avalon Blvd	0.4	-	0.4	-
Imperial Highway between Avalon Blvd and Slater Ave	0.2	-	0.2	-

	% of ADT			
Vehicle Type	**Day**	**Eve**	**Night**	**Sub total**
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

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Roadway/Segment	Speed MPH	Traffic Volumes AM	PM	ADT	Leq ROW	Leq 25 Feet	Leq 50 Feet	CNEL ROW	CNEL 25 Feet	CNEL 50 Feet
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
Existing										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Imperial Highway between Slater Ave and Wilmington Ave	40			28730	71.6	69.3	67.9	72.8	70.6	69.1
Imperial Highway between Wilmington Ave and Alameda St	40			34110	71.7	69.7	68.3	72.9	70.9	69.5
Imperial Highway e/o Alameda St	40			23650	70.1	68.1	66.7	71.4	69.3	68.0
118th Street between Compton Ave and Wilmington Ave	35			4940	64.2	61.2	59.5	65.4	62.4	60.7
120th Street between San Pedro St and Central Ave	40			13230	69.2	66.5	64.9	70.4	67.7	66.1
Existing With Project										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Imperial Highway between Slater Ave and Wilmington Ave	40			31110	72.0	69.7	68.2	73.2	70.9	69.4
Imperial Highway between Wilmington Ave and Alameda St	40			41880	72.6	70.6	69.2	73.8	71.8	70.4
Imperial Highway e/o Alameda St	40			25090	70.4	68.4	67.0	71.6	69.6	68.2
118th Street between Compton Ave and Wilmington Ave	35			5500	64.6	61.7	59.9	65.9	62.9	61.1
120th Street between San Pedro St and Central Ave	40			14640	69.6	66.9	65.3	70.8	68.2	66.5

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	**Project Increment**	**Cumulative Increment**	**Project Increment**	**Cumulative Increment**
Imperial Highway between Slater Ave and Wilmington Ave	0.3	-	0.3	-
Imperial Highway between Wilmington Ave and Alameda St	0.9	-	0.9	-
Imperial Highway e/o Alameda St	0.3	-	0.2	-
118th Street between Compton Ave and Wilmington Ave	0.5	-	0.4	-
120th Street between San Pedro St and Central Ave	0.5	-	0.4	-

	% of ADT			
Vehicle Type	**Day**	**Eve**	**Night**	**Sub total**
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

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Roadway/Segment	Speed MPH	Traffic Volumes AM	PM	ADT	Leq ROW	Leq 25 Feet	Leq 50 Feet	CNEL ROW	CNEL 25 Feet	CNEL 50 Feet
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
Existing										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
120th Street between Central Ave and Compton Ave	40			16420	69.2	66.9	65.4	70.4	68.1	66.7
119th Street between Compton Ave and Wilmington Ave	35			14020	68.7	65.7	64.0	69.9	66.9	65.2
119th Street between Wilmington Ave and Willowbrook Ave	35			9660	67.1	64.1	62.4	68.3	65.3	63.6
119th Street between Willowbrook Ave and Mona Blvd	35			6020	65.0	62.1	60.3	66.2	63.3	61.5
El Segundo Boulevard between San Pedro St and Slater Ave	40			25090	70.4	68.4	67.0	71.6	69.6	68.2
Existing With Project										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
120th Street between Central Ave and Compton Ave	40			21030	70.3	68.0	66.5	71.5	69.2	67.7
119th Street between Compton Ave and Wilmington Ave	35			19450	70.1	67.2	65.4	71.3	68.4	66.6
119th Street between Wilmington Ave and Willowbrook Ave	35			10270	67.4	64.4	62.6	68.6	65.6	63.8
119th Street between Willowbrook Ave and Mona Blvd	35			6490	65.4	62.4	60.6	66.6	63.6	61.9
El Segundo Boulevard between San Pedro St and Slater Ave	40			25710	70.5	68.5	67.1	71.7	69.7	68.3

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	**Project Increment**	**Cumulative Increment**	**Project Increment**	**Cumulative Increment**
120th Street between Central Ave and Compton Ave	1.1	-	1.0	-
119th Street between Compton Ave and Wilmington Ave	1.5	-	1.4	-
119th Street between Wilmington Ave and Willowbrook Ave	0.3	-	0.2	-
119th Street between Willowbrook Ave and Mona Blvd	0.3	-	0.4	-
El Segundo Boulevard between San Pedro St and Slater Ave	0.1	-	0.1	-

	% of ADT			
Vehicle Type	**Day**	**Eve**	**Night**	**Sub total**
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

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Roadway/Segment	Speed MPH	Traffic Volumes AM	PM	ADT	Leq ROW	Leq 25 Feet	Leq 50 Feet	CNEL ROW	CNEL 25 Feet	CNEL 50 Feet
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
Existing										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
El Segundo Boulevard between Slater Ave and Wilmington Ave	40			23840	70.8	68.5	67.1	72.0	69.8	68.3
El Segundo Boulevard between Wilmington Ave and Alameda Ave	40			15500	68.9	66.7	65.2	70.2	67.9	66.4
Rosecrans Avenue between San Pedro St and Willowbrook Ave	40			22220	70.5	68.2	66.7	71.7	69.4	68.0
Rosecrans Avenue between Willowbrook Ave and Alameda Ave	40			24330	70.9	68.6	67.1	72.1	69.8	68.4
I-105 between Compton Ave and Mona Blvd	65			101360	80.4	78.8	77.7	81.6	80.0	78.9
Existing With Project										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
El Segundo Boulevard between Slater Ave and Wilmington Ave	40			26090	71.2	68.9	67.4	72.4	70.1	68.7
El Segundo Boulevard between Wilmington Ave and Alameda Ave	40			16860	69.3	67.0	65.6	70.5	68.2	66.8
Rosecrans Avenue between San Pedro St and Willowbrook Ave	40			23400	70.7	68.5	67.0	71.9	69.7	68.2
Rosecrans Avenue between Willowbrook Ave and Alameda Ave	40			25700	71.1	68.9	67.4	72.4	70.1	68.6
I-105 between Compton Ave and Mona Blvd	65			104860	80.5	79.0	77.8	81.7	80.2	79.0

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	**Project Increment**	**Cumulative Increment**	**Project Increment**	**Cumulative Increment**
El Segundo Boulevard between Slater Ave and Wilmington Ave	0.3	-	0.4	-
El Segundo Boulevard between Wilmington Ave and Alameda Ave	0.3	-	0.4	-
Rosecrans Avenue between San Pedro St and Willowbrook Ave	0.3	-	0.2	-
Rosecrans Avenue between Willowbrook Ave and Alameda Ave	0.3	-	0.2	-
I-105 between Compton Ave and Mona Blvd	0.2	-	0.1	-

	% of ADT			
Vehicle Type	**Day**	**Eve**	**Night**	**Sub total**
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

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Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Main Street, N/O and S/O Imperial Hwy	35			11840	67.3	64.7	63.0	68.5	65.9	64.2
San Pedro Street, 108th St to 135th St	40			11320	68.0	65.5	64.0	69.2	66.8	65.2
Avalon Boulevard, N/O Imperial Hwy	40			20440	70.5	68.1	66.6	71.8	69.3	67.8
Central Avenue, Rosecrans Ave to Walnut St	40			19320	69.9	67.6	66.1	71.1	68.8	67.4
Wilmington Avenue, Rosecrans Avenue to SR-91	40			21370	70.3	68.1	66.6	71.6	69.3	67.8
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Main Street, N/O and S/O Imperial Hwy	35			13490	67.9	65.2	63.6	69.1	66.4	64.8
San Pedro Street, 108th St to 135th St	40			12480	68.4	66.0	64.4	69.6	67.2	65.6
Avalon Boulevard, N/O Imperial Hwy	40			22850	71.0	68.6	67.0	72.2	69.8	68.3
Central Avenue, Rosecrans Ave to Walnut St	40			20860	70.2	68.0	66.5	71.4	69.2	67.7
Wilmington Avenue, Rosecrans Avenue to SR-91	40			21950	70.5	68.2	66.7	71.7	69.4	67.9
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Main Street, N/O and S/O Imperial Hwy	35			13650	67.9	65.3	63.6	69.2	66.5	64.8
San Pedro Street, 108th St to 135th St	40			12560	68.4	66.0	64.4	69.6	67.2	65.7
Avalon Boulevard, N/O Imperial Hwy	40			23550	71.2	68.7	67.2	72.4	69.9	68.4
Central Avenue, Rosecrans Ave to Walnut St	40			21600	70.4	68.1	66.6	71.6	69.3	67.8
Wilmington Avenue, Rosecrans Avenue to SR-91	40			25170	71.0	68.8	67.3	72.3	70.0	68.5

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Main Street, N/O and S/O Imperial Hwy	0.1	0.6	0.0	0.6
San Pedro Street, 108th St to 135th St	0.0	0.4	0.1	0.5
Avalon Boulevard, N/O Imperial Hwy	0.1	0.6	0.1	0.6
Central Avenue, Rosecrans Ave to Walnut St	0.1	0.5	0.1	0.4
Wilmington Avenue, Rosecrans Avenue to SR-91	0.6	0.7	0.6	0.7

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

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Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Alameda Street, Rosecrans Ave to SR-91	45			19730	71.2	69.0	67.5	72.4	70.2	68.7
State St/Santa Fe Ave, N/O Imperial Hwy to S/O El Segundo Blvd	40			13910	68.9	66.4	64.9	70.1	67.7	66.1
108th Street, Central Ave to W/O Avalon Blvd	40			7320	66.6	63.9	62.3	67.8	65.1	63.5
Imperial Highway, San Pedro St to W/O Main St	45			24610	72.2	69.9	68.4	73.4	71.1	69.6
Imperial Highway, Alameda St to E/O State St	45			24220	72.1	69.8	68.4	73.3	71.1	69.6
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Alameda Street, Rosecrans Ave to SR-91	45			19860	71.3	69.0	67.5	72.5	70.2	68.7
State St/Santa Fe Ave, N/O Imperial Hwy to S/O El Segundo Blvd	40			13910	68.9	66.4	64.9	70.1	67.7	66.1
108th Street, Central Ave to W/O Avalon Blvd	40			8060	67.0	64.3	62.7	68.2	65.6	63.9
Imperial Highway, San Pedro St to W/O Main St	45			27410	72.7	70.4	68.9	73.9	71.6	70.1
Imperial Highway, Alameda St to E/O State St	45			25090	72.3	70.0	68.5	73.5	71.2	69.7
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Alameda Street, Rosecrans Ave to SR-91	45			21160	71.5	69.3	67.8	72.7	70.5	69.0
State St/Santa Fe Ave, N/O Imperial Hwy to S/O El Segundo Blvd	40			14010	68.9	66.5	64.9	70.1	67.7	66.1
108th Street, Central Ave to W/O Avalon Blvd	40			8140	67.1	64.4	62.7	68.3	65.6	64.0
Imperial Highway, San Pedro St to W/O Main St	45			28680	72.9	70.6	69.1	74.1	71.8	70.3
Imperial Highway, Alameda St to E/O State St	45			26530	72.5	70.2	68.8	73.7	71.5	70.0

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
	Project	Cumulative	Project	Cumulative
Roadway/Segment	Increment	Increment	Increment	Increment
Alameda Street, Rosecrans Ave to SR-91	0.3	0.3	0.3	0.3
State St/Santa Fe Ave, N/O Imperial Hwy to S/O El Segundo Blvd	0.0	0.0	0.0	0.0
108th Street, Central Ave to W/O Avalon Blvd	0.0	0.5	0.1	0.5
Imperial Highway, San Pedro St to W/O Main St	0.2	0.7	0.2	0.7
Imperial Highway, Alameda St to E/O State St	0.3	0.4	0.3	0.4

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
El Segundo Boulevard, W/O and E/O State St	35			8660	66.6	63.6	61.9	67.8	64.9	63.1
Comption Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19660	70.4	67.9	66.4	71.6	69.2	67.6
Alondra Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			18540	69.9	67.6	66.2	71.1	68.7	67.2
0	0			0	-	-	-	-	-	-
0	0			0	-	-	-	-	-	-
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
El Segundo Boulevard, W/O and E/O State St	35			9260	66.9	63.9	62.2	68.1	65.1	63.4
Comption Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19700	70.4	67.9	66.4	71.6	69.2	67.6
Alondra Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19440	69.9	67.6	66.1	71.1	68.9	67.4
0	0			0	-	-	-	-	-	-
0	0			0	-	-	-	-	-	-
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
El Segundo Boulevard, W/O and E/O State St	35			9730	67.1	64.1	62.4	68.3	65.4	63.6
Comption Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19830	70.4	68.0	66.4	71.6	69.2	67.6
Alondra Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19530	69.9	67.7	66.2	71.2	68.9	67.4
0	0			0	-	-	-	-	-	-
0	0			0	-	-	-	-	-	-

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
	Project	Cumulative	Project	Cumulative
Roadway/Segment	Increment	Increment	Increment	Increment
El Segundo Boulevard, W/O and E/O State St	0.3	0.5	0.2	0.5
Comption Boulevard, W/O Central Ave to E/O Willowbrook Ave	0.0	0.0	0.0	0.0
Alondra Boulevard, W/O Central Ave to E/O Willowbrook Ave	0.0	0.2	0.0	0.2
0	-	-	-	-
0	-	-	-	-

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

Roadway/Segment	Speed MPH	Traffic Volumes AM	PM	ADT	Leq ROW	Leq 25 Feet	Leq 50 Feet	CNEL ROW	CNEL 25 Feet	CNEL 50 Feet
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
				0	-	-	-	-	-	-
Existing										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Main Street, N/O and S/O Imperial Hwy	35			11840	67.3	64.7	63.0	68.5	65.9	64.2
San Pedro Street, 108th St to 135th St	40			11320	68.0	65.5	64.0	69.2	66.8	65.2
Avalon Boulevard, N/O Imperial Hwy	40			20440	70.5	68.1	66.6	71.8	69.3	67.8
Central Avenue, Rosecrans Ave to Walnut St	40			19320	69.9	67.6	66.1	71.1	68.8	67.4
Wilmington Avenue, Rosecrans Avenue to SR-91	40			21370	70.3	68.1	66.6	71.6	69.3	67.8
Existing With Project										
Roadway/Segment	**Speed MPH**	**Traffic Volumes AM**	**PM**	**ADT**	**Leq ROW**	**Leq 25 Feet**	**Leq 50 Feet**	**CNEL ROW**	**CNEL 25 Feet**	**CNEL 50 Feet**
Main Street, N/O and S/O Imperial Hwy	35			12000	67.4	64.7	63.1	68.6	65.9	64.3
San Pedro Street, 108th St to 135th St	40			11400	68.0	65.6	64.0	69.2	66.8	65.2
Avalon Boulevard, N/O Imperial Hwy	40			21140	70.7	68.3	66.7	71.9	69.5	67.9
Central Avenue, Rosecrans Ave to Walnut St	40			20060	70.1	67.8	66.3	71.3	69.0	67.5
Wilmington Avenue, Rosecrans Avenue to SR-91	40			24590	70.9	68.7	67.2	72.2	69.9	68.4

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Main Street, N/O and S/O Imperial Hwy	0.0	-	0.1	-
San Pedro Street, 108th St to 135th St	0.0	-	0.0	-
Avalon Boulevard, N/O Imperial Hwy	0.2	-	0.1	-
Central Avenue, Rosecrans Ave to Walnut St	0.2	-	0.1	-
Wilmington Avenue, Rosecrans Avenue to SR-91	0.6	-	0.6	-

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Roadway Traffic Noise Calculations

Project: Willowbrook Transit Oriented District Specific Plan

Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
					-	-	-	-	-	-
					-	-	-	-	-	-
					-	-	-	-	-	-
					-	-	-	-	-	-
					-	-	-	-	-	-
Future No Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Alameda Street, Rosecrans Ave to SR-91	45			19730	71.2	69.0	67.5	72.4	70.2	68.7
State St/Santa Fe Ave, N/O Imperial Hwy to S/O El Segundo Blvd	40			13910	68.9	66.4	64.9	70.1	67.7	66.1
108th Street, Central Ave to W/O Avalon Blvd	40			7320	66.6	63.9	62.3	67.8	65.1	63.5
Imperial Highway, San Pedro St to W/O Main St	45			24610	72.2	69.9	68.4	73.4	71.1	69.6
Imperial Highway, Alameda St to E/O State St	45			24220	72.1	69.8	68.4	73.3	71.1	69.6
Future With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
Alameda Street, Rosecrans Ave to SR-91	45			21030	71.5	69.2	67.7	72.7	70.4	69.0
State St/Santa Fe Ave, N/O Imperial Hwy to S/O El Segundo Blvd	40			14010	68.9	66.5	64.9	70.1	67.7	66.1
108th Street, Central Ave to W/O Avalon Blvd	40			7400	66.6	64.0	62.3	67.9	65.2	63.5
Imperial Highway, San Pedro St to W/O Main St	45			25880	72.4	70.1	68.6	73.6	71.3	69.9
Imperial Highway, Alameda St to E/O State St	45			25660	72.4	70.1	68.6	73.6	71.3	69.8

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
	Project	Cumulative	Project	Cumulative
Roadway/Segment	Increment	Increment	Increment	Increment
Alameda Street, Rosecrans Ave to SR-91	0.2	-	0.3	-
State St/Santa Fe Ave, N/O Imperial Hwy to S/O El Segundo Blvd	0.0	-	0.0	-
108th Street, Central Ave to W/O Avalon Blvd	0.1	-	0.0	-
Imperial Highway, San Pedro St to W/O Main St	0.2	-	0.3	-
Imperial Highway, Alameda St to E/O State St	0.2	-	0.2	-

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Project: Willowbrook Transit Oriented District Specific Plan

	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
					-	-	-	-	-	-
					-	-	-	-	-	-
					-	-	-	-	-	-
					-	-	-	-	-	-
					-	-	-	-	-	-
Existing										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
El Segundo Boulevard, W/O and E/O State St	35			8660	66.6	63.6	61.9	67.8	64.9	63.1
Comption Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19660	70.4	67.9	66.4	71.6	69.2	67.6
Alondra Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19420	69.9	67.6	66.2	71.1	68.7	67.2
0	0			0	-	-	-	-	-	-
0	0			0	-	-	-	-	-	-
Existing With Project										
	Speed	Traffic Volumes			Leq			CNEL		
Roadway/Segment	MPH	AM	PM	ADT	ROW	25 Feet	50 Feet	ROW	25 Feet	50 Feet
El Segundo Boulevard, W/O and E/O State St	35			9130	66.8	63.9	62.1	68.1	65.1	63.3
Comption Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19790	70.4	68.0	66.4	71.6	69.2	67.6
Alondra Boulevard, W/O Central Ave to E/O Willowbrook Ave	40			19620	70.0	67.7	66.2	71.2	68.7	67.2
0	0			0	-	-	-	-	-	-
0	0			0	-	-	-	-	-	-

CNEL

Summary	25 ft. from ROW		50 ft. from ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
El Segundo Boulevard, W/O and E/O State St	0.2	-	0.2	-
Comption Boulevard, W/O Central Ave to E/O Willowbrook Ave	0.0	-	0.0	-
Alondra Boulevard, W/O Central Ave to E/O Willowbrook Ave	0.0	-	0.0	-
0	-	-	-	-
0	-	-	-	-

	% of ADT			
Vehicle Type	Day	Eve	Night	Sub total
Auto	77.6%	9.7%	9.7%	97.0%
Medium Truck	1.6%	0.2%	0.2%	2.0%
Heavy Truck	0.8%	0.1%	0.1%	1.0%
	80.0%	10.0%	10.0%	100.0%

Appendix F
Traffic Study

ESA

Appendix F
Traffic Study

ESA

Willowbrook TOD Specific Plan

EIR Traffic Study

May 4, 2017

Prepared by

The **Mobility** Group

Willowbrook TOD Specific Plan

EIR Traffic Study

May 4, 2017

Matthew L. Simons
TR 2154

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1. Introduction

This report documents a traffic analysis to support a Program EIR for the Willowbrook TOD Specific Plan. The area is located in the unincorporated community of Willowbrook in Los Angeles County. The Specific Plan is focused around the Willowbrook/Rosa Parks Station, which serves the Metro Blue Line and Metro Green Line. The Specific Plan Area generally contains the southern portion of the area within a half mile radius of the station, and extends from Imperial Highway in the north, to 121st/122nd Streets in the south, Mona Boulevard in the east and Compton Avenue in the west. The Specific Plan Area is shown in Figure 1.1.

1.1 Project Description

The proposed project involves the establishment of the Willowbrook TOD Specific Plan, including goals, and establishment of a land use program and circulation system that will provide a pedestrian-friendly, mixed-use environment, in a transit-oriented district around the existing Metro Station. The Specific Plan is fully described in the Draft Willowbrook TOD Specific Plan[1] document.

Some of the key facilities and land uses in the Specific Plan area include (see Figure 1.1): the Willowbrook/Rosa Parks Station, the Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, Kenneth Hahn Plaza shopping center, the Willowbrook Library, and the Martin Luther King Jr. Center for Public Health.

The purpose of the Willowbrook TOD Specific Plan is to revitalize the community within the project area and to improve access to all modes of transportation, including transit, walking, and bicycling. Building off the goals and policies outlined in the General Plan, the Willowbrook TOD Specific Plan will encourage transit oriented development, promote active transportation and reduce vehicle miles travelled. The Specific Plan is anticipated to facilitate development, especially residential and employment-generating uses proximate to the Willowbrook/Rosa Parks Station.

The primary objectives of the Specific Plan are to identify land use options that include mixed uses, increased housing opportunities', and neighborhood–serving retail uses, In addition the Specific Plan is intended to foster a healthy community by improving pedestrian linkages between the Willowbrook/Rosa Parks Station, the Kenneth Hahn Plaza, the Martin Luther King Jr. Medical Center, the Charles R. Drew University of Medicine and Science, future mixed use areas, and existing residential neighborhoods.

[1] Draft Willowbrook TOD Specific Plan, County of Los Angeles – October, 2015.

1.2 Study Scope

The scope for the analysis in this study was determined in conjunction with the County of Los Angeles staff including the geographic coverage, input assumptions, and methodologies used in the analysis. The analysis addresses the AM and PM peak hours which are the times of the day when the street traffic volumes in the area are highest. For purposes of analysis a future horizon year of 2035 is assumed.

The study area includes a total of 66 analyzed intersections, which are located in four jurisdictions, as follows:

- 28 in the County of Los Angeles
- 16 in the City of Compton
- 3 in the City of Lynwood
- 19 in the City of Los Angeles

Four of the intersections in the County are shared with the City of Compton, and two are shared with the City of Lynwood. Four of the intersections in the City of Los Angeles are shared with the County.

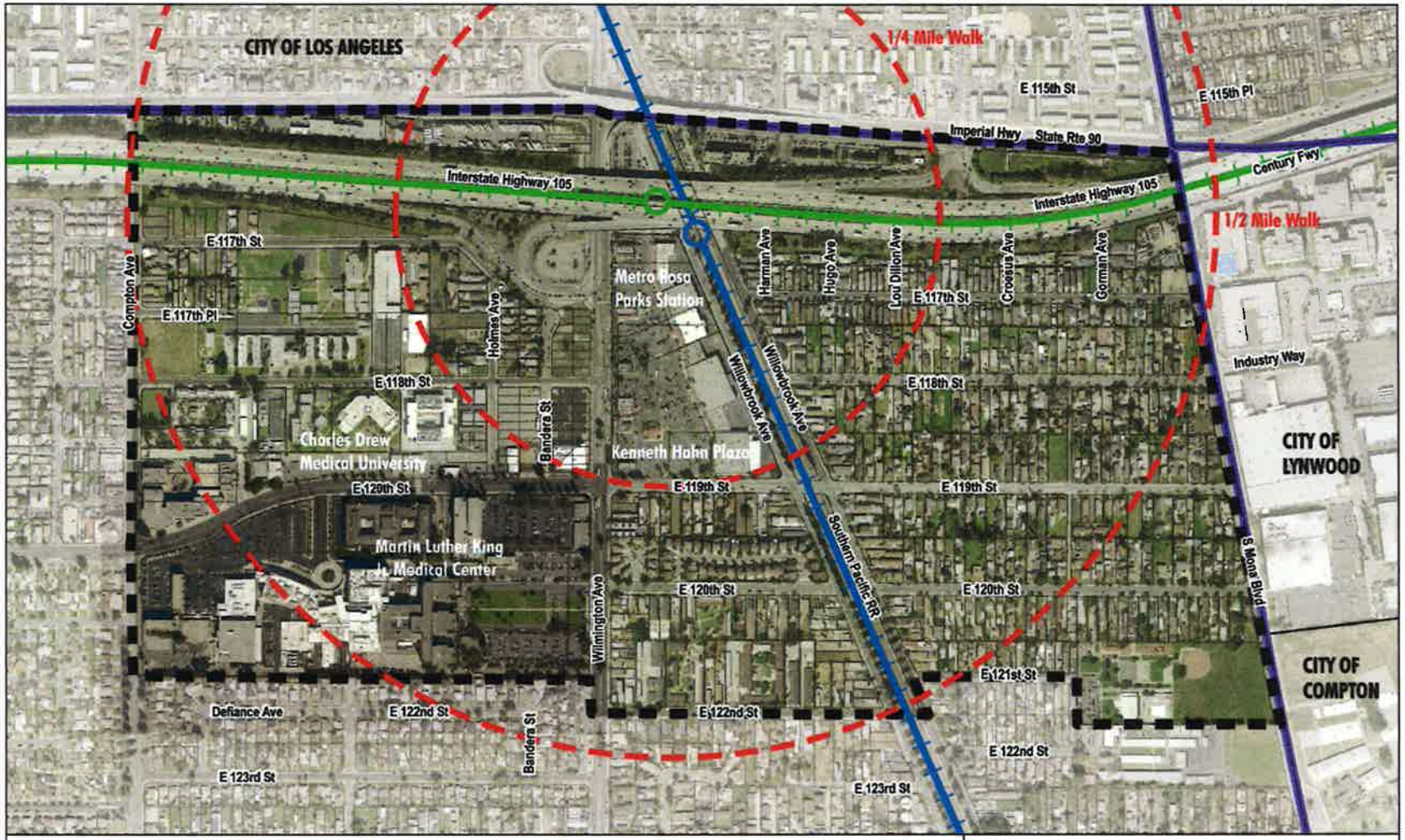
The study follows the methodology procedures of Los Angeles County as the lead agency. However, the intersections in each jurisdiction were analyzed with the methodology appropriate to that jurisdiction, as described in Chapter 2.

The Traffic Study addresses the following scenarios:

- Existing Conditions
- Existing Plus Project Conditions
- Existing Plus Project Conditions Plus Mitigations
- Existing Plus Project Plus Cumulative Conditions (Year 2035)
- Existing Plus Project Plus Cumulative Conditions (Year 2035) Plus Mitigations

1.3 Organization of this Report

The remainder of this report is organized as follows. Chapter 2 describes the existing transportation conditions in the area of the Project. Chapter 3 describes the transportation characteristics of the Specific Plan Project. Chapter 4 addresses impacts for the Existing Plus Project Conditions. Chapter 5 describes transportation parameter inputs for future conditions (2035). Chapter 6 addresses impacts for the Existing Plus Project plus Cumulative Conditions. Chapter 7 provides an analysis of the freeway system for Caltrans. Chapter 8 addresses mitigations for significant transportation impacts.



Source: The Arroyo Group

11/7/16

Figure 1.1
Specific Plan Area

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

2. Existing Conditions

The Specific Plan is focused around the Willowbrook/Rosa Parks Station, which serves the Metro Blue Line and Metro Green Line. The Specific Plan Area generally contains the southern portion of the area within a half mile radius of the station, and extends from Imperial Highway in the north, to 121st/122nd Streets in the south, Mona Boulevard in the east and Compton Avenue in the west. The Specific Plan Area is shown in Figure 1.1.

The street system in the Specific Plan area is under the jurisdiction of the County of Los Angeles. Some streets and study intersections outside of the Specific Plan area are under the jurisdiction of the City of Compton, the City of Lynwood and the City of Los Angeles.

2.1 Roadway System

Regional access to the Project site is provided by the Century (I-105) freeway which is located immediately to the north and east of the Project Site. The I-710 Freeway runs north-south approximately 3.4 miles east of the Project Site. The I-110 Freeway runs north-south approximately 2.8 miles west of the Project Site, and the SR-91 Freeway runs east-west-approximately 3.4 miles south of the Project Site.

The Project site is served by a comprehensive grid system of surface streets, with multiple access points to the I-105 freeway. The key surface streets serving the area of the Specific Plan are described below (street classification references are from the County of Los Angeles General Plan).

North-South Streets

San Pedro Street: San Pedro Street is a two-way street and is classified as a Secondary Highway. South of 120th Street it has two travel lanes in each direction, and north of 120th Street it has one travel lane in each direction with left turn lanes at intersections. North of 120th Street it also has a central left turn lane. North of Alondra Boulevard it connects to Avalon Boulevard. On-street parking is generally allowed on both sides of the street.

Main Street: Main Street is a two-way street and is classified as a Major Highway. South of 120th Street it has two travel lanes in each direction, and north of 120th Street it has one travel lane in each direction with left turn lanes at intersections. North of 119th Street and south of El Segundo Boulevard it also has a central left turn lane. On-street parking is generally allowed on both sides of the street.

Avalon Boulevard: Avalon Boulevard is a two-way street and is classified as a Major Highway. It has two travel lanes in each direction with left turn lanes at intersections, and on-street parking is generally allowed. Between 119th Street and 126th Street it also has a central left turn lane.

Central Avenue: Central Avenue is a two-way street and is classified as a Major Highway. Its configuration varies, but generally has two travel lanes in each direction with left turn lanes at intersections, and on-street parking is generally allowed. Between 121st Street and 127th Street it has local access streets immediately adjacent to it on either side, which each allow travel in both directions with parking permitted on both sides.

Compton Avenue: Compton Avenue is a two-way street and is classified as a Secondary Highway. It has two travel lanes in each direction. On-street parking is generally allowed on both sides of the street.

Wilmington Avenue: Wilmington Avenue is a two-way street and is classified as a Major Highway. North of 119th Street, it has three travel lanes northbound and two travel lanes southbound with left turn lanes at intersections, and on-street parking is generally prohibited. North of Imperial Highway it reduces to one lane in each direction. South of 119th Street it has two travel lanes in each direction, and on-street parking is permitted without restriction.

Willowbrook Avenue - West: Willowbrook Avenue West is classified as a Secondary Highway. It does not connect directly to Imperial Highway, but is accessed from Wilmington Avenue and provides one southbound lane past the Willowbrook/Rosa Parks Station (and adjacent bus bays). From the Willowbrook/Rosa Parks station south to 119th Street it is a one-way southbound street and has two southbound travel lanes. On-street parking is prohibited on both sides of the street. South of 119th Street, it is a two-way street with one lane in each direction. On-street parking is generally allowed on the west side of the street and prohibited on the east side.

Willowbrook Avenue - East: Willowbrook Avenue East is a two-way street and is classified as a Secondary Highway. It has one travel lane in each direction. On-street parking is generally allowed on the east side of the street and prohibited on the west side. It does not extend north of I-105 as a though street, as the section between just north of 117th Street and Imperial Highway is restricted to southbound buses serving the Willowbrook/Rosa Parks Station.

Mona Boulevard: Mona Boulevard is a two-way street and is classified as a Secondary Highway. It has two travel lanes in each direction. On-street parking is generally prohibited.

Alameda Street: Alameda Street is split into an eastern section and a western section, separated by a train line. The western section is a two-way street and is classified as a Secondary Highway. It has two travel lanes in each direction and on-street parking is

generally allowed on both sides of the street. The eastern section of Alameda Street has a single travel lane in each direction and is a local street and parking is generally allowed on both sides of the street.

State Street / Santa Fe Avenue: State Street is a two-way street and is classified as a Secondary Highway north of Lynwood Road. South of Lynwood Avenue it is classified as a Major Highway. It has two travel lanes in each direction with left turn lanes at intersections. On-street parking is generally allowed on both sides of the street.

East-West Streets

103th Street: 103th Street is a two-way street extending between Alameda Street and S Broadway, and is classified as a local street. It has one travel lane in each direction. On-street parking is generally allowed on both sides of the street.

108th Street: 108th Street is a two-way street extending west from Wilmington Avenue past I-110, and is classified as a Secondary Highway. It has one travel lane in each direction. On-street parking is generally allowed on both sides of the street. East of Wilmington Avenue it continues as the southern section of Santa Ana Boulevard South.

Santa Ana Boulevard North: Santa Ana Boulevard North is a two-way street extending between Willowbrook Avenue and Alameda Street, and is a local street. It has one travel lane in each direction. On-street parking is generally allowed on both sides of the street. East of Alameda Street it continues as Fernwood Avenue.

Santa Ana Boulevard South: Santa Ana Boulevard South is a two-way street extending between Wilmington Avenue and Alameda Street, and is a local street. It has one travel lane in each direction. On-street parking is generally allowed on both sides of the street. West of Wilmington Avenue it continues as 108th Street.

Imperial Highway: Imperial Highway is a two-way street and is classified as a Major Highway. The configuration varies by location. It generally has three travel lanes in each direction with left turn lanes at intersections. It is grade separated from Wilmington Avenue and Willowbrook Avenue on an overpass with two lanes in each direction, and one-way frontage roads. On-street parking is allowed in some locations, with some restrictions.

119th Street: 119th Street is a two-way street extending between Wilmington Avenue and Mona Boulevard, and is classified as a Secondary Highway. It has one travel lane in each direction with a central turn lane. On-street parking is generally allowed on both sides of the street. West of Wilmington Avenue it continues as 120th Street.

120th Street: 120th Street, extending west of Wilmington Avenue, is a two-way street and is classified as a Secondary Highway. It has two travel lanes in each direction. On-street

parking is generally allowed with some restrictions. East of Wilmington Avenue, 120th Street extends east to Mona Boulevard, on an alignment south of 120th Street west of Wilmington Avenue, but does not connect across the Metro Blue Line tracks on Willowbrook Avenue. Along this section, it is a Local Street, with one lane in each direction with parking allowed on both sides of the street.

El Segundo Boulevard: El Segundo Boulevard is a two-way street and is classified as a Major Highway. The configuration varies by location. It generally has two travel lanes in each direction with left turn lanes at intersections. On-street parking is generally allowed on both sides of the street.

Rosecrans Avenue: Rosecrans Avenue is a two-way street and is classified as a Major Highway. The configuration varies by location. It generally has two travel lanes in each direction with left turn lanes at intersections. On-street parking is generally allowed on both sides of the street.

West Compton Boulevard: West Compton Boulevard is a two-way street and is classified as a Secondary Highway east of Central Avenue. West of Central Avenue it connects to Redondo Beach Boulevard and is classified as a Major Highway. It generally has two travel lanes in each direction with left turn lanes at intersections. On-street parking is generally prohibited.

Alondra Boulevard: Alondra Boulevard is a two-way street and is classified as a Major Highway. It generally has two travel lanes in each direction with left turn lanes at intersections. On-street parking is generally allowed on both sides of the street.

Greenleaf Boulevard: Greenleaf Boulevard is a two-way street extending between Central Avenue and Atlantic Drive and is classified as a Secondary Highway. It generally has one travel lane in each direction with left turn lanes at intersections and a central left turn lane. On-street parking is generally allowed on both sides of the street.

Walnut Street: Walnut Street is a two-way street extending between Billings Drive and Acacia Court and is classified as a Secondary Highway. Between Avalon Boulevard and Central Avenue it has two travel lanes in each direction with a central left turn lane. West of Avalon Boulevard and east of Central Avenue it has one travel lane in each direction. On-street parking is generally prohibited.

2.2 Study Intersections

A total of sixty-six study intersections were identified, in conjunction with Los Angeles County staff, for inclusion in the traffic analysis. The analyzed locations are shown in Figure 2.1 and were identified as locations where the majority of trips associated with the Project would be focused based on the trip distribution developed for the Project. These locations

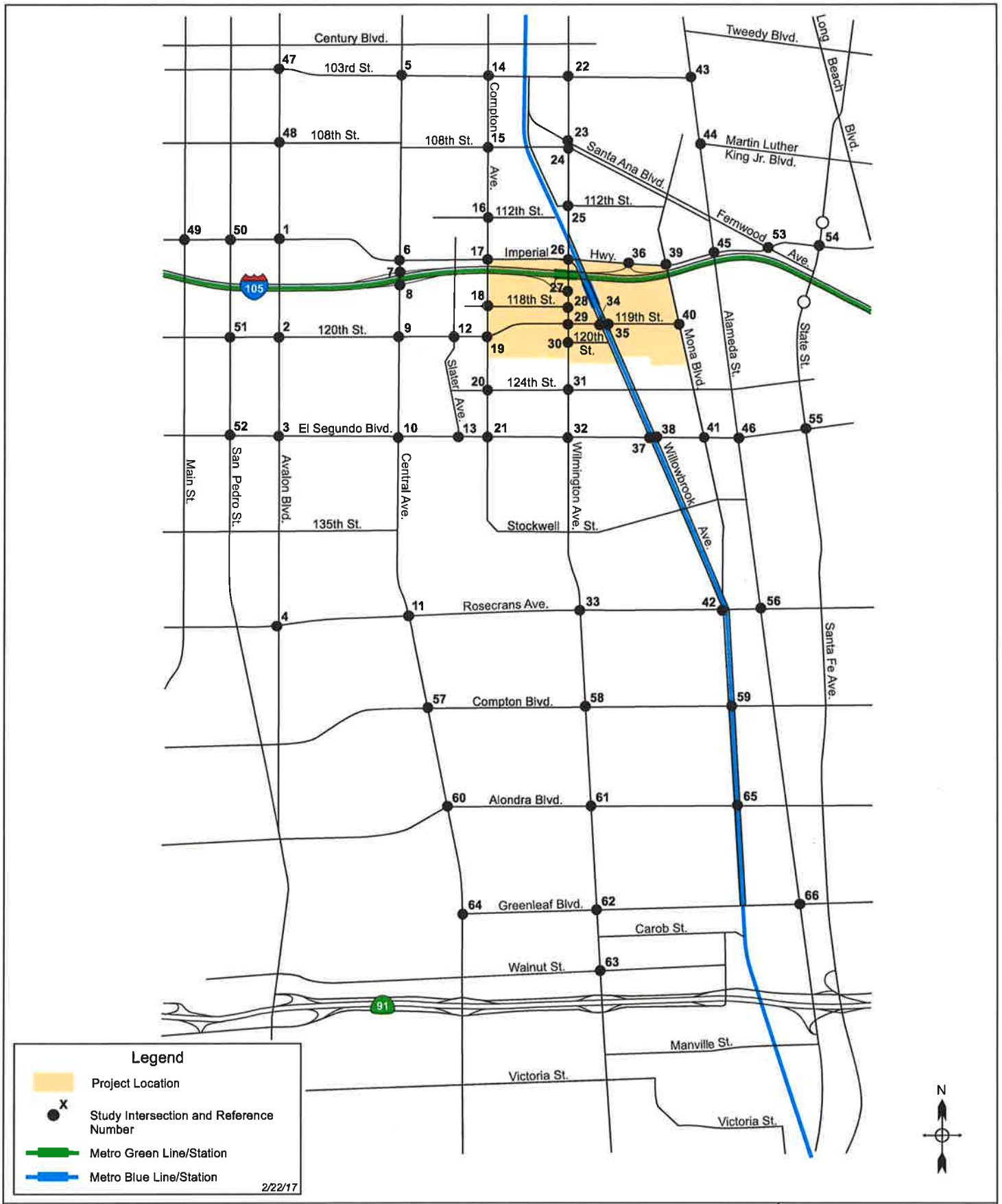


Figure 2.1
Study Intersections

Willowbrook TOD Specific Plan EIR Traffic Study

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consist of the intersections through which Project trips would travel before dispersing to multiple routes and therefore were the locations where potential traffic impacts were most likely to occur. The intersections identified for analysis are as follows:

1. Avalon Blvd & Imperial Hwy
2. Avalon Blvd & 120th St
3. Avalon Blvd & El Segundo Blvd
4. Avalon Blvd & Rosecrans Ave
5. Central Ave & 103rd St
6. Central Ave & Imperial Hwy
7. Central Ave & I-105 w/b Ramps
8. Central Ave & I-105 e/b Ramps
9. Central Ave & 120th St
10. Central Ave & El Segundo Blvd
11. Central Ave & Rosecrans Ave
12. Slater Ave & 120th St
13. Slater Ave & El Segundo Blvd
14. Compton Ave & 103rd St
15. Compton Ave & 108th St
16. Compton Ave & 112th St
17. Compton Ave & Imperial Hwy
18. Compton Ave & 118th St
19. Compton Ave & 120th St
20. Compton Ave & 124th St
21. Compton Ave & El Segundo Blvd
22. Wilmington Ave & 103rd St
23. Wilmington Ave & Santa Ana Blvd
24. Wilmington Ave & 108th St
25. Wilmington Ave & 112th St
26. Wilmington Ave & Imperial Hwy
27. Wilmington Ave & I-105 e/b Ramps
28. Wilmington Ave & 118th St
29. Wilmington Ave & 120th St West
30. Wilmington Ave & 120th St East
31. Wilmington Ave & 124th St
32. Wilmington Ave & El Segundo Blvd
33. Wilmington Ave & Rosecrans Ave
34. Willowbrook Ave W & 119th Street
35. Willowbrook Ave E & 119th Street
36. Imperial Hwy & I-105 w/b Ramps
37. Willowbrook Ave W & El Segundo Blvd
38. Willowbrook Ave E & El Segundo Blvd
39. Mona Blvd & Imperial Hwy

40. Mona Blvd & 119th St
41. Mona Blvd & El Segundo Blvd
42. Willowbrook Ave & Rosecrans Ave
43. Alameda St & 103rd St
44. Alameda St & Abbott Rd
45. Alameda St & Imperial Hwy
46. Alameda St & El Segundo Blvd
47. Avalon Blvd & 103rd St
48. Avalon Blvd & 108th St
49. Imperial Hwy & Main St
50. Imperial Hwy & San Pedro St
51. San Pedro St & 120th St
52. El Segundo Blvd & San Pedro St
53. Imperial Hwy & Fernwood Ave
54. Imperial Hwy & State St
55. El Segundo Blvd & Santa Fe Ave
56. Alameda St & Rosecrans Ave
57. Central Ave & W Compton Blvd
58. Wilmington Ave & W Compton Blvd
59. Willowbrook Ave & W Compton Blvd
60. Central Ave & Alondra Blvd
61. Wilmington Ave & Alondra Blvd
62. Wilmington Ave & Greenleaf Blvd
63. Wilmington Ave & Walnut St
64. Central Ave & Greenleaf Blvd
65. Willowbrook Ave & Alondra Blvd
66. Alameda St & Greenleaf Blvd

The existing lane configurations for these sixty six analyzed intersections are shown in Figure 2.2.

Intersections in the City of Los Angeles are signalized and currently operate under the City's ATSAC system (Automated Traffic Surveillance and Control) which is a centralized control system that provides for the coordination of traffic signal timing to maximize the street capacities and to minimize traffic delays on City streets. Per the City of Los Angeles, a capacity increase of 7% (0.07 volume/capacity adjustment) was applied for ATSAC at these intersections.

2.3 Existing Intersection Conditions

Existing Traffic Volumes

Recent traffic counts were used for all of the analyzed intersections. AM and PM peak period

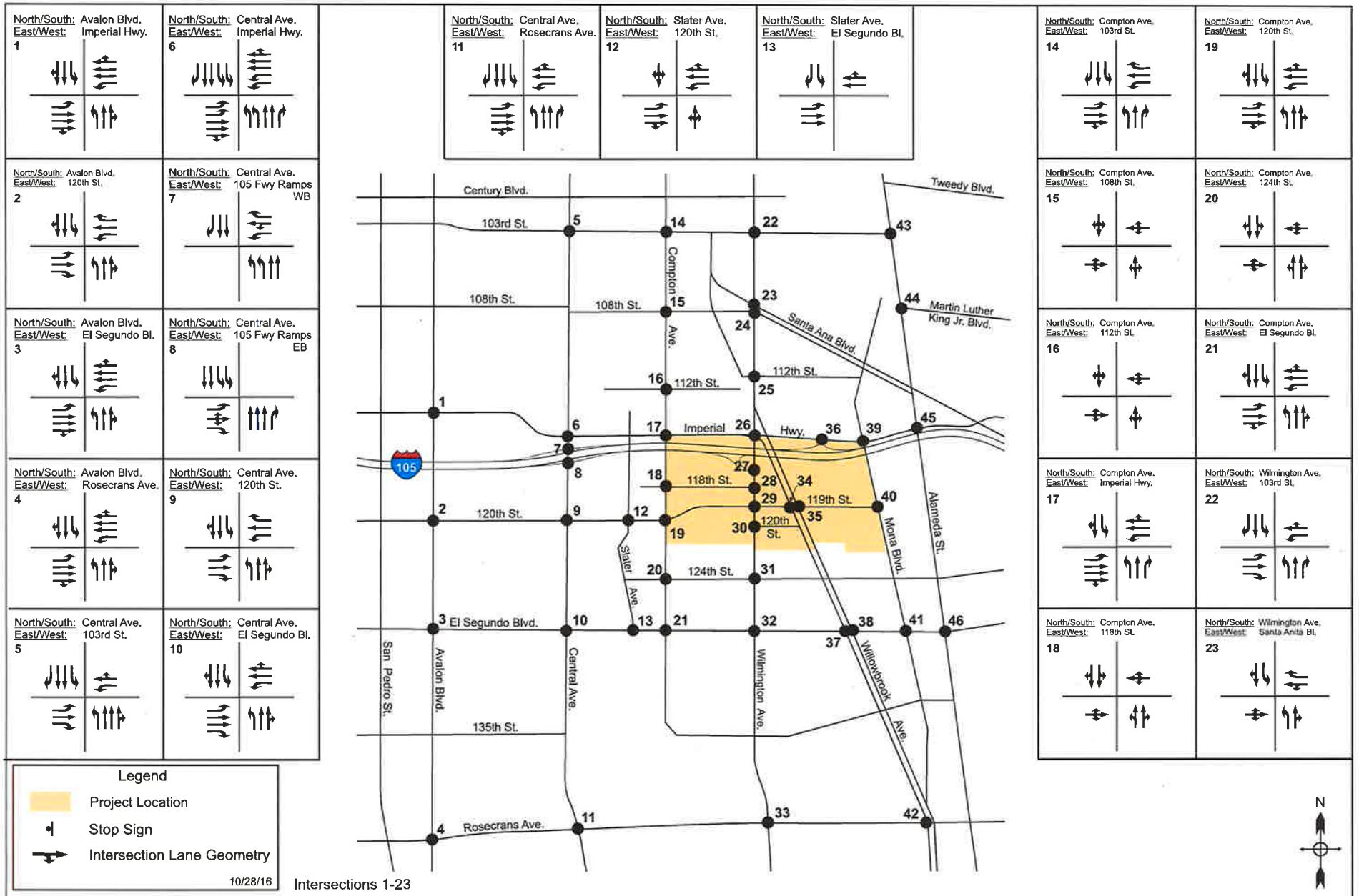

Figure 2.2
Configuration of Analyzed Intersections

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Figure 2.2
Configuration of Analyzed Intersections

Willowbrook TOD Specific Plan EIR Traffic Study

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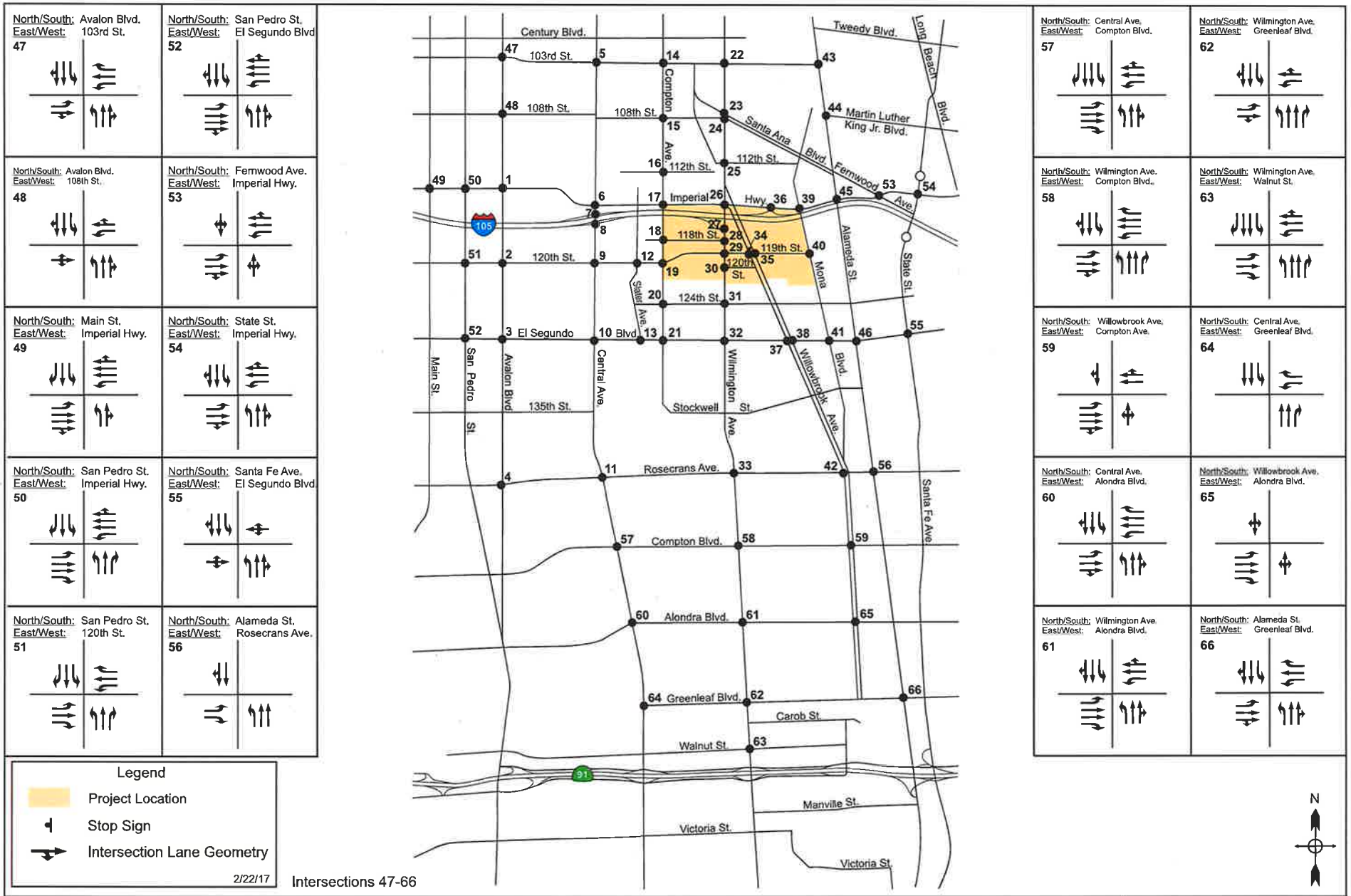

Figure 2.2
Configuration of Analyzed Intersections

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traffic counts (7-10 AM and 3-6 PM) were conducted in May of 2015 for intersections 1-46 and were conducted in December 2016 for intersections 47-66. The 2015 counts were factored by 1% to reflect 2016 conditions. The existing peak hour traffic volumes are illustrated in Figure 2.3 and 2.4 for the AM and PM peak hours respectively, and were used in all subsequent analyses. The traffic volume counts are shown in Appendix C.

Level of Service Methodology

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F, with each level defined by a range of volume/capacity (V/C) ratios. Table 2.1 defines the ranges of V/C ratios and their corresponding levels of service for signalized intersections. Three study intersections are unsignalized. Levels of service for unsignalized intersections are defined instead by the average delay in seconds per vehicle occurring at the intersection. In contrast to signalized intersections, where all approaches to the intersection must stop at a red light and wait for the next green light, at stop-controlled intersections only the minor street traffic controlled by the stop sign is required to stop (at two-way stop intersections). Through traffic movements on the major street do not stop, and turning movements from the major street must stop only if there is conflicting traffic approaching in the opposite direction. At all-way stop intersections, all approaches have to stop. Table 2.2 defines the ranges of delay and their corresponding levels of service for unsignalized intersections. For unsignalized intersections these parameters are reported for the minor movements only and not for the major street through moves or for the intersection as a whole.

SB 743

Senate Bill 743 mandated that CEQA review of transportation impacts of proposed development projects no longer be based on delay and capacity methods such as delay and level of service and instead use another methodology. The Office of Planning and Research (OPR) is currently in the process of updating CEQA guidelines to these ends and has proposed that the impact methodology be based on vehicle miles travelled. At this time, OPR is finalizing its recommendations but no official procedures have been adopted at the statewide level. In anticipation of SB743 being implemented, the County of Los Angeles is in the process of developing procedures and methodologies but similarly has not yet finalized or adopted such procedures. The analysis in this study therefore follows the current County of Los Angeles Traffic Study Guidelines and is based on intersection level of service analysis.

Los Angeles County Methodology

Per the County of Los Angeles Traffic Impact Analysis guidelines, the Intersection Capacity Utilization (ICU) method of intersection analysis was used to obtain volume/capacity (V/C) ratios for each signalized study intersection in the county. A capacity of 1,600 vehicles per hour per lane and 2,880 vehicles per hour for dual left-turn lanes, and a ten percent yellow

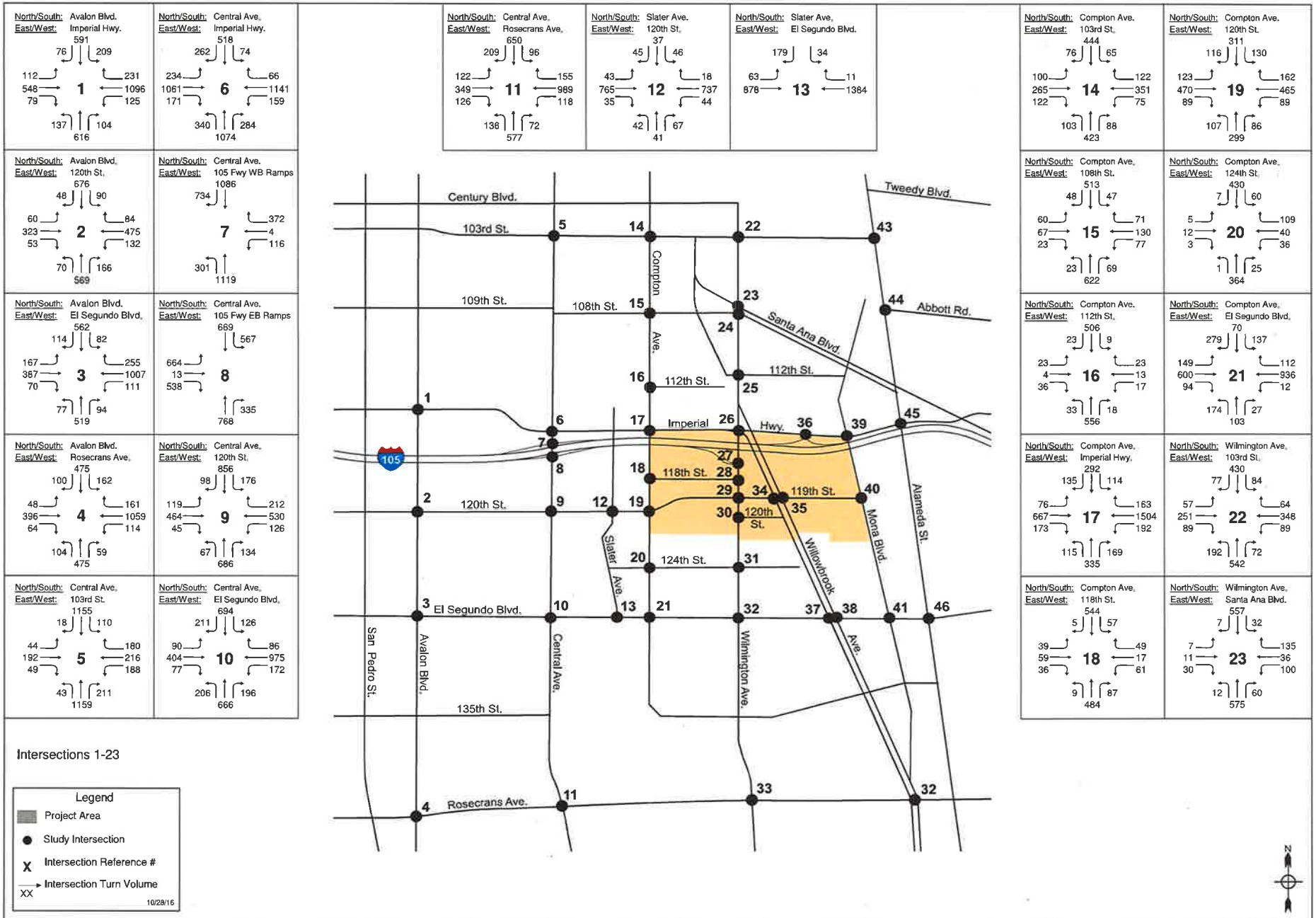

Figure 2.3
Existing Traffic Volumes - AM Peak Hour

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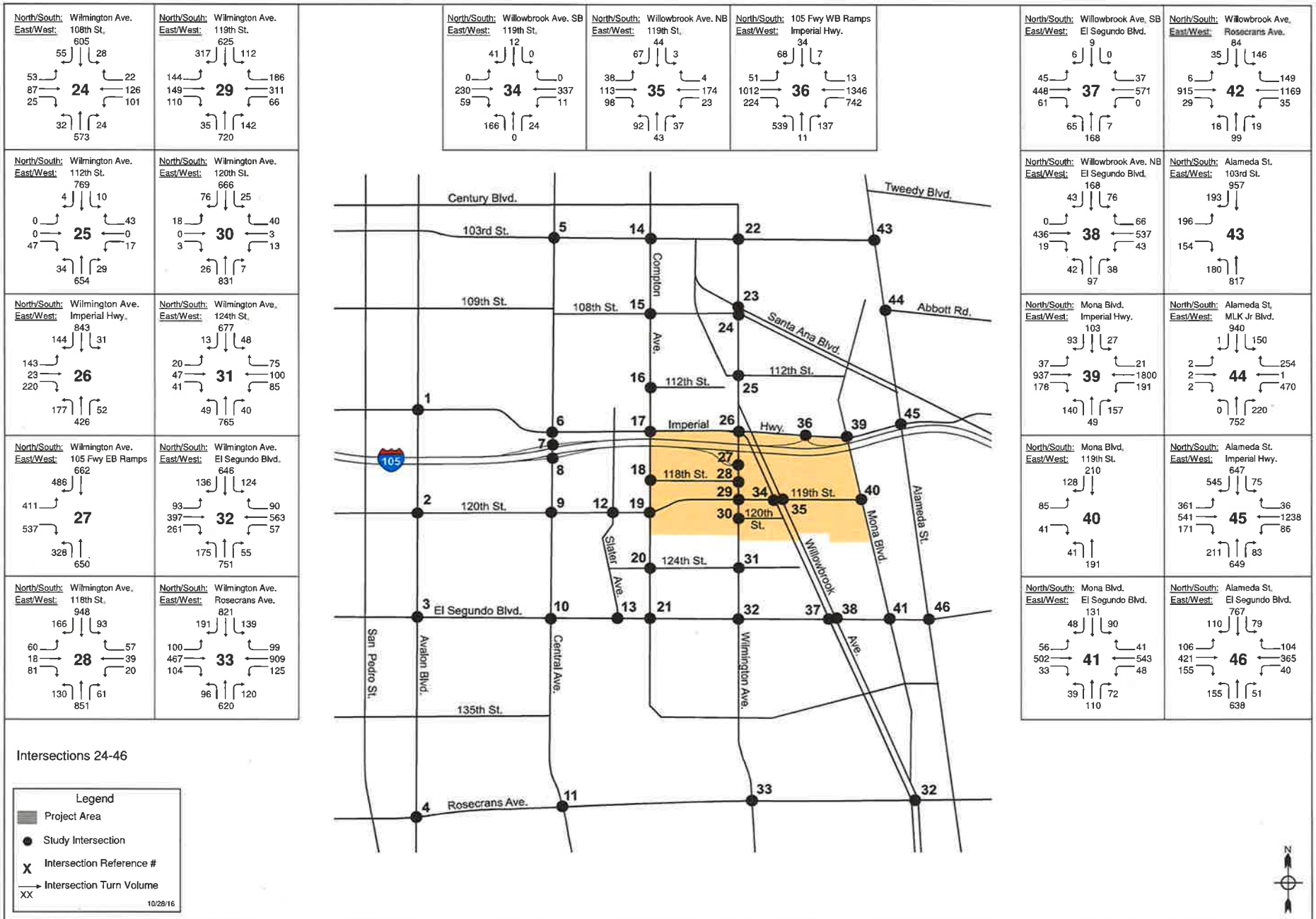

Figure 2.3
Existing Traffic Volumes - AM Peak Hour

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Figure 2.3
Existing Traffic Volumes - AM Peak Hour

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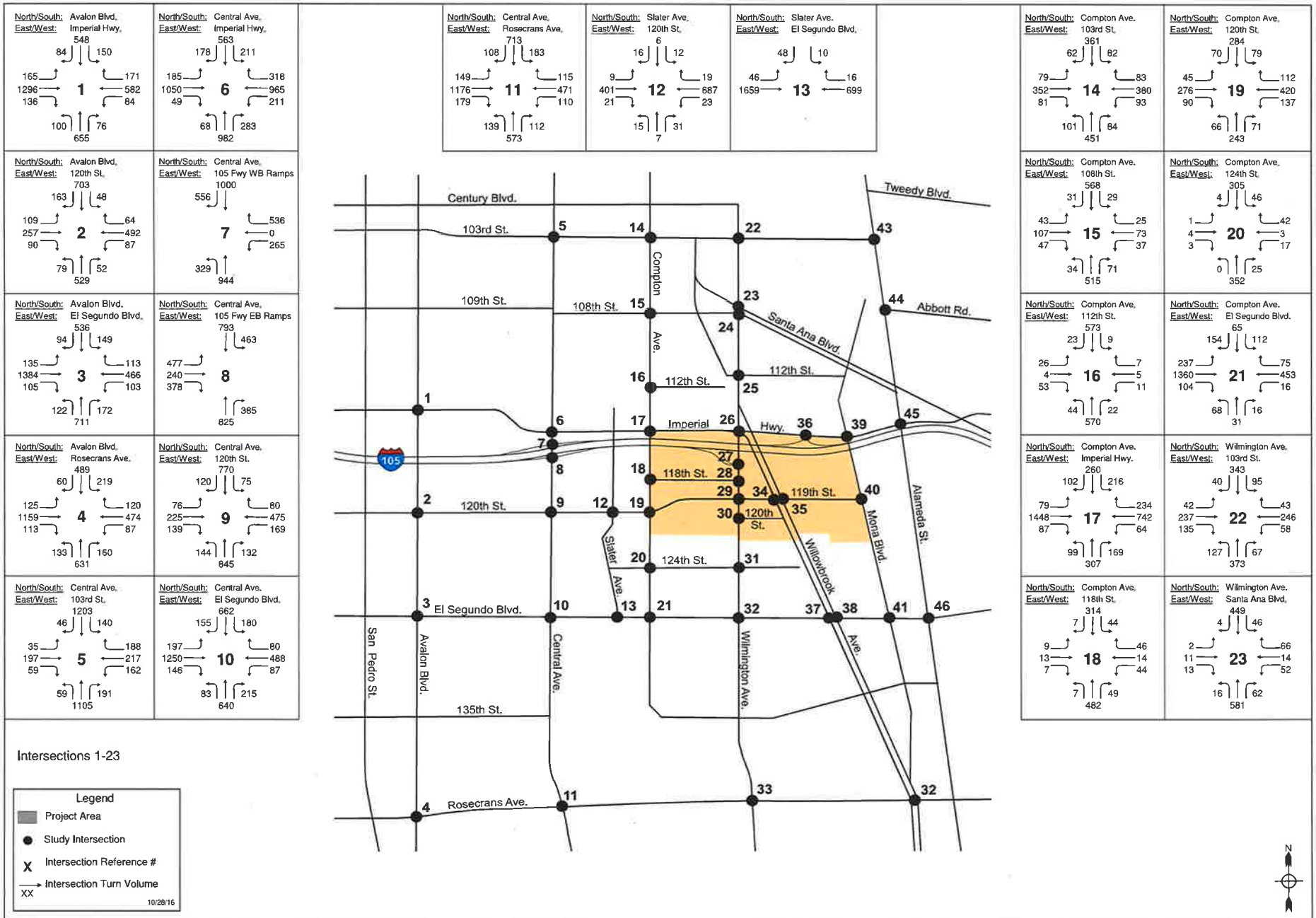

Figure 2.4
Existing Traffic Volumes - PM Peak Hour

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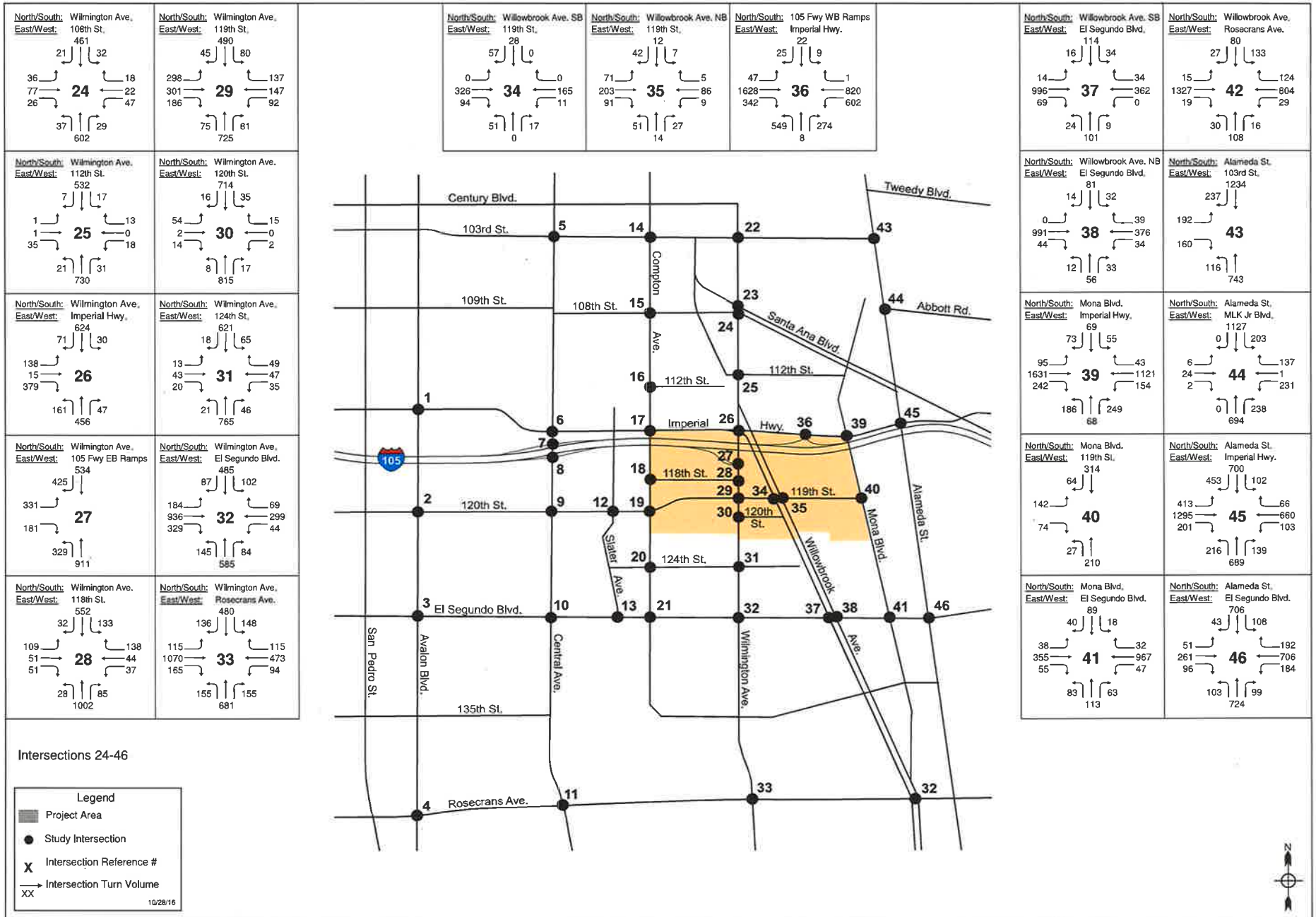

Figure 2.4
Existing Traffic Volumes - PM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

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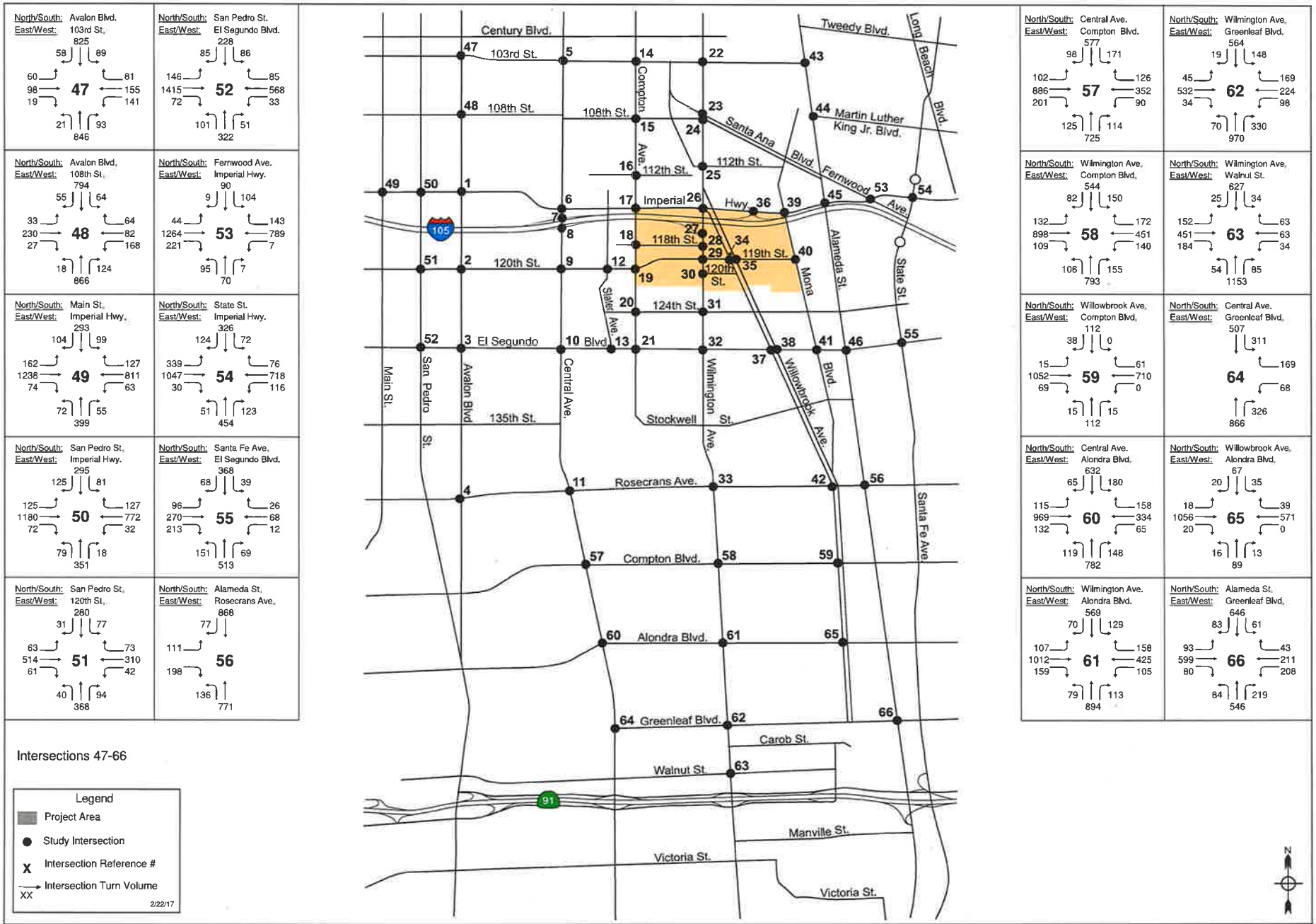

Figure 2.4
Existing Traffic Volumes - PM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

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Table 2.1 Level of Service Definitions for Signalized Intersections

Level of Service	Description	Volume to Capacity Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	<0.600
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 – 0.700
C	Good operation. Occasionally drivers may have to wait for more than 60 seconds, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 – 0.800
D	Fair operation. Cars are sometimes required to wait for more than 60 seconds during short peaks. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 – 0.900
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	0.901 – 1.000
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersections approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	Over 1.000

Source: *Highway Capacity Manual*, Special Report 209, Transportation Research Board, Washington, D.C., 1985 and *Interim Materials on Highway Capacity*, MCHRP Circular 212, 1982.

Table 2.2 Level Of Service Definitions For Unsignalized Intersections

Level of Service	Average Control Delay (seconds/veh)
A	0 to 10
B	>10 to 15
C	>15 to 25
D	>25 to 35
E	>35 to 50
F	> 50

Source: *HCM2010 Highway Capacity Manual 2010*, Transportation Research Board, Washington, D.C.

clearance cycle was assumed in conducting the capacity analysis. For unsignalized intersections the Highway Capacity Manual (HCM) 2010 methodology was used.

City of Compton, and City of Lynwood Methodology

The County of Los Angeles methodology of ICU analysis was used to determine volume/capacity (V/C) ratios for each study intersection in the City of Compton and in the City of Lynwood.

City of Los Angeles

For intersections in the City of Los Angeles, intersection analysis was conducted using the "Critical Movement Analysis (Planning Method)" as described in "Transportation Research Circular 212, Transportation Research Board, Washington D.C. 1980", and as required by LADOT's Traffic Study Policy and Procedures, to obtain volume/capacity (V/C) ratios for each intersection. The City's CMA Spreadsheet was used for all intersection LOS calculations. For unsignalized intersections the Highway Capacity Manual (HCM) 2010 methodology was used.

Existing Conditions – Intersection Levels of Service

Table 2.3 summarizes the existing AM and PM peak hour V/C ratios and corresponding levels of service at the analyzed intersections. Intersection worksheets are shown in Appendix D.

AM Peak Hour

All of the studied intersections currently operate at LOS D or better during the AM peak hour, except the following two intersections:

25.	Wilmington Ave & 112th St	LOS E
17.	Compton Ave & Imperial Hwy	LOS F

PM Peak Hour

All of the studied intersections currently operate at LOS D or better during the PM peak hour, except the following four intersections:

10.	Central Ave & El Segundo Blvd	LOS E
16.	Compton Ave & 112th St	LOS E
25.	Wilmington Ave & 112th St	LOS E
62.	Wilmington Ave & Greenleaf Blvd	LOS E

2.4 Existing Transit Service

The Specific Plan area is served by significant levels of transit including two Metro rail lines (Blue and Green Lines), seven regional bus lines, and five local shuttle routes. There are five Metro Local regional bus lines, one Compton Renaissance bus line and 1 GTrans (formerly Gardena Municipal Bus Lines) bus line, and also two LA County The Link shuttle bus lines, one Lynwood Breeze shuttle bus line and one LADOT DASH shuttle bus line, serving the Specific Plan area.

The focus of transit service is the Willowbrook/Rosa Parks Station which serves the Metro Blue and Green Lines and many of the bus lines. Regional rail and regional bus transit lines are shown in Figure 2.5, and shuttle bus routes are shown in Figure 2.6 and all transit lines are listed in Table 2.4 which shows the frequency of service (headways) during the peak periods.

Rail Transit Service

Metro Blue Line

The Willowbrook/Rosa Parks Station is served by the Metro Blue Line, which runs between Downtown Los Angeles and Downtown Long Beach. The Blue Line operates between approximately 4:00 am and 1:00 am, and until about 2:00 am on weekend nights. It operates every 6 to 12 minutes during weekday peak periods and at about 10 to 15 minutes on weekends. There is a transfer to the Metro Green Line at this station.

Table 2.3 Existing Conditions - Intersection Level of Service 2/9/2017

Intersection		*Intersection Type*	*Existing Conditions*			
			Weekday AM Peak Hour		*Weekday PM Peak Hour*	
			V/C or (Delay)	LOS	V/C or (Delay)	LOS
Los Angeles County						
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.726	C	0.844	D
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.652	B	0.804	C
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.899	D	0.925	E
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.822	D	0.761	C
12.	Slater Ave & 120th St	Signalized	0.501	A	0.367	A
17.	Compton Ave & Imperial Hwy [2]	Signalized	1.007	F	0.781	C
18.	Compton Ave & 118th St	Signalized	0.438	A	0.367	A
19.	Compton Ave & 120th St	Signalized	0.574	A	0.448	A
20.	Compton Ave & 124th St	Signalized	0.378	A	0.287	A
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.657	B	0.654	B
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.848	D	0.680	B
28.	Wilmington Ave & 118th St	Signalized	0.641	B	0.527	A
29.	Wilmington Ave & 120th St (West)	Signalized	0.840	D	0.766	C
30.	Wilmington Ave & 120th St (East)	Signalized	0.424	A	0.426	A
31.	Wilmington Ave & 124th St	Signalized	0.557	A	0.485	A
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.716	C	0.793	C
34.	Willowbrook Ave W & 119th Street	Signalized	0.447	A	0.436	A
35.	Willowbrook Ave E & 119th Street	Signalized	0.375	A	0.359	A
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.775	C	0.792	C
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.416	A	0.508	A
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.447	A	0.507	A
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.730	C	0.825	D
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(13.5)	B	(17.0)	C
41.	Mona Blvd & El Segundo Blvd	Signalized	0.512	A	0.609	B
43.	Alameda St & 103rd St [4]	Signalized	0.790	C	0.852	D
45.	Alameda St & Imperial Hwy [4]	Signalized	0.772	C	0.799	C
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.765	C	0.898	D
52.	El Segundo Blvd & San Pedro St	Signalized	0.589	A	0.601	B
City of Compton						
13.	Slater Ave & El Segundo Blvd	Signalized	0.687	B	0.649	B
21.	Compton Ave & El Segundo Blvd	Signalized	0.804	C	0.706	C
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.854	D	0.847	D
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.693	B	0.719	C
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.592	A	0.700	B
56.	Alameda St & Rosecrans Ave	Signalized	0.606	B	0.604	B
57.	Cental Ave & W Compton Blvd	Signalized	0.758	C	0.802	C
58.	Wilmington Ave & W Compton Blvd	Signalized	0.702	B	0.888	D
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.532	A	0.453	A
60.	Central Ave & Alondra Blvd	Signalized	0.754	C	0.842	D

Table 2.3 Existing Conditions - Intersection Level of Service 2/9/2017

Intersection		*Intersection Type*	*Existing Conditions*			
			Weekday AM Peak Hour		*Weekday PM Peak Hour*	
			V/C or (Delay)	LOS	V/C or (Delay)	LOS
61.	Wilmington Blvd & Alondra Blvd	Signalized	0.825	D	0.877	D
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.797	C	0.911	E
63.	Wilmington Ave & Walnut St	Signalized	0.595	A	0.785	C
64.	Central Ave & Greenleaf Blvd	Signalized	0.534	A	0.671	B
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.532	A	0.526	A
66.	Alameda St & Greenleaf Blvd	Signalized	0.628	B	0.723	C
City of Lynwood						
44.	Alameda St & Abbott Rd	Signalized	0.660	B	0.624	B
53.	Imperial Hwy & Fernwood Ave	Signalized	0.732	C	0.755	C
54.	Imperial Hwy & State St	Signalized	0.738	C	0.785	C
City of Los Angeles						
1.	Avalon Blvd & Imperial Hwy	Signalized	0.747	C	0.713	C
2.	Avalon Blvd & 120th St	Signalized	0.592	A	0.672	B
5.	Central Ave & 103rd St	Signalized	0.637	B	0.664	B
6.	Central Ave & Imperial Hwy	Signalized	0.737	C	0.757	C
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.823	D
8.	Central Ave & I-105 e/b Ramps	Signalized	0.668	B	0.635	B
9.	Central Ave & 120th St	Signalized	0.753	C	0.690	B
14.	Compton Ave & 103rd St	Signalized	0.604	B	0.587	A
15.	Compton Ave & 108th St	Signalized	0.663	B	0.527	A
16.	Compton Ave & 112th St	Unsignalized [5]	(31.0)	D	(38.5)	E
22.	Wilmington Ave & 103rd St	Signalized	0.660	B	0.463	A
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.473	A	0.441	A
24.	Wilmington Ave & 108th St	Signalized	0.593	A	0.496	A
25.	Wilmington Ave & 112th St	Unsignalized [5]	(44.5)	E	(42.1)	E
47.	Avalon Blvd & 103rd St	Signalized	0.441	A	0.475	A
48.	Avalon Blvd & 108th St	Signalized	0.564	B	0.608	A
49.	Imperial Hwy & Main St	Signalized	0.590	B	0.632	A
50.	Imperial Hwy & San Pedro St	Signalized	0.661	B	0.697	B
51.	San Pedro St & 120th St	Signalized	0.528	A	0.597	A
City of Los Angeles & Los Angeles County [6]						
17.	Compton Ave & Imperial Hwy	Signalized	0.898	D	0.663	B
26.	Wilmington Ave & Imperial Hwy	Signalized	0.501	A	0.497	A
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.69	B	0.71	C
39.	Mona Blvd & Imperial Hwy	Signalized	0.601	B	0.704	C

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

[6] Analyzed per City of Los Angeles methodology.

Metro Green Line

The Willowbrook/Rosa Parks Station is also served by the Metro Green Line, which runs between Redondo Beach and Norwalk. The Green Line operates between approximately 4:00 am and 12:00 am, and until about 2:00 am on weekend nights. It operates every 7 to 10 minutes during weekday peak periods and at about 15 minutes on weekends. There is a transfer to the Metro Blue Line at this station.

The Willowbrook/Rosa Parks Station

The Willowbrook/Rosa Parks station is located on the southeast corner of Wilmington Avenue and Imperial Highway. It is a three-level station where the ground level platform provides access to the Metro Blue Line, the second level is a mezzanine area connecting both platforms, and the third-level provides access to the Metro Green Line.

The station is also directly served by the following bus lines via off-street bus loading bays (the route names refer to communities not street names):

- Metro Local 55/355 - Willowbrook to Downtown Los Angeles.
- Metro Local 120 - Whittier to El Segundo.
- Metro Local 202 - Wilmington to Willowbrook.
- Metro Local 205 - Willowbrook to San Pedro.
- Gardena Municipal Bus Lines Route 5 - Willowbrook to Hawthorne.
- Metro Local 612 – Local Area Circulator Shuttle.
- Los Angeles County Link Route B - Local Willowbrook Shuttle.
- Lynwood Breeze Route A - Shuttle between Willowbrook and Lynwood.

Regional Bus Transit Service Serving the Specific Plan Area

Metro Local 55/355 runs between Willowbrook/Rosa Parks Station and Downtown Los Angeles via Wilmington Avenue in the study area. It operates at about 10-30 minute headways during weekday peak periods and at about 20-60 minute headways on weekends. It operates 24-hours.

Metro Local 120 runs between Whittier and El Segundo via Imperial Highway in the study area. It operates at about 30-40 minute headways during weekday peak periods and at 60 minute headways on weekends.

Metro Local 202 runs between Wilmington and Willowbrook/Rosa Parks Station via Willowbrook Avenue in the study area. It operates at about 50 to 60 minute headways during weekday peak periods and at about 60 minute headways overnight. There is no mid-day service and no service at weekends.

Table 2.4 Existing Public Transit Services

10/28/2016

Route	Description	Approximate Headway (minutes)	
		AM Peak	PM Peak
Metro Rail			
Blue Line	Long Beach - Downtown Los Angeles	6	6
Green Line	Redondo Beach - Norwalk	8	8
Metro Local			
55/355	Willowbrook - Downtown Los Angeles	20	13
120	El Segundo - Whittier	40	40
202	Wilmington - Willowbrook	60	60
205	San Pedro - Willowbrook	30	40
612	Willowbrook - Huntington Park	60	60
LA County The Link			
Route A	San Pedro St. & 135th St. - Hahn Plaza	60	60
Route B	Mona Blvd. & Otis St. - Willowbrook Station	30	30
KMC Shuttle	King Medical Center - Willowbrook Station	20	20
Gardena Municipal			
GA 5	Hawthorne - Willowbrook	30	30
Compton			
C5	Compton - Willowbrook	60	0
Lynwood Breeze			
Route D	Willowbrook - Lynwood	30	30
LADOT DASH			
Dash Watts	Watts - Willowbrook	20	20

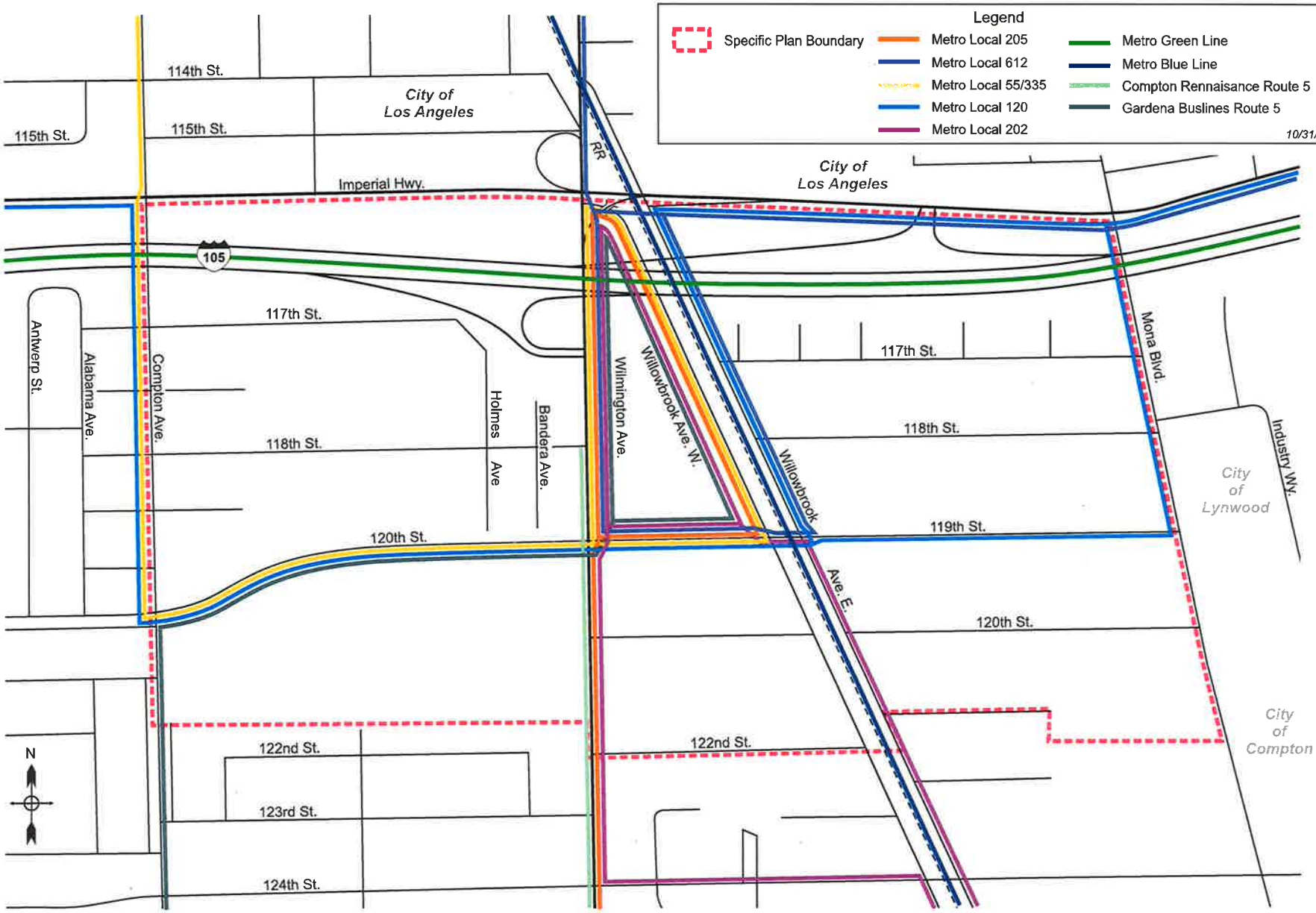

Figure 2-5
Existing Transit - Regional Lines

Willowbrook TOD Specific Plan

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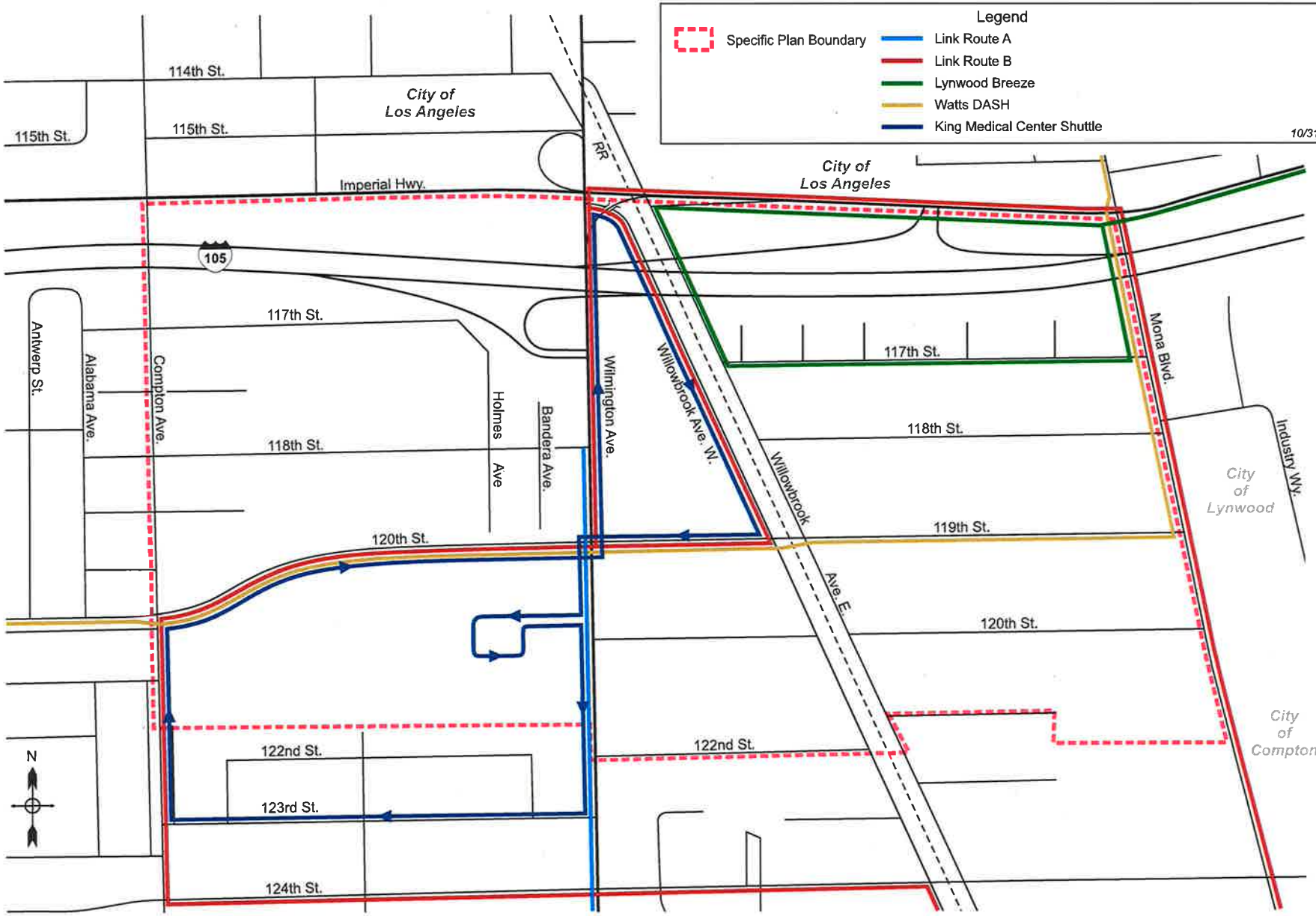

Figure 2.6
Existing Transit - Shuttle Routes

Willowbrook TOD Specific Plan

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Metro Local 205 runs between Willowbrook/Rosa Parks Station and San Pedro via Wilmington Avenue in the study area. It operates at about 25 to 50 minute headways during weekday peak periods and at 55-60 minute headways on weekends.

Metro Local 612 runs as a circulator shuttle, connecting the Willowbrook/Rosa Parks Station to Lynwood, South Gate, Cudahy, Bell, Walnut Park, and Watts. It operates at about 60 minute headways every day.

GTrans (formerly Gardena Municipal Bus Lines) Route 5 runs between Willowbrook/Rosa Parks Station and Hawthorne via Wilmington Avenue in the study area. It operates at about 30 minute headways on weekdays.

Compton Renaissance Route 5 operates as a circulator shuttle between Willowbrook (Martin Luther King Jr. Hopsital) and Compton. Based on available schedules, it operates at about 60 minute headways between 8am and 3pm on weekdays and between 10am and 3pm on Saturdays.

Shuttle Bus Routes Serving the Specific Plan Area

Los Angeles County

Los Angeles County's The Link Route A is a clockwise loop linking Hahn Plaza, MLK Medical Center via Wilmington Avenue, El Segundo Boulevard, Central Avenue, Rosecrans Avenue, Broadway and Imperial Highway. It provides connections to the MLK Medical Center, Carver Park, the Magic Johnson Park, the Avalon Green Line Station and other points throughout Willowbrook. It operates at about 60 minute headways on weekdays and Saturdays.

Los Angeles County's The Link Route B runs as circulator shuttle throughout Willowbrook, mostly running along Willowbrook Avenue, Mona Boulevard, Wilmington Avenue, 120th Street, 124th Street, 126th Street and 130th Street. It provides connections to the MLK Medical Center, Drew University, Mona Park, Jefferson Elementary school, and the Willowbrook Rosa Parks Metro Station. It operates at about 30 minute headways on weekdays and Saturdays.

Los Angeles County's King Medical Center Shuttle runs between the Medical Center and the Willowbrook/Rosa Parks Station and also served the Hahn Shopping Center. It operates at 20 minute headways on weekdays and Saturdays.

Los Angeles DOT (DASH)

The DASH Watts shuttle (LDWTS) runs as a circulator shuttle connecting Willowbrook to areas throughout Watts, mainly via Mona Boulevard, 103rd Street, Wilmington Avenue, 92nd

Street, McKinley Avenue, Avalon Boulevard, and 120th Street. It operates at 20 minute headways on weekdays and Saturdays.

Lynwood Breeze

The Lynwood Breeze Route D shuttle runs between Willowbrook and Lynwood. It operates at about 30 minute headways on weekdays.

Transit Routes by Key Street

The streets with the most transit service are Wilmington Avenue, Willowbrook Avenue and 119th/120th Street. The lines that run along each street are listed below.

Wilmington Avenue

- Metro Local 202 - Willowbrook to Wilmington.
- Metro Local 205 - Willowbrook to San Pedro.
- Metro Local 612 – Local Circulator Shuttle.
- Los Angeles County Link Route A – Local Circulator Shuttle.
- Los Angeles County King Medical Center Shuttle – Local Circulator Shuttle
- Compton Renaissance Route 5 – Local Shuttle between Willowbrook and Compton.

Willowbrook Avenue

- Metro Local 202 - Wilmington to Willowbrook.
- Metro Blue Line – Downtown Long Beach to Downtown Los Angeles.

Imperial Highway

- Metro Local 120 - Whittier to El Segundo.
- Lynwood Breeze Route D - Shuttle Imperial/Wilmington Station and Lynwood.

120th Street

- Metro Local 55/355 – Willowbrook to Downtown Los Angeles.
- Metro Local 120 - Whittier to El Segundo.
- Gardena Municipal Bus Lines Route 5 - Willowbrook to Hawthorne.
- Los Angeles County Link Route B – Local Circulator Shuttle.
- Los Angeles County King Medical Center Shuttle – Local Circulator Shuttle
- DASH Watts Shuttle – Local Circulator Shuttle.

Routes Connecting the Martin Luther King Jr. Medical Center and the Charles R. Drew University Campus to the Willowbrook Rosa Parks Metro Station

The following transit routes run along 120th Street between Compton Avenue and Wilmington Avenue, and connect the Martin Luther King Jr. Medical Center and the Charles R. Drew University Campus to the Willowbrook Rosa Parks Metro Station.

- Metro Local 55/355
- Metro Local 120
- Gardena Municipal Bus Lines Route 5
- The Link Route B
- King Medical Center Shuttle

Service frequencies for these routes are identified earlier in this section, and generally range from as low as 8-15 minutes in the peak periods for Route 55/355, to 30-60 minutes for the other routes on weekdays, and 30-60 minutes on Saturdays. The Route 5/355 operates 24 hours a day, the Route 120 operates up to about midnight. Only the two Metro Lines operate on Sundays. The Gardena Route 5 does not operate late evenings or weekends. The Link Route B and the King Medical Center Shuttle run 20-30 minute service frequencies, but do not operate evenings after 6pm or on Sundays.

2.5 Bicycle and Pedestrian Facilities

Bicycle Facilities

The Los Angeles County Bicycle Master Plan designates a countywide network of bicycle paths, bicycle-lanes, and bicycle routes in the area of the Project. The following designations are used by type of facility:

- Bicycle Paths (Class I) are paved right-of-way for exclusive use by bicyclists, pedestrians and other non-motorized modes of travel. They are physically separated from vehicular traffic.

- Bicycle Lanes (Class II) have an allocated portion of the roadway exclusive for bicycle travel, defined by pavement striping and signage. Bicycle lanes are one-way facilities on either side of the roadway. They are located adjacent to the curb, where there is no on-street parking and adjacent to the parking lane, where on-street parking exists. .

- Bicycle Routes (Class III) provide shared use with motor vehicle traffic within the same traffic lane and are designated by signage.

There are no current bike paths, bike lanes, or bike routes in the Specific Plan area. The existing bicycle facilities in the study area are shown in Figure 2.7. There is a single Bicycle Path which runs along Compton Creek. There are also Bike Lanes on the following streets:

- Central Avenue (Between Century Boulevard and Imperial Highway)
- Central Avenue (Between El Segundo Boulevard and south of Compton Boulevard)

Pedestrian Facilities

Sidewalks exist on all streets in the Specific Plan Area. Pedestrian crosswalks exist at signalized intersections. There is a mid-block crosswalk on 120th Street midway between Compton Avenue & Wilmington Avenue, which is a signalized crosswalk. There are also two unsignalized crosswalks on 118th Street between Compton Avenue & Wilmington Avenue.

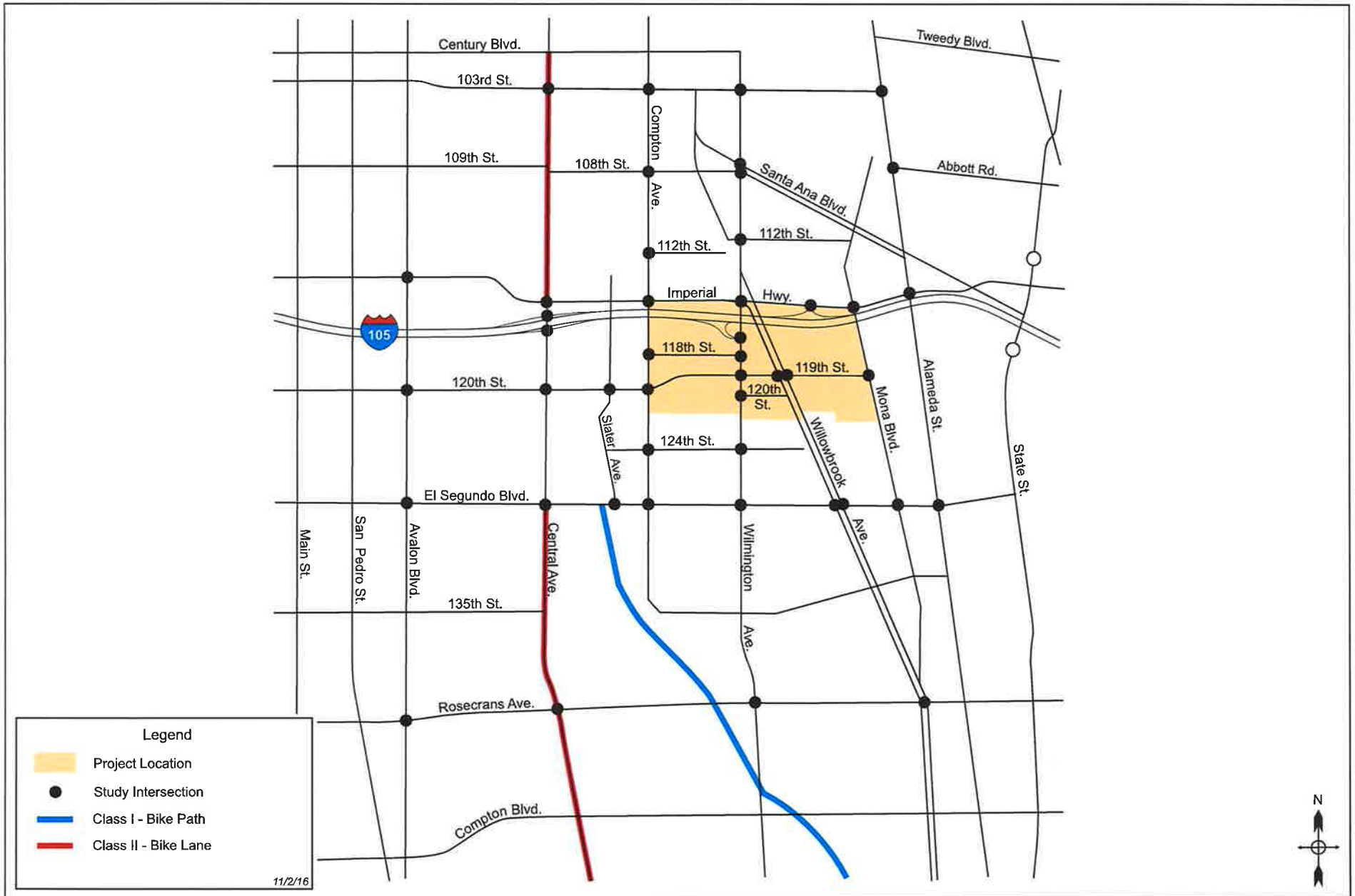

Figure 2.7
Existing Bicycle Facilities

Willowbrook TOD Specific Plan EIR Traffic Study

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3. The Specific Plan - Transportation Characteristics

This section of the report describes the transportation characteristics of the proposed project (the Specific Plan). To set the context, the Specific Plan purpose and objectives are first described, followed by a summary of Specific Plan land uses. The resultant transportation characteristics of the Specific Plan are then discussed.

3.1 Specific Plan Purpose and Objectives

As identified in Chapter 1, the purpose of the Willowbrook TOD Specific Plan is to revitalize the community within the project area and to improve access to all modes of transportation, including transit, walking, and bicycling. Building off the goals and policies outlined in the General Plan, the Willowbrook TOD Specific Plan will encourage transit oriented development, promote active transportation and reduce vehicle miles travelled. The Specific Plan is anticipated to facilitate development, especially residential and employment-generating uses proximate to the Willowbrook/Rosa Parks Station.

The primary objectives of the Specific Plan are to identify land use options that include mixed uses, increased housing opportunities', and neighborhood–serving retail uses, In addition the Specific Plan is intended to foster a healthy community by improving pedestrian linkages between the Willowbrook/Rosa Parks Station, the Kenneth Hahn Plaza, the Martin Luther King Jr. Medical Center, the Charles R. Drew University of Medicine and Science, future mixed use areas, and existing residential neighborhoods.

3.2 Specific Plan Land Uses

For the purposes of the EIR analysis, land use forecasts were developed for the Specific Plan. These comprised land use types and quantities that could be added in the Specific Plan area and land use types and quantities that could be replaced (removed). A total of seven sub-areas were identified and divided into thirteen geographic zones. Land use projections made for each zone, and also aggregated to sub-areas. The sub-areas are shown in Figure 3.1. The thirteen zones are shown in Figure A-1 in Appendix A.

Land Use Changes in the Specific Plan

The Specific Plan includes three key land use areas: the Martin Luther King Jr. Medical Center, the Charles R. Drew University of Medicine and Science, and the remaining areas of the Specific Plan. Land use changes were forecast for all three components. Table 3.1 summaries the land use quantities by key type of use.

Martin Luther King Jr. Medical Center

An EIR for modification and expansion of the Medical Center was approved in 2010[1]. The EIR identified two tiers of construction. Tier 1 is now complete, and is included in the existing traffic counts (comprising the baseline existing conditions for the traffic analysis). The EIR Traffic Study identified Tier 2 development assumptions totaling 1,814,695 sq. ft. with 100 DU's. For this Specific Plan, Tier 2 growth was updated to an amount considered more realistic for the current environment at 1,248,522 sq. ft. and 100 DU's (which represents 75% of the Tier 2 growth assumed in the EIR). This adjustment was made by by County staff in coordination with the Second Supervisorial District.

Charles R. Drew University of Medicine and Science (CDU) Master Plan.

The CDU Master Plan is also included in the Specific Plan land use forecasts. CDU provided information on their Master Plan for growth at the university, representing an increase of 825 students from 625 existing to 1,450 total, and an additional 70 dwelling units from 49 existing to 119 total.

Other Specific Plan Land Uses

Land use forecasts were also prepared for the remaining areas of the Specific Plan. These represent an increase of 1,945 residential dwelling units (DU'S), of which the vast majority are multi-family; and approximately 865,770 sq. ft. of commercial uses (comprised primarily of approximately743,590 sq. ft. of office/R&D/business park/medical uses, and 122,185 sq. ft. of retail commercial uses)[2].

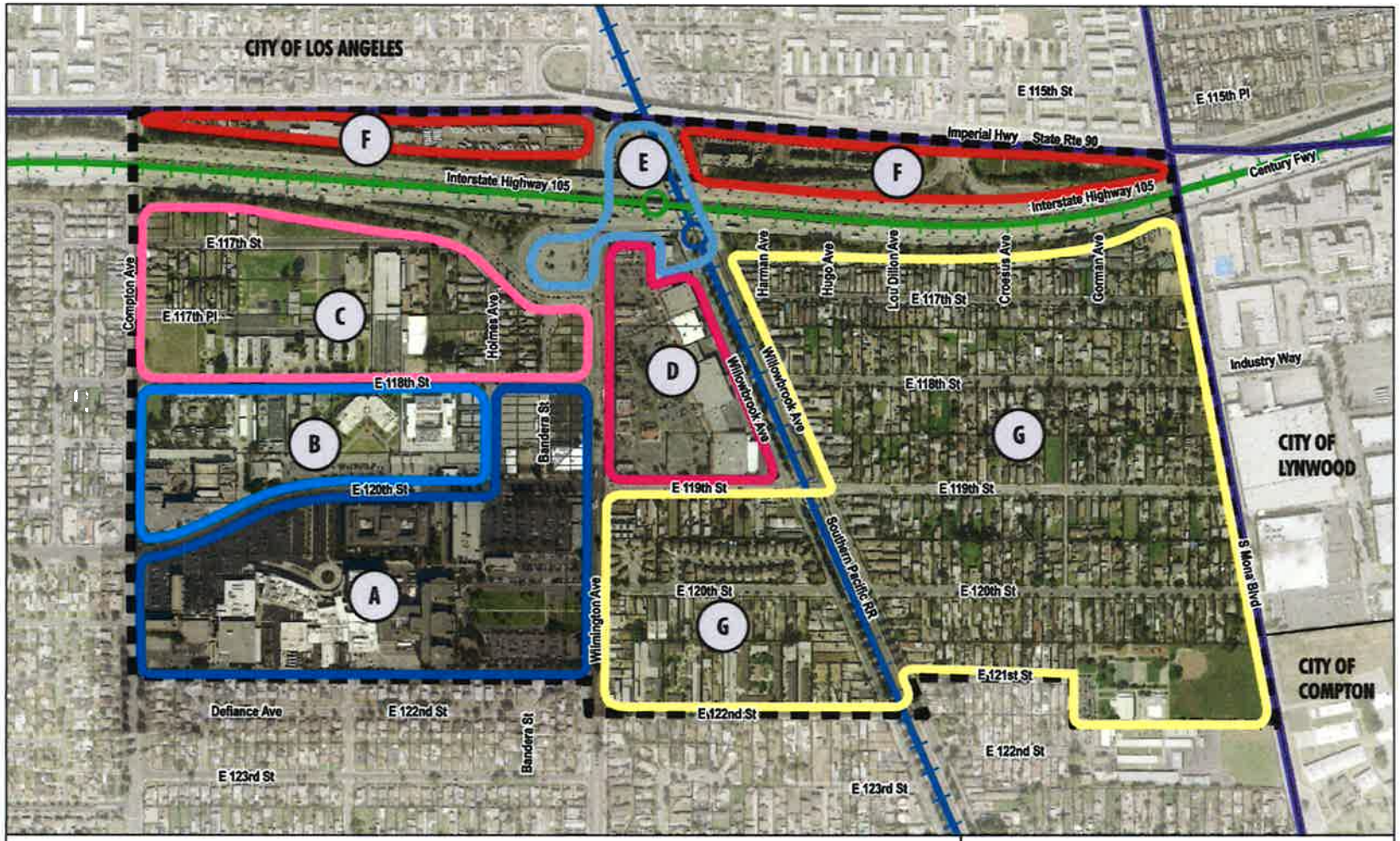
3.2 Specific Plan Trip Generation

Vehicular trip generation was estimated for the existing land uses and for the projected future land uses, to determine a net increase in trip generation. As described above, for purposes of traffic analysis, the Specific Plan area was divided into 13 geographic zones, and potential changes in land uses were identified for each zone.

Trip generation from the project was estimated using trip rates from *Trip Generation Manual – 9th Edition* (Institute of Transportation Engineers, 2012). However, ITE trip rates are generally for suburban stand-alone land uses with negligible transit use. They were thus adjusted to be more representative of the existing and proposed land uses in the Specific Plan area and a transit oriented district – where the proximity to transit allows some trips to be

[1] Traffic Study for the Martin Luther King Jr. Medical Center Campus Project, County of Los Angeles, July 2010.

[2] The breakdown of mixed use land use categories s to specific land use types was made in consultation with County staff.



Source: The Arroyo Group

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Figure 3.1
Specific Plan Sub-Areas

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Willowbrook TOD Specific Plan EIR Traffic Study

Table 3.1 Specific Plan Land Use Summary - By Type of Use

Category	Land Use	Existing	Future	Net Change
Martin Luther King Jr. Medical Campus	Single Family Housing (DU's)	0	100	100
	MLK Medical Campus (sf)	890,891	2,139,413	1,248,522
Charles R. Drew University	Multi-Family Housing (DU's)	49	119	70
	University Students	625	1,450	825
		477,842	772,990	295,148
Other Specifc Plan Land Uses	Single Family Housing (DU's)	347	609	262
	Multi-Family Housing (DU's)	572	1,987	1,415
	Senior Housing (DU's)	0	105	105
	General Office (sf)	8,408	393,745	385,337
	Business Park (sf)	0	224,317	224,317
	Medical Office (sf)	0	35,427	35,427
	R & D Office (sf)	0	98,506	98,506
	Restaurant-High Turnover (sf)	0	7,086	7,086
	Restaurant-Fast Food (sf)	0	2,696	2,696
	Retail (sf)	0	81,572	81,572
	Shopping Center (sf)	189,286	220,116	30,830
	Other/Miscellaneous/Parking (sf)	344,096	600,691	256,595
Total	Total			
	Residential (DU's)	968	2,920	1,952
	Non-Residential (sf)	1,910,523	4,576,559	2,666,036

made by transit, where the proximity of land uses allows for some trips to be made by walking rather than driving, and where some of the trips are between destinations within the Specific Plan area and thus do not leave the area.

The following methodology was used to calculate trip generation for each of the three separate land use areas area in the Specific Plan.

Martin Luther King Jr. (MLK) Medical Center

Trip generation information for the Martin Luther King Jr. Medical Center was taken directly from the approved EIR for that project[1]. As the Tier I development has been completed, it is already included in the existing conditions baseline and is reflected in the existing traffic counts conducted for the study. The Approved EIR Traffic Study identified Tier 2 development assumptions totaling 1,814,695 sq. ft. and associated trip generation totals. As discussed above, this Specific Plan assumes Tier 2 growth at 75% of that level. Trip generation was therefore calculated as 75% of the Tier 2 totals in the MLK EIR and input to the impact analyses described in later chapters.

CDU Master Plan

The Specific Plan includes the Master Plan projections for the CDU Master Plan provided by CDU, and totaling an increase of 825 students from 625 existing to 1,450 total, and an additional 70 dwelling units from 49 existing to 119 total. Trip generation estimates were developed for the CDU Master Plan based on *ITE Trip Generation 9th Edition*, with adjustment factors appropriate for the CDU campus and a TOD area (see further discussion below).

Remainder of the Specific Plan area (the "Non-MLK/CDU area")

The Specific Plan Project includes land use projections for the remainder of the Specific Plan area (the "Non-MLK/CDU area"), as described above.

Trip generation was generally calculated according to trip rates from *ITE Trip Generation 9th Edition*. The base trip rates are shown in Table A-1 in Appendix A. However, the typical methodology of estimating trip generation using trip rates from Institute of Transportation Engineers (ITE) data[2] does not adequately reflect the mixed use characteristics and the TOD environment of the proposed Project, because those trip rates were derived from data typically collected from stand-alone (single use) suburban sites, rather than sites with the characteristics of the Specific Plan area.

[1] Ibid
[2] Institute of Transportation Engineers, *9th Edition Trip Generation Manual*, Washington D.C., 2012

The Specific Plan is in a heavily urbanized area with significant levels of transit service. As discussed at the beginning of this chapter, the purpose of the Specific Plan with respect to transportation is to "... *improve access to all modes of transportation, including transit, walking and bicycling.... to encourage transit oriented development, and promote active transportation.... to facilitate development, especially residential and employment-generating uses proximate to the Willowbrook/Rosa Parks Station... identify land use options that include mixed uses, increased housing opportunities, and neighborhood-serving retail uses...and improve pedestrian linkages between the Willowbrook/Rosa Parks Station, Kenneth Hahn Plaza, Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, future mixed use areas, and existing residential neighborhoods*".

The trip rates therefore required the following types of adjustments to reflect the characteristics of the Specific Plan area. These adjustments were developed in consultation with, and approved by, County staff.

Trips Internal to the Project

With a large mixed use Proposed Project area, there is a high potential for internal synergy between land uses, such that some trips will both start and end within the Project area itself – and thus will not leave the Specific Plan area. These will include people who live in the Project going to the retail, restaurant, and/or other commercial uses, or to the office uses if they both live and work in the Project. It will also include people who drive to the Project, but visit multiple destinations within the Project (for example office and retail, or retail and restaurant). Because these people will walk between those multiple destinations in the Project they will make only one vehicle trip rather than driving to each destination.

The adjustment factors to account for trips remaining internal to the Project area were based on a variety of sources. Studies conducted for the Florida Department of Transportation[1] documented internal trip capture rates at mixed use developments of 7% to 24% in the PM peak period. A research report from the Center for Urban Transportation[2] reported observed internal trip capture rates at mixed use developments of 9% to 14% in the AM peak period and 13% to 16% in the PM peak period. NCHRP Report 684[3] observed trip capture rates of 11% to 31% in the AM peak and 33% to 44% in the PM peak .

The trip adjustment factors to be applied in this study are shown in Table A-2 in Appendix A. Internal trip capture rates of 5% to 15% were applied to commercial uses in the Specific Plan

[1] Tindale Oliver & Associates, Inc., Trip *Characteristics Studies of Multi Use Developments.* Report Prepared for Florida Department of Transportation, 1993.
Walter H. Keller Inc., Districtwide Trip Generation Study, Task 5, Final Report. Prepared for Florida Department of Transportation. 1995

[2] Center for Urban Transportation Research Final Report BDK84-977-10, *Trip Internalization in Mixed Use Developments,* April 2014.

[3] NCHRP Report 684, *Enhancing Internal Trip Capture Estimation for Mixed Use Developments*, Transportation Research Board, 2011.

area, adjustment rates of 5% were applied to institutional uses, and adjustments of 10% were applied to residential uses. These are modest and conservatively low adjustments for internal capture when compared to the information documented above so are considered very reasonable for the Specific Plan area.

For the MLK Medical Center, this study used the internal trip capture rate of 15% utilized in the EIR for that project. For the CDU Master Plan, this study used an internal capture rate of 50% for the on-campus student housing in the peak hours due to the immediate proximity of the housing to campus facilities.

Trips Using Transit

The Project area is well served by transit, focused on the Willowbrook/Rosa Parks Station which serves both the Metro Blue Line and Metro Green Line. The Specific Plan area is served by three regional bus operators, and numerous shuttle bus routes. These operate a total of six regional bus lines and six shuttle lines. These high levels of transit service will result in a significant number of trips being made by transit.

There is increasing evidence that vehicle trip rates for urban mixed use projects and for transit-oriented developments (TOD's) are much lower than the more suburban based ITE trip rates. TCRP Report 128[1] documents that peak hour vehicle trip rates for residential TOD's are 50% lower than standard ITE rates. A Caltrans study[2] documented that peak hour trip rates in urban infill developments, including mixed use projects, were 28% lower than standard ITE rates for mid-rise residential uses, 50% lower for office uses, and 25 to 35% lower for quality restaurant uses, due to internal synergy, walkable proximity to other land uses, and proximity to transit.

The transit use adjustment factors that were applied in this study are shown in Table A-3 in Appendix A. These range from 15% to 25% for residential uses and 10% to 25% for the commercial uses, depending on proximity to the rail station and the type of mixed use development. These are conservatively on the low side when compared to the information documented above so are considered very reasonable for the Specific Plan area.

For the MLK Medical Center, this study used the transit use adjustment rate of 15% utilized in the EIR for that project. For the CDU Master Plan, this study used a transit use adjustment rate of 15% in the peak hours consistent with the rate for the MLK Medical Center and the adjustment rates for the TOD uses.

[1] *TCRP Report 128, Effects of TOD on Housing, Parking and Travel*, Transportation Research Board, 2008
[2] *Trip Generation Rates for Urban Infill Land Uses in California*, Caltrans, 2009

Trip Generation Totals

As shown in Table 3.2, the Project would add 3,139 new AM peak hour trips in the Specific Plan area and 3,832 new PM peak hour trips. (Detailed trip generation calculations are shown in Table A-4 for the AM peak hour and in Table A-5 for the PM peak hour in Appendix A).

As also shown in Table 3.2, approximately 43% of the new trips would be generated by the MLK Medical Center, 3% by CDU, and 54% by the other land uses in the Specific Plan area. Of all new trips, approximately 23% would be from residential uses and 77% from non-residential uses.

Table 3.2 Trip Generation Totals – By Key Land Use Area

Component	*AM Peak Hour*	*AM Peak Hour %*	*PM Peak Hour*	*PM Peak Hour %*
MLK Medical Center	1,289	41%	1,684	44%
CDU	125	4%	126	3%
Specific Plan Remainder	1,725	55%	2,022	53%
Total	3,139		3,832	
Residential	718	23%	887	23%
Non-Residential	2,421	77%	2,945	77%

Table 3.3 shows the breakdown of trips by subarea of the Specific Plan. This shows that the vast majority of additional trips in the remainder of the Specific Plan area will be generated by the Northwest subarea, with relatively few trips being generated in other subareas.

As identified earlier in Chapter 2, the trip generation estimates are used to project traffic volumes and calculate intersection level of service. Vehicle miles travelled (VMT) are estimated and used in the Air Quality and Green House Gas analyses in other sections of the EIR. In general, the VMT for the Specific Plan is lower than would otherwise be the norm because of the TOD nature of the Specific Plan. As discussed above, proximity to the Metro station and transit and Specific Plan features to enhance bike and walk facilities will encourage and lead to higher use of transit, as well as walk/bike. Also, the land use densities and close proximities will increase internal synergies within the Specific Plan area with respect to trip making and, with some trips remaining inside the Specific Plan area, with less trips leaving the Specific Plan area. As also identified above, the traffic analysis estimated

Table 3.3 Trip Generation by Sub-Area

Sub-Area	*Zones*	*AM Peak Hour*		*PM Peak Hour*	
		Trips	*% of Total*	*Trips*	*% of Total*
A. MLK Medical Center	1, 2A, 2B	1,289	41%	1,684	44%
B. CDU	2C	125	4%	126	3%
C. Northwest	3A – 3G	1,307	42%	1,534	40%
D. Kenneth Hahn Plaza	4B	109	4%	188	5%
E. Metro Station	4A	24	1%	31	1%
F. Imperial Hwy Corridor	12 - 13	153	5%	209	6%
G. Residential Neighborhoods	5 - 11	46	2%	60	2%
Total		*3,139*	*100%*	*3,832*	*100%*

internal capture within the Specific Plan area of 5% to 15% for commercial uses, 5% for institutional uses, and 10% for residential uses. The traffic analysis also estimated transit use at 15% to 25% for residential uses, and 10% to 25% for commercial uses. Without the TOD features of the Specific Plan, the estimated VMT would be higher.

3.3 Specific Plan Trip Distribution

The trip distribution for the analysis is shown in Figure 3.2 for residential trips and Figure 3.3 for non-residential trips. These were derived from a select zone type analysis of the trip distribution information in the Los Angeles County Congestion Management Plan and are therefore consistent with County of Los Angeles guidelines and regional travel forecasting methodologies. This identified the regional distribution of trip origins and destinations.

However, the regional proportion by freeway (derived from RSA 21 as a whole) was judged to be too high for the Specific Plan land uses (which are located in the southwest edge of the RSA) and which are focused on revitalization for the local community rather than creating a regional destination (see Specific Plan goals discussed earlier). Consideration was also taken of the type of land uses in the project, the likely origins and destinations of project residents and visitors, and the characteristics of the street system in the area of the project. Based on these considerations, the freeway/local split was therefore adjusted to 40% freeway and 60% local street to reflect the more locally oriented characteristics of the Specific Plan area and land uses and more locally oriented trips. This is consistent with the MLK Medical Center

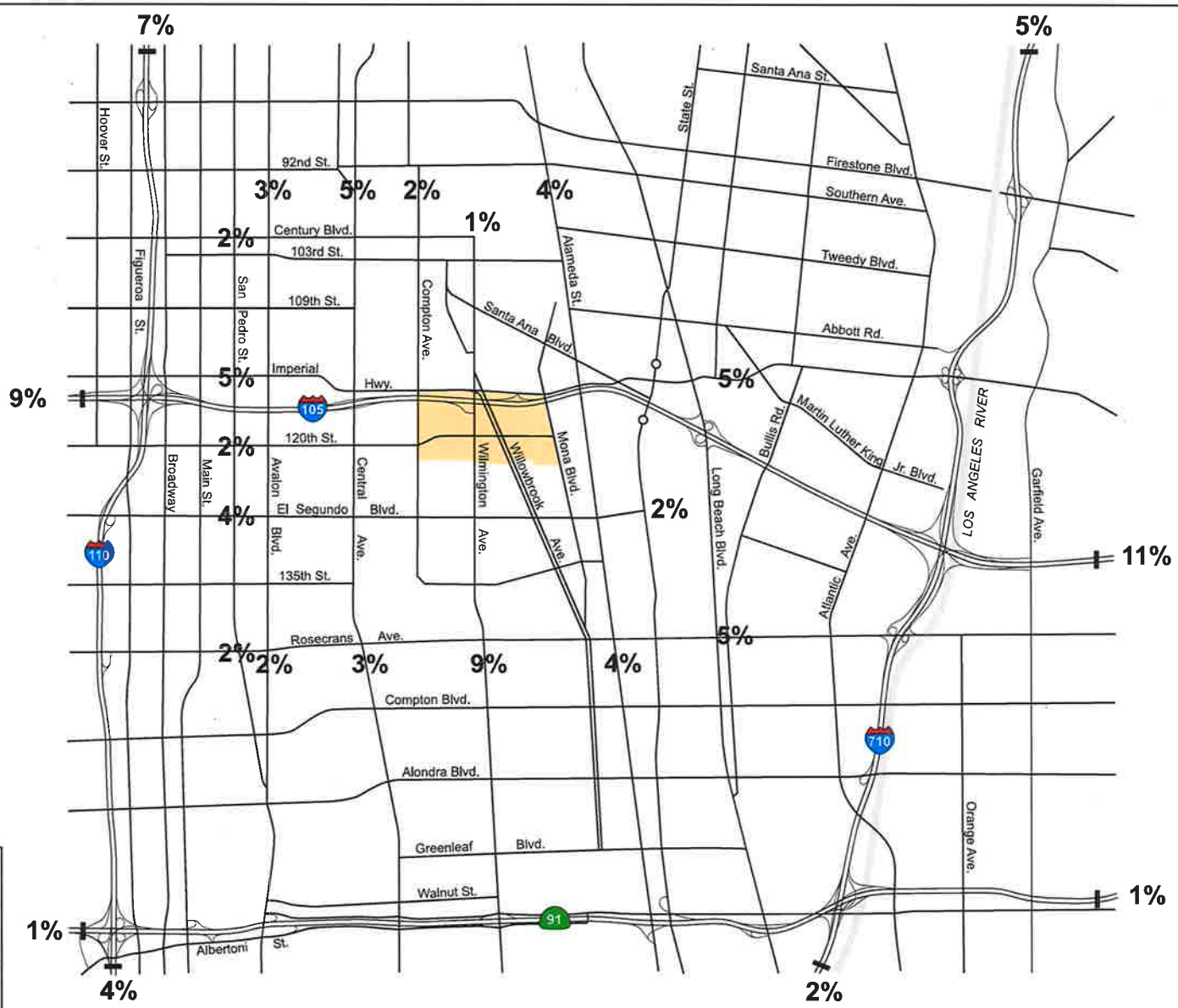

Figure 3.2
Trip Distribution - Residential

Willowbrook TOD Specific Plan EIR Traffic Study

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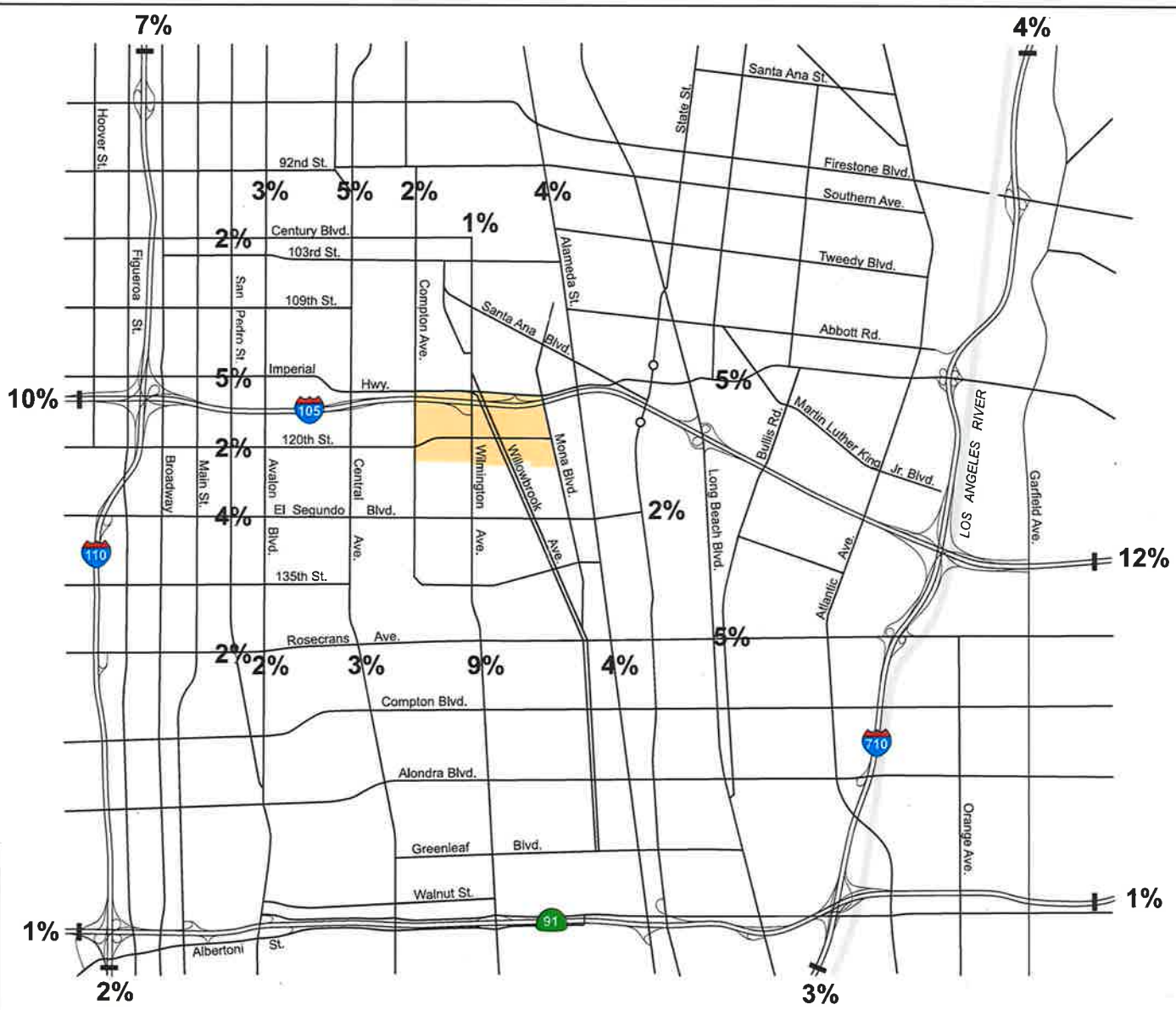

Figure 3.3
Trip Distribution - Non-Residential

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EIR Traffic Study which forecast approximately 35% to the freeways. The local distribution of trips to local streets was also based on the CMP distribution data as well consideration of the population and employment in adjacent and nearby communities, roadway types serving the Specific Plan area and professional judgment. These distributions were developed in consultation with, and approved by, County staff.

3.4 Transportation Improvements in the Specific Plan

The Mobility Element of the Specific Plan is described in detail in Chapter 4 of the Willowbrook TOD Specific Plan, so only a summary is provided here. The overall mobility goal in the Specific Plan area is to enhance connectivity and the ease of movements for non-auto transportation modes, particularly pedestrians and bicyclists. These enhancements will support healthy transportation options.

Roadway System

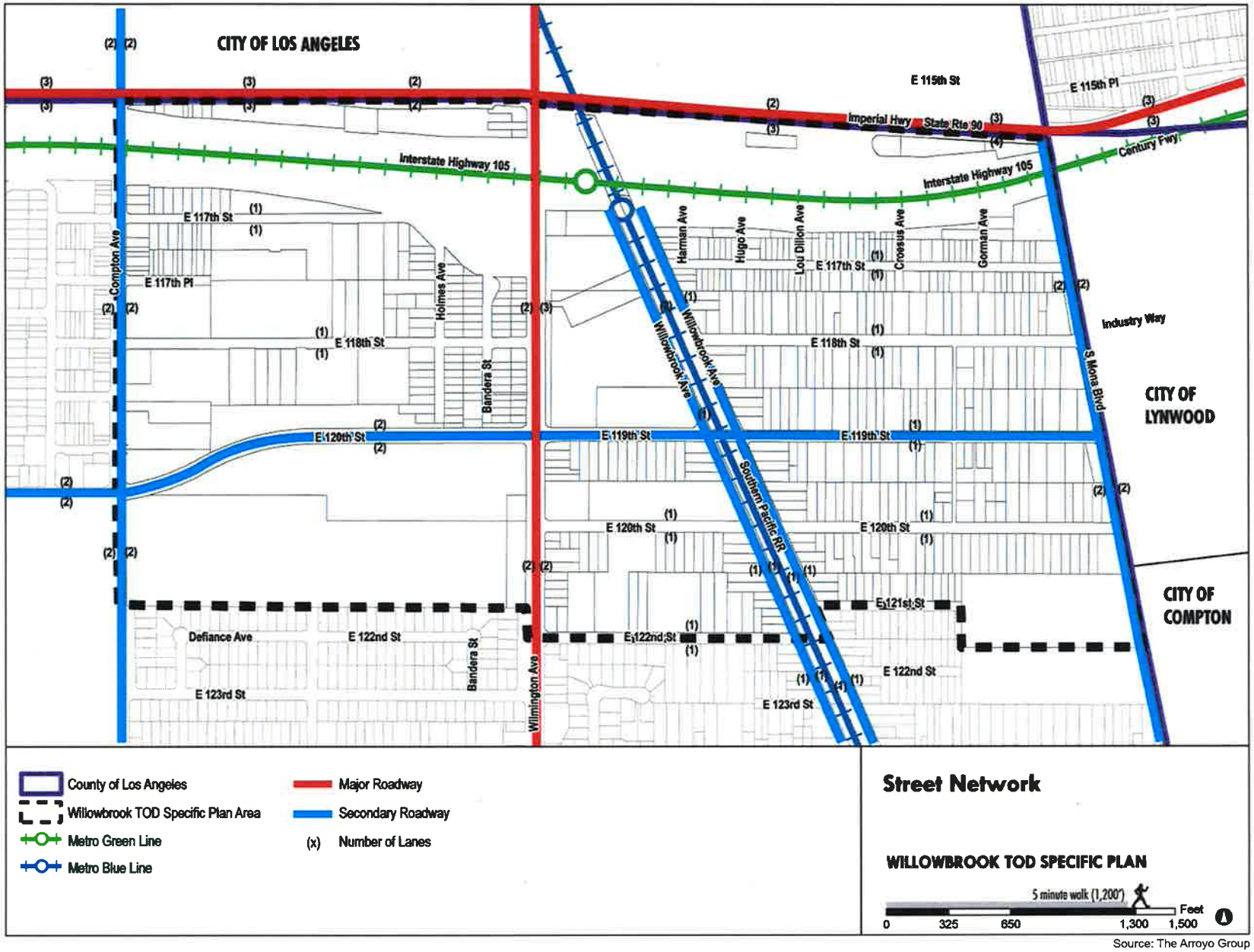
The roadway system, shown in Figure 3.4, provides the backbone circulation system for all modes of transportation. While historically street systems have been oriented to serving the automobile, the roadway system should provide a network of complete streets that provides for the safe and efficient circulation of transit, bicycles, and pedestrian as well as automobiles.

The existing street system will be largely maintained in its current configuration, with some changes/improvements designed to improve access and circulation, and walkability. The Major Roadways (as identified in the County General Plan) will continue to be Wilmington Avenue and Imperial Highway. Secondary Roadways (also identified in the County General Plan) will continue to be Compton Avenue, Willowbrook Avenue and Mona Boulevard in the north-south direction, and 120th Street/119th Street in the east-west direction. The number of traffic lanes and roadway lane configurations will generally remain the same, except where otherwise noted in the Specific Plan (for example where road diets will be implemented).

The following street enhancements, shown in Figure 3-5, are intended to improve circulation for bicycles and pedestrians in the Specific Plan area. These are also described in more detail in Sections 4.4 and 4.5 of the Specific Plan. They have been included in the impact analysis in Chapter 4 and Chapter 6 of this report.

Road Diet and Bicycle Lanes on 120th Street

The section of 120th Street between Compton Avenue & Wilmington Avenue, will be reduced from four lanes to three lanes, with a bicycle lane in each direction. This is part of the Willowbrook Area Access Improvement Project.



Source: The Arroyo Group

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Figure 3.4
Street Network

Willowbrook TOD Specific Plan EIR Traffic Study

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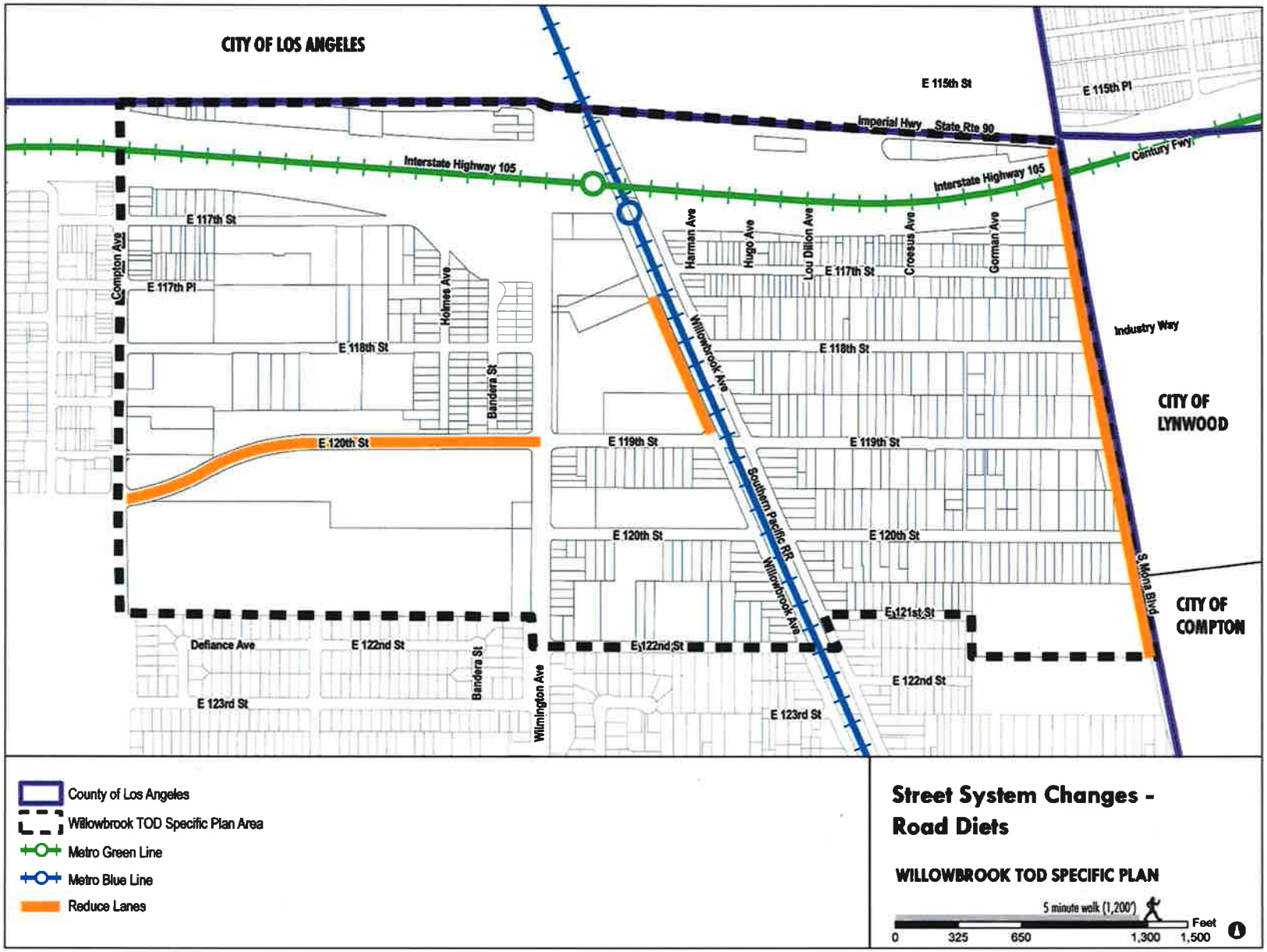

Source: The Arroyo Group

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Figure 3.5
Street System Changes – Road Diet

Willowbrook TOD Specific Plan EIR Traffic Study

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Road Diet and Bicycle/Pedestrian Trail on Mona Boulevard
Mona Boulevard from the I-105 Freeway to 124th Street will be converted from a four lane street to a three lane street, and a pedestrian/bicycle trail installed on the west side of the street.

Willowbrook Avenue West
The section of Willowbrook Avenue West between the Willowbrook/Rosa Parks Metro Station and 119th Street, will be reduced from two lanes southbound to one lane southbound, and a bike path installed on the west side of the street.

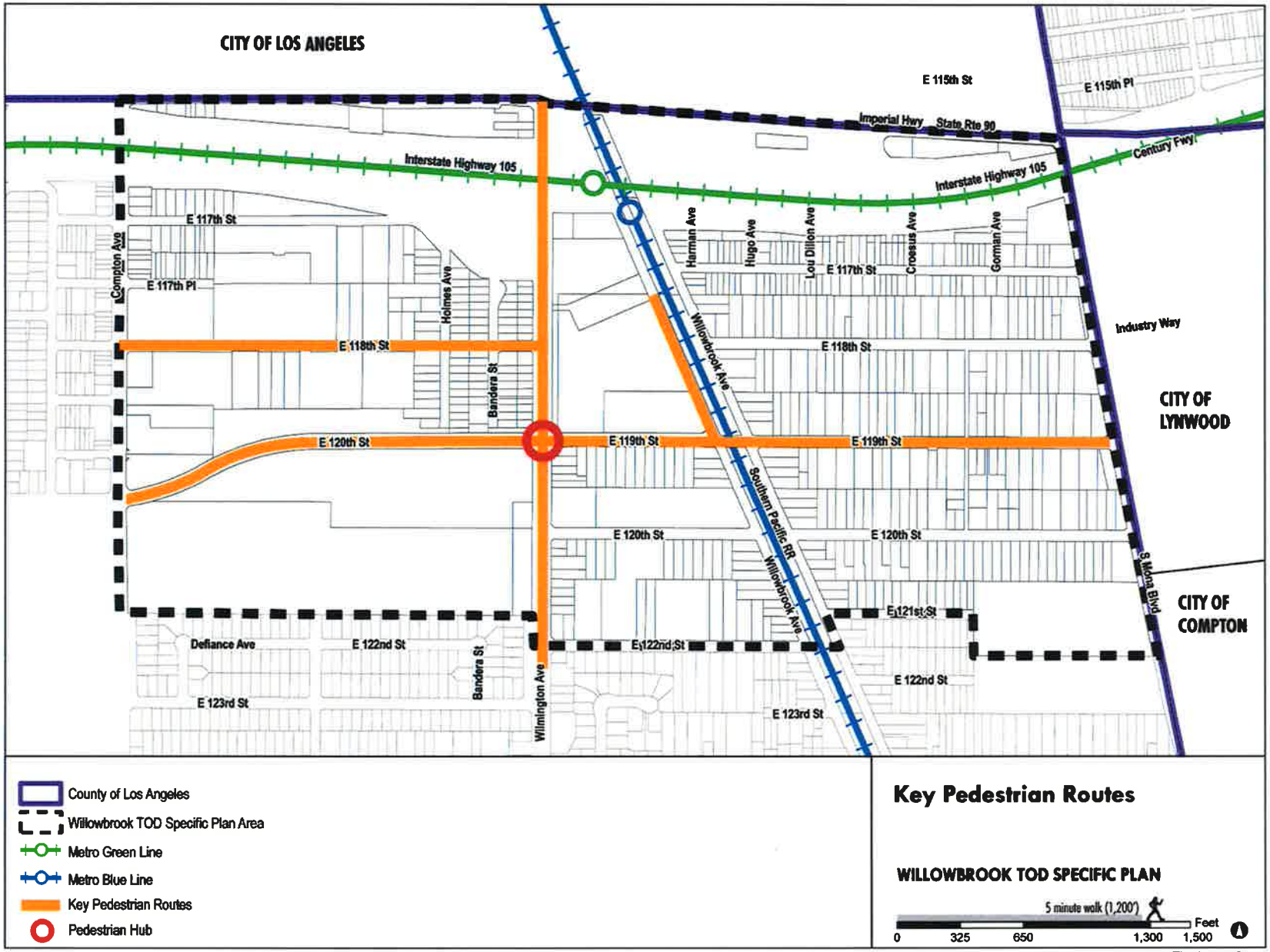
Pedestrian Circulation

The key pedestrian routes in the Specific Plan Area are shown in Figure 3-6. The backbone of the pedestrian system is formed by Wilmington Avenue in the north-east direction and 120th/119th Street in the east-west direction. These corridors connect activity centers of the Willowbrook/Rosa Parks Station, the Kenneth Hahn Shopping Plaza, and the Martin Luther King Jr. Medical Center Campus. They also cross at the intersection of Wilmington Avenue and 120/119th Street – which is the functional pedestrian hub of the Specific Plan Area. Additional key elements of the pedestrian system are 118th Street between Compton Avenue and Wilmington Avenue - which connects the Charles Drew University campus to the rest of the Specific Plan Area, Willowbrook Avenue West between 119th Street & the Willowbrook/Rosa Parks Metro Station – providing access from residential areas to the station, and 119th Street between Willowbrook Avenue & Mona Boulevard – which provides access from the residential areas to the activity centers of the Specific Plan Area. Mona Boulevard also provides north-south pedestrian access on the east side of the Specific Plan Area including access to Mona Park, the Martin Luther King Elementary School and the Dr. Ralph Bunche Middle School.

Pedestrian Oriented Intersection Improvements

In order to enhance the pedestrian environment and to calm traffic, a number of pedestrian oriented intersection improvements will be implemented throughout the Specific Plan Area, where feasible. These will be based on a menu of improvements that includes the following:

- Adding high visibility crosswalks at intersections.
- Adding passive pedestrian detection and pedestrian push buttons for crosswalks at traffic signals at intersections.
- Adding pedestrian countdown pedestrian signals and audio signals to crosswalks at intersections.
- Adding advance stop bars to intersection approaches.
- Adding sidewalk bulbouts and extensions, or reducing curb returns, on intersection corners where feasible.



Source: The Arroyo Group

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Figure 3.6
Key Pedestrian Routes

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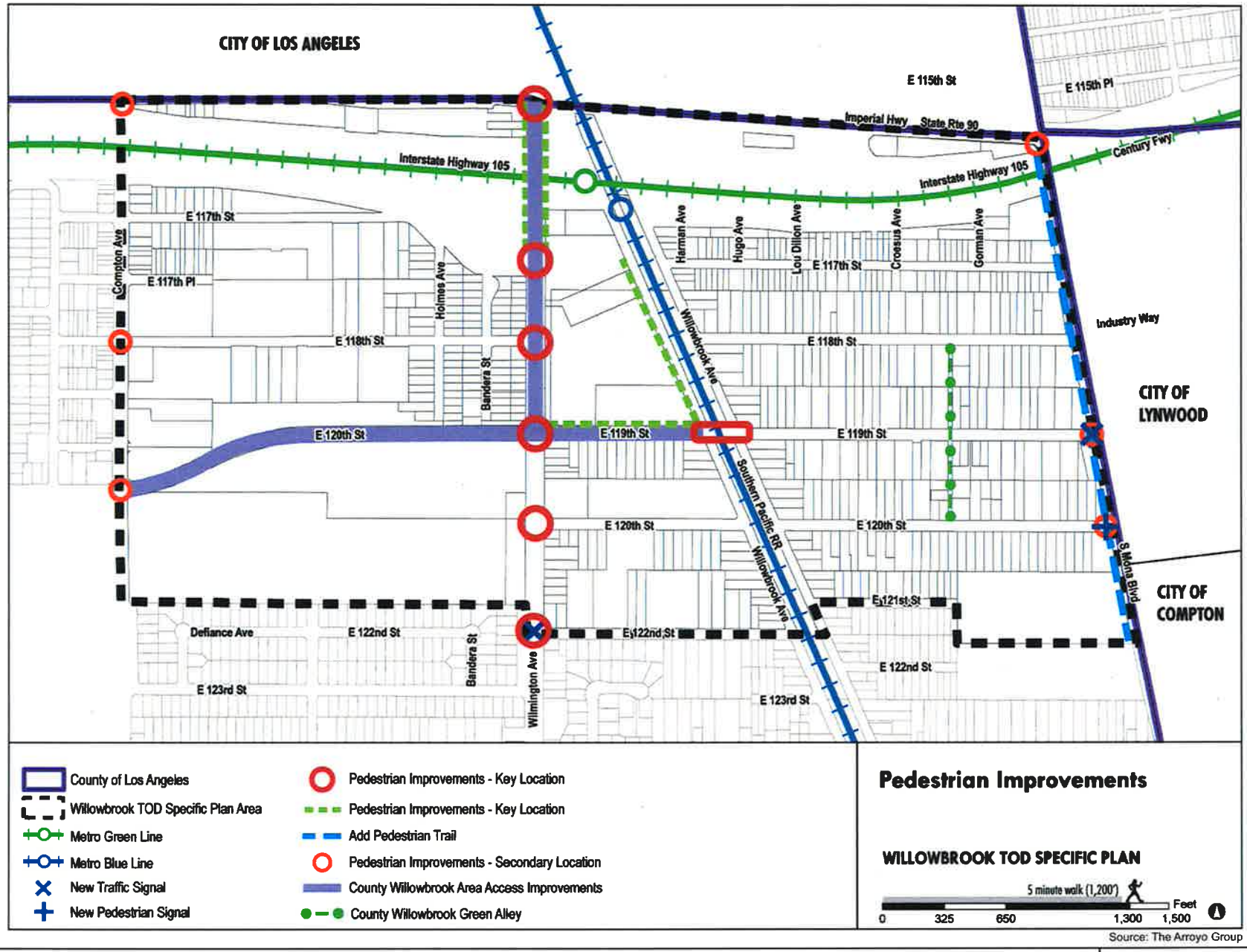

Source: The Arroyo Group

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Figure 3.7
Pedestrian Improvements

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These measures will facilitate pedestrian circulation by reducing the width of roadway for pedestrians to cross, providing additional sidewalk space, and making pedestrian crossings more visible to both pedestrians and motorists. Figure 3-7 shows the anticipated locations of such improvements. The specific improvements to be implemented at each location will be determined following detailed design studies to determine applicability and feasibility and the ultimate configuration. However curb extensions should not restrict the circulation of buses, trucks, emergency vehicles, and bicycles. As their exact nature is currently undefined, they are not included directly in this traffic study.

Improvements at Wilmington Avenue & I-105 Eastbound Ramps will add a crosswalk across Wilmington Avenue to facilitate access to the Metro Station. This is included in the traffic analysis.

The Specific Plan proposes to add new traffic signals at Wilmington Avenue & 122nd Street, and at Mona Avenue & 119th Street, to facilitate pedestrian crossings on long stretches of both streets currently without signalized crosswalks. Also to install a signalized pedestrian crosswalk on Mona Avenue & 120th Street, to facilitate pedestrians crossing to the Dr. Ralph Bunche Middle School. The specific improvements will be determined following detailed design studies to determine applicability, feasibility, and if warranted. As their exact nature is currently undefined, they are not included directly in this traffic study.

Bicycle Circulation

The Specific Plan Bicycle Network, shown in Figure 3.8, includes a combination of Class I, Class II and Class III facilities that connects activity centers and neighborhoods to the rail station, connects to adjacent communities, and provides a dedicated network for bicyclists to use safely and efficiently. The Bicycle Circulation System includes elements from, and is consistent with, the County's Bicycle Plan and the City of Los Angeles Bicycle Plan.

Class I bike paths will be implemented on Willowbrook Avenue (West) between 119th Street & Imperial Highway — to provide access to the rail station, and on Mona Avenue (east side) between Imperial Highway and 124th Street. The associated lane reductions are included in the following impact analyses, and shown in Figure B-1, in Appendix B.

Class II bike lanes will be implemented on 120th Street between Compton Avenue & Wilmington Avenue. The associated lane reductions are included in the following impact analyses, and shown in Figure B-1, in Appendix B. Class II Bike lanes are also proposed on Wilmington Avenue between 124th Street & 120th Street, but will not require any changes in traffic lanes. Class II Bike Lanes are also proposed on Imperial Highway between Compton Avenue & Mona Avenue. However, there are no design concepts or details available, so no changes to lane configurations have been incorporated into this study.

Not all streets can support bicycle lanes. Either there is insufficient width, or on-street parking is also an important asset to the function and economic well-being of the adjacent commercial uses or neighborhoods, so where there is insufficient roadway width to stripe bicycle lanes and to retain on-street parking, a connected network is achieved through the designation of Class Ill Bike Routes. Class III bike routes will be implemented on Compton Avenue, Willowbrook Avenue (West) south of 119th Street, 119th Street between Wilmington Avenue & Mona Avenue, and on 124th Street throughout the Specific Plan Area.

Transit Circulation

Key transit streets (with multiple bus routes) in the Specific Plan Area are shown in Figure 3.9. The Specific Plan anticipates that current bus routes will continue to serve the Specific Plan area focusing on the rail station.

Shuttle Routes

The Specific Plan also anticipates that the existing shuttle routes that are operated by the County, the Martin Luther King Jr. Medical Center and Charles Drew University will be continued in order to facilitate alternative modes of transportation, and provide critical access to the Medical Center for those without a car.

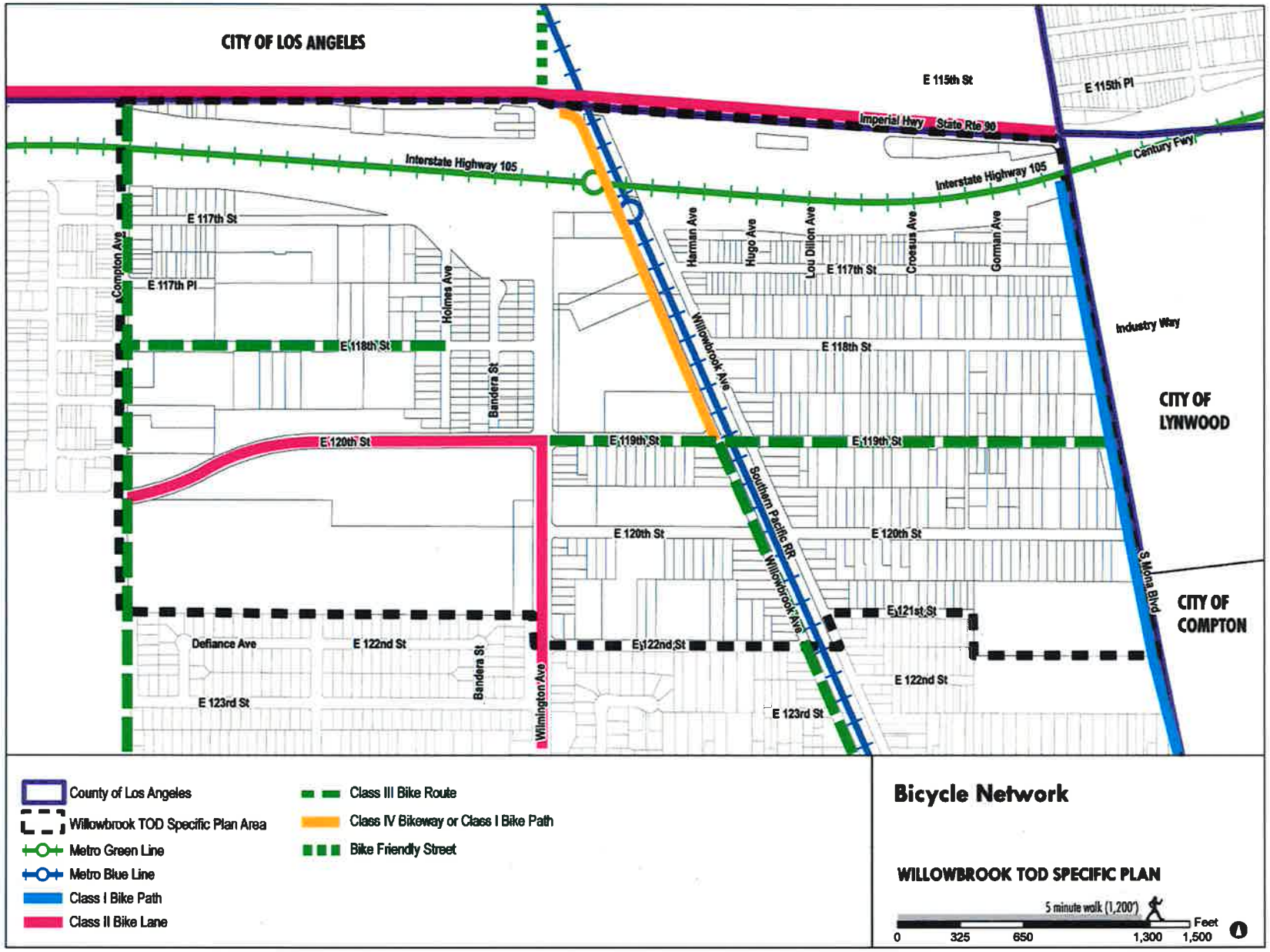
Additional shuttle routes are proposed to be added to serve new development in the North West Quadrant and connect the land uses to the Metro Station. These new shuttle services could be provided by the private sector as part of a comprehensive Transportation Demand Management Program (see below).

Transportation Demand Management

The Specific Plan identifies that a Transportation Demand Management Program will be developed by the County, to take advantage of the high level of transit service, and to reduce both vehicle trips and the number of parking spaces provided. Such programs would include the encouragement of use of transit, bicycling, walking, and ridesharing. These types of programs are generally most suitable and most effective for large employers and institutional uses, and office uses and could be attractive to employers in new office type land uses in the the North West Quadrant as they could reduce the capital costs needs of building parking. The Program should include the North West Quadrant, Charles Drew University, and the Martin Luther King Jr. Medical Center.

Transportation demand management and trip reductions strategies could include but not be limited to:

- Encouraging use of transit, including subsidizing transit passes
- Parking cash out programs



Source: The Arroyo Group

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Figure 3.8
Bicycle Network

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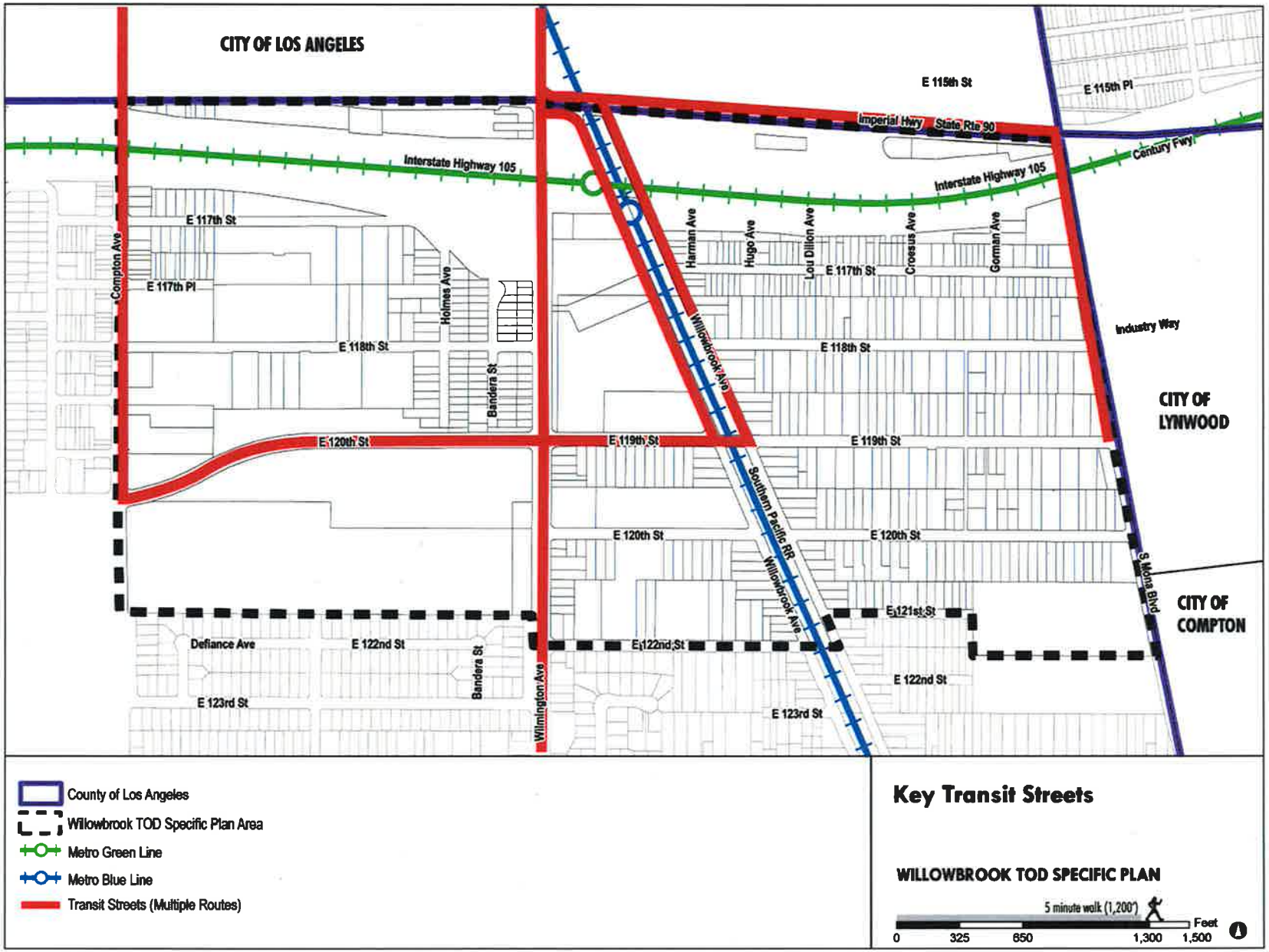

Source: The Arroyo Group

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Figure 3.9
Key Transit Routes

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- Encouraging rideshare
- Providing preferential parking for carpools
- Facilitating formation of carpools and vanpools
- Site and building design to facilitate use of transit, bicycling and walking

A Transportation Management Organization (TMO) could also be established to facilitate these programs at an area wide level and support individual employers and/or buildings in participating to the fullest extent possible.

3.5 Future Traffic Forecasts for The Specific Plan Project

The trip generation estimates for each zone (and summarized in Table 3.3) were assigned to to the roadway network using the trip distribution parameters described earlier, to obtain Specific Plan traffic volumes (Project Only) on the roadway network. The Project Only traffic volumes are shown in Figure 3.10 for the AM peak hour and in Figure 3.11 for the PM peak hour.

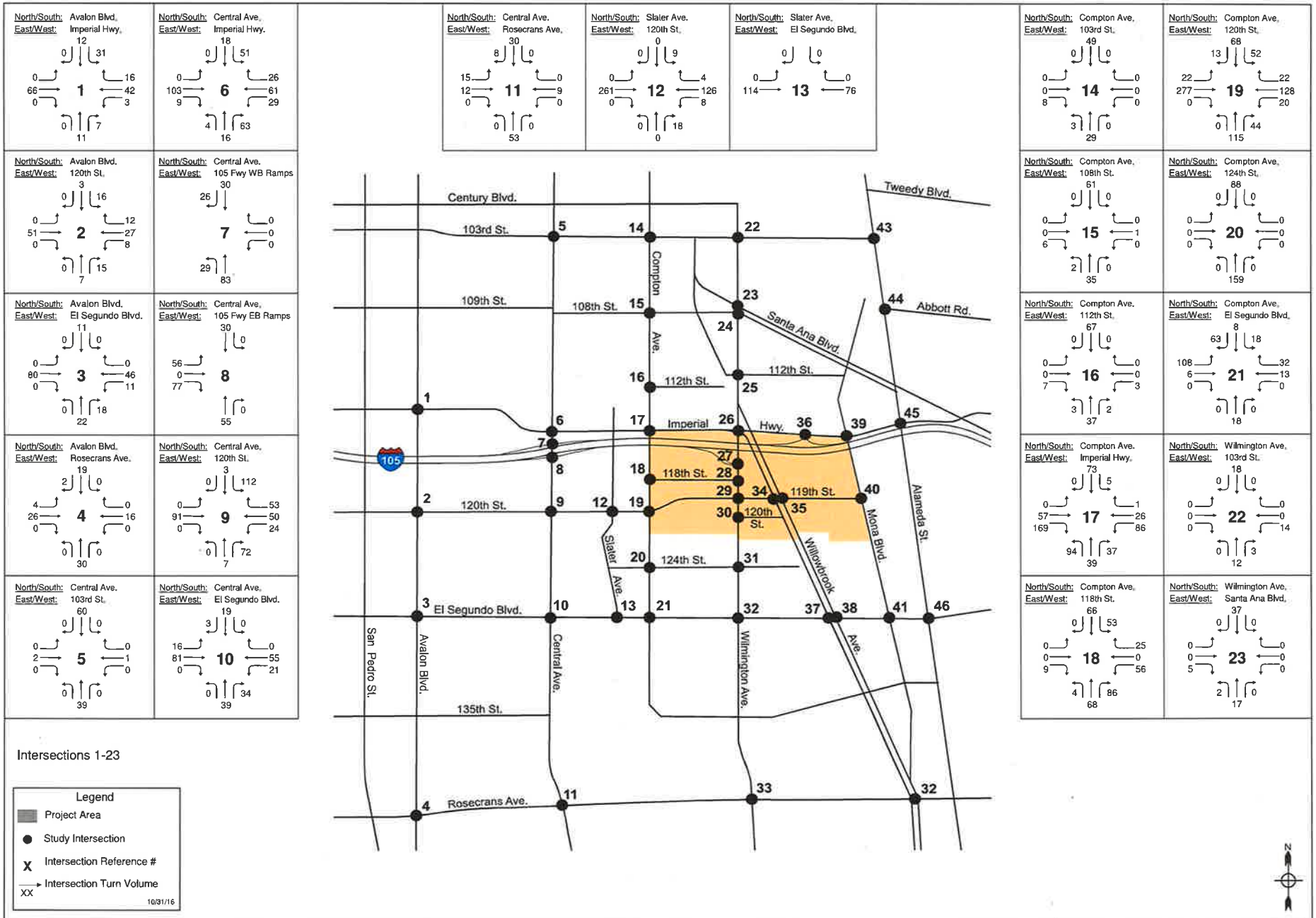

Figure 3.10
Project Only Traffic Volumes - AM Peak Hour

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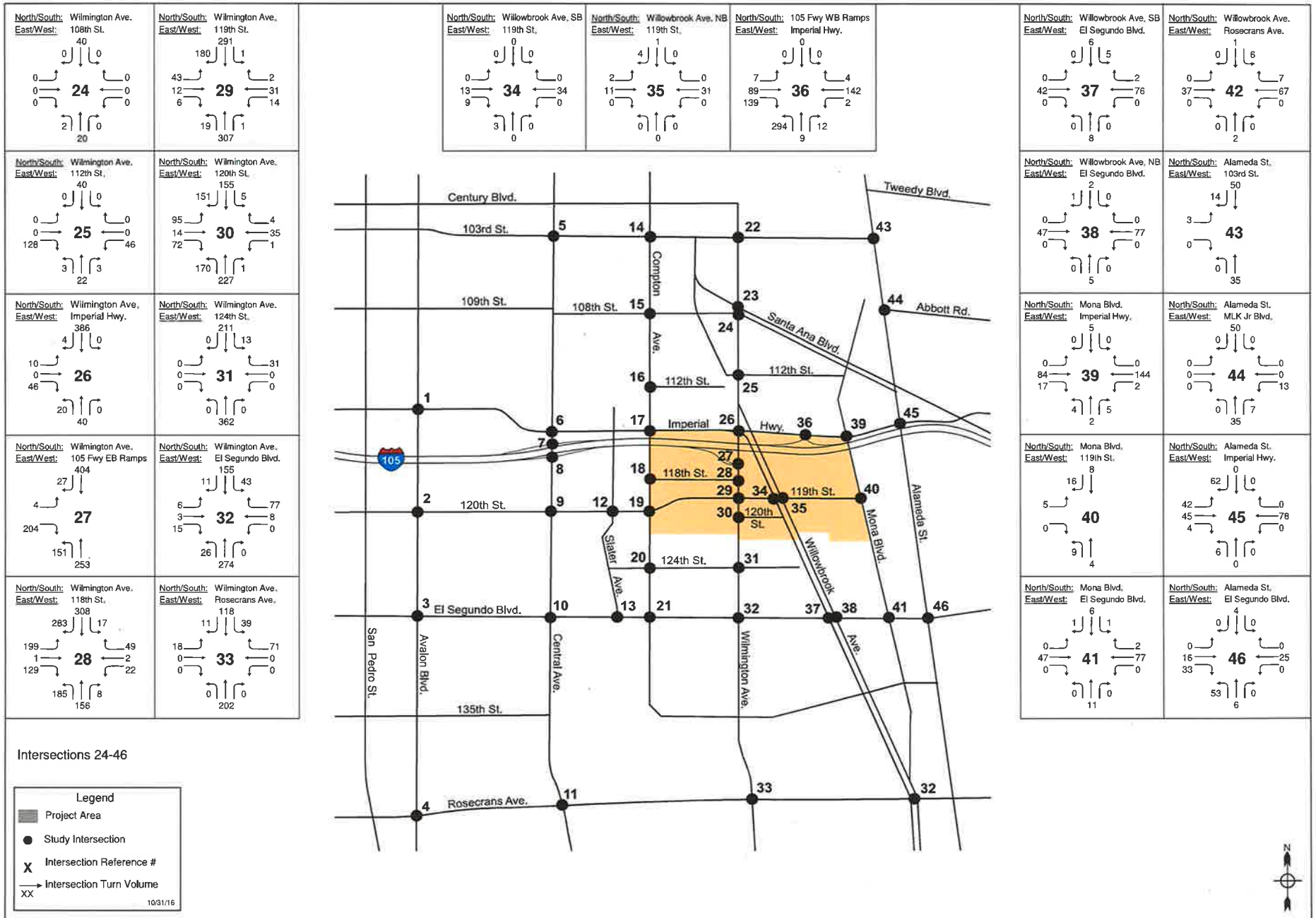

Figure 3.10
Project Only Traffic Volumes - AM Peak Hour

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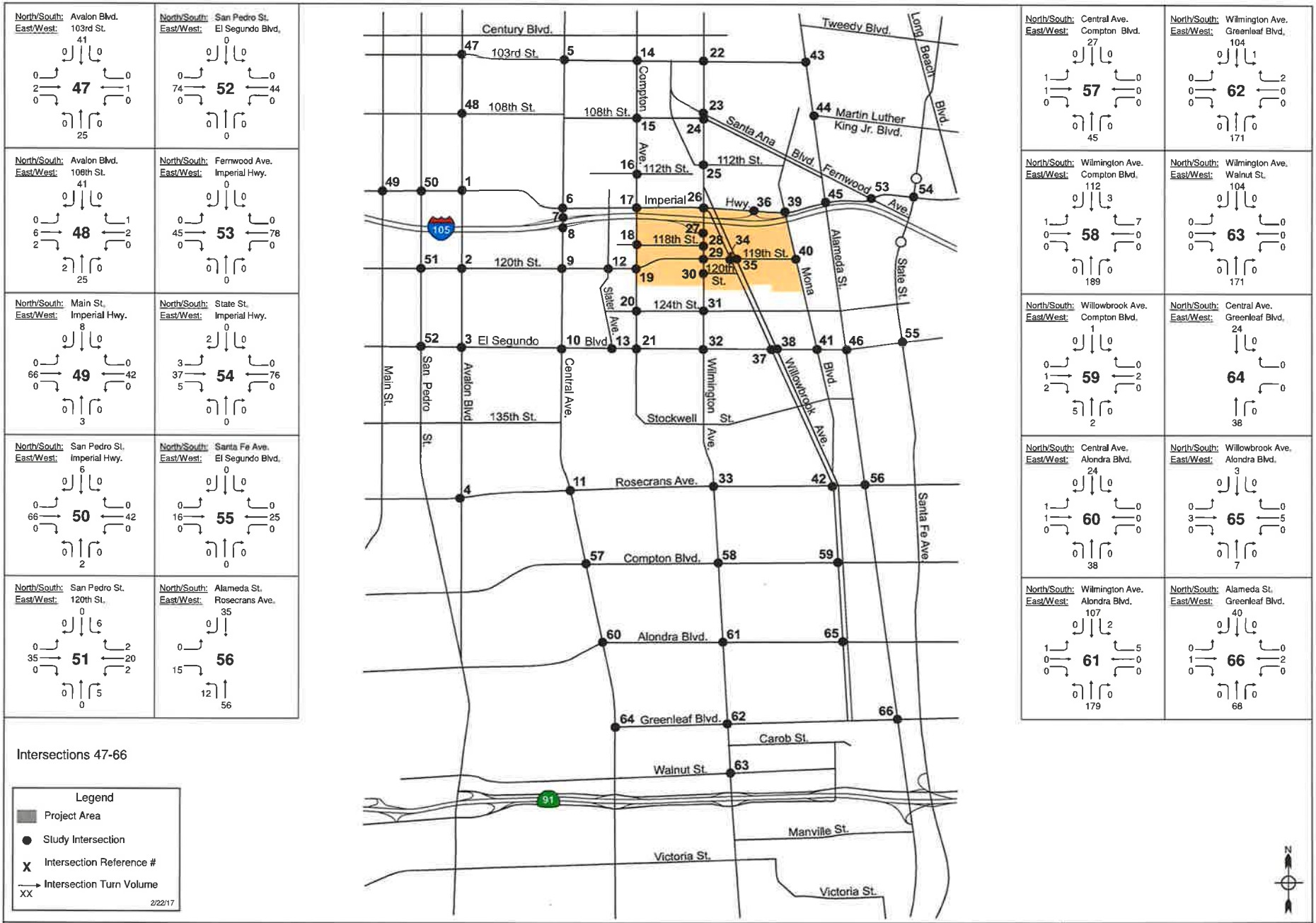

Figure 3.10
Project Only Traffic Volumes - AM Peak Hour

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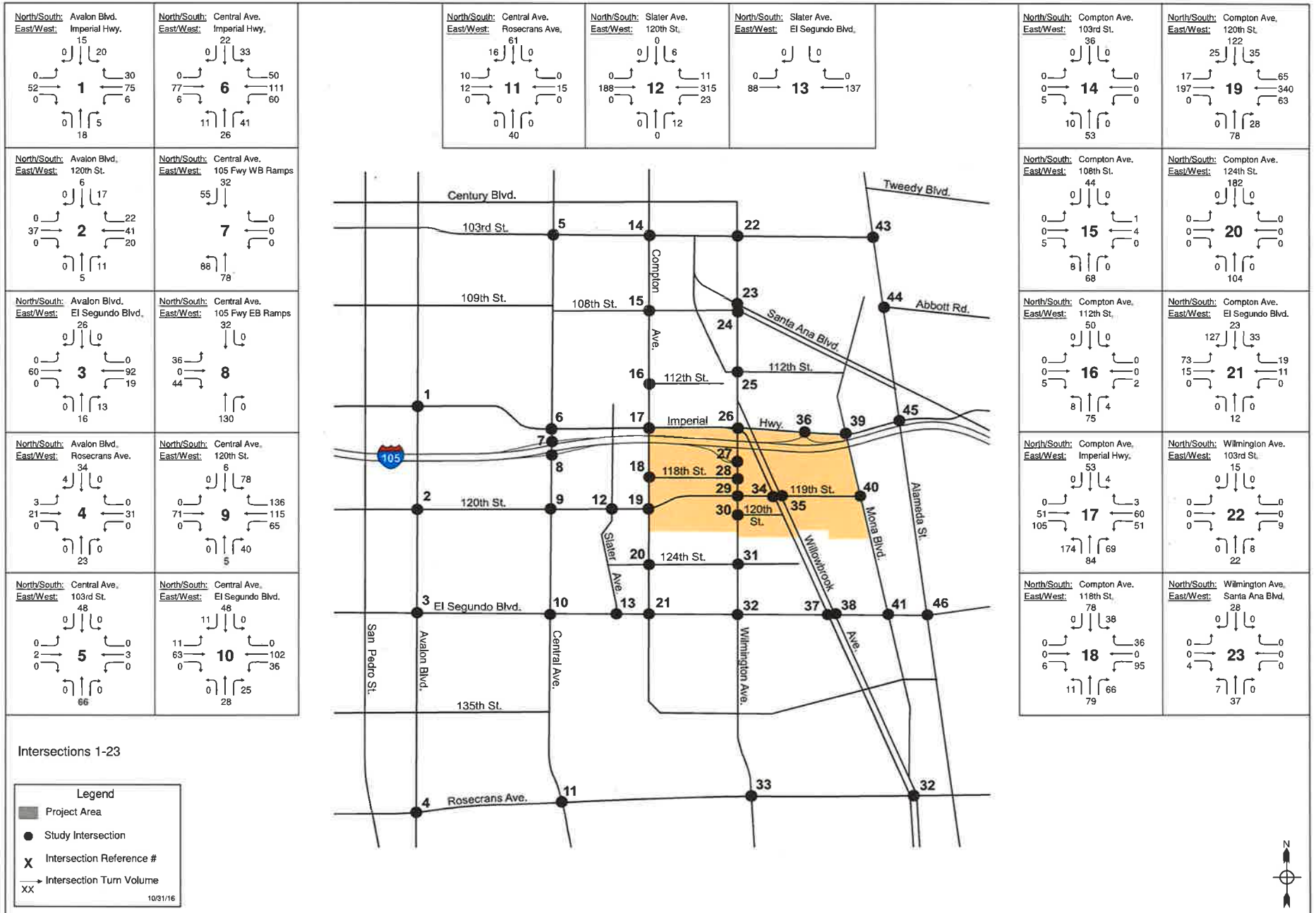

Figure 3.11
Project Only Traffic Volumes - PM Peak Hour

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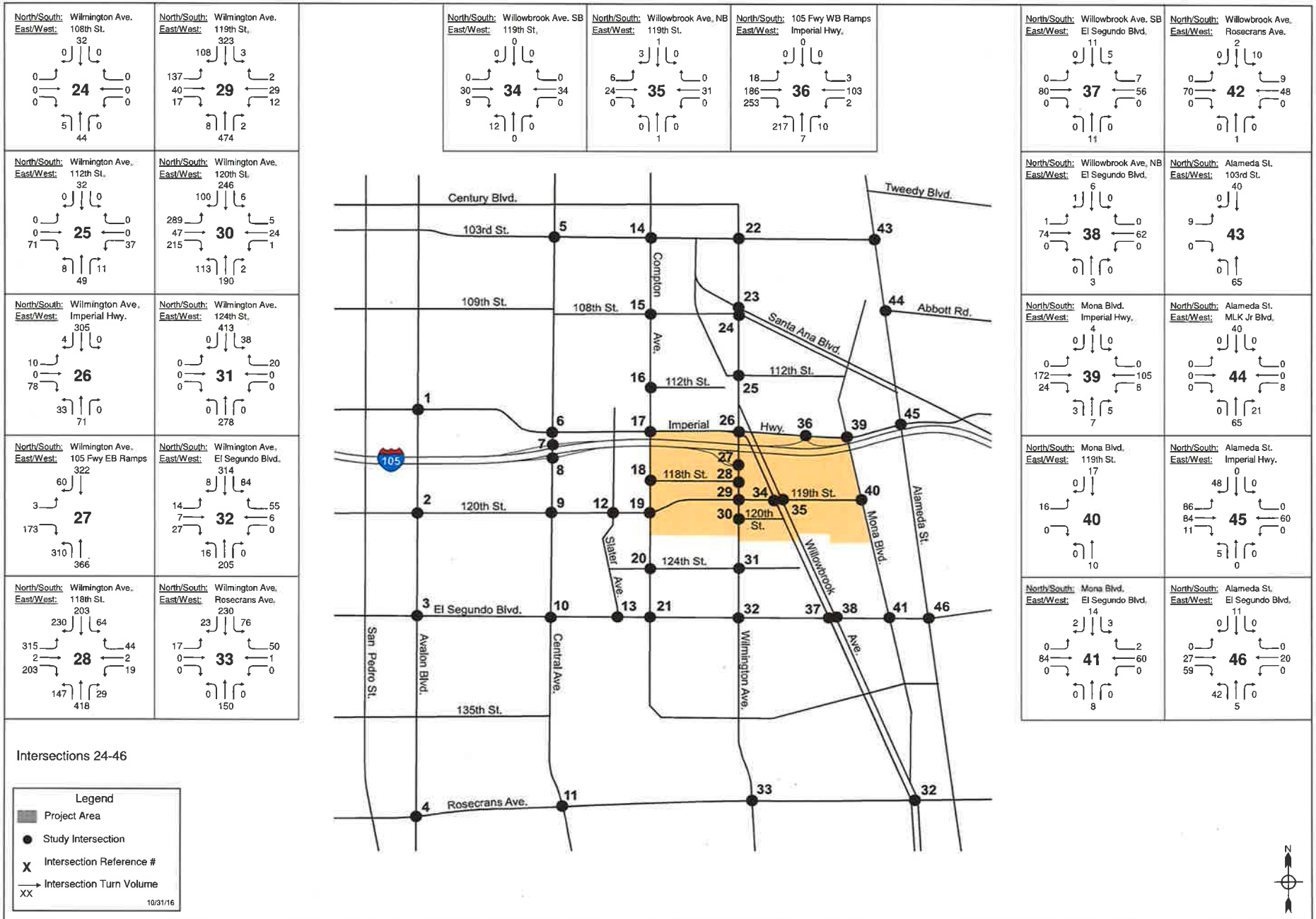

Figure 3.11
Project Only Traffic Volumes - PM Peak Hour

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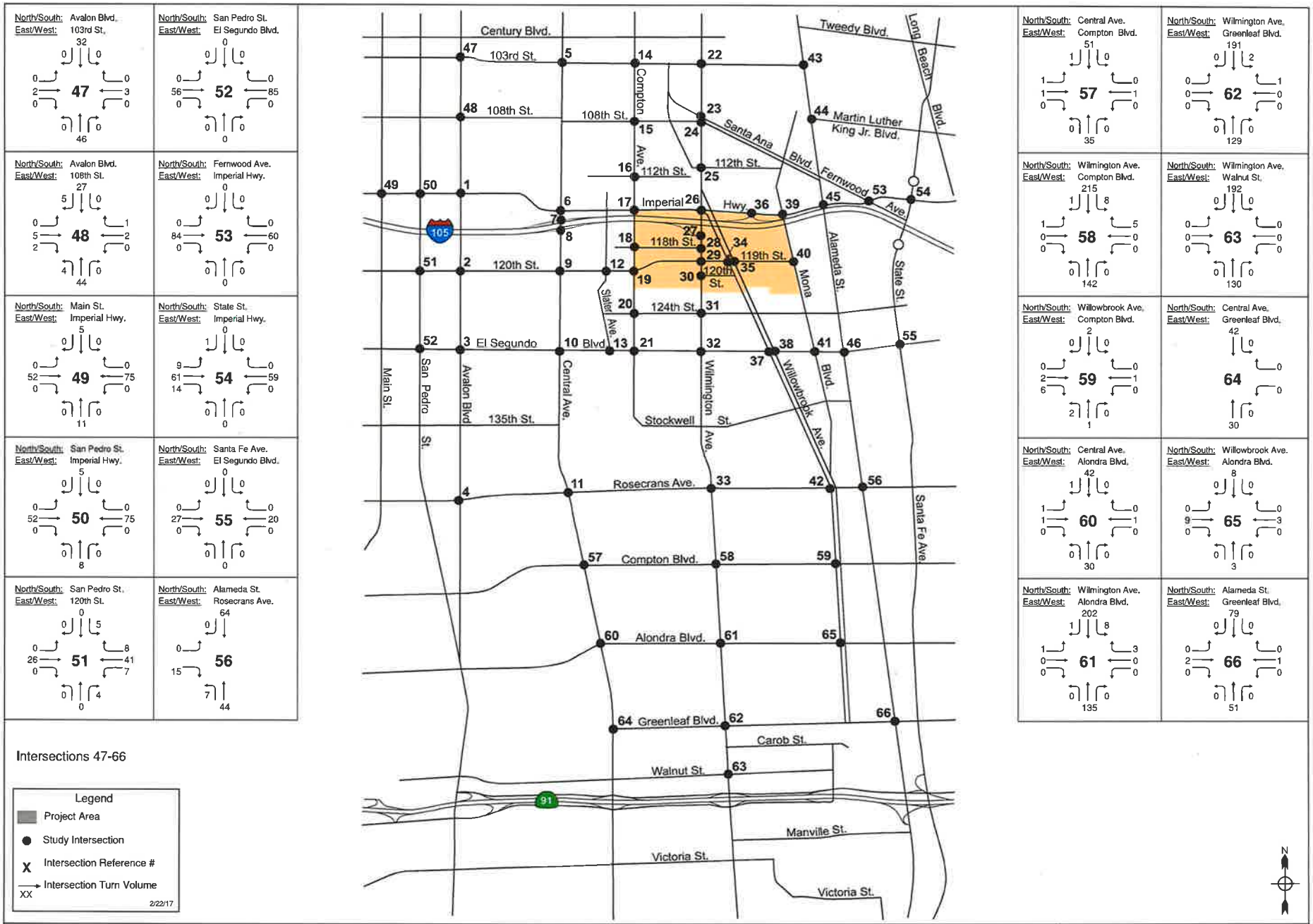

Figure 3.11
Project Only Traffic Volumes - PM Peak Hour

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4. Existing With Project Conditions

This section of the report documents an analysis of potential Project impacts for the Existing With Project Condition. The Project trips estimated and described in Chapter 3, were added to the existing conditions traffic volumes and an impact analysis was conducted. The total Existing With Project peak hour traffic volumes are illustrated in Figures 4.1 and 4.2 for the AM and PM peak hours respectively.

The analysis then used the methodologies (as described in Chapter 2) and thresholds for significant impact appropriate to each of the different jurisdictions, to calculate intersection level of service and potential impacts.

4.1 Significant Impact Thresholds

The analysis used the following thresholds for determining significant traffic impacts.

Significant Impact Thresholds – County of Los Angeles

The County of Los Angeles Department of Public Works has established threshold criteria to determine if project has a significant impact at a study intersection. According to the criteria provided by the County of Los Angeles, a project impact is considered significant if the following conditions are met:

Pre-Project Conditions		Project-Related Increase
LOS	V/C Ratio	in V/C Ratio
C	0.71 – 0.80	equal to or greater than 0.040
D	0.81 – 0.90	equal to or greater than 0.020
E, F	0.91 or more	equal to or greater than 0.010

For example, a project would not have a significant impact at an intersection if it operated at LOS D after the addition of project traffic and the incremental change in the V/C ratio is less than 0.020. However if the intersection operated at LOS F after the addition of project traffic and the incremental change in the V/C ratio is 0.010 or greater, then the project would be considered to have a significant impact.

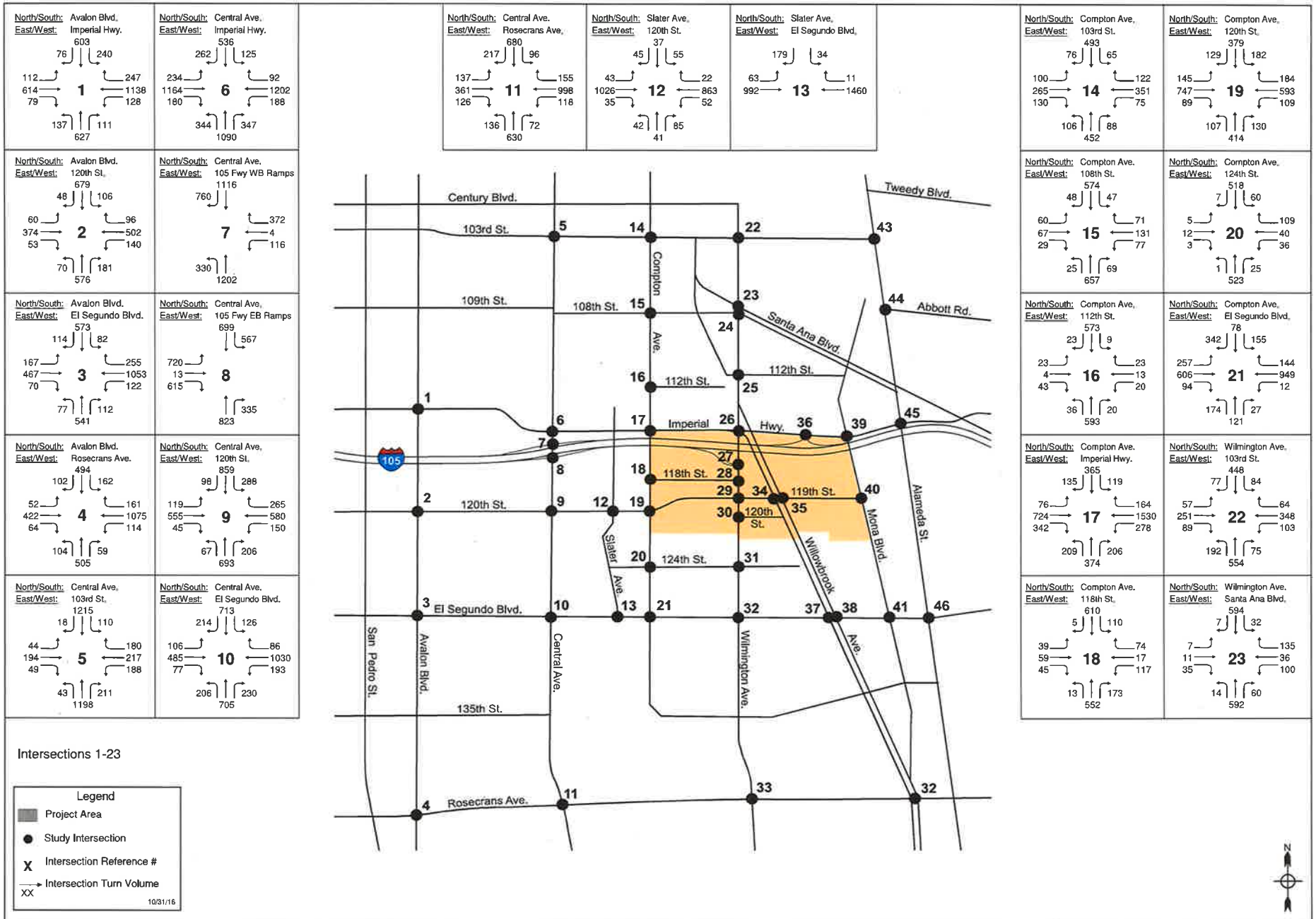

Figure 4.1
Existing With Project Traffic Volumes - AM Peak Hour

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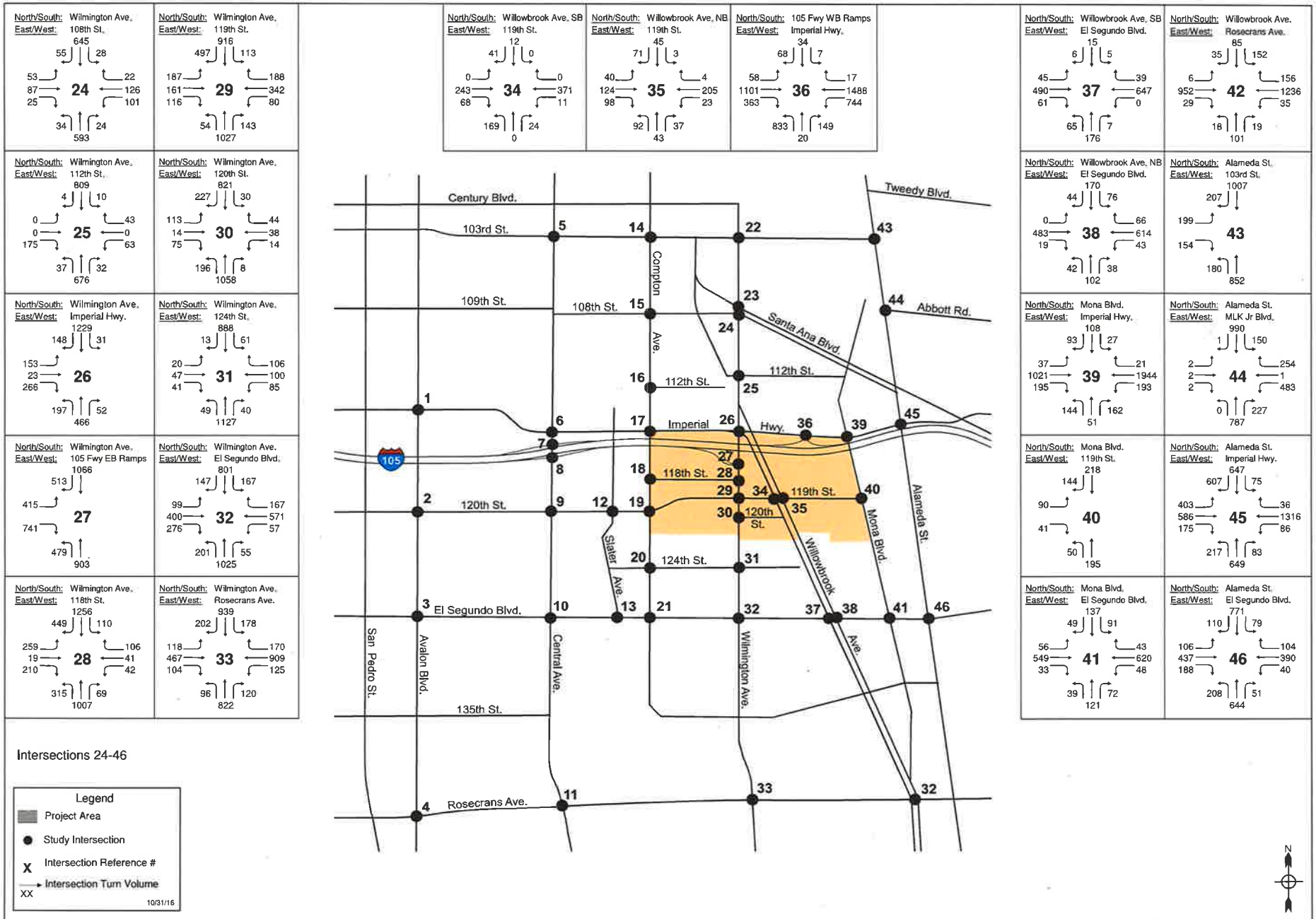

Figure 4.1
Existing With Project Traffic Volumes - AM Peak Hour

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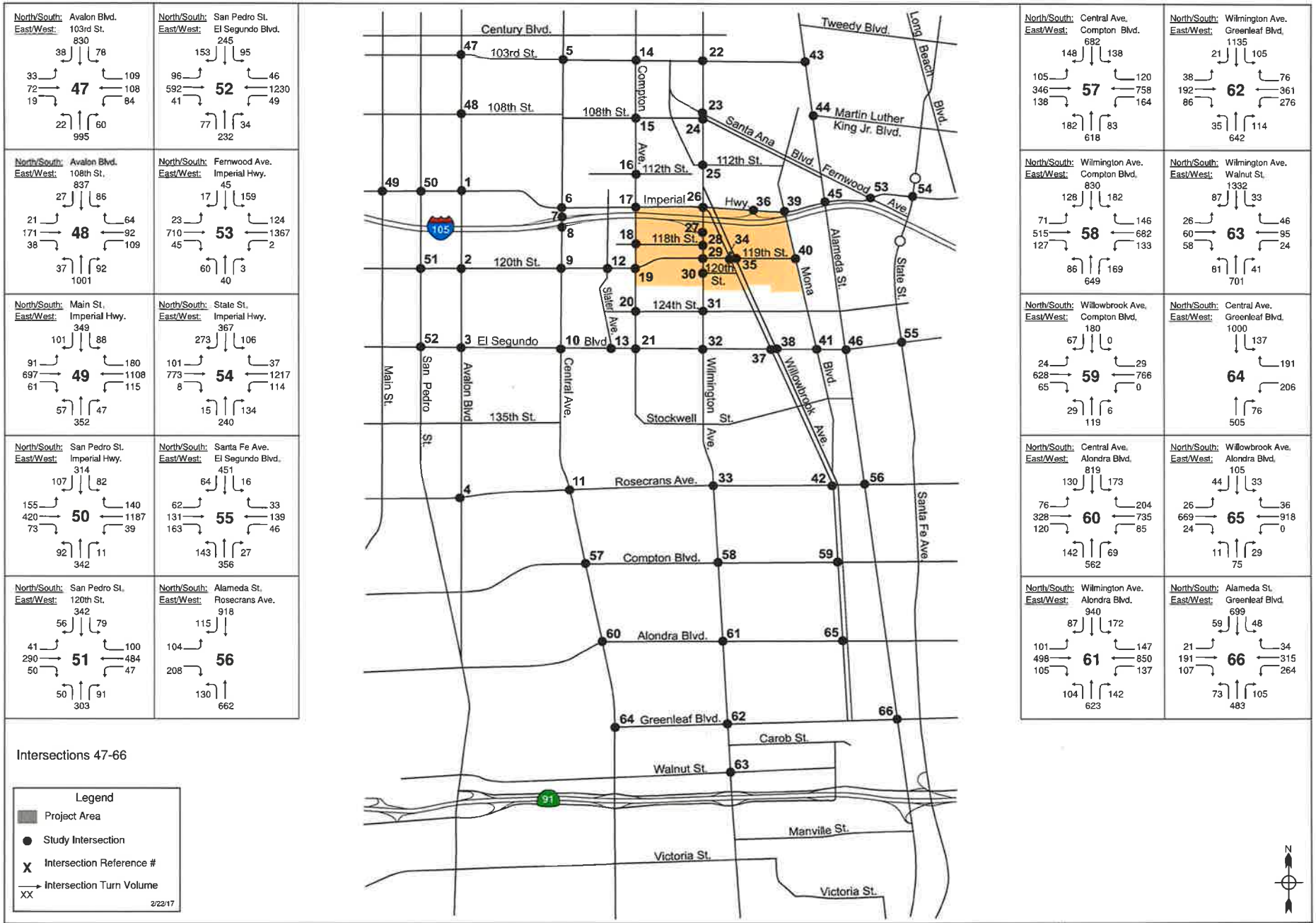

Figure 4.1
Existing With Project Traffic Volumes - AM Peak Hour

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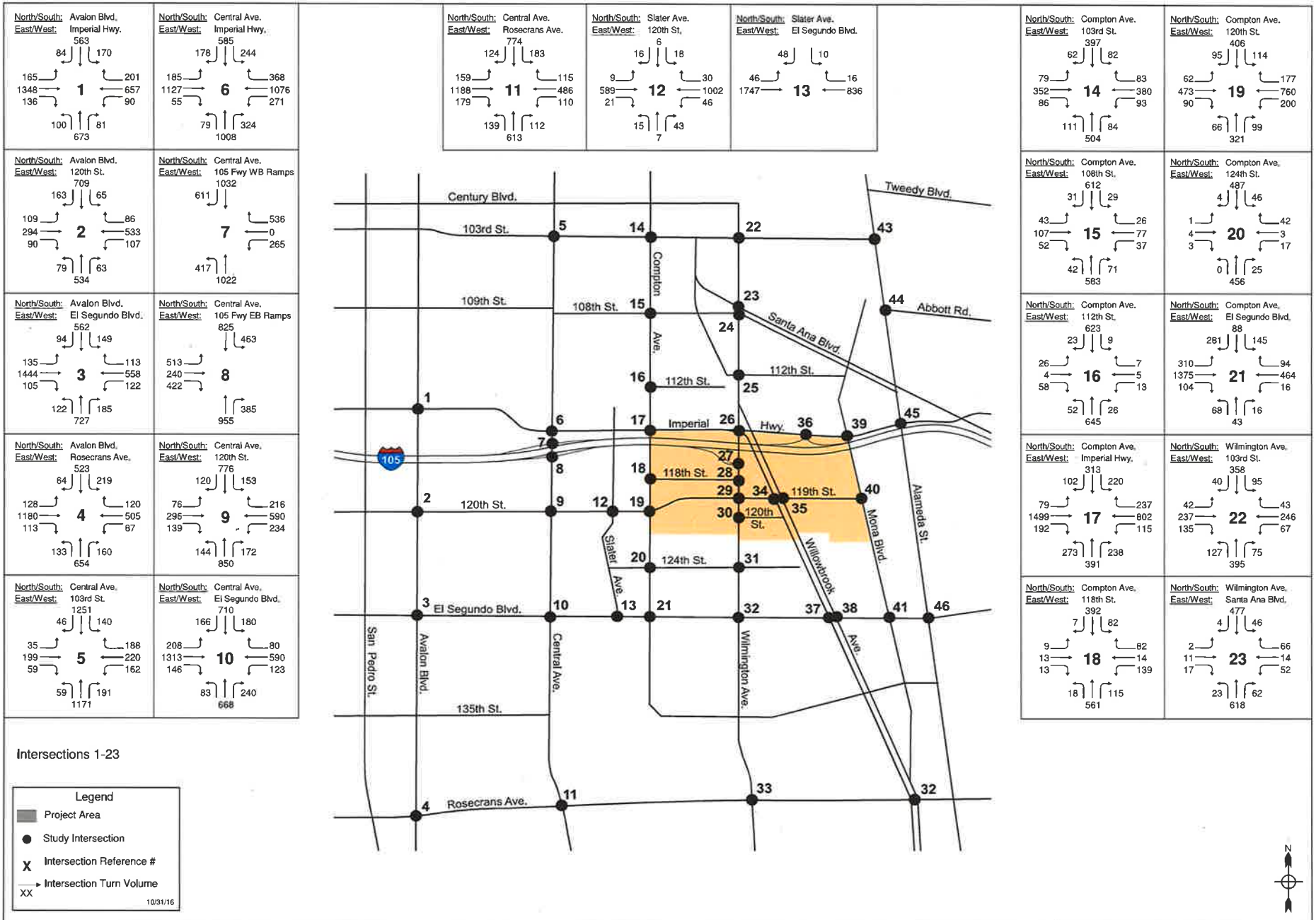

Figure 4.2
Existing With Project Traffic Volumes - PM Peak Hour

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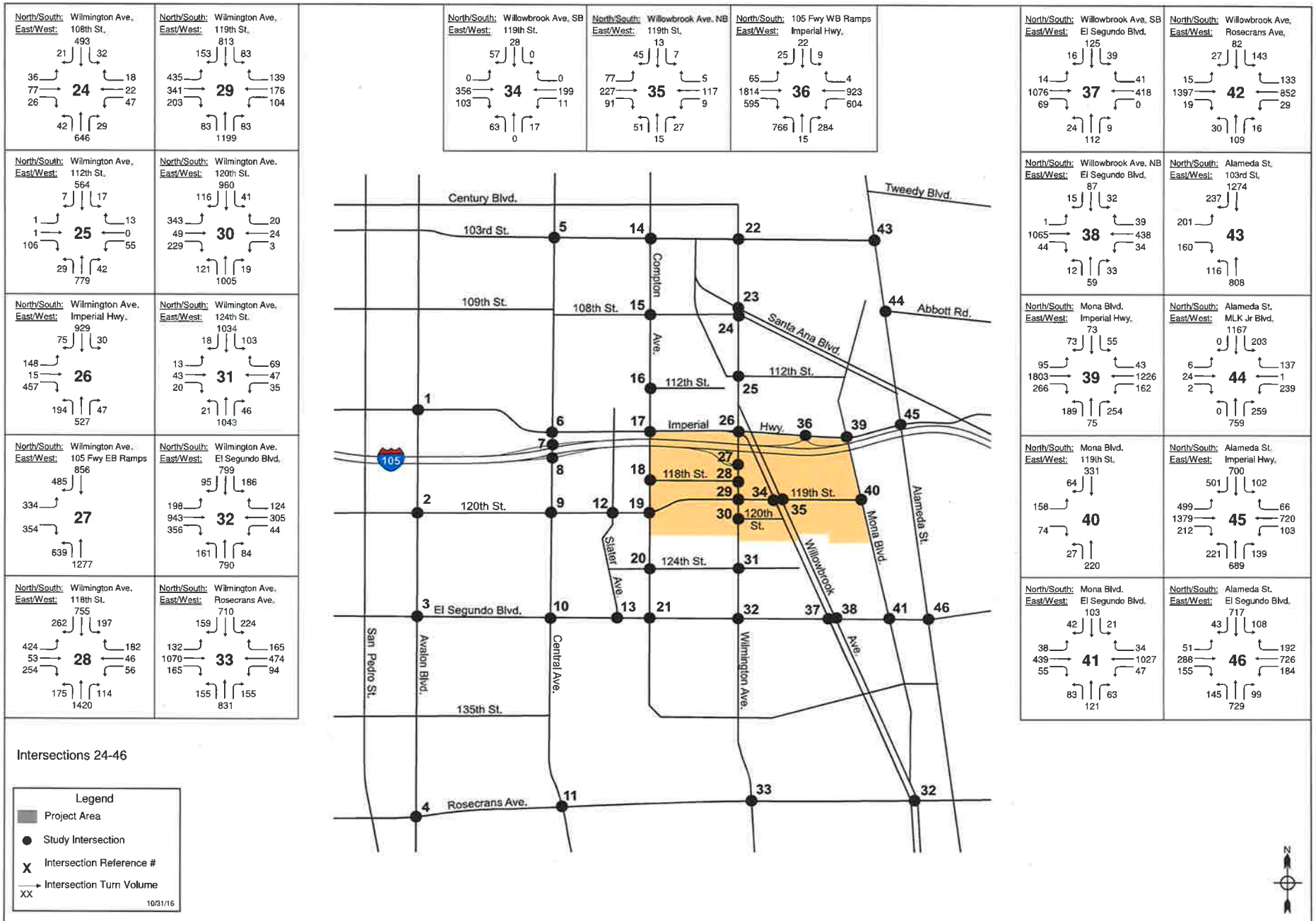

Figure 4.2
Existing With Project Traffic Volumes - PM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

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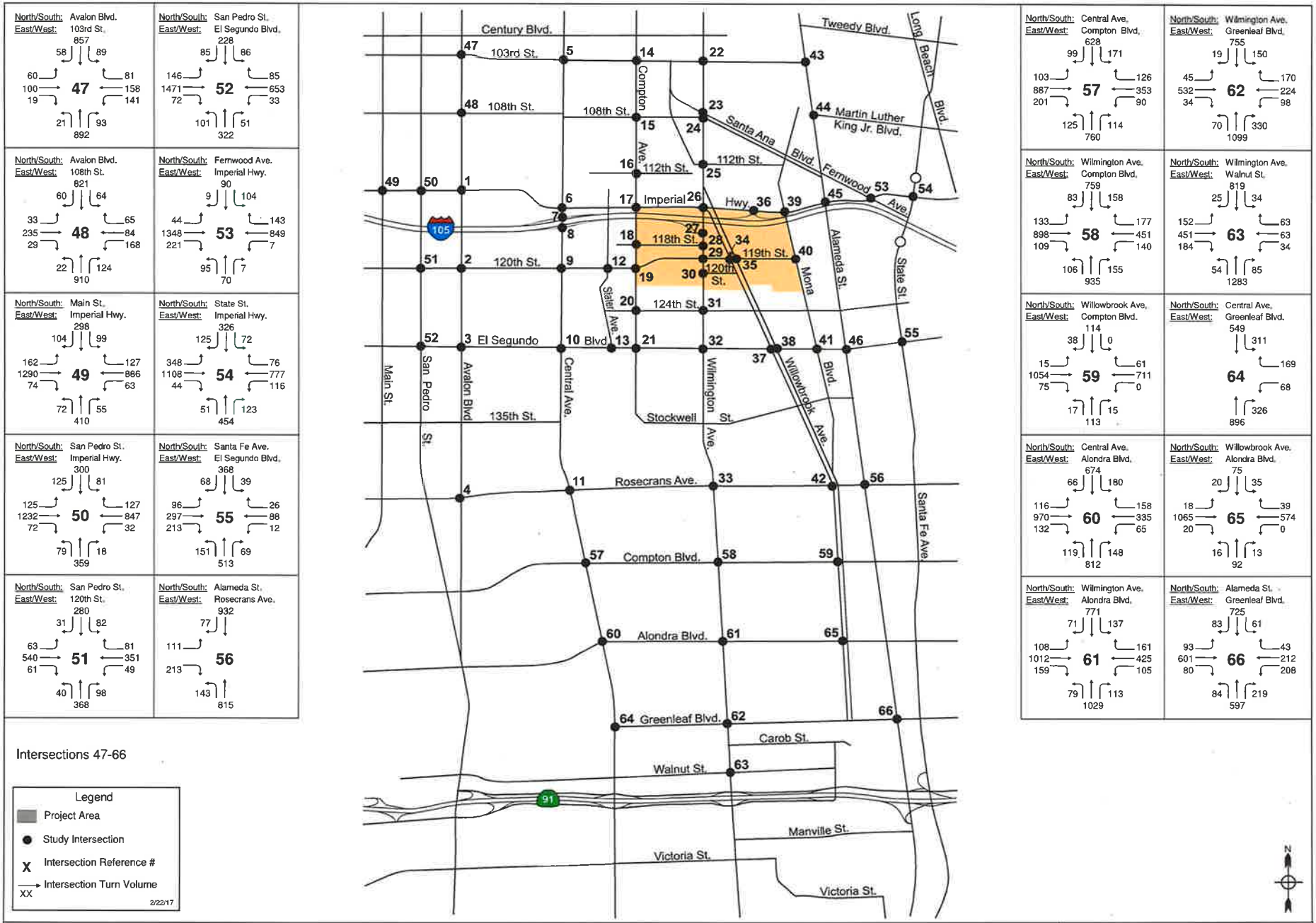

Figure 4.2
Existing With Project Traffic Volumes - PM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

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The County of Los Angeles does not have threshold criteria for determining significant impacts at unsignalized intersections. For the purposes of this study, a significant impact was assumed to occur if the Project caused the level of service for the minor (controlled) approach to worsen to LOS F, or if already LOS F to increase the delay by more than 10%, and if installation of a traffic signal would be warranted.

Significant Impact Thresholds - City of Compton and City of Lynwood

The Cities of Compton and Lynwood do not have published thresholds criteria to determine significant impact. The County of Los Angeles threshold criteria were therefore used in the analysis of intersections in Cities of Compton and Lynwood.

Significant Impact Thresholds - City of Los Angeles

LADOT has established threshold criteria to determine if project impacts are significant at an intersection. The City of Los Angeles considers an impact to be significant if the following criteria are met;

With Project Traffic		Project-Related Increase
LOS	V/C Ratio	in V/C Ratio
C	0.701 – 0.800	equal to or greater than 0.040
D	0.801 – 0.900	equal to or greater than 0.020
E, F	> 0.900	equal to or greater than 0.010

Using these criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS C after the addition of project traffic and the incremental change in the volume/capacity (V/C) ratio is less than 0.040. However, in another example, if the intersection is operating at LOS E or LOS F and the incremental change in V/C ratio is 0.010 or greater, then the project would be considered to have a significant impact at that location.

The City of Los Angeles does not have threshold criteria for determining significant impacts at unsignalized intersections. For the purposes of this study, a significant impact was assumed to occur if the Project caused the level of service for the minor (controlled) approach to be either LOS E or LOS F and if installation of a traffic signal would be warranted.

4.2 Project Impact Analysis - Existing With Project

The intersection level of service analysis compared the V/C ratios at each intersection for the Existing Condition and the Existing With Project Condition, to determine the incremental difference in V/C ratios caused by the Project.

The results of the analysis is summarized in Table 4.1 for the AM peak hour and in Table 4.2 for the PM peak hour. These tables compare the level of service for Existing Conditions and Existing With Project Conditions, show the increase in V/C ratios at each intersection due to the Project, and identifies if the increase constitutes a significant impact. The intersection levels of service are also illustrated graphically in Figure 4.3 for the AM Peak Hour and Figure 4.4 for the PM Peak Hour.

County of Los Angeles Intersections - AM Peak Hour

The analysis summarized in Table 4.1 indicates that for the AM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 20 of the 28 intersections analyzed in the County of Los Angeles. Table 4.1 also shows that there would be significant impacts at 12 intersections, as listed below.

11. Central Ave & Rosecrans Ave	LOS D
26. Wilmington Ave & Imperial Hwy	LOS D
32. Wilmington Ave & El Segundo Blvd	LOS D
45. Alameda St & Imperial Hwy	LOS D
46. Alameda St & El Segundo Blvd	LOS D
10. Central Ave & El Segundo Blvd	LOS E
19. Compton Ave & 120th St	LOS E
29. Wilmington Ave & 120th St (West)	LOS E
36. Imperial Hwy & I-105 w/b Ramps	LOS E
17. Compton Ave & Imperial Hwy	LOS F
27. Wilmington Ave & I-105 e/b Ramps	LOS F
28. Wilmington Ave & 118th St	LOS F

Five of the impacted intersections would operate at LOS D or better, four would operate at LOS E, and three would operate at LOS F.

County of Los Angeles Intersections - PM Peak Hour

The analysis summarized in Table 4.2 indicates that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 19 of the 28 intersections analyzed in the County of Los Angeles. Table 4.2 also shows that there would be significant impacts at 13 intersections, as listed below.

30. Wilmington Ave & 120th St (East)	LOS C
3. Avalon Blvd & Rosecrans Ave	LOS D
19. Compton Ave & 120th St	LOS D
26. Wilmington Ave & Imperial Hwy	LOS D
39. Mona Blvd & Imperial Hwy	LOS D
43. Alameda St & 103rd St	LOS D
10. Central Ave & El Segundo Blvd	LOS E
17. Compton Ave & Imperial Hwy	LOS E
27. Wilmington Ave & I-105 e/b Ramps	LOS E
29. Wilmington Ave & 120th St (West)	LOS E
36. Imperial Hwy & I-105 w/b Ramps	LOS E
32. Wilmington Ave & El Segundo Blvd	LOS E
28. Wilmington Ave & 118th St	LOS F

Six of the impacted intersections would operate at LOS D or better, six would operate at LOS E, and one would operate at LOS F.

City of Compton Intersections – AM Peak Hour

The analysis summarized in Table 4.1 indicates that for the AM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 14 of the 16 intersections analyzed in the City of Compton. Table 4.1 also shows that there would be significant impacts at 4 intersections, as listed below.

61. Wilmington Ave & Alondra Blvd	LOS D
62. Wilmington Ave & Greenleaf Blvd	LOS D
21. Compton Ave & El Segundo Blvd	LOS E
33. Wilmington Ave & Rosecrans Ave	LOS E

City of Compton Intersections – PM Peak Hour

The analysis summarized in Table 4.2 indicates that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 13 of the 16 intersections analyzed in the City of Compton. Table 4.2 also shows that there would be significant impacts at 6 intersections, as listed below.

21. Compton Ave & El Segundo Blvd	LOS C
58. Wilmington Ave & W Compton Blvd	LOS D
63. Wilmington Ave & Walnut St	LOS D
33. Wilmington Ave & Rosecrans Ave	LOS E
61. Wilmington Ave & Alondra Blvd	LOS E
62. Wilmington Ave & Greenleaf Blvd	LOS E

City of Lynwood Intersections – AM Peak Hour

The analysis summarized in Table 4.1 indicates that for the AM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at all 3 intersections analyzed in the City of Lynwood, and that the Project would not cause significant impacts at these intersections.

City of Lynwood Intersections – PM Peak Hour

The analysis summarized in Table 4.2 indicates that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at all 3 intersections analyzed in the City of Lynwood. Table 4.2 also shows that there would be a significant impact at 1 intersection, as listed below.

54. Imperial Hwy & State St	LOS D

City of Los Angeles Intersections – AM Peak Hour

The analysis summarized in Table 4.1 indicates that for the AM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 17 of the 19 intersections analyzed in the City of Los Angeles. Table 4.1 also shows that there would be significant impacts at 5 intersections, as listed below.

1. Avalon Blvd & Imperial Hwy	LOS C
6. Central Ave & Imperial Hwy	LOS C
7. Central Ave & I-105 w/b Ramps	LOS D
9. Central Ave & 120th St	LOS D
25. Wilmington Ave & 112th St	LOS F

Four of the five impacted intersections would operate at LOS D or better. The intersection of Wilmington Ave & 112th St would operate at LOS F on the minor approach, and a traffic signal would be warranted.

City of Los Angeles Intersections – PM Peak Hour

The analysis summarized in Table 4.2 indicates that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 17 of the 19 intersections analyzed in the City of Los Angeles. Table 4.2 also shows that there would significant impacts at 6 intersections, as listed below.

1. Avalon Blvd & Imperial Hwy	LOS C
2. Avalon Blvd & 120th St	LOS C

6. Central Ave & Imperial Hwy	LOS D
7. Central Ave & I-105 w/b Ramps	LOS D
9. Central Ave & 120th St	LOS D
25. Wilmington Ave & 112th St	LOS F

Five of the six impacted intersections would operate at LOS D or better. The intersection of Wilmington Ave & 112th St would operate at LOS F on the minor approach, and a traffic signal would be warranted.

City of Los Angeles Intersections – Shared With County of Los Angeles - AM Peak Hour

Four of the 28 intersections located in the County of Los Angeles and analyzed above with the County's impact thresholds have common jurisdiction with the City of Los Angeles. These intersections were also analyzed using the City of Los Angeles methodology and significant impact criteria.

The analysis summarized in Table 4.1 indicates that for the AM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 3 of the 4 shared intersections analyzed for the City of Los Angeles. Table 4.1 also shows that there would significant impacts at 2 intersections, as listed below.

36. Imperial Hwy & I-105 w/b Ramps	LOS D
17. Compton Ave & Imperial Hwy	LOS F

These results are the same as the analysis under the County methodology, except that whereas under the County methodology there would be a significant impact at Intersection #26 at Wilmington Avenue & Imperial Highway, there would not be a significant impact under the City of Los Angeles methodology.

City of Los Angeles Intersections – Shared With County of Los Angeles - PM Peak Hour

The analysis summarized in Table 4.2 indicates that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at all 4 of the shared intersections analyzed for the City of Los Angeles. Table 4.2 also shows that there would significant impacts at 3 intersections, as listed below.

39. Mona Blvd & Imperial Hwy	LOS C
17. Compton Ave & Imperial Hwy	LOS D
36. Imperial Hwy & I-105 w/b Ramps	LOS D

These results are the same as the analysis under the County methodology, except that whereas under the County methodology there would be a significant impact at Intersection #26 at

Wilmington Avenue & Imperial Highway, there would not be a significant impact under the City of Los Angeles methodology.

Summary - All Intersections – AM Peak Hour

In summary, Table 4.1 shows that for the AM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 55 of the 66 total intersections analyzed. Table 4.1 also shows that there would significant impacts at 21 intersections.

Summary - All Intersections – PM Peak Hour

In summary, Table 4.2 shows that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at a 53 of the 66 total intersections analyzed. Table 4.1 also shows that there would significant impacts at 26 intersections.

Table 4.1 Existing With Project Conditions - Intersection Level of Service - AM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS		
Los Angeles County								
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.726	C	0.739	C	0.013	No
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.652	B	0.667	B	0.015	No
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.899	D	0.933	E	0.034	Yes
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.822	D	0.844	D	0.022	Yes
12.	Slater Ave & 120th St	Signalized	0.501	A	0.604	B	0.103	No
17.	Compton Ave & Imperial Hwy [2]	Signalized	1.007	F	1.120	F	0.113	Yes
18.	Compton Ave & 118th St	Signalized	0.438	A	0.561	A	0.123	No
19.	Compton Ave & 120th St	Signalized	0.574	A	0.919	E	0.345	Yes
20.	Compton Ave & 124th St	Signalized	0.378	A	0.428	A	0.050	No
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.657	B	0.820	D	0.163	Yes
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.848	D	1.196	F	0.348	Yes
28.	Wilmington Ave & 118th St	Signalized	0.641	B	1.161	F	0.520	Yes
29.	Wilmington Ave & 120th St (West)	Signalized	0.840	D	0.907	E	0.067	Yes
30.	Wilmington Ave & 120th St (East)	Signalized	0.424	A	0.681	B	0.257	No
31.	Wilmington Ave & 124th St	Signalized	0.557	A	0.697	B	0.140	No
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.716	C	0.834	D	0.118	Yes
34.	Willowbrook Ave W & 119th Street	Signalized	0.447	A	0.478	A	0.031	No
35.	Willowbrook Ave E & 119th Street	Signalized	0.375	A	0.388	A	0.013	No
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.775	C	0.906	E	0.131	Yes
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.416	A	0.448	A	0.032	No
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.447	A	0.473	A	0.026	No
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.730	C	0.766	C	0.036	No
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(13.5)	B	(15.4)	C	(1.9)	No
41.	Mona Blvd & El Segundo Blvd	Signalized	0.512	A	0.544	A	0.032	No
43.	Alameda St & 103rd St [4]	Signalized	0.790	C	0.812	D	0.022	No
45.	Alameda St & Imperial Hwy [4]	Signalized	0.772	C	0.829	D	0.057	Yes
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.765	C	0.815	D	0.050	Yes
52.	El Segundo Blvd & San Pedro St	Signalized	0.589	A	0.598	A	0.009	No
City of Compton								
13.	Slater Ave & El Segundo Blvd	Signalized	0.687	B	0.710	C	0.023	No
21.	Compton Ave & El Segundo Blvd	Signalized	0.804	C	0.925	E	0.121	Yes
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.854	D	0.927	E	0.073	Yes
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.693	B	0.721	C	0.028	No
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.592	A	0.602	B	0.010	No
56.	Alameda St & Rosecrans Ave	Signalized	0.606	B	0.634	B	0.028	No
57.	Cental Ave & W Compton Blvd	Signalized	0.758	C	0.767	C	0.009	No
58.	Wilmington Ave & W Compton Blvd	Signalized	0.702	B	0.737	C	0.035	No
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.532	A	0.536	A	0.004	No
60.	Central Ave & Alondra Blvd	Signalized	0.754	C	0.762	C	0.008	No
61.	Wilmington Blvd & Alondra Blvd	Signalized	0.825	D	0.861	D	0.036	Yes
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.797	C	0.829	D	0.032	Yes
63.	Wilmington Ave & Walnut St	Signalized	0.595	A	0.627	B	0.032	No
64.	Central Ave & Greenleaf Blvd	Signalized	0.534	A	0.541	A	0.007	No
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.532	A	0.535	A	0.003	No
66.	Alameda St & Greenleaf Blvd	Signalized	0.628	B	0.641	B	0.013	No

Table 4.1 Existing With Project Conditions - Intersection Level of Service - AM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS		
City of Lynwood								
44.	Alameda St & Abbott Rd	Signalized	0.660	B	0.673	B	0.013	No
53.	Imperial Hwy & Fernwood Ave	Signalized	0.732	C	0.756	C	0.024	No
54.	Imperial Hwy & State St	Signalized	0.738	C	0.764	C	0.026	No
City of Los Angeles								
1.	Avalon Blvd & Imperial Hwy	Signalized	0.747	C	0.790	C	0.043	Yes
2.	Avalon Blvd & 120th St	Signalized	0.592	A	0.628	B	0.036	No
5.	Central Ave & 103rd St	Signalized	0.637	B	0.658	B	0.021	No
6.	Central Ave & Imperial Hwy	Signalized	0.737	C	0.784	C	0.047	Yes
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.852	D	0.029	Yes
8.	Central Ave & I-105 e/b Ramps	Signalized	0.668	B	0.699	B	0.031	No
9.	Central Ave & 120th St	Signalized	0.753	C	0.881	D	0.128	Yes
14.	Compton Ave & 103rd St	Signalized	0.604	B	0.688	B	0.084	No
15.	Compton Ave & 108th St	Signalized	0.663	B	0.669	B	0.006	No
16.	Compton Ave & 112th St	Unsignalized [5]	(31.0)	D	(42.5)	E	(11.5)	No
22.	Wilmington Ave & 103rd St	Signalized	0.660	B	0.669	B	0.009	No
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.473	A	0.488	A	0.015	No
24.	Wilmington Ave & 108th St	Signalized	0.593	A	0.621	B	0.028	No
25.	Wilmington Ave & 112th St	Unsignalized [5]	(44.5)	E	Overflow	F	Overflow	Yes
47.	Avalon Blvd & 103rd St	Signalized	0.441	A	0.451	A	0.010	No
48.	Avalon Blvd & 108th St	Signalized	0.564	A	0.578	A	0.014	No
49.	Imperial Hwy & Main St	Signalized	0.590	A	0.601	B	0.011	No
50.	Imperial Hwy & San Pedro St	Signalized	0.661	B	0.673	B	0.012	No
51.	San Pedro St & 120th St	Signalized	0.528	A	0.541	A	0.013	No
City of Los Angeles & Los Angeles County [6]								
17.	Compton Ave & Imperial Hwy	Signalized	0.898	D	1.018	F	0.120	Yes
26.	Wilmington Ave & Imperial Hwy	Signalized	0.501	A	0.670	B	0.169	No
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.690	B	0.830	D	0.140	Yes
39.	Mona Blvd & Imperial Hwy	Signalized	0.601	B	0.639	B	0.038	No

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

[6] Analyzed per City of Los Angeles methodology.

Table 4.2 Existing With Project Conditions - Intersection Level of Service - PM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS		
Los Angeles County								
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.844	D	0.877	D	0.033	Yes
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.804	C	0.815	D	0.011	No
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.925	E	0.983	E	0.058	Yes
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.761	C	0.782	C	0.021	No
12.	Slater Ave & 120th St	Signalized	0.367	A	0.480	A	0.113	No
17.	Compton Ave & Imperial Hwy [2]	Signalized	0.781	C	0.954	E	0.173	Yes
18.	Compton Ave & 118th St	Signalized	0.367	A	0.522	A	0.155	No
19.	Compton Ave & 120th St	Signalized	0.448	A	0.817	D	0.369	Yes
20.	Compton Ave & 124th St	Signalized	0.287	A	0.319	A	0.032	No
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.654	B	0.820	D	0.166	Yes
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.680	B	0.988	E	0.308	Yes
28.	Wilmington Ave & 118th St	Signalized	0.527	A	1.019	F	0.492	Yes
29.	Wilmington Ave & 120th St (West)	Signalized	0.766	C	0.934	E	0.168	Yes
30.	Wilmington Ave & 120th St (East)	Signalized	0.426	A	0.756	C	0.330	Yes
31.	Wilmington Ave & 124th St	Signalized	0.485	A	0.608	B	0.123	No
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.793	C	0.923	E	0.130	Yes
34.	Willowbrook Ave W & 119th Street	Signalized	0.436	A	0.486	A	0.050	No
35.	Willowbrook Ave E & 119th Street	Signalized	0.359	A	0.377	A	0.018	No
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.792	C	0.918	E	0.126	Yes
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.508	A	0.540	A	0.032	No
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.507	A	0.535	A	0.028	No
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.825	D	0.875	D	0.050	Yes
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(17.0)	C	(21.6)	C	(4.6)	No
41.	Mona Blvd & El Segundo Blvd	Signalized	0.609	B	0.635	B	0.026	No
43.	Alameda St & 103rd St [4]	Signalized	0.852	D	0.872	D	0.020	Yes
45.	Alameda St & Imperial Hwy [4]	Signalized	0.799	C	0.818	D	0.019	No
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.898	D	0.912	E	0.014	No
52.	El Segundo Blvd & San Pedro St	Signalized	0.601	B	0.612	B	0.011	No
City of Compton								
13.	Slater Ave & El Segundo Blvd	Signalized	0.649	B	0.676	B	0.027	No
21.	Compton Ave & El Segundo Blvd	Signalized	0.706	C	0.790	C	0.084	Yes
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.847	D	0.941	E	0.094	Yes
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.719	C	0.748	C	0.029	No
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.700	B	0.717	C	0.017	No
56.	Alameda St & Rosecrans Ave	Signalized	0.604	B	0.638	B	0.034	No
57.	Cental Ave & W Compton Blvd	Signalized	0.802	C	0.813	D	0.011	No
58.	Wilmington Ave & W Compton Blvd	Signalized	0.844	D	0.893	D	0.049	Yes
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.453	A	0.456	A	0.003	No
60.	Central Ave & Alondra Blvd	Signalized	0.888	D	0.898	D	0.010	No
61.	Wilmington Blvd & Alondra Blvd	Signalized	0.877	D	0.924	E	0.047	Yes
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.911	E	0.952	E	0.041	Yes
63.	Wilmington Ave & Walnut St	Signalized	0.785	C	0.825	D	0.040	Yes
64.	Central Ave & Greenleaf Blvd	Signalized	0.671	B	0.680	B	0.009	No
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.526	A	0.530	A	0.004	No
66.	Alameda St & Greenleaf Blvd	Signalized	0.723	C	0.748	C	0.025	No

Table 4.2 Existing With Project Conditions - Intersection Level of Service - PM Peak Hour 3/2/2017

Intersection		*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS		
City of Lynwood								
44.	Alameda St & Abbott Rd	Signalized	0.624	B	0.651	B	0.027	No
53.	Imperial Hwy & Fernwood Ave	Signalized	0.755	C	0.781	C	0.026	No
54.	Imperial Hwy & State St	Signalized	0.785	C	0.809	D	0.024	Yes
City of Los Angeles								
1.	Avalon Blvd & Imperial Hwy	Signalized	0.713	C	0.753	C	0.040	Yes
2.	Avalon Blvd & 120th St	Signalized	0.672	B	0.715	C	0.043	Yes
5.	Central Ave & 103rd St	Signalized	0.664	B	0.682	B	0.018	No
6.	Central Ave & Imperial Hwy	Signalized	0.757	C	0.818	D	0.061	Yes
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.896	D	0.073	Yes
8.	Central Ave & I-105 e/b Ramps	Signalized	0.635	B	0.654	B	0.019	No
9.	Central Ave & 120th St	Signalized	0.690	B	0.817	D	0.127	Yes
14.	Compton Ave & 103rd St	Signalized	0.587	A	0.604	B	0.017	No
15.	Compton Ave & 108th St	Signalized	0.527	A	0.573	A	0.046	No
16.	Compton Ave & 112th St	Unsignalized [5]	(38.5)	E	(56.0)	F	(17.5)	No
22.	Wilmington Ave & 103rd St	Signalized	0.463	A	0.477	A	0.014	No
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.441	A	0.469	A	0.028	No
24.	Wilmington Ave & 108th St	Signalized	0.496	A	0.525	A	0.029	No
25.	Wilmington Ave & 112th St	Unsignalized [5]	(42.1)	E	Overflow	F	Overflow	Yes
47.	Avalon Blvd & 103rd St	Signalized	0.475	A	0.491	A	0.016	No
48.	Avalon Blvd & 108th St	Signalized	0.608	B	0.627	B	0.019	No
49.	Imperial Hwy & Main St	Signalized	0.632	B	0.651	B	0.019	No
50.	Imperial Hwy & San Pedro St	Signalized	0.697	B	0.721	C	0.024	No
51.	San Pedro St & 120th St	Signalized	0.597	A	0.623	B	0.026	No
City of Los Angeles & Los Angeles County [6]								
17.	Compton Ave & Imperial Hwy	Signalized	0.663	B	0.841	D	0.178	Yes
26.	Wilmington Ave & Imperial Hwy	Signalized	0.497	A	0.671	B	0.174	No
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.710	C	0.847	D	0.137	Yes
39.	Mona Blvd & Imperial Hwy	Signalized	0.704	C	0.758	C	0.054	Yes

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

[6] Analyzed per City of Los Angeles methodology.

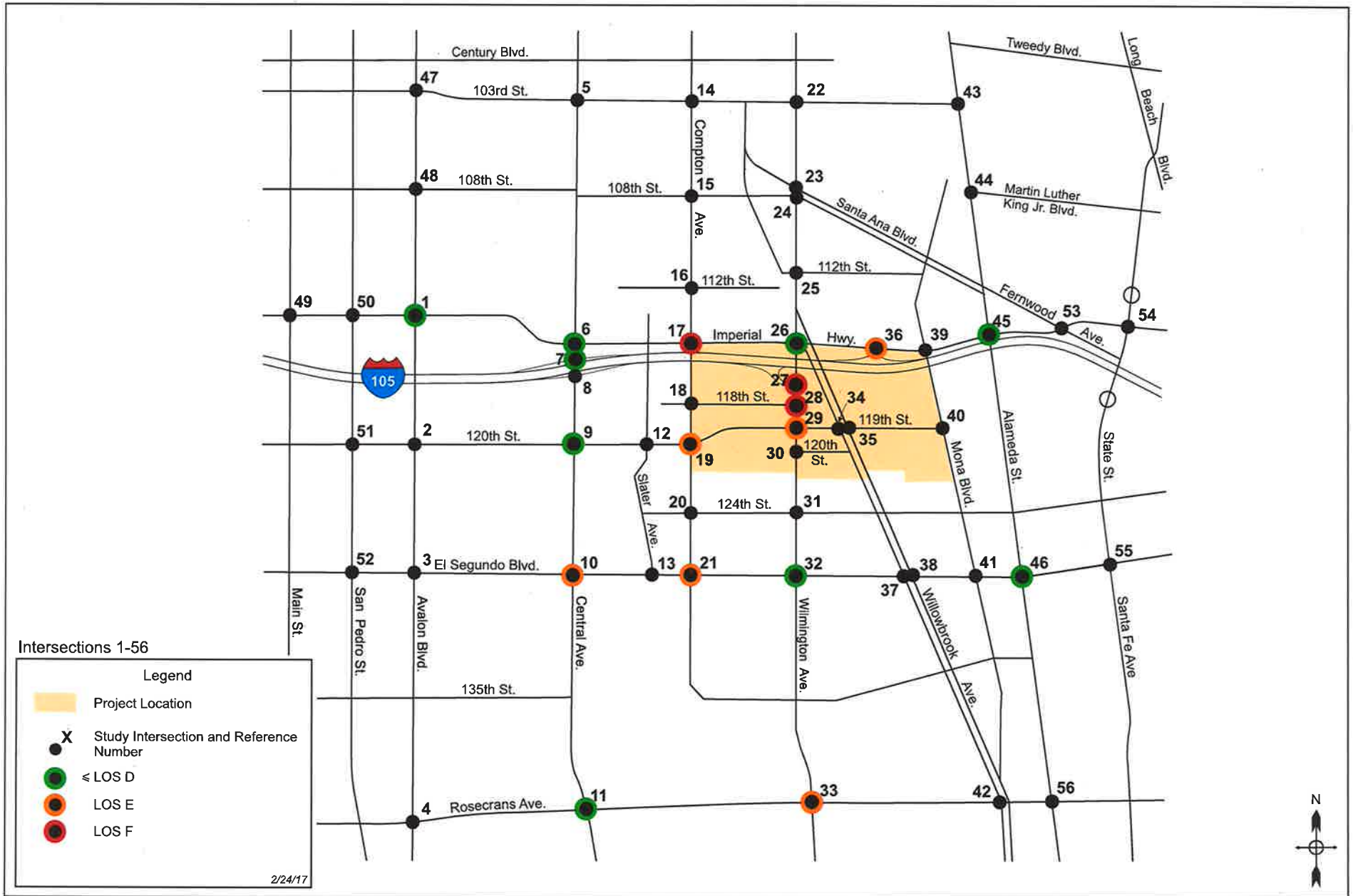

Figure 4.3
Existing + Project - AM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

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Figure 4.3
Existing + Project - AM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

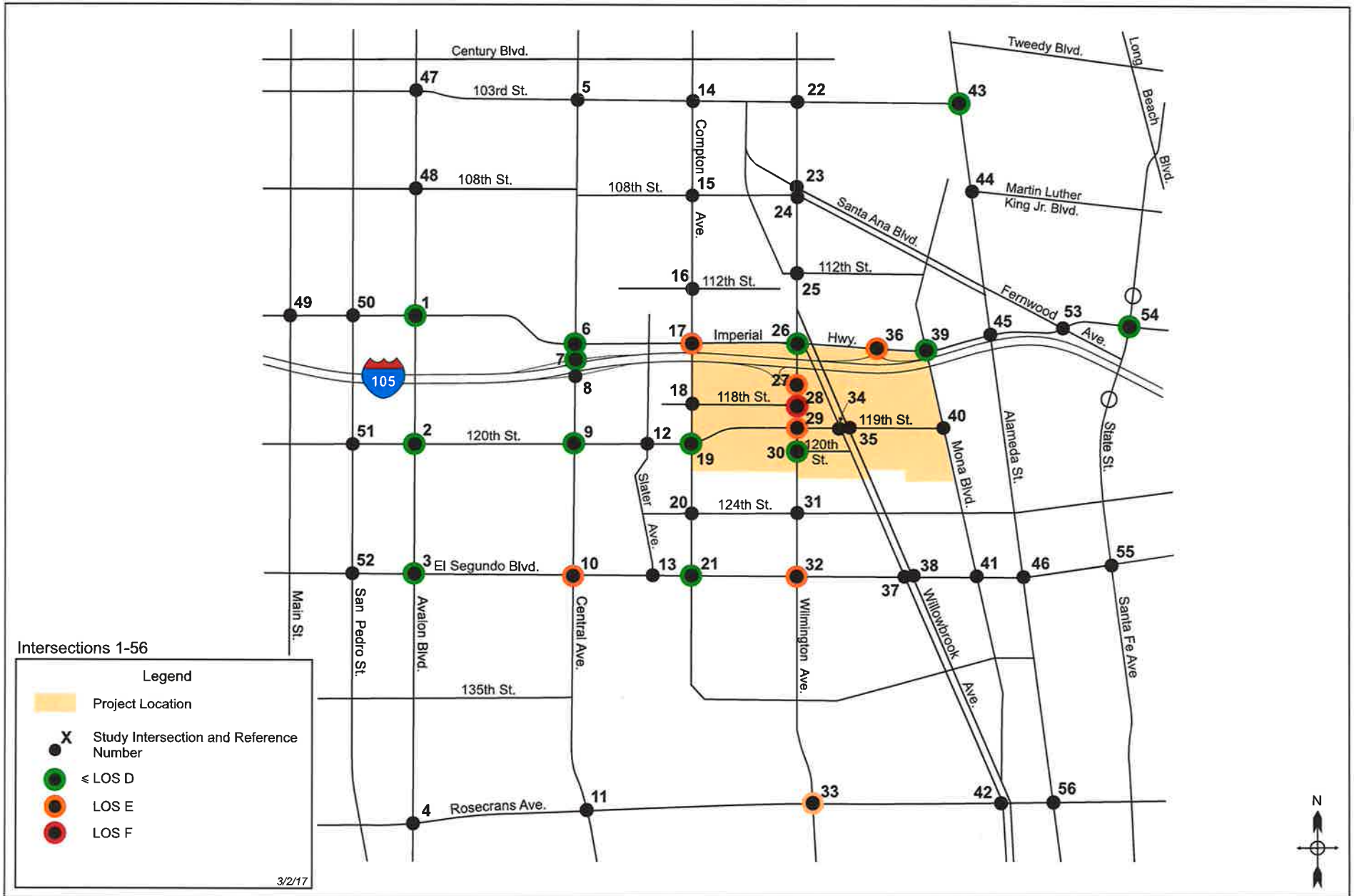

Figure 4.4
Existing + Project PM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

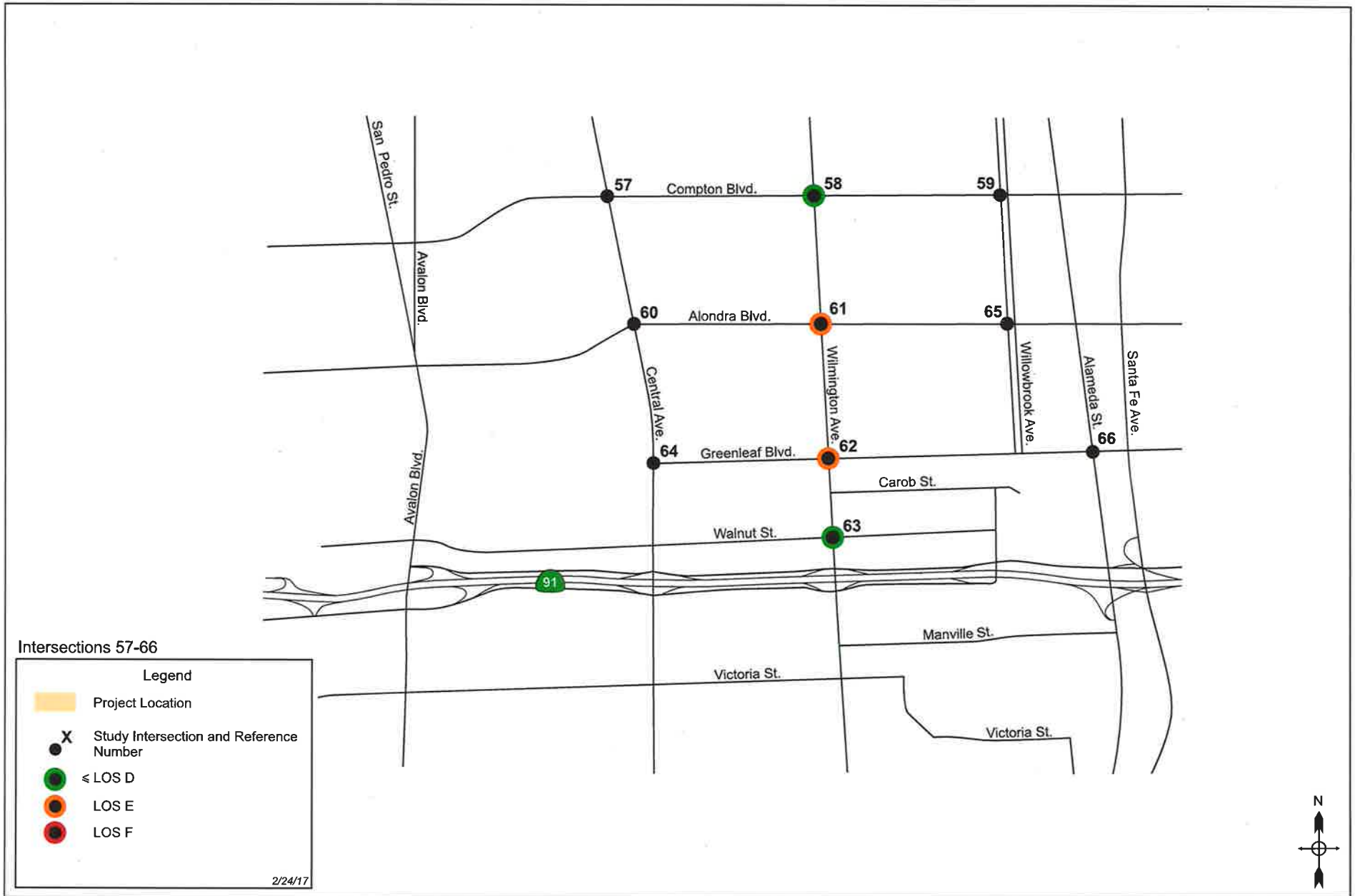

Figure 4.4
Existing + Project - PM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

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Transportation Strategies & Solutions

5. Future Conditions Background

The Traffic Study analyzes future conditions in Year 2035, the year representing build-out of the Specific Plan. This chapter describes data inputs and the development of traffic forecasts for that year.

5.1 Cumulative (Related) Projects

List of Cumulative Projects

The County of Los Angeles methodology requires that the trips from cumulative projects in the area of the Projects be considered in future conditions analyses. The following section of this chapter describes the process of estimating traffic from these related projects.

A list of proposed development projects that could affect traffic conditions in the Project Area by adding traffic volumes to study area intersections was prepared based on information provided by County of Los Angeles staff. The City of Los Angeles, City of Compton, and City of Lynwood were contacted for information regarding related projects and data was received from Los Angeles and Compton which were included in the Study. A total of 12 potential development projects were identified within an approximately 1.5-mile radius from the Project Site that are currently under construction, have received formal approval, or are under formal planning consideration and potentially could be in place by the year 2035 when the Project will be completed, and that could add traffic growth to the roadways in the study area. The locations of the cumulative projects are shown in Figure 5.1 and are listed in Table 5.1.

This approach is conservative in that not all of the related projects may be ultimately built, and for purposes of preparing a conservative analysis, no potential street improvements or transportation mitigation measures that might be associated with any of the related projects were included in the future conditions traffic analysis.

Cumulative Projects Trip Generation and Distribution

Trip generation estimates for the related projects were prepared, as shown in Table 5.1. These were generally taken from the environmental and/or traffic studies prepared for the individual projects. Where the information was not available from previous reports, the trip generation was estimated using trip rates from the Institute of Transportation Engineers (ITE) Trip generation, 9th Edition. These estimates are considered conservative in that they do not account for trip interaction between projects, and they do not in every case account for the possible use of non-auto modes such as transit, walk and bicycling.

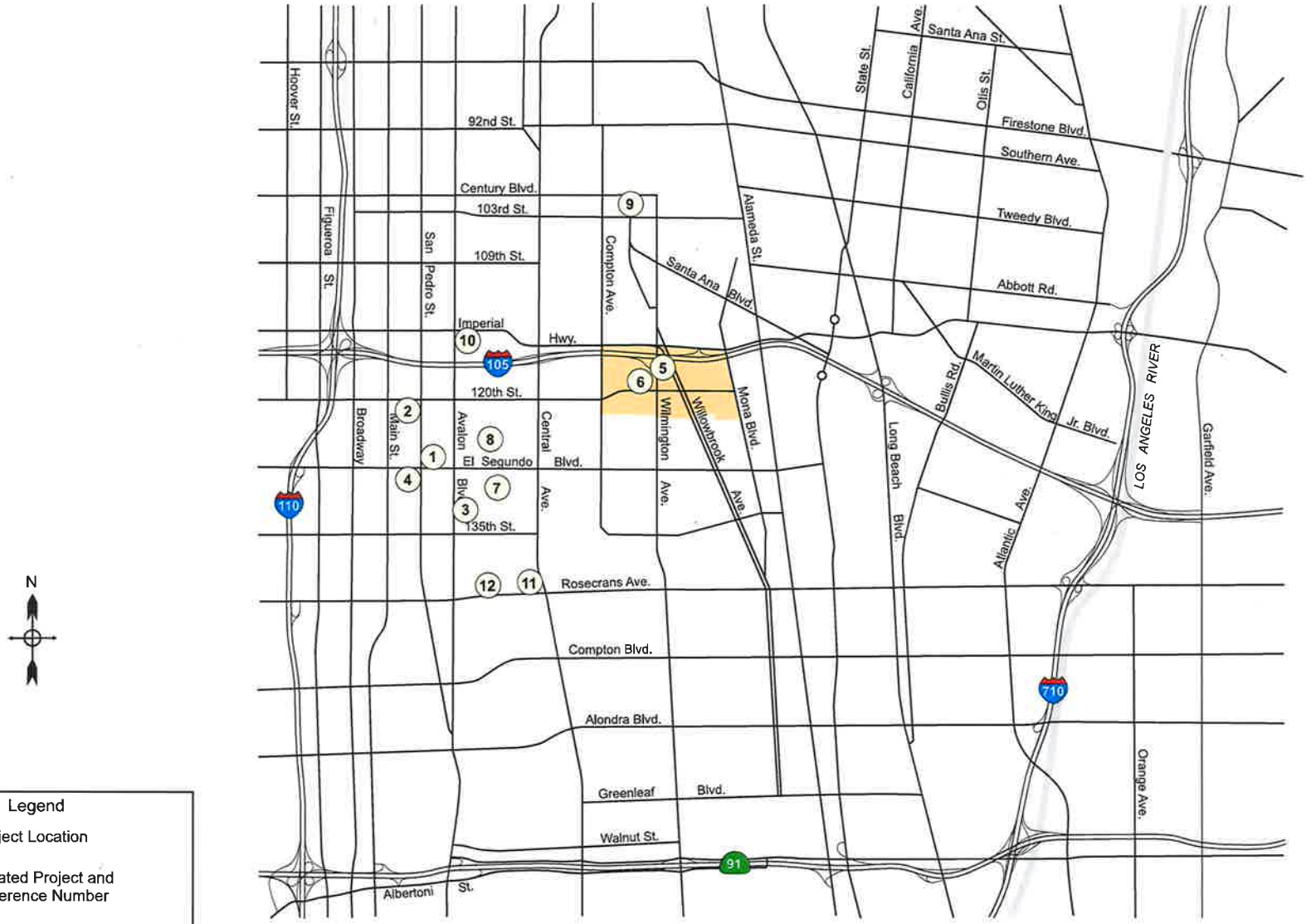

Figure 5.1
Location of Related Projects

Willowbrook TOD Specific Plan EIR Traffic Study

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Table 5.1 Related Project List and Trip Generation Estimates

5/20/2016

Project #	Project Name	Location / Address	Juisdiction	Project Description	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
1	Retail Extension R2013-02161	12726 S San Pedro St, Los Angeles	County of Los Angeles	2,100 s.f. Retail	130	2	2	5	6	6	13
2	Condominiums TR070601	South Side of 121st St, Half Way between Main St and San Pedro St	County of Los Angeles	10 DU Condominiums	58	1	4	4	3	2	5
3	Apartment Complex R2010-01629	13218 Avalon Blvd, Los Angeles	County of Los Angeles	54 DU Apartments	359	6	22	28	22	12	33
4	Single Family Homes R2015-01957	215 & 277 E El Segundo Blvd, Los Angeles	County of Los Angeles	9 DU Single Family Homes	86	2	5	7	6	3	9
5	Senior Housing & Library R2014-01830	11737 Wilmington Ave, Los Angeles	County of Los Angeles	109 DU Apartments	337	7	13	20	12	12	24
				8,000 s.f. Library	450	6	2	8	28	30	58
6	Medical Office R2006-00502	11815 Bandera St, Los Angeles	County of Los Angeles	48,000 s.f. Medical Office	1,734	91	24	115	48	123	171
7	Housing	13024 Salinas Avenue, Willowbrook	County of Los Angeles	95 DU Single Family Homes	904	18	53	71	60	35	95
8	Earvin "Magic" Johnson Recreation Area Redevelopment	905 E El Segundo Blvd, Los Angeles	County of Los Angeles	126 acres Park Redevelopment	3,489	148	60	208	394	305	699
9	Movie Theater and education center 13310	10341 Graham Avenue	City of Los Angeles	1,000 seat 4 Screen Theater	1,530	0	0	0	25	35	60
				12,417 s.f. School	290	26	5	31	17	10	27
10	COU Laundromat to 7 Eleven 42869	600 E Imperial Highway	City of Los Angeles	2,600 s.f. Retail	849	42	43	85	30	29	59
11	Brickyard Industrial	NWC Central / Rosecrans	City of Compton	1,154,000 s.f. Warehouse	2,350	38	11	49	38	111	149
12	Birtcher Goodmand Industrial	NEC McKinley / Rosecrans	City of Compton	102,000 s.f. Industrial	756	54	13	67	18	53	71
Total					**13,323**	**440**	**258**	**697**	**707**	**767**	**1,474**

Sources:

Los Angeles County data from Los Angeles County's Cumulative Project Report, 9/21/2015.

City of Los Angeles data from Case Logging and Tracking Sysytem - Related Projects, 10/15/2015.

City of Compton data received directly from City of Compton, 10/27/2015.

Similarly, trip distribution estimates were also taken from the environmental/traffic studies conducted for the individual projects where available or were estimated based on an understanding of the type of the project, its location, the geographic distribution of population and employment from which project trips may be drawn, and the surrounding roadway and circulation system. It should be noted that because of the large geographic distribution of these projects, that not all of the related project trips would travel through all of the study area or traverse all of the study intersections.

5.2 Future Traffic Conditions – County of Los Angeles Intersections

The County of Los Angeles procedures require analysis for the following conditions:

- Existing Conditions
- Existing Plus Project Conditions
- Existing Plus Project Plus Cumulative Conditions

The Existing Conditions and Existing Plus Project Conditions have been analyzed in Chapter 2 and Chapter 4 respectively. In order to provide traffic forecasts for the Existing Plus Project Plus Cumulative Conditions, the trip estimates shown in Table 5.1 for cumulative projects were added to the roadway network and combined with existing traffic volumes and project traffic volumes to provide forecasts of Existing Plus Project Plus Cumulative traffic conditions in the study area in 2035, for both the AM and PM peak periods. This process was also conducted for intersections in the Cities of Compton and Lynwood.

5.3 Future Traffic Conditions – City of Los Angeles Intersections

The City of Los Angeles procedures require analysis for the following conditions:

- Existing Conditions
- Existing Plus Cumulative Conditions (Future Without Project)
- Existing Plus Cumulative Plus Project Conditions (Future With Project)

The Existing Conditions have been analyzed in Chapter 2. In order to develop the traffic forecasts for the Existing Plus Cumulative (Future Without Project) Conditions, two steps were required. Per the City's methodology, an ambient traffic growth was first calculated that represents a general growth in traffic volumes due to minor new developments in the Project Area, and regional growth and development outside the study area. A background growth projection was estimated from the Los Angeles Congestion Management Program (CMP) forecasts for the local area. The background growth for RSA 21 – in which the Willowbrook TOP area is located – for 2016 to 2035 growth is 1.097, representing an annual growth of 0.49% per year. The existing traffic counts were therefore adjusted upward by a total of 0.49

% a year for nineteen years (from 2016 to 2035) to represent the ambient growth to the Project completion year.

The trip estimates shown in Table 5.1 for cumulative projects were then also added to the roadway network and combined with the existing plus ambient traffic volumes to provide data for the Existing Plus Cumulative (Future Without Project) Conditions. The final step was then to add the Project trips (from Chapter 3) to the roadway network to obtain the traffic forecasts for the Existing Plus Cumulative Plus Project Conditions (Future With Project) traffic conditions in the study area in 2035, for both the AM and PM peak periods.

5.4 Cumulative Transportation Projects

In addition to the transportation improvements in the Specific Plan, a number of transportation improvements are planned by others for the future in the area of the Specific Plan

Willowbrook Area Access Improvements

This County of Los Angeles project will implement street enhancements on Wilmington Avenue between Imperial Highway & 120th Street (West), and on 120th Street between Willowbrook Avenue & Compton Avenue. Streetscape improvements will including paved crosswalks on Wilmington Avenue. A road diet on 120th Street will add bike lanes in each direction and reduce the number of traffic lanes from four to three between Wilmington & Compton on 120th Street. Left turn lanes will be retained at intersections. This project has been included in the Specific Plan and the roadway lane and configuration changes are incorporated into the future conditions analysis.

Willowbrook/Rosa Parks Station

A Metro Project is designed to improve the functionality, safety, security and circulation at the station. Metro is designing the improvements, and has conducted a separate environmental review[1]. All improvements are on-site at the station, and there are no changes to street traffic movements or vehicular circulation patterns on adjacent streets. The station improvements are therefore not included in this study,

County of Los Angeles Bicycle Master Plan

This plan includes the following elements in the Specific Plan area.

[1] Willowbrook/Rosa Parks Station Improvement Project - Initial Study/Documented Categorical Exclusion, Metro,
May 2015.

Implement Class I Bike Facility in the Specific Plan area on:

- Willowbrook Avenue West between Metro Station and 119th Street. This would reduce the roadway from two southbound traffic lanes to one southbound traffic lane. Incorporated in study.

Implement Class II Bike Lanes in the Specific Plan area on:

- Wilmington Avenue, south of 119th Street
- Imperial Highway, between Compton Avenue & Wilmington Avenue
- 120th Street, between Compton Avenue & Wilmington Avenue.

These projects are included in the Specific Plan, and their incorporation into the traffic study is described in Chapter 3.

City of Los Angeles Bicycle Master Plan

This plan includes the following elements in the Specific Plan area.

Implement Class II Bike Lanes in the Specific Plan area on:

- Imperial Highway, between Wilmington Avenue & Mona Avenue

This project is included in the Specific Plan, and its incorporation into the traffic study is described in Chapter 3.

Implement Class III Bike Routes in the Specific Plan area on:

- Wilmington Avenue north of Imperial Highway.

This implementation would not affect the number of traffic lanes, so no roadway configuration changes are incorporated in the traffic analysis.

6. Existing With Project With Cumulative Conditions

This section of the report documents an analysis of potential Project impacts for the Existing With Project With Cumulative Condition. The trip estimates generated by related projects shown in Table 5.1 were added to the roadway network and combined with the volumes used for the Existing Plus Project Conditions analyzed in Chapter 4, to forecast Future with Project With Cumulative Conditions traffic volumes, for both the AM and PM peak periods. The total Existing With Project With Cumulative peak hour traffic volumes are illustrated in Figures 6.1 and 6.2 for the AM and PM peak hours respectively.

The analysis then used the methodologies (as described in Chapter 2) and thresholds for significant impact appropriate to each of the different jurisdictions, to calculate intersection level of service and potential impacts. The analysis used the same thresholds described in Chapter 4 for determining significant traffic impacts.

6.1 Project Impact Analysis - Existing With Project With Cumulative

The intersection level of service analysis compared the V/C ratios at each intersection for the Existing Condition and the Existing With Project With Cumulative Condition, to determine the incremental difference in V/C ratios caused by the Project.

The results of the analysis is summarized in Table 6.1 for the AM peak hour and in Table 6.2 for the PM peak hour. These tables compare the level of service for Existing Conditions and Existing With Project With Cumulative Conditions, show the increase in V/C ratios at each intersection due to the Project, and identifies if the increase constitutes a significant impact. The intersection levels of service are also illustrated graphically in Figure 6.3 for the AM Peak Hour and Figure 6.4 for the PM Peak Hour.

County of Los Angeles Intersections - AM Peak Hour

The analysis summarized in Table 6.1 indicates that for the AM peak hour, with the addition of Project and Cumulative traffic the level of service would remain LOS D or better at 21 of the 28 intersections analyzed in the County of Los Angeles. Table 6.1 also shows that there would significant impacts at 13 intersections, as listed below.

39. Mona Blvd & Imperial Hwy	LOS C
11. Central Ave & Rosecrans Ave	LOS D
26. Wilmington Ave & Imperial Hwy	LOS D
32. Wilmington Ave & El Segundo Blvd	LOS D

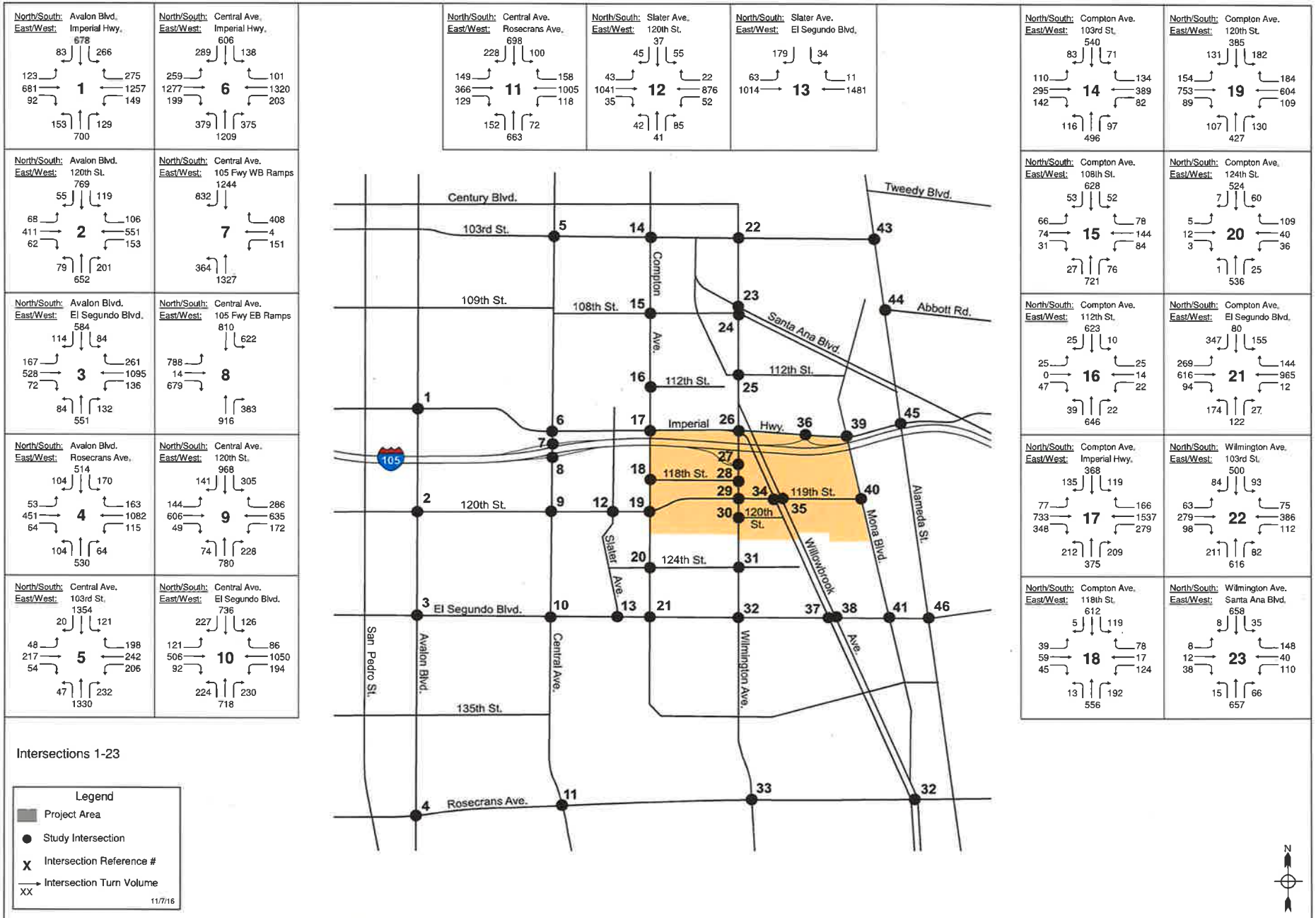

Figure 6.1
Existing With Project With Cumulative Traffic Volumes - AM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

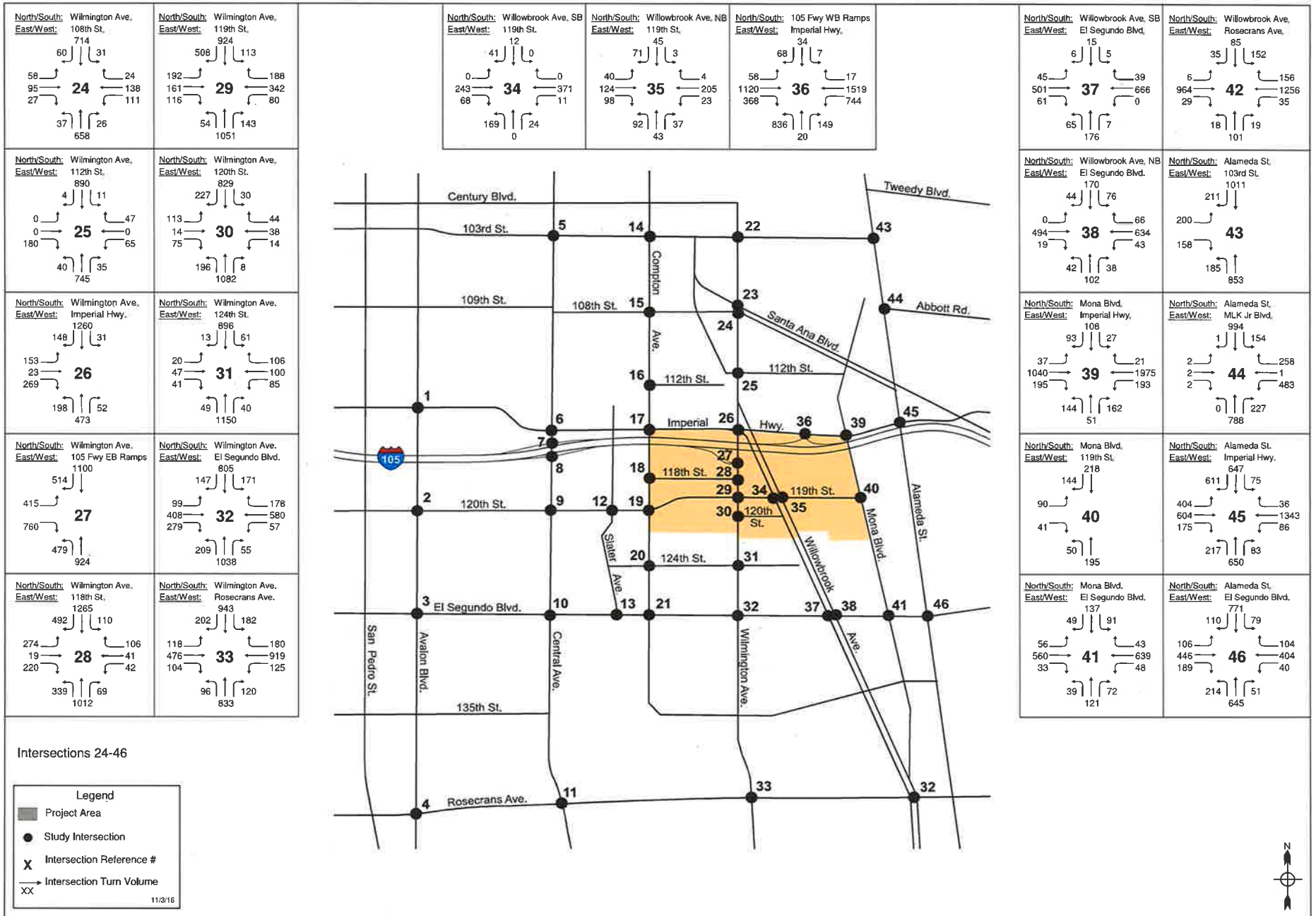

Figure 6.1
Existing With Project With Cumulative Traffic Volumes - AM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

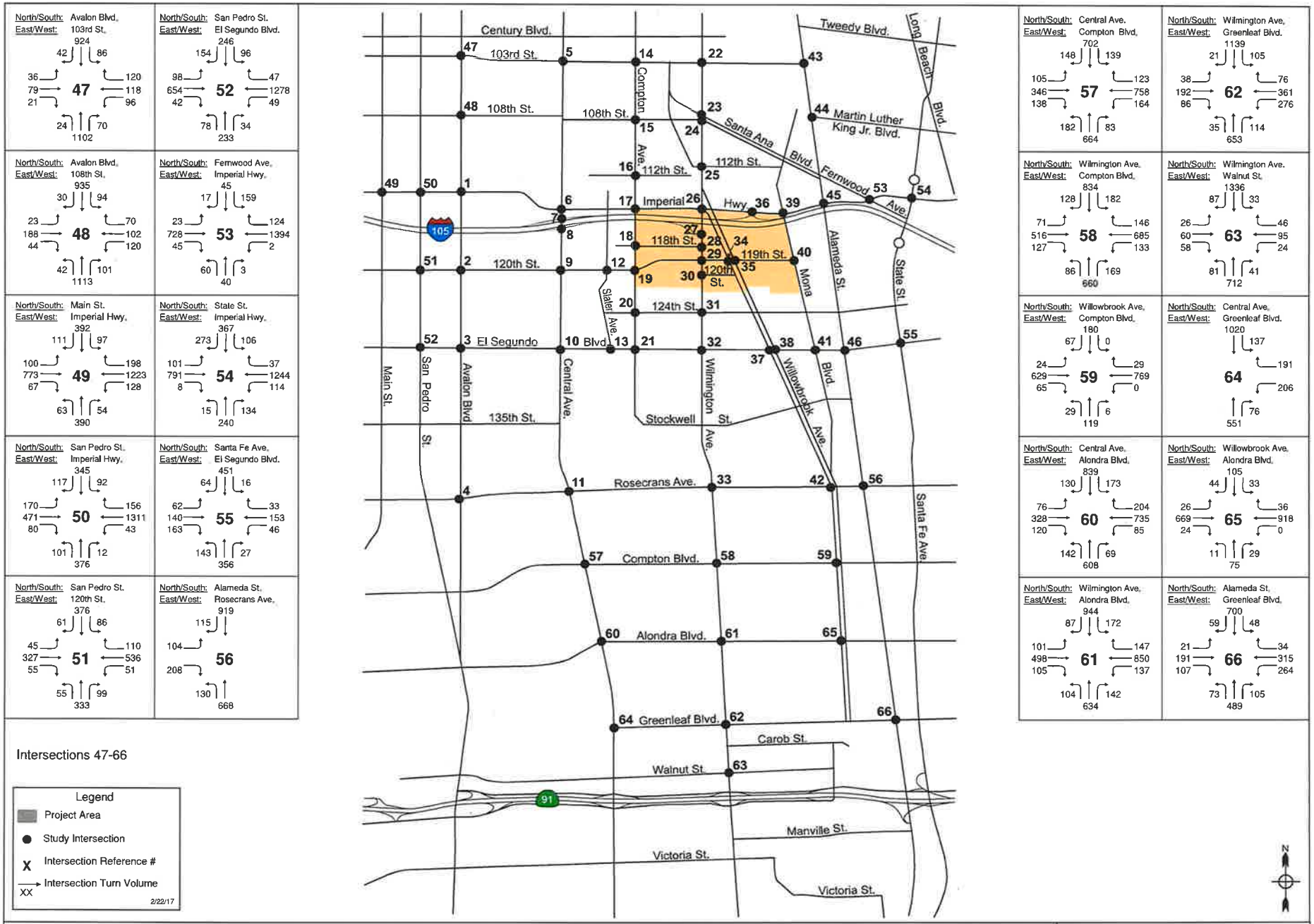

Figure 6.1
Existing With Project With Cumulative Traffic Volumes - AM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

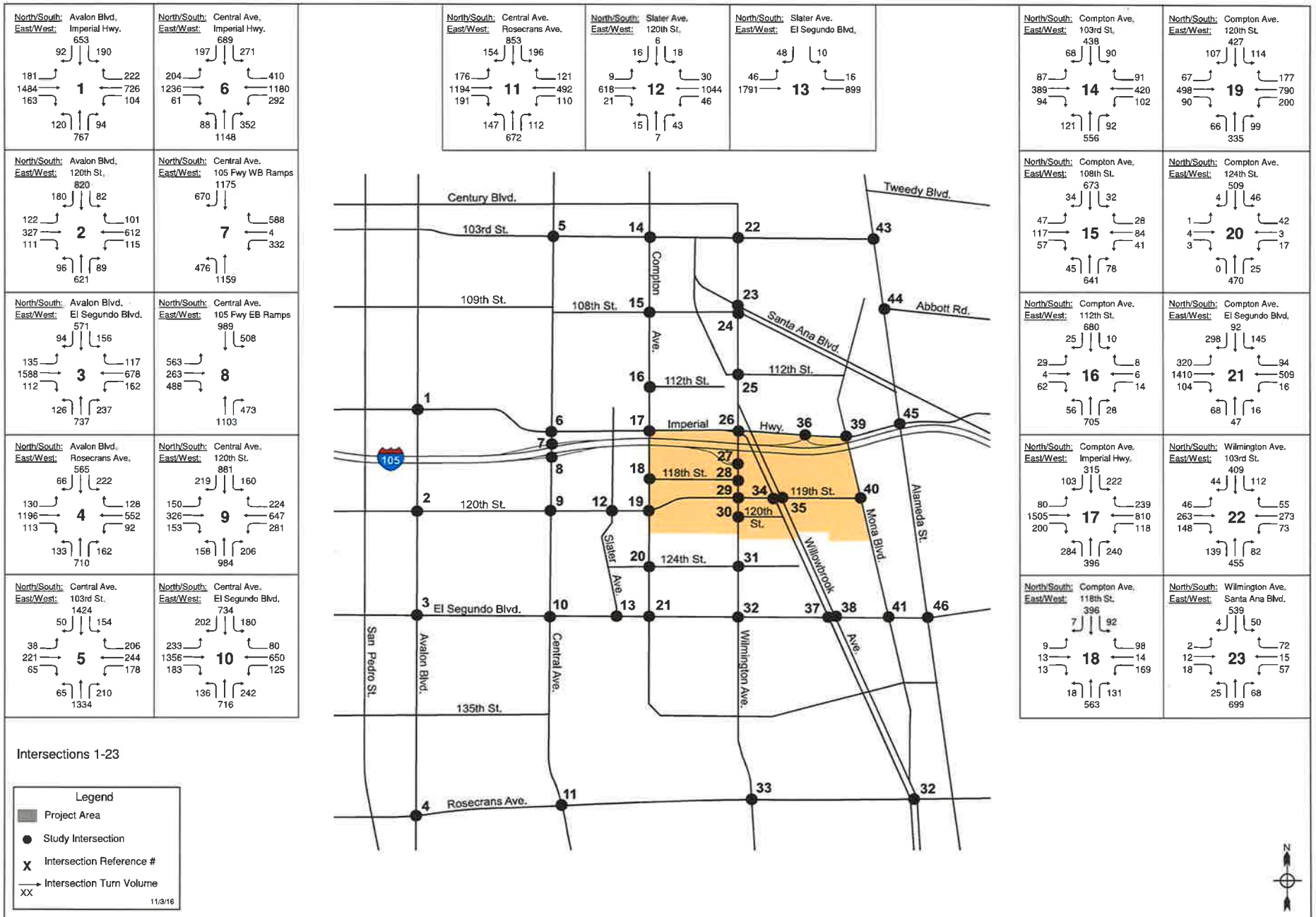

Figure 6.2
Existing With Project With Cumulative Traffic Volumes - PM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

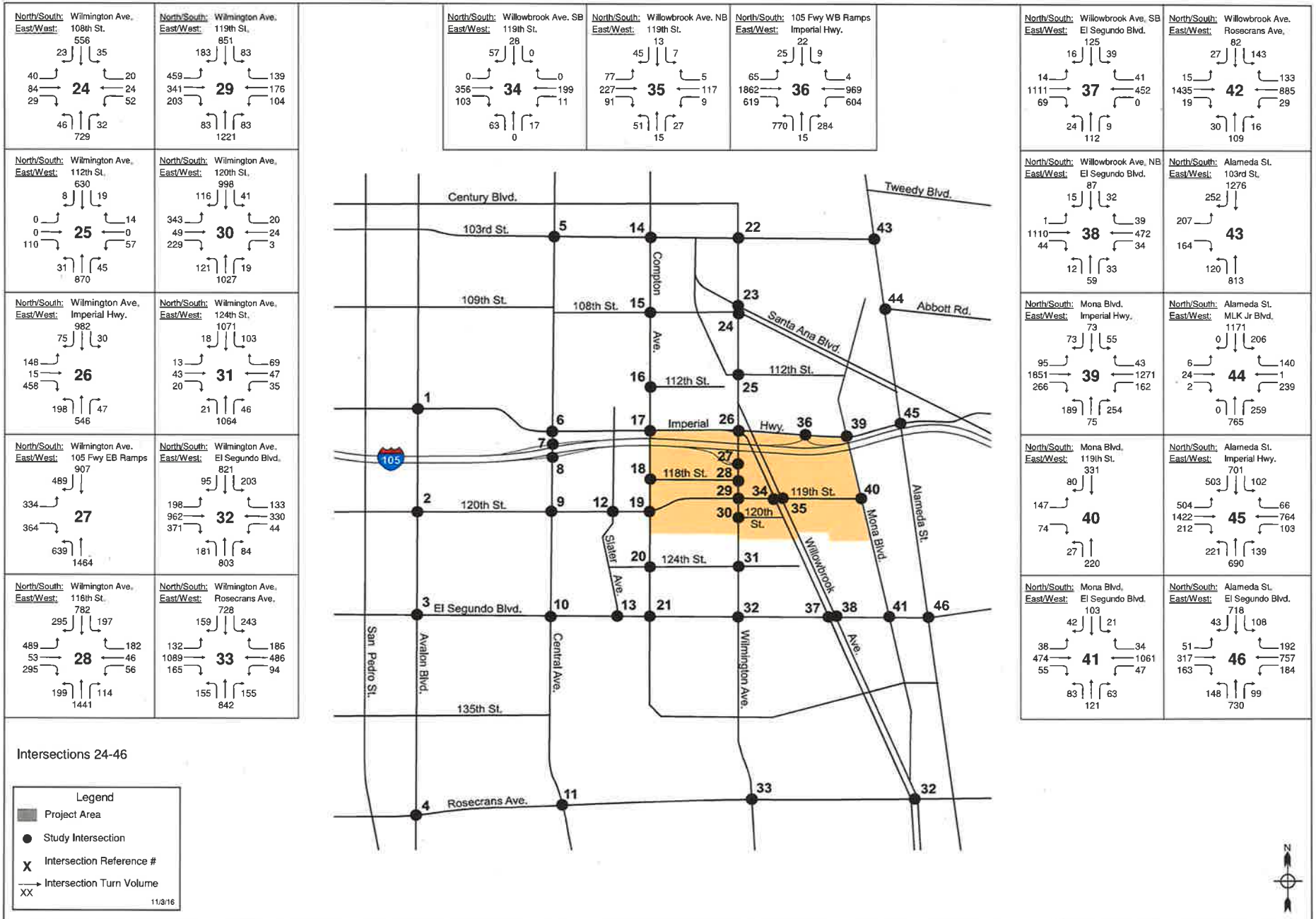

Figure 6.2
Existing With Project With Cumulative Traffic Volumes - PM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

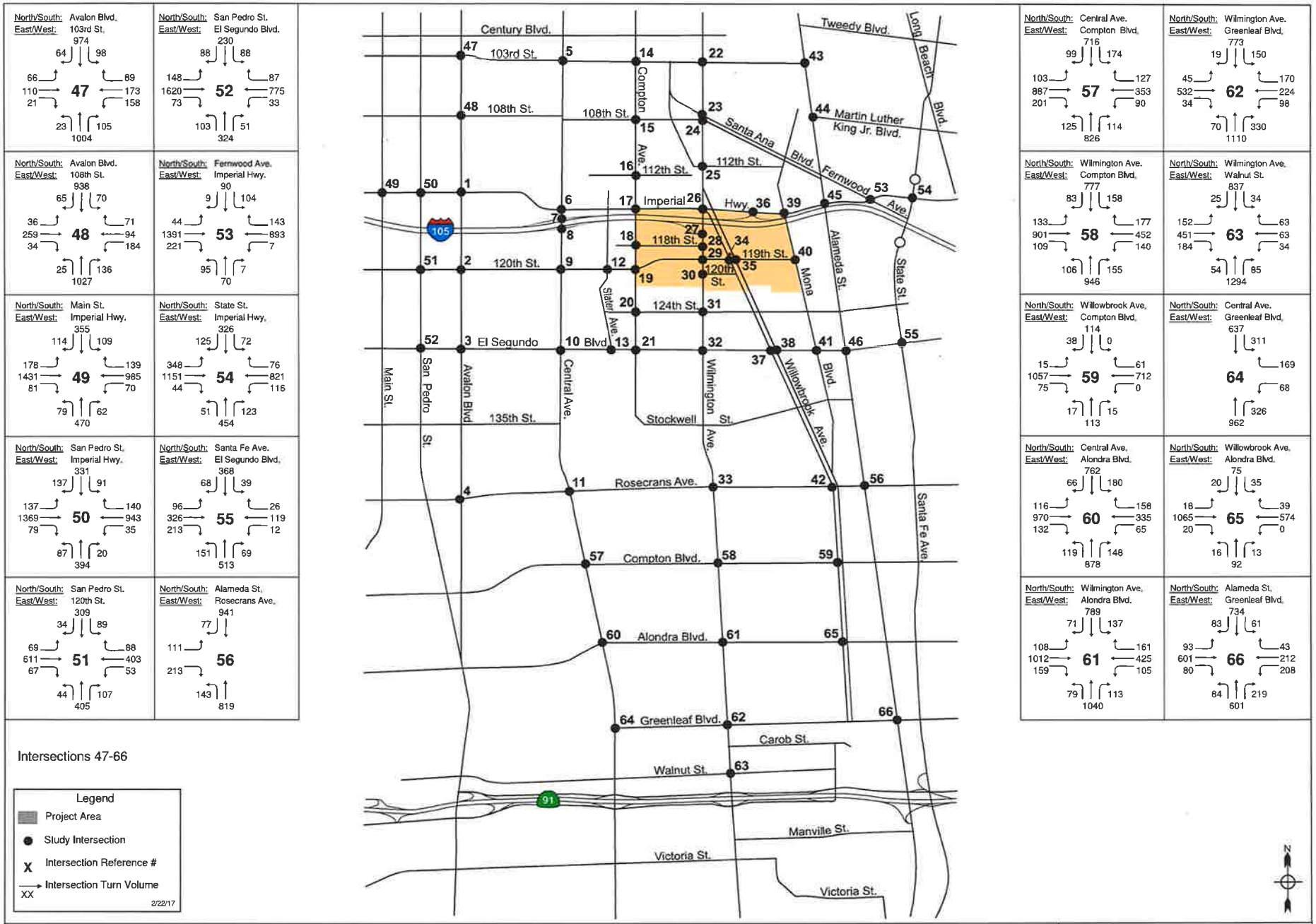

Figure 6.2
Existing With Project With Cumulative Traffic Volumes - PM Peak Hour

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

45. Alameda St & Imperial Hwy	LOS D
46. Alameda St & El Segundo Blvd	LOS D
10. Central Ave & El Segundo Blvd	LOS E
19. Compton Ave & 120th St	LOS E
29. Wilmington Ave & 120th St (West)	LOS E
36. Imperial Hwy & I-105 w/b Ramps	LOS E
17. Compton Ave & Imperial Hwy	LOS F
27. Wilmington Ave & I-105 e/b Ramps	LOS F
28. Wilmington Ave & 118th St	LOS F

Six of the impacted intersections would operate at LOS D or better, four would operate at LOS E, and three would operate at LOS F.

County of Los Angeles Intersections - PM Peak Hour

The analysis summarized in Table 6.2 indicates that for the PM peak hour, with the addition of Project and Cumulative traffic the level of service would remain LOS D or better at 19 of the 28 intersections analyzed in the County of Los Angeles. Table 6.2 also shows that there would significant impacts at 15 intersections, as listed below.

30. Wilmington Ave & 120th St (East)	LOS C
11. Central Ave & Rosecrans Ave	LOS D
19. Compton Ave & 120th St	LOS D
26. Wilmington Ave & Imperial Hwy	LOS D
39. Mona Blvd & Imperial Hwy	LOS D
43. Alameda St & 103rd St	LOS D
3. Avalon Blvd & Rosecrans Ave	LOS E
17. Compton Ave & Imperial Hwy	LOS E
29. Wilmington Ave & 120th St (West)	LOS E
32. Wilmington Ave & El Segundo Blvd	LOS E
36. Imperial Hwy & I-105 w/b Ramps	LOS E
46. Alameda St & El Segundo Blvd	LOS E
10. Central Ave & El Segundo Blvd	LOS F
27. Wilmington Ave & I-105 e/b Ramps	LOS F
28. Wilmington Ave & 118th St	LOS F

Six of the impacted intersections would operate at LOS D or better, six would operate at LOS E, and three would operate at LOS F.

City of Compton Intersections – AM Peak Hour

The analysis summarized in Table 6.1 indicates that for the AM peak hour, with the addition of Project and Cumulative traffic the level of service would remain LOS D or better at 14 of

the 16 intersections analyzed in the City of Compton. Table 6.1 also shows that there would significant impacts at 4 intersections, as listed below.

61. Wilmington Ave & Alondra Blvd	LOS D
62. Wilmington Ave & Greenleaf Blvd	LOS D
21. Compton Ave & El Segundo Blvd	LOS E
33. Wilmington Ave & Rosecrans Ave	LOS E

City of Compton Intersections – PM Peak Hour

The analysis summarized in Table 6.2 indicates that for the PM peak hour, with the addition of Project and Cumulative traffic the level of service would remain LOS D or better at 12 of the 16 intersections analyzed in the City of Compton. Table 6.2 also shows that there would significant impacts at 9 intersections, as listed below.

42. Willowbrook Ave & Rosecrans Ave	LOS C
21. Compton Ave & El Segundo Blvd	LOS D
57. Central Ave & W Compton Blvd	LOS D
58. Wilmington Ave & W Compton Blvd	LOS D
63. Wilmington Ave & Walnut St	LOS D
33. Wilmington Ave & Rosecrans Ave	LOS E
60. Central Ave & Alondra Blvd	LOS E
61. Wilmington Ave & Alondra Blvd	LOS E
62. Wilmington Ave & Greenleaf Blvd	LOS E

City of Lynwood Intersections – AM Peak Hour

The analysis summarized in Table 6.1 indicates that for the AM peak hour, with the addition of Project and Cumulative traffic the level of service would remain LOS D or better at all 3 intersections analyzed in the City of Lynwood, and that the Project would not cause a significant impact at these intersections.

City of Lynwood Intersections – PM Peak Hour

The analysis summarized in Table 6.2 indicates that for the PM peak hour, with the addition of Project and Cumulative traffic the level of service would remain LOS D or better at all 3 intersections analyzed in the City of Lynwood. Table 6.2 also shows that there would a significant impact at 1 intersection, as listed below.

54. Imperial Hwy & State St	LOS D

City of Los Angeles Intersections – AM Peak Hour

The analysis summarized in Table 6.1 compares the Future Without Project and Future With Project Conditions and indicates that for the AM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 15 of the 19 intersections analyzed in the City of Los Angeles. Table 6.1 also shows that there would significant impacts at 5 intersections, as listed below.

1. Avalon Blvd & Imperial Hwy	LOS D
6. Central Ave & Imperial Hwy	LOS D
7. Central Ave & I-105 w/b Ramps	LOS E
9. Central Ave & 120th St	LOS E
25. Wilmington Ave & 112th St	LOS F

Two of the impacted intersections would operate at LOS D or better, and two would operate at LOS E. The intersection of Wilmington Ave & 112th St would operate at LOS F on the minor approach, and a traffic signal would be warranted.

City of Los Angeles Intersections – PM Peak Hour

The analysis summarized in Table 6.2 compares the Future Without Project and Future With Project Conditions and indicates that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 15 of the 19 intersections analyzed in the City of Los Angeles. Table 6.2 also shows that there would significant impacts at 6 intersections, as listed below.

2. Avalon Blvd & 120th St	LOS C
1. Avalon Blvd & Imperial Hwy	LOS D
6. Central Ave & Imperial Hwy	LOS D
7. Central Ave & I-105 w/b Ramps	LOS E
9. Central Ave & 120th St	LOS E
25. Wilmington Ave & 112th St	LOS F

Three of the impacted intersections would operate at LOS D or better, and two would operate at LOS E. The intersection of Wilmington Ave & 112th St would operate at LOS F on the minor approach, and a traffic signal would be warranted.

City of Los Angeles Intersections – Shared With County of Los Angeles - AM Peak Hour

Four of the 66 intersections located in the County of Los Angeles and analyzed above with the County's impact thresholds have common jurisdiction with the City of Los Angeles. These intersections were also analyzed using the City of Los Angeles methodology and significant impact criteria.

The analysis summarized in Table 6.1 indicates that for the AM peak hour, with the addition of Project and Cumulative traffic the level of service would remain LOS D or better at 3 of the 4 shared intersections analyzed for the City of Los Angeles. Table 6.1 also shows that there would significant impacts at 3 intersections, as listed below.

26. Wilmington Ave & Imperial Hwy	LOS C
36. Imperial Hwy & I-105 w/b Ramps	LOS D
17. Compton Ave & Imperial Hwy	LOS F

These results are the same as the analysis under the County methodology, except that at Intersection #39 there would be a significant impact under the County methodology but not under the City methodology.

City of Los Angeles Intersections – Shared With County of Los Angeles - PM Peak Hour

The analysis summarized in Table 6.2 indicates that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 3 of the 4 of the shared intersections analyzed for the City of Los Angeles. Table 6.2 also shows that there would significant impacts at all 4 intersections, as listed below.

26. Wilmington Ave & Imperial Hwy	LOS C
17. Compton Ave & Imperial Hwy	LOS D
39. Mona Blvd & Imperial Hwy	LOS D
36. Imperial Hwy & I-105 w/b Ramps	LOS E

These results are the same as the analysis under the County methodology.

Summary - All Intersections – AM Peak Hour

In summary, Table 6.1 shows that for the AM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 53 of the 66 total intersections analyzed. Table 6.1 also shows that there would significant impacts at 22 intersections

Summary - All Intersections – PM Peak Hour

In summary, Table 6.2 shows that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at 49 of the 66 total intersections analyzed. Table 6.2 also shows that there would significant impacts at 31 intersections

Table 6.1 Existing With Project With Cumulative Conditions - Intersection Level of Service - AM Peak Hour 3/2/2017

Intersection		Intersection Type	Existing Conditions		Existing + Project Conditions		Change in V/C (Delay)	Significant Impact	Existing + Project + Cumulative Conditions		Change in V/C (Delay)	Significant Impact
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
Los Angeles County												
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.726	C	0.739	C	0.013	No	0.757	C	0.031	No
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.652	B	0.667	B	0.015	No	0.684	B	0.032	No
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.899	D	0.933	E	0.034	Yes	0.971	E	0.072	Yes
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.822	D	0.844	D	0.022	Yes	0.870	D	0.048	Yes
12.	Slater Ave & 120th St	Signalized	0.501	A	0.604	B	0.103	No	0.609	B	0.108	No
17.	Compton Ave & Imperial Hwy [2]	Signalized	1.007	F	1.120	F	0.113	Yes	1.127	F	0.120	Yes
18.	Compton Ave & 118th St	Signalized	0.438	A	0.561	A	0.123	No	0.579	A	0.141	No
19.	Compton Ave & 120th St	Signalized	0.574	A	0.919	E	0.345	Yes	0.926	E	0.352	Yes
20.	Compton Ave & 124th St	Signalized	0.378	A	0.428	A	0.050	No	0.432	A	0.054	No
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.657	B	0.820	D	0.163	Yes	0.832	D	0.175	Yes
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.848	D	1.196	F	0.348	Yes	1.128	F	0.280	Yes
28.	Wilmington Ave & 118th St	Signalized	0.641	B	1.161	F	0.520	Yes	1.208	F	0.567	Yes
29.	Wilmington Ave & 120th St (West)	Signalized	0.840	D	0.907	E	0.067	Yes	0.916	E	0.076	Yes
30.	Wilmington Ave & 120th St (East)	Signalized	0.424	A	0.681	B	0.257	No	0.684	B	0.260	No
31.	Wilmington Ave & 124th St	Signalized	0.557	A	0.697	B	0.140	No	0.705	C	0.148	No
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.716	C	0.834	D	0.118	Yes	0.847	D	0.131	Yes
34.	Willowbrook Ave W & 119th Street	Signalized	0.447	A	0.478	A	0.031	No	0.478	A	0.031	No
35.	Willowbrook Ave E & 119th Street	Signalized	0.375	A	0.388	A	0.013	No	0.388	A	0.013	No
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.775	C	0.906	E	0.131	Yes	0.910	E	0.135	Yes
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.416	A	0.448	A	0.032	No	0.454	A	0.038	No
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.447	A	0.473	A	0.026	No	0.479	A	0.032	No
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.730	C	0.766	C	0.036	No	0.772	C	0.042	Yes
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(13.5)	B	(15.4)	C	(1.9)	No	(15.4)	C	(1.9)	No
41.	Mona Blvd & El Segundo Blvd	Signalized	0.512	A	0.544	A	0.032	No	0.550	A	0.038	No
43.	Alameda St & 103rd St [4]	Signalized	0.790	C	0.812	D	0.022	No	0.821	D	0.031	No
45.	Alameda St & Imperial Hwy [4]	Signalized	0.772	C	0.829	D	0.057	Yes	0.837	D	0.065	Yes
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.765	C	0.815	D	0.050	Yes	0.827	D	0.062	Yes
52.	El Segundo Blvd & San Pedro St	Signalized	0.589	A	0.598	A	0.009	No	0.611	B	0.022	No

Table 6.1 Existing With Project With Cumulative Conditions - Intersection Level of Service - AM Peak Hour 3/2/2017

Intersection		*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Compton												
13.	Slater Ave & El Segundo Blvd	Signalized	0.687	B	0.710	C	0.023	No	0.717	C	0.030	No
21.	Compton Ave & El Segundo Blvd	Signalized	0.804	C	0.925	E	0.121	Yes	0.940	E	0.136	Yes
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.854	D	0.927	E	0.073	Yes	0.935	E	0.081	Yes
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.693	B	0.721	C	0.028	No	0.727	C	0.034	No
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.592	A	0.602	B	0.010	No	0.607	B	0.015	No
56.	Alameda St & Rosecrans Ave	Signalized	0.606	B	0.634	B	0.028	No	0.634	B	0.028	No
57.	Cental Ave & W Compton Blvd	Signalized	0.758	C	0.767	C	0.009	No	0.774	C	0.016	No
58.	Wilmington Ave & W Compton Blvd	Signalized	0.702	B	0.737	C	0.035	No	0.738	C	0.036	No
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.532	A	0.536	A	0.004	No	0.537	A	0.005	No
60.	Central Ave & Alondra Blvd	Signalized	0.754	C	0.762	C	0.008	No	0.769	C	0.015	No
61.	Wilmington Blvd & Alondra Blvd	Signalized	0.825	D	0.861	D	0.036	Yes	0.862	D	0.037	Yes
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.797	C	0.829	D	0.032	Yes	0.831	D	0.034	Yes
63.	Wilmington Ave & Walnut St	Signalized	0.595	A	0.627	B	0.032	No	0.628	B	0.033	No
64.	Central Ave & Greenleaf Blvd	Signalized	0.534	A	0.541	A	0.007	No	0.548	A	0.014	No
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.532	A	0.535	A	0.003	No	0.535	A	0.003	No
66.	Alameda St & Greenleaf Blvd	Signalized	0.628	B	0.641	B	0.013	No	0.641	B	0.013	No
City of Lynwood												
44.	Alameda St & Abbott Rd	Signalized	0.660	B	0.673	B	0.013	No	0.679	B	0.019	No
53.	Imperial Hwy & Fernwood Ave	Signalized	0.732	C	0.756	C	0.024	No	0.764	C	0.032	No
54.	Imperial Hwy & State St	Signalized	0.738	C	0.764	C	0.026	No	0.773	C	0.035	No

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

Table 6.1 Future With Project Conditions - Intersection Level of Service - AM Peak Hour 1/25/2017

Intersection		*Intersection Type*	*Existing Conditions*		*Existing + Ambient + Cumulative Conditions*		*Existing + Project +Ambient + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS	V/C or (Delay)	LOS		
City of Los Angeles										
1.	Avalon Blvd & Imperial Hwy	Signalized	0.747	C	0.813	D	0.856	D	0.043	Yes
2.	Avalon Blvd & 120th St	Signalized	0.592	A	0.641	B	0.677	B	0.036	No
5.	Central Ave & 103rd St	Signalized	0.637	B	0.687	B	0.708	C	0.021	No
6.	Central Ave & Imperial Hwy	Signalized	0.737	C	0.796	C	0.843	D	0.047	Yes
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.881	D	0.911	E	0.030	Yes
8.	Central Ave & I-105 e/b Ramps	Signalized	0.668	B	0.724	C	0.755	C	0.031	No
9.	Central Ave & 120th St	Signalized	0.753	C	0.825	D	0.959	E	0.134	Yes
14.	Compton Ave & 103rd St	Signalized	0.604	B	0.643	B	0.662	B	0.019	No
15.	Compton Ave & 108th St	Signalized	0.663	B	0.707	C	0.732	C	0.025	No
16.	Compton Ave & 112th St	Unsignalized [1]	(31.0)	D	(41.4)	E	(61.6)	F	(20.2)	No
22.	Wilmington Ave & 103rd St	Signalized	0.660	B	0.714	C	0.723	C	0.009	No
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.473	A	0.503	A	0.517	A	0.014	No
24.	Wilmington Ave & 108th St	Signalized	0.593	A	0.633	B	0.661	B	0.028	No
25.	Wilmington Ave & 112th St	Unsignalized [1]	(44.5)	E	(78.0)	F	Overflow	F	Overflow	Yes
47.	Avalon Blvd & 103rd St	Signalized	0.441	A	0.469	A	0.479	A	0.010	No
48.	Avalon Blvd & 108th St	Signalized	0.564	A	0.604	B	0.617	B	0.013	No
49.	Imperial Hwy & Main St	Signalized	0.590	A	0.632	B	0.643	B	0.011	No
50.	Imperial Hwy & San Pedro St	Signalized	0.661	B	0.708	C	0.720	C	0.012	No
51.	San Pedro St & 120th St	Signalized	0.528	A	0.561	A	0.575	A	0.014	No
City of Los Angeles & Los Angeles County [2]										
17.	Compton Ave & Imperial Hwy	Signalized	0.898	D	0.969	E	1.089	F	0.120	Yes
26.	Wilmington Ave & Imperial Hwy	Signalized	0.501	A	0.539	A	0.708	C	0.169	Yes
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.690	B	0.739	C	0.879	D	0.140	Yes
39.	Mona Blvd & Imperial Hwy	Signalized	0.601	B	0.644	B	0.682	B	0.038	No

Note:

[1] Unsignalized intersection show delay/LOS for controlled approach.

[2] Analyzed per City of Los Angeles methodology.

Table 6.2 Existing With Project With Cumulative Conditions - Intersection Level of Service - PM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
Los Angeles County												
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.844	D	0.877	D	0.033	Yes	0.957	E	0.113	Yes
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.804	C	0.815	D	0.011	No	0.842	D	0.038	No
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.925	E	0.983	E	0.058	Yes	1.014	F	0.089	Yes
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.761	C	0.782	C	0.021	No	0.816	D	0.055	Yes
12.	Slater Ave & 120th St	Signalized	0.367	A	0.480	A	0.113	No	0.494	A	0.127	No
17.	Compton Ave & Imperial Hwy [2]	Signalized	0.781	C	0.954	E	0.173	Yes	0.967	E	0.186	Yes
18.	Compton Ave & 118th St	Signalized	0.367	A	0.522	A	0.155	No	0.562	A	0.195	No
19.	Compton Ave & 120th St	Signalized	0.448	A	0.817	D	0.369	Yes	0.843	D	0.395	Yes
20.	Compton Ave & 124th St	Signalized	0.287	A	0.319	A	0.032	No	0.324	A	0.037	No
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.654	B	0.820	D	0.166	Yes	0.840	D	0.186	Yes
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.680	B	0.988	E	0.308	Yes	1.010	F	0.330	Yes
28.	Wilmington Ave & 118th St	Signalized	0.527	A	1.019	F	0.492	Yes	1.119	F	0.592	Yes
29.	Wilmington Ave & 120th St (West)	Signalized	0.766	C	0.934	E	0.168	Yes	0.956	E	0.190	Yes
30.	Wilmington Ave & 120th St (East)	Signalized	0.426	A	0.756	C	0.330	Yes	0.767	C	0.341	Yes
31.	Wilmington Ave & 124th St	Signalized	0.485	A	0.608	B	0.123	No	0.614	B	0.129	No
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.793	C	0.923	E	0.130	Yes	0.948	E	0.155	Yes
34.	Willowbrook Ave W & 119th Street	Signalized	0.436	A	0.486	A	0.050	No	0.486	A	0.050	No
35.	Willowbrook Ave E & 119th Street	Signalized	0.359	A	0.377	A	0.018	No	0.377	A	0.018	No
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.792	C	0.918	E	0.126	Yes	0.928	E	0.136	Yes
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.508	A	0.540	A	0.032	No	0.551	A	0.043	No
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.507	A	0.535	A	0.028	No	0.546	A	0.039	No
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.825	D	0.875	D	0.050	Yes	0.885	D	0.060	Yes
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(17.0)	C	(21.6)	C	(4.6)	No	(21.6)	C	(4.6)	No
41.	Mona Blvd & El Segundo Blvd	Signalized	0.609	B	0.635	B	0.026	No	0.646	B	0.037	No
43.	Alameda St & 103rd St [4]	Signalized	0.852	D	0.872	D	0.020	Yes	0.884	D	0.032	Yes
45.	Alameda St & Imperial Hwy [4]	Signalized	0.799	C	0.818	D	0.019	No	0.828	D	0.029	No
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.898	D	0.912	E	0.014	No	0.931	E	0.033	Yes
52.	El Segundo Blvd & San Pedro St	Signalized	0.601	B	0.612	B	0.011	No	0.646	B	0.045	No

Table 6.2 Existing With Project With Cumulative Conditions - Intersection Level of Service - PM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Compton												
13.	Slater Ave & El Segundo Blvd	Signalized	0.649	B	0.676	B	0.027	No	0.690	B	0.041	No
21.	Compton Ave & El Segundo Blvd	Signalized	0.706	C	0.790	C	0.084	Yes	0.812	D	0.106	Yes
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.847	D	0.941	E	0.094	Yes	0.962	E	0.115	Yes
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.719	C	0.748	C	0.029	No	0.760	C	0.041	Yes
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.700	B	0.717	C	0.017	No	0.735	C	0.035	No
56.	Alameda St & Rosecrans Ave	Signalized	0.604	B	0.638	B	0.034	No	0.641	B	0.037	No
57.	Cental Ave & W Compton Blvd	Signalized	0.802	C	0.813	D	0.011	No	0.836	D	0.034	Yes
58.	Wilmington Ave & W Compton Blvd	Signalized	0.844	D	0.893	D	0.049	Yes	0.897	D	0.053	Yes
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.453	A	0.456	A	0.003	No	0.457	A	0.004	No
60.	Central Ave & Alondra Blvd	Signalized	0.888	D	0.898	D	0.010	No	0.918	E	0.030	Yes
61.	Wilmington Blvd & Alondra Blvd	Signalized	0.877	D	0.924	E	0.047	Yes	0.928	E	0.051	Yes
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.911	E	0.952	E	0.041	Yes	0.956	E	0.045	Yes
63.	Wilmington Ave & Walnut St	Signalized	0.785	C	0.825	D	0.040	Yes	0.829	D	0.044	Yes
64.	Central Ave & Greenleaf Blvd	Signalized	0.671	B	0.680	B	0.009	No	0.701	B	0.030	No
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.526	A	0.530	A	0.004	No	0.530	A	0.004	No
66.	Alameda St & Greenleaf Blvd	Signalized	0.723	C	0.748	C	0.025	No	0.751	C	0.028	No
City of Lynwood												
44.	Alameda St & Abbott Rd	Signalized	0.624	B	0.651	B	0.027	No	0.657	B	0.033	No
53.	Imperial Hwy & Fernwood Ave	Signalized	0.755	C	0.781	C	0.026	No	0.794	C	0.039	No
54.	Imperial Hwy & State St	Signalized	0.785	C	0.809	D	0.024	Yes	0.823	D	0.038	Yes

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

Table 6.2 Future With Project Conditions - Intersection Level of Service - PM Peak Hour 1/25/2017

Intersection		*Intersection Type*	*Existing Conditions*		*Existing + Ambient + Cumulative Conditions*		*Existing + Project +Ambient + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS	V/C or (Delay)	LOS		
City of Los Angeles										
1.	Avalon Blvd & Imperial Hwy	Signalized	0.713	C	0.787	C	0.827	D	0.040	Yes
2.	Avalon Blvd & 120th St	Signalized	0.672	B	0.744	C	0.787	C	0.043	Yes
5.	Central Ave & 103rd St	Signalized	0.664	B	0.725	C	0.743	C	0.018	No
6.	Central Ave & Imperial Hwy	Signalized	0.757	C	0.831	D	0.893	D	0.062	Yes
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.894	D	0.967	E	0.073	Yes
8.	Central Ave & I-105 e/b Ramps	Signalized	0.635	B	0.716	C	0.735	C	0.019	No
9.	Central Ave & 120th St	Signalized	0.690	B	0.825	D	0.935	E	0.110	Yes
14.	Compton Ave & 103rd St	Signalized	0.587	A	0.625	B	0.643	B	0.018	No
15.	Compton Ave & 108th St	Signalized	0.527	A	0.559	A	0.605	B	0.046	No
16.	Compton Ave & 112th St	Unsignalized [1]	(38.5)	E	(51.5)	F	(84.1)	F	(32.6)	No
22.	Wilmington Ave & 103rd St	Signalized	0.463	A	0.513	A	0.527	A	0.014	No
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.441	A	0.477	A	0.504	A	0.027	No
24.	Wilmington Ave & 108th St	Signalized	0.496	A	0.538	A	0.567	A	0.029	No
25.	Wilmington Ave & 112th St	Unsignalized [1]	(42.1)	E	(67.2)	F	Overflow	F	Overflow	Yes
47.	Avalon Blvd & 103rd St	Signalized	0.475	A	0.511	A	0.528	A	0.017	No
48.	Avalon Blvd & 108th St	Signalized	0.608	B	0.657	B	0.677	B	0.020	No
49.	Imperial Hwy & Main St	Signalized	0.632	B	0.691	B	0.710	C	0.019	No
50.	Imperial Hwy & San Pedro St	Signalized	0.697	B	0.752	C	0.776	C	0.024	No
51.	San Pedro St & 120th St	Signalized	0.597	A	0.647	B	0.672	B	0.025	No
City of Los Angeles & Los Angeles County [2]										
17.	Compton Ave & Imperial Hwy	Signalized	0.663	B	0.714	C	0.893	D	0.179	Yes
26.	Wilmington Ave & Imperial Hwy	Signalized	0.497	A	0.543	A	0.718	C	0.175	Yes
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.710	C	0.767	C	0.904	E	0.137	Yes
39.	Mona Blvd & Imperial Hwy	Signalized	0.704	C	0.760	C	0.814	D	0.054	Yes

Note:

[1] Unsignalized intersection show delay/LOS for controlled approach.

[2] Analyzed per City of Los Angeles methodology.

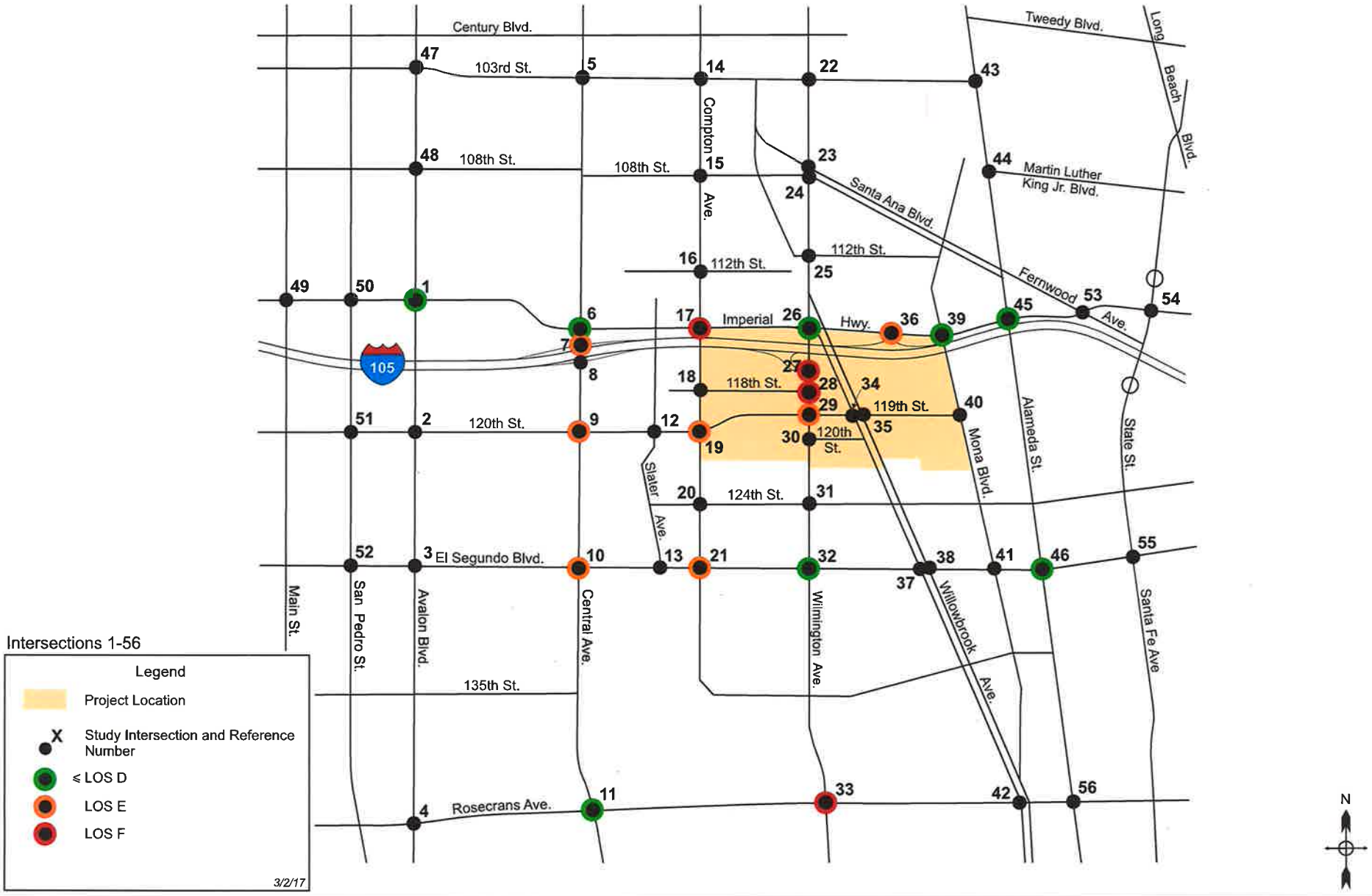

Figure 6.3
Existing + Project + Cumulative - AM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

Figure 6.3
Existing + Project + Cumulative - AM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

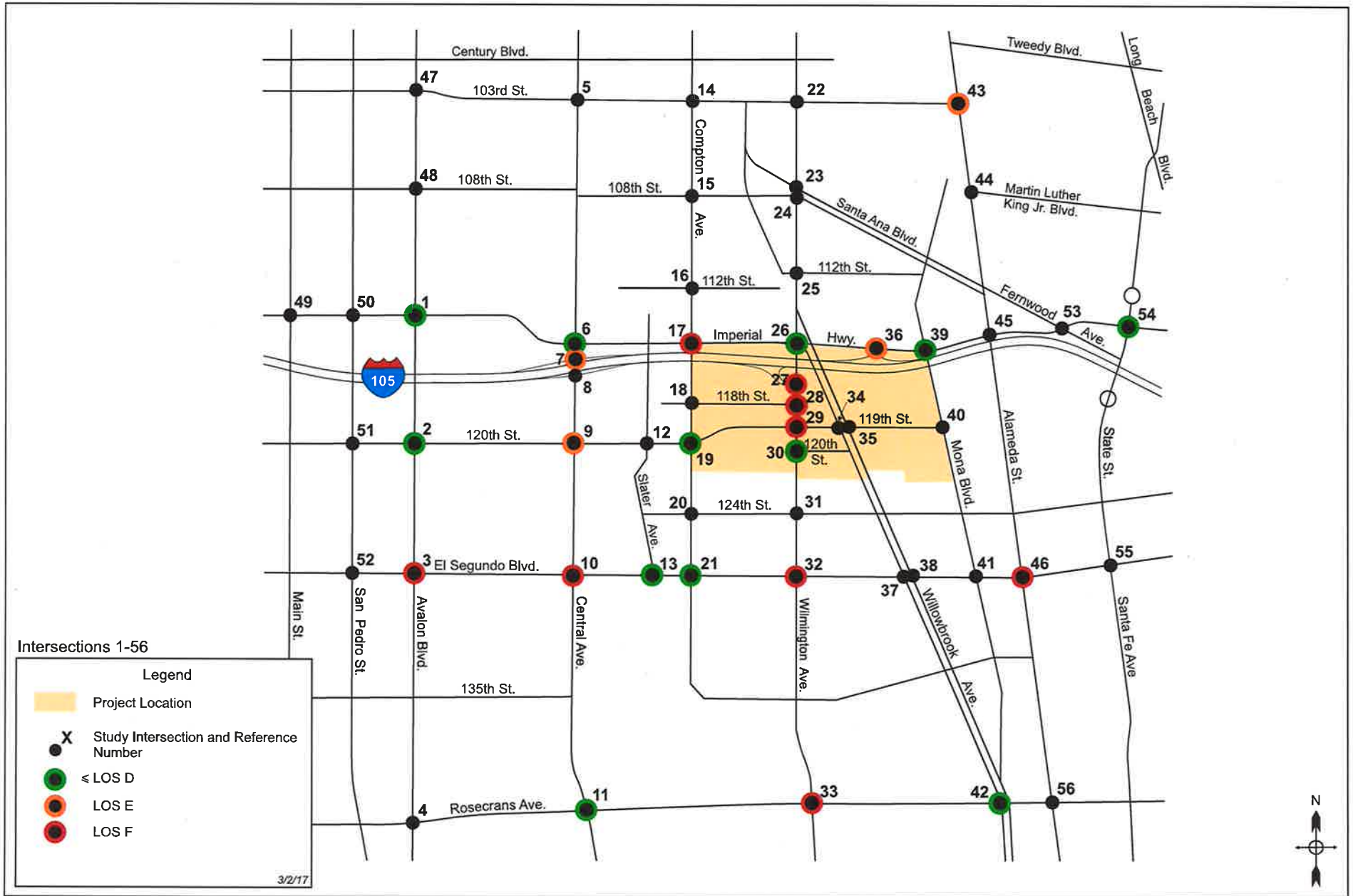

Figure 6.4
Existing + Project + Cumulative - PM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

Figure 6.4
Existing + Project + Cumulative - PM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

6.2 Project Impacts – CMP Analysis

The Los Angeles County Congestion Management Program (CMP) requires that new development projects analyze potential project impacts on CMP monitoring locations, if an EIR is prepared for the Project. When a CMP analysis is needed, the CMP methodology requires that the Traffic Study analyze traffic conditions at all CMP arterial monitoring intersections where the Project will add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic. The CMP also requires that traffic studies analyze mainline freeway monitoring stations where the Project will add 150 or more trips in either direction during either AM or PM weekday peak hours. If, based on these criteria, the Traffic Study identifies no facilities for study, then no further traffic analysis is required.

CMP Arterial Monitoring Locations

A review of the CMP indicated the following arterial monitoring stations that are closest to the Project Site:

- Manchester Ave & Vermont Ave
- Manchester Ave & Avalon Blvd
- Alameda St & Firestone Blvd
- Alameda St & Imperial Hwy
- Alameda St & W Compton Blvd
- Alameda St SR-91 EB Ramps

The additional trips added by the Project at these intersections are shown Table 6.3 below.

The closest monitoring locations to the Project site are at the Alameda St & Imperial Hwy, Alameda St & Firestone Blvd, Alameda St & W Compton Blvd, and Manchester Ave & Avalon Blvd intersections which are located approximately four miles or less from the Project Site. The other monitoring locations at Alameda St & the SR-91 EB Ramps, and at Manchester Ave & Vermont Ave, are located further away from and between four and six miles from the Project Site.

Based on the trip generation and trip distribution characteristics of the Project as described in Chapter 3, the number of Project trips that would be added to these locations was calculated and is shown in Table 6.3. For locations further from the Project site, Project trips will disperse onto an increasing number of roadways so the incremental addition of trips will reduce with distance from the Project.

As can be seen in Table 6.3, the Project will add 50 or more trips to four CMP monitoring locations, which would exceed the threshold to require analysis. Further analysis of these four locations was therefore conducted.

Table 6.3 CMP Arterial Analysis – Number of Trips Added by Project

Monitoring Location	*No. of Trips Added by Project*	
	AM	*PM*
Alameda St & Firestone Blvd	77	92
Alameda St & Imperial Hwy	237	294
Alameda St & W Compton Blvd	58	67
Alameda St SR-91 EB Ramps	37	43
Manchester Ave & Avalon Blvd	40	47
Manchester Ave & Vermont Ave	0	0

Significant Impact Thresholds

The impact analysis used the Los Angeles County CMP threshold of significance, which states that a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C ≥0.02), causing LOS F (V/C > 1.00); if the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C ≥0.02).

Impact Analysis

The analysis was based on existing traffic counts, forecasts of Future Without Project traffic volumes using the methodology described in Chapter 5, and the addition of Proposed Project trips as described in Chapter 3, to analyze the Future With Project conditions. The analysis of the four CMP intersections identified above is summarized in Table 6.4. As shown in Table 6.4, while the Project would increase the V/C rates at the intersections, the level of service would not change except at one location, and the incremental increase in V/C ratio would be less than the significant impact threshold of 0.02. Based on this analysis, the Project would not cause any significant traffic impacts at any of the four CMP monitoring intersections.

CMP Freeway Monitoring Stations

A review of the CMP also indicated the following freeway monitoring stations that are nearest to the Project Site.

Table 6.4 Future With Project Conditions - CMP Intersection Analysis - AM Peak Hour

No.	CMP Intersection	Existing Conditions (2016)		Future Without Project Conditions		Future With Project Conditions		Change in V/C	Significant Impact
		V/C	LOS	V/C	LOS	V/C	LOS		
1	Alameda St & Firestone Blvd	0.899	D	0.972	E	0.981	E	0.009	No
2	Alameda St & Imperial Hwy	0.772	C	0.858	D	0.899	D	0.041	No
3	Alameda St & W Compton Blvd	0.659	B	0.716	C	0.725	C	0.009	No
4	Alameda St & SR-91 EB Ramps	0.582	A	0.583	A	0.595	A	0.012	No

Table 6.4 Future With Project Conditions - CMP Intersection Analysis - PM Peak Hour

No.	CMP Intersection	Existing Conditions (2016)		Future Without Project Conditions		Future With Project Conditions		Change in V/C	Significant Impact
		V/C	LOS	V/C	LOS	V/C	LOS		
1	Alameda St & Firestone Blvd	0.924	E	1.003	F	1.018	F	0.015	No
2	Alameda St & Imperial Hwy	0.799	C	0.876	D	0.891	D	0.015	No
3	Alameda St & W Compton Blvd	0.637	B	0.694	B	0.705	C	0.011	No
4	Alameda St & SR-91 EB Ramps	0.829	D	0.899	D	0.899	D	0.000	No

- I-105 East of Crenshaw Blvd, West of Vermont Ave
- I-105 West of I-710, East of Harris Ave
- I-105 East of Bellflower Blvd, West of I-605
- I-110 at Manchester Blvd
- I-710 North of I-105, North of Firestone Blvd
- I-710 North of I-405, South of Del Amo Blvd
- SR-91 East of Alameda St / Santa Fe Ave

None of these locations are located close to the Project Site. The closest (I-105 West of I-710, East of Harris Ave) is located 4.0 miles from the Project Site and the second closest (I-105 East of Crenshaw Blvd) is located about 5.0 miles from the Project Site. The remaining stations are located considerable distances from the Project Site (up to 9.8 miles).

The number of Project vehicle trips expected to pass through these stations was estimated based on the Project trip generation and distribution discussed in Chapter 3. The additional trips added by the Project at these locations are shown in Table 6.5 below.

The incremental volumes are above the CMP threshold of 150 trips at four locations listed in Table 6.5. Further analysis was therefore conducted at those locations.

Significant Impact Thresholds

The impact analysis used the Los Angeles County CMP threshold of significance, which states that a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C $\geq$0.02), causing LOS F (V/C > 1.00); if the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C $\geq$0.02).

Impact Analysis

Existing traffic volumes on these freeway segments in the A.M. and P.M. peak hours were obtained from the *2010 Congestion Management Program for Los Angeles County* (LACMTA). Freeway levels of service are determined by calculating demand/capacity ratios per the definitions shown in Table 6.6

Existing Conditions levels of service were calculated for each freeway segment using a capacity of 2,000 vehicles per hour per freeway mainline lane (as per the 2010 Congestion Management Program). The 2035 Future Without Project base freeway traffic volumes were projected by factoring existing volumes by the regional growth factors discussed in Chapter 5. Trips from the Project were assigned to the freeway system using the Project trip generation and the Project trip distribution discussed in Chapter 3. The number of Project vehicle trips

Table 6.5 CMP Freeway Analysis – Number of Trips Added by Project

Monitoring Location	*Direction*	*No. of Trips Added by Project*	
		AM	*PM*
I-105 e/o Crenshaw Blvd, w/o Vermont Ave	EB	131	158
	WB	133	160
I-105 w/o Jct Rte 710, e/o Harris Ave	EB	179	370
	WB	310	237
I-105 e/o Bellflower Blvd, w/o Rte 605	EB	137	304
	WB	262	185
I-110 at Manchester Blvd	NB	73	150
	SB	131	96
I-710 n/o Rte 105, n/o Firestone Blvd	NB	35	52
	SB	45	41
I-710 n/o Jct Rte 405, s/o Del Amo Blvd	NB	32	22
	SB	17	34
SR-91 e/o Alameda St / Santa Fe Ave	EB	17	32
	WB	31	20

expected to pass through the CMP monitoring locations closest to the Project was estimated based on the methodology described above. The CMP freeway impact analysis at the four locations is shown in Table 6.7 for the AM peak hour and in Table 6.8 for the PM peak hour.

In the AM peak hour, the addition of vehicle trips generated by the Project would cause significant impacts according to CMP criteria at two freeway monitoring locations, at:

- I-105 westbound (West of I-710, East of Harris Ave)
- I-105 westbound (East of Bellflower Blvd. West of I-605)

The Project would cause an increase in V/C of 0.031 and 0.032 at these locations, slightly above the threshold of 0.020 for a significant impact.

Table 6.6 Level of Service Definitions for Freeway Mainline Segments

Level of Service	*Demand/Capacity Ratio*
A	0.00 – 0.35
B	>0.35 – 0.54
C	>0.54 – 0.77
D	>0.77 – 0.93
E	>0.93 – 1.00
F (0)	>1.00 – 1.25
F (1)	>1.25 – 1.35
F (2)	>1.35 – 1.45
F (3)	>1.45

Source: Draft 2010 *Congestion Management Plan for Los Angeles County, LACMTA, 2010.*

In the PM peak hour, the addition of vehicle trips generated by the Project would cause significant impacts according to CMP criteria at four freeway monitoring locations, at:

- I-105 eastbound (West of I-710, East of Harris Ave)
- I-105 westbound (West of I-710, East of Harris Ave)
- I-105 eastbound (East of Bellflower Blvd. West of I-605)
- I-105 westbound (East of Bellflower Blvd. West of I-605)

The Project would cause an increase in V/C of between 0.023 and 0.038 at these locations, slightly above the threshold of 0.020 for a significant impact. The freeway would be operating at LOS F at these locations without the Project.

CMP Transit Impact Analysis

As an EIR is being prepared for the Project, an analysis of potential Project impacts on the transit system was also performed, per the CMP requirements and guidelines.

Significant Impact Thresholds

For the purposes of this traffic study, the following criterion was established to determine if there would be any significant transit impacts due to the Project:

- The capacity of the transit system serving the Project area would be substantially exceeded.

Table 6.7 CMP Freeway Level of Service - Future With Project - Weekday AM Peak Hour

11/7/2016

No.	Location	Dir	Capacity	Existing Conditions (Year 2016)			Future Without Project Conditions (Year 2035)			Future With Project Conditions (Year 2035)				Increase in D/C	Significant Impact?
				Hourly Volume[1]	D/C	LOS	Hourly Volume	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS		
1	I-105 (East of Crenshaw Blvd., West of Vermont Ave.)	EB	10,000	8,711	0.871	D	9,586	0.959	E	131	9,717	0.972	E	0.013	No
		WB	10,000	12,901	1.290	F(1)	14,169	1.417	F(2)	133	14,302	1.430	F(2)	0.012	No
2	I-105 (West of I-710, East of Harris Ave.)	EB	10,000	9,042	0.904	D	9,934	0.993	E	179	10,113	1.011	F(0)	0.017	No
		WB	10,000	13,011	1.301	F(1)	14,300	1.430	F(2)	310	14,610	1.461	F(3)	0.031	Yes
3	I-105 (East of Bellflower Blvd. West of I-605)	EB	8,000	6,726	0.841	D	7,391	0.924	D	137	7,528	0.941	E	0.016	No
		WB	8,000	10,255	1.282	F(1)	11,271	1.409	F(2)	262	11,533	1.442	F(2)	0.032	Yes
4	I-110 (at Manchester Blvd.)	NB	12,000	12,625	1.052	F(0)	13,865	1.155	F(0)	73	13,938	1.161	F(0)	0.006	No
		SB	12,000	11,899	0.992	E	13,080	1.090	F(0)	131	13,211	1.101	F(0)	0.010	No

Notes:

1. Existing Traffic volumes calculated using volumes from "Existing Conditions from 2010 Congestion Management Program for LA County", factored to 2016 using growth factors for Regional Statistical Area 21 (Vernon).

Table 6.8 CMP Freeway Level of Service - Future With Project - Weekday PM Peak Hour

11/7/2016

No.	Location	Dir	Capacity	Existing Conditions (Year 2016)			Future Without Project Conditions (Year 2035)			Future With Project Conditions (Year 2035)				Increase in D/C	Significant Impact?
				Hourly Volume[1]	D/C	LOS	Hourly Volume	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS		
1	I-105 (East of Crenshaw Blvd., West of Vermont Ave.)	EB	10,000	13,122	1.312	F(1)	14,444	1.444	F(2)	158	14,602	1.460	F(3)	0.016	No
		WB	10,000	8,601	0.860	D	9,488	0.949	E	160	9,648	0.965	E	0.016	No
2	I-105 (West of I-710, East of Harris Ave.)	EB	10,000	13,673	1.367	F(2)	15,054	1.505	F(3)	370	15,424	1.542	F(3)	0.037	Yes
		WB	10,000	9,152	0.915	D	10,085	1.008	F(0)	237	10,322	1.032	F(0)	0.024	Yes
3	I-105 (East of Bellflower Blvd. West of I-605)	EB	8,000	12,791	1.599	F(3)	14,074	1.759	F(3)	304	14,378	1.797	F(3)	0.038	Yes
		WB	8,000	9,814	1.227	F(0)	10,807	1.351	F(2)	185	10,992	1.374	F(2)	0.023	Yes
4	I-110 (at Manchester Blvd.)	NB	12,000	12,791	1.066	F(0)	14,081	1.173	F(0)	150	14,231	1.186	F(0)	0.012	No
		SB	12,000	12,978	1.082	F(0)	14,281	1.190	F(0)	96	14,377	1.198	F(0)	0.008	No

Notes:

1. Existing Traffic volumes calculated using volumes from "Existing Conditions from 2010 Congestion Management Program for LA County", factored to 2016 using growth factors for Regional Statistical Area 21 (Vernon).

Transit Analysis

The number of transit trips that would be generated by the Project was estimated based on the trip generation methodology described in Chapter 3. The estimate of base vehicle trips for each Project land use in Table A-4 and Table A-5 (excluding internal trips) was converted to person trips by applying a conversion factor of 1.4, as per CMP guidelines. The person trip numbers were then multiplied by the estimated percent taking transit for each land use, as previously discussed in Chapter 3 and identified in Tables A-4 and Table A-5. These numbers are project specific and more appropriate than the default countywide guidelines in the CMP as they reflect the estimated transit use that would occur for the Project because of its location near numerous transit lines.

The estimated number of transit trips for the CMP analysis is shown in Table 6.9. In the AM peak hour the Project would generate an estimated 873 net additional transit trips (521 inbound trips and 352 outbound trips), and in the PM peak hour approximately 1,094 additional transit trips (462 inbound and 632 outbound), as shown in Table 6.9. The highest number of additional transit trips would therefore occur in the PM peak hour.

Based on the information presented in Chapter 2 on the existing transit services in the Specific Plan area, the peak hour capacity of the transit system serving the Project Site is approximately 7,920 persons per direction. The highest directional volume of peak hour trips added by the Project would be 632 trips, which would represent approximately 8% of the total transit capacity during the peak hour. Based on a discussion with Metro, Project's projected increase in transit ridership of approximately 8% would not exceed the existing capacity of the transit system and the project would result in less than significant impact on transit services[1].

[1] Green, Scott. Metro. 2017. Email received by County of Los Angeles Regional Planning on April 11, 2017.

Table 6.9 Transit Trips Generated by The Project 3/2/2017

Component	*Transit Trips*					
	AM Peak Hour			*PM Peak Hour*		
	Total	*In*	*Out*	*Total*	*In*	*Out*
MLK Medical Center	326	218	108	433	161	272
CDU	31	23	8	31	11	20
Specific Plan Remainder	516	280	236	630	290	340
Total	873	521	352	1,094	462	632
Residential	231	50	181	286	186	100
Non-Residential	642	471	171	808	276	532

7. Freeway Analysis

This section of the report presents an analysis of the freeway system in the area of the Proposed Project. The analysis of the state highway facilities was conducted according to analysis locations and methodologies agreed with Caltrans, and follows the Caltrans Traffic Study Guidelines and measures of effectiveness.

It addresses freeway mainline locations (segments) and freeway off-ramps in locations that would most likely be affected by Project traffic. The traffic forecasts used in the analysis are consistent with those developed in Chapter 4 and Chapter 6 and use the trip generation and trip distribution information described earlier in Chapter 3. Similarly, the analysis focuses on the Existing With Project and Future With Project Conditions (for the year 2025).

7.1 Freeway Mainline Segments

The analysis addresses ten freeway mainline segments on the I-110, I-105, I-710, and SR-91 freeways that are closest to, and that provide regional access to, the Project site. Figure 7.1 illustrates the location of study locations.

Methodology

Existing traffic volumes on these freeway segments for the AM peak hour and PM peak hour time periods were provided by Caltrans. These 2015 volumes were factored by 1% to represent 2016 volumes. Future Without Project Condition Future year 2035 freeway traffic volumes were developed from the traffic projections described in Chapter 5 including ambient/regional growth and the cumulative projects identified for the area. Future With Project Condition traffic volumes were obtained by adding trips generated by the Project to forecasts for the freeway system for the Future Without Condition, based on the trip generation and trip distribution information described in Chapter 3.

Level of service for freeway segments is based on the total volume of traffic, or demand, traveling along a freeway segment compared to the capacity of that specific location. A lane capacity of 2,000 vehicles per hour per lane (vphpl) for a freeway mainline lane was used Auxiliary lanes were not included in the analysis. The overall capacity of a specific freeway segment was calculated by multiplying the lane capacity by the total number of lanes in that

Figure 7.1
Freeway Mainline Segment Analysis Locations

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segment. Freeway level of service (LOS) was then determined by comparing the total number of vehicles traveling along a specific freeway segment to the capacity of that segment as calculated above. These demand/capacity (D/C) ratios are then rated for levels of service using the definitions shown in Table 7-1.

Freeway Segment Analysis

Caltrans does not have published criteria for determination of significant impacts on freeway mainline segments. Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities, and to maintain the existing LOS in cases where a facility is operating at less than the target LOS. For the purposes of this study, the threshold that was used was that a significant impact would occur if the Project causes a worsening of the level of service to LOS D on a segment, or if the level of service was already LOS D that if the Project causes a change (worsening) in the level of service.

Existing With Project Conditions

The freeway segment analysis is summarized in Tables 7.2 and 7.3, which show the levels of service and demand/capacity (D/C) ratios for Existing Conditions, and Existing With Project conditions for the AM peak hour and the PM peak hour respectively. These tables also show the number of trips that would be added by the Project to each freeway segment. The following discussion refers to a location as one direction (i.e. twenty locations for ten freeway segments).

AM Peak Hour

In the AM peak hour, the Project would add between 12 and 342 trips to the freeway segments analyzed depending on location and direction. The highest volume increases (ranging from 141 to 342 trips) would occur at seven locations on I-105 between Avalon Boulevard and Long Beach Boulevard. At nine of the remaining fourteen locations the volume increase would be less than 50 trips.

The increase in trips due to the Project on freeway segments would range from 0.2 percent to 6.4 percent. The increase would be approximately 4% to 6% at four locations, less than 2% at thirteen locations, and less than 1% at nine locations.

The increase in D/C ratios would range from 0.001 to 0.052. At five locations the increase would be more than 0.025. At nine of the remaining 15 locations the increase would be less than 0.010.

The level of service would not change at any mainline freeway segment due to the Project, except at one location – the I-110 southbound between 135th St & Rosecrans Ave where it

Table 7.1 Level of Service Definitions for Freeway Segments

Level of Service	Demand/Capacity Ratio	Flow Conditions
A	0.00 – 0.35	Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed.
B	0.36 – 0.54	Stable traffic flow, speed becoming slightly restricted. Low restriction on maneuverability.
C	0.55 – 0.77	Stable traffic flow, but less freedom to select speed, change lanes, or pass. Density increasing.
D	0.78 – 0.93	Approaching unstable flow. Speeds tolerable but subject to sudden and considerable variation. Less maneuverability and driver comfort.
E	0.94 – 1.00	Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort.
F (0)	1.01 – 1.25	Forced traffic flow. Speed and flow may be greatly reduced with high densities.
F (1)	1.26 – 1.35	Forced traffic flow. Severe congested conditions prevail for more than one hour. Speed and flow may drop to zero with high densities.
F (2)	1.36 – 1.45	Forced traffic flow. Severe congested conditions prevail for more than one hour. Speed and flow may drop to zero with high densities.
F (3)	> 1.45	Forced traffic flow. Severe congested conditions prevail for more than one hour. Speed and flow may drop to zero with high densities.

Source: *2010 Congestion Management Program for Los Angeles County*, Los Angeles County Metropolitan Transportation Authority, July 2010.

Table 7.2 Freeway Segment Level of Service - Existing Plus Project - Weekday AM Peak Hour

10/3/2016

No.	Location	Dir	Inbound/ Outbound	No of Lanes	Capacity	Existing Conditions (Year 2016)			Existing Plus Project Conditions (Year 2016)				Increase in D/C	% Increase Volume due to Project
						Hourly Volume[1]	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS		
1	I-110 between Century Blvd and 109th St	NB	Outbound	4G+2E	8,000	6,697	0.837	D	73	6,770	0.846	D	0.008	1.1%
		SB	Inbound	5G+2E	10,000	8,811	0.881	D	131	8,942	0.894	D	0.012	1.5%
2	I-110 between 135th St and Rosecrans Ave	NB	Inbound	4G+1E	8,000	7,987	0.998	E	62	8,049	1.006	F(0)	0.007	0.8%
		SB	Outbound	4G+1E	8,000	8,566	1.071	F(0)	40	8,606	1.076	F(0)	0.005	0.5%
3	I-105 between Vermont Ave and Hoover St	EB	Inbound	3G+1HOV	6,000	3,819	0.637	C	170	3,989	0.665	C	0.028	4.5%
		WB	Outbound	3G+1HOV	6,000	6,225	1.038	F(0)	94	6,319	1.053	F(0)	0.015	1.5%
4	I-105 between Avalon Blvd and Central Ave	EB	Inbound	3G+1HOV+1A	7,000	7,029	1.004	F(0)	342	7,371	1.053	F(0)	0.048	4.9%
		WB	Outbound	4G+1HOV	8,000	6,846	0.856	D	196	7,042	0.880	D	0.024	2.9%
5	I-105 between Compton Ave and Wilmington Ave	EB	Inbound	3G+1HOV	6,000	5,190	0.865	D	209	5,399	0.900	D	0.035	4.0%
		WB	Outbound	3G+1HOV	6,000	4,946	0.824	D	141	5,087	0.848	D	0.023	2.9%
6	I-105 between State St and Long Beach Blvd	EB	Outbound	3G+1HOV	6,000	4,852	0.809	D	179	5,031	0.839	D	0.030	3.7%
		WB	Inbound	3G+1HOV	6,000	4,899	0.817	D	314	5,213	0.869	D	0.052	6.4%
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8,000	5,747	0.718	C	22	5,769	0.721	C	0.002	0.4%
		WB	Outbound	4G+1HOV	8,000	7,651	0.956	E	12	7,663	0.958	E	0.001	0.2%
8	SR-91 between Santa Fe Ave and Long Beach Blvd	EB	Outbound	5G+1HOV	10,000	6,446	0.645	C	23	6,469	0.647	C	0.002	0.4%
		WB	Inbound	5G+1HOV	10,000	8,321	0.832	D	47	8,368	0.837	D	0.004	0.6%
9	I-710 between Firestone Blvd and Abbott Rd	NB	Outbound	4G	8,000	6,032	0.754	C	35	6,067	0.758	C	0.004	0.6%
		SB	Inbound	4G	8,000	4,131	0.516	B	45	4,176	0.522	B	0.005	1.1%
10	I-710 between Del Amo Blvd and Long Beach Blvd	NB	Inbound	5G	10,000	5,817	0.582	C	48	5,865	0.587	C	0.005	0.8%
		SB	Outbound	4G	8,000	7,605	0.951	E	23	7,628	0.954	E	0.003	0.3%

Notes:

1. Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% per annum applied for 2016 volumes.

Table 7.3 Freeway Segment Level of Service - Existing Plus Project - Weekday PM Peak Hour

10/3/2016

No.	Location	Dir	Inbound/ Outbound	No of Lanes	Capacity	Existing Conditions (Year 2016)			Existing Plus Project Conditions (Year 2016)				Increase in D/C	% Increase Volume due to Project
						Hourly Volume[1]	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS		
1	I-110 between Century Blvd and 109th St	NB	Outbound	4G+2E	8,000	7,693	0.962	E	150	7,843	0.980	E	0.018	1.9%
		SB	Inbound	5G+2E	10,000	8,144	0.814	D	96	8,240	0.824	D	0.009	1.2%
2	I-110 between 135th St and Rosecrans Ave	NB	Inbound	4G+1E	8,000	7,652	0.957	E	52	7,704	0.963	E	0.006	0.7%
		SB	Outbound	4G+1E	8,000	7,934	0.992	E	77	8,011	1.001	F(0)	0.009	1.0%
3	I-105 between Vermont Ave and Hoover St	EB	Inbound	3G+1HOV	6,000	3,777	0.630	C	123	3,900	0.650	C	0.020	3.3%
		WB	Outbound	3G+1HOV	6,000	5,619	0.937	E	195	5,814	0.969	E	0.032	3.5%
4	I-105 between Avalon Blvd and Central Ave	EB	Inbound	3G+1HOV+1A	7,000	6,664	0.952	E	257	6,921	0.989	E	0.037	3.9%
		WB	Outbound	4G+1HOV	8,000	6,490	0.811	D	397	6,887	0.861	D	0.049	6.1%
5	I-105 between Compton Ave and Wilmington Ave	EB	Inbound	3G+1HOV	6,000	5,200	0.867	D	177	5,377	0.896	D	0.029	3.4%
		WB	Outbound	3G+1HOV	6,000	4,824	0.804	D	254	5,078	0.846	D	0.041	5.3%
6	I-105 between State St and Long Beach Blvd	EB	Outbound	3G+1HOV	6,000	4,625	0.771	D	370	4,995	0.833	D	0.062	8.0%
		WB	Inbound	3G+1HOV	6,000	5,044	0.841	D	234	5,278	0.880	D	0.039	4.6%
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8,000	6,548	0.819	D	15	6,563	0.820	D	0.001	0.2%
		WB	Outbound	4G+1HOV	8,000	6,214	0.777	D	25	6,239	0.780	D	0.003	0.4%
8	SR-91 between Santa Fe Ave and Long Beach Blvd	EB	Outbound	5G+1HOV	10,000	7,363	0.736	C	51	7,414	0.741	C	0.004	0.7%
		WB	Inbound	5G+1HOV	10,000	6,525	0.653	C	30	6,555	0.656	C	0.003	0.5%
9	I-710 between Firestone Blvd and Abbott Rd	NB	Outbound	4G	8,000	6,031	0.754	C	52	6,083	0.760	C	0.006	0.9%
		SB	Inbound	4G	8,000	4,237	0.530	B	41	4,278	0.535	B	0.005	1.0%
10	I-710 between Del Amo Blvd and Long Beach Blvd	NB	Inbound	5G	10,000	6,826	0.683	C	32	6,858	0.686	C	0.003	0.5%
		SB	Outbound	4G	8,000	6,416	0.802	D	53	6,469	0.809	D	0.007	0.8%

Notes:

1. Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% per annum applied for 2016 volumes.

would change from LOS E to LOS F. The Project would therefore cause one significant freeway mainline segment impact in the AM peak hour under Existing Plus Project Conditions.

PM Peak Hour

In the PM peak hour, the Project would add between 15 and 397 trips to the freeway segments analyzed depending on location and direction. The highest volume increases (ranging from 177 to 397 trips) would occur at seven locations on I-105 between Avalon Boulevard and Long Beach Boulevard. At eleven of the remaining fourteen locations the volume increase would be less than 100 trips.

The increase in trips due to the Project on freeway segments would range from 0.2 percent to 8.0 percent. The increase would be approximately 4% to 8% at four locations, less than 2% at twelve locations, and less than 1% at eight locations.

The increase in D/C ratios would range from 0.001 to 0.062. At five locations the increase would be more than 0.035. At eleven of the remaining 15 locations the increase would be less than 0.010.

The level of service would not change at any mainline freeway segment due to the Project, except at I-110 southbound between 135th St & Rosecrans Ave where it would change from LOS E to LOS F. The Project would therefore cause one significant freeway mainline segment impact in the PM peak hour under Existing Plus Project Conditions

Future With Project Conditions (Includes Cumulative Trips)

The freeway segment analysis is summarized in Tables 7.4 and 7.5, which show the levels of service and demand/capacity (D/C) ratios for Existing Conditions, Future Without Project Conditions, and Future With Project conditions for the AM peak hour and the PM peak hour respectively. The Future With Project conditions include cumulative trips. These tables also show the number of trips that would be added by the Project to each freeway segment.

AM Peak Hour

In the AM peak hour, the Project would add between 12 and 342 trips to the freeway segments analyzed depending on location and direction. The highest volume increases (ranging from 141 to 342 trips) would occur at seven locations on I-105 between Avalon Boulevard and Long Beach Boulevard. At nine of the remaining fourteen locations the volume increase would be less than 50 trips.

Table 7.4 Freeway Segment Level of Service - Future With Project - Weekday AM Peak Hour

10/3/2016

No.	Location	Dir	Inbound/ Outbound	No of Lanes	Capacity	Existing Conditions (Year 2016)			Future Without Project Conditions (Year 2035)			Future With Project Conditions (Year 2035)				Increase in D/C	% Increase Volume due to Project
						Hourly Volume[1]	D/C	LOS	Hourly Volume	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS		
1	I-110 between Century Blvd and 109th St	NB	Outbound	4G+2E	8,000	6,697	0.837	D	7,321	0.915	D	73	7,394	0.924	D	0.009	1.1%
		SB	Inbound	5G+2E	10,000	8,811	0.881	D	9,638	0.964	E	131	9,769	0.977	E	0.013	1.5%
2	I-110 between 135th St and Rosecrans Ave	NB	Inbound	4G+1E	8,000	7,987	0.998	E	8,733	1.092	F(0)	62	8,795	1.099	F(0)	0.006	0.8%
		SB	Outbound	4G+1E	8,000	8,566	1.071	F(0)	9,367	1.171	F(0)	40	9,407	1.176	F(0)	0.004	0.5%
3	I-105 between Vermont Ave and Hoover St	EB	Inbound	3G+1HOV	6,000	3,819	0.637	C	4,197	0.699	C	170	4,367	0.728	C	0.029	4.5%
		WB	Outbound	3G+1HOV	6,000	6,225	1.038	F(0)	6,809	1.135	F(0)	94	6,903	1.150	F(0)	0.014	1.5%
4	I-105 between Avalon Blvd and Central Ave	EB	Inbound	3G+1HOV+1A	7,000	7,029	1.004	F(0)	7,702	1.100	F(0)	342	8,044	1.149	F(0)	0.048	4.9%
		WB	Outbound	4G+1HOV	8,000	6,846	0.856	D	7,479	0.935	E	196	7,675	0.959	E	0.023	2.9%
5	I-105 between Compton Ave and Wilmington Ave	EB	Inbound	3G+1HOV	6,000	5,190	0.865	D	5,696	0.949	E	209	5,905	0.984	E	0.035	4.0%
		WB	Outbound	3G+1HOV	6,000	4,946	0.824	D	5,425	0.904	D	141	5,566	0.928	D	0.024	2.9%
6	I-105 between State St and Long Beach Blvd	EB	Outbound	3G+1HOV	6,000	4,852	0.809	D	5,309	0.885	D	179	5,488	0.915	D	0.030	3.7%
		WB	Inbound	3G+1HOV	6,000	4,899	0.817	D	5,372	0.895	D	314	5,686	0.948	E	0.052	6.4%
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8,000	5,747	0.718	C	6,274	0.784	D	22	6,296	0.787	D	0.003	0.4%
		WB	Outbound	4G+1HOV	8,000	7,651	0.956	E	8,363	1.045	F(0)	12	8,375	1.047	F(0)	0.002	0.2%
8	SR-91 between Santa Fe Ave and Long Beach Blvd	EB	Outbound	5G+1HOV	10,000	6,446	0.645	C	7,037	0.704	C	23	7,060	0.706	C	0.002	0.4%
		WB	Inbound	5G+1HOV	10,000	8,321	0.832	D	9,094	0.909	D	47	9,141	0.914	D	0.005	0.6%
9	I-710 between Firestone Blvd and Abbott Rd	NB	Outbound	4G	8,000	6,032	0.754	C	6,583	0.823	D	35	6,618	0.827	D	0.004	0.6%
		SB	Inbound	4G	8,000	4,131	0.516	B	4,515	0.564	C	45	4,560	0.570	C	0.006	1.1%
10	I-710 between Del Amo Blvd and Long Beach Blvd	NB	Inbound	5G	10,000	5,817	0.582	C	6,353	0.635	C	48	6,401	0.640	C	0.005	0.8%
		SB	Outbound	4G	8,000	7,605	0.951	E	8,300	1.038	F(0)	23	8,323	1.040	F(0)	0.002	0.3%

Notes:

1. Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% per annum applied for 2016 volumes.

Table 7.5 Freeway Segment Level of Service - Future With Project - Weekday PM Peak Hour

10/3/2016

No.	Location	Dir	Inbound/ Outbound	No of Lanes	Capacity	Existing Conditions (Year 2016)			Future Without Project Conditions (Year 2035)			Future With Project Conditions (Year 2035)				Increase in D/C	% Increase Volume due to Project
						Hourly Volume[1]	D/C	LOS	Hourly Volume	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS		
1	I-110 between Century Blvd and 109th St	NB	Outbound	4G+2E	8,000	7,693	0.962	E	8,438	1.055	F(0)	150	8,588	1.073	F(0)	0.018	1.9%
		SB	Inbound	5G+2E	10,000	8,144	0.814	D	8,924	0.892	D	96	9,020	0.902	D	0.010	1.2%
2	I-110 between 135th St and Rosecrans Ave	NB	Inbound	4G+1E	8,000	7,652	0.957	E	8,396	1.049	F(0)	52	8,448	1.056	F(0)	0.007	0.7%
		SB	Outbound	4G+1E	8,000	7,934	0.992	E	8,689	1.086	F(0)	77	8,766	1.096	F(0)	0.010	1.0%
3	I-105 between Vermont Ave and Hoover St	EB	Inbound	3G+1HOV	6,000	3,777	0.630	C	4,170	0.695	C	123	4,293	0.716	C	0.021	3.3%
		WB	Outbound	3G+1HOV	6,000	5,619	0.937	E	6,183	1.031	F(0)	195	6,378	1.063	F(0)	0.032	3.5%
4	I-105 between Avalon Blvd and Central Ave	EB	Inbound	3G+1HOV+1A	7,000	6,664	0.952	E	7,314	1.045	F(0)	257	7,571	1.082	F(0)	0.037	3.9%
		WB	Outbound	4G+1HOV	8,000	6,490	0.811	D	7,137	0.892	D	397	7,534	0.942	E	0.049	6.1%
5	I-105 between Compton Ave and Wilmington Ave	EB	Inbound	3G+1HOV	6,000	5,200	0.867	D	5,734	0.956	E	177	5,911	0.985	E	0.029	3.4%
		WB	Outbound	3G+1HOV	6,000	4,824	0.804	D	5,329	0.888	D	254	5,583	0.931	E	0.043	5.3%
6	I-105 between State St and Long Beach Blvd	EB	Outbound	3G+1HOV	6,000	4,625	0.771	D	5,101	0.850	D	370	5,471	0.912	D	0.062	8.0%
		WB	Inbound	3G+1HOV	6,000	5,044	0.841	D	5,548	0.925	D	234	5,782	0.964	E	0.038	4.6%
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8,000	6,548	0.819	D	7,178	0.897	D	15	7,193	0.899	D	0.002	0.2%
		WB	Outbound	4G+1HOV	8,000	6,214	0.777	D	6,791	0.849	D	25	6,816	0.852	D	0.003	0.4%
8	SR-91 between Santa Fe Ave and Long Beach Blvd	EB	Outbound	5G+1HOV	10,000	7,363	0.736	C	8,068	0.807	D	51	8,119	0.812	D	0.005	0.7%
		WB	Inbound	5G+1HOV	10,000	6,525	0.653	C	7,130	0.713	C	30	7,160	0.716	C	0.003	0.5%
9	I-710 between Firestone Blvd and Abbott Rd	NB	Outbound	4G	8,000	6,031	0.754	C	6,599	0.825	D	52	6,651	0.831	D	0.006	0.9%
		SB	Inbound	4G	8,000	4,237	0.530	B	4,629	0.579	C	41	4,670	0.584	C	0.005	1.0%
10	I-710 between Del Amo Blvd and Long Beach Blvd	NB	Inbound	5G	10,000	6,826	0.683	C	7,452	0.745	C	32	7,484	0.748	C	0.003	0.5%
		SB	Outbound	4G	8,000	6,416	0.802	D	7,014	0.877	D	53	7,067	0.883	D	0.006	0.8%

Notes:

1. Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% per annum applied for 2016 volumes.

The increase in trips due to the Project on freeway segments would range from 0.2 percent to 6.4 percent. The increase would be approximately 4% to 6% at four locations, less than 2% at thirteen locations, and less than 1% at nine locations.

The increase in D/C ratios would range from 0.002 to 0.052. At four locations the increase would be more than 0.025. At eleven of the remaining sixteen locations the increase would be less than 0.010.

The level of service would not change at any mainline freeway segment due to the Project, except at one location - I-105 westbound between State St & Long Beach Blvd where it would change from LOS D to LOS E. The Project would therefore cause one significant freeway mainline segment impact in the AM peak hour under Future With Project Conditions.

PM Peak Hour

In the PM peak hour, the Project would add between 15 and 397 trips to the freeway segments analyzed depending on location and direction. The highest volume increases (ranging from 177 to 397 trips) would occur at seven locations on I-105 between Avalon Boulevard and Long Beach Boulevard. At eleven of the remaining fourteen locations the volume increase would be less than 100 trips.

The increase in trips due to the Project on freeway segments would range from 0.2 percent to 8.0 percent. The increase would be approximately 4% to 8% at four locations, less than 2% at twelve locations, and less than 1% at eight locations.

The increase in D/C ratios would range from 0.002 to 0.062. At five locations the increase would be more than 0.035. At nine of the remaining 15 locations the increase would be less than 0.010.

The level of service would not change at any mainline freeway segment due to the Project, except at three locations:

- I-105 westbound between Avalon Ave & Central Ave
- I-105 westbound between Compton Ave & Wilmington Ave
- I-105 westbound between State St & Long Beach Blvd

At all three locations the level of service would change from LOS D to LOS E with the Project. The Project would therefore cause three significant freeway mainline impacts in the PM peak hour under Future With Project Conditions.

7.2 Freeway Off-Ramps

The analysis reviewed a total of ten freeway off-ramps located along the I-110, I-105, and SR-91 freeways that could potentially be used by Project traffic. As illustrated in Figure 7.2, the following ramps were reviewed:

- I-110 NB off-ramp at El Segundo Blvd
- I-110 SB off-ramp at El Segundo Blvd
- I-105 EB off-ramp at Central Ave
- I-105 WB off-ramp at Central Ave
- I-105 EB off-ramp at Wilmington Ave
- I-105 WB off-ramp at Imperial Hwy
- I-105 EB off-ramp at Long Beach Blvd
- I-105 WB off-ramp at Long Beach Blvd
- SR-91 EB Off-ramp at Wilmington Ave
- SR-91 WB Off-ramp at Wilmington Ave

Methodology

Existing traffic volumes on these freeway off-ramps were obtained from traffic counts conducted as part of the overall traffic count program described in Chapter 2. Forecasts of the off-ramp volumes for Future Without Project Conditions were obtained from the analysis described in Chapter 5 including ambient/regional growth and trips from related projects. Forecasts for the Existing With Project Conditions and Future With Project Conditions were obtained using the analysis of Project trip generation and distribution described in Chapter 3. The ramp analysis used operational parameters requested by Caltrans. The analysis of ramp traffic conditions is based on a queue analysis at the end of the ramp intersection, using the Highway Capacity Manual (HCM) 2010 Operations methodology, and determining the 95th percentile queue length (the vehicle queue length that would be exceeded only 5% of the time, which is a common measure used to evaluate queues). The analysis used signal timing information provided by Caltrans and the other cities in the study area. The analysis also determined the storage length capacity of an off-ramp and used 85% of the total (to include a Caltrans requested "safety" factor). It applied a passenger car equivalent (PCE) of 3.0 for heavy vehicles, used truck factors of 3% to 5% of the traffic volumes (as supplied by Caltrans), and car lengths of 30 feet. It should be noted that these are all conservative assumptions, and when combined together provide a very conservative worst case analysis.

Freeway Off-Ramp Analysis

Caltrans does not have published criteria for determination of significant impacts on freeway off-ramps. Caltrans' primary concern is if peak hour traffic queues on an off-ramp exceed the storage length on the ramp and result in queues backing onto the mainline freeway.

Figure 7.2
Freeway Off-Ramp Analysis Locations

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For the purposes of this study, the threshold that was used was that a significant impact would occur if the Project caused the overall queue on an off-ramp to exceed the overall storage capacity of the ramp.

Existing With Project Conditions

The freeway off-ramp analysis for the Existing With Project Conditions is summarized in Table 7.6 for the AM peak hour and in Table 7.7 for the PM peak hour. These tables show the ramp storage lengths, and the ramp volumes, and queue lengths for the Existing Condition and the Existing Plus Project Condition.

AM Peak Hour

As can be seen from Table 7.6, queues do not currently exceed the storage lengths on any of the off-ramps during the AM peak hour, except at two locations:

- I-110 SB Off-ramp at El Segundo Blvd
- I-105 EB Off-ramp at Central Ave.

The Project would add between 133 and 315 trips to three ramps in the AM peak hour, and between 0 and 47 trips at the other off-ramps analyzed.

For the Existing With Project conditions, the queues would not exceed the total ramp storage lengths at any of the ramps, except at the same two locations where storage lengths are currently exceeded under existing conditions:

- I-110 SB Off-ramp at El Segundo Blvd
- I-105 EB Off-ramp at Central Ave.

At these two off-ramps, the Project would not cause storage capacities to be exceeded, but would increase the queue lengths.

At a third location, at the I-105 WB Off-ramp at Imperial Hwy, the queue for one movement would exceed the storage length for that movement with the Project, but the overall ramp storage length would not be exceeded.

As the Project would not be the cause of the overall queue lengths exceeding the overall storage capacity of any ramps, the Project would not cause any significant impacts in the AM peak period for the Existing Plus Project Conditions.

PM Peak Hour

As can be seen from Table 7.7, overall queues do not currently exceed the total storage lengths on any of the ramps during the Weekday PM Peak hour.

The Project would add between 80 to 234 trips to three off-ramps in the PM peak hour, and between 0 and 30 trips at the other off-ramps analyzed.

For the Existing With Project conditions, the queues would not exceed the total ramp storage lengths at any of the ramps. For the I-105 EB off-ramp at Central Avenue, the queue for two of the ramp movements would exceed the storage length for those movement, but the overall queue length would not exceed the overall ramp storage capacity. For the I-105 WB off-ramp at Central Avenue, the queue for one movement would exceed the storage length for that movement, but the Project would not add any trips to that movement and the overall queue length would not exceed the overall ramp storage capacity. For the I-105 WB off-ramp at Imperial Hwy, the queue for one movement would exceed the storage length for that movement, but the overall queue length for the ramp as a would not exceed the overall ramp storage capacity. For the SR-91 WB off-ramp at Wilmington Avenue, the queue for the one movement would exceed the storage length for that movement (as it would for the existing condition without the Project), but the overall queue length for the ramp would not exceed the overall ramp storage capacity.

As the Project would not be the cause of the overall queue lengths exceeding the overall storage capacity of any ramps, the Project would not cause any significant impacts in the PM peak period for the Existing Plus Project Conditions.

Future With Project Conditions

The freeway off-ramp analysis for the Future With Project Conditions is summarized in Table 7.8 for the AM peak hour and in Table 7.9 for the PM peak hour. These tables show the ramp volumes and queue lengths for the Existing Condition, the Future Without Project Condition, and the Future With Project Condition.

AM Peak Hour

As can be seen from Table 7.8, queues do not currently exceed the overall storage lengths on any of the ramps under existing conditions during the AM peak hour, except at two locations:

- I-110 SB Off-ramp at El Segundo Blvd
- I-105 EB Off-ramp at Central Ave.

For the Future Without Project Conditions, overall queues would not exceed the overall storage lengths on any of the ramps under existing conditions during the AM peak hour, except at the same two locations as under Existing Conditions.

The Project would add between 133 and 315 trips to three ramps in the AM peak hour, and between 0 and 47 trips at the other off-ramps analyzed.

For the Future With Project conditions, the queues would not exceed the total ramp storage lengths at any of the ramps, except at the same two locations where storage lengths are exceeded under both Existing Conditions and Future Without Project Conditions:

- I-110 SB Off-ramp at El Segundo Blvd
- I-105 EB Off-ramp at Central Ave.

At these two off-ramps, the Project would not cause storage capacities to be exceeded (as they would already by exceeded under Future Without Project Conditions) , but would increase the queue lengths.

At a third location, at the I-105 WB off-ramp at Imperial Hwy, the queue for two movements would exceed the storage length for those movements with the Project, but the overall ramp storage length would not be exceeded.

As the Project would not be the cause of the overall queue lengths exceeding the overall storage capacity of any ramps, the Project would not cause any significant impacts in the AM peak period for the Future Plus Project Conditions.

PM Peak Hour

As can be seen from Table 7.9, queues do not currently exceed the total storage lengths on any of the ramps under Existing Conditions during the PM peak hour.

For the Future Without Project Condition, the queue length would exceed the overall storage length at one off-ramp:

- I-105 EB Off-ramp at Central Ave

The Project would add between 80 to 234 trips to three off-ramps in the PM peak hour, and between 0 and 30 trips at the other off-ramps analyzed.

For the Future With Project conditions, the queues would not exceed the total ramp storage lengths at any of the ramps, except at three locations:

- I-110 SB Off-ramp at El Segundo Blvd

- I-105 EB Off-ramp at Central Ave
- I-105 WB Off-ramp at Imperial Hwy

For the I-105 SB off-ramp at El Segundo Blvd, the queue in the Future Without Project Conditions would be very close to the storage capacity. The Project would increase the overall queue length by only 2%, and would cause the queue length for the Future With Project Condition to be very slightly over the overall storage capacity. This would constitute a significant impact.

For the I-105 EB off-ramp at Central Avenue, the queue length for the Future With Project Condition would exceed the overall storage capacity as it would for the Future Without Project Condition. The Project would therefore not cause the overall storage capacity to be exceeded but would increase the queue length.

For the I-105 WB off-ramp at Imperial Highway, the Project would cause the overall queue length for the Future With Project Condition to exceed the overall storage capacity. The capacity would be exceeded by about 4%. This would constitute a significant impact.

At the I-105 WB Off-ramp at Central Ave, for the Future With Project Condition the queue for one movement would exceed the storage length for that movement, and it would also exceed the storage length in the Future Without Condition, but the Project would not add any trips to that movement and the overall queue length for the ramp would not exceed the overall ramp storage capacity.

At the I-105 WB Off-ramp at Long Beach Blvd., for the Future With Project Condition the queue for two westbound movements would exceed the storage length for those movements (as it also would for the Future Without Condition), but the overall queue length for the ramp would not exceed the overall ramp storage capacity.

Also, at the SR-91 WB Off-ramp at Wilmington Ave., for the Future With Project Condition the queue for one movement would exceed the storage length for that movement (as it also would for the Future Without Condition), but the overall queue length for the ramp would not exceed the overall ramp storage capacity.

The Project would therefore be the cause of the overall queue lengths exceeding the overall storage capacity of two ramps, and the Project would cause two significant impacts in the PM peak period for the Future Plus Project Conditions.

Table 7.6 Existing With Project - Freeway Off-Ramp Analysis - Weekday AM Peak Hour

3/1/2017

Off - Ramp # and Location	Ramp Movement at Intersection				Existing Conditions[1] (Year 2016)				Existing With Project Conditions (Year 2016)				
	Move	# of Lanes	Ramp Storage Length (feet)	85% Ramp Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length
1 I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	1936	1,646	879	C	392	No	15	894	C	400	No
2 I-110 SB Off-ramp at El Segundo Blvd	SB LT	1	657	558	511	D	546	No	6	517	D	557	No
	SB LT/RT	1	418	355	0	D	492	Yes	0	0	D	492	Yes
	SB RT	1	418	355	839	C	457	Yes	0	839	C	457	Yes
	RAMP TOTAL	3	1,493	1,269	1,350	D	1,495	Yes	6	1,356	D	1,506	Yes
3 I-105 EB Off-ramp at Central Ave	EB LT	1	682	580	664	F	842	Yes	56	720	F	958	Yes
	EB LT/TH/RT	1	682	580	13	F	867	Yes	0	13	F	958	Yes
	EB RT	1	945	803	538	C	330	No	77	615	D	458	No
	RAMP TOTAL	3	2,309	1,963	1,215	F	2,039	Yes	133	1,348	F	2,374	Yes
4 I-105 WB Off-ramp at Central Ave	WB LT	1	1152	979	116	D	104	No	0	116	D	104	No
	WB TH/LT	1	996	847	4	D	101	No	0	4	D	101	No
	WB RT	1	996	847	372	F	536	No	0	372	F	564	No
	RAMP TOTAL	3	3,144	2,672	492	E	741	No	0	492	F	769	No
5 I-105 EB Off-ramp at Wilmington	EB LT	1	1285	1,092	411	F	600	No	4	415	D	499	No
	EB RT	1	1285	1,092	537	D	361	No	204	741	D	907	No
	RAMP TOTAL	2	2,570	2,185	948	F	961	No	208	1,156	D	1,406	No
6 I-105 WB Off-ramp at Imperial Hwy	NB LT	1	705	599	539	F	491	No	294	833	F	757	Yes
	NB TH/LT	4	635	540	11	F	491	No	9	20	F	761	Yes
	NB RT	1	635	540	137	A	4	No	12	149	A	14	No
	RAMP TOTAL	6	1,975	1,679	687	F	986	No	315	1,002	F	1,532	No
7 I-105 EB Off-ramp at Long Beach Blvd	EB LT	1	1198	1,018	614	F	438	No	0	614	F	438	No
	EB TH/LT	1	729	620	3	F	445	No	0	3	F	445	No
	EB RT	1	729	620	346	B	172	No	0	346	B	172	No
	RAMP TOTAL	3	2,656	2,258	963	E	1,055	No	0	963	E	1,055	No
8 I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1350	1,148	165	D	175	No	0	165	D	175	No
	WB TH/RT	1	824	700	27	F	500	No	0	27	F	502	No
	WB RT	1	824	700	792	F	482	No	5	797	F	488	No
	RAMP TOTAL	3	2,998	2,548	984	F	1,157	No	5	989	F	1,165	No

Table 7.6 Existing With Project - Freeway Off-Ramp Analysis - Weekday AM Peak Hour

3/1/2017

Off - Ramp # and Location	Ramp Movement at Intersection				Existing Conditions[1] (Year 2016)				Existing With Project Conditions (Year 2016)				
	Move	# of Lanes	Ramp Storage Length (feet)	85% Ramp Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length
9 SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1427	1,213	771	F	805	No	22	793	F	817	No
	EB LT/TH/RT	2	1427	1,213	670	F	669	No	0	670	F	686	No
	RAMP TOTAL	3	2,854	2,426	1,441	F	1,474	No	22	1,463	F	1,503	No
10 SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	914	777	175	D	218	No	0	175	D	218	No
	WB LT/TH/RT	2	914	777	666	F	497	No	47	713	F	558	No
	RAMP TOTAL	3	1,828	1,554	841	F	715	No	47	888	F	776	No

Notes:

1. Traffic counts conducted in 2015 and factored to 2016 using a rate of 1% per annum.
2. Ramp storage lengths are 85% of the actual storage lengths per Caltrans "Safety" factor.

Table 7.7 Existing With Project - Freeway Off-Ramp Analysis - Weekday PM Peak Hour

3/1/2017

Off - Ramp # and Location	Ramp Movement at Intersection				Existing Conditions[1] (Year 2016)				Existing With Project Conditions (Year 2016)				
	Move	# of Lanes	Ramp Storage Length (feet)	85% Ramp Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length
1 I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	1936	1,646	583	C	202	No	11	594	C	204	No
2 I-110 SB Off-ramp at El Segundo Blvd	SB LT	1	657	558	437	E	437	No	4	441	E	435	No
	SB LT/RT	1	418	355	0	D	320	No	0	0	D	319	No
	SB RT	1	418	355	424	C	206	No	0	424	C	231	No
	RAMP TOTAL	3	1,493	1,269	861	D	963	No	4	865	D	985	No
3 I-105 EB Off-ramp at Central Ave	EB LT	1	682	580	477	F	653	Yes	36	513	F	712	Yes
	EB LT/TH/RT	1	682	580	240	F	703	Yes	0	240	F	780	Yes
	EB RT	1	945	803	378	C	303	No	44	422	C	377	No
	RAMP TOTAL	3	2,309	1,963	1,095	E	1,659	No	80	1,175	F	1,869	No
4 I-105 WB Off-ramp at Central Ave	WB LT	1	1152	979	265	D	192	No	0	265	D	192	No
	WB TH/LT	1	996	847	0	D	192	No	0	0	D	192	No
	WB RT	1	996	847	536	F	824	No	0	536	F	856	Yes
	RAMP TOTAL	3	3,144	2,672	801	F	1,208	No	0	801	F	1,240	No
5 I-105 EB Off-ramp at Wilmington	EB LT	1	1285	1,092	331	F	446	No	3	334	C	346	No
	EB RT	1	1285	1,092	181	A	64	No	173	354	B	240	No
	RAMP TOTAL	2	2,570	2,185	512	F	510	No	176	688	C	586	No
6 I-105 WB Off-ramp at Imperial Hwy	NB LT	1	705	599	549	F	500	No	217	766	F	697	Yes
	NB TH/LT	4	635	540	8	F	495	No	7	15	F	695	Yes
	NB RT	1	635	540	274	C	192	No	10	284	C	208	No
	RAMP TOTAL	6	1,975	1,679	831	F	1,187	No	234	1,065	F	1,600	No
7 I-105 EB Off-ramp at Long Beach Blvd	EB LT	1	1198	1,018	328	E	255	No	0	328	F	255	No
	EB TH/LT	1	729	620	1	E	258	No	0	1	F	258	No
	EB RT	1	729	620	215	B	75	No	0	215	B	75	No
	RAMP TOTAL	3	2,656	2,258	544	D	588	No	0	544	D	588	No
8 I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1350	1,148	285	F	441	No	0	285	F	441	No
	WB TH/RT	1	824	700	9	F	695	No	0	9	F	695	No
	WB RT	1	824	700	987	F	677	No	3	990	F	682	No
	RAMP TOTAL	3	2,998	2,548	1,281	F	1,813	No	3	1,284	F	1,818	No

Table 7.7 Existing With Project - Freeway Off-Ramp Analysis - Weekday PM Peak Hour

3/1/2017

Off - Ramp # and Location		Ramp Movement at Intersection				Existing Conditions[1] (Year 2016)				Existing With Project Conditions (Year 2016)				
		Move	# of Lanes	Ramp Storage Length (feet)	85% Ramp Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length
9	SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1427	1,213	433	F	663	No	15	448	F	672	No
		EB LT/TH/RT	2	1427	1,213	694	D	412	No	0	694	D	452	No
		RAMP TOTAL	3	2,854	2,426	1,127	E	1,075	No	15	1,142	E	1,124	No
10	SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	914	777	197	D	274	No	0	197	D	274	No
		WB LT/TH/RT	2	914	777	1,011	F	892	Yes	30	1,041	F	920	Yes
		RAMP TOTAL	3	1,828	1,554	1,208	F	1,166	No	30	1,238	F	1,194	No

Notes:

1. Traffic counts conducted in 2015 and factored to 2016 using a rate of 1% per annum.
2. Ramp storage lengths are 85% of the actual storage lengths per Caltrans "Safety" factor.

Table 7.8 Future Cumulative With Project - Freeway Off-Ramp Analysis - Weekday AM Peak Hour

3/1/2017

Off - Ramp # and Location	Ramp Movement at Intersection				Existing Conditions[1] (Year 2016)				Future Cumulative Without Project Conditions (Year 2035)				Future Cumulative With Project Conditions (Year 2035)				
	Move	# of Lanes	Ramp Storage Length (feet)	85% Ramp Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length
1 I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	1936	1,646	879	C	392	No	970	D	492	No	15	985	D	503	No
2 I-110 SB Off-ramp at El Segundo Blvd	SB LT	1	657	558	511	D	546	No	574	E	648	Yes	6	580	E	656	Yes
	SB LT/RT	1	418	355	0	D	492	Yes	0	D	571	Yes	0	0	D	572	Yes
	SB RT	1	418	355	839	C	457	Yes	916	D	532	Yes	0	916	D	532	Yes
	RAMP TOTAL	3	1,493	1,269	1,350	D	1,495	Yes	1,490	D	1,751	Yes	6	1,496	D	1,760	Yes
3 I-105 EB Off-ramp at Central Ave	EB LT	1	682	580	664	F	842	Yes	727	F	951	Yes	56	783	F	1,052	Yes
	EB LT/TH/RT	1	682	580	13	F	867	Yes	14	F	960	Yes	0	14	F	1,063	Yes
	EB RT	1	945	803	538	C	330	No	599	E	513	No	77	676	F	647	No
	RAMP TOTAL	3	2,309	1,963	1,215	F	2,039	Yes	1,340	F	2,424	Yes	133	1,473	F	2,762	Yes
4 I-105 WB Off-ramp at Central Ave	WB LT	1	1152	979	116	D	10	No	151	D	126	No	0	151	D	126	No
	WB TH/LT	1	996	847	4	D	101	No	4	D	126	No	0	4	D	127	No
	WB RT	1	996	847	372	F	536	No	406	F	651	No	0	406	F	654	No
	RAMP TOTAL	3	3,144	2,672	492	E	647	No	561	F	903	No	0	561	F	907	No
5 I-105 EB Off-ramp at Wilmington	EB LT	1	1285	1,092	411	F	600	No	449	D	564	No	4	453	D	572	No
	EB RT	1	1285	1,092	537	D	361	No	604	C	554	No	204	808	E	1,035	No
	RAMP TOTAL	2	2,570	2,185	948	F	961	No	1,053	D	1,118	No	208	1,261	E	1,607	No
6 I-105 WB Off-ramp at Imperial Hwy	NB LT	1	705	599	539	F	491	No	591	F	538	No	294	885	F	803	Yes
	NB TH/LT	4	635	540	11	F	491	No	12	F	538	No	9	21	F	808	Yes
	NB RT	1	635	540	137	A	4	No	150	A	15	No	12	162	A	24	No
	RAMP TOTAL	6	1,975	1,679	687	F	986	No	753	F	1,091	No	315	1,068	F	1,635	No
7 I-105 EB Off-ramp at Long Beach Blvd	EB LT	1	1198	1,018	614	F	438	No	670	F	448	No	0	670	F	488	No
	EB TH/LT	1	729	620	3	F	445	No	3	F	490	No	0	3	F	490	No
	EB RT	1	729	620	346	B	172	No	378	C	239	No	0	378	C	239	No
	RAMP TOTAL	3	2,656	2,258	963	E	1,055	No	1,051	F	1,177	No	0	1,051	F	1,217	No
8 I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1350	1,148	165	D	175	No	180	D	190	No	0	180	D	190	No
	WB TH/RT	1	824	700	27	F	500	No	30	F	581	No	0	30	F	586	No
	WB RT	1	824	700	792	F	482	No	864	F	563	No	5	869	F	566	No
	RAMP TOTAL	3	2,998	2,548	984	F	1,157	No	1,074	F	1,334	No	5	1,079	F	1,342	No

Table 7.8 Future Cumulative With Project - Freeway Off-Ramp Analysis - Weekday AM Peak Hour

3/1/2017

Off - Ramp # and Location	Ramp Movement at Intersection				Existing Conditions[1] (Year 2016)				Future Cumulative Without Project Conditions (Year 2035)				Future Cumulative With Project Conditions (Year 2035)				
	Move	# of Lanes	Ramp Storage Length (feet)	85% Ramp Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length
9 SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1427	1,213	771	F	805	No	841	F	895	No	22	863	F	907	No
	EB LT/TH/RT	2	1427	1,213	670	F	669	No	732	F	753	No	0	732	F	770	No
	RAMP TOTAL	3	2,854	2,426	1,441	F	1,474	No	1,573	F	1,648	No	22	1,595	F	1,677	No
10 SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	914	777	175	D	218	No	191	D	254	No	0	191	D	254	No
	WB LT/TH/RT	2	914	777	666	F	497	No	726	F	573	No	47	773	F	630	No
	RAMP TOTAL	3	1,828	1,554	841	F	715	No	917	F	827	No	47	964	F	884	No

Notes:

1. Traffic counts conducted in 2015 and factored to 2016 using a rate of 1% per annum.
2. Ramp storage lengths are 85% of the actual storage lengths per Caltrans "Safety" factor.

Table 7.9 Future Cumulative With Project - Freeway Off-Ramp Analysis - Weekday PM Peak Hour

3/1/2017

Off - Ramp # and Location	Ramp Movement at Intersection				Existing Conditions[1] (Year 2016)				Future Cumulative Without Project Conditions (Year 2035)				Future Cumulative With Project Conditions (Year 2035)				
	Move	# of Lanes	Ramp Storage Length (feet)	85% Ramp Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length
1 I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	1936	1,646	583	C	202	No	667	C	246	No	11	678	C	263	No
2 I-110 SB Off-ramp at El Segundo Blvd	SB LT	1	657	558	437	E	437	No	520	F	508	No	4	524	F	512	No
	SB LT/RT	1	418	355	0	D	320	No	0	D	405	Yes	0	0	D	408	Yes
	SB RT	1	418	355	424	C	206	No	463	D	343	No	0	463	D	362	No
	RAMP TOTAL	3	1,493	1,269	861	D	963	No	983	E	1,256	No	4	987	F	1,282	Yes
3 I-105 EB Off-ramp at Central Ave	EB LT	1	682	580	477	F	653	Yes	524	F	757	Yes	36	560	F	826	Yes
	EB LT/TH/RT	1	682	580	240	F	703	Yes	262	F	820	Yes	0	262	F	893	Yes
	EB RT	1	945	803	378	C	303	No	441	D	505	No	44	485	E	571	No
	RAMP TOTAL	3	2,309	1,963	1,095	E	1,659	No	1,227	F	2,082	Yes	80	1,307	F	2,290	Yes
4 I-105 WB Off-ramp at Central Ave	WB LT	1	1152	979	265	D	192	No	330	D	234	No	0	330	D	234	No
	WB TH/LT	1	996	847	0	D	192	No	0	D	235	No	0	0	D	235	No
	WB RT	1	996	847	536	F	824	No	585	F	989	Yes	0	585	F	1,013	Yes
	RAMP TOTAL	3	3,144	2,672	801	F	1,208	No	915	F	1,458	No	0	915	F	1,482	No
5 I-105 EB Off-ramp at Wilmington	EB LT	1	1285	1,092	331	F	446	No	361	D	378	No	3	364	D	383	No
	EB RT	1	1285	1,092	181	A	64	No	207	A	101	No	173	380	B	270	No
	RAMP TOTAL	2	2,570	2,185	512	F	510	No	568	C	479	No	176	744	C	653	No
6 I-105 WB Off-ramp at Imperial Hwy	NB LT	1	705	599	549	F	500	No	603	F	549	No	217	820	F	744	Yes
	NB TH/LT	4	635	540	8	F	495	No	9	F	543	Yes	7	16	F	744	Yes
	NB RT	1	635	540	274	C	192	No	299	D	235	No	10	309	D	253	No
	RAMP TOTAL	6	1,975	1,679	831	F	1,187	No	911	F	1,327	No	234	1,145	F	1,741	Yes
7 I-105 EB Off-ramp at Long Beach Blvd	EB LT	1	1198	1,018	328	E	255	No	358	F	283	No	0	358	F	283	No
	EB TH/LT	1	729	620	1	E	258	No	1	F	285	No	0	1	F	285	No
	EB RT	1	729	620	215	B	75	No	235	B	107	No	0	235	B	107	No
	RAMP TOTAL	3	2,656	2,258	544	D	588	No	594	E	675	No	0	594	E	675	No
8 I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1350	1,148	285	F	441	No	311	F	483	No	0	311	F	483	No
	WB TH/RT	1	824	700	9	F	695	No	10	F	797	Yes	0	10	F	798	Yes
	WB RT	1	824	700	987	F	677	No	1,077	F	780	Yes	3	1,080	F	783	Yes
	RAMP TOTAL	3	2,998	2,548	1,281	F	1,813	No	1,398	F	2,060	No	3	1,401	F	2,064	No

Table 7.9 Future Cumulative With Project - Freeway Off-Ramp Analysis - Weekday PM Peak Hour

3/1/2017

Off - Ramp # and Location	Ramp Movement at Intersection				Existing Conditions[1] (Year 2016)				Future Cumulative Without Project Conditions (Year 2035)				Future Cumulative With Project Conditions (Year 2035)				
	Move	# of Lanes	Ramp Storage Length (feet)	85% Ramp Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed 85% Storage Length
9 SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1427	1,213	433	F	663	No	473	F	742	No	15	488	F	750	No
	EB LT/TH/RT	2	1427	1,213	694	D	412	No	746	E	509	No	0	746	E	545	No
	RAMP TOTAL	3	2,854	2,426	1,127	E	1,075	No	1,219	E	1,251	No	15	1,234	E	1,295	No
10 SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	914	777	197	D	274	No	215	E	313	No	0	215	E	313	No
	WB LT/TH/RT	2	914	777	1,011	F	892	Yes	1,103	F	986	Yes	30	1,133	F	1,014	Yes
	RAMP TOTAL	3	1,828	1,554	1,208	F	1,166	No	1,318	F	1,299	No	30	1,348	F	1,327	No

Notes:

1. Traffic counts conducted in 2015 and factored to 2016 using a rate of 1% per annum.
2. Ramp storage lengths are 85% of the actual storage lengths per Caltrans "Safety" factor.

8. Project Mitigation

This Chapter of the report explores and identifies mitigation strategies to reduce significant transportation impacts identified in the earlier impact analyses for the Project, and describes a proposed transportation mitigation program.

8.1 Summary of Impacts

Impacts were identified in the following categories.

Intersection Impacts

The analysis in Chapters 4 and 6 (see Tables 4.1, 4.2 and 6.1, 6.2,) identified significant impacts in the Existing With Project and Existing With Project With Cumulative Conditions.

For the Existing With Project Conditions, in the AM peak hour, the Project would result in significant impacts at twenty one intersections, of which eleven intersections would operate at LOS D or better. In the PM peak hour, the Project would result in significant impacts at twenty six intersections, of which fifteen intersections would operate at LOS D or better.

For the Existing With Project With Cumulative Conditions, in the AM peak hour, the Project would result in significant impacts at twenty two intersections, of which ten intersections would operate at LOS D or better. In the PM peak hour, the Project would result in significant impacts at thirty one intersections, of which fifteen intersections would operate at LOS D or better.

CMP Impacts

The analysis in Chapter 6 (see Tables 6.7 and 6.8) identified significant impacts at two freeway mainline monitoring locations in the AM peak hour, and at four freeway monitoring locations in the PM peak hour.

Freeway Impacts

For the Existing With Project Condition, the analysis in Chapter 7 (see Table 7.2 and 7.3) identified that the Project would result in one significant mainline freeway impact in the AM peak hour, and one significant freeway mainline impact in the PM peak hour.

For the Existing With Project With Cumulative Condition, the analysis in Chapter 7 (see Table 7.4 and 7.5) identified that the Project would result in one significant mainline freeway impact in the AM peak hour, and three significant freeway mainline impact in the PM peak hour.

Also, for the Existing With Project With Cumulative Condition, the analysis in Chapter 7 (see Table 7.9) identified that the Project would result in two significant freeway off-ramp impacts in the PM peak hour.

8.2 Discussion of Mitigation Strategy

The Specific Plan (the Project) is for a transit-oriented district focused on the Willowbrook/Rosa Parks rail station. As discussed in Chapter 3, the Specific Plan is in a heavily urbanized area with significant levels of transit service. The purpose of the Specific Plan with respect to transportation is to "*... improve access to all modes of transportation, including transit, walking and bicycling.... to encourage transit oriented development, and promote active transportation.... to facilitate development, especially residential and employment- generating uses proximate to the Willowbrook/Rosa Parks Station... identify land use options that include mixed uses, increased housing opportunities, and neighborhood-serving retail uses...and improve pedestrian linkages between the Willowbrook/Rosa Parks Station, Kenneth Hahn Plaza, Martin Luther King Jr. Medical Center, Charles R. Drew University of Medicine and Science, future mixed use areas, and existing residential neighborhoods*".

To these ends the Specific Plan focuses on enhancing alternatives to the car and improving access to transit and improving circulation for bicycles and pedestrians in the Specific Plan area. The Specific Plan includes a range of improvements to the bicycle and pedestrian networks in the Specific Plan area (see Chapter 3), including the installation of road diets to reduce traffic lanes in certain locations. Generally then, potential mitigation measures that widen roadways at the expense of the pedestrian and bicycle environment are therefore inconsistent with the goals and objectives of the Specific Plan and are considered to be infeasible. The restriping of traffic lanes within the existing curb-to-curb roadway cross section was however considered to be a feasible mitigation measure to the extend any such measure would not conflict with Specific Plan features or impact the bicycle and pedestrian facilities.

The feasibility of physical intersection improvements was investigated for all intersection locations where the Project would cause significant traffic impacts. This evaluation, which was conducted in conjunction with County staff, looked at the feasibility of re-striping traffic lanes and/or adding traffic lanes to modify intersection lane configurations, roadway widenings, and potential changes to signal timing and phasing. Roadway widenings were generally not feasible (due to the lack of available right-of-way because of existing buildings or lack of control over adjacent right-of-way, or because of inconsistency with Specific Plan

goals and objectives); lane re-stripings were considered to be feasible if they would not result in inadequate lane widths (minimum lane widths of 10' and 12' for curb lanes was maintained); and signal timing/phasing changes were considered to be feasible as long as they would improve and not worsen intersection operations or potentially cause other problems and/or impacts elsewhere. A Transportation Demand Management Program is considered to be a realistic option to reduce vehicle trips, but is not considered to be a quantifiable mitigation measure by the County of Los Angeles.

The Martin Luther King Jr. Medical Campus Tier 2 Expansion is included in the Specific Plan and the traffic study, as discussed in Chapter 3. The Martin Luther King Jr. Medical Campus EIR identified a number of traffic mitigations. All of these mitigations were evaluated in this current analysis, and included where they continue to be feasible. In the Specific Plan area, a number of those mitigations that involved roadway widening are considered to be now infeasible because of the Specific Plan goals, objectives and provisions, and so are not included in the following list of mitigation measures for this study.

8.3 Transportation Mitigation Measures - Intersection Improvements

No feasible mitigation measures were identified at the following intersections:

1. Avalon Blvd & Imperial Hwy
2. Avalon Blvd & 120th St
6. Central Ave & Imperial Hwy
19. Compton Ave & 120th St
26. Wilmington Ave & Imperial Hwy
29. Wilmington Ave & 120th St (West)
39. Mona Blvd & Imperial Hwy
42. Willowbrook Ave & Rosecrans Ave
58. Wilmington Ave & W Compton Blvd
62. Wilmington Ave & Greenleaf Blvd

At these locations, mitigation measures were not feasible due to insufficient roadway width to accommodate restriping for additional traffic lanes and/or the unavailability of additional right of way for roadway widening, as described above.

Feasible mitigation improvements were identified at a number of locations. The Project therefore proposes to implement the following physical mitigation measures.

The results of the mitigation analyses are shown in Tables 8.1 and 8.2 for the Existing With Project Conditions for the AM and PM peak hours respectively. Figure 8.1 shows the levels of service after mitigation graphically.

Tables 8.3 and 8.4 show the results of the mitigation analyses for the Existing With Project With Cumulative Conditions for the AM and PM peak hours respectively. Figure 8.2 shows the levels of service after mitigation graphically.

To address mitigations in jurisdictions outside the County of Los Angeles, individual projects that are developed within the Specific Plan area will perform a traffic impact analysis in accordance with the jurisdictions guidelines, disclose any impacts, and mitigate those impacts.

For mitigations at locations in the County of Los Angeles individual projects will construct the recommended traffic improvements, or equally beneficial improvements approved by the Director of Public Works.

County of Los Angeles Intersections

#3. Avalon Blvd & El Segundo Blvd

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is no significant impact in the AM peak hour, but a significant impact in the PM peak hour at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is no significant impact in the AM peak hour, but a significant impact in the PM peak hour at this location. The proposed mitigation measure is as follows.

Restripe the northbound approach to add a right turn lane. This would modify the approach from one left turn lane, one through lane, and one through-right turn lane to one left turn lane, two through lanes and a separate right turn lane. This can be accomplished by narrowing the median to 3'. This would need to occur all the way to an alley located approximately 100' south of the intersection. The bus stop at this approach would continue to be located at the same location; however, buses would be allowed to go straight through the intersection. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR. In addition restripe the southbound approach to provide a separate right turn lane by narrowing the median to 2'. This would modify the approach from one left turn lane, one through lane, and one through-right turn lane to one left turn lane, two through lanes and a separate right turn lane.

For the Existing With Project Condition, these mitigation measures would fully mitigate the PM peak hour impact at this location.

For the Existing With Project With Cumulative Condition, these mitigation measures would partially mitigate the PM peak hour impact at this location. In the PM peak hour the level of service would improve to LOS D.

#10. Central Ave & El Segundo Blvd

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the southbound approach to provide a separate right-turn lane. Restripe the northbound approach by reducing median to 2'. This would modify both approaches from one left turn lane, one through lane, and one through-right turn lane to one left turn lane, two through lanes and a separate right turn lane. Allow buses to go through the intersection from the right-turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR. In addition restripe the westbound approach to provide a separate right turn lane by narrowing the median to 2'. This would modify the approach from one left turn lane, one through lane, and one through-right turn lane to one left turn lane, two through lanes and a separate right turn lane.

For the Existing With Project Conditions these mitigation measures would fully mitigate the impacts in both the AM and PM peak hours.

For the Existing With Project With Cumulative Conditions these mitigation measures would fully mitigate the AM peak hour impact, and would partially mitigate the PM peak hour impact. In the PM peak hour the level of service would improve to LOS E.

#11. Central Ave & Rosecrans Ave

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in the AM Peak hour, but no significant impact in the PM peak hour at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the westbound approach to provide a separate right-turn lane by narrowing the median to 2'. This would modify the approach from one left turn lane, one through lane, and one through-right turn lane to one left turn lane, two through lanes and a separate right turn lane. Allow buses to go through the intersection from the right-turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

For the Existing With Project Condition this mitigation measure would fully mitigate the AM peak hour impact.

For the Existing With Project With Cumulative Condition this mitigation measure would fully mitigate the AM peak hour impact, and would partially mitigate the PM peak hour impact. In the PM peak hour the level of service would remain at LOS D.

#17. Compton Ave & Imperial Hwy

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the westbound approach to provide a separate right-turn lane. This would modify the approach from one left turn lane, one through lane, and one through-right turn lane to one left turn lane, two through lanes and a separate right turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR. No other feasible improvements were identified at this location.

For the Existing With Project Condition, this mitigation measure would partially mitigate the impacts in both the AM and PM peak hours. In the AM peak hour the level of service would remain at LOS F. In the PM peak hour it would remain at LOS E.

For the Existing With Project With Cumulative Condition, this mitigation measure would partially mitigate the impacts in both the AM and PM peak hours. In the AM peak hour the level of service would remain at LOS F. In the PM peak hour it would remain at LOS E.

27. Wilmington Ave & I-105 e/b Ramps

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Condition there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Provide an additional eastbound lane by widening (reducing the raised median on the ramp) the off-ramp. This would modify the approach from a left-turn lane and a right-turn lane to a left-turn lane, shared left-right turn lane and a separate right-turn lane. In addition, provide an additional northbound left-turn lane by reducing the median width. This would modify the approach from a left-turn lane and three through lanes to dual left-turn lanes and three through lanes. These were mitigation measures in the Martin Luther King Jr. Medical Campus EIR.

For the Existing With Project Condition, these mitigation measures would fully mitigate the impacts in both the AM and PM peak hours.

For the Existing With Project With Cumulative Condition, these mitigation measures would fully mitigate the AM peak hour impact, and would partially mitigate the PM peak hour impact. In the PM peak hour the level of service would improve to LOS C.

#28. Wilmington Ave & 118th St

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the eastbound approach of 118th Street to provide a separate right-turn lane. This would modify the eastbound approach from a shared left-through-right lane to a shared left-through lane and a right turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

For the Existing With Project Condition, this mitigation measure would partially mitigate the impacts in both the AM and PM peak hours. In the AM peak hour the level of service would remain at LOS F. In the PM peak hour it would improve to LOS E.

For the Existing With Project With Cumulative Condition, this mitigation measure would partially mitigate the impacts in both the AM and PM peak hours. In the AM peak hour the level of service would remain at LOS F. In the PM peak hour it would improve to LOS E.

#30. Wilmington Ave & 120th St (East)

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is no significant impact in the AM Peak hour, but a significant impact in the PM peak hour at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is no significant impact in the AM Peak hour, but a significant impact in the PM peak hour at this location. The proposed mitigation measure is as follows.

Widen 120th Street west of Wilmington Avenue (the driveway to the Martin Luther King Jr. Medical Campus) for 250', on the south side by 2' and restripe the eastbound approach to provide dual left-turn lanes. This would modify the approach from a left-through lane and a

right-turn lane to dual left-turn lanes, a through lane, and a right-turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

For the Existing With Project Condition, this mitigation measure would fully mitigate the PM peak hour impact.

For the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the PM peak hour impact.

#32. Wilmington Ave & El Segundo Blvd

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the eastbound and westbound approaches to add separate right-turn lanes. Allow buses to go through the intersection from the right-turn lanes. These would modify both approaches from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a right-turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

For the Existing With Project Conditions, these mitigation measures would partially mitigate the impact in the AM peak hour (and the level of service would improve to LOS C), and would fully mitigate the impact in the PM peak hour.

For the Existing With Project With Cumulative Conditions, these mitigation measures would partially mitigate the impacts in both the AM and PM peak hours. In the AM peak hour the level of service would improve to LOS C. In the PM peak hour the level of service would improve to LOS D.

#36. Imperial Hwy & I-105 w/b Ramps

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Provide a third northbound left-turn lane by widening the off-ramp by 10' for approximately 150' to 200'. This would modify the approach from a left-turn lane, a left-through lane, and a right-turn lane to dual left-turn lanes, a left-through lane, and a right-turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

For the Existing With Project Condition, this measure would partially mitigate the impacts in both the AM and PM peak hours, and the level of service would improve to LOS D in both peak hours.

For the Existing With Project With Cumulative Condition, this measure would partially mitigate the impacts in both the AM and PM peak hours, and the level of service would improve to LOS D in both peak hours.

#43. Alameda St & 103rd St

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in the PM peak hour at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in the PM peak hour at this location. The proposed mitigation measure is as follows.

Restripe the eastbound approach for a separate left-turn lane. This would modify the approach from a shared left/right lane to a left-turn lane and a shared left/right lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

In the Existing With Project Condition, this mitigation measure would fully mitigate the impact in the PM peak hour.

In the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the impact in the PM peak hour.

#45. Alameda St & Imperial Hwy

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in the AM peak hour, but no significant impact in the PM peak hour at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in the AM peak hour at this location. The proposed mitigation measure is as follows.

Restripe the southbound approach for dual right-turn lanes. This would modify the approach from a left-turn lane, two through lanes, and a right-turn lane to dual left-turn lanes, two

through lanes, and a separate right-right lane. This is a modification of the mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

In the Existing With Project Condition, this mitigation measure would fully mitigate the impact in the AM peak hour.

In the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the AM peak hour impact. In the AM peak hour the level of service would improve to LOS C.

#46. Alameda St & El Segundo Blvd

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there are significant impact in the AM peak hour at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there are significant impacts in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the northbound and southbound approaches to provide separate right-turn lanes. This would modify both approaches from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a right-turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

In the Existing With Project Condition, this mitigation measure would fully mitigate the impact in the AM peak hour.

In the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the AM peak hour impact, and would partially mitigate the PM peak hour impact. In the PM peak hour it would remain at LOS E.

City of Compton Intersections

#21. Compton Ave & El Segundo Blvd

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the eastbound and westbound approaches to provide separate right-turn lanes by narrowing the medians to 2'. These would modify both approaches from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a right-turn lane.

In the Existing With Project Condition, these mitigation measures would partially mitigate the impact in the AM peak hour (and the level of service would improve to LOS D), and would partially mitigate the impact in the PM peak hour. In the PM peak hour the level of service would remain at LOS C.

In the Existing With Project With Cumulative Condition, these mitigation measures would partially mitigate the impact in both the AM and PM peak hours. In the AM peak hour the level of service would improve to LOS D. In the PM peak hour the level of service would improve to LOS C.

#33. Wilmington Ave & Rosecrans Ave

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the northbound approach to provide a separate right-turn lane by narrowing the median to 2'. This would modify the approach from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a right-turn lane.

In the Existing With Project Condition, this mitigation measure would partially mitigate the impacts in the AM peak hour and the level of service would remain at LOS E, and would partially mitigate the impact in the PM peak hour and the level of service would improve to LOS D.

In the Existing With Project With Cumulative Condition, this mitigation measure would partially mitigate the impacts in the AM peak hour and the level of service would remain at LOS E, and would partially mitigate the impact in the PM peak hour and the level of service would remain at LOS E.

#57. Central Ave & W Compton Blvd

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is no significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is no significant impact in the AM Peak hour, but a significant impact in the PM peak hour at this location. The proposed mitigation measure is as follows.

Restripe the northbound approach to provide a separate right-turn lane by narrowing the median to 2'. This would modify the approach from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a right-turn lane. This mitigation measure requires removal of five on-street parking on the northbound approach.

In the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the impacts in the PM peak hour and the level of service would improve to LOS C.

#60. Central Ave & Alondra Blvd

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is no significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is no significant impact in the AM Peak hour, but a significant impact in the PM peak hour at this location. The proposed mitigation measure is as follows.

Restripe the northbound and southbound approaches to provide a separate right-turn lane by narrowing the median to 2'. This would modify both approaches from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a right-turn lane.

In the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the impacts in the PM peak hour and the level of service would improve to LOS D.

#61. Wilmington Ave & Alondra Blvd

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the westbound approach to provide a separate right-turn lane by narrowing the median to 3'. This would modify the approach from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a right-turn lane.
In the Existing With Project Condition, this mitigation measure would fully mitigate the impact in the AM peak hour and the level of service would remain at LOS D, and would

partially mitigate the impact in the PM peak hour and the level of service would remain at LOS E.

In the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the impacts in the AM peak hour and the level of service would remain at LOS D, and would partially mitigate the impact in the PM peak hour and the level of service would remain at LOS E.

#63. Wilmington Ave & Walnut St

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is no significant impact in the AM Peak hour, but a significant impact in the PM peak hour at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is no significant impact in the AM Peak hour, but a significant impact in the PM peak hour at this location. The proposed mitigation measure is as follows.

Restripe and modify the eastbound approach from a left-turn lane, a through lane, and a right-turn lane to a left-turn lane, a through lane, and a through-right lane. It requires converting Walnut Street east of the intersection from one lane eastbound to two-lanes eastbound for a minimum of 400 feet providing an 11' lane and a 12' curb lane prior to merging back to one lane, and prohibiting on street parking for the same distance.

In the Existing With Project Condition, this mitigation measure would fully mitigate the impact in the PM peak hour. In the PM peak hour the level of service would improve to LOS C.

In the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the impact in the PM peak hour. In the PM peak hour the level of service would improve to LOS C.

City of Lynwood Intersections

#54. Imperial Hwy & State St

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is no significant impact in the AM Peak hour, but a significant impact in the PM peak hour at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is no significant impact in the AM Peak hour, but a significant impact in the PM peak hour at this location. The proposed mitigation measure is as follows.

Restripe the northbound and southbound approaches to provide separate right-turn lanes. This would modify both approaches from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a right-turn lane. These mitigation measures require removal of two on-street parking spaces on each approach.

In the Existing With Project Condition, these mitigation measures would fully mitigate the impact in the PM peak hour. In the PM peak hour the level of service would improve to LOS C.

In the Existing With Project With Cumulative Condition, these mitigation measures would fully mitigate the impact in the PM peak hour. In the PM peak hour the level of service would improve to LOS C.

City of Los Angeles Intersections

#7. Central Ave & I-105 w/b Ramps

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the westbound approach from a left-turn lane, a through-left lane, and right-turn lane, to a left-turn lane, a through-right lane, and a right-turn lane.

In the Existing With Project Condition, this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours. In both AM and PM peak hours the level of service would improve to LOS C.

In the Existing With Project With Cumulative Condition, this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours. In both AM and PM peak hours the level of service would improve to LOS C.

#9. Central Ave & 120th St

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

Restripe the northbound approach to provide a separate right-turn lane. This would modify the approach from a left-turn, a through lane, and a through-right lane to a left-turn lane, two through lanes, and a separate right-turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.

In the Existing With Project Condition, this mitigation measure would partially mitigate the impacts in both the AM and PM peak hours. In the AM peak hour the level of service would remain at LOS D and in the PM peak hour the level of service would improve to LOS C.

In the Existing With Project With Cumulative Condition, this mitigation measure would partially mitigate the impacts in both the AM and PM peak hours. In the AM peak hour the level of service would improve to LOS D. In the PM peak hour the level of service would remain at LOS E.

#25. Wilmington Ave & 112th St

As shown in Tables 4.1 and 4.2, in the Existing With Project Conditions there is a significant impact on the stop-controlled approach of this unsignalized intersection in both the AM and PM peak hours at this location.

As shown in Tables 6.1 and 6.2, in the Existing With Project With Cumulative Conditions there is a significant impact on the stop-controlled approach of this unsignalized intersection in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows.

The signal warrant analysis indicated that a traffic signal would be warranted at this location so the mitigation measure is to install a new traffic signal.

In the Existing With Project Conditions, this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours.

In the Existing With Project With Cumulative Conditions, this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours.

Remaining Significant Impacts – Existing With Project

AM Peak Hour

With the proposed mitigation program, there would be 13 remaining significant impacts in the AM peak hour, at the following intersections:

County of Los Angeles:

32.	Wilmington Ave & El Segundo Blvd	LOS C
26.	Wilmington Ave & Imperial Hwy	LOS D
36.	Imperial Hwy & I-105 w/b Ramps	LOS D
19.	Compton Ave & 120th St	LOS E
29.	Wilmington Ave & 120th St (West)	LOS E
17.	Compton Ave & Imperial Hwy	LOS F
28.	Wilmington Ave & 118th St	LOS F

City of Compton:

21.	Compton Ave & El Segundo Blvd	LOS D
62.	Wilmington Ave & Greenleaf Blvd	LOS D
33.	Wilmington Ave & Rosecrans Ave	LOS E

City of Los Angeles:

1.	Avalon Blvd & Imperial Hwy	LOS C
6.	Central Ave & Imperial Hwy	LOS C
9.	Central Ave & 120th St	LOS D

At these remaining significant impact locations, the level of service would be LOS D or better at 9 locations, LOS E at 3 locations and LOS F at 2 locations.

PM Peak Hour

With the proposed mitigation program, there would be 16 remaining significant impacts in the PM peak hour, at the following locations:

County of Los Angeles:

19.	Compton Ave & 120th St	LOS D
26.	Wilmington Ave & Imperial Hwy	LOS D
36.	Imperial Hwy & I-105 w/b Ramps	LOS D
39.	Mona Blvd & Imperial Hwy	LOS D
17.	Compton Ave & Imperial Hwy	LOS E
28.	Wilmington Ave & 118th St	LOS E
29.	Wilmington Ave & 120th St (West)	LOS E

City of Compton:

21.	Compton Ave & El Segundo Blvd	LOS C

33.	Wilmington Ave & Rosecrans Ave	LOS D
58.	Wilmington Ave & W Compton Blvd	LOS D
61.	Wilmington Ave & Alondra Blvd	LOS E
62.	Wilmington Ave & Greenleaf Blvd	LOS E

City of Los Angeles:

1.	Avalon Blvd & Imperial Hwy	LOS C
2.	Avalon Blvd & 120th St	LOS C
9.	Central Ave & 120th St	LOS C
6.	Central Ave & Imperial Hwy	LOS D

At these remaining significant impact locations, the level of service would be LOS D or better at 11 locations and LOS E at 5 locations.

Remaining Significant Impacts – Existing With Project With Cumulative

AM Peak Hour

With the proposed mitigation program, there would be 14 remaining significant impacts in the AM peak hour, at the following intersections:
County of Los Angeles:

32.	Wilmington Ave & El Segundo Blvd	LOS C
39.	Mona Blvd & Imperial Hwy	LOS C
26.	Wilmington Ave & Imperial Hwy	LOS D
36.	Imperial Hwy & I-105 w/b Ramps	LOS D
19.	Compton Ave & 120th St	LOS E
29.	Wilmington Ave & 120th St (West)	LOS E
17.	Compton Ave & Imperial Hwy	LOS F
28.	Wilmington Ave & 118th St	LOS F

City of Compton:

21.	Compton Ave & El Segundo Blvd	LOS D
62.	Wilmington Ave & Greenleaf Blvd	LOS D
33.	Wilmington Ave & Rosecrans Ave	LOS E

City of Los Angeles:

1.	Avalon Blvd & Imperial Hwy	LOS D
6.	Central Ave & Imperial Hwy	LOS D

9.	Central Ave & 120th St	LOS D

At these remaining significant impact locations, the level of service would be LOS D or better at 9 locations, LOS E at 3 locations and LOS F at 2 locations.

PM Peak Hour

With the proposed mitigation program, there would be 23 remaining significant impacts in the PM peak hour, at the following intersections:

County of Los Angeles:

27.	Wilmington Ave & I-0105 e/b Ramps	LOS C
3.	Avalon Blvd & El Segundo Blvd	LOS D
11.	Central Ave & Rosecrans Ave	LOS D
19.	Compton Ave & 120th St	LOS D
26.	Wilmington Ave & Imperial Hwy	LOS D
32.	Wilmington Ave & El Segundo Blvd	LOS D
36.	Imperial Hwy & I-105 w/b Ramps	LOS D
39.	Mona Blvd & Imperial Hwy	LOS D
10.	Central Ave & El Segundo Blvd	LOS E
17.	Compton Ave & Imperial Hwy	LOS E
28.	Wilmington Ave & 118th St	LOS E
29.	Wilmington Ave & 120th St (West)	LOS E
46.	Alameda St & El Segundo Blvd	LOS E

City of Compton:

21.	Compton Ave & El Segundo Blvd	LOS C
42.	Willowbrook Ave & Rosecrans Ave	LOS C
58.	Wilmington Ave & W Compton Blvd	LOS D
33.	Wilmington Ave & Rosecrans Ave	LOS E
61.	Wilmington Ave & Alondra Blvd	LOS E
62.	Wilmington Ave & Greenleaf Blvd	LOS E

City of Los Angeles:

2.	Avalon Blvd & 120th St	LOS C
1.	Avalon Blvd & Imperial Hwy	LOS D
6.	Central Ave & Imperial Hwy	LOS D
9.	Central Ave & 120th St	LOS E

At these remaining significant impact locations, the level of service would be LOS D at 14 locations, and LOS E at 9 locations.

8.3 Transportation Mitigation Measures - CMP

As discussed in Chapter 6 (see Tables 6.7 and 6.8) in the AM peak hour, the addition of vehicle trips generated by the Project would cause significant impacts according to CMP criteria at two freeway monitoring locations in the AM peak hour, and at four freeway monitoring locations in the PM peak hour. The freeways would be operating at LOS F at these locations without the Project. The Project would cause an increase in V/C of between 0.023 and 0.038 at these locations, slightly above the threshold of 0.020 for a significant impact.

No feasible mitigation measures have been identified for these impacts. Freeway mainline improvements are the responsibility of regional agencies such as SCAG, Metro, and Caltrans, and are generally beyond the ability of individual projects to implement. These impacts would therefore remain significant.

8.4 Transportation Mitigation Measures - Freeways

Freeway System - Mainline

As discussed in Chapter 7 (see Tables 7.1 and 7.3), under Existing With Project Conditions the Project would cause one significant freeway mainline segment impact in the AM peak hour, and one significant freeway mainline segment impact in the PM peak hour. The Project would cause the V/C ratio to be 1.006 in the AM peak hour and 1.001 in the PM Peak hour, both just slightly above capacity.

Under the Future With Project Conditions, the Project would cause one significant freeway mainline segment impact in the AM peak hour, and three significant freeway mainline segment impacts in the PM peak hour. The level of service would be LOS E (below capacity) in all cases.

No feasible mitigation measures have been identified for these impacts. Freeway mainline improvements are the responsibility of regional agencies such as SCAG, Metro, and Caltrans, and are generally beyond the ability of individual projects to implement. These impacts would therefore remain significant.

The Caltrans Traffic Impact Study Guidelines provide a methodology for identifying a project's proportionate share of the future traffic growth on freeway facilities. For the Future With Project Condition, in the AM peak hour, the Specific Plan share of total future traffic

growth is approximately 40% (see Table 7.4) and for the PM peak hour it is 32% to 38% (see Table 7.4).

Freeway System – Off-Ramps

The analysis in Chapter 7 (see Table 7.6) identified that the Project would cause two significant impacts at off-ramps in the PM peak hour for Future With Project Conditions. At the I-110 SB off-ramp at El Segundo Blvd., no feasible mitigation measure has been identified, and this would remain a significant impact . However the overall queue length with the Project would be only 1% over the overall storage capacity of the off-ramp. Given the very conservative assumptions that were input to the analysis (see Chapter 7), including the 85% "safety factor" identified by Caltrans, it is unlikely that the queue would actually back onto the freeway mainline.

At the I-105 WB off-ramp at Imperial Highway, the proposed mitigation for the intersection of the off-ramp and Imperial Highway would add storage capacity to the off-ramp. This would increase the overall storage length and the overall queue would no longer exceed the improved overall storage capacity of the ramp. This improvement would fully mitigate the impact at this location.

Table 8.1 Existing With Project With Mitigation Conditions - Intersection Level of Service - AM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
Los Angeles County												
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.726	C	0.739	C	0.013	No				
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.652	B	0.667	B	0.015	No				
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.899	D	0.933	E	0.034	Yes	0.839	D	-0.060	No
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.822	D	0.844	D	0.022	Yes	0.795	C	-0.027	No
12.	Slater Ave & 120th St	Signalized	0.501	A	0.604	B	0.103	No				
17.	Compton Ave & Imperial Hwy [2]	Signalized	1.007	F	1.120	F	0.113	Yes	1.069	F	0.062	Yes
18.	Compton Ave & 118th St	Signalized	0.438	A	0.561	A	0.123	No				
19.	Compton Ave & 120th St	Signalized	0.574	A	0.919	E	0.345	Yes				
20.	Compton Ave & 124th St	Signalized	0.378	A	0.428	A	0.050	No				
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.657	B	0.820	D	0.163	Yes				
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.848	D	1.196	F	0.348	Yes	0.824	D	-0.024	No
28.	Wilmington Ave & 118th St	Signalized	0.641	B	1.161	F	0.520	Yes	1.057	F	0.416	Yes
29.	Wilmington Ave & 120th St (West)	Signalized	0.840	D	0.907	E	0.067	Yes				
30.	Wilmington Ave & 120th St (East)	Signalized	0.424	A	0.681	B	0.257	No				
31.	Wilmington Ave & 124th St	Signalized	0.557	A	0.697	B	0.140	No				
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.716	C	0.834	D	0.118	Yes	0.782	C	0.066	Yes
34.	Willowbrook Ave W & 119th Street	Signalized	0.447	A	0.478	A	0.031	No				
35.	Willowbrook Ave E & 119th Street	Signalized	0.375	A	0.388	A	0.013	No				
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.775	C	0.906	E	0.131	Yes	0.807	D	0.032	Yes
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.416	A	0.448	A	0.032	No				
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.447	A	0.473	A	0.026	No				
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.730	C	0.766	C	0.036	No				
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(13.5)	B	(15.4)	C	(1.9)	No				
41.	Mona Blvd & El Segundo Blvd	Signalized	0.512	A	0.544	A	0.032	No				
43.	Alameda St & 103rd St [4]	Signalized	0.790	C	0.812	D	0.022	No				
45.	Alameda St & Imperial Hwy [4]	Signalized	0.772	C	0.829	D	0.057	Yes	0.792	C	0.020	No
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.765	C	0.815	D	0.050	Yes	0.780	C	0.015	No
52.	El Segundo Blvd & San Pedro St	Signalized	0.589	A	0.598	A	0.009	No				

Table 8.1 Existing With Project With Mitigation Conditions - Intersection Level of Service - AM Peak Hour 3/2/2017

Intersection		*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Compton												
13.	Slater Ave & El Segundo Blvd	Signalized	0.687	B	0.710	C	0.023	No				
21.	Compton Ave & El Segundo Blvd	Signalized	0.804	C	0.925	E	0.121	Yes	0.880	D	0.076	Yes
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.854	D	0.927	E	0.073	Yes	0.927	E	0.073	Yes
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.693	B	0.721	C	0.028	No				
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.592	A	0.602	B	0.010	No				
56.	Alameda St & Rosecrans Ave	Signalized	0.606	B	0.634	B	0.028	No				
57.	Cental Ave & W Compton Blvd	Signalized	0.758	C	0.767	C	0.009	No				
58.	Wilmington Ave & W Compton Blvd	Signalized	0.702	B	0.737	C	0.035	No				
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.532	A	0.536	A	0.004	No				
60.	Central Ave & Alondra Blvd	Signalized	0.754	C	0.762	C	0.008	No				
61.	Wilmingtpn Blvd & Alondra Blvd	Signalized	0.825	D	0.861	D	0.036	Yes	0.815	D	-0.010	No
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.797	C	0.829	D	0.032	Yes				
63.	Wilmington Ave & Walnut St	Signalized	0.595	A	0.627	B	0.032	No				
64.	Central Ave & Greenleaf Blvd	Signalized	0.534	A	0.541	A	0.007	No				
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.532	A	0.535	A	0.003	No				
66.	Alameda St & Greenleaf Blvd	Signalized	0.628	B	0.641	B	0.013	No				
City of Lynwood												
44.	Alameda St & Abbott Rd	Signalized	0.660	B	0.673	B	0.013	No				
53.	Imperial Hwy & Fernwood Ave	Signalized	0.732	C	0.756	C	0.024	No				
54.	Imperial Hwy & State St	Signalized	0.738	C	0.764	C	0.026	No				

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

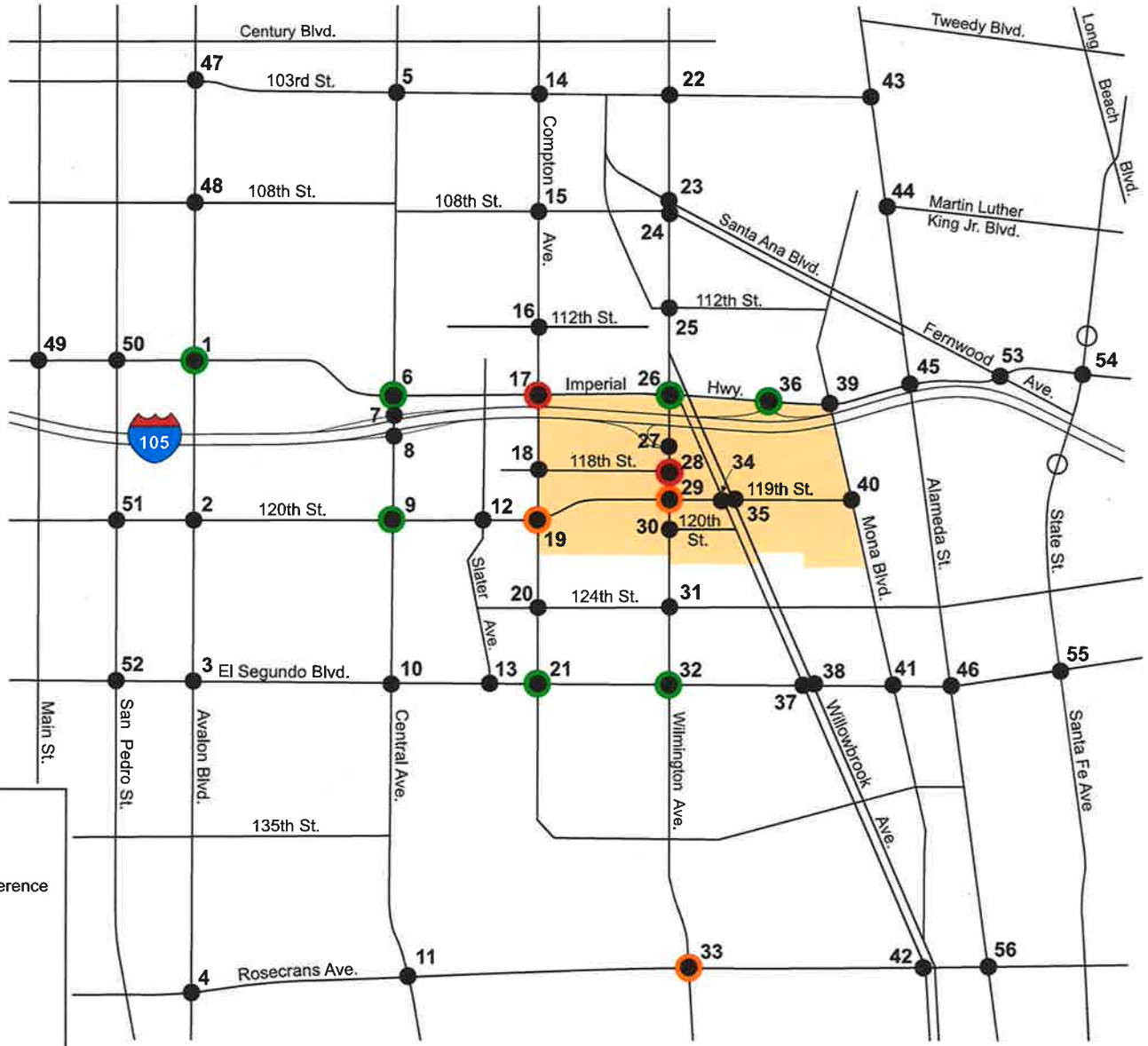
Table 8.1 Existing With Project With Mitigation Conditions - Intersection Level of Service - AM Peak Hour 1/26/2017

Intersection		*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Los Angeles												
1.	Avalon Blvd & Imperial Hwy	Signalized	0.747	C	0.790	C	0.043	Yes				
2.	Avalon Blvd & 120th St	Signalized	0.592	A	0.628	B	0.036	No				
5.	Central Ave & 103rd St	Signalized	0.637	B	0.658	B	0.021	No				
6.	Central Ave & Imperial Hwy	Signalized	0.737	C	0.784	C	0.047	Yes				
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.852	D	0.029	Yes	0.723	C	-0.100	No
8.	Central Ave & I-105 e/b Ramps	Signalized	0.668	B	0.699	B	0.031	No				
9.	Central Ave & 120th St	Signalized	0.753	C	0.881	D	0.128	Yes	0.819	D	0.066	Yes
14.	Compton Ave & 103rd St	Signalized	0.604	B	0.688	B	0.084	No				
15.	Compton Ave & 108th St	Signalized	0.663	B	0.669	B	0.006	No				
16.	Compton Ave & 112th St	Unsignalized [1]	(31.0)	D	(42.5)	E	(11.5)	No				
22.	Wilmington Ave & 103rd St	Signalized	0.660	B	0.669	B	0.009	No				
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.473	A	0.488	A	0.015	No				
24.	Wilmington Ave & 108th St	Signalized	0.593	A	0.621	B	0.028	No				
25.	Wilmington Ave & 112th St	Unsignalized [1]	(44.5)	E	Overflow	F	Overflow	Yes				
47.	Avalon Blvd & 103rd St	Signalized	0.441	A	0.451	A	0.010	No				
48.	Avalon Blvd & 108th St	Signalized	0.564	A	0.578	A	0.014	No				
49.	Imperial Hwy & Main St	Signalized	0.590	A	0.601	B	0.011	No				
50.	Imperial Hwy & San Pedro St	Signalized	0.661	B	0.673	B	0.012	No				
51.	San Pedro St & 120th St	Signalized	0.528	A	0.541	A	0.013	No				
City of Los Angeles & Los Angeles County [2]												
17.	Compton Ave & Imperial Hwy	Signalized	0.898	D	1.018	F	0.120	Yes	0.963	F	0.065	Yes
26.	Wilmington Ave & Imperial Hwy	Signalized	0.501	A	0.670	B	0.169	No				
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.690	B	0.830	D	0.140	Yes	0.726	D	0.036	Yes
39.	Mona Blvd & Imperial Hwy	Signalized	0.601	B	0.639	B	0.038	No				

Note:

[1] Unsignalized intersection show delay/LOS for controlled approach.

[2] Analyzed per City of Los Angeles methodology.



Intersections 1-56

Legend

- Project Location
- X Study Intersection and Reference Number
- ≤ LOS D
- LOS E
- LOS F

1/27/17

Figure 8.1
Existing + Project + Mitigation - AM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

Intersections 57-66

Legend

Project Location

Study Intersection and Reference Number

≤ LOS D

LOS E

LOS F

3/2/17

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Figure 8.1
Existing + Project + Mitigation - AM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
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Table 8.2 Existing With Project With Mitigation Conditions - Intersection Level of Service - PM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
Los Angeles County												
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.844	D	0.877	D	0.033	Yes	0.820	D	-0.024	No
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.804	C	0.815	D	0.011	No				
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.925	E	0.983	E	0.058	Yes	0.908	E	-0.017	No
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.761	C	0.782	C	0.021	No				
12.	Slater Ave & 120th St	Signalized	0.367	A	0.480	A	0.113	No				
17.	Compton Ave & Imperial Hwy [2]	Signalized	0.781	C	0.954	E	0.173	Yes	0.954	E	0.173	Yes
18.	Compton Ave & 118th St	Signalized	0.367	A	0.522	A	0.155	No				
19.	Compton Ave & 120th St	Signalized	0.448	A	0.817	D	0.369	Yes				
20.	Compton Ave & 124th St	Signalized	0.287	A	0.319	A	0.032	No				
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.654	B	0.820	D	0.166	Yes				
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.680	B	0.988	E	0.308	Yes	0.711	C	0.031	No
28.	Wilmington Ave & 118th St	Signalized	0.527	A	1.019	F	0.492	Yes	0.907	E	0.380	Yes
29.	Wilmington Ave & 120th St (West)	Signalized	0.766	C	0.934	E	0.168	Yes				
30.	Wilmington Ave & 120th St (East)	Signalized	0.426	A	0.756	C	0.330	Yes	0.685	B	0.259	No
31.	Wilmington Ave & 124th St	Signalized	0.485	A	0.608	B	0.123	No				
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.793	C	0.923	E	0.130	Yes	0.812	D	0.019	No
34.	Willowbrook Ave W & 119th Street	Signalized	0.436	A	0.486	A	0.050	No				
35.	Willowbrook Ave E & 119th Street	Signalized	0.359	A	0.377	A	0.018	No				
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.792	C	0.918	E	0.126	Yes	0.827	D	0.035	Yes
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.508	A	0.540	A	0.032	No				
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.507	A	0.535	A	0.028	No				
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.825	D	0.875	D	0.050	Yes				
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(17.0)	C	(21.6)	C	(4.6)	No				
41.	Mona Blvd & El Segundo Blvd	Signalized	0.609	B	0.635	B	0.026	No				
43.	Alameda St & 103rd St [4]	Signalized	0.852	D	0.872	D	0.020	Yes	0.760	C	-0.092	No
45.	Alameda St & Imperial Hwy [4]	Signalized	0.799	C	0.818	D	0.019	No				
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.898	D	0.912	E	0.014	No				
52.	El Segundo Blvd & San Pedro St	Signalized	0.601	B	0.612	B	0.011	No				

Table 8.2 Existing With Project With Mitigation Conditions - Intersection Level of Service - PM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Compton												
13.	Slater Ave & El Segundo Blvd	Signalized	0.649	B	0.676	B	0.027	No				
21.	Compton Ave & El Segundo Blvd	Signalized	0.706	C	0.790	C	0.084	Yes	0.758	C	0.052	Yes
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.847	D	0.941	E	0.094	Yes	0.893	D	0.046	Yes
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.719	C	0.748	C	0.029	No				
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.700	B	0.717	C	0.017	No				
56.	Alameda St & Rosecrans Ave	Signalized	0.604	B	0.638	B	0.034	No				
57.	Cental Ave & W Compton Blvd	Signalized	0.802	C	0.813	D	0.011	No				
58.	Wilmington Ave & W Compton Blvd	Signalized	0.844	D	0.893	D	0.049	Yes				
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.453	A	0.456	A	0.003	No				
60.	Central Ave & Alondra Blvd	Signalized	0.888	D	0.898	D	0.010	No				
61.	Wilmingtpn Blvd & Alondra Blvd	Signalized	0.877	D	0.924	E	0.047	Yes	0.924	E	0.047	Yes
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.911	E	0.952	E	0.041	Yes				
63.	Wilmington Ave & Walnut St	Signalized	0.785	C	0.825	D	0.040	Yes	0.742	C	-0.043	No
64.	Central Ave & Greenleaf Blvd	Signalized	0.671	B	0.680	B	0.009	No				
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.526	A	0.530	A	0.004	No				
66.	Alameda St & Greenleaf Blvd	Signalized	0.723	C	0.748	C	0.025	No				
City of Lynwood												
44.	Alameda St & Abbott Rd	Signalized	0.624	B	0.651	B	0.027	No				
53.	Imperial Hwy & Fernwood Ave	Signalized	0.755	C	0.781	C	0.026	No				
54.	Imperial Hwy & State St	Signalized	0.785	C	0.809	D	0.024	Yes	0.771	C	-0.014	No

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

Table 8.2 Existing With Project With Mitigation Conditions - Intersection Level of Service - PM Peak Hour

1/26/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Los Angeles												
1.	Avalon Blvd & Imperial Hwy	Signalized	0.713	C	0.753	C	0.040	Yes				
2.	Avalon Blvd & 120th St	Signalized	0.672	B	0.715	C	0.043	Yes				
5.	Central Ave & 103rd St	Signalized	0.664	B	0.682	B	0.018	No				
6.	Central Ave & Imperial Hwy	Signalized	0.757	C	0.818	D	0.061	Yes				
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.896	D	0.073	Yes	0.709	C	-0.114	No
8.	Central Ave & I-105 e/b Ramps	Signalized	0.635	B	0.654	B	0.019	No				
9.	Central Ave & 120th St	Signalized	0.690	B	0.817	D	0.127	Yes	0.769	C	0.079	Yes
14.	Compton Ave & 103rd St	Signalized	0.587	A	0.604	B	0.017	No				
15.	Compton Ave & 108th St	Signalized	0.527	A	0.573	A	0.046	No				
16.	Compton Ave & 112th St	Unsignalized [1]	(38.5)	E	(56.0)	F	(17.5)	No				
22.	Wilmington Ave & 103rd St	Signalized	0.463	A	0.477	A	0.014	No				
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.441	A	0.469	A	0.028	No				
24.	Wilmington Ave & 108th St	Signalized	0.496	A	0.525	A	0.029	No				
25.	Wilmington Ave & 112th St	Unsignalized [1]	(42.1)	E	Overflow	F	Overflow	Yes				
47.	Avalon Blvd & 103rd St	Signalized	0.475	A	0.491	A	0.016	No				
48.	Avalon Blvd & 108th St	Signalized	0.608	B	0.627	B	0.019	No				
49.	Imperial Hwy & Main St	Signalized	0.632	B	0.651	B	0.019	No				
50.	Imperial Hwy & San Pedro St	Signalized	0.697	B	0.721	C	0.024	No				
51.	San Pedro St & 120th St	Signalized	0.597	A	0.623	B	0.026	No				
City of Los Angeles & Los Angeles County [2]												
17.	Compton Ave & Imperial Hwy	Signalized	0.663	B	0.841	D	0.178	Yes	0.841	D	0.178	Yes
26.	Wilmington Ave & Imperial Hwy	Signalized	0.497	A	0.671	B	0.174	No				
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.710	C	0.847	D	0.137	Yes	0.752	D	0.042	Yes
39.	Mona Blvd & Imperial Hwy	Signalized	0.704	C	0.758	C	0.054	Yes				

Note:

[1] Unsignalized intersection show delay/LOS for controlled approach.

[2] Analyzed per City of Los Angeles methodology.

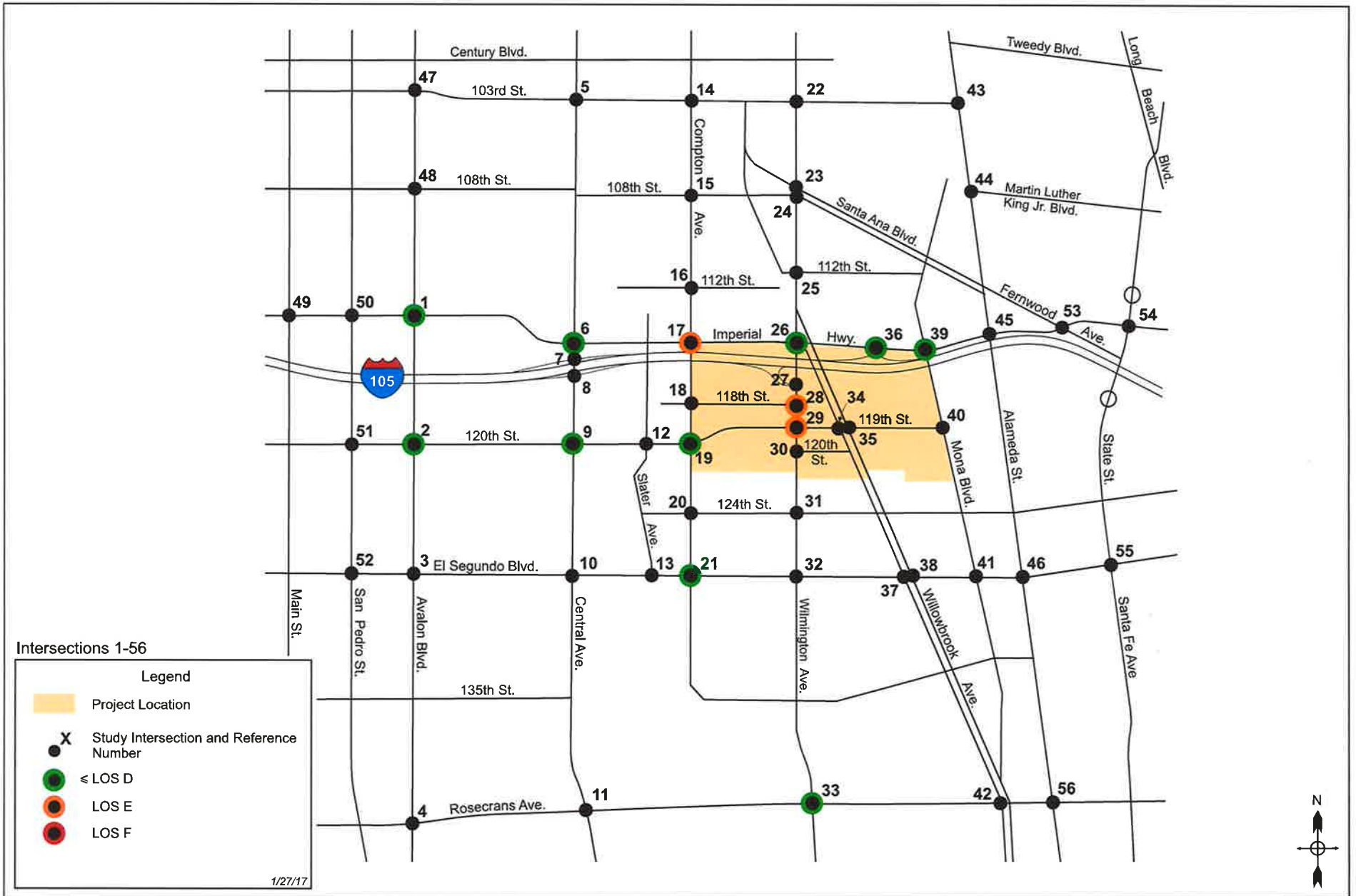

Figure 8.2
Existing + Project + Mitigation - PM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

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Figure 8.2
Existing + Project + Mitigation - PM Peak Hour - Significant Impact Locations

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Table 8.3 Existing With Project With Cumulative With Mitigation Conditions - Intersection Level of Service - AM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project +Cumulative + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
Los Angeles County												
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.726	C	0.757	C	0.031	No				
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.652	B	0.684	B	0.032	No				
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.899	D	0.971	E	0.072	Yes	0.874	D	-0.025	No
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.822	D	0.870	D	0.048	Yes	0.821	D	-0.001	No
12.	Slater Ave & 120th St	Signalized	0.501	A	0.609	B	0.108	No				
17.	Compton Ave & Imperial Hwy [2]	Signalized	1.007	F	1.127	F	0.120	Yes	1.075	F	0.068	Yes
18.	Compton Ave & 118th St	Signalized	0.438	A	0.579	A	0.141	No				
19.	Compton Ave & 120th St	Signalized	0.574	A	0.926	E	0.352	Yes				
20.	Compton Ave & 124th St	Signalized	0.378	A	0.432	A	0.054	No				
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.657	B	0.832	D	0.175	Yes				
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.848	D	1.128	F	0.280	Yes	0.855	D	0.007	No
28.	Wilmington Ave & 118th St	Signalized	0.641	B	1.208	F	0.567	Yes	1.098	F	0.457	Yes
29.	Wilmington Ave & 120th St (West)	Signalized	0.840	D	0.916	E	0.076	Yes				
30.	Wilmington Ave & 120th St (East)	Signalized	0.424	A	0.684	B	0.260	No				
31.	Wilmington Ave & 124th St	Signalized	0.557	A	0.705	C	0.148	No				
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.716	C	0.847	D	0.131	Yes	0.792	C	0.076	Yes
34.	Willowbrook Ave W & 119th Street	Signalized	0.447	A	0.478	A	0.031	No				
35.	Willowbrook Ave E & 119th Street	Signalized	0.375	A	0.388	A	0.013	No				
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.775	C	0.910	E	0.135	Yes	0.811	D	0.036	Yes
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.416	A	0.454	A	0.038	No				
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.447	A	0.479	A	0.032	No				
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.730	C	0.772	C	0.042	Yes				
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(13.5)	B	(15.4)	B	(1.9)	No				
41.	Mona Blvd & El Segundo Blvd	Signalized	0.512	A	0.550	A	0.038	No				
43.	Alameda St & 103rd St [4]	Signalized	0.790	C	0.821	D	0.031	No				
45.	Alameda St & Imperial Hwy [4]	Signalized	0.772	C	0.837	D	0.065	Yes	0.798	C	0.026	No
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.765	C	0.827	D	0.062	Yes	0.793	C	0.028	No
52.	El Segundo Blvd & San Pedro St	Signalized	0.589	A	0.611	B	0.022	No				

Table 8.3 Existing With Project With Cumulative With Mitigation Conditions - Intersection Level of Service - AM Peak Hour

3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project +Cumulative + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Compton												
13.	Slater Ave & El Segundo Blvd	Signalized	0.687	B	0.717	C	0.030	No				
21.	Compton Ave & El Segundo Blvd	Signalized	0.804	C	0.940	E	0.136	Yes	0.895	D	0.091	Yes
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.854	D	0.935	E	0.081	Yes	0.935	E	0.081	Yes
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.693	B	0.727	C	0.034	No				
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.592	A	0.607	B	0.015	No				
56.	Alameda St & Rosecrans Ave	Signalized	0.606	B	0.634	B	0.028	No				
57.	Cental Ave & W Compton Blvd	Signalized	0.758	C	0.774	C	0.016	No				
58.	Wilmington Ave & W Compton Blvd	Signalized	0.702	B	0.738	C	0.036	No				
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.532	A	0.537	A	0.005	No				
60.	Central Ave & Alondra Blvd	Signalized	0.754	C	0.769	C	0.015	No				
61.	Wilmingtpn Blvd & Alondra Blvd	Signalized	0.825	D	0.862	D	0.037	Yes	0.816	D	-0.009	No
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.797	C	0.831	D	0.034	Yes				
63.	Wilmington Ave & Walnut St	Signalized	0.595	A	0.628	B	0.033	No				
64.	Central Ave & Greenleaf Blvd	Signalized	0.534	A	0.548	A	0.014	No				
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.532	A	0.535	A	0.003	No				
66.	Alameda St & Greenleaf Blvd	Signalized	0.628	B	0.641	B	0.013	No				
City of Lynwood												
44.	Alameda St & Abbott Rd	Signalized	0.660	B	0.679	B	0.019	No				
53.	Imperial Hwy & Fernwood Ave	Signalized	0.732	C	0.764	C	0.032	No				
54.	Imperial Hwy & State St	Signalized	0.738	C	0.773	C	0.035	No				

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

Table 8.3 Future With Project With Mitigation Conditions - Intersection Level of Service - AM Peak Hour 1/26/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project +Ambient + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project +Ambient + Cumulative + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Los Angeles												
1.	Avalon Blvd & Imperial Hwy	Signalized	0.747	C	0.856	D	0.043	Yes				
2.	Avalon Blvd & 120th St	Signalized	0.592	A	0.677	B	0.036	No				
5.	Central Ave & 103rd St	Signalized	0.637	B	0.708	C	0.021	No				
6.	Central Ave & Imperial Hwy	Signalized	0.737	C	0.843	D	0.047	Yes				
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.911	E	0.030	Yes	0.769	C	-0.112	No
8.	Central Ave & I-105 e/b Ramps	Signalized	0.668	B	0.755	C	0.031	No				
9.	Central Ave & 120th St	Signalized	0.753	C	0.959	E	0.134	Yes	0.883	D	0.058	Yes
14.	Compton Ave & 103rd St	Signalized	0.604	B	0.662	B	0.019	No				
15.	Compton Ave & 108th St	Signalized	0.663	B	0.732	C	0.025	No				
16.	Compton Ave & 112th St	Unsignalized [1]	(31.0)	D	(61.6)	F	(20.2)	No				
22.	Wilmington Ave & 103rd St	Signalized	0.660	B	0.723	C	0.009	No				
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.473	A	0.517	A	0.014	No				
24.	Wilmington Ave & 108th St	Signalized	0.593	A	0.661	B	0.028	No				
25.	Wilmington Ave & 112th St	Unsignalized [1]	(44.5)	E	Overflow	F	Overflow	Yes				
47.	Avalon Blvd & 103rd St	Signalized	0.441	A	0.479	A	0.010	No				
48.	Avalon Blvd & 108th St	Signalized	0.564	A	0.617	B	0.013	No				
49.	Imperial Hwy & Main St	Signalized	0.590	A	0.643	B	0.011	No				
50.	Imperial Hwy & San Pedro St	Signalized	0.661	B	0.720	C	0.012	No				
51.	San Pedro St & 120th St	Signalized	0.528	A	0.575	A	0.014	No				
City of Los Angeles & Los Angeles County [2]												
17.	Compton Ave & Imperial Hwy	Signalized	0.898	D	1.089	F	0.120	Yes	1.029	F	0.060	Yes
26.	Wilmington Ave & Imperial Hwy	Signalized	0.501	A	0.708	C	0.169	Yes				
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.69	B	0.879	D	0.140	Yes	0.768	C	0.029	No
39.	Mona Blvd & Imperial Hwy	Signalized	0.601	B	0.682	B	0.038	No				

Note:

[1] Unsignalized intersection show delay/LOS for controlled approach.

[2] Analyzed per City of Los Angeles methodology.

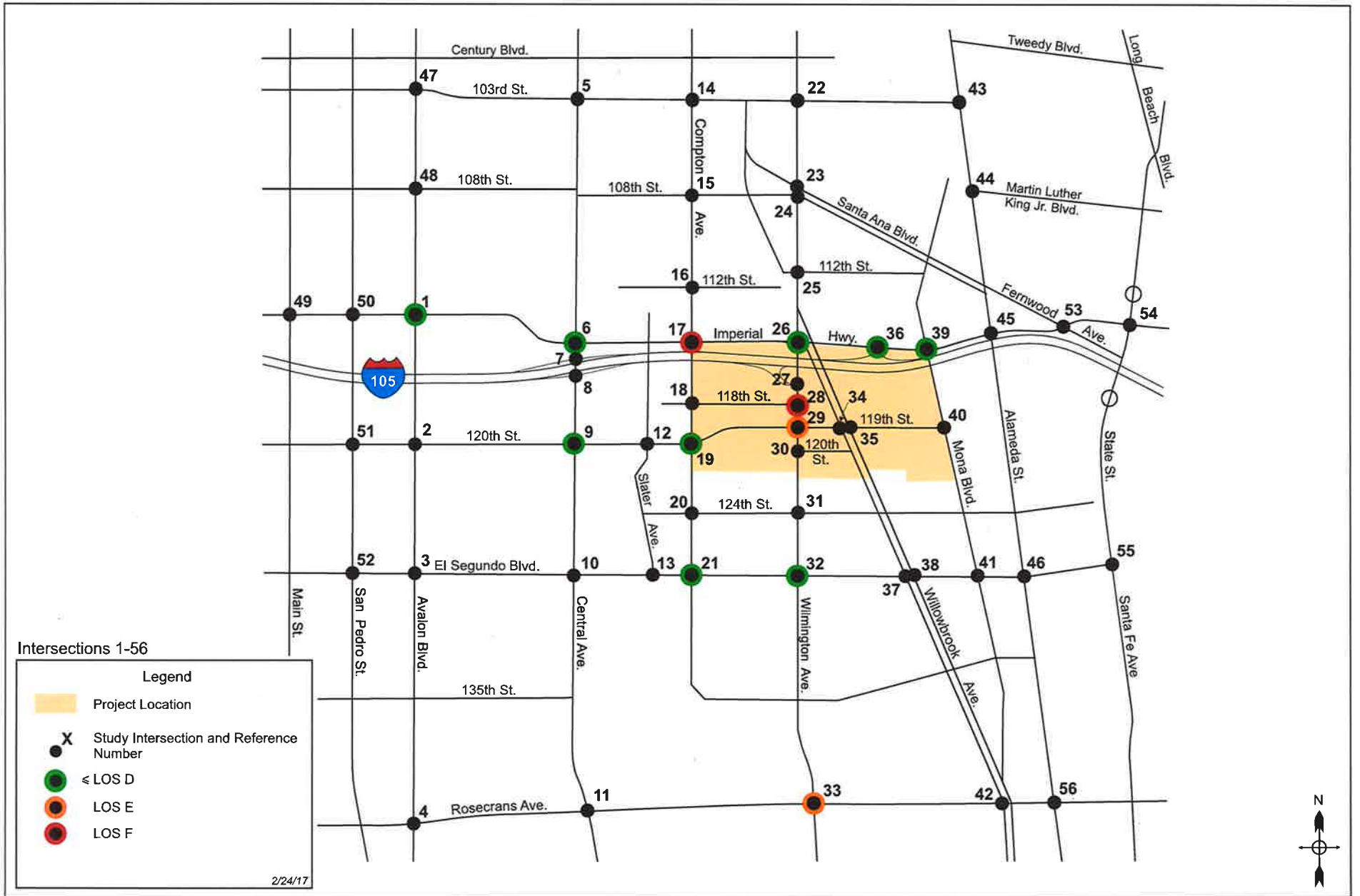

Figure 8.3
Existing + Project + Cumulative + Mitigation - AM Peak Hour - Significant Impact Locations

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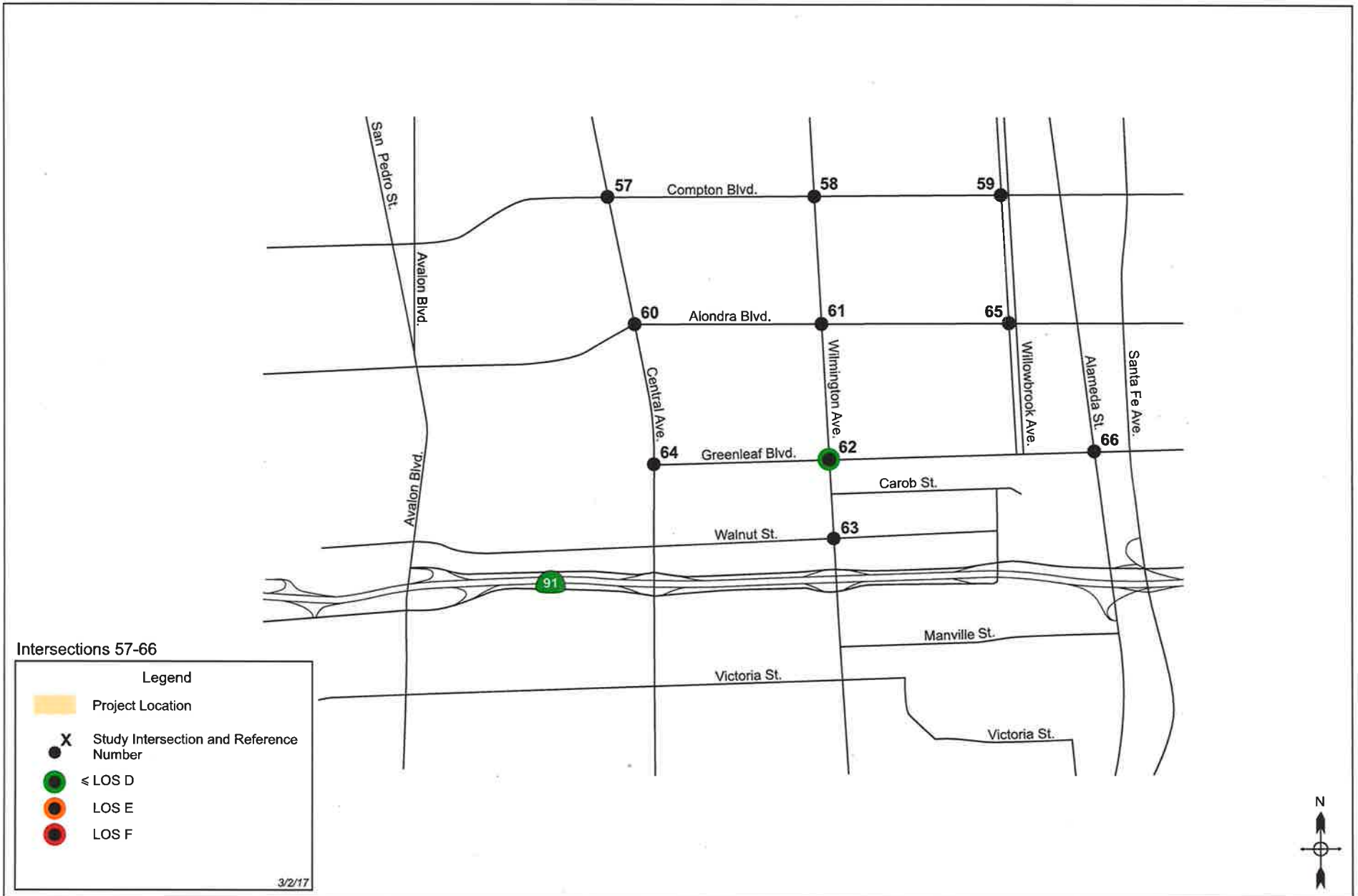

Figure 8.3
Existing + Project + Cumulative + Mitigation - AM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

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Table 8.4 Existing With Project With Cumulative With Mitigation Conditions - Intersection Level of Service - PM Peak Hour 3/2/2017

Intersection		*Intersection Type*	*Existing Conditions*		*Existing + Project + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Cumulative + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
Los Angeles County												
3.	Avalon Blvd & El Segundo Blvd	Signalized	0.844	D	0.957	E	0.113	Yes	0.884	D	0.040	Yes
4.	Avalon Blvd & Rosecrans Ave	Signalized	0.804	C	0.842	D	0.038	No				
10.	Central Ave & El Segundo Blvd [1]	Signalized	0.925	E	1.014	F	0.089	Yes	0.938	E	0.013	Yes
11.	Central Ave & Rosecrans Ave [1]	Signalized	0.761	C	0.816	D	0.055	Yes	0.816	D	0.055	Yes
12.	Slater Ave & 120th St	Signalized	0.367	A	0.494	A	0.127	No				
17.	Compton Ave & Imperial Hwy [2]	Signalized	0.781	C	0.967	E	0.186	Yes	0.967	E	0.186	Yes
18.	Compton Ave & 118th St	Signalized	0.367	A	0.562	A	0.195	No				
19.	Compton Ave & 120th St	Signalized	0.448	A	0.843	D	0.395	Yes				
20.	Compton Ave & 124th St	Signalized	0.287	A	0.324	A	0.037	No				
26.	Wilmington Ave & Imperial Hwy [2]	Signalized	0.654	B	0.840	D	0.186	Yes				
27.	Wilmington Ave & I-105 e/b Ramps	Signalized	0.680	B	1.010	F	0.330	Yes	0.751	C	0.071	Yes
28.	Wilmington Ave & 118th St	Signalized	0.527	A	1.119	F	0.592	Yes	0.981	E	0.454	Yes
29.	Wilmington Ave & 120th St (West)	Signalized	0.766	C	0.956	E	0.190	Yes				
30.	Wilmington Ave & 120th St (East)	Signalized	0.426	A	0.767	C	0.341	Yes	0.697	B	0.271	No
31.	Wilmington Ave & 124th St	Signalized	0.485	A	0.614	B	0.129	No				
32.	Wilmington Ave & El Segundo Blvd [1]	Signalized	0.793	C	0.948	E	0.155	Yes	0.832	D	0.039	Yes
34.	Willowbrook Ave W & 119th Street	Signalized	0.436	A	0.486	A	0.050	No				
35.	Willowbrook Ave E & 119th Street	Signalized	0.359	A	0.377	A	0.018	No				
36.	Imperial Hwy & I-105 w/b Ramps [2]	Signalized	0.792	C	0.928	E	0.136	Yes	0.837	D	0.045	Yes
37.	Willowbrook Ave W & El Segundo Blvd	Signalized	0.508	A	0.551	A	0.043	No				
38.	Willowbrook Ave E & El Segundo Blvd	Signalized	0.507	A	0.546	A	0.039	No				
39.	Mona Blvd & Imperial Hwy [3]	Signalized	0.825	D	0.885	D	0.060	Yes				
40.	Mona Blvd & 119th St [4]	Unsignalized [5]	(17.0)	C	(21.6)	C	(4.6)	No				
41.	Mona Blvd & El Segundo Blvd	Signalized	0.609	B	0.646	B	0.037	No				
43.	Alameda St & 103rd St [4]	Signalized	0.852	D	0.884	D	0.032	Yes	0.769	C	-0.083	No
45.	Alameda St & Imperial Hwy [4]	Signalized	0.799	C	0.828	D	0.029	No				
46.	Alameda St & El Segundo Blvd [1]	Signalized	0.898	D	0.931	E	0.033	Yes	0.922	E	0.024	Yes
52.	El Segundo Blvd & San Pedro St	Signalized	0.601	B	0.646	B	0.045	No				

Table 8.4 Existing With Project With Cumulative With Mitigation Conditions - Intersection Level of Service - PM Peak Hour 3/2/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project + Cumulative + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Compton												
13.	Slater Ave & El Segundo Blvd	Signalized	0.649	B	0.690	B	0.041	No				
21.	Compton Ave & El Segundo Blvd	Signalized	0.706	C	0.812	D	0.106	Yes	0.779	C	0.073	Yes
33.	Wilmington Ave & Rosecrans Ave	Signalized	0.847	D	0.962	E	0.115	Yes	0.914	E	0.067	Yes
42.	Willowbrook Ave & Rosecrans Ave	Signalized	0.719	C	0.760	C	0.041	Yes				
55.	El Segundo Blvd & Santa Fe Ave [4]	Signalized	0.700	B	0.735	C	0.035	No				
56.	Alameda St & Rosecrans Ave	Signalized	0.604	B	0.641	B	0.037	No				
57.	Cental Ave & W Compton Blvd	Signalized	0.802	C	0.836	D	0.034	Yes	0.800	C	-0.002	No
58.	Wilmington Ave & W Compton Blvd	Signalized	0.844	D	0.897	D	0.053	Yes				
59.	Willowbrook Ave & W Compton Blvd	Signalized	0.453	A	0.457	A	0.004	No				
60.	Central Ave & Alondra Blvd	Signalized	0.888	D	0.918	E	0.030	Yes	0.872	D	-0.016	No
61.	Wilmingtpn Blvd & Alondra Blvd	Signalized	0.877	D	0.928	E	0.051	Yes	0.928	E	0.051	Yes
62.	Wilmington Ave & Greenleaf Blvd	Signalized	0.911	E	0.956	E	0.045	Yes				
63.	Wilmington Ave & Walnut St	Signalized	0.785	C	0.829	D	0.044	Yes	0.745	C	-0.040	No
64.	Central Ave & Greenleaf Blvd	Signalized	0.671	B	0.701	B	0.030	No				
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.526	A	0.530	A	0.004	No				
66.	Alameda St & Greenleaf Blvd	Signalized	0.723	C	0.751	C	0.028	No				
City of Lynwood												
44.	Alameda St & Abbott Rd	Signalized	0.624	B	0.657	B	0.033	No				
53.	Imperial Hwy & Fernwood Ave	Signalized	0.755	C	0.794	C	0.039	No				
54.	Imperial Hwy & State St	Signalized	0.785	C	0.823	D	0.038	Yes	0.785	C	0.000	No

Note:

[1] Shares jurisdiction with City of Compton.

[2] Shares jurisdiction with City of Los Angeles.

[3] Shares jurisdiction with City of Los Angeles & City of Lynwood.

[4] Shares jurisdiction with City of Lynwood.

[5] Unsignalized intersection show delay/LOS for controlled approach.

Table 8.4 Future With Project With Mitigation Conditions - Intersection Level of Service - PM Peak Hour 1/26/2017

	Intersection	*Intersection Type*	*Existing Conditions*		*Existing + Project +Ambient + Cumulative Conditions*		*Change in V/C (Delay)*	*Significant Impact*	*Existing + Project +Ambient + Cumulative + Mitigation Conditions*		*Change in V/C*	*Significant Impact*
			V/C or (Delay)	LOS	V/C or (Delay)	LOS			V/C or (Delay)	LOS		
City of Los Angeles												
1.	Avalon Blvd & Imperial Hwy	Signalized	0.713	C	0.827	D	0.040	Yes				
2.	Avalon Blvd & 120th St	Signalized	0.672	B	0.787	C	0.043	Yes				
5.	Central Ave & 103rd St	Signalized	0.664	B	0.743	C	0.018	No				
6.	Central Ave & Imperial Hwy	Signalized	0.757	C	0.893	D	0.062	Yes				
7.	Central Ave & I-105 w/b Ramps	Signalized	0.823	D	0.967	E	0.073	Yes	0.787	C	-0.107	No
8.	Central Ave & I-105 e/b Ramps	Signalized	0.635	B	0.735	C	0.019	No				
9.	Central Ave & 120th St	Signalized	0.690	B	0.935	E	0.110	Yes	0.903	E	0.078	Yes
14.	Compton Ave & 103rd St	Signalized	0.587	A	0.643	B	0.018	No				
15.	Compton Ave & 108th St	Signalized	0.527	A	0.605	B	0.046	No				
16.	Compton Ave & 112th St	Unsignalized [1]	(38.5)	E	(84.1)	F	(32.6)	No				
22.	Wilmington Ave & 103rd St	Signalized	0.463	A	0.527	A	0.014	No				
23.	Wilmington Ave & Santa Ana Blvd N	Signalized	0.441	A	0.504	A	0.027	No				
24.	Wilmington Ave & 108th St	Signalized	0.496	A	0.567	A	0.029	No				
25.	Wilmington Ave & 112th St	Unsignalized [1]	(42.1)	E	Overflow	F	Overflow	Yes				
47.	Avalon Blvd & 103rd St	Signalized	0.475	A	0.528	A	0.017	No				
48.	Avalon Blvd & 108th St	Signalized	0.608	B	0.677	B	0.020	No				
49.	Imperial Hwy & Main St	Signalized	0.632	B	0.710	C	0.019	No				
50.	Imperial Hwy & San Pedro St	Signalized	0.697	B	0.776	C	0.024	No				
51.	San Pedro St & 120th St	Signalized	0.597	A	0.672	B	0.025	No				
City of Los Angeles & Los Angeles County [2]												
17.	Compton Ave & Imperial Hwy	Signalized	0.663	B	0.893	D	0.179	Yes	0.893	D	0.179	Yes
26.	Wilmington Ave & Imperial Hwy	Signalized	0.497	A	0.718	C	0.175	Yes				
36.	Imperial Hwy & I-105 w/b Ramps	Signalized	0.71	C	0.904	E	0.137	Yes	0.803	D	0.036	Yes
39.	Mona Blvd & Imperial Hwy	Signalized	0.704	C	0.814	D	0.054	Yes				

Note:

[1] Unsignalized intersection show delay/LOS for controlled approach.

[2] Analyzed per City of Los Angeles methodology.

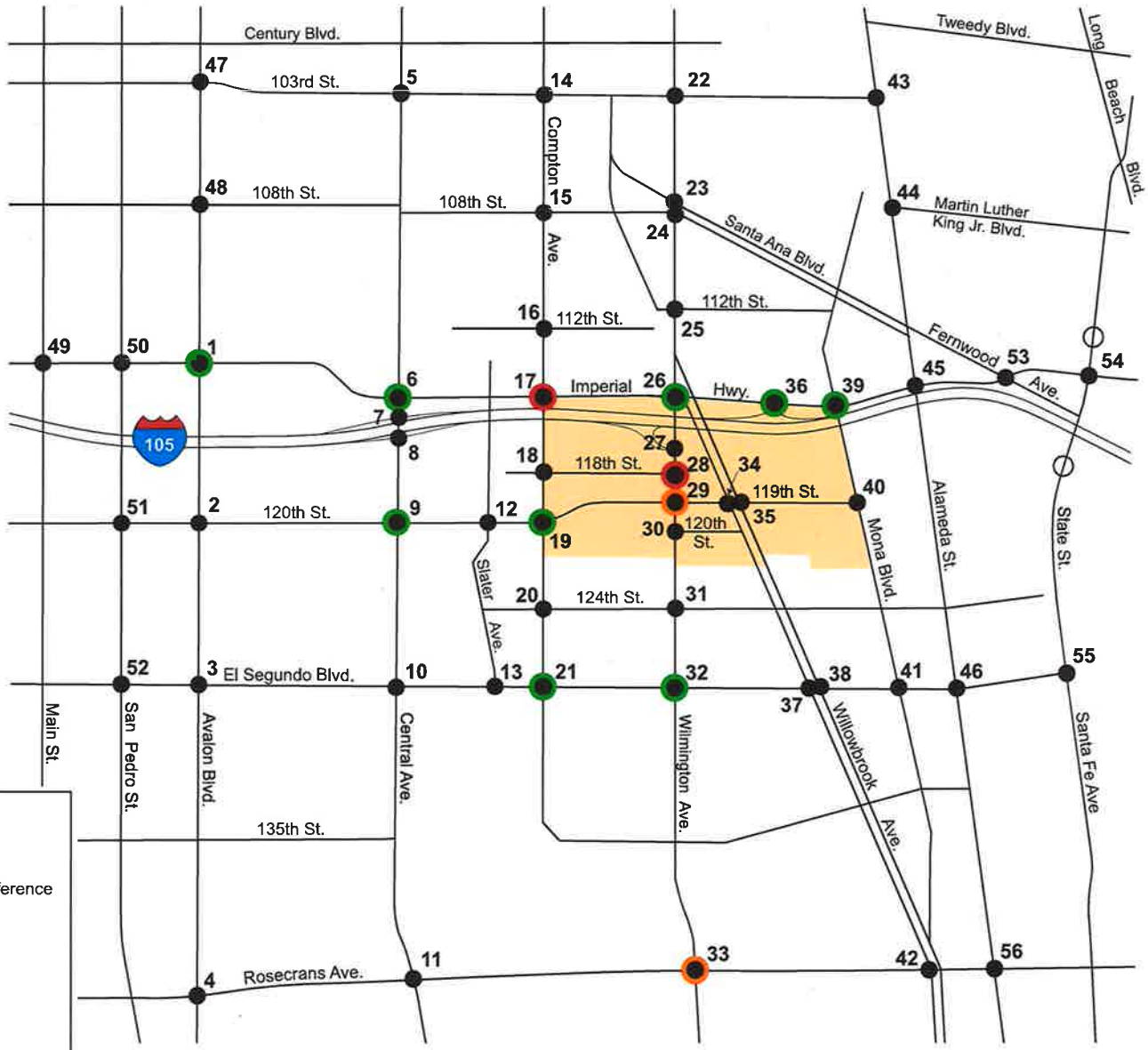


Figure 8.3
Existing + Project + Cumulative + Mitigation - AM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

Intersections 57-66

Legend

- Project Location
- X Study Intersection and Reference Number
- ≤ LOS D
- LOS E
- LOS F

2/24/17

N

Figure 8.4
Existing + Project + Cumulative + Mitigation - PM Peak Hour - Significant Impact Locations

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

Appendix A

Trip Generation Information

Table A-1. Willowbrook TOD Specific Plan EIR Traffic Study
Trip Generation - Trip Rates by Land Use - AM & PM

Land Use	ITE Code	Trip Rate	
		AM	PM
Single Family Housing (DU's)	ITE 210	0.75	1.00
Multi-Family Housing (DU's)	ITE 220	0.51	0.62
Senior Housing (DU's)	ITE 252	0.20	0.25
Clinic	ITE 630	3.60	5.18
Library	ITE 590	1.04	7.30
General Office (sf)	ITE 710	1.56	1.49
Business Park (sf)	ITE 770	1.40	1.26
Medical Office (sf)	ITE 720	2.39	3.57
R & D Office (sf)	ITE 760	1.22	1.07
Restaurant-High Turnover (sf)	ITE 932	10.81	9.85
Restaurant-Fast Food (sf)	ITE 934	45.42	32.65
Grocery (sf)	ITE 820	0.96	3.71
Retail (sf)	ITE 820	0.96	3.71
Elementary School (sf)	ITE 520	5.20	1.21
Shopping Center (sf)	ITE 820	0.96	3.71
Church (sf)	ITE 560	0.56	0.55
Open Space (sf)	ITE 412	0.02	0.09
Light Industrial (sf)	ITE 110	0.92	0.97
Children Care (sf)	ITE 565	12.18	12.34
University (Students)	ITE 550	0.17	0.17

Table A-2. Willowbrook TOD Specific Plan EIR Traffic Study
Trip Generation - Internal % Adjustments

Zone #	Internal %		
	Residential Uses	Commercial Uses	Institutional Uses
2	10%	15%	5%
3	10%	15%	5%
4	10%	5%	5%
5		5%	5%
6		5%	5%
7		5%	5%
8		5%	5%
9		5%	5%
10		5%	5%
11		5%	5%
12		5%	5%
13		5%	5%
14		5%	5%
1 (MLK Hospital)	15%	15%	15%
2C (CDU)	50%		

Table A-3. Willowbrook TOD Specific Plan EIR Traffic Study
Trip Generation - Transit % Adjustments

Distance from the Willowbrook/Rosa Parks Station	Zone #	Transit %	
		Residential Uses	Commercial & Institutional Uses
Station Adjacent	4A/4B	25%	15%
< 1/4 mile	2A, 2B, 3A, 3B, 4A, 4B, 5, 9, 10, 11, 12	25%	15% for Mixed-Use 1, 25% for Mixed-Use 2, 15% for Imperial Commercial
< 1/2 mile	3C, 3D, 3E, 3F, 3G, 6, 7, 8, 13	15%	10% for Mixed-Use 1, 15% for Mixed-Use 2, 10% for Imperial Commercial
MLK Hospital	1	15%	15%
CDU	2C	15%	15%

Table A-4 Willowbrook TOD Specific Plan - Trip Generation - AM Peak

Land Uses					Existing Trip Generations									Future Trip Generations								Net Trip Generations			
Group	Land Use	Existing	Future	Net Change	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Net Vehicle Trips	Total Trips
1	Single-Family Housing (DU's)	0	100	100	Single-Family Housing (DU's)	0									Single-Family Housing (DU's)	100									Single-Family Housing (DU's)	100	58	
1	Retail / Medical Office (sf)				Retail / Medical Office (sf)										Retail / Medical Office (sf)										Retail / Medical Office (sf)			
1	Hospital / General Office (sf)				Hospital / General Office (sf)										Hospital / General Office (sf)										Hospital / General Office (sf)			
1	Residential Subtotal	0	100	100	Residential Subtotal	0									Residential Subtotal	100									Residential Subtotal	100	58	
1	Non-Residentail Subtotal	890,891	2,139,413	1,248,522	Non-Residentail Subtotal	890,891									Non-Residentail Subtotal	2,139,413									Non-Residentail Subtotal	1,248,522	1,231	
2A	Multi-Family Housing (DU's)	0	105	105	Multi-Family Housing (DU's)	0	0.51	ITE 220	0	10%	25%		0	0.00	Multi-Family Housing (DU's)	105	0.51		54	10%	25%		36	0.35	Multi-Family Housing (DU's)	105	36	
2A	Clinic (sf)	33,000	33,381	381	Clinic (sf)	33,000	3.60	ITE 630	119	0%	25%	0%	89	0.00	Clinic (sf)	33,381	3.60		120	0%	25%	0%	90	0.00	Clinic (sf)	381	1	
2A	Residential Subtotal	0	105	105	Residential Subtotal	0			0				0		Residential Subtotal	105			54				36		Residential Subtotal	105	36	
2A	Non-Residentail Subtotal	33,000	33,381	381	Non-Residentail Subtotal	33,000			119				89		Non-Residentail Subtotal	33,381			120				90		Non-Residentail Subtotal	381	1	
2B	Multi-Family Housing (DU's)	0	117	117	Multi-Family Housing (DU's)	0	0.51	ITE 220	0	10%	25%		0	0.00	Multi-Family Housing (DU's)	117	0.51		60	10%	25%		41	0.35	Multi-Family Housing (DU's)	117	41	
2B	Fire Station (sf)	4,110	6,325	2,215	Fire Station (sf)	4,110				0%	0%	0%	0	0.00	Fire Station (sf)	6,325				0%	0%	0%	0		Fire Station (sf)	2,215	0	
2B	Clinic (sf)	1,850	5,205	3,355	Clinic (sf)	1,850	3.60	ITE 630	7	0%	25%	0%	5	0.00	Clinic (sf)	5,205	3.60		19	0%	25%	0%	14	0.00	Clinic (sf)	3,355	9	
2B	Hospital (sf)	0	1,118	1,118	Hospital (sf)	0									Hospital (sf)	1,118									Hospital (sf)	1,118		
2B	Parking (sf)	0	24,316	24,316	Parking (sf)	0									Parking (sf)	24,316									Parking (sf)	24,316		
2B	Residential Subtotal	0	117	117	Residential Subtotal	0			0				0		Residential Subtotal	117			60				41		Residential Subtotal	117	41	
2B	Non-Residentail Subtotal	5,960	36,964	31,004	Non-Residentail Subtotal	5,960			7				5		Non-Residentail Subtotal	36,964			19				14		Non-Residentail Subtotal	31,004	9	
2C	Multi-Family Housing (DU's)	49	119	70	Multi-Family Housing (DU's)	49	0.51	ITE 220	25		15%		21	0.43	Multi-Family Housing (DU's)	119	0.51		61	50%	15%		26	0.22	Multi-Family Housing (DU's)	70	5	
2C	Institute	477,842	772,990	295,148	Institute	477,842			0		0%		0	0.00	Institute	772,990			0		0%		0	0.00	Institute	295,148	0	
2C	University	625	1,450	825	University	625	0.17	ITE 550	106		15%		90	0.14	University	1,450	0.17		247		15%		210	0.14	University	825	120	
2C	Institute			0	Institute				0		0%		0	0.00	Institute				0		0%		0		Institute	0	0	
2C	Residential Subtotal	49	119	70	Residential Subtotal	49			25				21		Residential Subtotal	119			61				26		Residential Subtotal	70	5	
2C	Non-Residentail Subtotal	477,842	772,990	295,148	Non-Residentail Subtotal	477,842			106				90		Non-Residentail Subtotal	772,990			247				210		Non-Residentail Subtotal	295,148	120	
2	Residential Subtotal	49	341	292	Residential Subtotal	49			25				21		Residential Subtotal	341			175				103		Residential Subtotal	292	82	
	Non-Residentail Subtotal	516,802	843,335	326,533	Non-Residentail Subtotal	516,802			232				185		Non-Residentail Subtotal	843,335			386				314		Non-Residentail Subtotal	326,533	130	
3A	Senior Housing (DU's)	0	105	105	Senior Housing (DU's)	0	0.20	ITE 252	0	10%	25%	0%	0	0.00	Senior Housing (DU's)	105	0.20		21	10%	25%	0%	14	0.14	Senior Housing (DU's)	105	14	
3A	Library (sf)	0	8,939	8,939	Library (sf)	0	1.04	ITE 590		0%	25%	0%	0	0.00	Library (sf)	8,939	1.04		9	0%	25%	0%	7		Library (sf)	8,939	7	
3A	Residential Subtotal	0	105	105	Residential Subtotal	0			0				0		Residential Subtotal	105			21				14		Residential Subtotal	105	14	
3A	Non-Residentail Subtotal	0	8,939	8,939	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	8,939			9				7		Non-Residentail Subtotal	8,939	7	
3B	Single Family Housing (DU's)	19	0	-19	Single Family Housing (DU's)	19	0.75	ITE 210	14	10%	25%	0%	10	0.51	Single Family Housing (DU's)	0	0.75		0	10%	25%	0%	0	0.00	Single Family Housing (DU's)	-19	-10	
3B	Multi-Family Housing (DU's)		83	83	Multi-Family Housing (DU's)		0.51	ITE 220	0	10%	25%		0	0.00	Multi-Family Housing (DU's)	83	0.51		42	10%	25%		28	0.34	Multi-Family Housing (DU's)	83	28	
3B	General Office (sf)		31,276	31,276	General Office (sf)		1.56	ITE 710	0		25%		0	0.00	General Office (sf)	31,276	1.56		49	5%	25%		35	1.12	General Office (sf)	31,276	35	
3B	Business Park (sf)		14,216	14,216	Business Park (sf)		1.40	ITE 770	0		25%		0	0.00	Business Park (sf)	14,216	1.40		20	5%	25%		14	1.00	Business Park (sf)	14,216	14	
3B	Medical Office (sf)		2,843	2,843	Medical Office (sf)		2.39	ITE 720	0		25%	10%	0	0.00	Medical Office (sf)	2,843	2.39		7	5%	25%	10%	4	1.58	Medical Office (sf)	2,843	4	
3B	R & D Office (sf)		6,824	6,824	R & D Office (sf)		1.22	ITE 760	0		25%		0	0.00	R & D Office (sf)	6,824	1.22		8	5%	25%		6	0.84	R & D Office (sf)	6,824	6	
3B	Restaurant-High Turnover (sf)		569	569	Restaurant-High Turnover (sf)		10.81	ITE 932	0		25%	20%	0	0.00	Restaurant-High Turnover (sf)	569	10.81		6	5%	25%	20%	3	6.01	Restaurant-High Turnover (sf)	569	3	
3B	Retail (sf)		1,137	1,137	Retail (sf)		0.96	ITE 820	0		25%	50%	0	0.00	Retail (sf)	1,137	0.96		1	5%	25%	50%	0	0.31	Retail (sf)	1,137	0	
3B	Residential Subtotal	19	83	64	Residential Subtotal	19			14				10		Residential Subtotal	83			42				28		Residential Subtotal	64	19	
3B	Non-Residentail Subtotal	0	56,865	56,865	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	56,865			91				63		Non-Residentail Subtotal	56,865	63	
3C	Single Family Housing (DU's)	7	0	-7	Single Family Housing (DU's)	7	0.75	ITE 210	5	10%	15%	0%	4	0.57	Single Family Housing (DU's)	0	0.75		0	10%	15%	0%	0	0.00	Single Family Housing (DU's)	-7	-4	
3C	Multi-Family Housing (DU's)	23	255	232	Multi-Family Housing (DU's)	23	0.51	ITE 220	12	10%	15%		9	0.40	Multi-Family Housing (DU's)	255	0.51		130	10%	15%		99	0.39	Multi-Family Housing (DU's)	232	90	
3C	Pump Station (sf)	8,408		-8,408	Pump Station (sf)	8,408			0		0%		0	0.00	Pump Station (sf)				0		0%		0	0.00	Pump Station (sf)	-8,408	0	
3C	General Office (sf)	8,408	95,186	86,778	General Office (sf)	8,408	1.56	ITE 710	13	5%	15%		10	1.25	General Office (sf)	95,186	1.56		148	5%	15%		120	1.26	General Office (sf)	86,778	109	
3C	Business Park (sf)		43,266	43,266	Business Park (sf)		1.40	ITE 770	0		15%		0	0.00	Business Park (sf)	43,266	1.40		61	5%	15%		49	1.14	Business Park (sf)	43,266	49	
3C	Medical Office (sf)		8,653	8,653	Medical Office (sf)		2.39	ITE 720	0		15%	10%	0	0.00	Medical Office (sf)	8,653	2.39		21	5%	15%	10%	15	1.76	Medical Office (sf)	8,653	15	
3C	R & D Office (sf)		20,768	20,768	R & D Office (sf)		1.22	ITE 760	0		15%		0	0.00	R & D Office (sf)	20,768	1.22		25	5%	15%		20	0.97	R & D Office (sf)	20,768	20	
3C	Restaurant-High Turnover (sf)		1,731	1,731	Restaurant-High Turnover (sf)		10.81	ITE 932	0		15%	20%	0	0.00	Restaurant-High Turnover (sf)	1,731	10.81		19	5%	15%	20%	12	7.09	Restaurant-High Turnover (sf)	1,731	12	
3C	Retail (sf)		3,461	3,461	Retail (sf)		0.96	ITE 820	0		15%	50%	0	0.00	Retail (sf)	3,461	0.96		3	5%	15%	50%	1	0.35	Retail (sf)	3,461	1	
3C	Residential Subtotal	30	255	225	Residential Subtotal	30			17				13		Residential Subtotal	255			130				99		Residential Subtotal	225	86	
3C	Non-Residentail Subtotal	16,816	173,065	156,249	Non-Residentail Subtotal	16,816			13				10		Non-Residentail Subtotal	173,065			277				218		Non-Residentail Subtotal	156,249	207	
3D	Parking (sf)	150,000	351,610	201,610	Parking (sf)	150,000			0		0%		0	0.00	Parking (sf)	351,610			0		0%		0	0.00	Parking (sf)	201,610	0	
3D	Residential Subtotal	0	0	0	Residential Subtotal	0			0				0		Residential Subtotal	0			0				0		Residential Subtotal	0	0	
3D	Non-Residentail Subtotal	150,000	351,610	201,610	Non-Residentail Subtotal	150,000			0				0		Non-Residentail Subtotal	351,610			0				0		Non-Residentail Subtotal	201,610	0	
3E	Elementary School (sf)	86,684	86,684	0	Elementary School (sf)	86,684	5.20	ITE 520	451		15%		383	4.42	Elementary School (sf)	86,684	5.20		451		15%		383	4.42	Elementary School (sf)	0	0	
3E	Multi-Family Housing (DU's)		553	553	Multi-Family Housing (DU's)		0.51	ITE 220	0	10%	15%		0	0.00	Multi-Family Housing (DU's)	553	0.51		282	10%	15%		216	0.39	Multi-Family Housing (DU's)	553	216	
3E	General Office (sf)		158,812	158,812	General Office (sf)		1.56	ITE 710	0		15%		0	0.00	General Office (sf)	158,812	1.56		248	5%	15%		200	1.26	General Office (sf)	158,812	200	
3E	Business Park (sf)		72,187	72,187	Business Park (sf)		1.40	ITE 770	0		15%		0	0.00	Business Park (sf)	72,187	1.40		101	5%	15%		82	1.13	Business Park (sf)	72,187	82	
3E	Medical Office (sf)		14,437	14,437	Medical Office (sf)		2.39	ITE 720	0		15%	10%	0	0.00	Medical Office (sf)	14,437	2.39		35	5%	15%	10%	25	1.76	Medical Office (sf)	14,437	25	
3E	R & D Office (sf)		34,650	34,650	R & D Office (sf)		1.22	ITE 760	0		15%		0	0.00	R & D Office (sf)	34,650	1.22		42	5%	15%		34	0.98	R & D Office (sf)	34,650	34	
3E	Restaurant-High Turnover (sf)		2,888	2,888	Restaurant-High Turnover (sf)		10.81	ITE 932	0		15%	20%	0	0.00	Restaurant-High Turnover (sf)	2,888	10.81		31	5%	15%	20%	20	6.93	Restaurant-High Turnover (sf)	2,888	20	
3E	Retail (sf)		5,775	5,775	Retail (sf)		0.96	ITE 820	0		15%	50%	0	0.00	Retail (sf)	5,775	0.96		6	5%	15%	50%	2	0.42	Retail (sf)	5,775	2	
3E	Residential Subtotal	0	553	553	Residential Subtotal	0			0				0		Residential Subtotal	553			282				216		Residential Subtotal	553	216	
3E	Non-Residentail Subtotal	86,684	375,433	288,749	Non-Residentail Subtotal	86,684			451				383		Non-Residentail Subtotal	375,433			914				747		Non-Residentail Subtotal	288,749	364	

Table A-4 Willowbrook TOD Specific Plan - Trip Generation - AM Peak

Land Uses					Existing Trip Generations										Future Trip Generations										Net Trip Generations			
Group	Land Use	Existing	Future	Net Change	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Net Vehicle Trips	Total Trips
3F	Multi-Family Housing (DU's)	4	145	141	Multi-Family Housing (DU's)	4	0.51	ITE 220	2	10%	15%		2	0.38	Multi-Family Housing (DU's)	145	0.51		74	10%	15%		57	0.39	Multi-Family Housing (DU's)	141	55	
3F	General Office (sf)		54,172	54,172	General Office (sf)		1.56	ITE 710	0		15%		0	0.00	General Office (sf)	54,172	1.56		85	5%	15%		69	1.27	General Office (sf)	54,172	69	
3F	Business Park (sf)		24,624	24,624	Business Park (sf)		1.40	ITE 770	0		15%		0	0.00	Business Park (sf)	24,624	1.40		34	5%	15%		27	1.11	Business Park (sf)	24,624	27	
3F	Medical Office (sf)		4,925	4,925	Medical Office (sf)		2.39	ITE 720	0		15%	10%	0	0.00	Medical Office (sf)	4,925	2.39		12	5%	15%	10%	9	1.77	Medical Office (sf)	4,925	9	
3F	R & D Office (sf)		11,819	11,819	R & D Office (sf)		1.22	ITE 760	0		15%		0	0.00	R & D Office (sf)	11,819	1.22		14	5%	15%		11	0.96	R & D Office (sf)	11,819	11	
3F	Restaurant-High Turnover (sf)		984	984	Restaurant-High Turnover (sf)		10.81	ITE 932	0		15%	20%	0	0.00	Restaurant-High Turnover (sf)	984	10.81		11	5%	15%	20%	7	7.22	Restaurant-High Turnover (sf)	984	7	
3F	Retail (sf)		1,970	1,970	Retail (sf)		0.96	ITE 820	0		15%	50%	0	0.00	Retail (sf)	1,970	0.96		2	5%	15%	50%	1	0.41	Retail (sf)	1,970	1	
3F	Residential Subtotal	4	145	141	Residential Subtotal	4			2				2		Residential Subtotal	145			74				57		Residential Subtotal	141	55	
3F	Non-Residentail Subtotal	0	98,494	98,494	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	98,494			158				124		Non-Residentail Subtotal	98,494	124	
3G	Single Family Housing (DU's)	19	0	-19	Single Family Housing (DU's)	19	0.75	ITE 210	14	10%	15%	0%	11	0.57	Single Family Housing (DU's)	0	0.75		0	10%	15%	0%	0	0.00	Single Family Housing (DU's)	-19	-11	
3G	Multi-Family Housing (DU's)	5	134	129	Multi-Family Housing (DU's)	5	0.51	ITE 220	3	10%	15%		2	0.46	Multi-Family Housing (DU's)	134	0.51		68	10%	15%		52	0.39	Multi-Family Housing (DU's)	129	50	
3G	General Office (sf)		50,255	50,255	General Office (sf)		1.56	ITE 710	0		15%		0	0.00	General Office (sf)	50,255	1.56		78	5%	15%		63	1.25	General Office (sf)	50,255	63	
3G	Business Park (sf)		22,843	22,843	Business Park (sf)		1.40	ITE 770	0		15%		0	0.00	Business Park (sf)	22,843	1.40		32	5%	15%		26	1.13	Business Park (sf)	22,843	26	
3G	Medical Office (sf)		4,569	4,569	Medical Office (sf)		2.39	ITE 720	0		15%	10%	0	0.00	Medical Office (sf)	4,569	2.39		11	5%	15%	10%	8	1.75	Medical Office (sf)	4,569	8	
3G	R & D Office (sf)		10,965	10,965	R & D Office (sf)		1.22	ITE 760	0		15%		0	0.00	R & D Office (sf)	10,965	1.22		13	5%	15%		10	0.96	R & D Office (sf)	10,965	10	
3G	Restaurant-High Turnover (sf)		914	914	Restaurant-High Turnover (sf)		10.81	ITE 932	0		15%	20%	0	0.00	Restaurant-High Turnover (sf)	914	10.81		10	5%	15%	20%	6	7.07	Restaurant-High Turnover (sf)	914	6	
3G	Retail (sf)		1,827	1,827	Retail (sf)		0.96	ITE 820	0		15%	50%			Retail (sf)	1,827	0.96		2	5%	15%	50%	1	0.44	Retail (sf)	1,827	1	
3G	Grocery (sf)	3,359		-3,359	Grocery (sf)	3,359	0.96	ITE 820	3	5%	15%	40%	1	0.43	Grocery (sf)		0.96		0	5%	15%	40%	0	0.00	Grocery (sf)	-3,359	-1	
3G	Residential Subtotal	24	134	110	Residential Subtotal	24			17				13		Residential Subtotal	134			68				52		Residential Subtotal	110	39	
3G	Non-Residentail Subtotal	3,359	91,373	88,014	Non-Residentail Subtotal	3,359			3				1		Non-Residentail Subtotal	91,373			146				115		Non-Residentail Subtotal	88,014	113	
3	Residential Subtotal	77	1,275	1,198	Residential Subtotal	77			51				38		Residential Subtotal	1,569			617				466		Residential Subtotal	66,392	-1	
	Non-Residentail Subtotal	256,859	1,155,779	898,920	Non-Residentail Subtotal	256,859			467				395		Non-Residentail Subtotal	1,354,586			1,595				1,273		Non-Residentail Subtotal	1,097,727	404	
4A	Single Family Housing (DU's)		48	48	Single Family Housing (DU's)		0.75	ITE 210	0	10%	25%	0%	0	0.00	Single Family Housing (DU's)	48	0.75		36	10%	25%	0%	24	0.51	Single Family Housing (DU's)	48	24	
4A	Shopping Center (sf)	49,447	40,761	-8,686	Shopping Center (sf)	49,447	0.96	ITE 820	47	5%	15%	50%	19	0.38	Shopping Center (sf)	40,761	0.96		39	5%	15%	40%	19	0.46	Shopping Center (sf)	-8,686	0	
4A	Residential Subtotal	0	48	48	Residential Subtotal	0			0				0		Residential Subtotal	48			36				24		Residential Subtotal	48	24	
4A	Non-Residentail Subtotal	49,447	40,761	-8,686	Non-Residentail Subtotal	49,447			47				19		Non-Residentail Subtotal	40,761			39				19		Non-Residentail Subtotal	-8,686	0	
4B	Shopping Center (sf)	139,839	179,355	39,516	Shopping Center (sf)	139,839	1.37	ITE 820	191	5%	15%	30%	108	0.77	Shopping Center (sf)	179,355	1.24		223	5%	15%	30%	126	0.70	Shopping Center (sf)	39,516	18	
4B	Multi-Family Housing (DU's)		264	264	Multi-Family Housing (DU's)		0.51	ITE 220	0	10%	25%		0	0.00	Multi-Family Housing (DU's)	264	0.51		135	10%	25%		91	0.35	Multi-Family Housing (DU's)	264	91	
4B	Retail (sf)			0	Retail (sf)		0.96	ITE 820	0		15%		0	0.00	Retail (sf)										Retail (sf)		0	
4B	Restaurant-High Turnover (sf)			0	Restaurant-High Turnover (sf)		10.81	ITE 932	0		15%		0	0.00	Restaurant-High Turnover (sf)										Restaurant-High Turnover (sf)		0	
4B	Restaurant-Fast Food (sf)			0	Restaurant-Fast Food (sf)		45.42	ITE 934	0		15%		0	0.00	Restaurant-Fast Food (sf)										Restaurant-Fast Food (sf)		0	
4B	General Office (sf)			0	General Office (sf)		1.56	ITE 710	0		15%		0	0.00	General Office (sf)										General Office (sf)		0	
4B	Residential Subtotal	0	264	264	Residential Subtotal	0			0				0		Residential Subtotal	264			135				91		Residential Subtotal	264	91	
4B	Non-Residentail Subtotal	139,839	179,355	39,516	Non-Residentail Subtotal	139,839			191				108		Non-Residentail Subtotal	179,355			886				126		Non-Residentail Subtotal	39,516	18	
4	Residential Subtotal	0	312	312	Residential Subtotal	0			0				0		Residential Subtotal	390			171				115		Residential Subtotal	312	115	
	Non-Residentail Subtotal	189,286	220,116	30,830	Non-Residentail Subtotal	189,286			238				127		Non-Residentail Subtotal	275,145			925				145		Non-Residentail Subtotal	30,830	18	
5	Single Family Housing (DU's)	5	63	58	Single Family Housing (DU's)	5	0.75	ITE 210	4	0%	25%	0%	3	0.56	Single Family Housing (DU's)	11	0.75		8	0%	25%	0%	6	0.56	Single Family Housing (DU's)	6	3	
5	Multi-Family Housing (DU's)	78	30	-48	Multi-Family Housing (DU's)	78	0.51	ITE 220	40		25%		30	0.38	Multi-Family Housing (DU's)	87	0.51		44		25%		33	0.38	Multi-Family Housing (DU's)	9	3	
5	Church (sf)	1,900	28,328	26,428	Church (sf)	1,900	0.56	ITE 560	1		25%		1	0.39	Church (sf)	28,328	0.56		16		25%		12	0.42	Church (sf)	26,428	11	
5	Residential Subtotal	83	93	10	Residential Subtotal	83			44				33		Residential Subtotal	93			52				39		Residential Subtotal	15	6	
5	Non-Residentail Subtotal	1,900	28,328	26,428	Non-Residentail Subtotal	1,900			1				1		Non-Residentail Subtotal	28,328			16				12		Non-Residentail Subtotal	26,428	11	
6	Single Family Housing (DU's)	5	30	25	Single Family Housing (DU's)	5	0.75	ITE 210	4	0%	15%	0%	3	0.64	Single Family Housing (DU's)	0	0.75		0	0%	15%	0%	0	0.00	Single Family Housing (DU's)	-5	-3	
6	Multi-Family Housing (DU's)	267	248	-19	Multi-Family Housing (DU's)	267	0.51	ITE 220	136		15%		116	0.43	Multi-Family Housing (DU's)	279	0.51		142		15%		121	0.43	Multi-Family Housing (DU's)	12	5	
6	Residential Subtotal	272	278	6	Residential Subtotal	272			140				119		Residential Subtotal	278			142				121		Residential Subtotal	6	2	
6	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	
7	Single Family Housing (DU's)	37	60	23	Single Family Housing (DU's)	37	0.75	ITE 210	28	0%	15%	0%	24	0.64	Single Family Housing (DU's)	0	0.75		0	0%	15%	0%	0	0.00	Single Family Housing (DU's)	-37	-24	
7	Multi-Family Housing (DU's)	33	10	-23	Multi-Family Housing (DU's)	33	0.51	ITE 220	17		15%		14	0.44	Multi-Family Housing (DU's)	70	0.51		36		15%		31	0.44	Multi-Family Housing (DU's)	37	16	
7	Open Space (sf)	16,728	16,728	0	Open Space (sf)	16,728	0.02	ITE 412	0		0%		0	0.00	Open Space (sf)	16,728	0.02		0		0%		0	0.00	Open Space (sf)	0	0	
7	Residential Subtotal	70	70	0	Residential Subtotal	70			45				38		Residential Subtotal	70			36				31		Residential Subtotal	0	-7	
7	Non-Residentail Subtotal	16,728	16,728	0	Non-Residentail Subtotal	16,728			0				0		Non-Residentail Subtotal	16,728			0				0		Non-Residentail Subtotal	0	0	
8	Single Family Housing (DU's)	41	63	22	Single Family Housing (DU's)	41	0.75	ITE 210	31	0%	15%	0%	26	0.64	Single Family Housing (DU's)	64	0.75		48	0%	15%	0%	41	0.64	Single Family Housing (DU's)	23	15	
8	Multi-Family Housing (DU's)	58	39	-19	Multi-Family Housing (DU's)	58	0.51	ITE 220	30		15%		26	0.44	Multi-Family Housing (DU's)	39	0.51		20		15%		17	0.44	Multi-Family Housing (DU's)	-19	-9	
8	Residential Subtotal	99	102	3	Residential Subtotal	99			61				52		Residential Subtotal	102			68				58		Residential Subtotal	3	6	
8	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	
9	Single Family Housing (DU's)	116	63	-53	Single Family Housing (DU's)	116	0.75	ITE 210	87	0%	25%	0%	65	0.56	Single Family Housing (DU's)	121	0.75		91	0%	25%	0%	68	0.56	Single Family Housing (DU's)	5	3	
9	Multi-Family Housing (DU's)	0	57	57	Multi-Family Housing (DU's)	0	0.51	ITE 220	0		25%		0	0.00	Multi-Family Housing (DU's)	0	0.51		0		25%		0	0.00	Multi-Family Housing (DU's)	0	0	
9	Residential Subtotal	116	120	4	Residential Subtotal	116			87				65		Residential Subtotal	120			91				68		Residential Subtotal	4	3	
9	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	

Table A-4 Willowbrook TOD Specific Plan - Trip Generation - AM Peak

Land Uses					Existing Trip Generations									Future Trip Generations								Net Trip Generations			
Group	Land Use	Existing	Future	Net Change	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Net Vehicle Trips	Total Trips
10	Single Family Housing (DU's)	61	91	30	Single Family Housing (DU's)	61	0.75	ITE 210	46	0%	25%	0%	34	0.56	Single Family Housing (DU's)	132	0.75		99	0%	25%	0%	74	0.56	Single Family Housing (DU's)	71	40	
10	Multi-Family Housing (DU's)	68	41	-27	Multi-Family Housing (DU's)	68	0.51	ITE 220	35		25%		26	0.39	Multi-Family Housing (DU's)		0.51		0		25%		0	0.00	Multi-Family Housing (DU's)	-68	-26	
10	Church (sf)	2,112	2,112	0	Church (sf)	2,112	0.56	ITE 560	1		25%		1		Church (sf)	2,112	0.56		1		25%		1		Church (sf)	0	0	
10	Residential Subtotal	129	132	3	Residential Subtotal	129			82				61		Residential Subtotal	132			100				75		Residential Subtotal	3	14	
10	Non-Residentail Subtotal	2,112	2,112	0	Non-Residentail Subtotal	2,112			1				1		Non-Residentail Subtotal	2,112			1				1		Non-Residentail Subtotal	0	0	
11	Single Family Housing (DU's)	37	91	54	Single Family Housing (DU's)	37	0.75	ITE 210	28	0%	25%	0%	21	0.56	Single Family Housing (DU's)	76	0.75		57	0%	25%	0%	43	0.56	Single Family Housing (DU's)	39	22	
11	Multi-Family Housing (DU's)	30	0	-30	Multi-Family Housing (DU's)	30	0.51	ITE 220	15		25%		11	0.38	Multi-Family Housing (DU's)	0	0.51		0		25%		0	0.00	Multi-Family Housing (DU's)	-30	-11	
11	Light Industrial (sf)				Light Industrial (sf)	0	0.92	ITE 110	0		0%		0	0.00	Light Industrial (sf)	0	0.92		0		0%		0	0.00	Light Industrial (sf)		0	
11	Residentiial Subtotal	67	91	24	Residential Subtotal	67			43				32		Residential Subtotal	91			57				43		Residential Subtotal	9	11	
11	Non-Residentail Sublotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	
12	General Office (sf)	0	1,658	1,658	General Office (sf)	0	1.56	ITE 710	0	0%	15%		0		General Office (sf)	1,658	1.56		3	5%	15%	0%	2		General Office (sf)	1,658	2	
12	Business Park (sf)	0	19,348	19,348	Business Park (sf)	0	1.40	ITE 770	0	0%	15%		0		Business Park (sf)	19,348	1.40		27	5%	15%	0%	22		Business Park (sf)	19,348	22	
12	Retail (sf)	0	27,641	27,641	Retail (sf)	0	0.96	ITE 820	0	0%	15%		0		Retail (sf)	27,641	0.96		27	5%	15%	50%	11		Retail (sf)	27,641	11	
12	R & D Office (sf)	0	5,528	5,528	R & D Office (sf)	0	1.22	ITE 760	0	0%	15%		0		R & D Office (sf)	5,528	1.22		7	5%	15%	0%	6		R & D Office (sf)	5,528	6	
12	Restaurant-Fast Food (sf)	0	1,106	1,106	Restaurant-Fast Food (sf)	0	45.42	ITE 934	0		15%		0	0.00	Restaurant-Fast Food (sf)	1,106	45.42		50	5%	15%	50%	20	18.25	Restaurant-Fast Food (sf)	1,106	20	
12	Residential Subtotal	0	0	0	Residential Subtotal	0			0				0		Residential Subtotal	0			0				0		Residential Subtotal	0	0	
12	Non-Residentail Subtotal	0	55,281	55,281	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	55,281			114				61		Non-Residentail Subtotal	55,281	61	
13	Single Family Housing (DU's)			0	Single Family Housing (DU's)		0.75	ITE 210	0	0%	15%	0%	0	0.00	Single Family Housing (DU's)		0.75		0	0%	15%	0%	0	0.00	Single Family Housing (DU's)	0	0	
13	Multi-Family Housing (DU's)	6	6	0	Multi-Family Housing (DU's)	6	0.51	ITE 220	3		15%		3	0.43	Multi-Family Housing (DU's)	6	0.51		3		15%		3	0.43	Multi-Family Housing (DU's)	0	0	
13	Children Care (sf)	9,379	9,379	0	Children Care (sf)	9,379	12.18	ITE 565	114		15%	10%	87	9.30	Children Care (sf)	9,379	12.18		114		15%	10%	87	9.30	Children Care (sf)	0	0	
13	Light Industrial (sf)	26,566	26,566	0	Light Industrial (sf)	26,566	0.92	ITE 110	24		0%		24	0.90	Light Industrial (sf)	26,566	0.92		24		0%		24	0.90	Light Industrial (sf)	0	0	
13	General Office (sf)	0	2,386	2,386	General Office (sf)	0	1.56	ITE 710	0	0%	10%		0		General Office (sf)	2,386	1.56		4	5%	10%		3		General Office (sf)	2,386	3	
13	Business Park (sf)	0	27,833	27,833	Business Park (sf)	0	1.40	ITE 770	0	0%	10%		0		Business Park (sf)	27,833	1.40		39	5%	10%		33		Business Park (sf)	27,833	33	
13	Retail (sf)	0	39,761	39,761	Retail (sf)	0	0.96	ITE 820	0	0%	10%		0		Retail (sf)	39,761	0.96		38	5%	10%	50%	16		Retail (sf)	39,761	16	
13	R & D Office (sf)	0	7,952	7,952	R & D Office (sf)	0	1.22	ITE 760	0	0%	10%		0		R & D Office (sf)	7,952	1.22		10	5%	10%		9		R & D Office (sf)	7,952	9	
13	Restaurant-Fast Food (sf)	0	1,590	1,590	Restaurant-Fast Food (sf)	0	45.42	ITE 934	0		10%		0	0.00	Restaurant-Fast Food (sf)	1,590	45.42		72	5%	10%	50%	31	19.36	Restaurant-Fast Food (sf)	1,590	31	
13	Residential Subtotal	6	6	0	Residential Subtotal	6			3				3		Residential Subtotal	6			3				3		Residential Subtotal	0	0	
13	Non-Residentail Subtotal	35,945	115,467	79,522	Non-Residentail Subtotal	35,945			138				111		Non-Residentail Subtotal	115,467			301				204		Non-Residentail Subtotal	79,522	92	
14	Single Family Housing (DU's)			0	Single Family Housing (DU's)		0.75	ITE 210	0	0%	0%	0%	0	0.00	Single Family Housing (DU's)		0.75		0	0%	0%	0%	0	0.00	Single Family Housing (DU's)	0	0	
14	Multi-Family Housing (DU's)			0	Multi-Family Housing (DU's)		0.51	ITE 220	0		0%		0	0.00	Multi-Family Housing (DU's)		0.51		0		0%		0	0.00	Multi-Family Housing (DU's)	0	0	
14	Non-Residential (sf)			0	Non-Residential (sf)	0			0		0%		0	0.00	Non-Residential (sf)	0			0		0%		0	0.00	Non-Residential (sf)	0	0	
14	Residential Subtotal	0	0	0	Residential Subtotal	0			0				0		Residential Subtotal	0			0				0		Residential Subtotal	0	0	
14	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	
Total	Single Family Housing (DU's)	347	609	262	Single Family Housing (DU's)	347	0.75	1,2	260				201	0.58	Single Family Housing (DU's)	609	0.75	1,2	339				256	0.42	Single Family Housing (DU's)	262	114	
	Multi-Family Housing (DU's)	621	2,206	1,585	Multi-Family Housing (DU's)	621	0.51	1,9	318				260	0.42	Multi-Family Housing (DU's)	2,206	0.51	1,9	1,037				773	0.35	Multi-Family Housing (DU's)	1,585	590	
	Senior Housing (DU's)	0	105	105	Senior Housing (DU's)	0	0.20		0				0		Senior Housing (DU's)	105	0.20		21				14		Senior Housing (DU's)	105	14	
	Retail / Medical Office (sf)	0	0	0	Retail / Medical Office (sf)	0			0				0	0.00	Retail / Medical Office (sf)	0			0				0	0.00	Retail / Medical Office (sf)	0	0	
	Hospital / General Office (sf)	0	0	0	Hospital / General Office (sf)	0			0				0	0.00	Hospital / General Office (sf)	0			0				0	0.00	Hospital / General Office (sf)	0	0	
	Clinic	34,850	38,586	3,736	Clinic	34,850	3.60	ITE 630	126				95		Clinic	38,586	3.60		139				104		Clinic	3,736	10	
	Fire Station	4,110	6,325	2,215	Fire Station	4,110			0				0		Fire Station	6,325			0				0		Fire Station	2,215	0	
	Hospital	0	1,118	1,118	Hospital	0			0				0			1,118			0				0		Hospital	1,118	0	
	Library	0	8,939	8,939	Library	0	1.04		0				0		Library	8,939	1.04		9				7		Library	8,939	7	
	Institute	477,842	772,990	295,148	Institute	477,842			0				0		Institute	772,990			0				0		Institute	295,148	0	
	University	625	1,450	825	University	625	0.17	ITE 550	106				90	0.14	Students	1,450	0.17	2	247				210	0.14	Students	825	120	
	General Office (sf)	8,408	393,745	385,337	General Office (sf)	8,408	1.56		13				10		General Office (sf)	393,745	1.56		615				492	1.25	General Office (sf)	385,337	482	
	Business Park (sf)	0	224,317	224,317	Business Park (sf)	0	1.40	1,4	0				0	0.00	Business Park (sf)	224,317	1.40	1,4	314				254	1.13	Business Park (sf)	224,317	254	
	Medical Office (sf)	0	35,427	35,427	Medical Office (sf)	0	2.39	1,11	0				0	0.00	Medical Office (sf)	35,427	2.39	1,11	86				62	1.75	Medical Office (sf)	35,427	62	
	R & D Office (sf)	0	98,506	98,506	R & D Office (sf)	0	1.22		0				0		R & D Office (sf)	98,506	1.22		119				96		R & D Office (sf)	98,506	96	
	Restaurant-High Turnover (sf)	0	7,086	7,086	Restaurant-High Turnover (sf)	0	10.81	1,5	0				0	0.00	Restaurant-High Turnover (sf)	7,086	10.81	1,5	77				49	6.96	Restaurant-High Turnover (sf)	7,086	49	
	Restaurant-Fast Food (sf)	0	2,696	2,696	Restaurant-Fast Food (sf)	0	45.42		0				0		Restaurant-Fast Food (sf)	2,696	45.42		122				51		Restaurant-Fast Food (sf)	2,696	51	
	Grocery (sf)	3,359	0	-3,359	Grocery (sf)	3,359	0.96		3				1		Grocery (sf)	0	0.96		0				0		Grocery (sf)	-3,359	-1	
	Retail (sf)	0	81,572	81,572	Retail (sf)	0	0.96	1,6	0				0	0.00	Retail (sf)	81,572	0.96	1,6	79				33	0.40	Retail (sf)	81,572	33	
	Pump Station (sf)	8,408	0	-8,408	Pump Station (sf)	8,408			0				0		Pump Station (sf)	0			0				0		Pump Station (sf)	-8,408	0	
	Parking (sf)	150,000	375,926	225,926	Parking (sf)	150,000			0				0		Parking (sf)	375,926			0				0		Parking (sf)	225,926	0	
	Elementary School (sf)	86,684	86,684	0	Elementary School (sf)	86,684	5.20		451				383		Elementary School (sf)	86,684	5.20		451				383		Elementary School (sf)	0	0	
	Shopping Center (sf)	189,286	220,116	30,830	Shopping Center (sf)	189,286	0.96		238				127		Shopping Center (sf)	220,116	0.96		262				145		Shopping Center (sf)	30,830	18	
	Church (sf)	4,012	30,440	26,428	Church (sf)	4,012	0.56		2				2		Church (sf)	30,440	0.56		17				13		Church (sf)	26,428	11	
	Open Space (sf)	16,728	16,728	0	Open Space (sf)	16,728			0				0		Open Space (sf)	16,728			0				0		Open Space (sf)	0	0	
	Light Industrial (sf)	26,566	26,566	0	Light Industrial (sf)	26,566	0.92	1,8	24				24	0.90	Light Industrial (sf)	26,566	0.92	1,8	24				24	0.90	Light Industrial (sf)	0	0	
	Children Care (sf)	9,379	9,379	0	Children Care (sf)	9,379	12.18		114				87		Children Care (sf)	9,379	12.18		114				87		Children Care (sf)	0	0	
	Total				Total				1,656				1,280		Total				4,072				3,053		Total		1,908	
	Residential (DU's)	968	2,920	1,952	Residential (DU's)	968			578				460		Residential (DU's)	2,920			1,397				1,044		Residential (DU's)	1,952	718	
	Non-Residential (sf)	1,910,523	4,576,559	2,666,036	Non-Residential (sf)	1,910,523			1,077				820		Non-Residential (sf)	4,576,559			2,675				2,009		Non-Residential (sf)	2,666,036	1,190	

Table A-4 Willowbrook TOD Specific Plan - Trip Generation - AM Peak

Land Uses					Existing Trip Generations									Future Trip Generations									Net Trip Generations			
Group	Land Use	Existing	Future	Net Change	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Net Vehicle Trips	Total Trips
1	Residential Subtotal	0	100	100	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	100	0	0	0	0	0	0	0	0	Residential Subtotal	100	58	
1	Non-Residentail Subtotal	890,891	2,139,413	1,248,522	Non-Residentail Subtotal	890,891	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	2,139,413	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	1,248,522	1231	1,289
2A	Residential Subtotal	0	105	105	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	105	0	0	54	0	0	0	36	0	Residential Subtotal	105	36	
2A	Non-Residentail Subtotal	33,000	33,381	381	Non-Residentail Subtotal	33,000	0	0	119	0	0	0	89	0	Non-Residentail Subtotal	33,381	0	0	120	0	0	0	90	0	Non-Residentail Subtotal	381	1	37
2B	Residential Subtotal	0	117	117	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	117	0	0	60	0	0	0	41	0	Residential Subtotal	117	41	
2B	Non-Residentail Subtotal	5,960	36,964	31,004	Non-Residentail Subtotal	5,960	0	0	7	0	0	0	5	0	Non-Residentail Subtotal	36,964	0	0	19	0	0	0	14	0	Non-Residentail Subtotal	31,004	9	50
2C	Residential Subtotal	49	119	70	Residential Subtotal	49	0	0	25	0	0	0	21	0	Residential Subtotal	119	0	0	61	0	0	0	26	0	Residential Subtotal	70	5	
2C	Non-Residentail Subtotal	477,842	772,990	295,148	Non-Residentail Subtotal	477,842	0	0	106	0	0	0	90	0	Non-Residentail Subtotal	772,990	0	0	247	0	0	0	210	0	Non-Residentail Subtotal	295,148	120	125
3A	Residential Subtotal	0	105	105	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	105	0	0	21	0	0	0	14	0	Residential Subtotal	105	14	
3A	Non-Residentail Subtotal	0	8,939	8,939	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	8,939	0	0	9	0	0	0	7	0	Non-Residentail Subtotal	8,939	7	21
3B	Residential Subtotal	19	83	64	Residential Subtotal	19	0	0	14	0	0	0	10	0	Residential Subtotal	83	0	0	42	0	0	0	28	0	Residential Subtotal	64	19	
3B	Non-Residentail Subtotal	0	56,865	56,865	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	56,865	0	0	91	0	0	0	63	0	Non-Residentail Subtotal	56,865	63	82
3C	Residential Subtotal	30	255	225	Residential Subtotal	30	0	0	17	0	0	0	13	0	Residential Subtotal	255	0	0	130	0	0	0	99	0	Residential Subtotal	225	86	
3C	Non-Residentail Subtotal	16,816	173,065	156,249	Non-Residentail Subtotal	16,816	0	0	13	0	0	0	10	0	Non-Residentail Subtotal	173,065	0	0	277	0	0	0	218	0	Non-Residentail Subtotal	156,249	207	293
3D	Residential Subtotal	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	
3D	Non-Residentail Subtotal	150,000	351,610	201,610	Non-Residentail Subtotal	150,000	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	351,610	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	201,610	0	0
3E	Residential Subtotal	0	553	553	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	553	0	0	282	0	0	0	216	0	Residential Subtotal	553	216	
3E	Non-Residentail Subtotal	86,684	375,433	288,749	Non-Residentail Subtotal	86,684	0	0	451	0	0	0	383	0	Non-Residentail Subtotal	375,433	0	0	914	0	0	0	747	0	Non-Residentail Subtotal	288,749	364	579
3F	Residential Subtotal	4	145	141	Residential Subtotal	4	0	0	2	0	0	0	2	0	Residential Subtotal	145	0	0	74	0	0	0	57	0	Residential Subtotal	141	55	
3F	Non-Residentail Subtotal	0	98,494	98,494	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	98,494	0	0	158	0	0	0	124	0	Non-Residentail Subtotal	98,494	124	179
3G	Residential Subtotal	24	134	110	Residential Subtotal	24	0	0	17	0	0	0	13	0	Residential Subtotal	134	0	0	68	0	0	0	52	0	Residential Subtotal	110	39	
3G	Non-Residentail Subtotal	3,359	91,373	88,014	Non-Residentail Subtotal	3,359	0	0	3	0	0	0	1	0	Non-Residentail Subtotal	91,373	0	0	146	0	0	0	115	0	Non-Residentail Subtotal	88,014	113	152
4A	Residential Subtotal	0	48	48	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	48	0	0	36	0	0	0	24	0	Residential Subtotal	48	24	
4A	Non-Residentail Subtotal	49,447	40,761	-8,686	Non-Residentail Subtotal	49,447	0	0	47	0	0	0	19	0	Non-Residentail Subtotal	40,761	0	0	39	0	0	0	19	0	Non-Residentail Subtotal	-8,686	0	24
4B	Residential Subtotal	0	264	264	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	264	0	0	135	0	0	0	91	0	Residential Subtotal	264	91	
4B	Non-Residentail Subtotal	139,839	179,355	39,516	Non-Residentail Subtotal	139,839	0	0	191	0	0	0	108	0	Non-Residentail Subtotal	179,355	0	0	886	0	0	0	126	0	Non-Residentail Subtotal	39,516	18	109
5	Residential Subtotal	83	93	10	Residential Subtotal	83	0	0	43.75	0	0	0	32.8125	0	Residential Subtotal	93	0	0	52	0	0	0	39	0	Residential Subtotal	15	6	
5	Non-Residentail Subtotal	1,900	28,328	26428	Non-Residentail Subtotal	1,900	0	0	1	0	0	0	0.75	0	Non-Residentail Subtotal	28,328	0	0	16	0	0	0	12	0	Non-Residentail Subtotal	26428	11	18
6	Residential Subtotal	272	278	6	Residential Subtotal	272	0	0	140	0	0	0	119	0	Residential Subtotal	278	0	0	142	0	0	0	121	0	Residential Subtotal	6	2	
6	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	2
7	Residential Subtotal	70	70	0	Residential Subtotal	70	0	0	45	0	0	0	38	0	Residential Subtotal	70	0	0	36	0	0	0	31	0	Residential Subtotal	0	-7	
7	Non-Residentail Subtotal	16,728	16,728	0	Non-Residentail Subtotal	16,728	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	16,728	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	-7
8	Residential Subtotal	99	102	3	Residential Subtotal	99	0	0	61	0	0	0	52	0	Residential Subtotal	102	0	0	68	0	0	0	58	0	Residential Subtotal	3	6	
8	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	6
9	Residential Subtotal	116	120	4	Residential Subtotal	116	0	0	87	0	0	0	65	0	Residential Subtotal	120	0	0	91	0	0	0	68	0	Residential Subtotal	4	3	
9	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	3
10	Residential Subtotal	129	132	3	Residential Subtotal	129	0	0	82	0	0	0	61	0	Residential Subtotal	132	0	0	100	0	0	0	75	0	Residential Subtotal	3	14	
10	Non-Residentail Subtotal	2,112	2,112	0	Non-Residentail Subtotal	2,112	0	0	1	0	0	0	1	0	Non-Residentail Subtotal	2,112	0	0	1	0	0	0	1	0	Non-Residentail Subtotal	0	0	14
11	Residential Subtotal	67	91	24	Residential Subtotal	67	0	0	43	0	0	0	32	0	Residential Subtotal	91	0	0	57	0	0	0	43	0	Residential Subtotal	9	11	
11	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	11
12	Residential Subtotal	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	
12	Non-Residentail Subtotal	0	55,281	55,281	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	55,281	0	0	114	0	0	0	61	0	Non-Residentail Subtotal	55,281	61	61
13	Residential Subtotal	6	6	0	Residential Subtotal	6	0	0	3	0	0	0	3	0	Residential Subtotal	6	0	0	3	0	0	0	3	0	Residential Subtotal	0	0	
13	Non-Residentail Subtotal	35,945	115,467	79,522	Non-Residentail Subtotal	35,945	0	0	138	0	0	0	111	0	Non-Residentail Subtotal	115,467	0	0	301	0	0	0	204	0	Non-Residentail Subtotal	79,522	92	92
14	Residential Subtotal	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	
14	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0
	Total				Total				1,657				1,281		Total				4,850				3,131		Total		3,139	3,139
	Residential (DU's)	968	2,920	1,952	Residenlial (DU's)	968			579				461		Residential (DU's)	2,920			1,512				1,121		Residential (DU's)	1,952	718	
	Non-Residential (sf)	1,910,523	4,576,559	2,666,036	Non-Residential (sf)	1,910,523			1,077				820		Non-Residential (sf)	4,576,559			3,338				2,009		Non-Residential (sf)	2,666,036	2,421	

Table A-5 Willowbrook TOD Specific Plan - Trip Generation - PM Peak

Land Uses					Existing Trip Generations									Future Trip Generations								Net Trip Generations			
Group	Land Use	Existing	Future	Net Change	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Net Vehicle Trips	Total Trips
1	Single-Family Housing (DU's)	0	100	100	Single-Family Housing (DU's)	0									Single-Family Housing (DU's)	100									Single-Family Housing (DU's)	100	76	
1	Retail / Medical Office (sf)				Retail / Medical Office (sf)										Retail / Medical Office (sf)										Retail / Medical Office (sf)			
1	Hospital / General Office (sf)				Hospital / General Office (sf)										Hospital / General Office (sf)										Hospital / General Office (sf)			
1	Residential Subtotal	0	100	100	Residential Subtotal	0									Residential Subtotal	100									Residential Subtotal	100	76	
1	Non-Residentail Subtotal	890,891	2,139,413	1,248,522	Non-Residentail Subtotal	890,891									Non-Residentail Subtotal	2,139,413									Non-Residentail Subtotal	1,248,522	1,608	
2A	Multi-Family Housing (DU's)	0	105	105	Multi-Family Housing (DU's)	0	0.62		0	10%	25%	0%	0	0.00	Multi-Family Housing (DU's)	105	0.62		65	10%	25%	0%	44	0.42	Multi-Family Housing (DU's)	105	44	
2A	Clinic (sf)	33,000	33,381	381	Clinic (sf)	33,000	5.18		171	0%	25%	0%	128	0.00	Clinic (sf)	33,381	5.18		173	0%	25%	0%	130	0.00	Clinic (sf)	381	2	
2A	Residential Subtotal	0	105	105	Residential Subtotal	0			0				0		Residential Subtotal	105			65				44		Residential Subtotal	105	44	
2A	Non-Residentail Subtotal	33,000	33,381	381	Non-Residentail Subtotal	33,000			171				128		Non-Residentail Subtotal	33,381			173				130		Non-Residentail Subtotal	381	2	
2B	Multi-Family Housing (DU's)	0	117	117	Multi-Family Housing (DU's)	0	0.62		0	10%	25%		0	0.00	Multi-Family Housing (DU's)	117	0.62		73	10%	25%		49	0.42	Multi-Family Housing (DU's)	117	49	
2B	Fire Station (sf)	4,110	6,325	2,215	Fire Station (sf)	4,110				0%	0%	0%	0	0.00	Fire Station (sf)	6,325				0%	0%	0%	0		Fire Station (sf)	2,215	0	
2B	Clinic (sf)	1,850	5,205	3,355	Clinic (sf)	1,850	5.18		10	0%	25%	0%	8	0.00	Clinic (sf)	5,205	5.18		27	0%	25%	0%	20	0.00	Clinic (sf)	3,355	13	
2B	Hospital (sf)	0	1,118	1,118	Hospital (sf)	0									Hospital (sf)	1,118									Hospital (sf)	1,118		
2B	Parking (sf)	0	24,316	24,316	Parking (sf)	0									Parking (sf)	24,316									Parking (sf)	24,316		
2B	Residential Subtotal	0	117	117	Residential Subtotal	0			0				0		Residential Subtotal	117			73				49		Residential Subtotal	117	49	
2B	Non-Residentail Subtotal	5,960	36,964	31,004	Non-Residentail Subtotal	5,960			10				8		Non-Residentail Subtotal	36,964			27				20		Non-Residentail Subtotal	31,004	13	
2C	Multi-Family Housing (DU's)	49	119	70	Multi-Family Housing (DU's)	49	0.62		30		15%		26	0.52	Multi-Family Housing (DU's)	119	0.62		74	50%	15%		31	0.26	Multi-Family Housing (DU's)	70	6	
2C	Institute	477,842	772,990	295,148	Institute	477,842			0		0%		0	0.00	Institute	772,990			0		0%		0	0.00	Institute	295,148	0	
2C	University	625	1,450	825	University	625	0.17		106		15%		90	0.14	University	1,450	0.17		247		15%		210	0.14	University	825	120	
2C	Institute			0	Institute				0		0%		0	0.00	Institute				0		0%		0		Institute	0	0	
2C	Residential Subtotal	49	119	70	Residential Subtotal	49			30				26		Residential Subtotal	119			74				31		Residential Subtotal	70	6	
2C	Non-Residentail Subtotal	477,842	772,990	295,148	Non-Residentail Subtotal	477,842			106				90		Non-Residentail Subtotal	772,990			247				210		Non-Residentail Subtotal	295,148	120	
2	Residential Subtotal	49	341	292	Residential Subtotal	49			30				26		Residential Subtotal	341			212				125		Residential Subtotal	292	99	
	Non-Residentail Subtotal	516,802	843,335	326,533	Non-Residentail Subtotal	516,802			287				226		Non-Residentail Subtotal	843,335			447				360		Non-Residentail Subtotal	326,533	134	
3A	Senior Housing (DU's)	0	105	105	Senior Housing (DU's)	0	0.25		0	10%	25%	0%	0	0.00	Senior Housing (DU's)	105	0.25		26	10%	25%	0%	18	0.17	Senior Housing (DU's)	105	18	
3A	Library (sf)	0	8,939	8,939	Library (sf)	0	7.30			0%	25%	0%	0	0.00	Library (sf)	8,939	7.30		65	0%	25%	0%	49		Library (sf)	8,939	49	
3A	Residential Subtotal	0	105	105	Residential Subtotal	0			0				0		Residential Subtotal	105			26				18		Residential Subtotal	105	18	
3A	Non-Residentail Subtotal	0	8,939	8,939	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	8,939			65				49		Non-Residentail Subtotal	8,939	49	
3B	Single Family Housing (DU's)	19	0	-19	Single Family Housing (DU's)	19	1.00		19	10%	25%	0%	13	0.68	Single Family Housing (DU's)	0	1.00		0	10%	25%	0%	0	0.00	Single Family Housing (DU's)	-19	-13	
3B	Multi-Family Housing (DU's)		83	83	Multi-Family Housing (DU's)		0.62		0	10%	25%		0	0.00	Multi-Family Housing (DU's)	83	0.62		51	10%	25%		34	0.41	Multi-Family Housing (DU's)	83	34	
3B	General Office (sf)		31,276	31,276	General Office (sf)		1.49		0		25%		0	0.00	General Office (sf)	31,276	1.49		47	5%	25%		33	1.07	General Office (sf)	31,276	33	
3B	Business Park (sf)		14,216	14,216	Business Park (sf)		1.26		0		25%		0	0.00	Business Park (sf)	14,216	1.26		18	5%	25%		13	0.90	Business Park (sf)	14,216	13	
3B	Medical Office (sf)		2,843	2,843	Medical Office (sf)		3.57		0		25%	10%	0	0.00	Medical Office (sf)	2,843	3.57		10	5%	25%	10%	6	2.26	Medical Office (sf)	2,843	6	
3B	R & D Office (sf)		6,824	6,824	R & D Office (sf)		1.07		0		25%		0	0.00	R & D Office (sf)	6,824	1.07		7	5%	25%		5	0.73	R & D Office (sf)	6,824	5	
3B	Restaurant-High Turnover (sf)		569	569	Restaurant-High Turnover (sf)		9.85		0		25%	20%	0	0.00	Restaurant-High Turnover (sf)	569	9.85		6	5%	25%	20%	3	6.01	Restaurant-High Turnover (sf)	569	3	
3B	Retail (sf)		1,137	1,137	Retail (sf)		3.71		0		25%	50%	0	0.00	Retail (sf)	1,137	3.71		4	5%	25%	50%	1	1.25	Retail (sf)	1,137	1	
3B	Residential Subtotal	19	83	64	Residential Subtotal	19			19				13		Residential Subtotal	83			51				34		Residential Subtotal	64	22	
3B	Non-Residentail Subtotal	0	56,865	56,865	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	56,865			92				63		Non-Residentail Subtotal	56,865	63	
3C	Single Family Housing (DU's)	7	0	-7	Single Family Housing (DU's)	7	1.00		7	10%	15%	0%	5	0.77	Single Family Housing (DU's)	0	1.00		0	10%	15%	0%	0	0.00	Single Family Housing (DU's)	-7	-5	
3C	Multi-Family Housing (DU's)	23	255	232	Multi-Family Housing (DU's)	23	0.62		14	10%	15%		11	0.47	Multi-Family Housing (DU's)	255	0.62		158	10%	15%		121	0.47	Multi-Family Housing (DU's)	232	110	
3C	Pump Station (sf)	8,408		-8,408	Pump Station (sf)	8,408			0		0%		0	0.00	Pump Station (sf)				0		0%		0	0.00	Pump Station (sf)	-8,408	0	
3C	General Office (sf)	8,408	95,186	86,778	General Office (sf)	8,408	1.49		13	5%	15%		10	1.25	General Office (sf)	95,186	1.49		142	5%	15%		115	1.20	General Office (sf)	86,778	104	
3C	Business Park (sf)		43,266	43,266	Business Park (sf)		1.26		0		15%		0	0.00	Business Park (sf)	43,266	1.26		55	5%	15%		44	1.03	Business Park (sf)	43,266	44	
3C	Medical Office (sf)		8,653	8,653	Medical Office (sf)		3.57		0		15%	10%	0	0.00	Medical Office (sf)	8,653	3.57		31	5%	15%	10%	23	2.60	Medical Office (sf)	8,653	23	
3C	R & D Office (sf)		20,768	20,768	R & D Office (sf)		1.07		0		15%		0	0.00	R & D Office (sf)	20,768	1.07		22	5%	15%		18	0.86	R & D Office (sf)	20,768	18	
3C	Restaurant-High Turnover (sf)		1,731	1,731	Restaurant-High Turnover (sf)		9.85		0		15%	20%	0	0.00	Restaurant-High Turnover (sf)	1,731	9.85		17	5%	15%	20%	11	6.34	Restaurant-High Turnover (sf)	1,731	11	
3C	Retail (sf)		3,461	3,461	Retail (sf)		3.71		0		15%	50%	0	0.00	Retail (sf)	3,461	3.71		13	5%	15%	50%	5	1.52	Retail (sf)	3,461	5	
3C	Residential Subtotal	30	255	225	Residential Subtotal	30			21				16		Residential Subtotal	255			158				121		Residential Subtotal	225	105	
3C	Non-Residentail Subtotal	16,816	173,065	156,249	Non-Residentail Sublotal	16,816			13				10		Non-Residentail Subtotal	173,065			280				216		Non-Residentail Subtotal	156,249	205	
3D	Parking (sf)	150,000	351,610	201,610	Parking (sf)	150,000			0		0%		0	0.00	Parking (sf)	351,610			0		0%		0	0.00	Parking (sf)	201,610	0	
3D	Residential Subtotal	0	0	0	Residential Subtotal	0			0				0		Residential Subtotal	0			0				0		Residential Subtotal	0	0	
3D	Non-Residentail Subtotal	150,000	351,610	201,610	Non-Residentail Subtotal	150,000			0				0		Non-Residentail Subtotal	351,610			0				0		Non-Residentail Sublotal	201,610	0	
3E	Elementary School (sf)	86,684	86,684	0	Elementary School (sf)	86,684	1.21		105		15%		89	1.03	Elementary School (sf)	86,684	1.21		105		15%		89	1.03	Elementary School (sf)	0	0	
3E	Multi-Family Housing (DU's)		553	553	Multi-Family Housing (DU's)		0.62		0	10%	15%		0	0.00	Multi-Family Housing (DU's)	553	0.62		343	10%	15%		262	0.47	Multi-Family Housing (DU's)	553	262	
3E	General Office (sf)		158,812	158,812	General Office (sf)		1.49		0		15%		0	0.00	General Office (sf)	158,812	1.49		237	5%	15%		191	1.21	General Office (sf)	158,812	191	
3E	Business Park (sf)		72,187	72,187	Business Park (sf)		1.26		0		15%		0	0.00	Business Park (sf)	72,187	1.26		91	5%	15%		73	1.02	Business Park (sf)	72,187	73	
3E	Medical Office (sf)		14,437	14,437	Medical Office (sf)		3.57		0		15%	10%	0	0.00	Medical Office (sf)	14,437	3.57		52	5%	15%	10%	38	2.62	Medical Office (sf)	14,437	38	
3E	R & D Office (sf)		34,650	34,650	R & D Office (sf)		1.07		0		15%		0	0.00	R & D Office (sf)	34,650	1.07		37	5%	15%		30	0.86	R & D Office (sf)	34,650	30	
3E	Restaurant-High Turnover (sf)		2,888	2,888	Restaurant-High Turnover (sf)		9.85		0		15%	20%	0	0.00	Restaurant-High Turnover (sf)	2,888	9.85		28	5%	15%	20%	18	6.26	Restaurant-High Turnover (sf)	2,888	18	
3E	Retail (sf)		5,775	5,775	Retail (sf)		3.71		0		15%	50%	0	0.00	Retail (sf)	5,775	3.71		21	5%	15%	50%	8	1.47	Retail (sf)	5,775	8	
3E	Residential Subtotal	0	553	553	Residential Subtotal	0			0				0		Residential Subtotal	553			343				262		Residential Subtotal	553	262	
3E	Non-Residentail Subtotal	86,684	375,433	288,749	Non-Residentail Subtotal	86,684			105				89		Non-Residentail Subtotal	375,433			571				448		Non-Residentail Subtotal	288,749	359	

Table A-5 Willowbrook TOD Specific Plan - Trip Generation - PM Peak

Land Uses					Existing Trip Generations										Future Trip Generations										Net Trip Generations			
Group	Land Use	Existing	Future	Net Change	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Net Vehicle Trips	Total Trips
3F	Multi-Family Housing (DU's)	4	145	141	Multi-Family Housing (DU's)	4	0.62		2	10%	15%		2	0.38	Multi-Family Housing (DU's)	145	0.62		90	10%	15%		69	0.47	Multi-Family Housing (DU's)	141	67	
3F	General Office (sf)		54,172	54,172	General Office (sf)		1.49		0		15%		0	0.00	General Office (sf)	54,172	1.49		81	5%	15%		65	1.21	General Office (sf)	54,172	65	
3F	Business Park (sf)		24,624	24,624	Business Park (sf)		1.26		0		15%		0	0.00	Business Park (sf)	24,624	1.26		31	5%	15%		25	1.02	Business Park (sf)	24,624	25	
3F	Medical Office (sf)		4,925	4,925	Medical Office (sf)		3.57		0		15%	10%	0	0.00	Medical Office (sf)	4,925	3.57		18	5%	15%	10%	13	2.66	Medical Office (sf)	4,925	13	
3F	R & D Office (sf)		11,819	11,819	R & D Office (sf)		1.07		0		15%		0	0.00	R & D Office (sf)	11,819	1.07		13	5%	15%		10	0.89	R & D Office (sf)	11,819	10	
3F	Restaurant-High Turnover (sf)		984	984	Restaurant-High Turnover (sf)		9.85		0		15%	20%	0	0.00	Restaurant-High Turnover (sf)	984	9.85		10	5%	15%	20%	6	6.57	Restaurant-High Turnover (sf)	984	6	
3F	Retail (sf)		1,970	1,970	Retail (sf)		3.71		0		15%	50%	0	0.00	Retail (sf)	1,970	3.71		7	5%	15%	50%	3	1.43	Retail (sf)	1,970	3	
3F	Residential Subtotal	4	145	141	Residential Subtotal	4			2				2		Residential Subtotal	145			90				69		Residential Subtotal	141	67	
3F	Non-Residentail Subtotal	0	98,494	98,494	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	98,494			160				123		Non-Residentail Subtotal	98,494	123	
3G	Single Family Housing (DU's)	19	0	-19	Single Family Housing (DU's)	19	1.00		19	10%	15%	0%	15	0.77	Single Family Housing (DU's)	0	1.00		0	10%	15%	0%	0	0.00	Single Family Housing (DU's)	-19	-15	
3G	Multi-Family Housing (DU's)	5	134	129	Multi-Family Housing (DU's)	5	0.62		3	10%	15%		2	0.46	Multi-Family Housing (DU's)	134	0.62		83	10%	15%		63	0.47	Multi-Family Housing (DU's)	129	61	
3G	General Office (sf)		50,255	50,255	General Office (sf)		1.49		0		15%		0	0.00	General Office (sf)	50,255	1.49		75	5%	15%		61	1.21	General Office (sf)	50,255	61	
3G	Business Park (sf)		22,843	22,843	Business Park (sf)		1.26		0		15%		0	0.00	Business Park (sf)	22,843	1.26		29	5%	15%		23	1.03	Business Park (sf)	22,843	23	
3G	Medical Office (sf)		4,569	4,569	Medical Office (sf)		3.57		0		15%	10%	0	0.00	Medical Office (sf)	4,569	3.57		16	5%	15%	10%	12	2.54	Medical Office (sf)	4,569	12	
3G	R & D Office (sf)		10,965	10,965	R & D Office (sf)		1.07		0		15%		0	0.00	R & D Office (sf)	10,965	1.07		12	5%	15%		10	0.88	R & D Office (sf)	10,965	10	
3G	Restaurant-High Turnover (sf)		914	914	Restaurant-High Turnover (sf)		9.85		0		15%	20%	0	0.00	Restaurant-High Turnover (sf)	914	9.85		9	5%	15%	20%	6	6.36	Restaurant-High Turnover (sf)	914	6	
3G	Retail (sf)		1,827	1,827	Retail (sf)		3.71		0		15%	50%			Retail (sf)	1,827	3.71		7	5%	15%	50%	3	1.55	Retail (sf)	1,827	3	
3G	Grocery (sf)	3,359		-3,359	Grocery (sf)	3,359	3.71		12	5%	15%	40%	6	1.73	Grocery (sf)		3.71		0	5%	15%	40%	0	0.00	Grocery (sf)	-3,359	-6	
3G	Residential Subtotal	24	134	110	Residential Subtotal	24			22				17		Residential Subtotal	134			83				63		Residential Subtotal	110	47	
3G	Non-Residentail Subtotal	3,359	91,373	88,014	Non-Residentail Subtotal	3,359			12				6		Non-Residentail Subtotal	91,373			148				114		Non-Residentail Subtotal	88,014	108	
3	Residential Subtotal	77	1,275	1,198	Residential Subtotal	77			64				47		Residential Subtotal	1,569			751				568		Residential Subtotal	1,198	520	
	Non-Residentail Subtotal	256,859	1,155,779	898,920	Non-Residentail Subtotal	256,859			130				106		Non-Residentail Subtotal	1,354,586			1,316				1,012		Non-Residentail Subtotal	697,310	907	
4A	Single Family Housing (DU's)		48	48	Single Family Housing (DU's)		1.00		0	10%	25%	0%	0	0.00	Single Family Housing (DU's)	48	1.00		48	10%	25%	0%	32	0.68	Single Family Housing (DU's)	48	32	
4A	Shopping Center (sf)	49,447	40,761	-8,686	Shopping Center (sf)	49,447	3.71		183	5%	15%	50%	74	1.49	Shopping Center (sf)	40,761	3.71		151	5%	15%	40%	73	1.79	Shopping Center (sf)	-8,686	-1	
4A	Residential Subtotal	0	48	48	Residential Subtotal	0			0				0		Residential Subtotal	48			48				32		Residential Subtotal	48	32	
4A	Non-Residentail Subtotal	49,447	40,761	-8,686	Non-Residentail Subtotal	49,447			183				74		Non-Residentail Subtotal	40,761			151				73		Non-Residentail Subtotal	-8,686	-1	
4B	Shopping Center (sf)	139,839	179,355	39,516	Shopping Center (sf)	139,839	5.36		750	5%	15%	30%	424	3.03	Shopping Center (sf)	179,355	3.71		886	5%	15%	30%	501	2.79	Shopping Center (sf)	39,516	77	
4B	Multi-Family Housing (DU's)		264	264	Multi-Family Housing (DU's)		0.62		0	10%	25%		0	0.00	Multi-Family Housing (DU's)	264	0.62		164	10%	25%		111	0.42	Multi-Family Housing (DU's)	264	111	
4B	Retail (sf)			0	Retail (sf)		3.71		0		15%		0	0.00	Retail (sf)										Retail (sf)		0	
4B	Restaurant-High Turnover (sf)			0	Restaurant-High Turnover (sf)		9.85		0		15%		0	0.00	Restaurant-High Turnover (sf)										Restaurant-High Turnover (sf)		0	
4B	Restaurant-Fast Food (sf)			0	Restaurant-Fast Food (sf)		32.65		0		15%		0	0.00	Restaurant-Fast Food (sf)										Restaurant-Fast Food (sf)		0	
4B	General Office (sf)			0	General Office (sf)		1.49		0		15%		0	0.00	General Office (sf)										General Office (sf)		0	
4B	Residential Subtotal	0	264	264	Residential Subtotal	0			0				0		Residential Subtotal	264			164				111		Residential Subtotal	264	111	
4B	Non-Residentail Subtotal	139,839	179,355	39,516	Non-Residentail Subtotal	139,839			750				424		Non-Residentail Subtotal	179,355			886				501		Non-Residentail Subtotal	39,516	77	
4	Residential Subtotal	0	312	312	Residential Subtotal	0			0				0		Residential Subtotal	390			212				143		Residential Subtotal	312	143	
	Non-Residentail Subtotal	189,286	220,116	30,830	Non-Residentail Subtotal	189,286			933				498		Non-Residentail Subtotal	275,145			1,037				574		Non-Residentail Subtotal	30,830	76	
5	Single Family Housing (DU's)	5	63	58	Single Family Housing (DU's)	5	1.00		5	0%	25%	0%	4	0.75	Single Family Housing (DU's)	11	1.00		11	0%	25%	0%	8	0.75	Single Family Housing (DU's)	6	5	
5	Multi-Family Housing (DU's)	78	30	-48	Multi-Family Housing (DU's)	78	0.62		48		25%		36	0.46	Multi-Family Housing (DU's)	87	0.62		54		25%		41	0.47	Multi-Family Housing (DU's)	9	5	
5	Church (sf)	1,900	28,328	26,428	Church (sf)	1,900	0.55		1		25%		1	0.39	Church (sf)	28,328	0.55		16		25%		12	0.42	Church (sf)	26,428	11	
5	Residential Subtotal	83	93	10	Residential Subtotal	83			53				40		Residential Subtotal	93			65				49		Residential Subtotal	15	9	
5	Non-Residentail Subtotal	1,900	28,328	26,428	Non-Residentail Subtotal	1,900			1				1		Non-Residentail Subtotal	28,328			16				12		Non-Residentail Subtotal	26,428	11	
6	Single Family Housing (DU's)	5	30	25	Single Family Housing (DU's)	5	1.00		5	0%	15%	0%	4	0.85	Single Family Housing (DU's)	0	1.00		0	0%	15%	0%	0	0.00	Single Family Housing (DU's)	-5	-4	
6	Multi-Family Housing (DU's)	267	248	-19	Multi-Family Housing (DU's)	267	0.62		166		15%		141	0.53	Multi-Family Housing (DU's)	279	0.62		173		15%		147	0.53	Multi-Family Housing (DU's)	12	6	
6	Residential Subtotal	272	278	6	Residential Subtotal	272			171				145		Residential Subtotal	278			173				147		Residential Subtotal	6	2	
6	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	
7	Single Family Housing (DU's)	37	60	23	Single Family Housing (DU's)	37	1.00		37	0%	15%	0%	31	0.85	Single Family Housing (DU's)	0	1.00		0	0%	15%	0%	0	0.00	Single Family Housing (DU's)	-37	-31	
7	Multi-Family Housing (DU's)	33	10	-23	Multi-Family Housing (DU's)	33	0.62		20		15%		17	0.52	Multi-Family Housing (DU's)	70	0.62		43		15%		37	0.52	Multi-Family Housing (DU's)	37	20	
7	Open Space (sf)	16,728	16,728	0	Open Space (sf)	16,728	0.09		0		0%		0	0.00	Open Space (sf)	16,728	0.09		0		0%		0	0.00	Open Space (sf)	0	0	
7	Residential Subtotal	70	70	0	Residential Subtotal	70			57				48		Residential Subtotal	70			43				37		Residential Subtotal	0	-12	
7	Non-Residentail Subtotal	16,728	16,728	0	Non-Residentail Subtotal	16,728			0				0		Non-Residentail Subtotal	16,728			0				0		Non-Residentail Subtotal	0	0	
8	Single Family Housing (DU's)	41	63	22	Single Family Housing (DU's)	41	1.00		41	0%	15%	0%	35	0.85	Single Family Housing (DU's)	64	1.00		64	0%	15%	0%	54	0.85	Single Family Housing (DU's)	23	20	
8	Multi-Family Housing (DU's)	58	39	-19	Multi-Family Housing (DU's)	58	0.62		36		15%		31	0.53	Multi-Family Housing (DU's)	39	0.62		24		15%		20	0.52	Multi-Family Housing (DU's)	-19	-10	
8	Residential Subtotal	99	102	3	Residential Subtotal	99			77				65		Residential Subtotal	102			88				75		Residential Subtotal	3	9	
8	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	
9	Single Family Housing (DU's)	116	63	-53	Single Family Housing (DU's)	116	1.00		116	0%	25%	0%	87	0.75	Single Family Housing (DU's)	121	1.00		121	0%	25%	0%	91	0.75	Single Family Housing (DU's)	5	4	
9	Multi-Family Housing (DU's)	0	57	57	Multi-Family Housing (DU's)	0	0.62		0		25%		0	0.00	Multi-Family Housing (DU's)	0	0.62		0		25%		0	0.00	Multi-Family Housing (DU's)	0	0	
9	Residential Subtotal	116	120	4	Residential Subtotal	116			116				87		Residential Subtotal	120			121				91		Residential Subtotal	4	4	
9	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	

Table A-5 Willowbrook TOD Specific Plan - Trip Generation - PM Peak

Land Uses					Existing Trip Generations									Future Trip Generations								Net Trip Generations			
Group	Land Use	Existing	Future	Net Change	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Net Vehicle Trips	Total Trips
10	Single Family Housing (DU's)	61	91	30	Single Family Housing (DU's)	61	1.00		61	0%	25%	0%	46	0.75	Single Family Housing (DU's)	132	1.00		132	0%	25%	0%	99	0.75	Single Family Housing (DU's)	71	53	
10	Multi-Family Housing (DU's)	68	41	-27	Multi-Family Housing (DU's)	68	0.62		42		25%		32	0.46	Multi-Family Housing (DU's)		0.62		0		25%		0	0.00	Multi-Family Housing (DU's)	-68	-32	
10	Church (sf)	2,112	2,112	0	Church (sf)	2,112	0.55		1		25%		1		Church (sf)	2,112	0.55		1		25%		1		Church (sf)	0	0	
10	Residential Subtotal	129	132	3	Residential Subtotal	129			104				78		Residential Subtotal	132			133				100		Residential Subtotal	3	22	
10	Non-Residentail Subtotal	2,112	2,112	0	Non-Residentail Subtotal	2,112			1				1		Non-Residentail Subtotal	2,112			1				1		Non-Residentail Subtotal	0	0	
11	Single Family Housing (DU's)	37	91	54	Single Family Housing (DU's)	37	1.00		37	0%	25%	0%	28	0.75	Single Family Housing (DU's)	76	1.00		76	0%	25%	0%	57	0.75	Single Family Housing (DU's)	39	29	
11	Multi-Family Housing (DU's)	30		-30	Multi-Family Housing (DU's)	30	0.62		19		25%		14	0.48	Multi-Family Housing (DU's)	0	0.62		0		25%		0	0.00	Multi-Family Housing (DU's)	-30	-14	
11	Light Industrial (sf)				Light Industrial (sf)		0.97		0		0%		0	0.00	Light Industrial (sf)		0.97		0		0%		0	0.00	Light Industrial (sf)		0	
11	Residential Subtotal	67	91	24	Residential Subtotal	67			56				42		Residential Subtotal	91			76				57		Residential Subtotal	9	15	
11	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	
12	General Office (sf)	0	1,658	1,658	General Office (sf)	0	1.49		0	0%	15%		0		General Office (sf)	1,658	1.49		2	5%	15%	0%	2		General Office (sf)	1,658	2	
12	Business Park (sf)	0	19,348	19,348	Business Park (sf)	0	1.26		0	0%	15%		0		Business Park (sf)	19,348	1.26		24	5%	15%	0%	19		Business Park (sf)	19,348	19	
12	Retail (sf)	0	27,641	27,641	Retail (sf)	0	3.71		0	0%	15%		0		Retail (sf)	27,641	3.71		103	5%	15%	50%	42		Retail (sf)	27,641	42	
12	R & D Office (sf)	0	5,528	5,528	R & D Office (sf)	0	1.07		0	0%	15%		0		R & D Office (sf)	5,528	1.07		6	5%	15%	0%	5		R & D Office (sf)	5,528	5	
12	Restaurant-Fast Food (sf)	0	1,106	1,106	Restaurant-Fast Food (sf)	0	32.65		0		15%		0	0.00	Restaurant-Fast Food (sf)	1,106	32.65		36	5%	15%	50%	15	13.14	Restaurant-Fast Food (sf)	1,106	15	
12	Residential Subtotal	0	0	0	Residential Subtotal	0			0				0		Residential Subtotal	0			0				0		Residential Subtotal	0	0	
12	Non-Residentail Subtotal	0	55,281	55,281	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	55,281			171				82		Non-Residentail Subtotal	55,281	82	
13	Single Family Housing (DU's)			0	Single Family Housing (DU's)		1.00		0	0%	15%	0%	0	0.00	Single Family Housing (DU's)		1.00		0	0%	15%	0%	0	0.00	Single Family Housing (DU's)	0	0	
13	Multi-Family Housing (DU's)	6	6	0	Multi-Family Housing (DU's)	6	0.62		4		15%		3	0.57	Multi-Family Housing (DU's)	6	0.62		4		15%		3	0.57	Multi-Family Housing (DU's)	0	0	
13	Children Care (sf)	9,379	9,379	0	Children Care (sf)	9,379	12.34		116		15%	10%	89	9.46	Children Care (sf)	9,379	12.34		116		15%	10%	89	9.46	Children Care (sf)	0	0	
13	Light Industrial (sf)	26,566	26,566	0	Light Industrial (sf)	26,566	0.97		26		0%		26	0.98	Light Industrial (sf)	26,566	0.97		26		0%		26	0.98	Light Industrial (sf)	0	0	
13	General Office (sf)	0	2,386	2,386	General Office (sf)	0	1.49		0	0%	10%		0		General Office (sf)	2,386	1.49		4	5%	10%		3		General Office (sf)	2,386	3	
13	Business Park (sf)	0	27,833	27,833	Business Park (sf)	0	1.26		0	0%	10%		0		Business Park (sf)	27,833	1.26		35	5%	10%		30		Business Park (sf)	27,833	30	
13	Retail (sf)	0	39,761	39,761	Retail (sf)	0	3.71		0	0%	10%		0		Retail (sf)	39,761	3.71		148	5%	10%	50%	63		Retail (sf)	39,761	63	
13	R & D Office (sf)	0	7,952	7,952	R & D Office (sf)	0	1.07		0	0%	10%		0		R & D Office (sf)	7,952	1.07		9	5%	10%		8		R & D Office (sf)	7,952	8	
13	Restaurant-Fast Food (sf)	0	1,590	1,590	Restaurant-Fast Food (sf)	0	32.65		0		10%		0	0.00	Restaurant-Fast Food (sf)	1,590	32.65		52	5%	10%	50%	22	13.98	Restaurant-Fast Food (sf)	1,590	22	
13	Residential Subtotal	6	6	0	Residential Subtotal	6			4				3		Residential Subtotal	6			4				3		Residential Subtotal	0	0	
13	Non-Residentail Subtotal	35,945	115,467	79,522	Non-Residentail Subtotal	35,945			142				115		Non-Residentail Subtotal	115,467			390				241		Non-Residentail Subtotal	79,522	127	
14	Single Family Housing (DU's)			0	Single Family Housing (DU's)		1.00		0	0%	0%	0%	0	0.00	Single Family Housing (DU's)		1.00		0	0%	0%	0%	0	0.00	Single Family Housing (DU's)	0	0	
14	Multi-Family Housing (DU's)			0	Multi-Family Housing (DU's)		0.62		0		0%		0	0.00	Multi-Family Housing (DU's)		0.62		0		0%		0	0.00	Multi-Family Housing (DU's)	0	0	
14	Non-Residential (sf)			0	Non-Residential (sf)				0		0%		0	0.00	Non-Residential (sf)				0		0%		0	0.00	Non-Residential (sf)	0	0	
14	Residential Subtotal	0	0	0	Residential Subtotal	0			0				0		Residential Subtotal	0			0				0		Residential Subtotal	0	0	
14	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0			0				0		Non-Residentail Subtotal	0	0	
Total	Single Family Housing (DU's)	347	609	262	Single Family Housing (DU's)	347	1.00	1,2	347				268	0.77	Single Family Housing (DU's)	609	1.00	1,2	452				342	0.56	Single Family Housing (DU's)	262	150	
	Multi-Family Housing (DU's)	621	2,206	1,585	Multi-Family Housing (DU's)	621	0.62	1,9	384				314	0.51	Multi-Family Housing (DU's)	2,206	0.62	1,9	1,261				940	0.43	Multi-Family Housing (DU's)	1,585	719	
	Senior Housing (DU's)	0	105	105	Senior Housing (DU's)	0	0.25		0				0		Senior Housing (DU's)	105	0.25		26				18		Senior Housing (DU's)	105	18	
	Retail / Medical Office (sf)	0	0	0	Retail / Medical Office (sf)	0			0				0	0.00	Retail / Medical Office (sf)	0			0				0		Retail / Medical Office (sf)	0	0	
	Hospital / General Office (sf)	0	0	0	Hospital / General Office (sf)	0			0				0	0.00	Hospital / General Office (sf)	0			0				0		Hospital / General Office (sf)	0	0	
	Clinic	34,850	38,586	3,736	Clinic	34,850	5.18		181				136		Clinic	38,586	5.18		200				150		Clinic	3,736	14	
	Hospital	0	1,118	1,118	Hospital	0			0						Hospital	1,118			0						Hospital	1,118	0	
	Fire Station	4,110	6,325	2,215	Fire Station	4,110			0				0		Fire Station	6,325			0				0		Fire Station	2,215	0	
	Library	0	8,939	8,939	Library	0	7.30		0				0		Library	8,939	7.30		65				49		Library	8,939	49	
	Institute	477,842	772,990	295,148	Institute	477,842			0				0		Institute	772,990			0				0		Institute	295,148	0	
	University	625	1,450	825	University	625	0.17		106				90	0.14	University	1,450	0.17	2	247				210	0.14	University	825	120	
	General Office (sf)	8,408	393,745	385,337	General Office (sf)	8,408	1.49		13				10		General Office (sf)	393,745	1.49		588				471	1.20	General Office (sf)	385,337	460	
	Business Park (sf)	0	224,317	224,317	Business Park (sf)	0	1.26	1,4	0				0	0.00	Business Park (sf)	224,317	1.26	1,4	283				228	1.02	Business Park (sf)	224,317	228	
	Medical Office (sf)	0	35,427	35,427	Medical Office (sf)	0	3.57	1,11	0				0	0.00	Medical Office (sf)	35,427	3.57	1,11	127				91	2.58	Medical Office (sf)	35,427	91	
	R & D Office (sf)	0	98,506	98,506	R & D Office (sf)	0	1.07		0				0		R & D Office (sf)	98,506	1.07		106				85		R & D Office (sf)	98,506	85	
	Restaurant-High Turnover (sf)	0	7,086	7,086	Restaurant-High Turnover (sf)	0	9.85	1,5	0				0	0.00	Restaurant-High Turnover (sf)	7,086	9.85	1,5	70				45	6.32	Restaurant-High Turnover (sf)	7,086	45	
	Restaurant-Fast Food (sf)	0	2,696	2,696	Restaurant-Fast Food (sf)	0	32.65		0				0		Restaurant-Fast Food (sf)	2,696	32.65		88				37		Restaurant-Fast Food (sf)	2,696	37	
	Grocery (sf)	3,359	0	-3,359	Grocery (sf)	3,359	3.71		12				6		Grocery (sf)	0	3.71		0				0		Grocery (sf)	-3,359	-6	
	Retail (sf)	0	81,572	81,572	Retail (sf)	0	3.71	1,6	0				0	0.00	Retail (sf)	81,572	3.71	1,6	303				126	1.54	Retail (sf)	81,572	126	
	Pump Station (sf)	8,408	0	-8,408	Pump Station (sf)	8,408			0				0		Pump Station (sf)	0			0				0		Pump Station (sf)	-8,408	0	
	Parking (sf)	150,000	375,926	225,926	Parking (sf)	150,000			0				0		Parking (sf)	375,926			0				0		Parking (sf)	225,926	0	
	Elementary School (sf)	86,684	86,684	0	Elementary School (sf)	86,684	1.21		105				89		Elementary School (sf)	86,684	1.21		105				89		Elementary School (sf)	0	0	
	Shopping Center (sf)	189,286	220,116	30,830	Shopping Center (sf)	189,286	3.71		933				498		Shopping Center (sf)	220,116	3.71		1,037				574		Shopping Center (sf)	30,830	76	
	Church (sf)	4,012	30,440	26,428	Church (sf)	4,012	0.55		2				2		Church (sf)	30,440	0.55		17				13		Church (sf)	26,428	11	
	Open Space (sf)	16,728	16,728	0	Open Space (sf)	16,728			0				0		Open Space (sf)	16,728			0				0		Open Space (sf)	0	0	
	Light Industrial (sf)	26,566	26,566	0	Light Industrial (sf)	26,566	0.97	1,8	26				26	0.98	Light Industrial (sf)	26,566	0.97	1,8	26				26	0.98	Light Industrial (sf)	0	0	
	Children Care (sf)	9,379	9,379	0	Children Care (sf)	9,379	12.34		116				89		Children Care (sf)	9,379	12.34		116				89		Children Care (sf)	0	0	
	Total				Total				2,225				1,527		Total				5,117				3,582		Total		2,224	
	Residential (DU's)	968	2,920	1,952	Residential (DU's)	968			731				581		Residential (DU's)	2,920			1,739				1,299		Residential (DU's)	1,952	887	
	Non-Residential (sf)	1,910,523	4,576,559	2,666,036	Non-Residential (sf)	1,910,523			1,494				945		Non-Residential (sf)	4,576,559			3,378				2,282		Non-Residential (sf)	2,666,036	1,337	

Table A-5 Willowbrook TOD Specific Plan - Trip Generation - PM Peak

Land Uses					Existing Trip Generations									Future Trip Generations									Net Trip Generations			
Group	Land Use	Existing	Future	Net Change	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal/ Walk	% Transit	% Pass-By	Net Vehicle Trips	Net Trip Rate	Land Use	Quantity	Net Vehicle Trips	Total Trips
1	Residential Subtotal	0	100	100	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	100	0	0	0	0	0	0	0	0	Residential Subtotal	100	76	
1	Non-Residentail Subtotal	890,891	2,139,413	1,248,522	Non-Residentail Subtotal	890,891	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	2,139,413	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	1,248,522	1,608	1,684
2A	Residential Subtotal	0	105	105	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	105	0	0	65	0	0	0	44	0	Residential Subtotal	105	44	
2A	Non-Residentail Subtotal	33,000	33,381	381	Non-Residentail Subtotal	33,000	0	0	171	0	0	0	128	0	Non-Residentail Subtotal	33,381	0	0	173	0	0	0	130	0	Non-Residentail Subtotal	381	2	45
2B	Residential Subtotal	0	117	117	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	117	0	0	73	0	0	0	49	0	Residential Subtotal	117	49	
2B	Non-Residentail Subtotal	5,960	36,964	31,004	Non-Residentail Subtotal	5,960	0	0	10	0	0	0	8	0	Non-Residentail Subtotal	36,964	0	0	27	0	0	0	20	0	Non-Residentail Subtotal	31,004	13	62
2C	Residential Subtotal	49	119	70	Residential Subtotal	49	0	0	30	0	0	0	26	0	Residential Subtotal	119	0	0	74	0	0	0	31	0	Residential Subtotal	70	6	
2C	Non-Residentail Subtotal	477,842	772,990	295,148	Non-Residentail Subtotal	477,842	0	0	106	0	0	0	90	0	Non-Residentail Subtotal	772,990	0	0	247	0	0	0	210	0	Non-Residentail Subtotal	295,148	120	126
3A	Residential Subtotal	0	105	105	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	105	0	0	26	0	0	0	18	0	Residential Subtotal	105	18	
3A	Non-Residentail Subtotal	0	8,939	8,939	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	8,939	0	0	65	0	0	0	49	0	Non-Residentail Subtotal	8,939	49	66
3B	Residential Subtotal	19	83	64	Residential Subtotal	19	0	0	19	0	0	0	13	0	Residential Subtotal	83	0	0	51	0	0	0	34	0	Residential Subtotal	64	22	
3B	Non-Residentail Subtotal	0	56,865	56,865	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	56,865	0	0	92	0	0	0	63	0	Non-Residentail Subtotal	56,865	63	84
3C	Residential Subtotal	30	255	225	Residential Subtotal	30	0	0	21	0	0	0	16	0	Residential Subtotal	255	0	0	158	0	0	0	121	0	Residential Subtotal	225	105	
3C	Non-Residentail Subtotal	16,816	173,065	156,249	Non-Residentail Subtotal	16,816	0	0	13	0	0	0	10	0	Non-Residentail Subtotal	173,065	0	0	280	0	0	0	216	0	Non-Residentail Subtotal	156,249	205	310
3D	Residential Subtotal	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	
3D	Non-Residentail Subtotal	150,000	351,610	201,610	Non-Residentail Subtotal	150,000	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	351,610	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	201,610	0	0
3E	Residential Subtotal	0	553	553	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	553	0	0	343	0	0	0	262	0	Residential Subtotal	553	262	
3E	Non-Residentail Subtotal	86,684	375,433	288,749	Non-Residentail Subtotal	86,684	0	0	105	0	0	0	89	0	Non-Residentail Subtotal	375,433	0	0	571	0	0	0	448	0	Non-Residentail Subtotal	288,749	359	621
3F	Residential Subtotal	4	145	141	Residential Subtotal	4	0	0	2	0	0	0	2	0	Residential Subtotal	145	0	0	90	0	0	0	69	0	Residential Subtotal	141	67	
3F	Non-Residentail Subtotal	0	98,494	98,494	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	98,494	0	0	160	0	0	0	123	0	Non-Residentail Subtotal	98,494	123	191
3G	Residential Subtotal	24	134	110	Residential Subtotal	24	0	0	22	0	0	0	17	0	Residential Subtotal	134	0	0	83	0	0	0	63	0	Residential Subtotal	110	47	
3G	Non-Residentail Subtotal	3,359	91,373	88,014	Non-Residentail Subtotal	3,359	0	0	12	0	0	0	6	0	Non-Residentail Subtotal	91,373	0	0	148	0	0	0	114	0	Non-Residentail Subtotal	88,014	108	155
4A	Residential Subtotal	0	48	48	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	48	0	0	48	0	0	0	32	0	Residential Subtotal	48	32	
4A	Non-Residentail Subtotal	49,447	40,761	-8,686	Non-Residentail Subtotal	49,447	0	0	183	0	0	0	74	0	Non-Residentail Subtotal	40,761	0	0	151	0	0	0	73	0	Non-Residentail Subtotal	-8,686	-1	32
4B	Residential Subtotal	0	264	264	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	264	0	0	164	0	0	0	111	0	Residential Subtotal	264	111	
4B	Non-Residentail Subtotal	139,839	179,355	39,516	Non-Residentail Subtotal	139,839	0	0	750	0	0	0	424	0	Non-Residentail Subtotal	179,355	0	0	886	0	0	0	501	0	Non-Residentail Subtotal	39,516	77	188
5	Residential Subtotal	83	93	10	Residential Subtotal	83	0	0	53	0	0	0	39.75	0	Residential Subtotal	93	0	0	65	0	0	0	48.75	0	Residential Subtotal	15	9	
5	Non-Residentail Subtotal	1,900	28,328	26428	Non-Residentail Subtotal	1,900	0	0	1	0	0	0	1	0	Non-Residentail Subtotal	28328	0	0	16	0	0	0	12	0	Non-Residentail Subtotal	26428	11	20
6	Residential Subtotal	272	278	6	Residential Subtotal	272	0	0	171	0	0	0	145	0	Residential Subtotal	278	0	0	173	0	0	0	147	0	Residential Subtotal	6	2	
6	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	2
7	Residential Subtotal	70	70	0	Residential Subtotal	70	0	0	57	0	0	0	48	0	Residential Subtotal	70	0	0	43	0	0	0	37	0	Residential Subtotal	0	-12	
7	Non-Residentail Subtotal	16,728	16,728	0	Non-Residentail Subtotal	16,728	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	16,728	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	-12
8	Residential Subtotal	99	102	3	Residential Subtotal	99	0	0	77	0	0	0	65	0	Residential Subtotal	102	0	0	88	0	0	0	75	0	Residential Subtotal	3	9	
8	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	9
9	Residential Subtotal	116	120	4	Residential Subtotal	116	0	0	116	0	0	0	87	0	Residential Subtotal	120	0	0	121	0	0	0	91	0	Residential Subtotal	4	4	
9	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	4
10	Residential Subtotal	129	132	3	Residential Subtotal	129	0	0	104	0	0	0	78	0	Residential Subtotal	132	0	0	133	0	0	0	100	0	Residential Subtotal	3	22	
10	Non-Residentail Subtotal	2,112	2,112	0	Non-Residentail Subtotal	2,112	0	0	1	0	0	0	1	0	Non-Residentail Subtotal	2,112	0	0	1	0	0	0	1	0	Non-Residentail Subtotal	0	0	22
11	Residential Subtotal	67	91	24	Residential Subtotal	67	0	0	56	0	0	0	42	0	Residential Subtotal	91	0	0	76	0	0	0	57	0	Residential Subtotal	9	15	
11	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	15
12	Residential Subtotal	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	
12	Non-Residentail Subtotal	0	55,281	55,281	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	55,281	0	0	171	0	0	0	82	0	Non-Residentail Subtotal	55,281	82	82
13	Residential Subtotal	6	6	0	Residential Subtotal	6	0	0	4	0	0	0	3	0	Residential Subtotal	6	0	0	4	0	0	0	3	0	Residential Subtotal	0	0	
13	Non-Residentail Subtotal	35,945	115,467	79,522	Non-Residentail Subtotal	35,945	0	0	142	0	0	0	115	0	Non-Residentail Subtotal	115,467	0	0	390	0	0	0	241	0	Non-Residentail Subtotal	79,522	127	127
14	Residential Subtotal	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	0	0	0	0	0	0	0	Residential Subtotal	0	0	
14	Non-Residentail Subtotal	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0	0	0	0	0	0	0	Non-Residentail Subtotal	0	0	0
	Total				Total				2,226				1,528		Total				5,256				3,676		Total		3,832	3,832
	Residential (DU's)	968	2,920	1,952	Residential (DU's)	968			732				582		Residential (DU's)	2,920			1,878				1,393		Residential (DU's)	1,952	887	
	Non-Residential (sf)	1,910,523	4,576,559	2,666,036	Non-Residential (sf)	1,910,523			1,494				945		Non-Residential (sf)	4,576,559			3,378				2,282		Non-Residential (sf)	2,666,036	2,945	

Table A-6. Transit Trips Generated by The Project

3/2/2017

Land Use	Base (Unadjusted) [1] Vehicle Trips		Person Trips [2]		% By Transit [3]		Transit Trips					
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour			PM Peak Hour		
							Total	In	Out	Total	In	Out
Martin Luther King Jr. Medical Campus												
Single Family Housing	51	67	71	94	15%	15%	11	3	8	14	9	5
MLK Medical Campus	1,501	1,993	2,101	2,790	15%	15%	315	215	100	419	152	267
Charles R. Drew University												
Multi-Family Housing	6	7	8	10	15%	15%	1	0	1	1	1	0
University Students	141	141	197	197	15%	15%	30	23	7	30	10	20
Other Specific Plan Land Uses												
Single Family Housing	79	105	111	147	15-25%	15-25%	32	8	24	43	27	16
Multi-Family Housing	714	870	1,000	1,218	15-25%	15-25%	180	37	143	220	145	75
Senior Housing	19	23	27	32	25%	25%	7	2	5	8	4	4
General Office	572	546	801	764	15-25%	15-25%	126	111	15	121	21	100
Business Park	298	269	417	377	10-25%	10-25%	63	53	10	57	15	42
Medical Office	82	121	115	169	15-25%	15-25%	18	15	3	27	8	19
R & D Office	113	101	158	141	10-25%	10-25%	24	18	6	21	2	19
Restaurant-High Turnover	73	67	102	94	15-25%	15-25%	16	9	7	14	9	5
Restaurant-Fast Food	116	84	162	118	10-15%	10-15%	20	10	10	14	8	6
Retail	75	288	105	403	10-25%	10-25%	13	8	5	51	26	25
Elementary School	0	0	0	0	15%	15%	0	0	0	0	0	0
Shopping Center	22	99	31	139	15%	15%	5	3	2	21	10	11
Other/Miscellaneous/Parking	34	88	48	123	15-25%	15-25%	12	6	6	33	15	18
Open Space	0	0	0	0	0%	0%	0	0	0	0	0	0
Light Industrial	0	0	0	0	0%	0%	0	0	0	0	0	0
Children Care	0	0	0	0	15%	15%	0	0	0	0	0	0
	0											
Total	3,896	4,869	5,454	6,816	0-25%	0-25%	873	521	352	1,094	462	632

Appendix B

Intersection Configurations

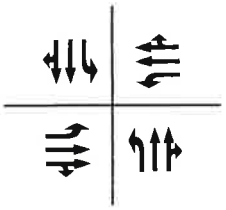
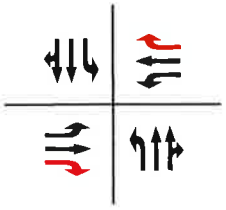
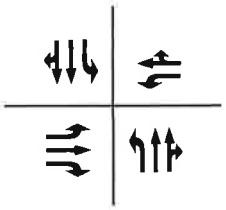
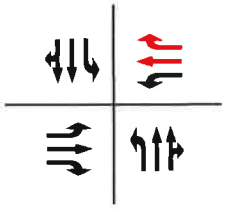
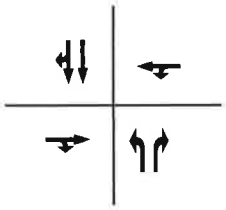
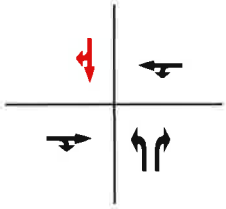
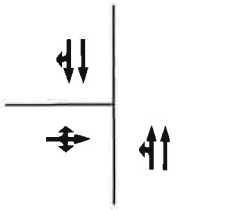
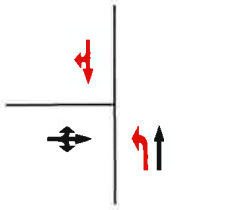
Intersection	Existing Configuration	Specific Plan
19. Compton Ave. & 120th St.		
29. Wilmington Ave. & 120th St. West		
34. Willowbrook W. Ave. & 119th St.		
40. Mona Blvd. & 119th St.		

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Figure B-1
Intersection Configurations Changed in Specific Plan

Willowbrook TOD Specific Plan EIR Traffic Study

The **Mobility** Group
Transportation Strategies & Solutions

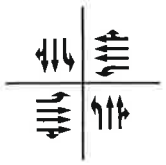
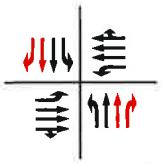
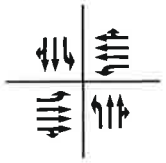
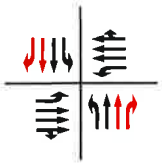
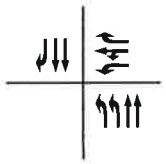
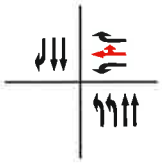
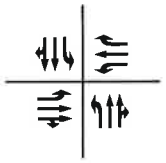
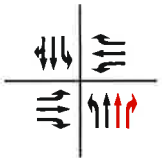
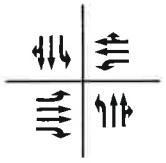
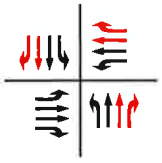
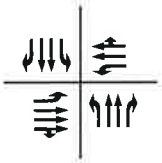
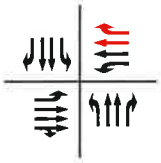
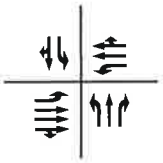
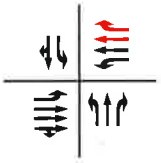
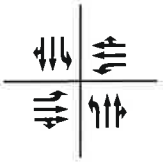
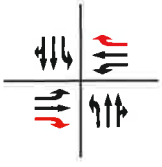
Intersection	Existing Configuration	Specific Plan	Mitigation
3. Avalon Blvd. & El Segundo Bl.		Same as Existing	
4. Avalon Blvd. & Rosecrans Ave.		Same as Existing	
7. Central Ave. & 105 Fwy Ramps WB		Same as Existing	
9. Central Ave. & 120th St.		Same as Existing	
10. Central Ave. & El Segundo Bl.		Same as Existing	
11. Central Ave. & Rosecrans Ave.		Same as Existing	
17. Compton Ave. & Imperial Hwy.		Same as Existing	
19. Compton Ave. & 120th St.			Same as Specific Plan

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Figure B-2
Intersection Configurations - Mitigation

The **Mobility** Group
Transportation Strategies & Solutions

Willowbrook TOD Specific Plan EIR Traffic Study

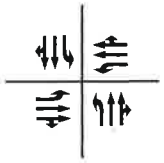
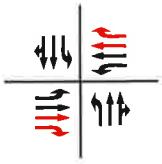
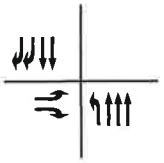
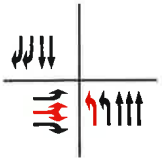
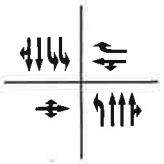
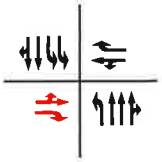
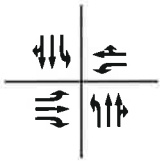
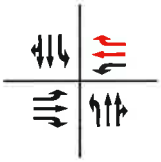
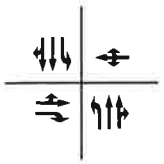
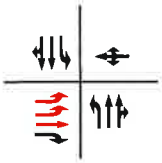
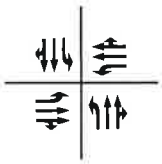
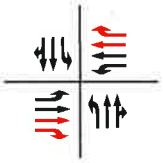
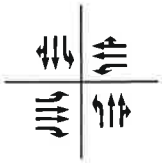
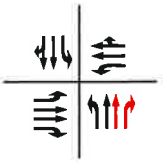
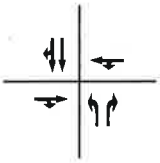
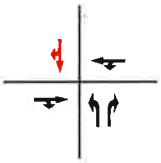
Intersection	Existing Configuration	Specific Plan	Mitigation
21. Compton Ave. & El Segundo Bl.		Same as Existing	
27. Wilmington Ave. & 105 Fwy Ramps EB		Same as Existing	
28. Wilmington Ave. & 118th St.		Same as Existing	
29. Wilmington Ave. & 120th St. (West)			Same as Specific Plan
30. Wilmington Ave. & 120th St. (East)		Same as Existing	
32. Wilmington Ave. & El Segundo Bl.		Same as Existing	
33. Wilmington Ave. & Rosecrans Ave.		Same as Existing	
34. Willowbrook Ave. SB & 119th St.			Same as Specific Plan

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Figure B-2 Cont.
Intersection Configurations - Mitigation

The **Mobility** Group
Transportation Strategies & Solutions

Willowbrook TOD Specific Plan EIR Traffic Study

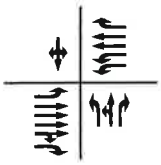
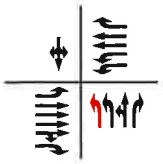
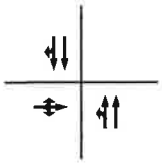
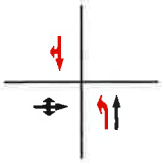
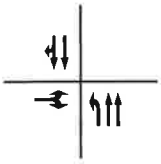
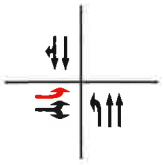
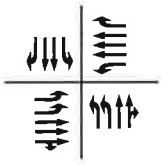
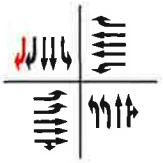
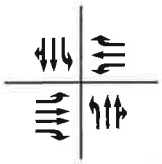
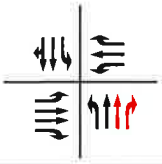
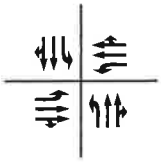
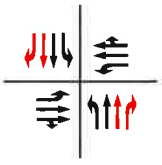
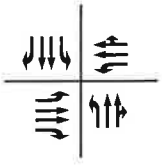
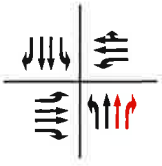
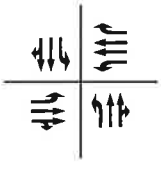
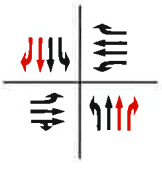
Intersection	Existing Configuration	Specific Plan	Mitigation
36. 105 Fwy Ramps & Imperial Hwy.		Same as Existing	
40. Mona Blvd. & 119th St.			Same as Specific Plan
43. Alameda St. & 103rd St.		Same as Existing	
45. Alameda St. & Imperial Hwy		Same as Existing	
46. Alameda St. & El Segundo Blvd.		Same as Existing	
54. State St. & Imperial Hwy.		Same as Existing	
57. Central Ave. & Compton Blvd.		Same as Existing	
60. Central Ave. & Alondra Blvd.		Same as Existing	

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Figure B-2 cont.
Intersection Configurations - Mitigation

The **Mobility** Group
Transportation Strategies & Solutions

Willowbrook TOD Specific Plan EIR Traffic Study

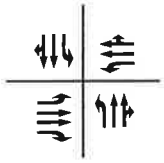
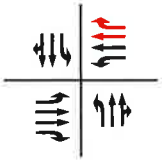
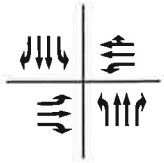
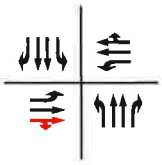
Intersection	Existing Configuration	Specific Plan	Mitigation
61. Wilmington Ave. & Alondra Blvd.		Same as Existing	
63. Wilmington Ave. & Walnut St.		Same as Existing	

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Figure B-2 cont.
Intersection Configurations - Mitigation

The **Mobility** Group
Transportation Strategies & Solutions

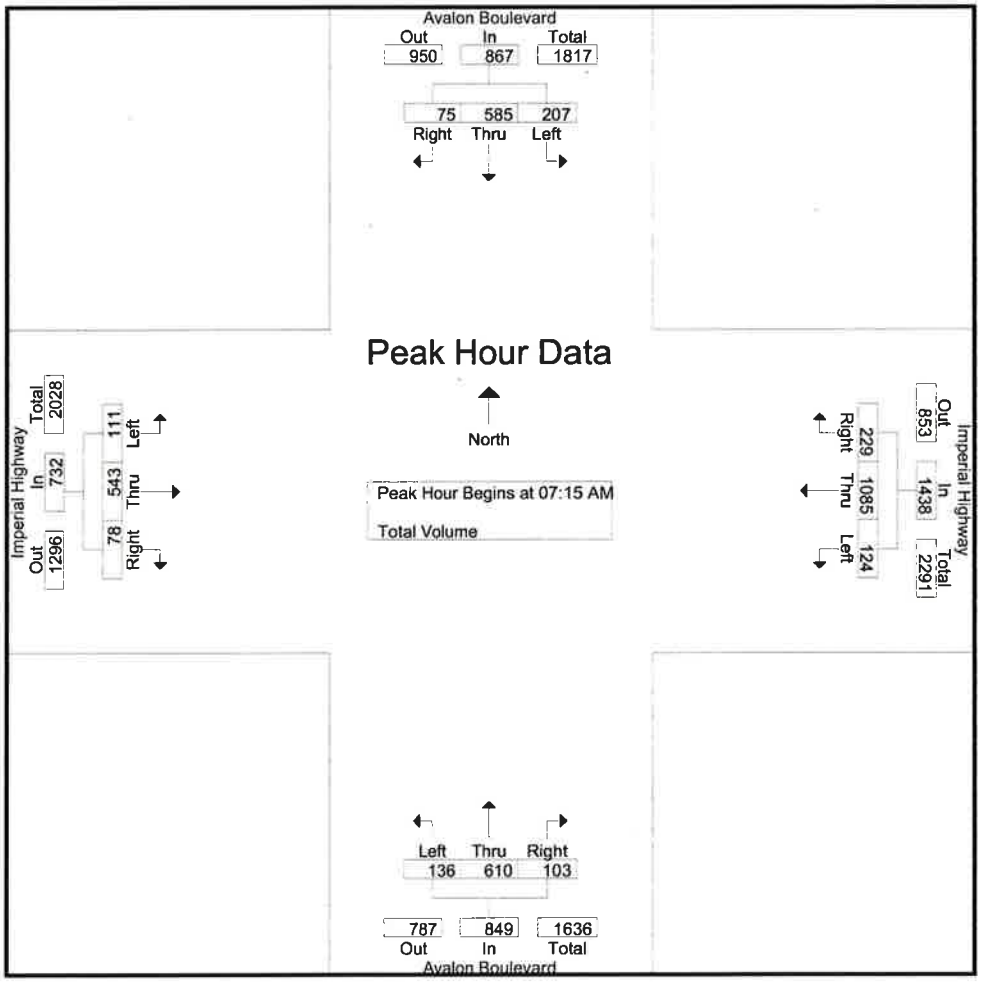
Appendix C

Traffic Count Data

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Avalon Boulevard
E/W: Imperial Highway
Weather: Clear

File Name : LACAVIMAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



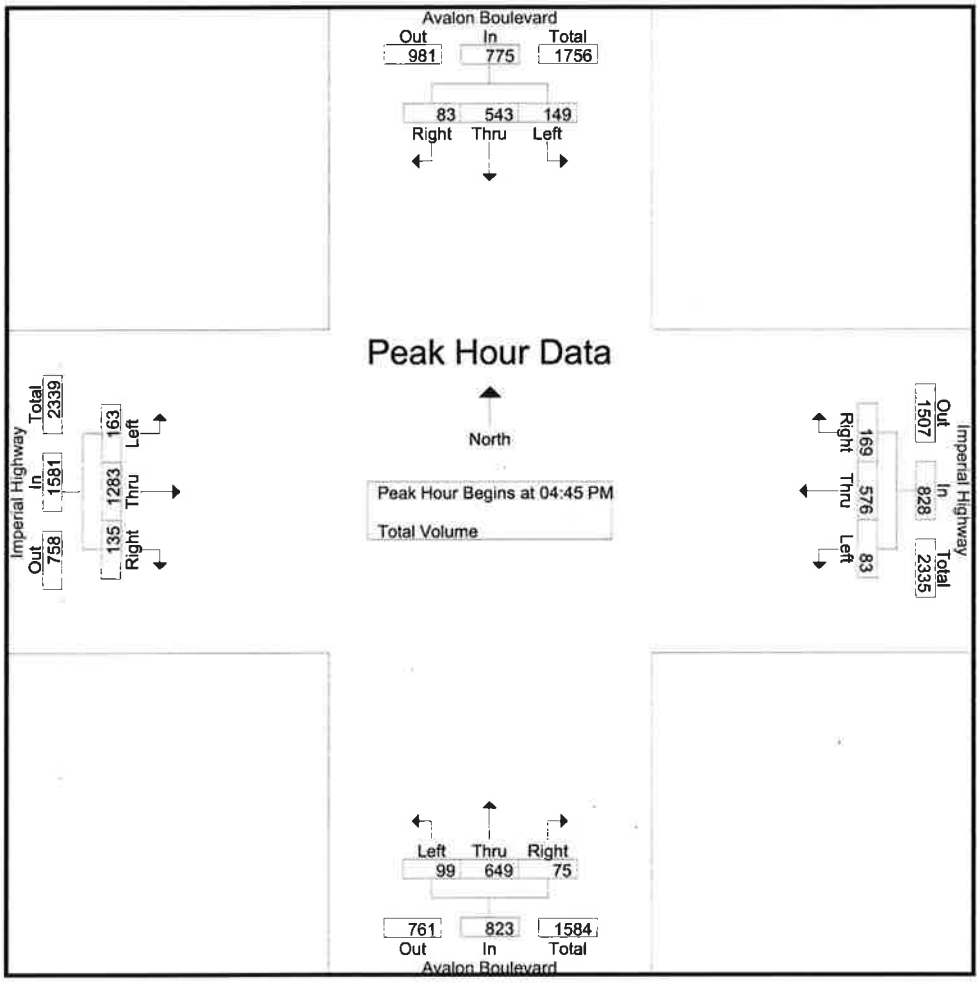
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	48	125	16	189	26	266	50	342	25	146	18	189	20	111	17	148
+15 mins.	51	142	15	208	34	**288**	**61**	**383**	30	**163**	22	215	28	139	16	183
+30 mins.	**57**	**179**	19	**255**	**39**	262	61	362	32	156	**39**	**227**	**41**	**148**	**27**	**216**
+45 mins.	51	139	**25**	215	25	269	57	351	**49**	145	24	218	22	145	18	185
Total Volume	207	585	75	867	124	1085	229	1438	136	610	103	849	111	543	78	732
% App. Total	23.9	67.5	8.7		8.6	75.5	15.9		16	71.8	12.1		15.2	74.2	10.7	
PHF	.908	.817	.750	.850	.795	.942	.939	.939	.694	.936	.660	.935	.677	.917	.722	.847

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Avalon Boulevard
E/W: Imperial Highway
Weather: Clear

File Name : LACAVIMPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



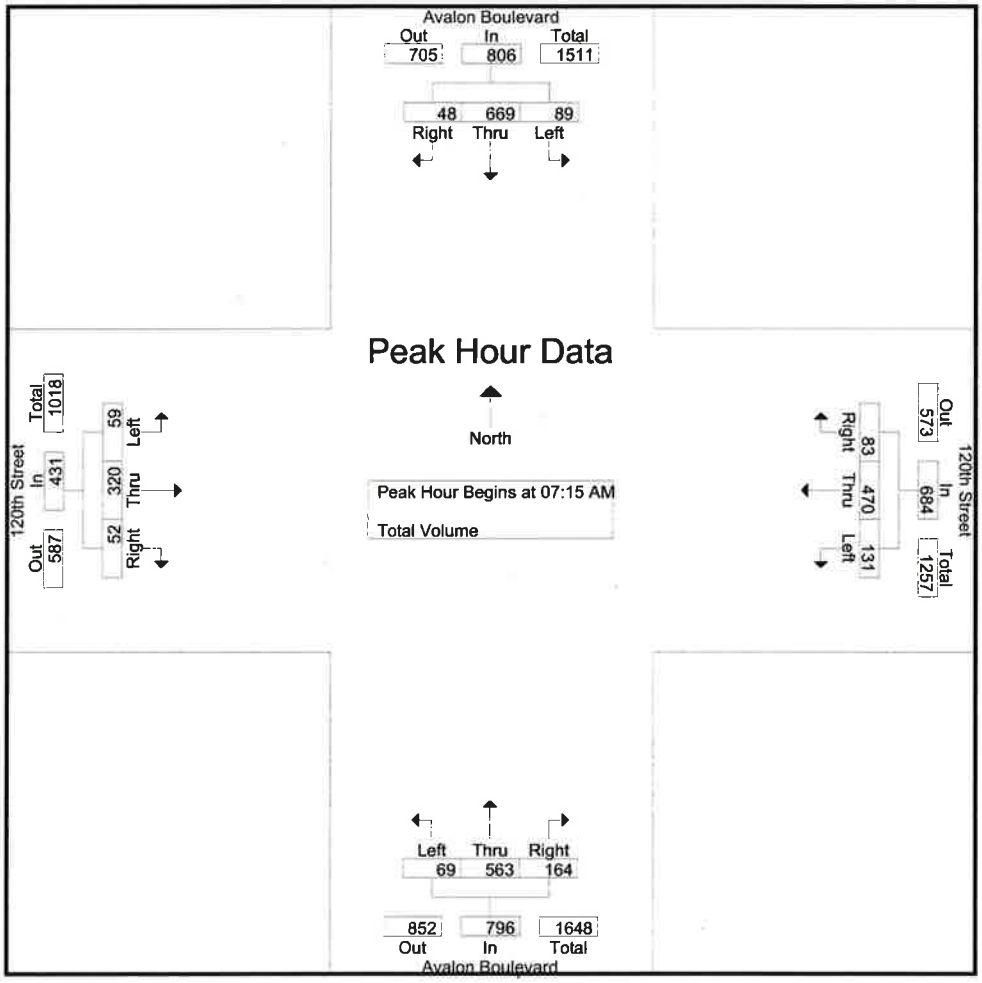
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				05:00 PM				04:45 PM			
+0 mins.	**46**	123	15	184	**23**	**158**	30	211	23	157	**25**	205	**46**	**333**	31	**410**
+15 mins.	38	130	21	189	22	135	46	203	28	167	11	206	46	311	35	392
+30 mins.	31	**154**	21	**206**	17	147	41	205	**29**	166	25	**220**	38	312	27	377
+45 mins.	39	138	**26**	203	20	151	**50**	**221**	21	**171**	14	206	33	327	**42**	402
Total Volume	154	545	83	782	82	591	167	840	101	661	75	837	163	1283	135	1581
% App. Total	19.7	69.7	10.6		9.8	70.4	19.9		12.1	79	9		10.3	81.2	8.5	
PHF	.837	.885	.798	.949	.891	.935	.835	.950	.871	.966	.750	.951	.886	.963	.804	.964

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Avalon Boulevard
E/W: 120th Street
Weather: Clear

File Name : LACAV120AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



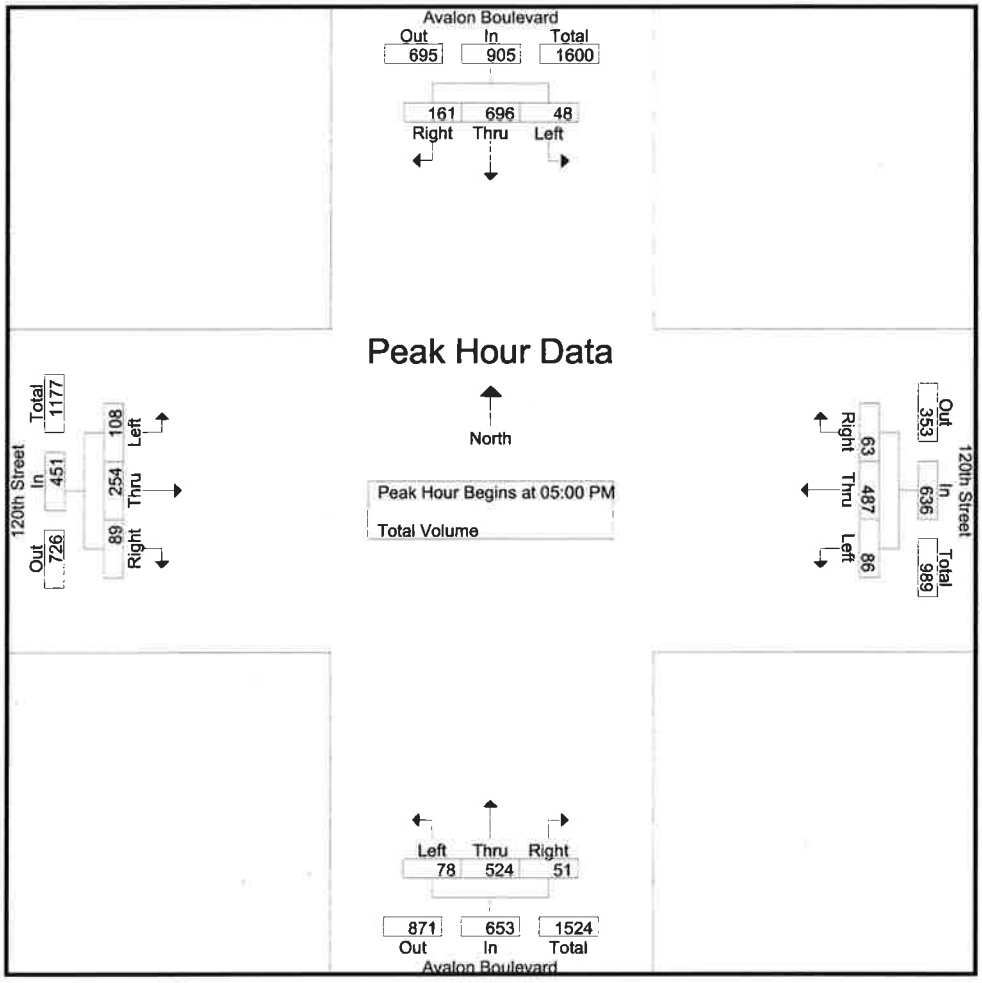
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	11	149	7	167	30	99	21	150	7	136	26	169	8	73	5	86
+15 mins.	18	174	**18**	210	25	128	19	172	18	**147**	46	211	14	85	10	109
+30 mins.	**33**	**181**	13	**227**	34	**133**	21	**188**	21	147	**59**	**227**	14	**95**	**21**	**130**
+45 mins.	27	165	10	202	**42**	110	**22**	174	**23**	133	33	189	**23**	67	16	106
Total Volume	89	669	48	806	131	470	83	684	69	563	164	796	59	320	52	431
% App. Total	11	83	6		19.2	68.7	12.1		8.7	70.7	20.6		13.7	74.2	12.1	
PHF	.674	.924	.667	.888	.780	.883	.943	.910	.750	.957	.695	.877	.641	.842	.619	.829

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Avalon Boulevard
E/W: 120th Street
Weather: Clear

File Name : LACAV120PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



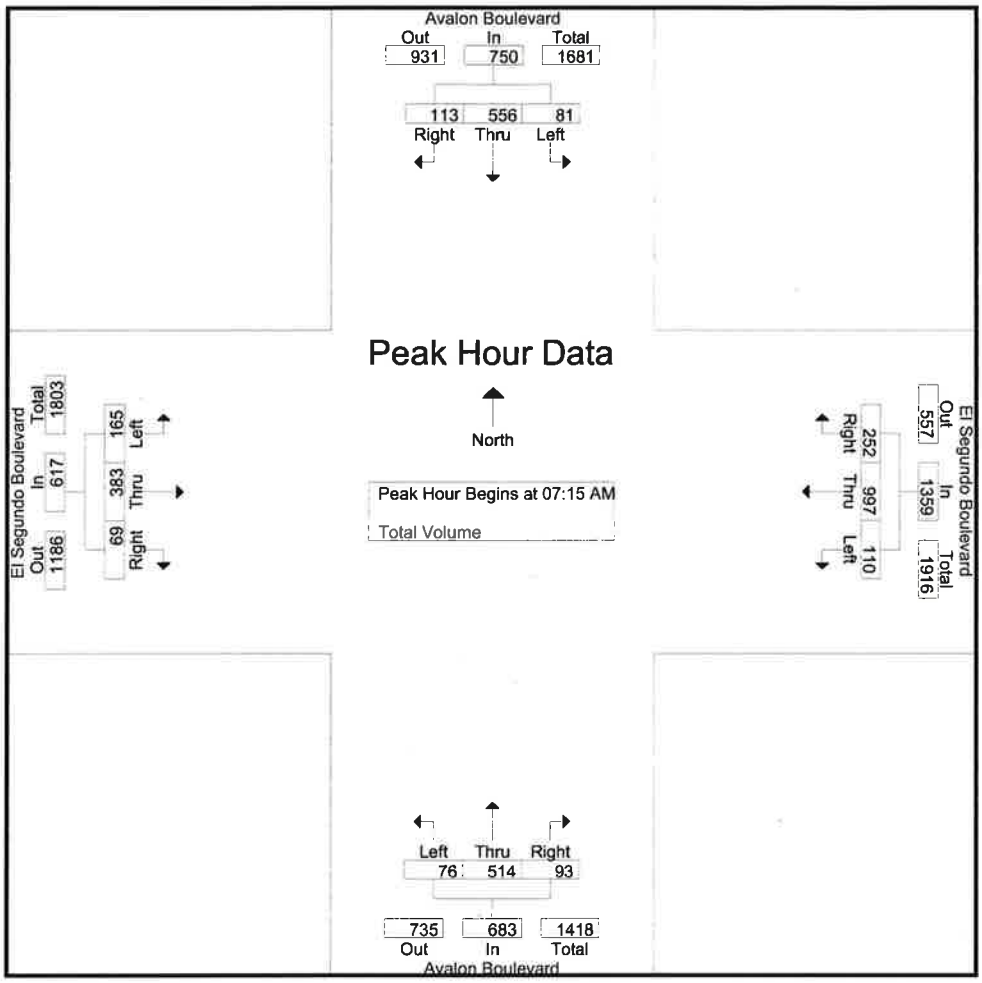
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				05:00 PM				05:00 PM			
+0 mins.	18	166	38	222	17	121	15	153	14	133	8	155	23	**80**	22	**125**
+15 mins.	**19**	179	43	**241**	19	118	14	151	20	123	4	147	25	61	**24**	110
+30 mins.	16	161	**51**	228	**24**	**136**	18	178	21	117	**23**	161	28	65	21	114
+45 mins.	14	**187**	37	238	24	135	**21**	**180**	**23**	**151**	16	**190**	**32**	48	22	102
Total Volume	67	693	169	929	84	510	68	662	78	524	51	653	108	254	89	451
% App. Total	7.2	74.6	18.2		12.7	77	10.3		11.9	80.2	7.8		23.9	56.3	19.7	
PHF	.882	.926	.828	.964	.875	.938	.810	.919	.848	.868	.554	.859	.844	.794	.927	.902

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Avalon Boulevard
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLAAVELAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



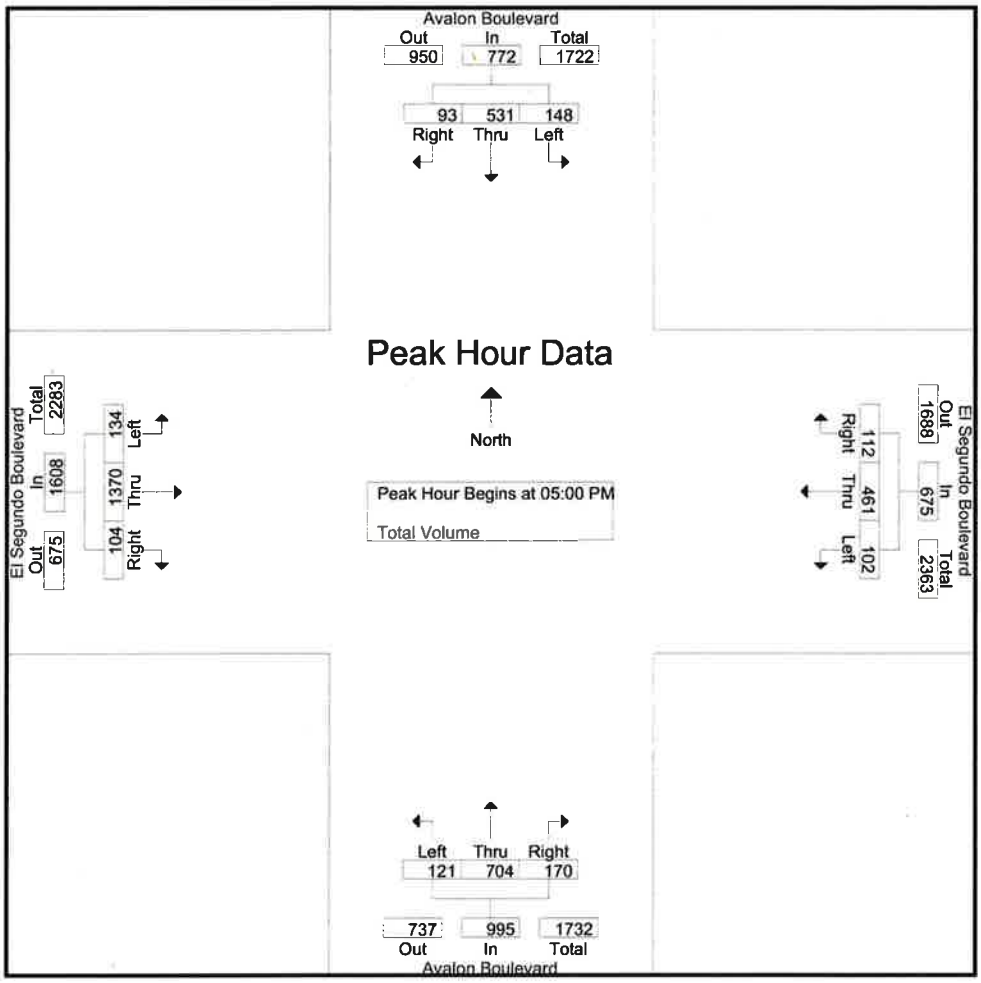
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:30 AM			
+0 mins.	10	122	28	160	16	258	44	318	**22**	132	**25**	179	43	83	15	141
+15 mins.	17	128	**29**	174	28	**274**	61	**363**	19	124	23	166	**47**	**134**	18	**199**
+30 mins.	24	**155**	28	207	31	199	**94**	324	18	141	23	182	44	103	**22**	169
+45 mins.	**30**	151	28	**209**	**35**	266	53	354	18	**153**	19	**190**	13	110	18	141
Total Volume	81	556	113	750	110	997	252	1359	77	550	90	717	147	430	73	650
% App. Total	10.8	74.1	15.1		8.1	73.4	18.5		10.7	76.7	12.6		22.6	66.2	11.2	
PHF	.675	.897	.974	.897	.786	.910	.670	.936	.875	.899	.900	.943	.782	.802	.830	.817

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Avalon Boulevard
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLAAVELPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



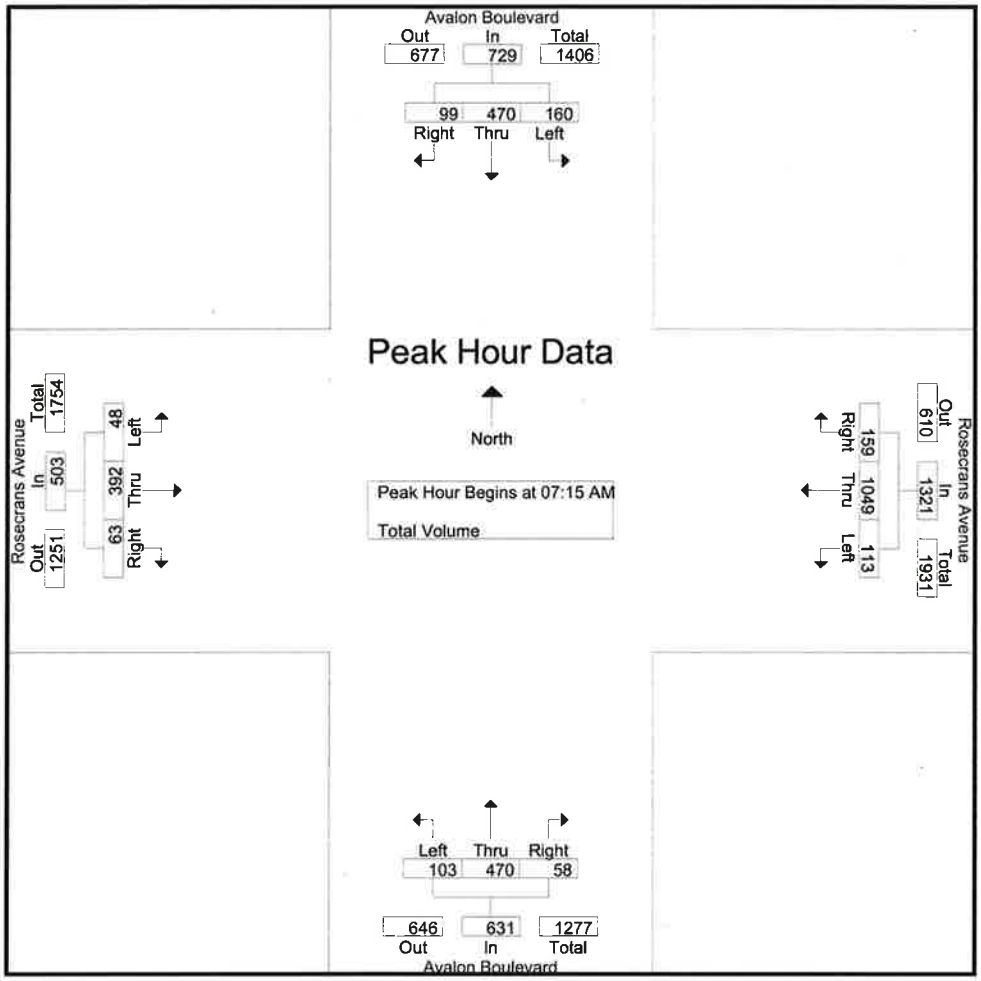
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	37	**143**	17	197	18	100	31	149	30	**197**	27	254	31	335	**34**	400
+15 mins.	33	118	10	161	16	123	**36**	175	**35**	161	41	237	**35**	351	19	405
+30 mins.	**40**	134	**35**	**209**	29	**149**	25	**203**	28	184	**50**	**262**	31	**358**	30	**419**
+45 mins.	38	136	31	205	**30**	143	28	201	30	183	38	251	31	327	26	384
Total Volume	148	531	93	772	93	515	120	728	123	725	156	1004	128	1371	109	1608
% App. Total	19.2	68.8	12		12.8	70.7	16.5		12.3	72.2	15.5		8	85.3	6.8	
PHF	.925	.928	.664	.923	.775	.864	.833	.897	.879	.920	.780	.958	.914	.957	.801	.959

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Avalon Boulevard
E/W: Rosecrans Avenue
Weather: Clear

File Name : CLAAVROAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:45 AM			
+0 mins.	22	96	**28**	146	25	**309**	33	**367**	23	**133**	8	164	12	**114**	14	**140**
+15 mins.	37	119	25	181	24	263	36	323	17	109	11	137	13	96	**21**	130
+30 mins.	**55**	**128**	26	**209**	**32**	244	40	316	**32**	117	**26**	**175**	10	92	18	120
+45 mins.	46	127	20	193	32	233	**50**	315	26	111	21	158	**14**	90	17	121
Total Volume	160	470	99	729	113	1049	159	1321	98	470	66	634	49	392	70	511
% App. Total	21.9	64.5	13.6		8.6	79.4	12		15.5	74.1	10.4		9.6	76.7	13.7	
PHF	.727	.918	.884	.872	.883	.849	.795	.900	.766	.883	.635	.906	.875	.860	.833	.913

Counts Unlimited
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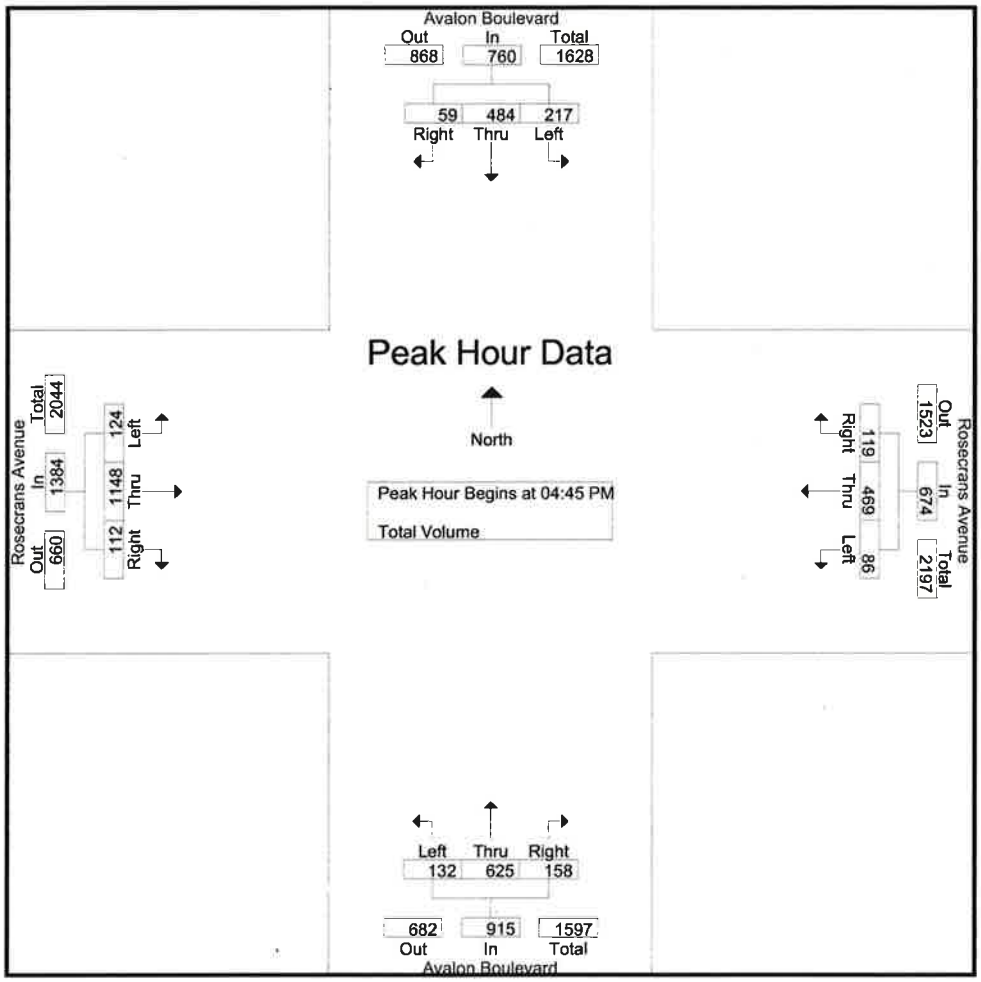
County of Los Angeles
N/S: Avalon Boulevard
E/W: Rosecrans Avenue
Weather: Clear

File Name : CLAAVROPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:45 PM			
+0 mins.	58	114	**21**	193	**29**	120	**40**	189	33	**158**	43	234	33	275	26	334
+15 mins.	53	119	9	181	21	**132**	37	**190**	27	157	32	216	**35**	299	28	362
+30 mins.	58	**126**	18	**202**	28	119	30	177	**44**	155	37	**236**	32	258	**31**	321
+45 mins.	**62**	114	16	192	23	122	27	172	27	150	**56**	233	24	**316**	27	**367**
Total Volume	231	473	64	768	101	493	134	728	131	620	168	919	124	1148	112	1384
% App. Total	30.1	61.6	8.3		13.9	67.7	18.4		14.3	67.5	18.3		9	82.9	8.1	
PHF	.931	.938	.762	.950	.871	.934	.838	.958	.744	.981	.750	.974	.886	.908	.903	.943

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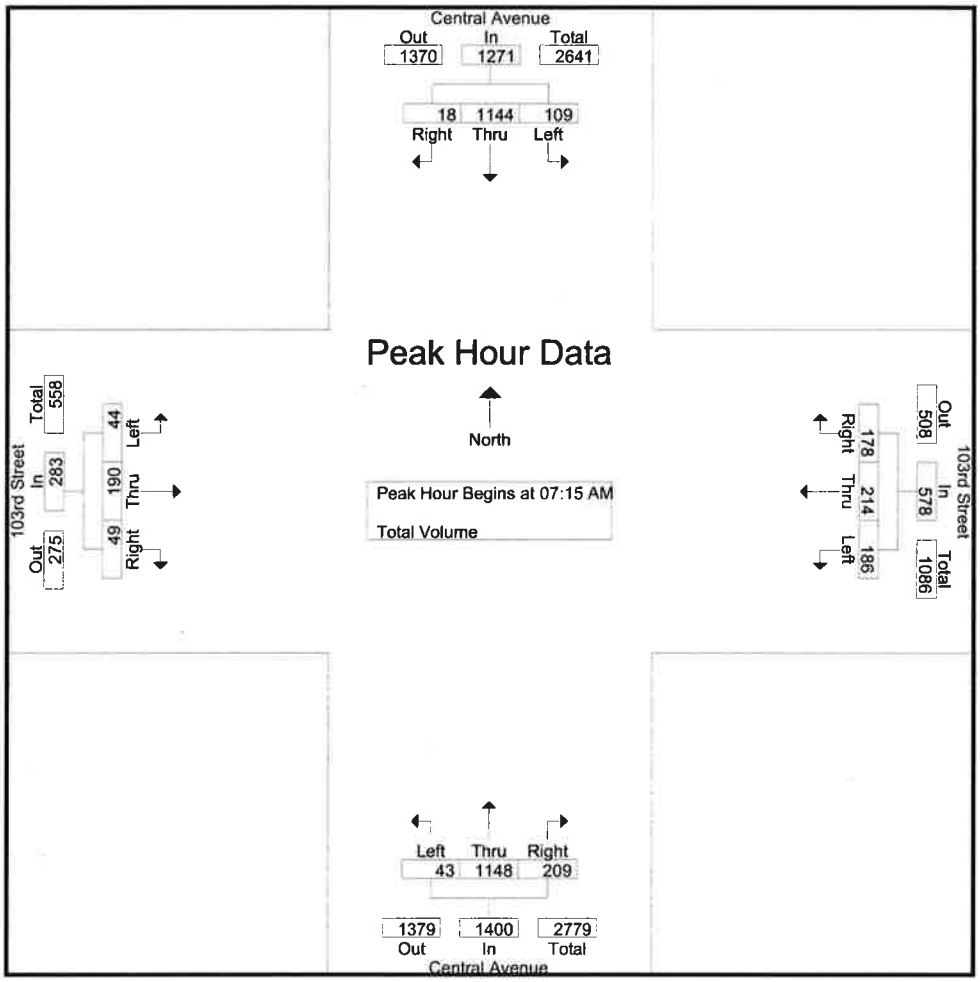
County of Los Angeles
N/S: Central Avenue
E/W: 103rd Street
Weather: Clear

File Name : LACCE103AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:30 AM			
+0 mins.	16	269	4	289	41	55	**55**	**151**	5	295	29	329	8	51	13	72
+15 mins.	27	280	2	309	51	47	51	149	8	**334**	39	**381**	**10**	**55**	**15**	**80**
+30 mins.	31	**328**	4	**363**	**53**	**61**	33	147	7	286	58	351	8	48	13	69
+45 mins.	**35**	267	**8**	310	41	51	39	131	**15**	285	**69**	369	8	44	11	63
Total Volume	109	1144	18	1271	186	214	178	578	35	1200	195	1430	34	198	52	284
% App. Total	8.6	90	1.4		32.2	37	30.8		2.4	83.9	13.6		12	69.7	18.3	
PHF	.779	.872	.563	.875	.877	.877	.809	.957	.583	.898	.707	.938	.850	.900	.867	.888

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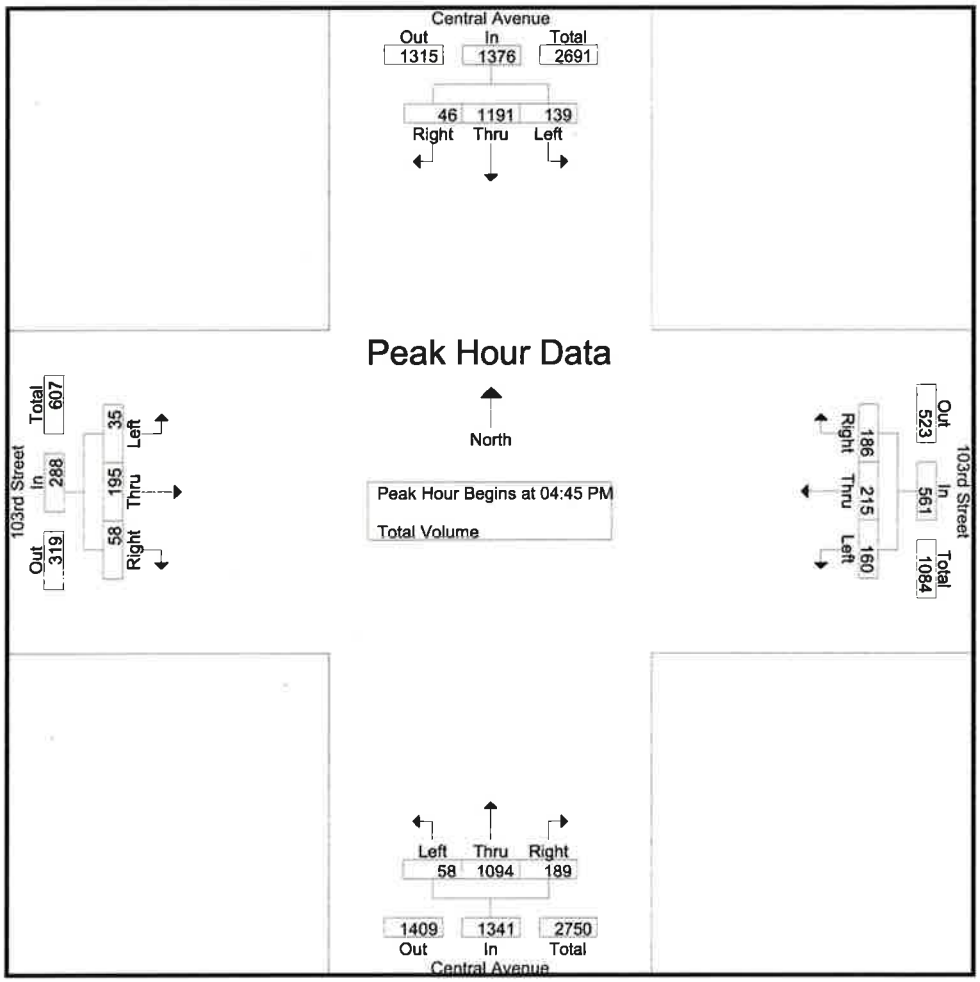
County of Los Angeles
N/S: Central Avenue
E/W: 103rd Street
Weather: Clear

File Name : LACCE103PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:45 PM				05:00 PM			
+0 mins.	34	288	12	334	43	63	54	**160**	**17**	**282**	**56**	**355**	9	48	11	68
+15 mins.	38	**323**	11	**372**	**44**	**68**	39	151	15	278	48	341	9	54	**16**	79
+30 mins.	37	292	**13**	342	39	45	43	127	14	265	40	319	9	52	12	73
+45 mins.	**41**	312	5	358	39	60	**59**	158	12	269	45	326	**13**	**69**	12	**94**
Total Volume	150	1215	41	1406	165	236	195	596	58	1094	189	1341	40	223	51	314
% App. Total	10.7	86.4	2.9		27.7	39.6	32.7		4.3	81.6	14.1		12.7	71	16.2	
PHF	.915	.940	.788	.945	.938	.868	.826	.931	.853	.970	.844	.944	.769	.808	.797	.835

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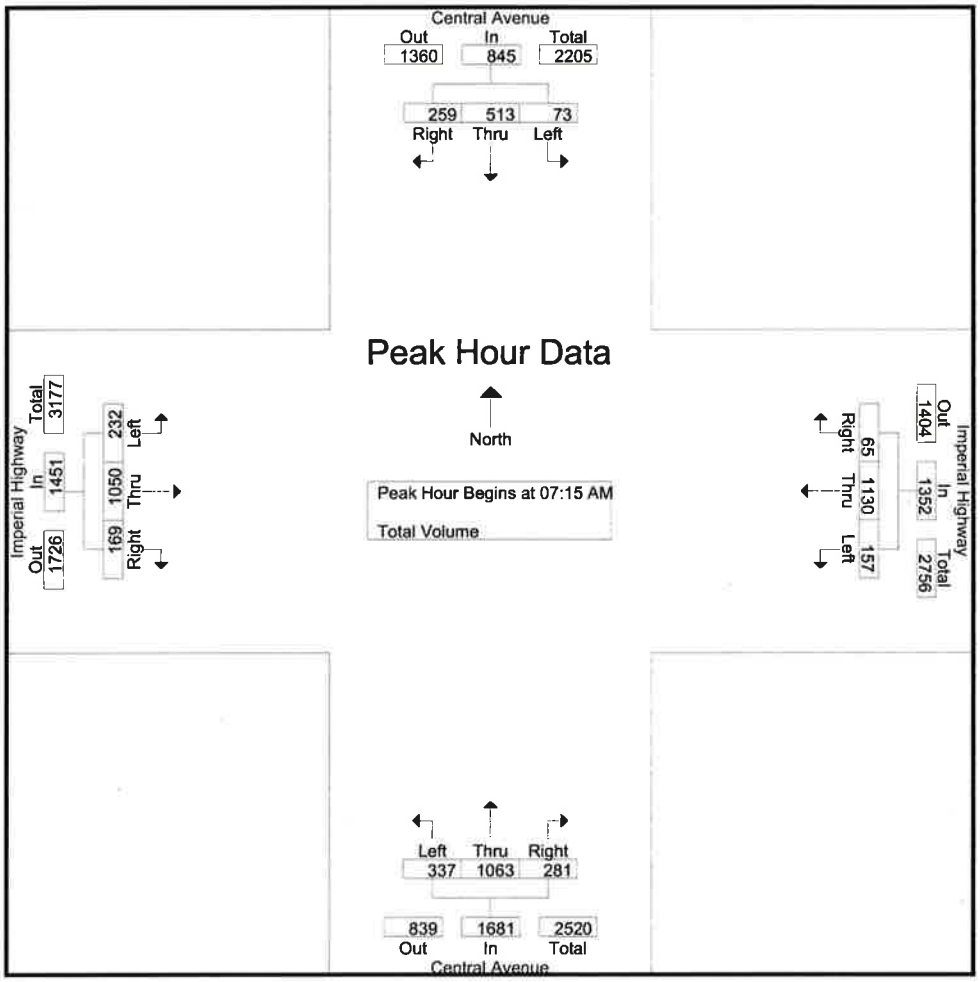
County of Los Angeles
N/S: Central Avenue
E/W: Imperial Highway
Weather: Clear

File Name : LACCEIMAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	18	109	**83**	210	30	297	**20**	347	79	244	75	398	60	**277**	31	368
+15 mins.	16	113	65	194	**53**	**332**	12	**397**	92	253	71	416	55	258	44	357
+30 mins.	18	**167**	54	**239**	35	236	18	289	90	265	68	423	**68**	242	**59**	**369**
+45 mins.	**21**	124	57	202	39	265	15	319	**97**	**315**	**80**	**492**	49	273	35	357
Total Volume	73	513	259	845	157	1130	65	1352	358	1077	294	1729	232	1050	169	1451
% App. Total	8.6	60.7	30.7		11.6	83.6	4.8		20.7	62.3	17		16	72.4	11.6	
PHF	.869	.768	.780	.884	.741	.851	.813	.851	.923	.855	.919	.879	.853	.948	.716	.983

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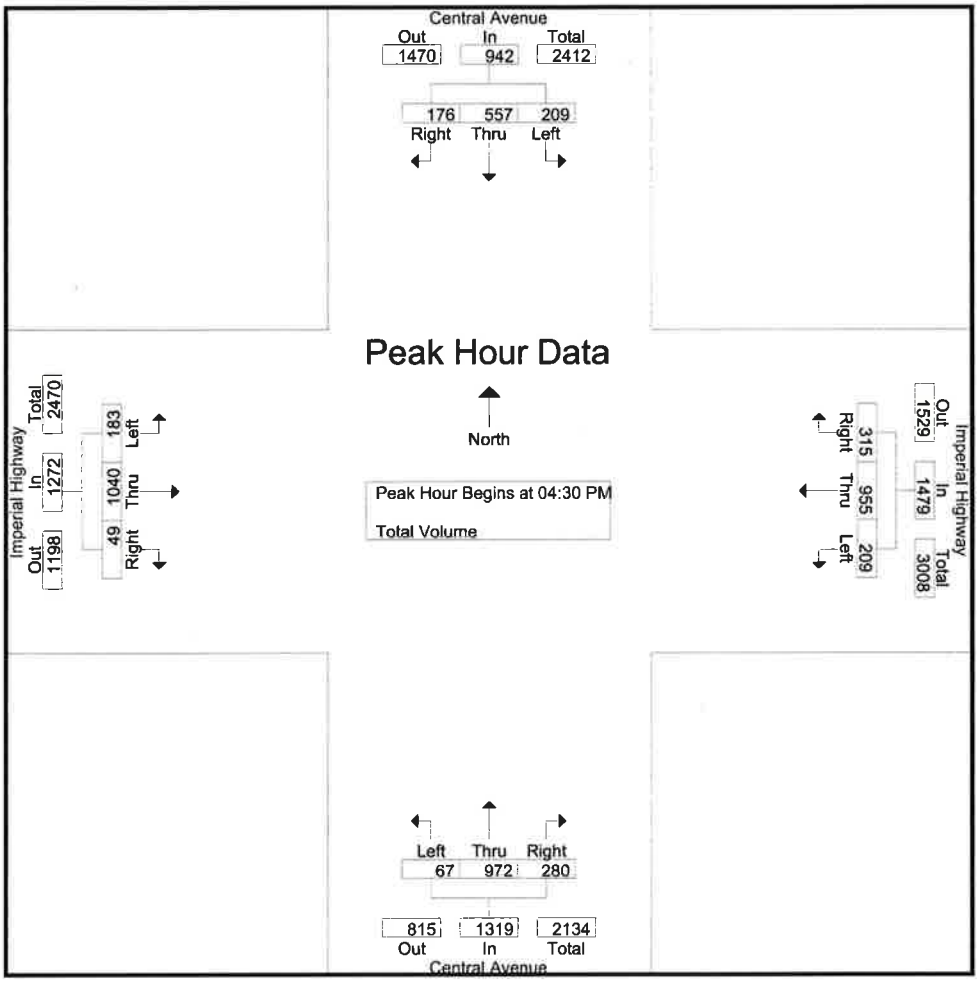
County of Los Angeles
N/S: Central Avenue
E/W: Imperial Highway
Weather: Clear

File Name : LACCEIMPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:45 PM				05:00 PM			
+0 mins.	40	137	47	224	49	**256**	78	**383**	14	255	77	346	46	237	12	295
+15 mins.	**68**	**148**	38	**254**	55	226	73	354	**19**	248	69	336	**62**	**301**	**14**	**377**
+30 mins.	55	140	**49**	244	**56**	240	79	375	15	238	**79**	332	49	237	6	292
+45 mins.	46	130	47	223	49	233	**85**	367	17	**279**	67	**363**	55	243	12	310
Total Volume	209	555	181	945	209	955	315	1479	65	1020	292	1377	212	1018	44	1274
% App. Total	22.1	58.7	19.2		14.1	64.6	21.3		4.7	74.1	21.2		16.6	79.9	3.5	
PHF	.768	.938	.923	.930	.933	.933	.926	.965	.855	.914	.924	.948	.855	.846	.786	.845

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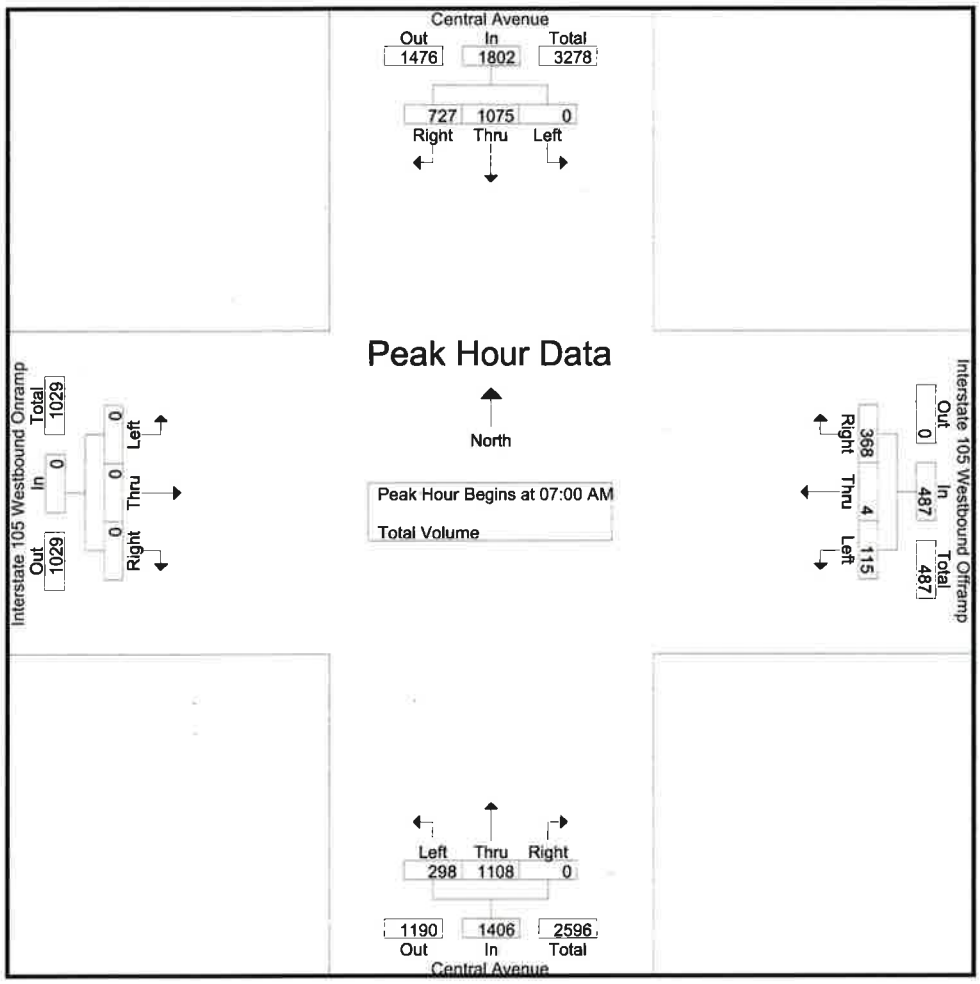
County of Los Angeles
N/S: Central Avenue
E/W: Interstate 105 Westbound Ramps
Weather: Clear

File Name : LACCE105WAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:15 AM				07:00 AM			
+0 mins.	0	243	182	425	45	**3**	**101**	**149**	**84**	285	0	**369**	0	0	0	0
+15 mins.	0	280	**203**	483	**49**	2	81	132	84	266	0	350	0	0	0	0
+30 mins.	0	**312**	194	**506**	31	0	88	119	57	**302**	0	359	0	0	0	0
+45 mins.	0	240	148	388	44	1	92	137	62	285	0	347	0	0	0	0
Total Volume	0	1075	727	1802	169	6	362	537	287	1138	0	1425	0	0	0	0
% App. Total	0	59.7	40.3		31.5	1.1	67.4		20.1	79.9	0		0	0	0	
PHF	.000	.861	.895	.890	.862	.500	.896	.901	.854	.942	.000	.965	.000	.000	.000	.000

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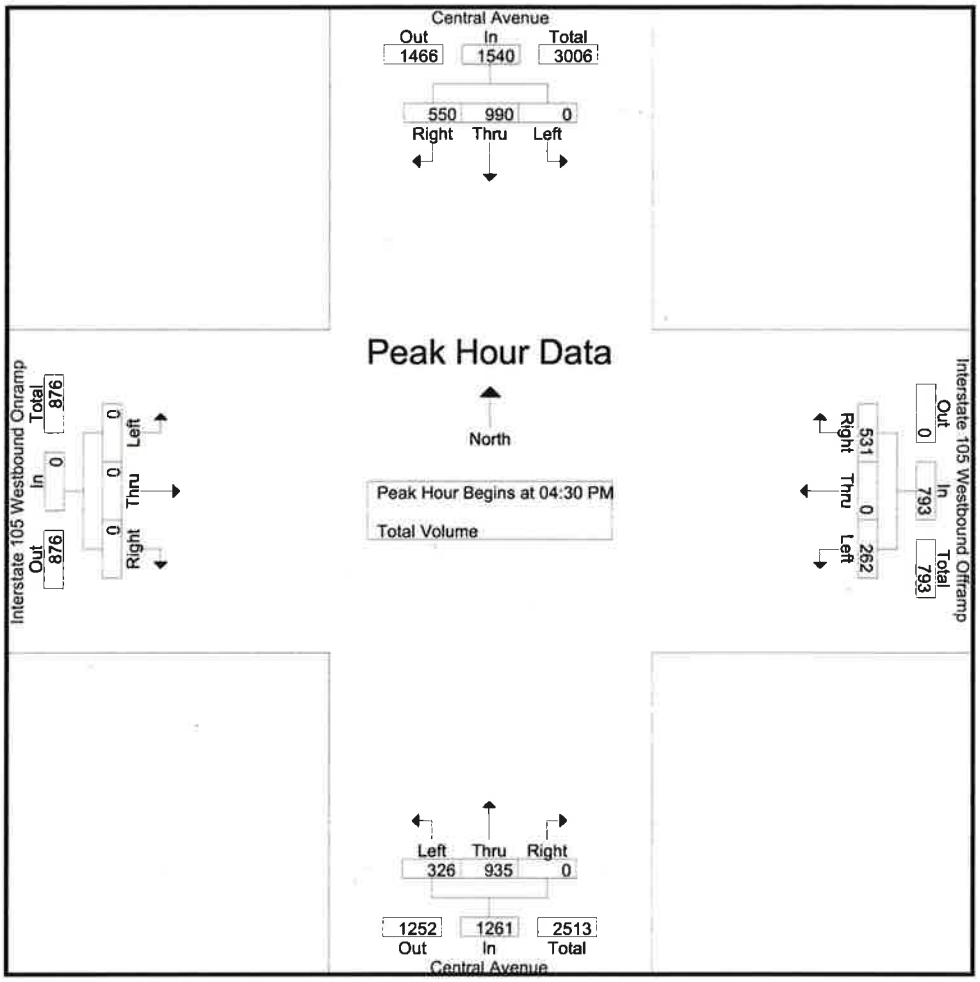
County of Los Angeles
N/S: Central Avenue
E/W: Interstate 105 Westbound Ramps
Weather: Clear

File Name : LACCE105WPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:00 PM			
+0 mins.	0	229	**151**	380	74	0	**161**	**235**	77	**239**	0	316	0	0	0	0
+15 mins.	0	**306**	142	**448**	70	0	146	216	82	234	0	316	0	0	0	0
+30 mins.	0	246	109	355	66	0	134	200	81	224	0	305	0	0	0	0
+45 mins.	0	234	126	360	**75**	0	132	207	**86**	238	0	**324**	0	0	0	0
Total Volume	0	1015	528	1543	285	0	573	858	326	935	0	1261	0	0	0	0
% App. Total	0	65.8	34.2		33.2	0	66.8		25.9	74.1	0		0	0	0	
PHF	.000	.829	.874	.861	.950	.000	.890	.913	.948	.978	.000	.973	.000	.000	.000	.000

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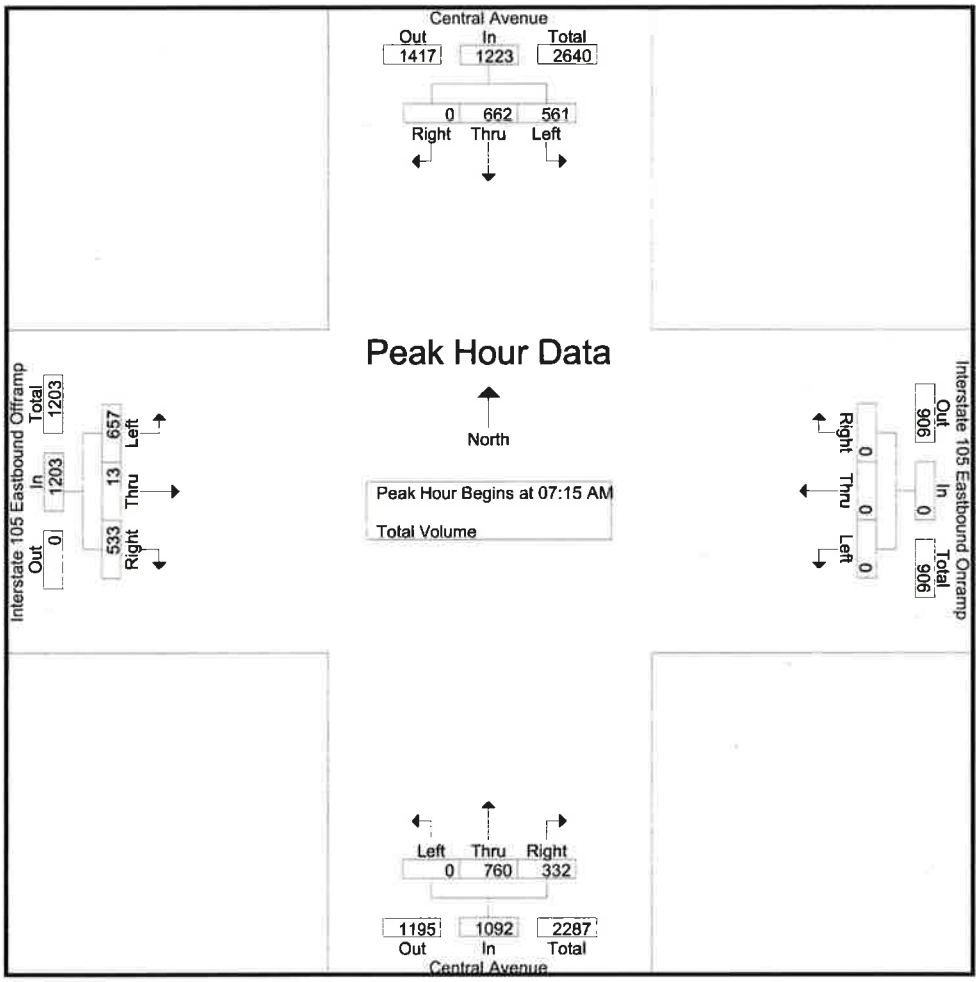
County of Los Angeles
N/S: Central Avenue
E/W: Interstate 105 Eastbound Ramps
Weather: Clear

File Name : LACCE105EAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:00 AM			
+0 mins.	**167**	126	0	293	0	0	0	0	0	200	88	288	143	1	77	221
+15 mins.	158	175	0	**333**	0	0	0	0	0	**201**	**94**	**295**	180	3	120	303
+30 mins.	106	179	0	285	0	0	0	0	0	170	71	241	169	**6**	144	319
+45 mins.	130	**182**	0	312	0	0	0	0	0	189	79	268	**193**	4	**169**	**366**
Total Volume	561	662	0	1223	0	0	0	0	0	760	332	1092	685	14	510	1209
% App. Total	45.9	54.1	0		0	0	0		0	69.6	30.4		56.7	1.2	42.2	
PHF	.840	.909	.000	.918	.000	.000	.000	.000	.000	.945	.883	.925	.887	.583	.754	.826

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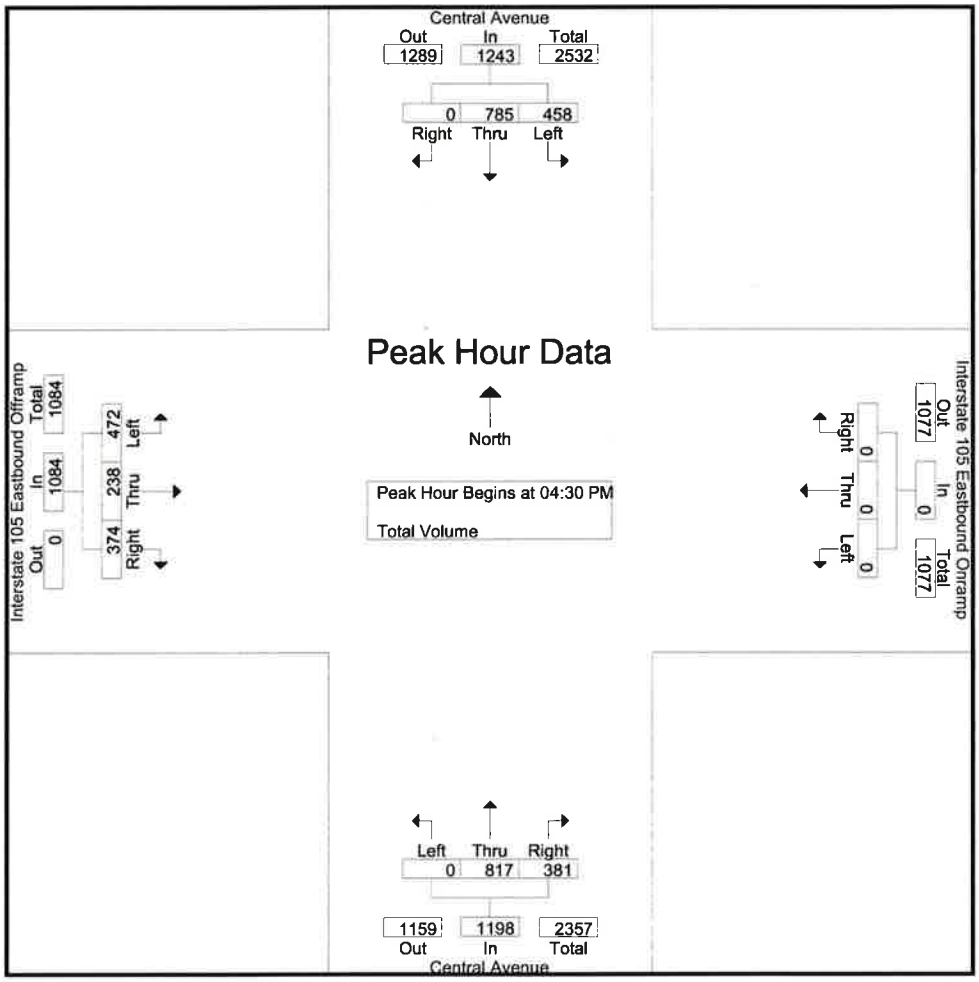
County of Los Angeles
N/S: Central Avenue
E/W: Interstate 105 Eastbound Ramps
Weather: Clear

File Name : LACCE105EPM
Site Code : 12815514
Start Date : 9/23/2015



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:00 PM				04:30 PM				05:00 PM			
+0 mins.	129	185	0	314	0	0	0	0	0	**211**	85	296	116	62	86	264
+15 mins.	117	171	0	288	0	0	0	0	0	199	79	278	123	61	103	287
+30 mins.	139	**209**	0	**348**	0	0	0	0	0	207	104	311	**135**	**66**	90	**291**
+45 mins.	**140**	180	0	320	0	0	0	0	0	200	**113**	**313**	122	54	**107**	283
Total Volume	525	745	0	1270	0	0	0	0	0	817	381	1198	496	243	386	1125
% App. Total	41.3	58.7	0		0	0	0		0	68.2	31.8		44.1	21.6	34.3	
PHF	.938	.891	.000	.912	.000	.000	.000	.000	.000	.968	.843	.957	.919	.920	.902	.966

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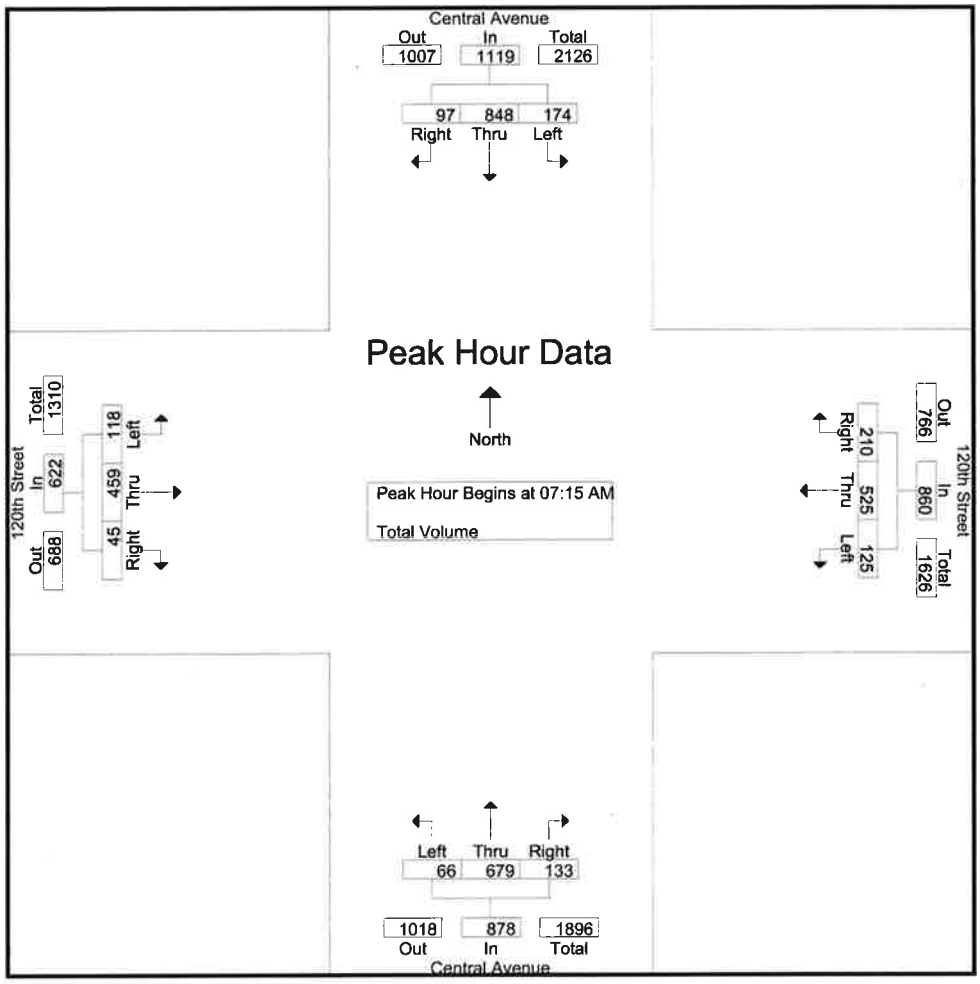
County of Los Angeles
N/S: Central Avenue
E/W: 120th Street
Weather: Clear

File Name : CLACE120AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	39	150	25	214	25	104	37	166	17	**181**	14	212	26	67	7	100
+15 mins.	40	204	16	260	33	138	59	230	**21**	164	44	**229**	26	136	8	170
+30 mins.	47	**255**	**32**	**334**	**34**	**171**	**79**	**284**	10	160	**47**	217	26	**167**	**17**	**210**
+45 mins.	**48**	239	24	311	33	112	35	180	18	174	28	220	**40**	89	13	142
Total Volume	174	848	97	1119	125	525	210	860	66	679	133	878	118	459	45	622
% App. Total	15.5	75.8	8.7		14.5	61	24.4		7.5	77.3	15.1		19	73.8	7.2	
PHF	.906	.831	.758	.838	.919	.768	.665	.757	.786	.938	.707	.959	.738	.687	.662	.740

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County of Los Angeles
N/S: Central Avenue
E/W: 120th Street
Weather: Clear

File Name : CLACE120PM
Site Code : 12815514
Start Date : 9/23/2015
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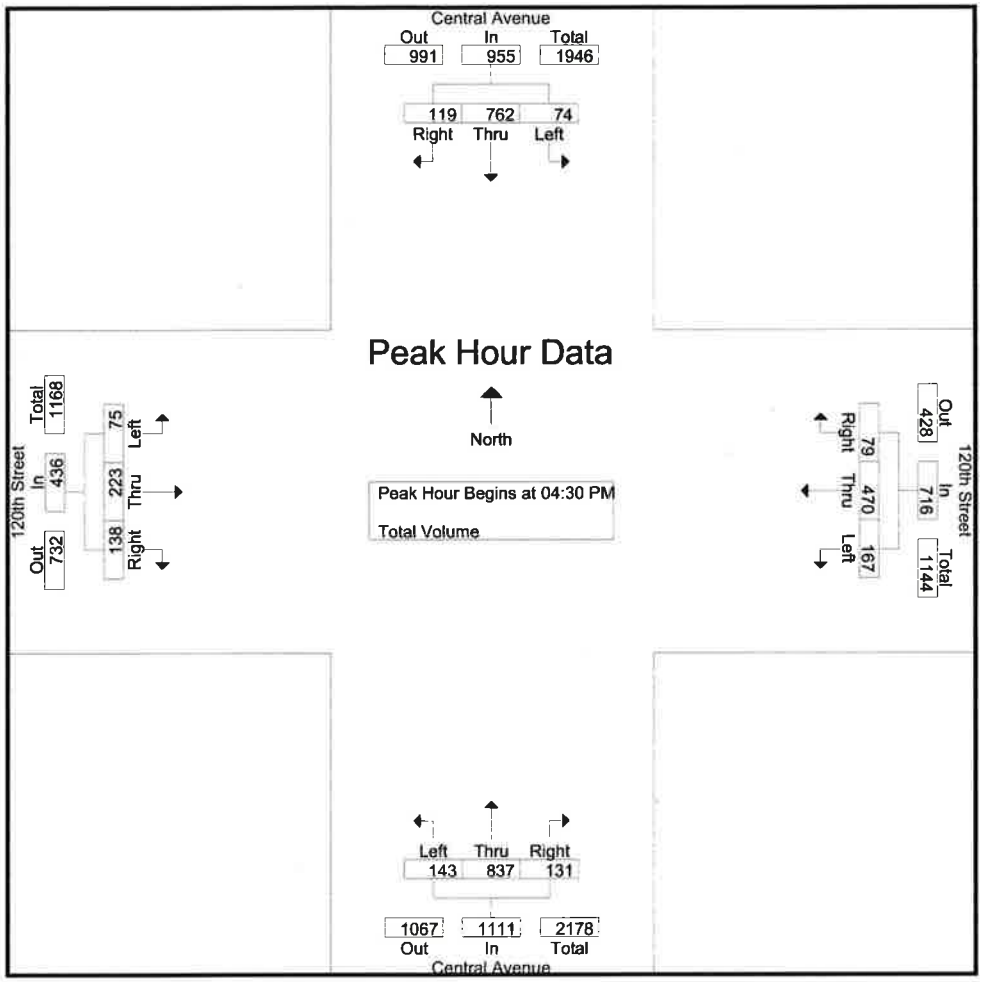

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				05:00 PM				04:30 PM			
+0 mins.	12	178	24	214	38	**129**	**24**	**191**	29	209	**38**	276	17	58	**41**	116
+15 mins.	23	203	28	254	40	120	19	179	41	**224**	29	294	18	54	34	106
+30 mins.	14	167	33	214	42	117	19	178	43	188	31	262	**23**	**62**	40	**125**
+45 mins.	**25**	**214**	**34**	**273**	**47**	115	20	182	**47**	224	27	**298**	17	49	23	89
Total Volume	74	762	119	955	167	481	82	730	160	845	125	1130	75	223	138	436
% App. Total	7.7	79.8	12.5		22.9	65.9	11.2		14.2	74.8	11.1		17.2	51.1	31.7	
PHF	.740	.890	.875	.875	.888	.932	.854	.955	.851	.943	.822	.948	.815	.899	.841	.872

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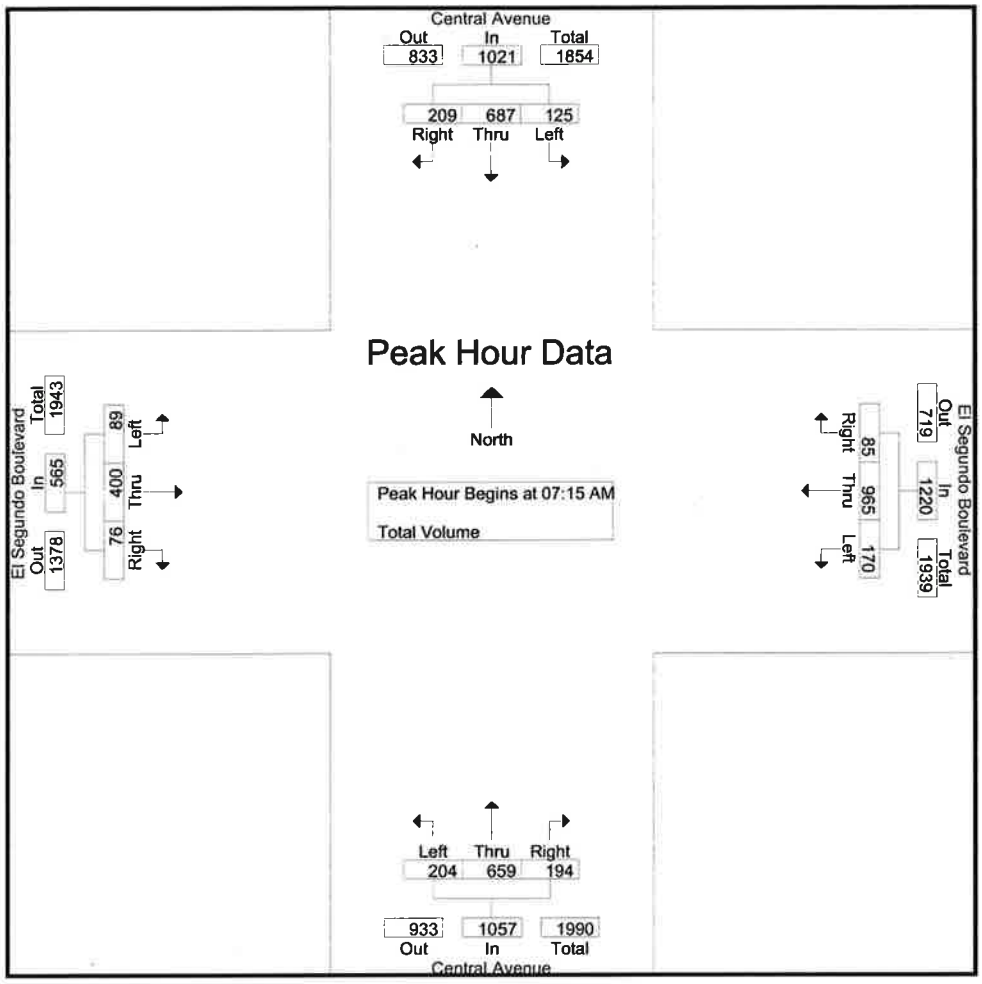
County of Los Angeles
N/S: Central Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLACEELAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	28	173	**59**	260	34	253	22	309	44	**183**	28	255	24	92	12	128
+15 mins.	**40**	182	55	277	40	**256**	21	**317**	42	165	30	237	22	**133**	**32**	**187**
+30 mins.	35	**220**	51	**306**	41	227	19	287	55	152	**74**	281	**25**	100	20	145
+45 mins.	19	122	39	180	**55**	229	**23**	307	**63**	159	62	**284**	24	105	20	149
Total Volume	122	697	204	1023	170	965	85	1220	204	659	194	1057	95	430	84	609
% App. Total	11.9	68.1	19.9		13.9	79.1	7		19.3	62.3	18.4		15.6	70.6	13.8	
PHF	.763	.792	.864	.836	.773	.942	.924	.962	.810	.900	.655	.930	.950	.808	.656	.814

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County of Los Angeles
N/S: Central Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLACEELPM
Site Code : 12815514
Start Date : 9/23/2015
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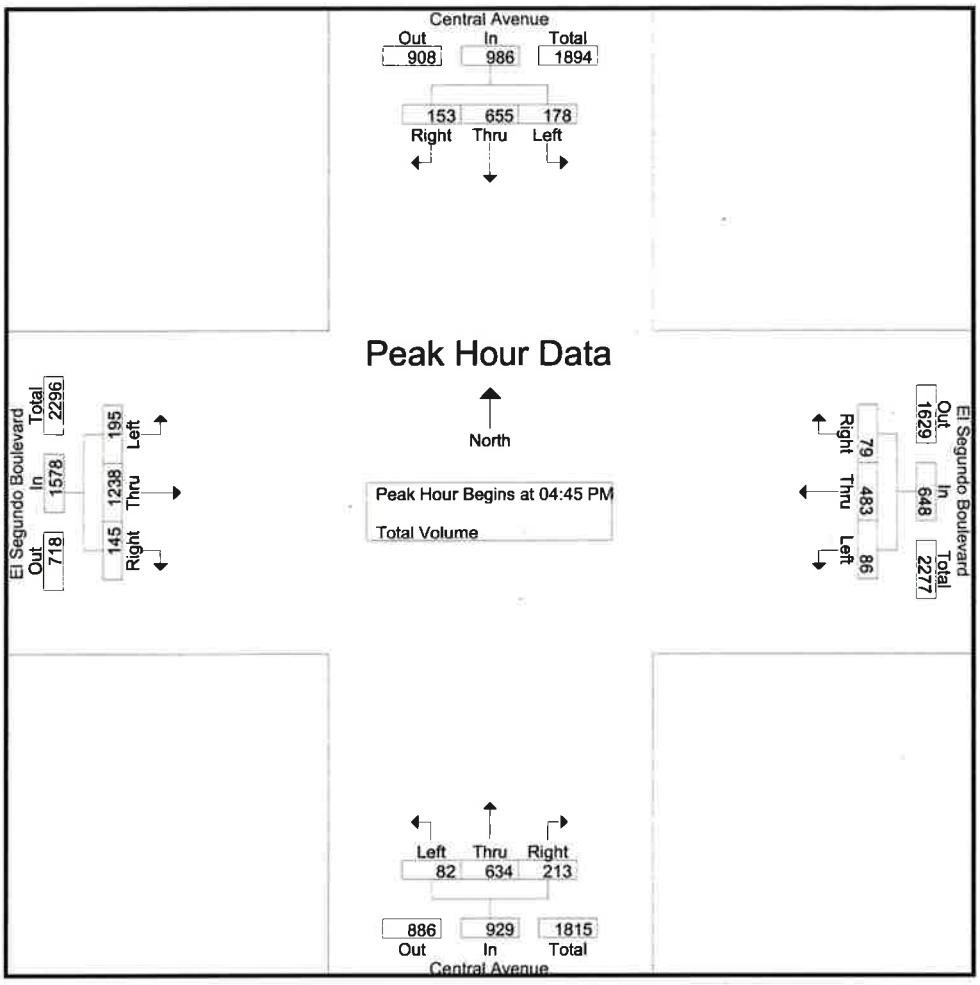

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	46	**181**	40	**267**	21	**137**	16	174	22	**187**	55	**264**	**61**	290	31	382
+15 mins.	43	148	**42**	233	**24**	120	20	164	**23**	144	56	223	52	**359**	**42**	**453**
+30 mins.	44	174	31	249	21	92	19	132	16	154	**60**	230	36	306	35	377
+45 mins.	**50**	167	35	252	20	134	**24**	**178**	21	149	42	212	59	307	39	405
Total Volume	183	670	148	1001	86	483	79	648	82	634	213	929	208	1262	147	1617
% App. Total	18.3	66.9	14.8		13.3	74.5	12.2		8.8	68.2	22.9		12.9	78	9.1	
PHF	.915	.925	.881	.937	.896	.881	.823	.910	.891	.848	.888	.880	.852	.879	.875	.892

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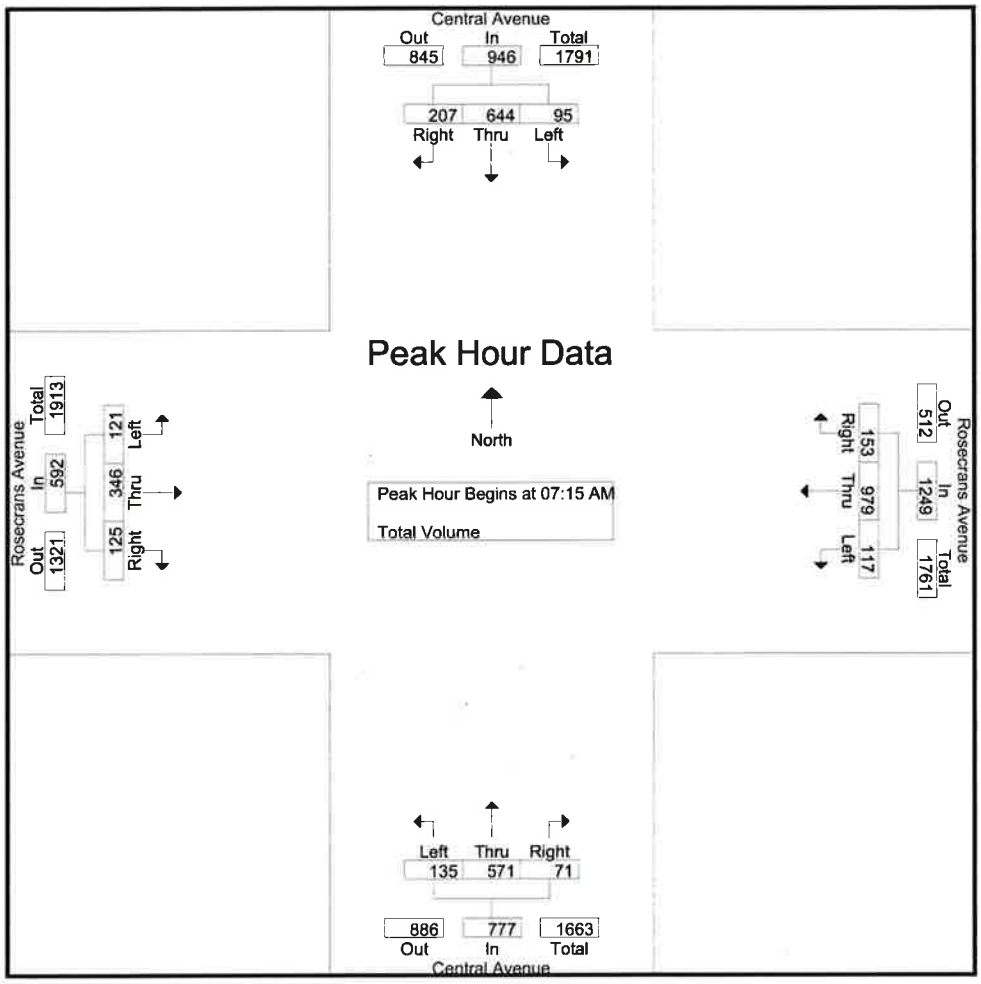
County of Los Angeles
N/S: Central Avenue
E/W: Rosecrans Avenue
Weather: Clear

File Name : CLACEROAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:15 AM				07:45 AM			
+0 mins.	21	151	36	208	21	243	36	300	**40**	**151**	10	**201**	27	**108**	**33**	**168**
+15 mins.	**32**	**189**	56	**277**	15	254	27	296	30	139	19	188	**43**	85	33	161
+30 mins.	27	179	**65**	271	36	**270**	39	**345**	25	143	**23**	191	22	101	23	146
+45 mins.	22	114	55	191	**41**	244	**48**	333	40	138	19	197	27	92	31	150
Total Volume	102	633	212	947	113	1011	150	1274	135	571	71	777	119	386	120	625
% App. Total	10.8	66.8	22.4		8.9	79.4	11.8		17.4	73.5	9.1		19	61.8	19.2	
PHF	.797	.837	.815	.855	.689	.936	.781	.923	.844	.945	.772	.966	.692	.894	.909	.930

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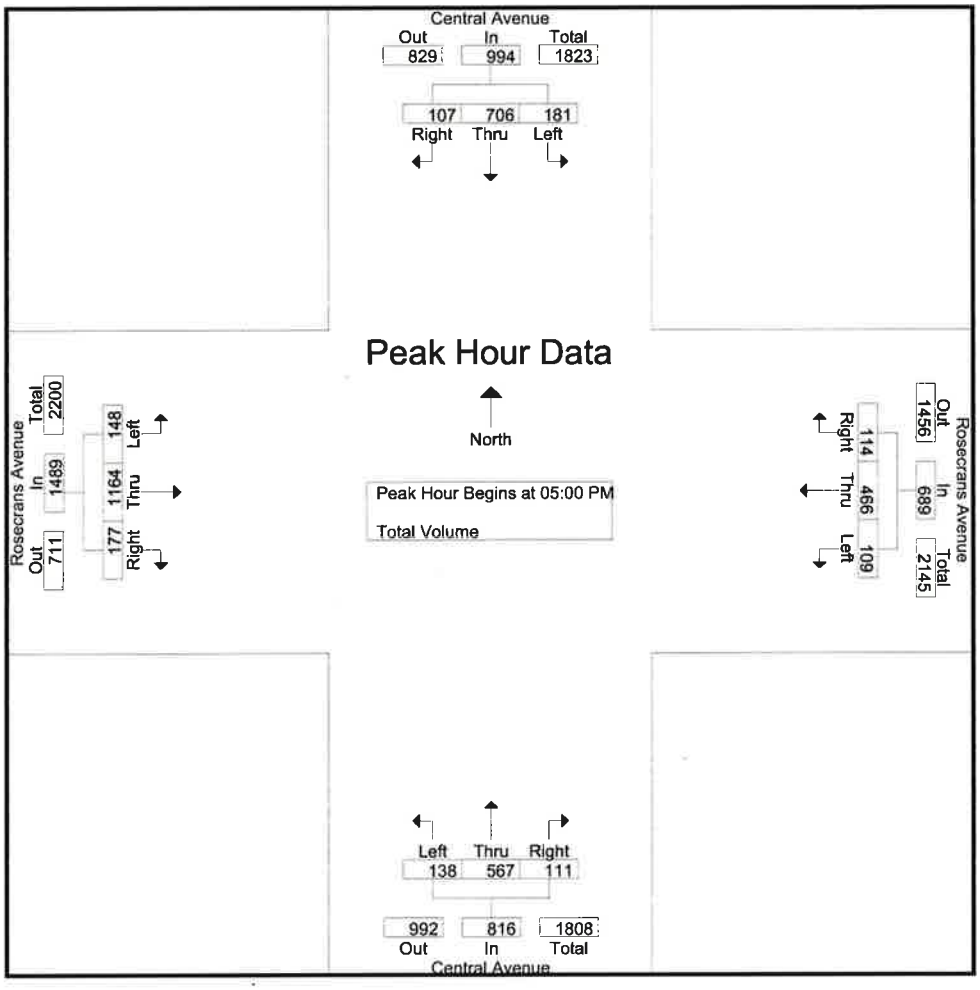
County of Los Angeles
N/S: Central Avenue
E/W: Rosecrans Avenue
Weather: Clear

File Name : CLACEROPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				05:00 PM				05:00 PM			
+0 mins.	44	180	18	242	31	108	20	159	40	141	21	202	49	279	35	363
+15 mins.	36	171	22	229	30	**132**	25	**187**	23	135	**41**	199	**53**	295	45	**393**
+30 mins.	**53**	159	29	241	32	117	**33**	182	**45**	133	28	206	25	**300**	**49**	374
+45 mins.	48	**196**	**38**	**282**	**38**	104	32	174	30	**158**	21	**209**	21	290	48	359
Total Volume	181	706	107	994	131	461	110	702	138	567	111	816	148	1164	177	1489
% App. Total	18.2	71	10.8		18.7	65.7	15.7		16.9	69.5	13.6		9.9	78.2	11.9	
PHF	.854	.901	.704	.881	.862	.873	.833	.939	.767	.897	.677	.976	.698	.970	.903	.947

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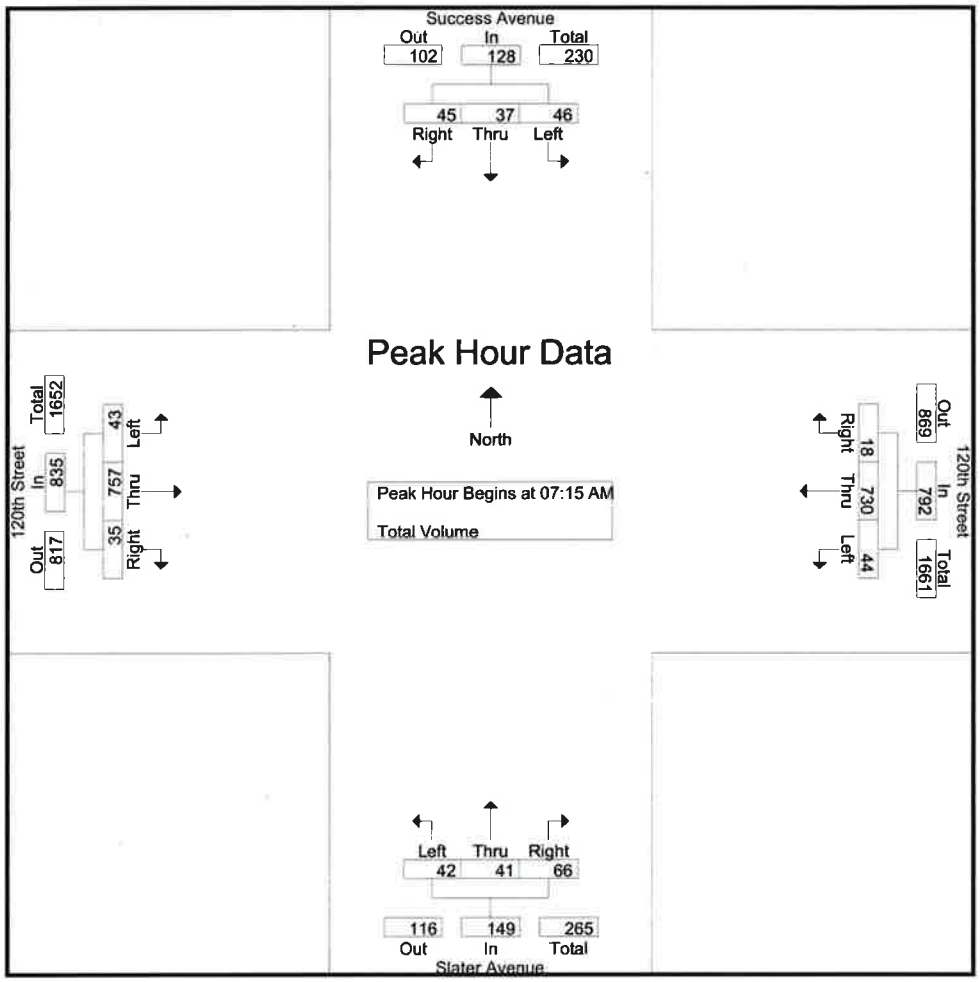
County of Los Angeles
N/S: Slater Avenue
E/W: 120th Street
Weather: Clear

File Name : CLASL120AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	12	8	7	27	4	115	3	122	5	3	12	20	2	136	5	143
+15 mins.	**17**	**15**	10	42	12	209	2	223	**16**	10	23	49	5	212	**12**	229
+30 mins.	10	12	**25**	**47**	**22**	**255**	5	**282**	13	**17**	**24**	**54**	14	**257**	11	**282**
+45 mins.	6	5	6	17	6	151	**8**	165	8	11	7	26	**22**	152	7	181
Total Volume	45	40	48	133	44	730	18	792	42	41	66	149	43	757	35	835
% App. Total	33.8	30.1	36.1		5.6	92.2	2.3		28.2	27.5	44.3		5.1	90.7	4.2	
PHF	.662	.667	.480	.707	.500	.716	.563	.702	.656	.603	.688	.690	.489	.736	.729	.740

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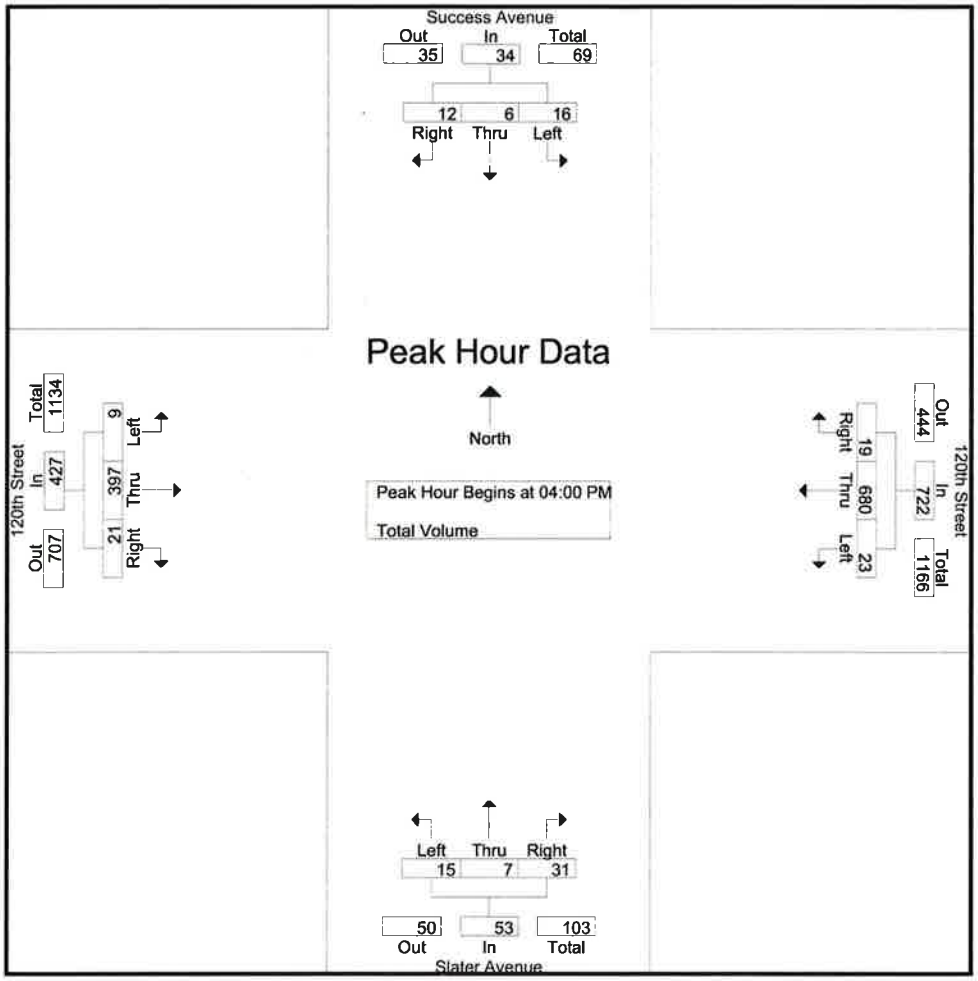
County of Los Angeles
N/S: Slater Avenue
E/W: 120th Street
Weather: Clear

File Name : CLASL120PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				05:00 PM				04:30 PM			
+0 mins.	4	1	3	8	6	152	3	161	1	4	13	18	1	**119**	4	**124**
+15 mins.	4	**2**	2	8	8	172	2	182	2	4	6	12	1	109	**5**	115
+30 mins.	**6**	2	**4**	**12**	**10**	172	3	185	**4**	**7**	17	**28**	**5**	99	2	106
+45 mins.	2	1	3	6	7	**187**	**5**	**199**	3	6	**18**	27	1	77	5	83
Total Volume	16	6	12	34	31	683	13	727	10	21	54	85	8	404	16	428
% App. Total	47.1	17.6	35.3		4.3	93.9	1.8		11.8	24.7	63.5		1.9	94.4	3.7	
PHF	.667	.750	.750	.708	.775	.913	.650	.913	.625	.750	.750	.759	.400	.849	.800	.863

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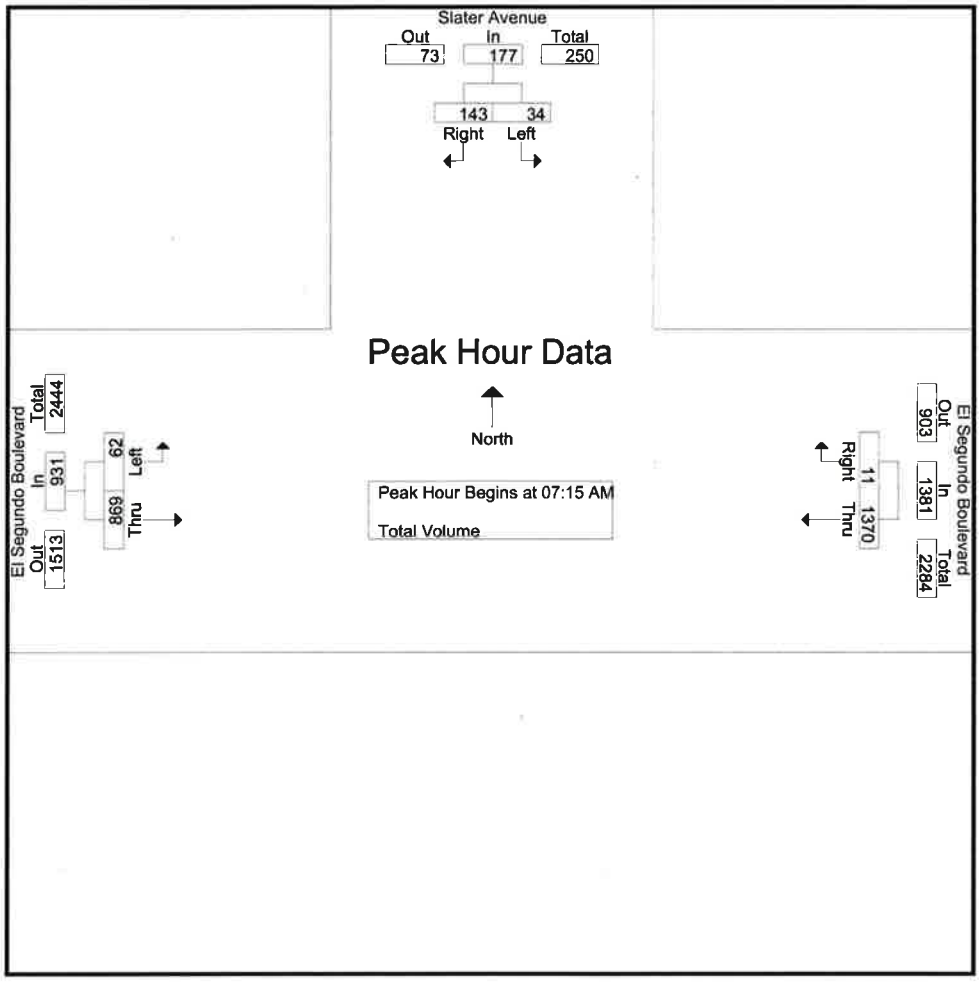
County of Los Angeles
N/S: Slater Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLASLELAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:30 AM		
+0 mins.	2	21	23	310	1	311	20	211	231
+15 mins.	7	29	36	**400**	1	**401**	**23**	**297**	**320**
+30 mins.	**16**	**66**	**82**	361	**5**	366	12	224	236
+45 mins.	9	27	36	299	4	303	9	145	154
Total Volume	34	143	177	1370	11	1381	64	877	941
% App. Total	19.2	80.8		99.2	0.8		6.8	93.2	
PHF	.531	.542	.540	.856	.550	.861	.696	.738	.735

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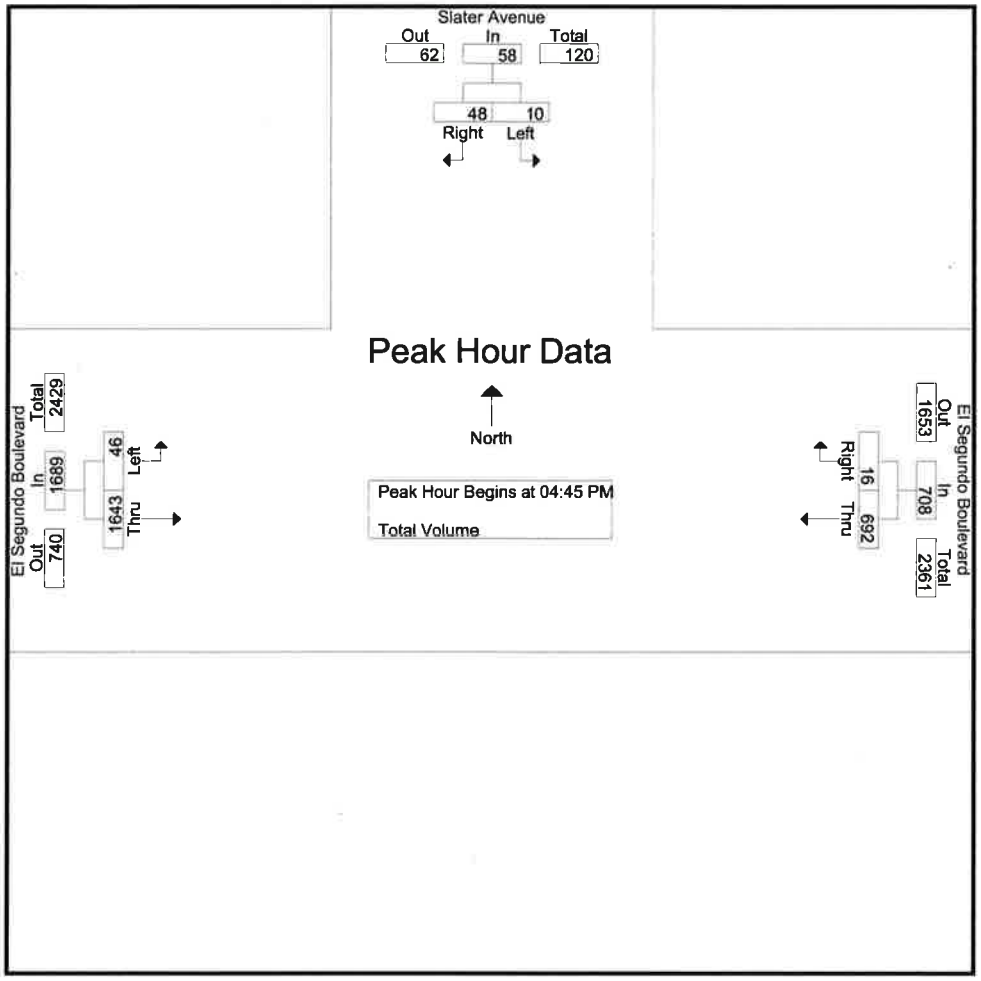
County of Los Angeles
N/S: Slater Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLASLELPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			05:00 PM		
+0 mins.	2	13	15	183	5	188	9	398	407
+15 mins.	2	**17**	**19**	180	2	182	16	**430**	**446**
+30 mins.	**4**	6	10	135	**7**	142	13	417	430
+45 mins.	2	12	14	**194**	2	**196**	**20**	397	417
Total Volume	10	48	58	692	16	708	58	1642	1700
% App. Total	17.2	82.8		97.7	2.3		3.4	96.6	
PHF	.625	.706	.763	.892	.571	.903	.725	.955	.953

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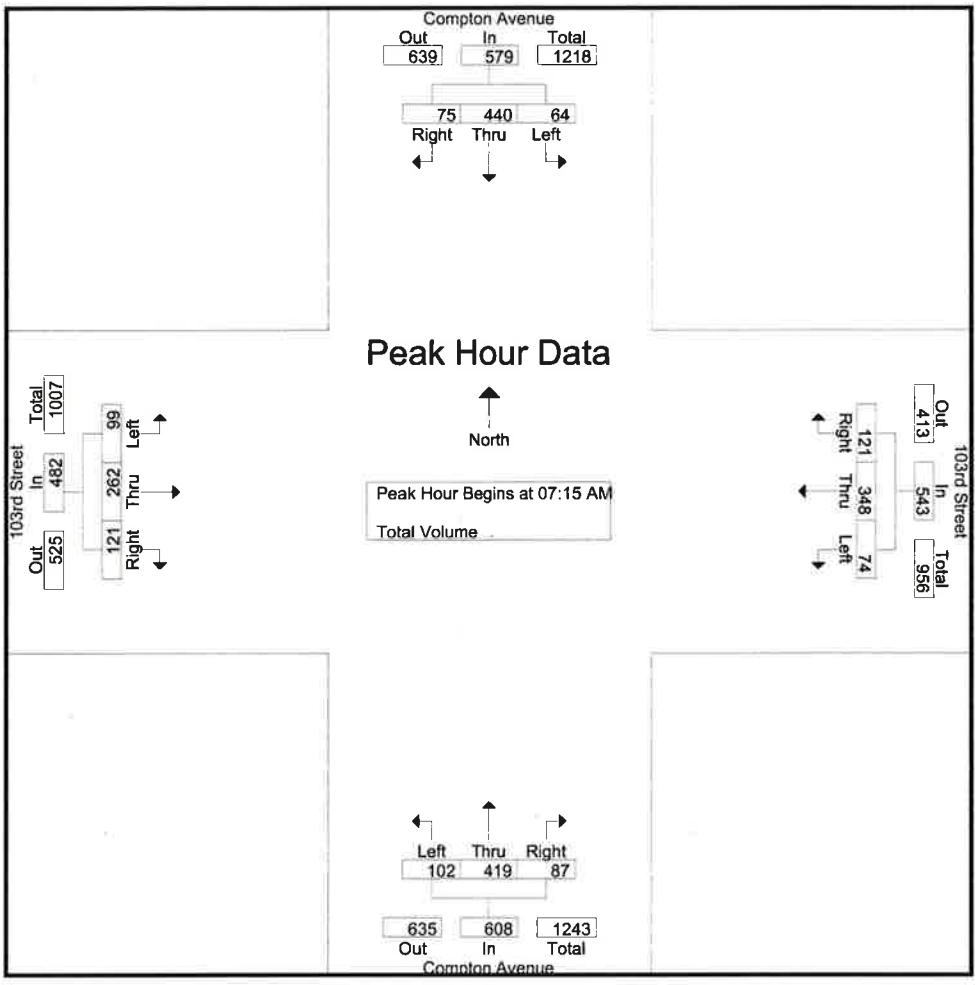
County of Los Angeles
N/S: Compton Avenue
E/W: 103rd Street
Weather: Clear

File Name : LACCO103AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:15 AM				07:30 AM			
+0 mins.	10	89	19	118	15	**99**	**44**	**158**	27	104	15	146	**33**	67	23	123
+15 mins.	11	**128**	**27**	**166**	**24**	90	28	142	17	**116**	23	156	24	**89**	**47**	**160**
+30 mins.	**22**	118	11	151	24	84	25	133	**30**	107	**27**	**164**	25	66	35	126
+45 mins.	21	105	18	144	17	83	30	130	28	92	22	142	14	61	27	102
Total Volume	64	440	75	579	80	356	127	563	102	419	87	608	96	283	132	511
% App. Total	11.1	76	13		14.2	63.2	22.6		16.8	68.9	14.3		18.8	55.4	25.8	
PHF	.727	.859	.694	.872	.833	.899	.722	.891	.850	.903	.806	.927	.727	.795	.702	.798

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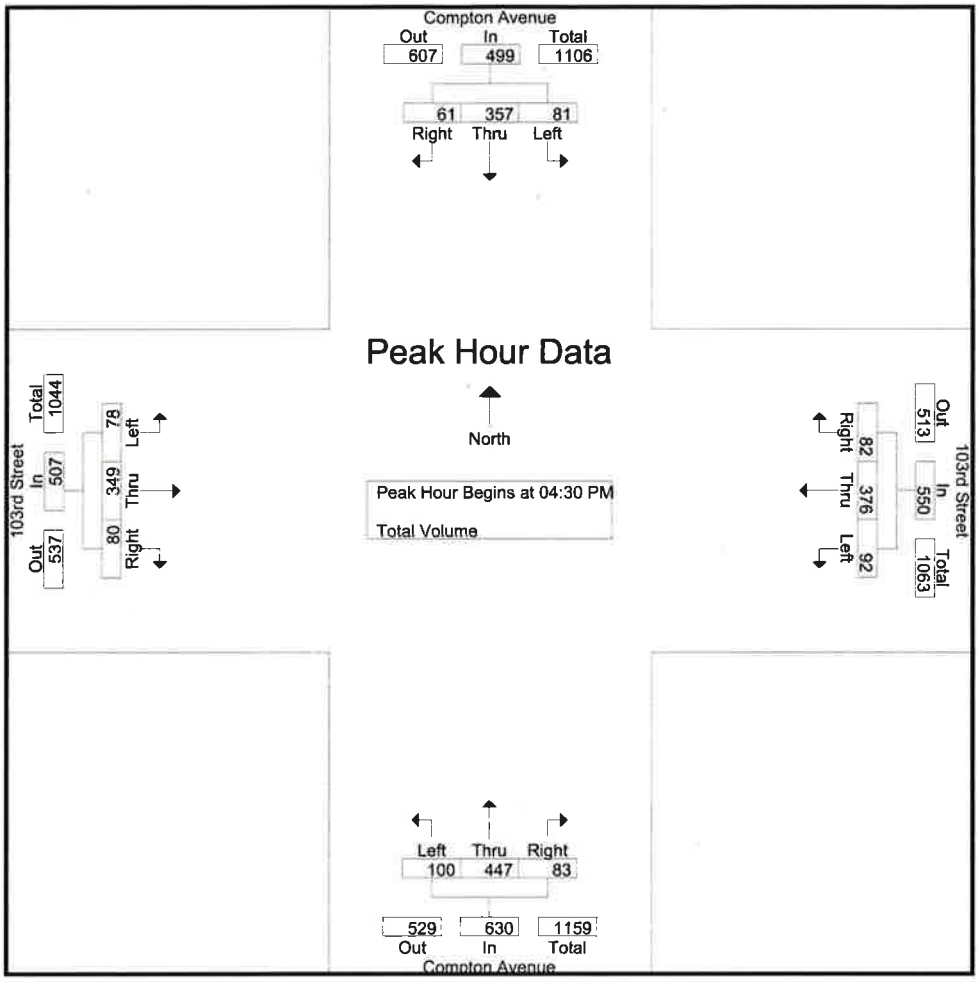
County of Los Angeles
N/S: Compton Avenue
E/W: 103rd Street
Weather: Clear

File Name : LACCO103PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	15	**102**	16	133	22	100	24	146	**36**	104	**25**	**165**	19	87	**25**	131
+15 mins.	13	89	14	116	18	102	**26**	146	24	111	17	152	**24**	91	21	**136**
+30 mins.	19	87	**23**	129	25	**109**	26	**160**	21	**116**	21	158	16	**95**	11	122
+45 mins.	**24**	93	17	**134**	**26**	76	22	124	19	116	20	155	19	76	23	118
Total Volume	71	371	70	512	91	387	98	576	100	447	83	630	78	349	80	507
% App. Total	13.9	72.5	13.7		15.8	67.2	17		15.9	71	13.2		15.4	68.8	15.8	
PHF	.740	.909	.761	.955	.875	.888	.942	.900	.694	.963	.830	.955	.813	.918	.800	.932

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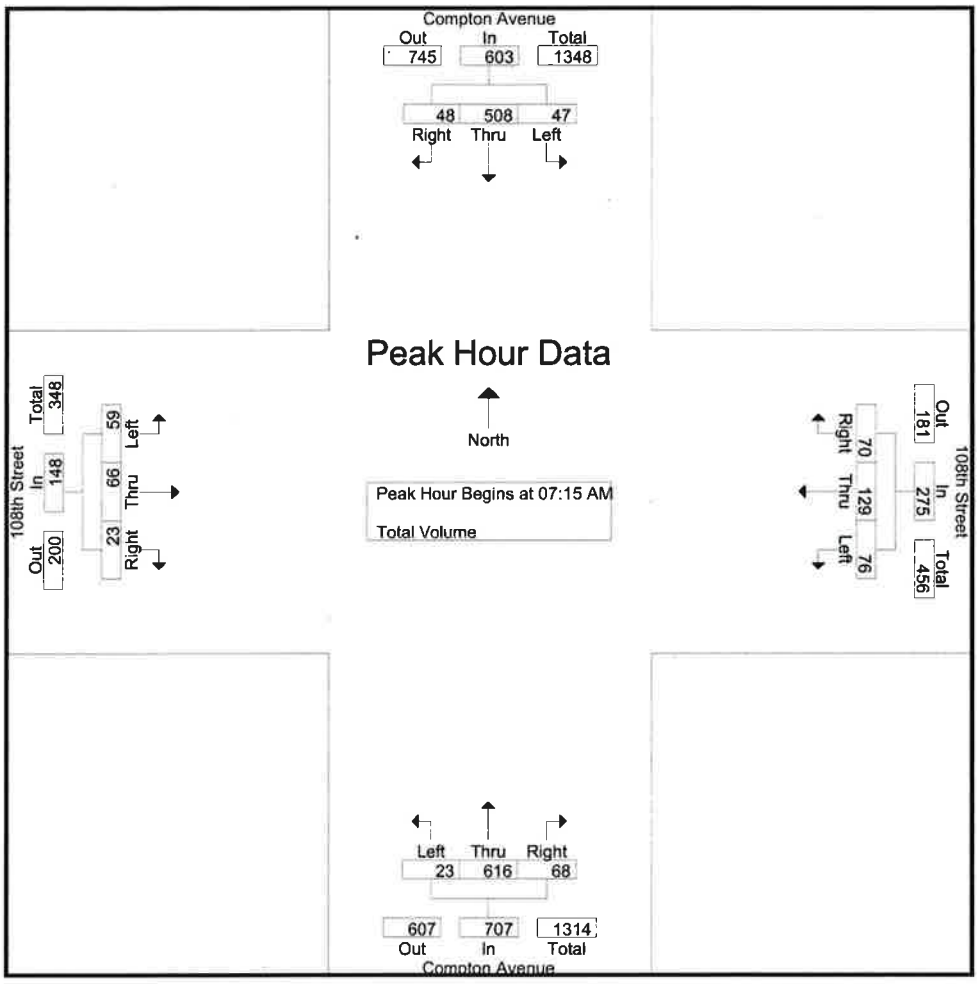
County of Los Angeles
N/S: Compton Avenue
E/W: 108th Street
Weather: Clear

File Name : LACCO108AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:15 AM				07:00 AM			
+0 mins.	9	**149**	10	**168**	12	36	22	70	3	151	8	162	9	18	3	30
+15 mins.	**18**	123	**20**	161	27	**38**	**27**	**92**	**11**	151	17	179	10	13	**10**	33
+30 mins.	16	121	13	150	**28**	34	12	74	5	150	19	174	8	16	1	25
+45 mins.	6	108	12	126	16	17	11	44	4	**164**	**24**	**192**	**28**	**24**	8	**60**
Total Volume	49	501	55	605	83	125	72	280	23	616	68	707	55	71	22	148
% App. Total	8.1	82.8	9.1		29.6	44.6	25.7		3.3	87.1	9.6		37.2	48	14.9	
PHF	.681	.841	.688	.900	.741	.822	.667	.761	.523	.939	.708	.921	.491	.740	.550	.617

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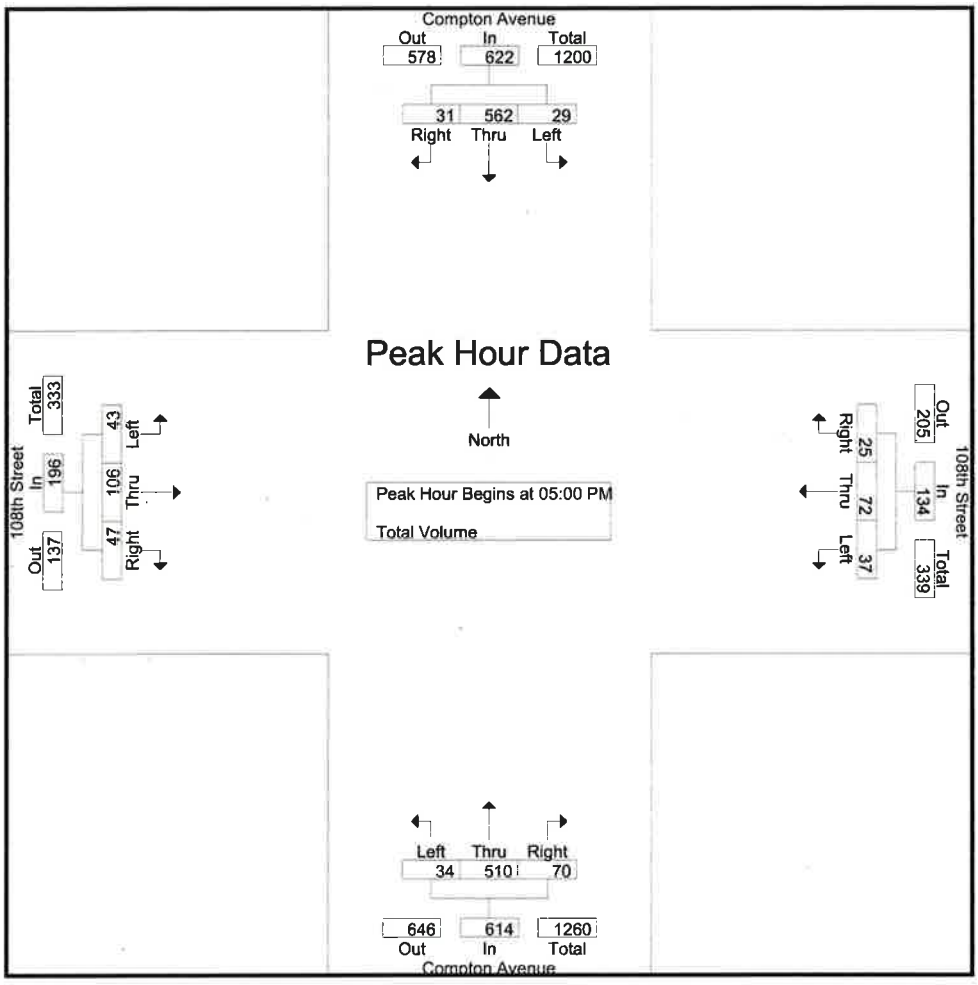
County of Los Angeles
N/S: Compton Avenue
E/W: 108th Street
Weather: Clear

File Name : LACCO108PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:15 PM				05:00 PM			
+0 mins.	**10**	**157**	8	**175**	8	15	**10**	33	8	130	13	151	9	22	13	44
+15 mins.	8	121	**11**	140	8	**23**	2	33	9	**139**	15	**163**	9	20	**15**	44
+30 mins.	4	150	7	161	9	14	7	30	**11**	130	19	160	**13**	**32**	13	**58**
+45 mins.	7	134	5	146	**12**	20	6	**38**	11	123	**25**	159	12	32	6	50
Total Volume	29	562	31	622	37	72	25	134	39	522	72	633	43	106	47	196
% App. Total	4.7	90.4	5		27.6	53.7	18.7		6.2	82.5	11.4		21.9	54.1	24	
PHF	.725	.895	.705	.889	.771	.783	.625	.882	.886	.939	.720	.971	.827	.828	.783	.845

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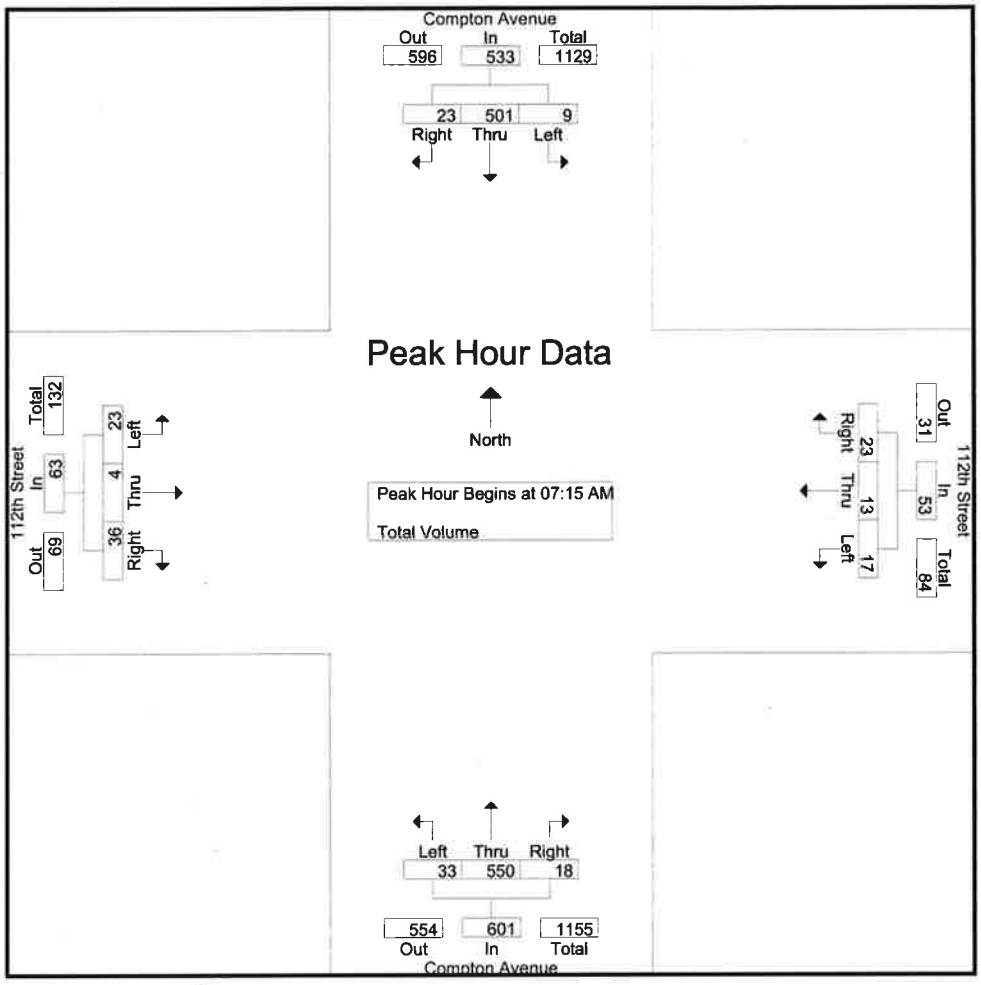
County of Los Angeles
N/S: Compton Avenue
E/W: 112th Street
Weather: Clear

File Name : LACCO112AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:00 AM			
+0 mins.	1	126	4	131	3	1	3	7	4	127	3	134	**8**	0	10	18
+15 mins.	1	**163**	3	**167**	3	2	7	12	6	**159**	**6**	**171**	4	**1**	5	10
+30 mins.	2	113	7	122	**7**	**5**	**8**	**20**	11	123	4	138	5	1	**11**	17
+45 mins.	**5**	99	**9**	113	4	5	5	14	**12**	141	5	158	8	1	11	**20**
Total Volume	9	501	23	533	17	13	23	53	33	550	18	601	25	3	37	65
% App. Total	1.7	94	4.3		32.1	24.5	43.4		5.5	91.5	3		38.5	4.6	56.9	
PHF	.450	.768	.639	.798	.607	.650	.719	.663	.688	.865	.750	.879	.781	.750	.841	.813

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County of Los Angeles
N/S: Compton Avenue
E/W: 112th Street
Weather: Clear

File Name : LACCO112PM
Site Code : 12815514
Start Date : 9/23/2015
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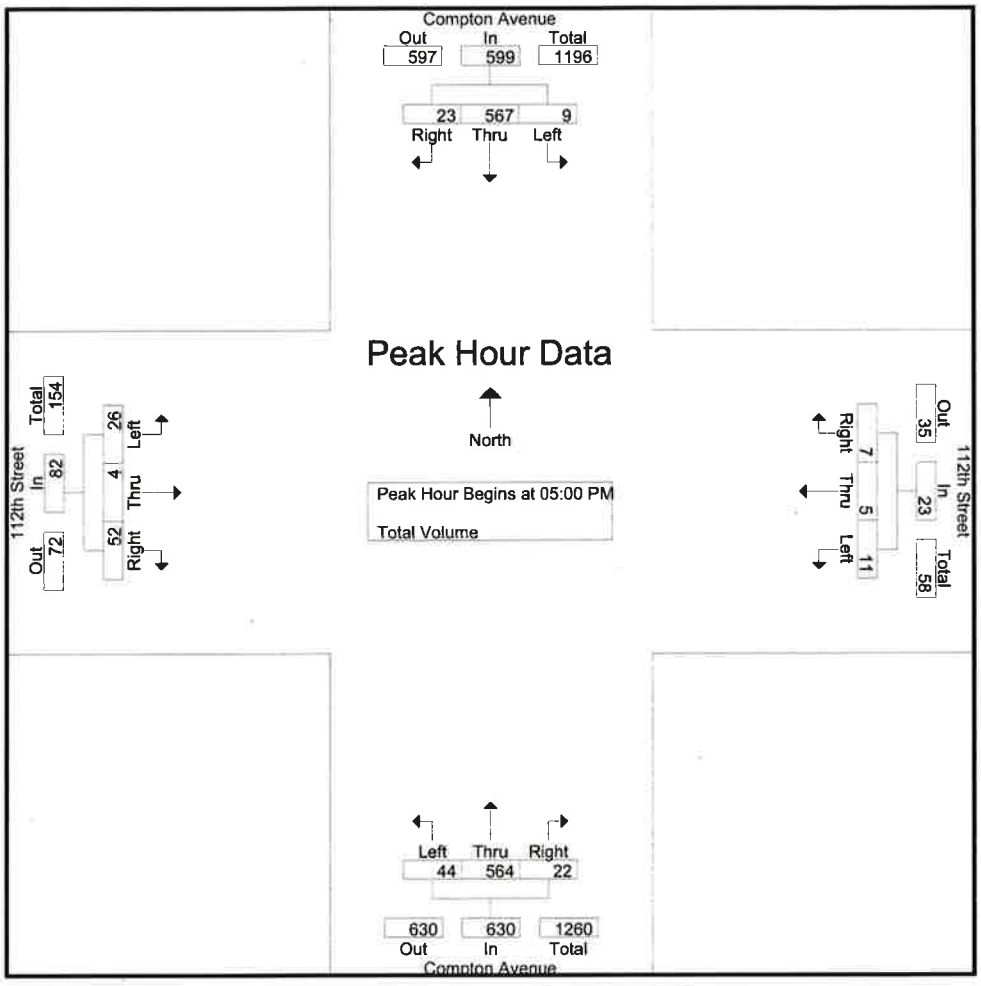

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:00 PM				04:45 PM			
+0 mins.	3	**152**	6	**161**	2	1	**3**	6	13	141	6	160	3	0	10	13
+15 mins.	0	131	5	136	3	1	3	7	4	**157**	10	**171**	**7**	0	**15**	22
+30 mins.	1	152	**8**	161	3	**2**	0	5	**19**	127	**13**	159	7	**2**	15	**24**
+45 mins.	**5**	132	4	141	**4**	2	2	**8**	11	143	9	163	7	1	15	23
Total Volume	9	567	23	599	12	6	8	26	47	568	38	653	24	3	55	82
% App. Total	1.5	94.7	3.8		46.2	23.1	30.8		7.2	87	5.8		29.3	3.7	67.1	
PHF	.450	.933	.719	.930	.750	.750	.667	.813	.618	.904	.731	.955	.857	.375	.917	.854

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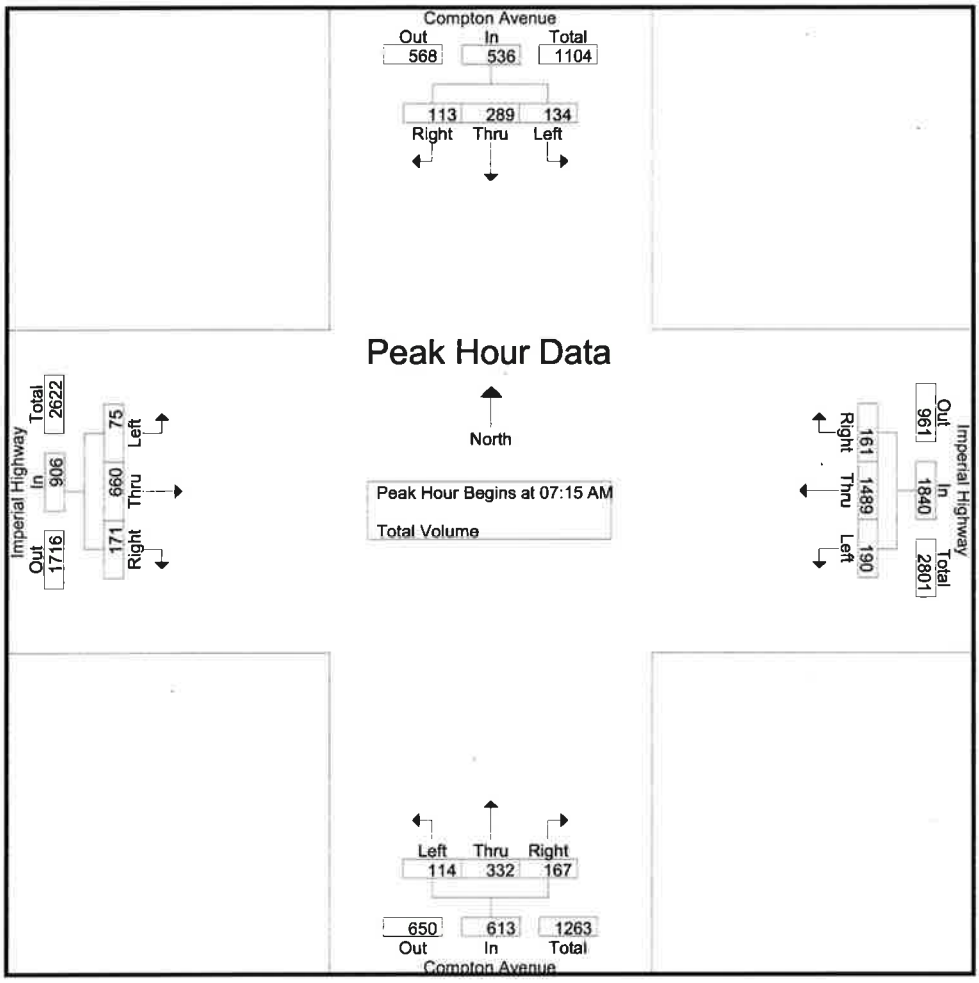
County of Los Angeles
N/S: Compton Avenue
E/W: Imperial Highway
Weather: Clear

File Name : LACCOIMAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	34	73	28	135	47	348	38	433	30	62	39	131	15	133	32	180
+15 mins.	35	79	26	140	46	394	35	475	26	89	32	147	18	175	56	249
+30 mins.	29	**90**	29	**148**	49	402	35	486	**32**	**104**	**51**	**187**	19	**187**	**60**	**266**
+45 mins.	**36**	47	**30**	113	**51**	**405**	**39**	**495**	26	77	45	148	**23**	165	23	211
Total Volume	134	289	113	536	193	1549	147	1889	114	332	167	613	75	660	171	906
% App. Total	25	53.9	21.1		10.2	82	7.8		18.6	54.2	27.2		8.3	72.8	18.9	
PHF	.931	.803	.942	.905	.946	.956	.942	.954	.891	.798	.819	.820	.815	.882	.713	.852

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County of Los Angeles
N/S: Compton Avenue
E/W: Imperial Highway
Weather: Clear

File Name : LACCOIMPM
Site Code : 12815514
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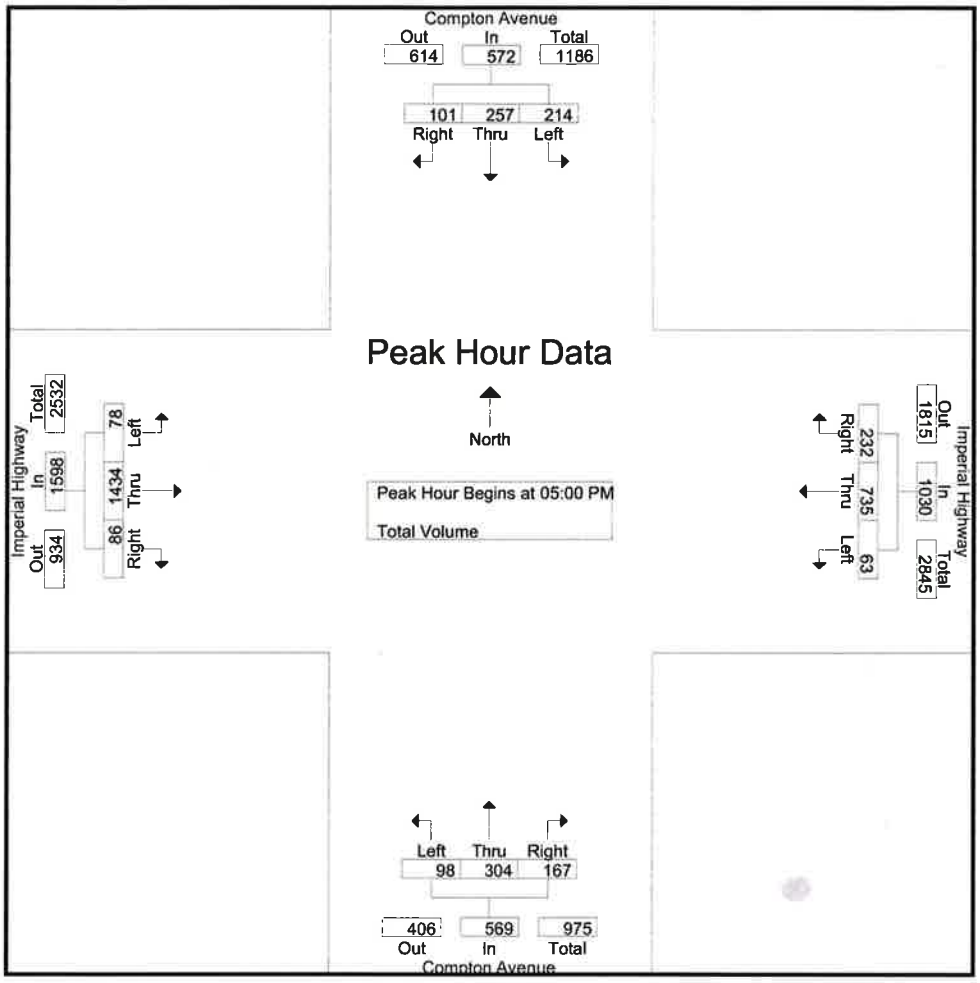
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:15 PM				05:00 PM			
+0 mins.	**94**	**90**	**47**	**231**	**23**	178	**67**	268	20	77	51	148	14	356	24	394
+15 mins.	40	58	25	123	20	**205**	55	**280**	**32**	**79**	**52**	**163**	14	350	16	380
+30 mins.	44	66	27	137	13	196	64	273	19	74	51	144	**26**	**367**	**25**	**418**
+45 mins.	44	46	29	119	16	180	55	251	30	73	46	149	24	361	21	406
Total Volume	222	260	128	610	72	759	241	1072	101	303	200	604	78	1434	86	1598
% App. Total	36.4	42.6	21		6.7	70.8	22.5		16.7	50.2	33.1		4.9	89.7	5.4	
PHF	.590	.722	.681	.660	.783	.926	.899	.957	.789	.959	.962	.926	.750	.977	.860	.956

Counts Unlimited
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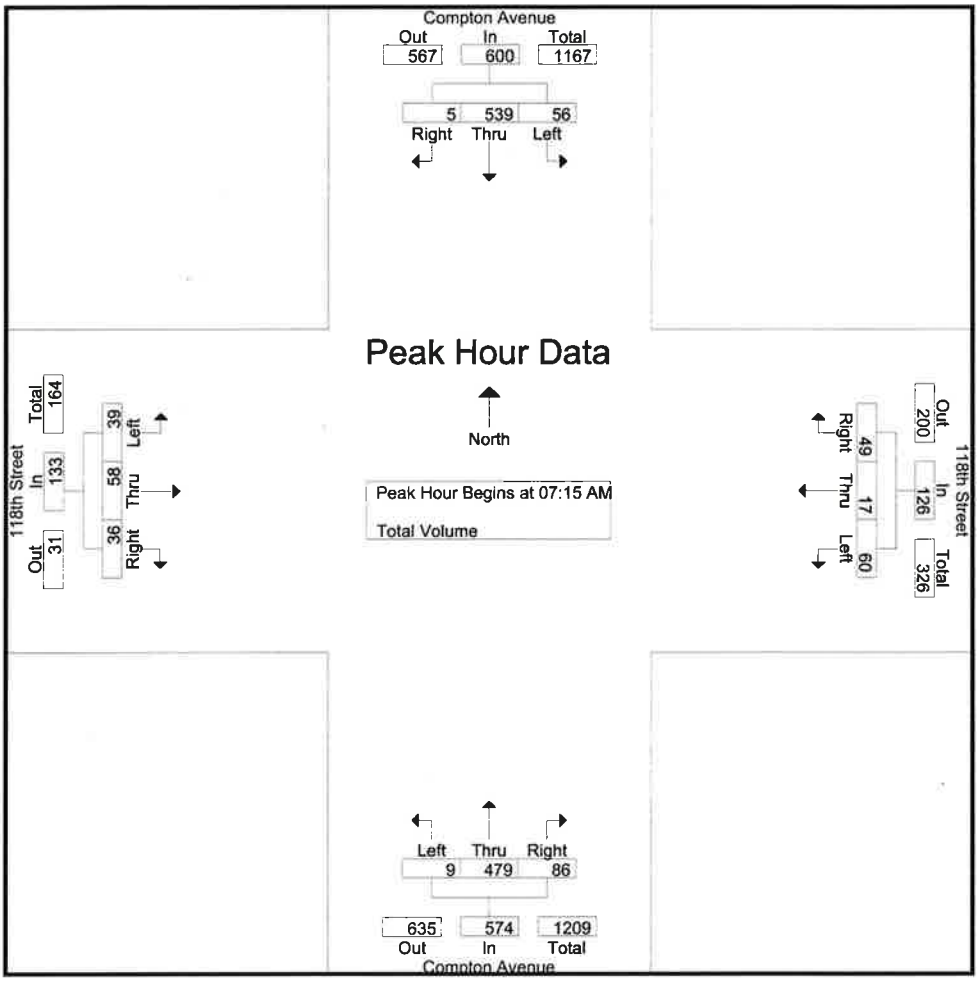
County of Los Angeles
N/S: Compton Avenue
E/W: 118th Street
Weather: Clear

File Name : CLACO118AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:15 AM				07:15 AM			
+0 mins.	8	119	1	128	**22**	3	10	35	**4**	113	9	126	2	6	**12**	20
+15 mins.	9	146	0	155	18	**8**	**16**	**42**	3	123	25	151	12	14	9	35
+30 mins.	**20**	**158**	**3**	**181**	15	5	15	35	0	**135**	**32**	**167**	**17**	**21**	12	**50**
+45 mins.	19	116	1	136	15	4	9	28	2	108	20	130	8	17	3	28
Total Volume	56	539	5	600	70	20	50	140	9	479	86	574	39	58	36	133
% App. Total	9.3	89.8	0.8		50	14.3	35.7		1.6	83.4	15		29.3	43.6	27.1	
PHF	.700	.853	.417	.829	.795	.625	.781	.833	.563	.887	.672	.859	.574	.690	.750	.665

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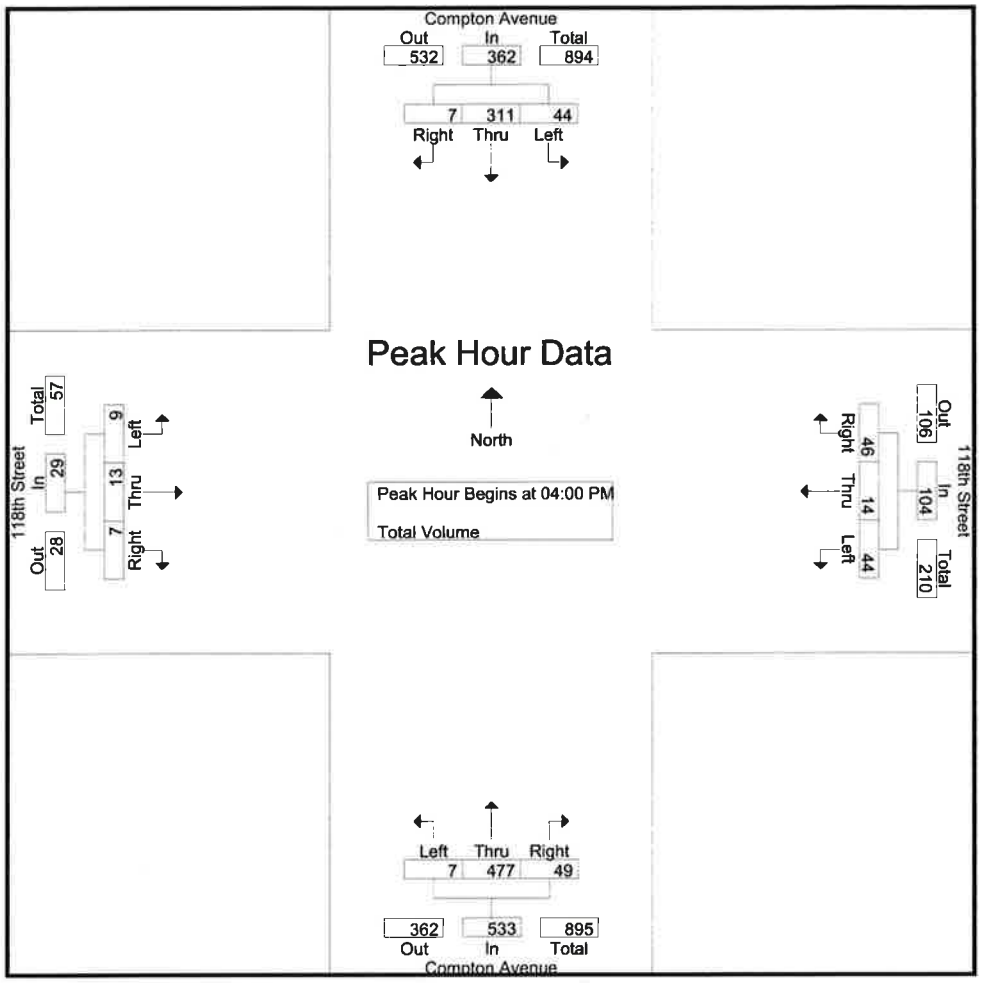
County of Los Angeles
N/S: Compton Avenue
E/W: 118th Street
Weather: Clear

File Name : CLACO118PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				04:30 PM			
+0 mins.	13	79	**4**	**96**	12	3	16	31	**4**	104	14	122	2	5	2	9
+15 mins.	**16**	79	1	96	**13**	**7**	**18**	**38**	0	127	**17**	144	1	4	1	6
+30 mins.	10	73	1	84	6	3	8	17	2	**133**	12	**147**	0	4	2	6
+45 mins.	5	**80**	1	86	12	4	11	27	1	113	6	120	**3**	**7**	**3**	**13**
Total Volume	44	311	7	362	43	17	53	113	7	477	49	533	6	20	8	34
% App. Total	12.2	85.9	1.9		38.1	15	46.9		1.3	89.5	9.2		17.6	58.8	23.5	
PHF	.688	.972	.438	.943	.827	.607	.736	.743	.438	.897	.721	.906	.500	.714	.667	.654

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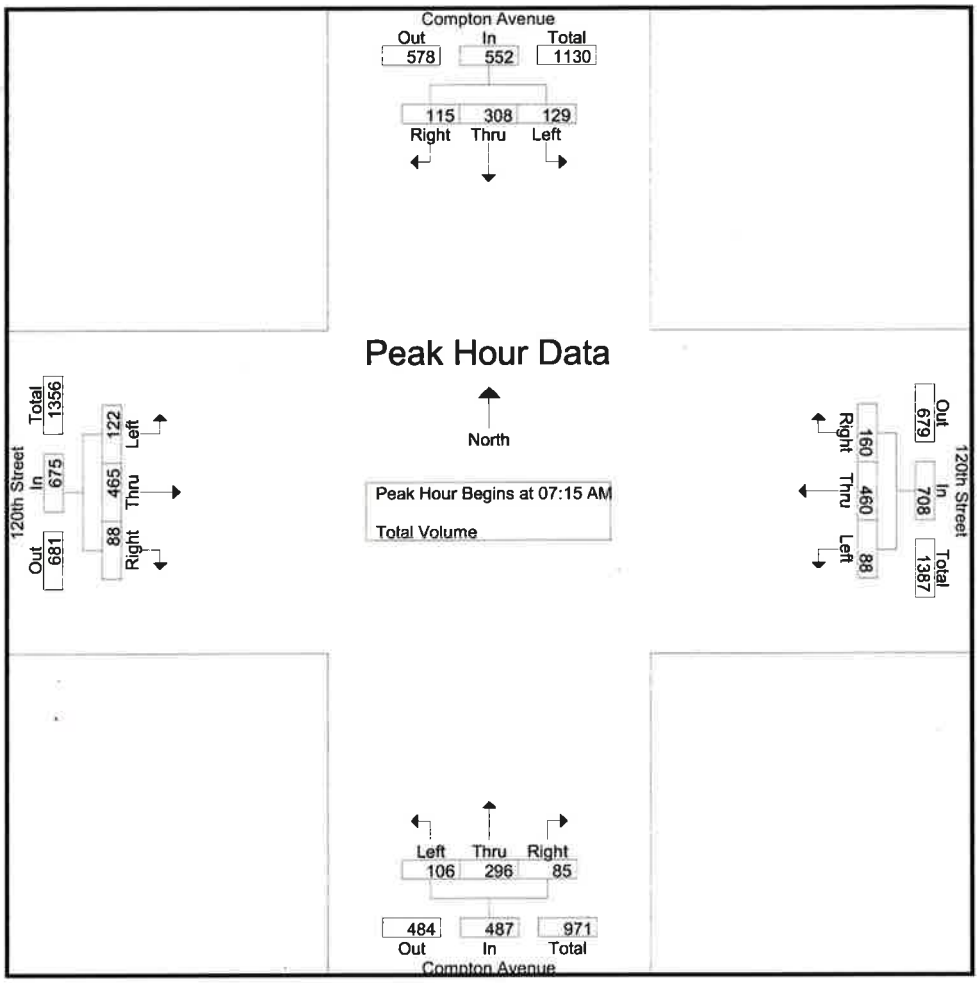
County of Los Angeles
N/S: Compton Avenue
E/W: 120th Street
Weather: Clear

File Name : CLACO120AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	17	84	24	125	12	86	32	130	20	76	18	114	27	73	14	114
+15 mins.	30	**89**	20	139	**32**	129	41	202	29	**78**	22	129	**34**	106	25	165
+30 mins.	**47**	69	**44**	**160**	30	**158**	**47**	**235**	**33**	76	21	**130**	34	**164**	**28**	**226**
+45 mins.	35	66	27	128	14	87	40	141	24	66	**24**	114	27	122	21	170
Total Volume	129	308	115	552	88	460	160	708	106	296	85	487	122	465	88	675
% App. Total	23.4	55.8	20.8		12.4	65	22.6		21.8	60.8	17.5		18.1	68.9	13	
PHF	.686	.865	.653	.863	.688	.728	.851	.753	.803	.949	.885	.937	.897	.709	.786	.747

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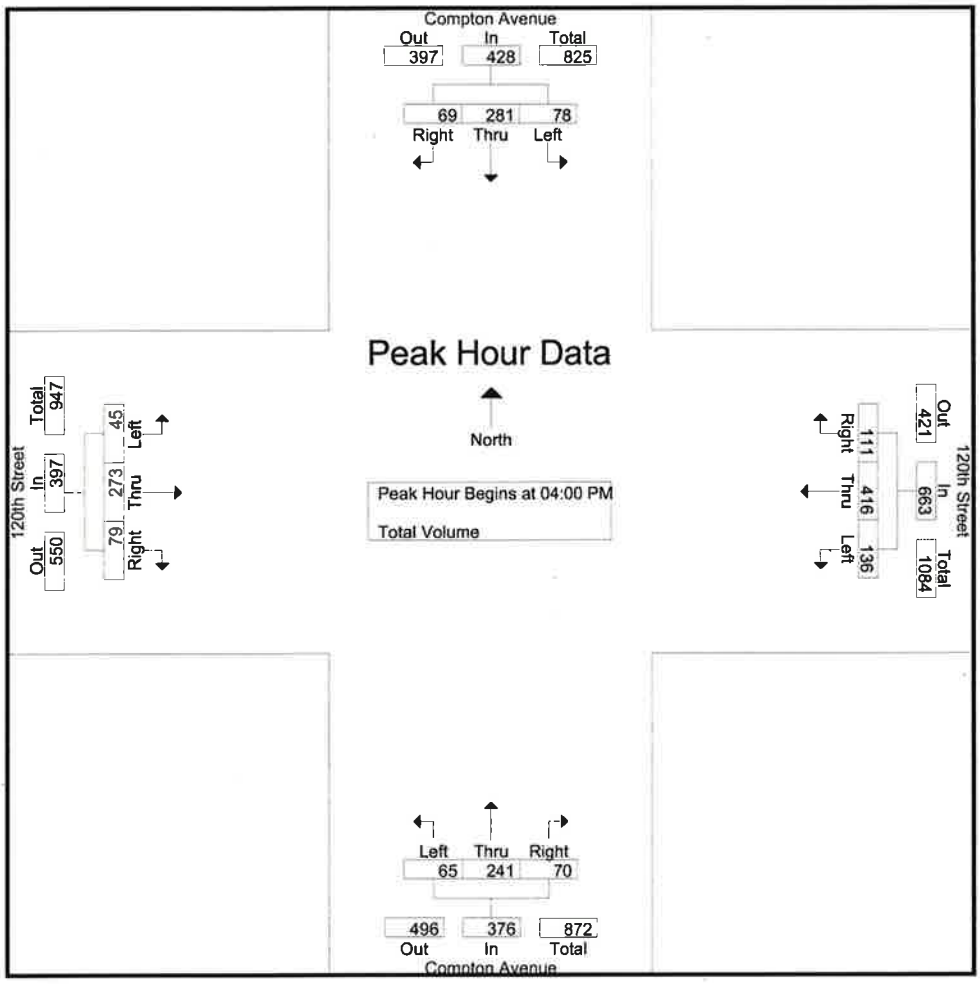
County of Los Angeles
N/S: Compton Avenue
E/W: 120th Street
Weather: Clear

File Name : CLACO120PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:15 PM				04:30 PM			
+0 mins.	**24**	66	13	103	25	97	**27**	149	11	**77**	13	**101**	**15**	**89**	**26**	**130**
+15 mins.	18	**91**	15	**124**	**41**	103	27	171	19	48	**23**	90	12	79	20	111
+30 mins.	16	65	19	100	31	119	24	174	**24**	59	17	100	6	70	14	90
+45 mins.	20	59	**22**	101	38	**133**	19	**190**	9	60	17	86	5	51	20	76
Total Volume	78	281	69	428	135	452	97	684	63	244	70	377	38	289	80	407
% App. Total	18.2	65.7	16.1		19.7	66.1	14.2		16.7	64.7	18.6		9.3	71	19.7	
PHF	.813	.772	.784	.863	.823	.850	.898	.900	.656	.792	.761	.933	.633	.812	.769	.783

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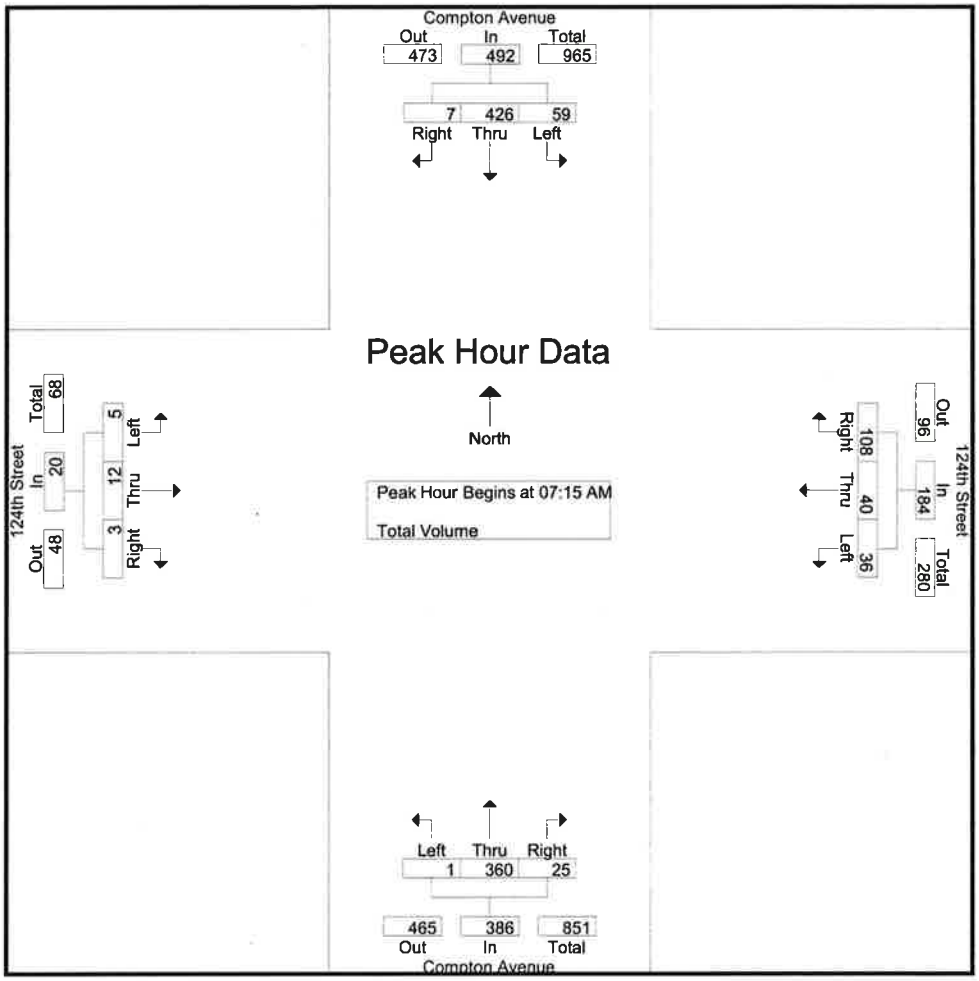
County of Los Angeles
N/S: Compton Avenue
E/W: 124th Street
Weather: Clear

File Name : CLACO124AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	12	100	1	113	3	6	26	35	0	72	4	76	1	**4**	**1**	**6**
+15 mins.	13	**130**	**2**	**145**	**14**	9	**31**	54	0	97	5	102	**2**	1	1	4
+30 mins.	**20**	114	2	136	12	**20**	31	**63**	0	**103**	**10**	**113**	1	4	0	5
+45 mins.	14	82	2	98	7	5	20	32	**1**	88	6	95	1	3	1	5
Total Volume	59	426	7	492	36	40	108	184	1	360	25	386	5	12	3	20
% App. Total	12	86.6	1.4		19.6	21.7	58.7		0.3	93.3	6.5		25	60	15	
PHF	.738	.819	.875	.848	.643	.500	.871	.730	.250	.874	.625	.854	.625	.750	.750	.833

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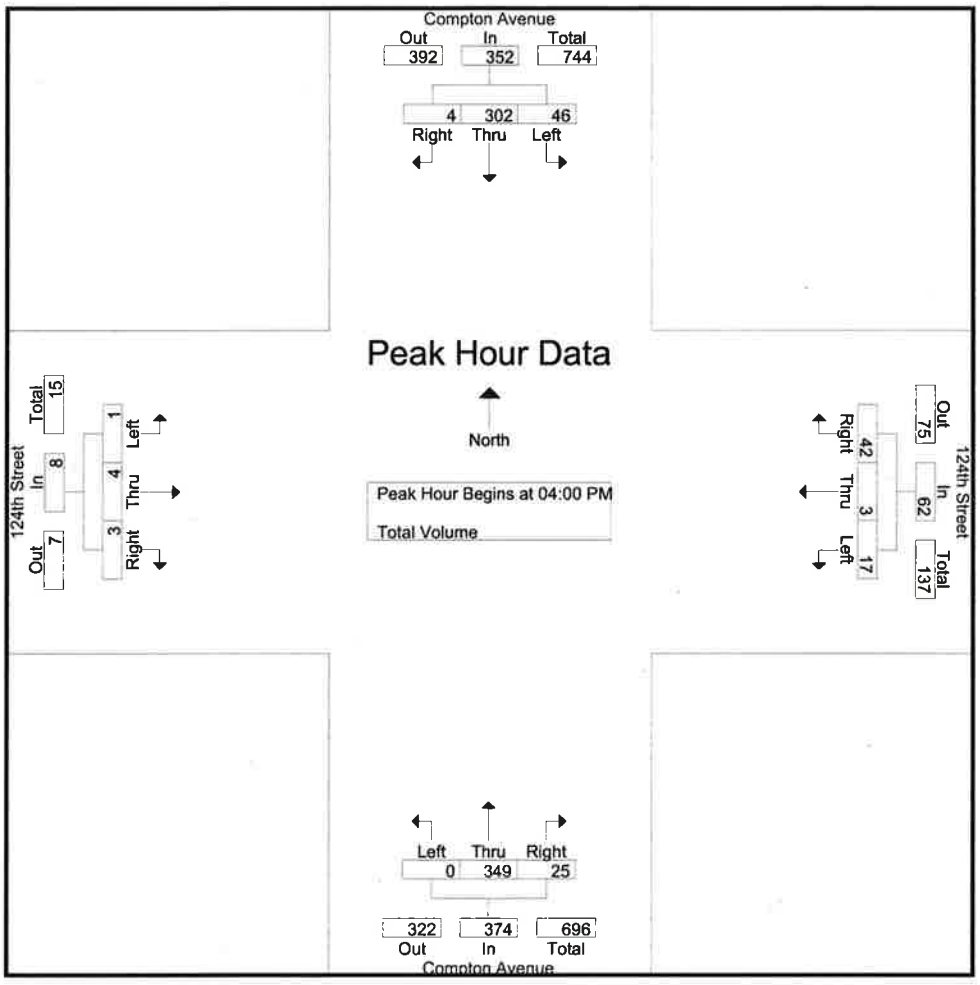
County of Los Angeles
N/S: Compton Avenue
E/W: 124th Street
Weather: Clear

File Name : CLACO124PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:00 PM				04:15 PM			
+0 mins.	12	**88**	**1**	**101**	**9**	4	12	**25**	0	89	5	94	1	0	1	2
+15 mins.	**13**	69	0	82	6	**5**	8	19	0	**94**	7	**101**	0	**2**	**2**	**4**
+30 mins.	8	65	1	74	7	0	9	16	0	82	**8**	90	0	1	0	1
+45 mins.	12	84	1	97	3	2	**16**	21	0	84	5	89	**2**	1	0	3
Total Volume	45	306	3	354	25	11	45	81	0	349	25	374	3	4	3	10
% App. Total	12.7	86.4	0.8		30.9	13.6	55.6		0	93.3	6.7		30	40	30	
PHF	.865	.869	.750	.876	.694	.550	.703	.810	.000	.928	.781	.926	.375	.500	.375	.625

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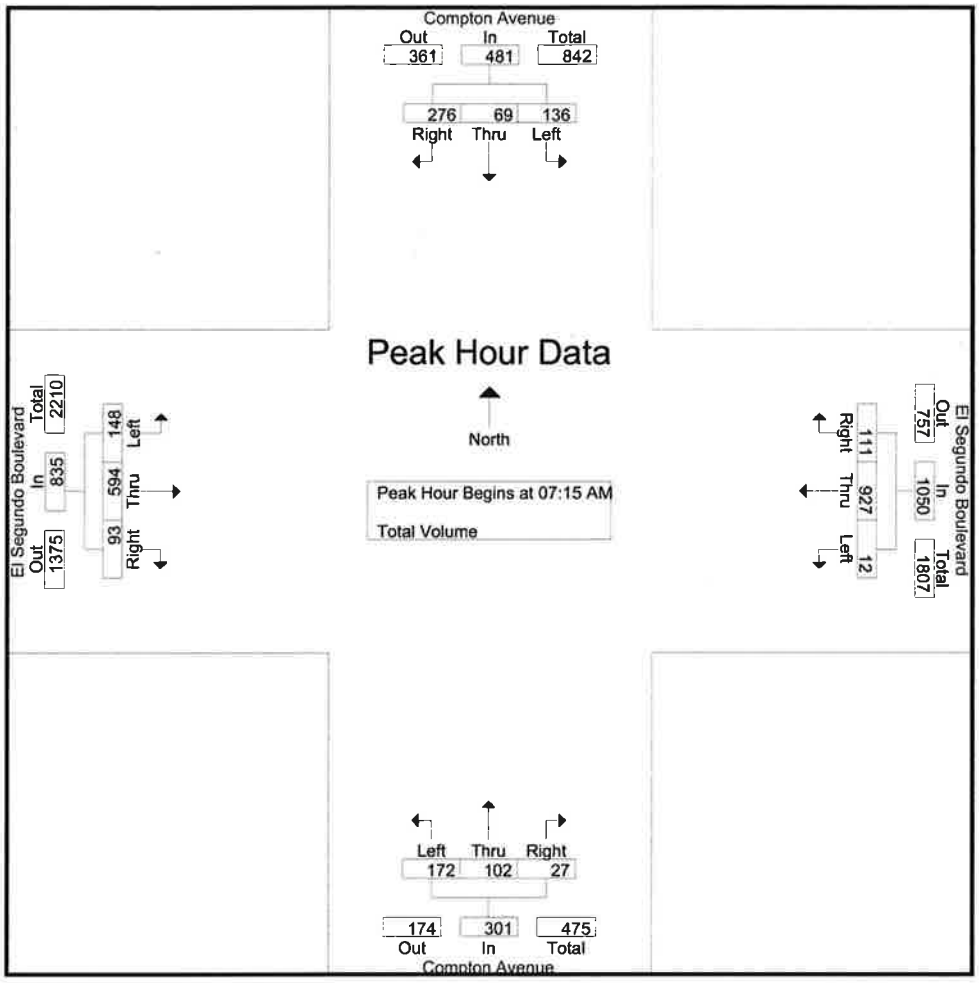
County of Los Angeles
N/S: Compton Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLACOELAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:30 AM			
+0 mins.	29	13	61	103	0	216	17	233	33	16	7	56	37	155	13	205
+15 mins.	36	17	81	134	1	223	24	248	49	29	5	83	33	**199**	**39**	**271**
+30 mins.	**48**	**21**	**83**	**152**	5	**270**	26	**301**	**60**	**39**	**11**	**110**	**51**	154	35	240
+45 mins.	23	18	51	92	**6**	240	**34**	280	30	18	4	52	21	102	23	146
Total Volume	136	69	276	481	12	949	101	1062	172	102	27	301	142	610	110	862
% App. Total	28.3	14.3	57.4		1.1	89.4	9.5		57.1	33.9	9		16.5	70.8	12.8	
PHF	.708	.821	.831	.791	.500	.879	.743	.882	.717	.654	.614	.684	.696	.766	.705	.795

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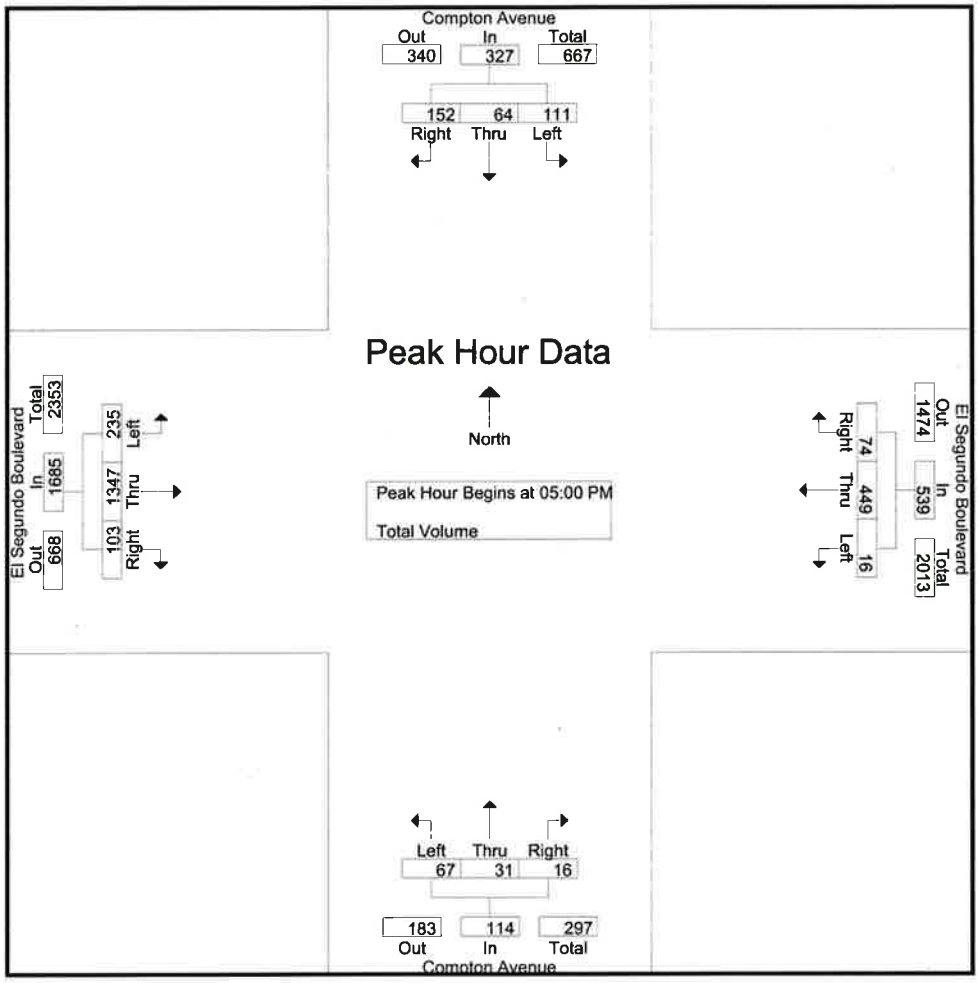
County of Los Angeles
N/S: Compton Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLACOELPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				05:00 PM				05:00 PM			
+0 mins.	25	**21**	45	**91**	4	112	**25**	141	20	**9**	2	31	52	329	**31**	412
+15 mins.	**29**	15	29	73	4	109	21	134	9	8	3	20	58	**344**	27	**429**
+30 mins.	28	14	**47**	89	4	**130**	24	**158**	**23**	5	**6**	**34**	60	338	18	416
+45 mins.	29	14	31	74	**5**	117	17	139	15	9	5	29	**65**	336	27	428
Total Volume	111	64	152	327	17	468	87	572	67	31	16	114	235	1347	103	1685
% App. Total	33.9	19.6	46.5		3	81.8	15.2		58.8	27.2	14		13.9	79.9	6.1	
PHF	.957	.762	.809	.898	.850	.900	.870	.905	.728	.861	.667	.838	.904	.979	.831	.982

Counts Unlimited
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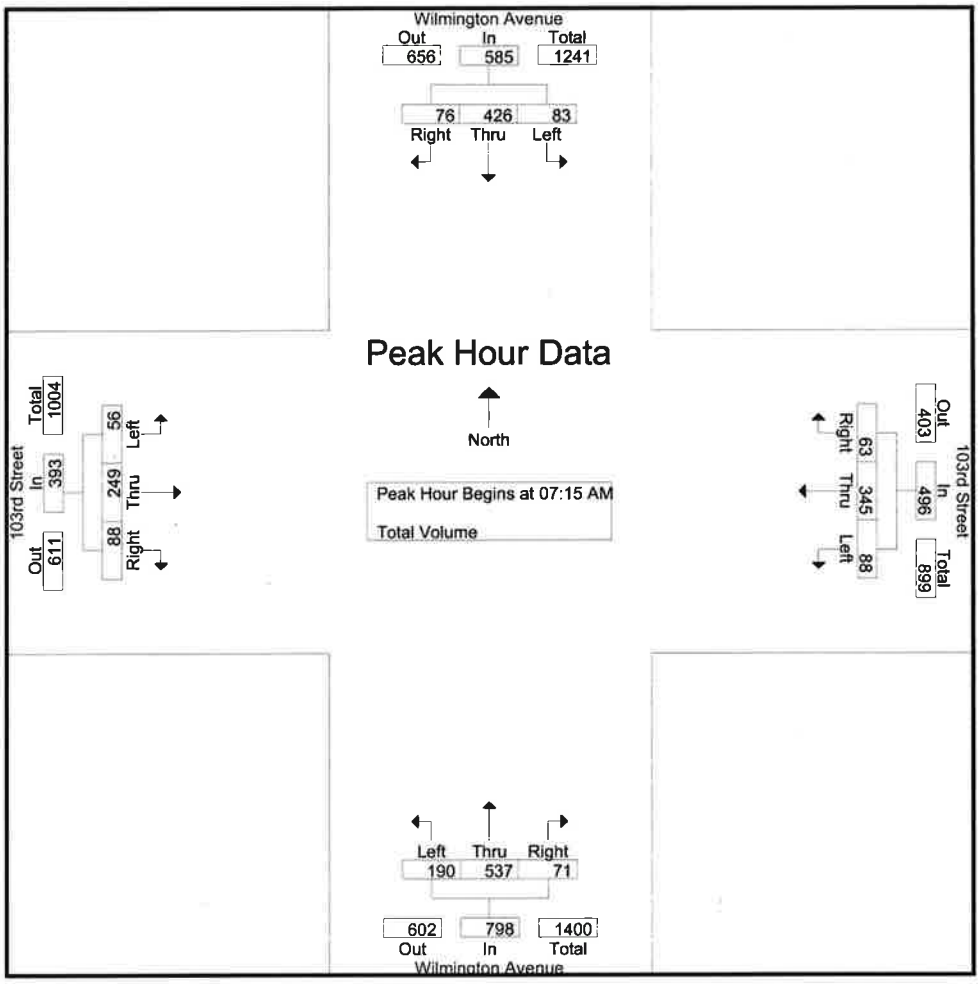
County of Los Angeles
N/S: Wilmington Avenue
E/W: 103rd Street
Weather: Clear

File Name : LACWI103AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	17	96	10	123	12	71	14	97	37	115	16	168	12	62	15	89
+15 mins.	20	111	13	144	**28**	86	10	124	42	144	12	198	**23**	**85**	**37**	**145**
+30 mins.	**28**	**117**	25	**170**	21	**107**	**20**	**148**	55	**149**	19	**223**	15	66	26	107
+45 mins.	18	102	**28**	148	27	81	19	127	**56**	129	**24**	209	12	61	25	98
Total Volume	83	426	76	585	88	345	63	496	190	537	71	798	62	274	103	439
% App. Total	14.2	72.8	13		17.7	69.6	12.7		23.8	67.3	8.9		14.1	62.4	23.5	
PHF	.741	.910	.679	.860	.786	.806	.788	.838	.848	.901	.740	.895	.674	.806	.696	.757

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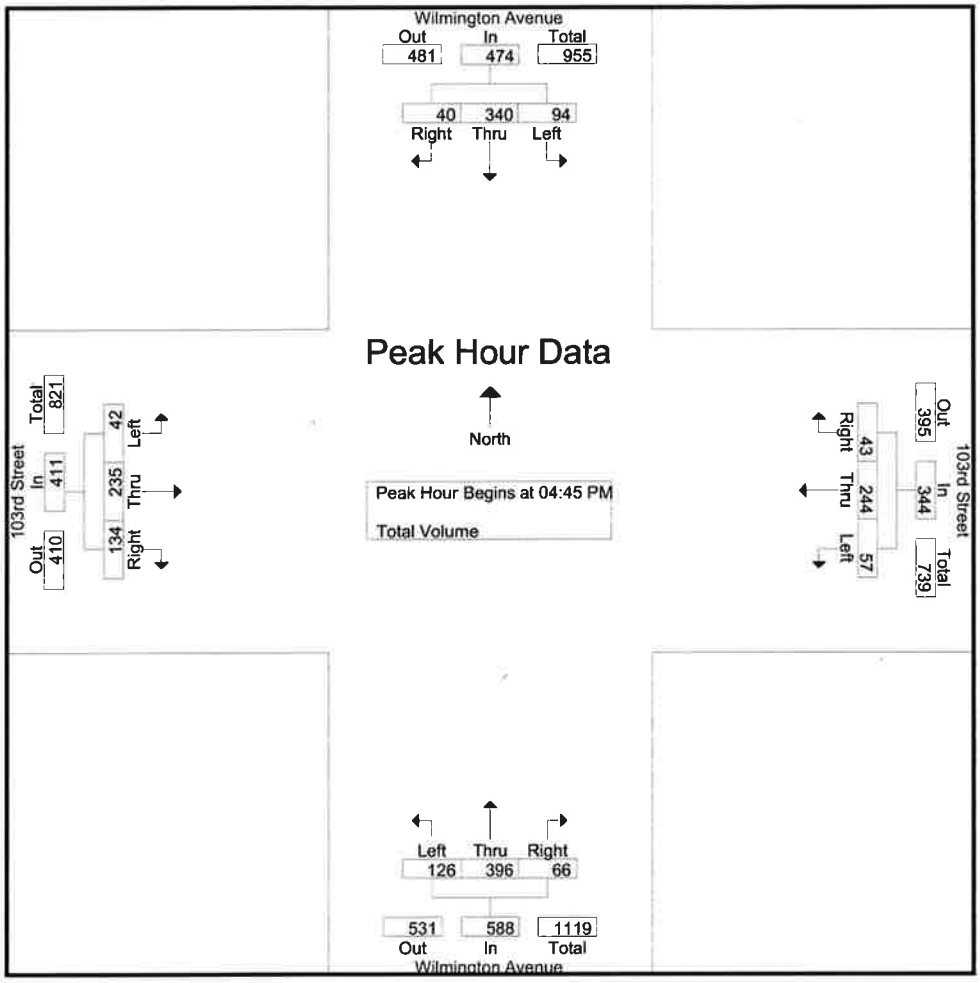
County of Los Angeles
N/S: Wilmington Avenue
E/W: 103rd Street
Weather: Clear

File Name : LACWI103PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:30 PM				04:00 PM			
+0 mins.	17	90	**12**	119	10	**75**	**13**	**98**	34	90	19	143	**13**	**75**	26	**114**
+15 mins.	26	83	6	115	**18**	53	8	79	27	100	12	139	12	51	36	99
+30 mins.	30	89	11	130	14	57	11	82	**38**	94	**20**	152	8	67	37	112
+45 mins.	**44**	**97**	10	**151**	15	59	11	85	32	**105**	18	**155**	10	58	**38**	106
Total Volume	117	359	39	515	57	244	43	344	131	389	69	589	43	251	137	431
% App. Total	22.7	69.7	7.6		16.6	70.9	12.5		22.2	66	11.7		10	58.2	31.8	
PHF	.665	.925	.813	.853	.792	.813	.827	.878	.862	.926	.863	.950	.827	.837	.901	.945

Counts Unlimited
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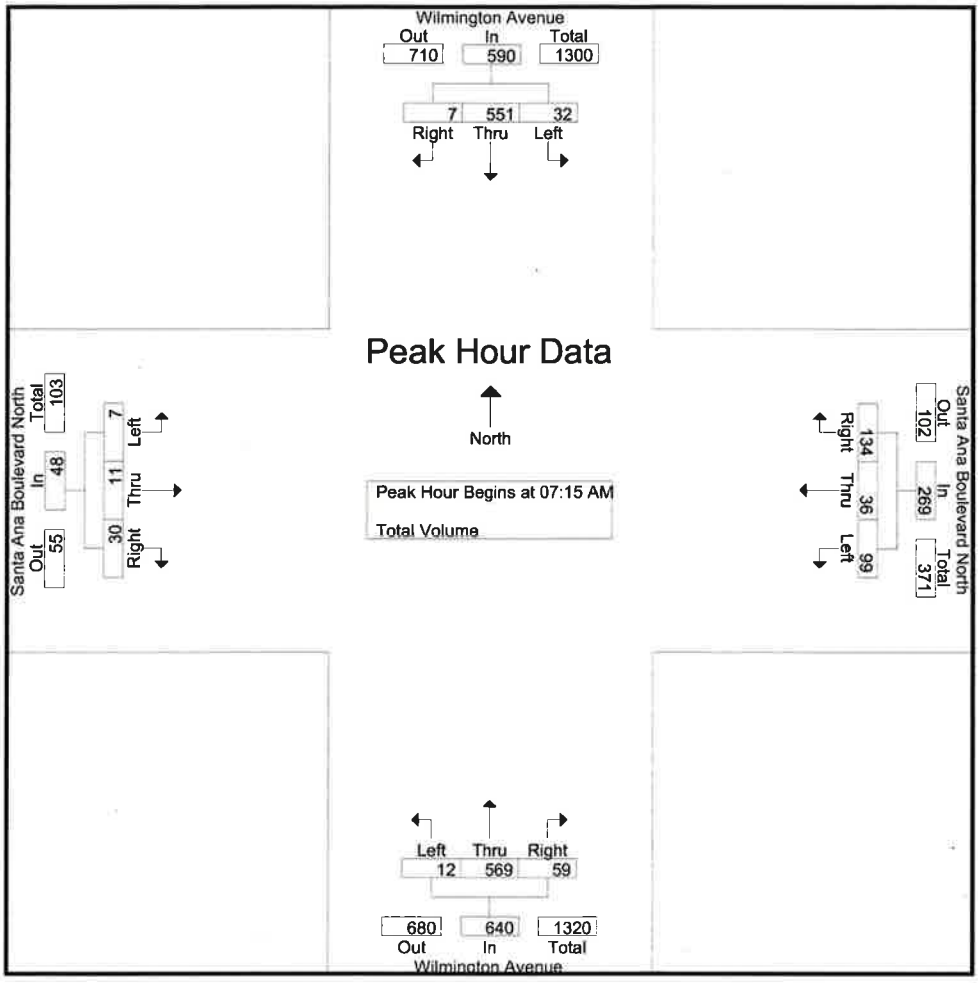
County of Los Angeles
N/S: Wilmington Avenue
E/W: Santa Ana Boulevard North
Weather: Clear

File Name : LACWISNAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	6	134	1	141	14	3	27	44	4	141	19	164	0	3	7	10
+15 mins.	**10**	**153**	2	**165**	27	7	**43**	**77**	**5**	**157**	**22**	**184**	3	3	**12**	**18**
+30 mins.	7	137	**3**	147	**33**	12	30	75	1	142	8	151	**4**	**4**	9	17
+45 mins.	9	127	1	137	25	**14**	34	73	2	142	7	151	0	2	3	5
Total Volume	32	551	7	590	99	36	134	269	12	582	56	650	7	12	31	50
% App. Total	5.4	93.4	1.2		36.8	13.4	49.8		1.8	89.5	8.6		14	24	62	
PHF	.800	.900	.583	.894	.750	.643	.779	.873	.600	.927	.636	.883	.438	.750	.646	.694

Counts Unlimited
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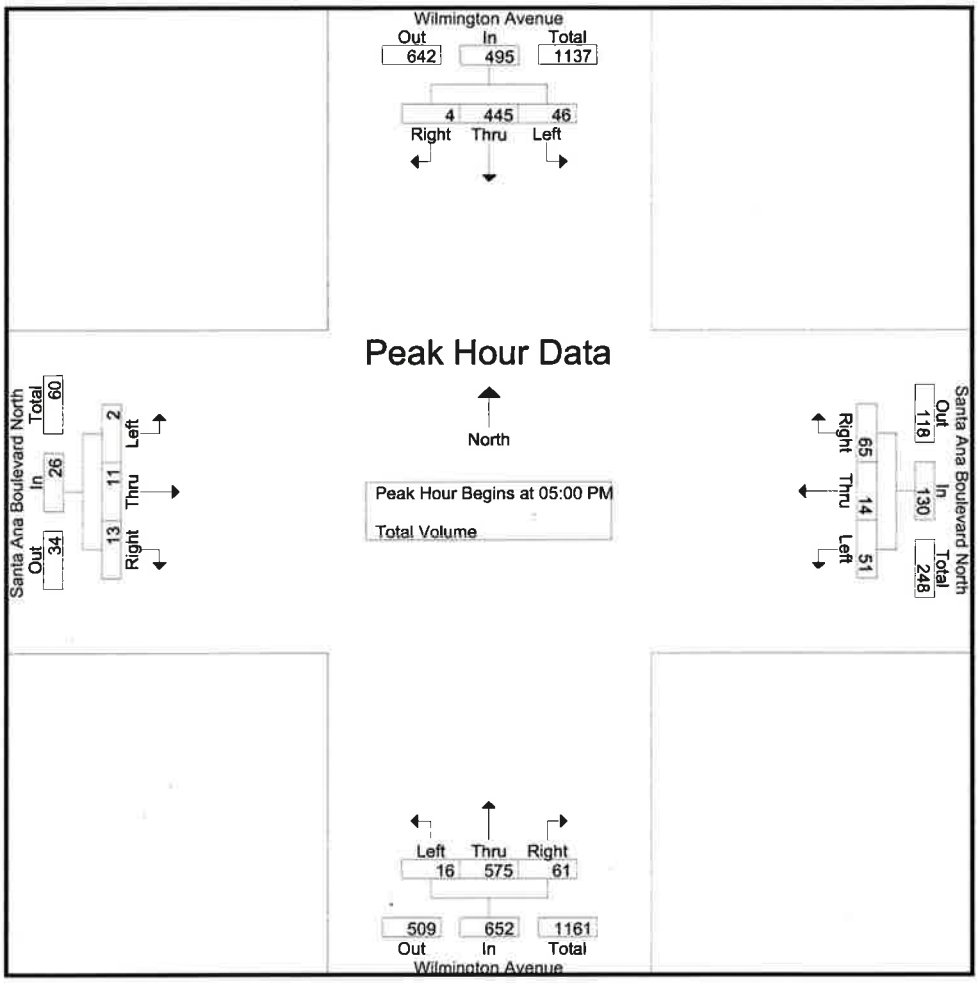
County of Los Angeles
N/S: Wilmington Avenue
E/W: Santa Ana Boulevard North
Weather: Clear

File Name : LACWISNPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:45 PM				04:15 PM			
+0 mins.	9	102	1	112	13	**6**	22	41	2	145	**17**	164	**2**	5	4	11
+15 mins.	11	107	1	119	13	4	**25**	42	4	143	13	160	2	**7**	5	**14**
+30 mins.	10	110	0	120	**17**	5	22	**44**	4	145	16	165	1	4	4	9
+45 mins.	**16**	**126**	**2**	**144**	12	3	16	31	**5**	**150**	16	**171**	0	5	**6**	11
Total Volume	46	445	4	495	55	18	85	158	15	583	62	660	5	21	19	45
% App. Total	9.3	89.9	0.8		34.8	11.4	53.8		2.3	88.3	9.4		11.1	46.7	42.2	
PHF	.719	.883	.500	.859	.809	.750	.850	.898	.750	.972	.912	.965	.625	.750	.792	.804

Counts Unlimited
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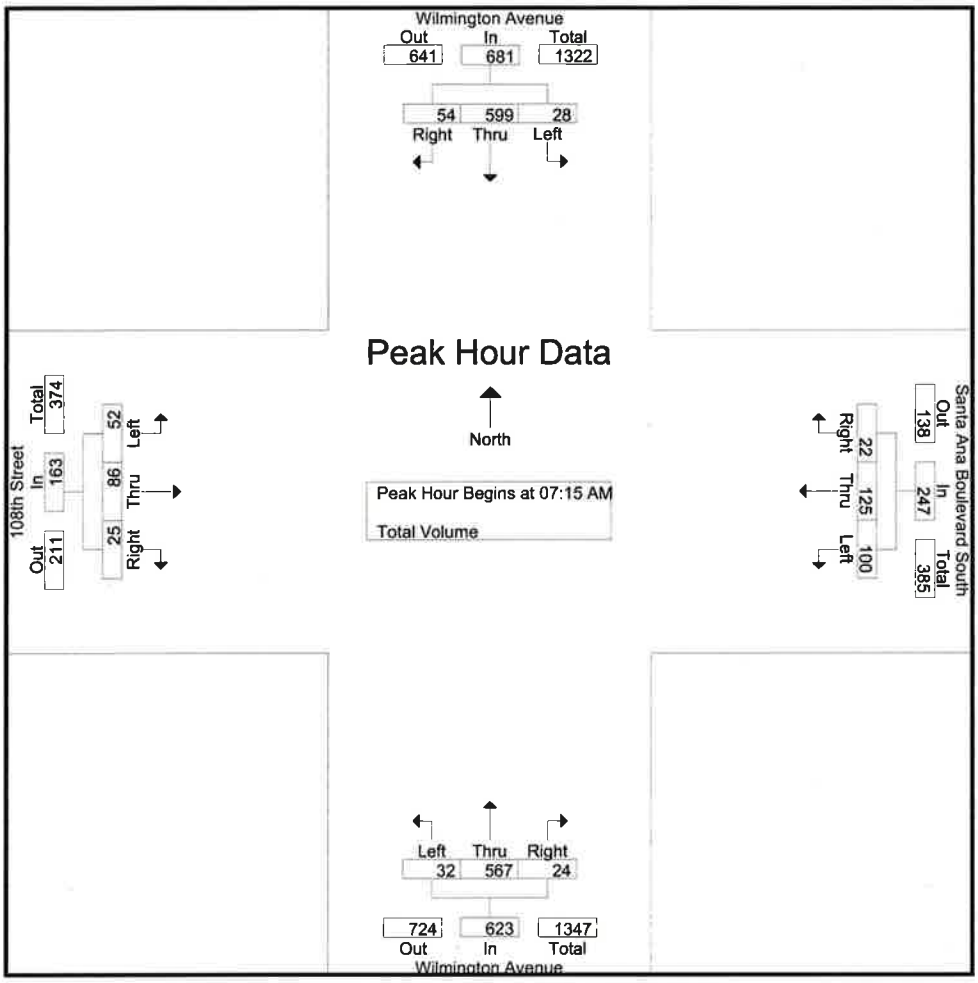
County of Los Angeles
N/S: Wilmington Avenue
E/W: Santa Ana Boulevard South
Weather: Clear

File Name : LACWISSAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	2	141	6	149	20	22	4	46	7	149	6	162	6	17	4	27
+15 mins.	8	**168**	12	**188**	26	29	4	59	9	**159**	4	**172**	13	12	3	28
+30 mins.	**10**	153	**21**	184	**33**	**44**	**9**	**86**	**10**	128	**9**	147	**17**	**34**	**11**	**62**
+45 mins.	8	137	15	160	21	30	5	56	7	143	7	157	16	23	7	46
Total Volume	28	599	54	681	100	125	22	247	33	579	26	638	52	86	25	163
% App. Total	4.1	88	7.9		40.5	50.6	8.9		5.2	90.8	4.1		31.9	52.8	15.3	
PHF	.700	.891	.643	.906	.758	.710	.611	.718	.825	.910	.722	.927	.765	.632	.568	.657

Counts Unlimited
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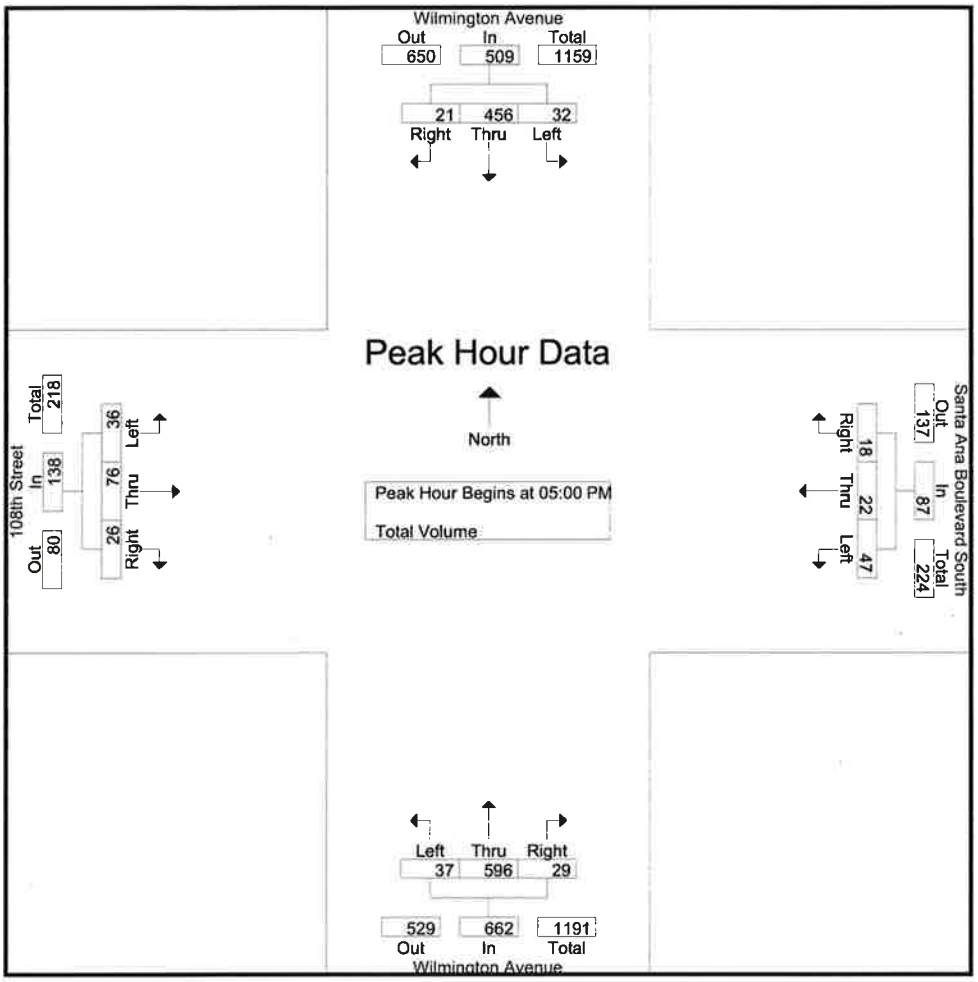
County of Los Angeles
N/S: Wilmington Avenue
E/W: Santa Ana Boulevard South
Weather: Clear

File Name : LACWISSPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:45 PM				05:00 PM			
+0 mins.	5	112	**6**	123	12	3	4	19	1	152	3	156	11	**22**	7	**40**
+15 mins.	9	112	6	127	9	**9**	2	20	7	148	5	160	4	22	2	28
+30 mins.	**10**	108	6	124	10	6	**7**	23	6	**158**	5	169	5	14	**13**	32
+45 mins.	8	**124**	3	**135**	**16**	4	5	**25**	**13**	155	**14**	**182**	**16**	18	4	38
Total Volume	32	456	21	509	47	22	18	87	27	613	27	667	36	76	26	138
% App. Total	6.3	89.6	4.1		54	25.3	20.7		4	91.9	4		26.1	55.1	18.8	
PHF	.800	.919	.875	.943	.734	.611	.643	.870	.519	.970	.482	.916	.563	.864	.500	.863

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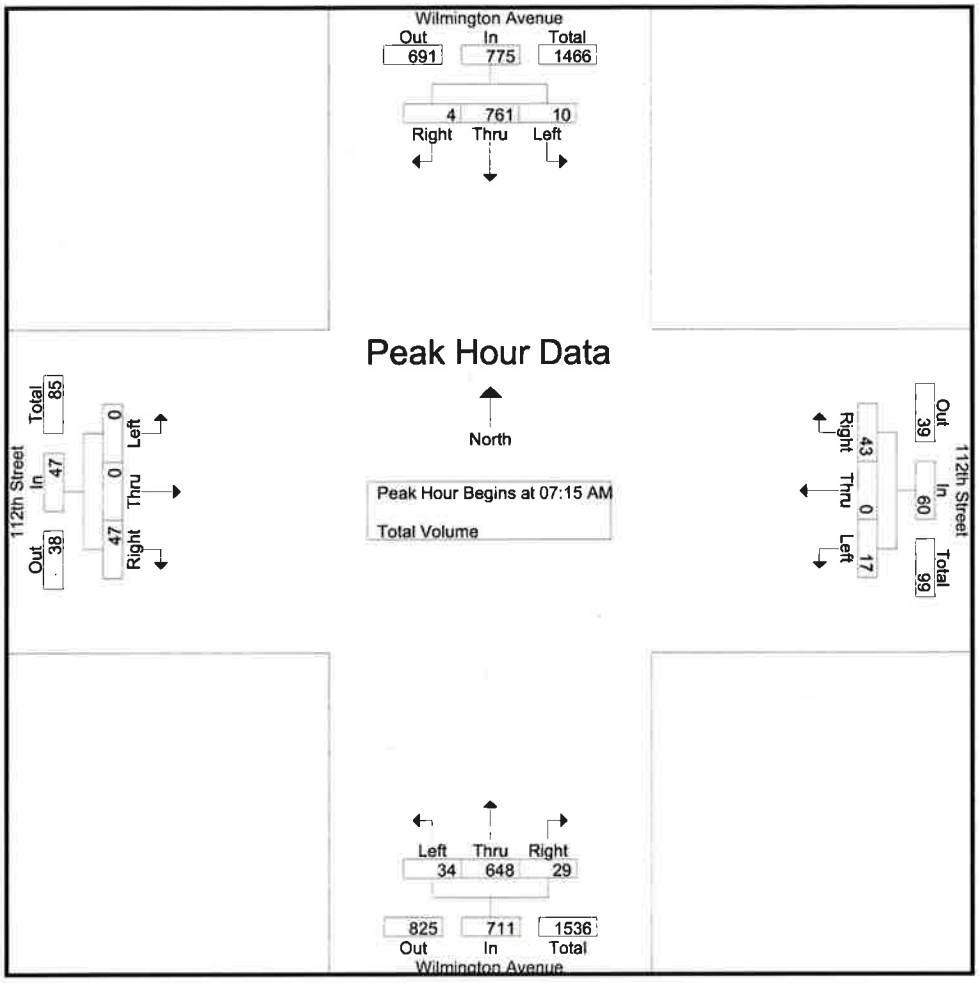
County of Los Angeles
N/S: Wilmington Avenue
E/W: 112th Street
Weather: Clear

File Name : LACWI112AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	0	183	0	183	3	0	8	11	4	173	4	181	0	0	11	11
+15 mins.	0	**206**	1	**207**	3	0	7	10	**16**	**183**	8	**207**	0	0	11	11
+30 mins.	4	187	1	192	5	0	10	15	13	151	**10**	174	0	0	**14**	**14**
+45 mins.	**6**	185	**2**	193	**6**	0	**18**	**24**	6	164	7	177	0	0	13	13
Total Volume	10	761	4	775	17	0	43	60	39	671	29	739	0	0	49	49
% App. Total	1.3	98.2	0.5		28.3	0	71.7		5.3	90.8	3.9		0	0	100	
PHF	.417	.924	.500	.936	.708	.000	.597	.625	.609	.917	.725	.893	.000	.000	.875	.875

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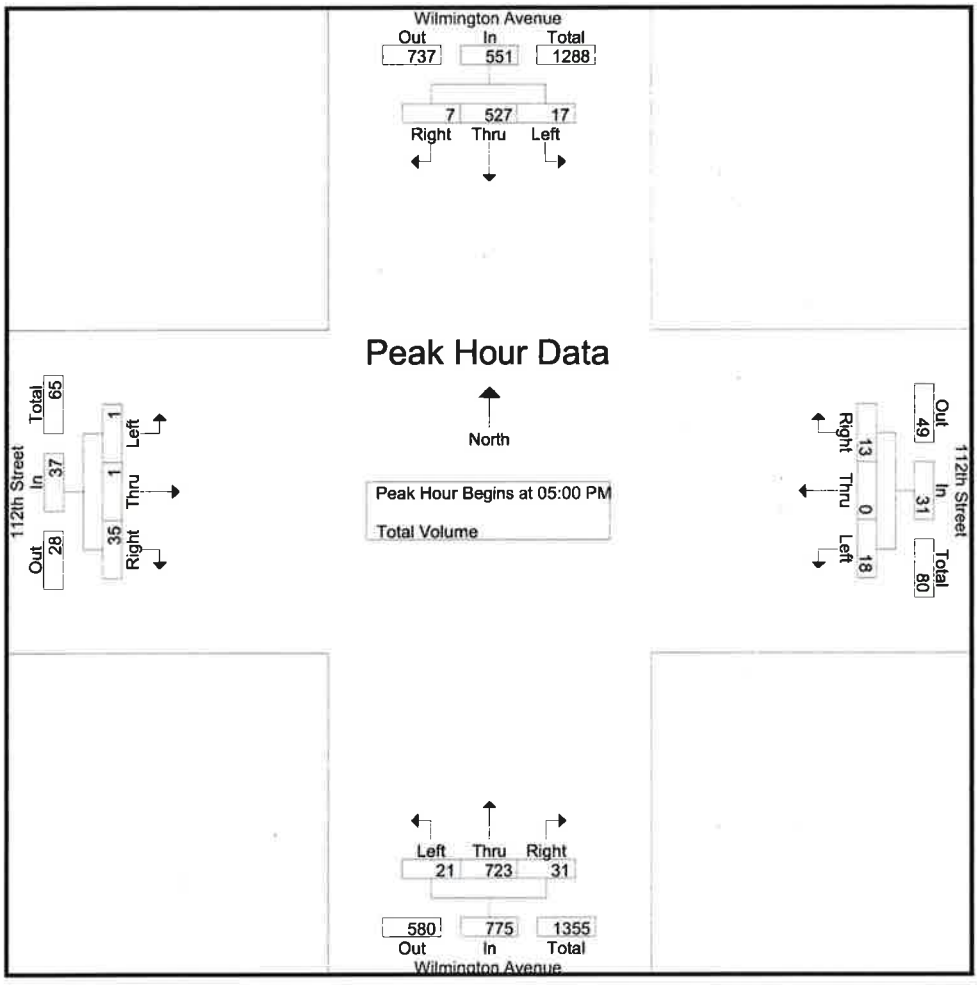
County of Los Angeles
N/S: Wilmington Avenue
E/W: 112th Street
Weather: Clear

File Name : LACWI112PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				04:00 PM			
+0 mins.	3	127	0	130	**6**	0	**5**	**11**	**8**	190	6	**204**	0	1	**14**	**15**
+15 mins.	3	134	2	139	2	0	5	7	6	173	7	186	**1**	1	9	11
+30 mins.	4	**135**	2	**141**	6	0	1	7	2	**193**	7	202	1	0	11	12
+45 mins.	**7**	131	**3**	141	4	0	2	6	5	167	**11**	183	0	**2**	10	12
Total Volume	17	527	7	551	18	0	13	31	21	723	31	775	2	4	44	50
% App. Total	3.1	95.6	1.3		58.1	0	41.9		2.7	93.3	4		4	8	88	
PHF	.607	.976	.583	.977	.750	.000	.650	.705	.656	.937	.705	.950	.500	.500	.786	.833

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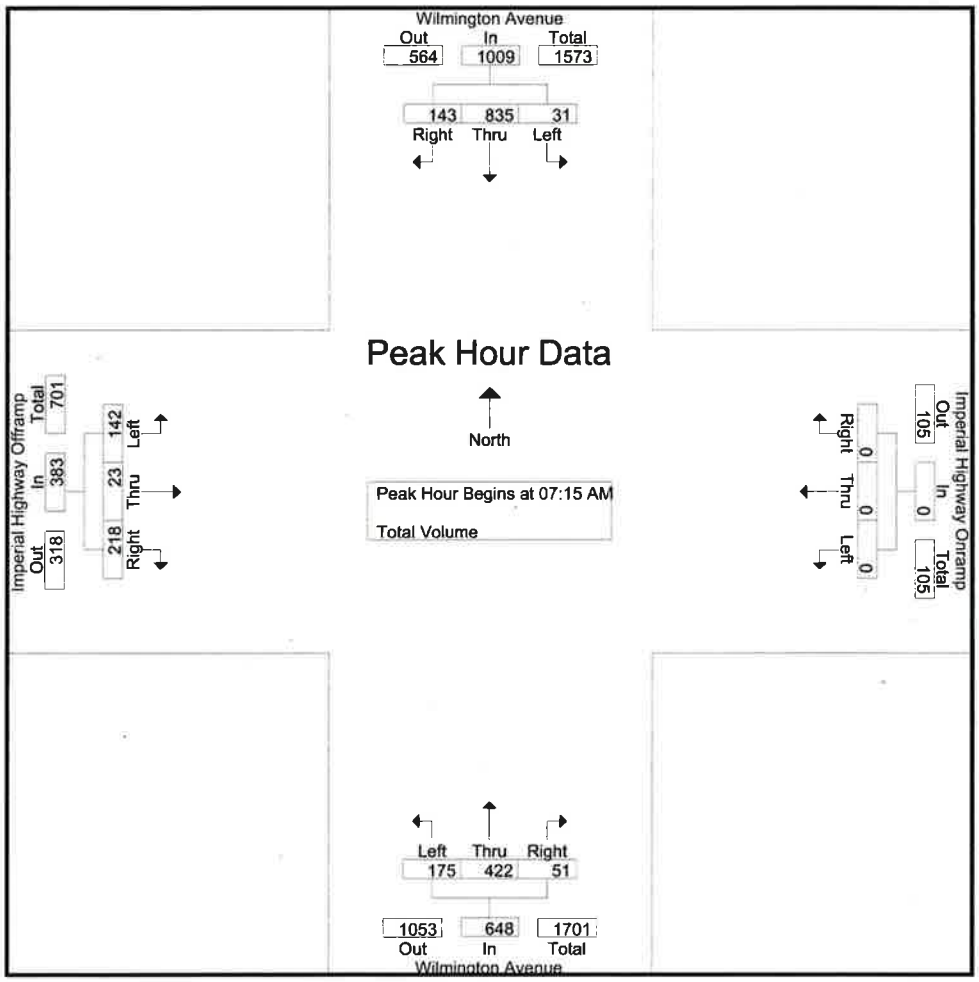
County of Los Angeles
N/S: Wilmington Avenue
E/W: Imperial Highway
Weather: Clear

File Name : LACWIIMAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	**10**	203	37	250	0	0	0	0	47	95	13	155	22	6	49	77
+15 mins.	9	**227**	33	**269**	0	0	0	0	39	108	13	160	30	**9**	**66**	**105**
+30 mins.	5	197	**38**	240	0	0	0	0	**56**	**118**	**14**	**188**	**51**	1	52	104
+45 mins.	7	208	35	250	0	0	0	0	33	101	11	145	39	7	51	97
Total Volume	31	835	143	1009	0	0	0	0	175	422	51	648	142	23	218	383
% App. Total	3.1	82.8	14.2		0	0	0		27	65.1	7.9		37.1	6	56.9	
PHF	.775	.920	.941	.938	.000	.000	.000	.000	.781	.894	.911	.862	.696	.639	.826	.912

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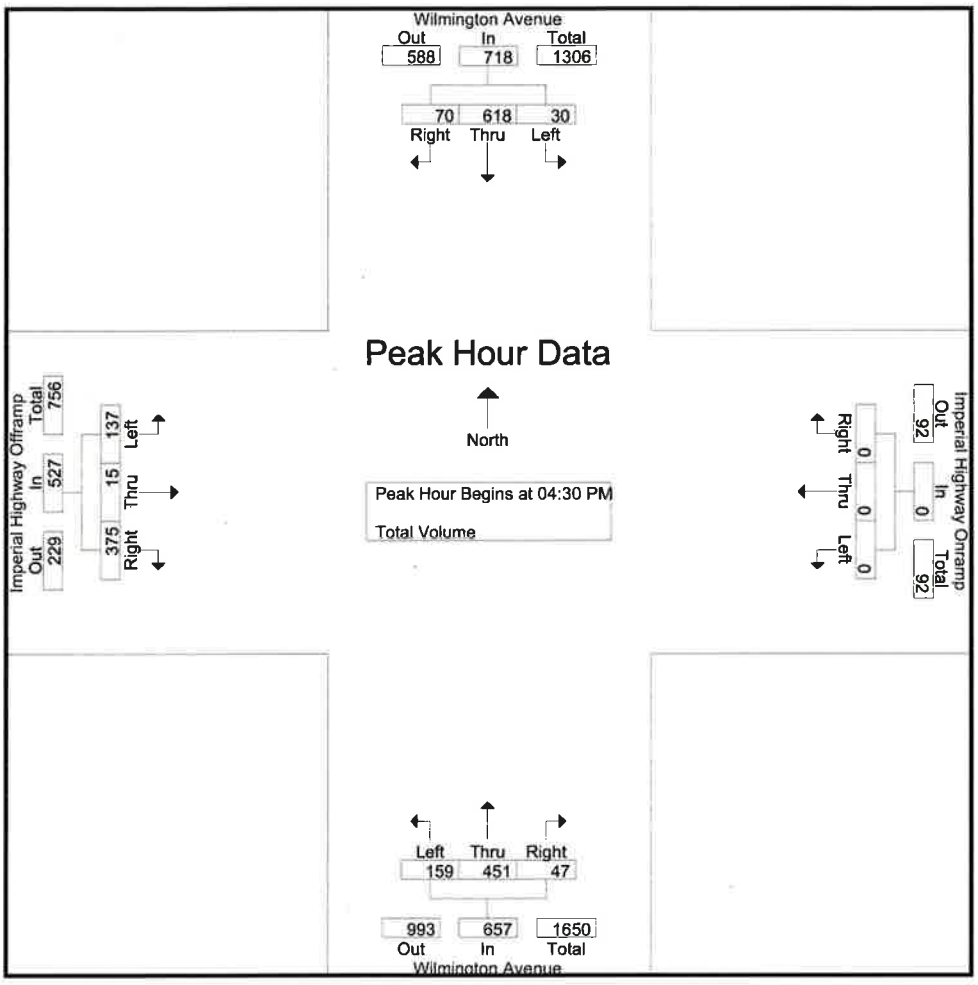
County of Los Angeles
N/S: Wilmington Avenue
E/W: Imperial Highway
Weather: Clear

File Name : LACWIIMPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:15 PM				05:00 PM			
+0 mins.	**9**	**168**	10	**187**	0	0	0	0	42	**120**	12	**174**	35	4	94	133
+15 mins.	6	150	16	172	0	0	0	0	37	117	9	163	30	5	93	128
+30 mins.	8	148	20	176	0	0	0	0	**44**	109	9	162	30	4	**107**	141
+45 mins.	7	152	**24**	183	0	0	0	0	39	114	**16**	169	**39**	**6**	102	**147**
Total Volume	30	618	70	718	0	0	0	0	162	460	46	668	134	19	396	549
% App. Total	4.2	86.1	9.7		0	0	0		24.3	68.9	6.9		24.4	3.5	72.1	
PHF	.833	.920	.729	.960	.000	.000	.000	.000	.920	.958	.719	.960	.859	.792	.925	.934

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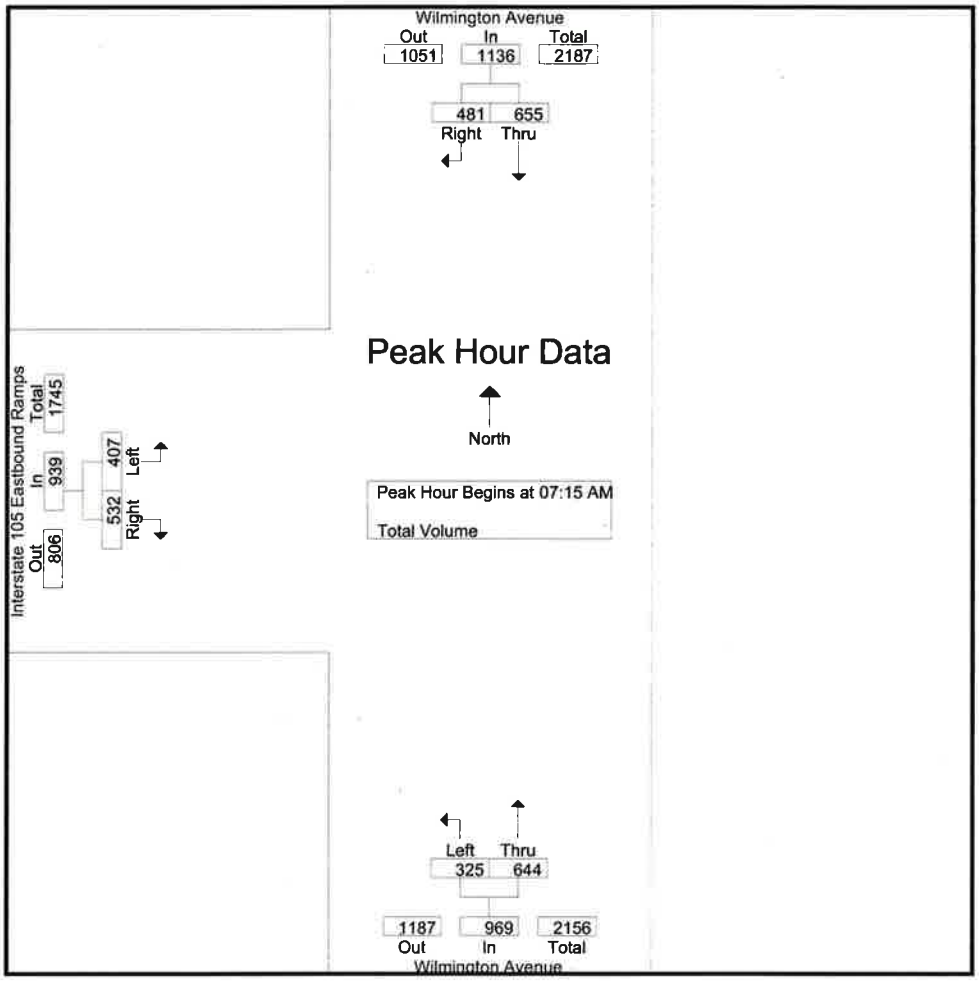
County of Los Angeles
N/S: Wilmington Avenue
E/W: Interstate 105 Eastbound Ramps
Weather: Clear

File Name : LACWI105EAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:00 AM			07:30 AM		
+0 mins.	142	135	277	92	158	250	**124**	**153**	**277**
+15 mins.	157	**143**	**300**	95	143	238	84	126	210
+30 mins.	**189**	97	286	**97**	**191**	**288**	100	132	232
+45 mins.	167	106	273	78	164	242	99	129	228
Total Volume	655	481	1136	362	656	1018	407	540	947
% App. Total	57.7	42.3		35.6	64.4		43	57	
PHF	.866	.841	.947	.933	.859	.884	.821	.882	.855

Counts Unlimited
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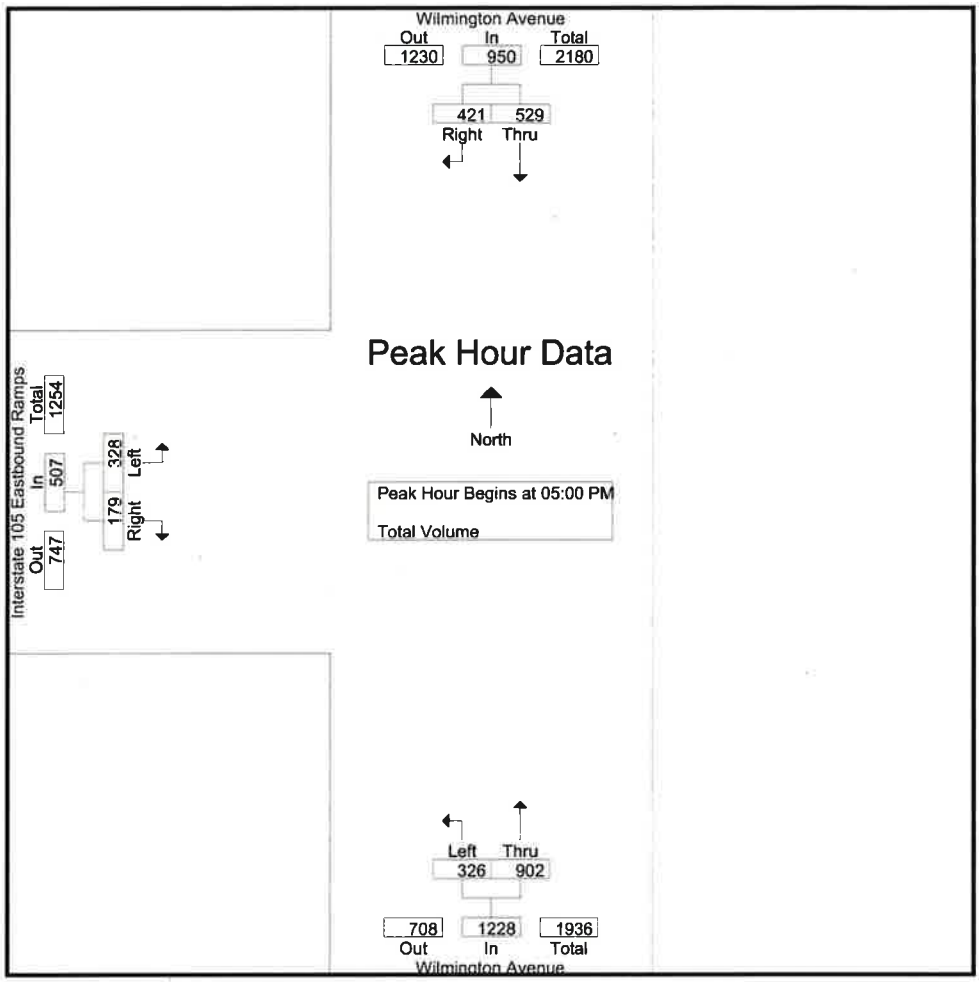
County of Los Angeles
N/S: Wilmington Avenue
E/W: Interstate 105 Eastbound Ramps
Weather: Clear

File Name : LACWI105EPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			05:00 PM		
+0 mins.	119	93	212	**100**	215	315	72	45	117
+15 mins.	117	**122**	239	94	227	321	86	33	119
+30 mins.	117	114	231	91	**242**	**333**	78	41	119
+45 mins.	**176**	92	**268**	82	222	304	**92**	**60**	**152**
Total Volume	529	421	950	367	906	1273	328	179	507
% App. Total	55.7	44.3		28.8	71.2		64.7	35.3	
PHF	.751	.863	.886	.918	.936	.956	.891	.746	.834

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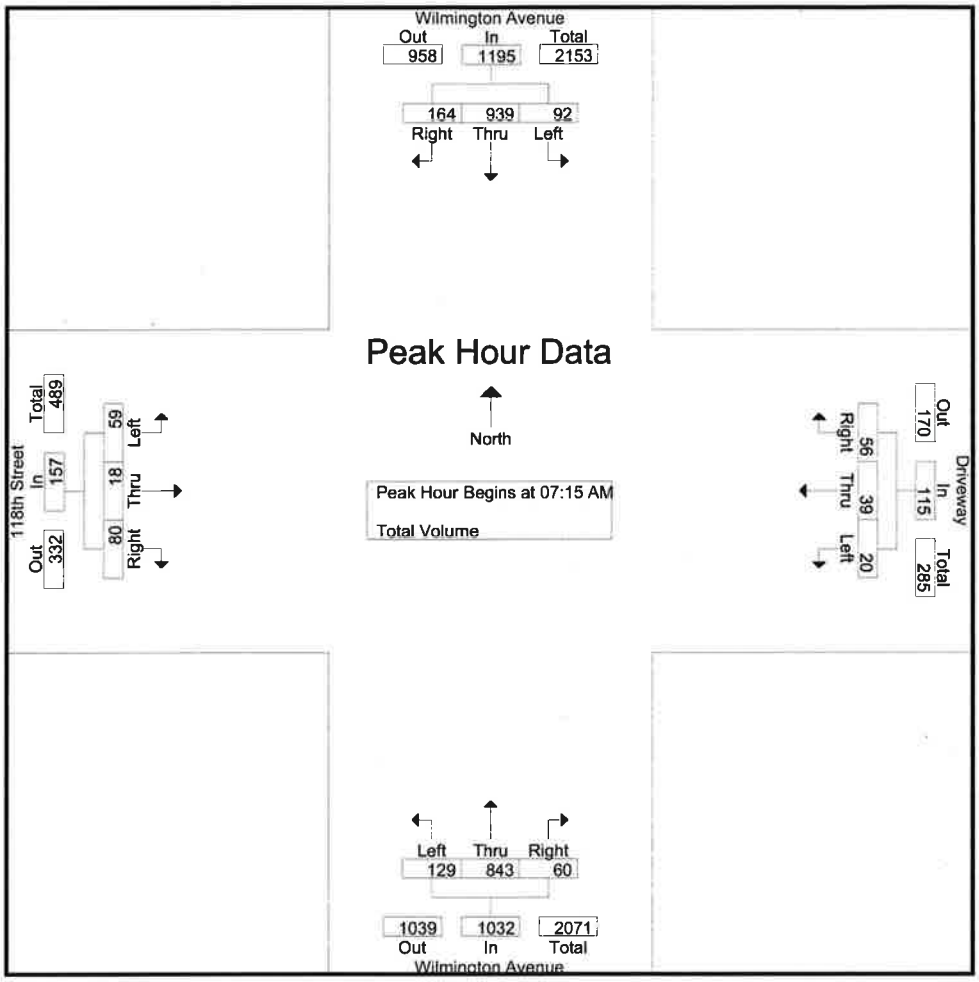
County of Los Angeles
N/S: Wilmington Avenue
E/W: 118th Street
Weather: Clear

File Name : CLAWI118AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				08:00 AM				07:00 AM				07:30 AM			
+0 mins.	23	208	31	262	3	**13**	14	30	5	221	6	232	14	3	20	37
+15 mins.	20	**252**	38	310	**7**	7	**26**	**40**	17	225	9	251	**23**	7	19	**49**
+30 mins.	**26**	245	**50**	**321**	7	6	24	37	36	**250**	**17**	**303**	12	6	**31**	49
+45 mins.	23	234	45	302	5	7	18	30	**42**	203	17	262	9	**9**	17	35
Total Volume	92	939	164	1195	22	33	82	137	100	899	49	1048	58	25	87	170
% App. Total	7.7	78.6	13.7		16.1	24.1	59.9		9.5	85.8	4.7		34.1	14.7	51.2	
PHF	.885	.932	.820	.931	.786	.635	.788	.856	.595	.899	.721	.865	.630	.694	.702	.867

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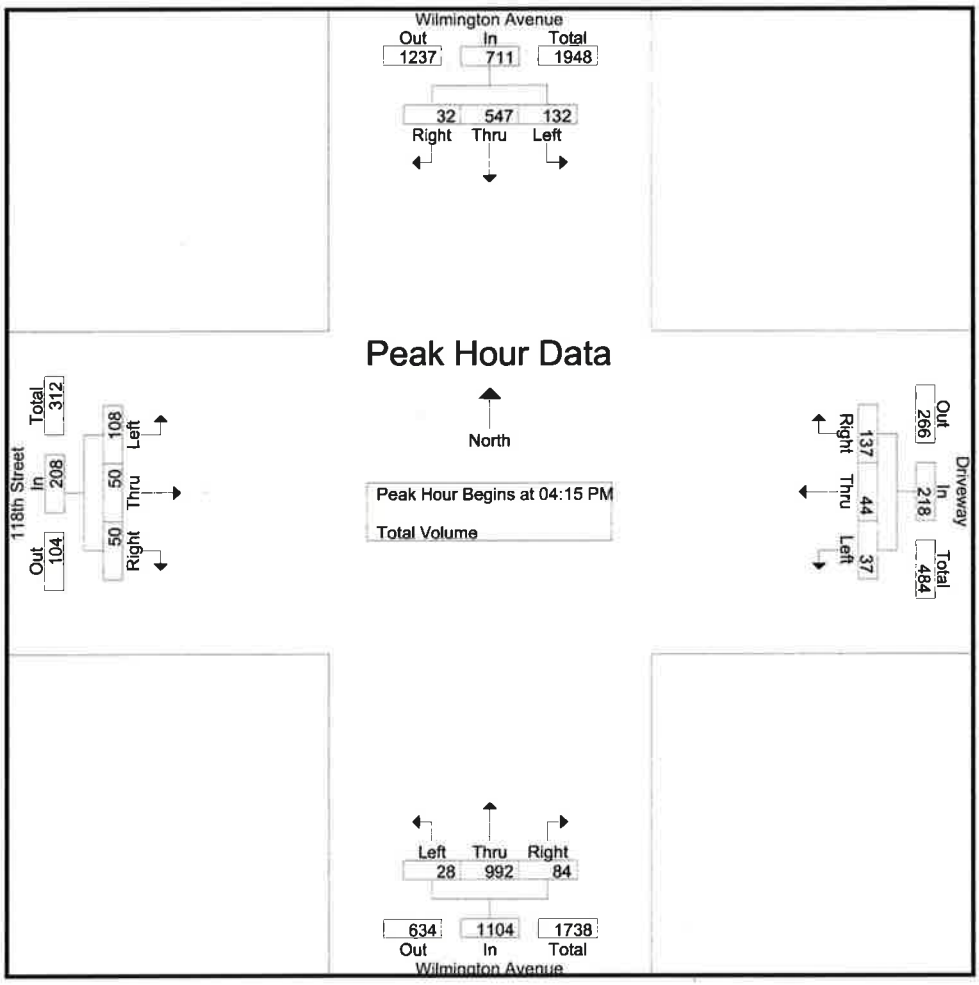
County of Los Angeles
N/S: Wilmington Avenue
E/W: 118th Street
Weather: Clear

File Name : CLAWI118PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:30 PM				04:15 PM			
+0 mins.	24	135	9	168	7	8	44	59	**10**	**274**	**25**	**309**	20	**19**	**17**	56
+15 mins.	**39**	**150**	**11**	**200**	12	9	32	53	5	247	18	270	**33**	16	14	**63**
+30 mins.	32	137	8	177	**16**	**12**	34	62	4	254	25	283	28	5	8	41
+45 mins.	37	125	4	166	9	9	**45**	**63**	5	241	17	263	27	10	11	48
Total Volume	132	547	32	711	44	38	155	237	24	1016	85	1125	108	50	50	208
% App. Total	18.6	76.9	4.5		18.6	16	65.4		2.1	90.3	7.6		51.9	24	24	
PHF	.846	.912	.727	.889	.688	.792	.861	.940	.600	.927	.850	.910	.818	.658	.735	.825

Counts Unlimited
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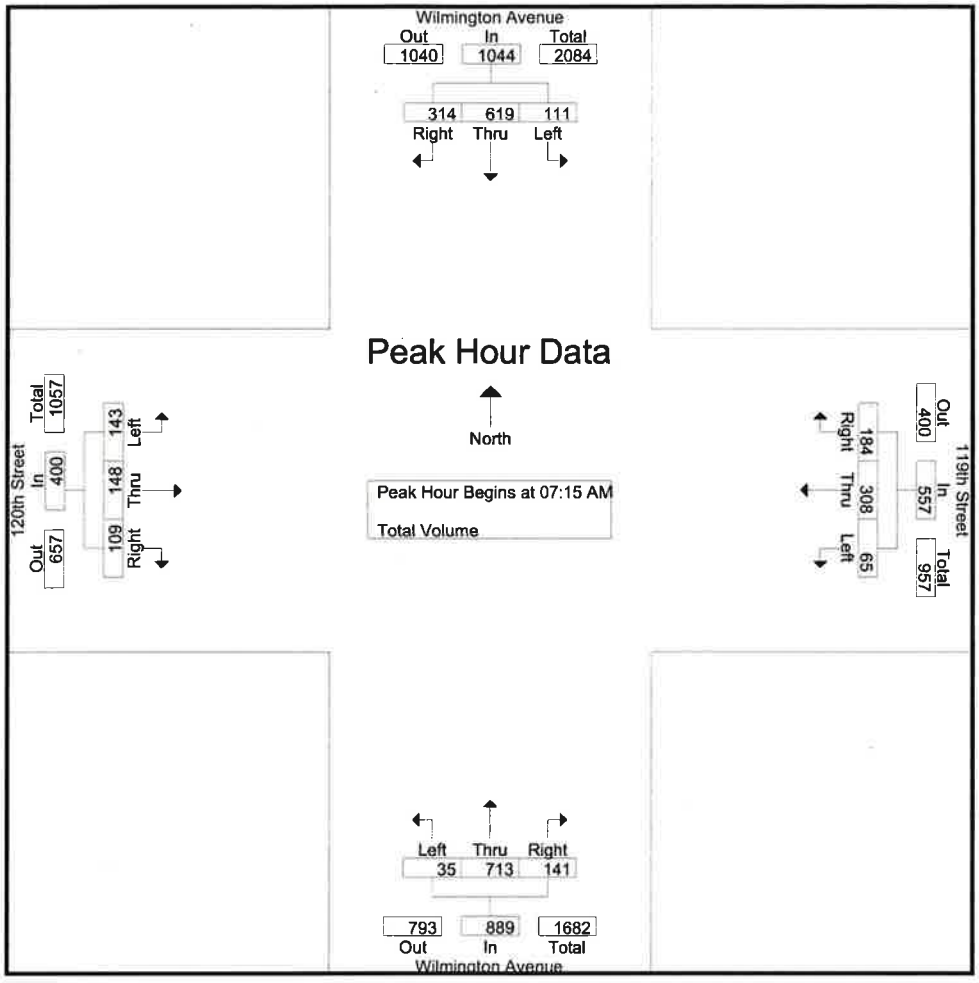
County of Los Angeles
N/S: Wilmington Avenue
E/W: 119th Street
Weather: Clear

File Name : CLAWI119AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	20	140	63	223	8	76	34	118	5	184	22	211	31	23	20	74
+15 mins.	25	166	90	**281**	**22**	85	46	153	7	184	30	221	**42**	36	24	102
+30 mins.	27	144	**95**	266	14	**92**	**53**	**159**	6	**218**	41	**265**	32	**48**	**38**	**118**
+45 mins.	**39**	**169**	66	274	21	55	51	127	**11**	174	**46**	231	38	41	27	106
Total Volume	111	619	314	1044	65	308	184	557	29	760	139	928	143	148	109	400
% App. Total	10.6	59.3	30.1		11.7	55.3	33		3.1	81.9	15		35.8	37	27.2	
PHF	.712	.916	.826	.929	.739	.837	.868	.876	.659	.872	.755	.875	.851	.771	.717	.847

Counts Unlimited
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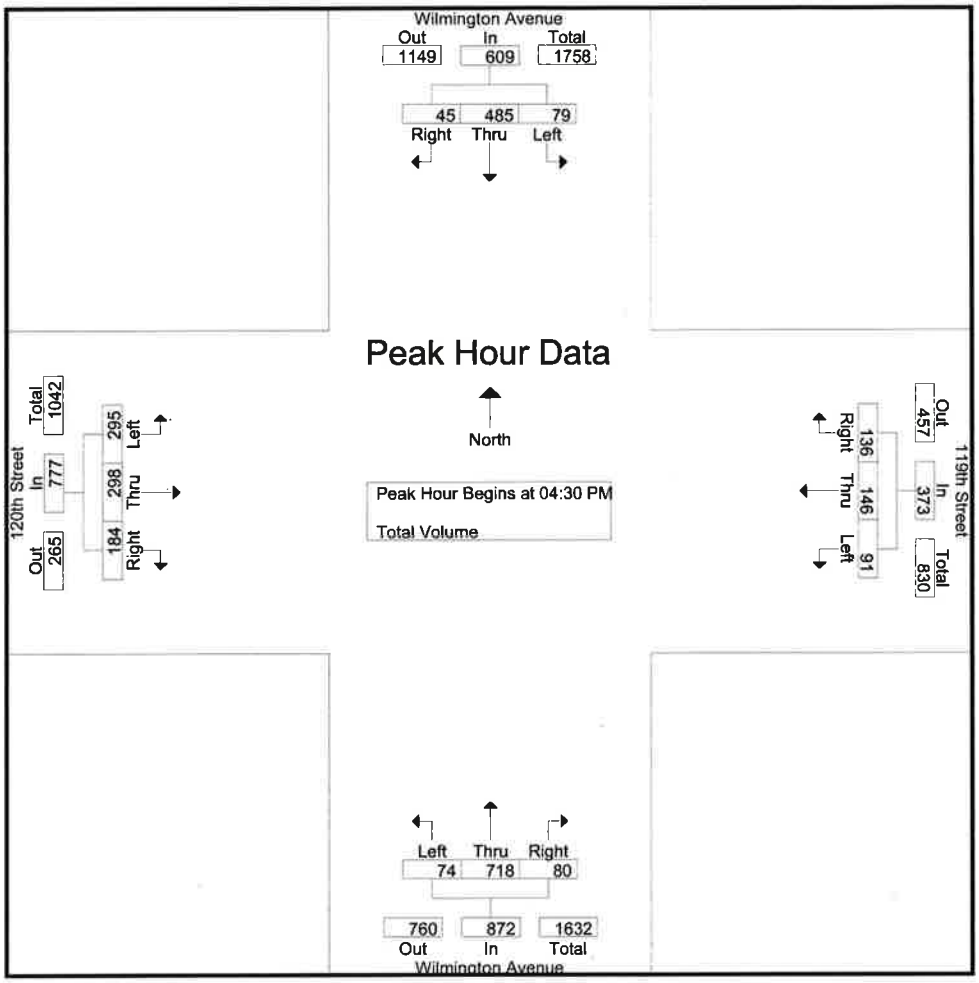
County of Los Angeles
N/S: Wilmington Avenue
E/W: 119th Street
Weather: Clear

File Name : CLAWI119PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				05:00 PM				04:30 PM			
+0 mins.	18	132	12	162	13	36	**43**	92	16	172	21	209	78	86	**64**	**228**
+15 mins.	**23**	**139**	14	**176**	26	**44**	30	**100**	**18**	181	15	214	75	**95**	45	215
+30 mins.	15	127	**15**	157	**28**	30	30	88	17	**208**	20	**245**	**79**	48	38	165
+45 mins.	20	115	7	142	24	36	33	93	18	169	**22**	209	63	69	37	169
Total Volume	76	513	48	637	91	146	136	373	69	730	78	877	295	298	184	777
% App. Total	11.9	80.5	7.5		24.4	39.1	36.5		7.9	83.2	8.9		38	38.4	23.7	
PHF	.826	.923	.800	.905	.813	.830	.791	.933	.958	.877	.886	.895	.934	.784	.719	.852

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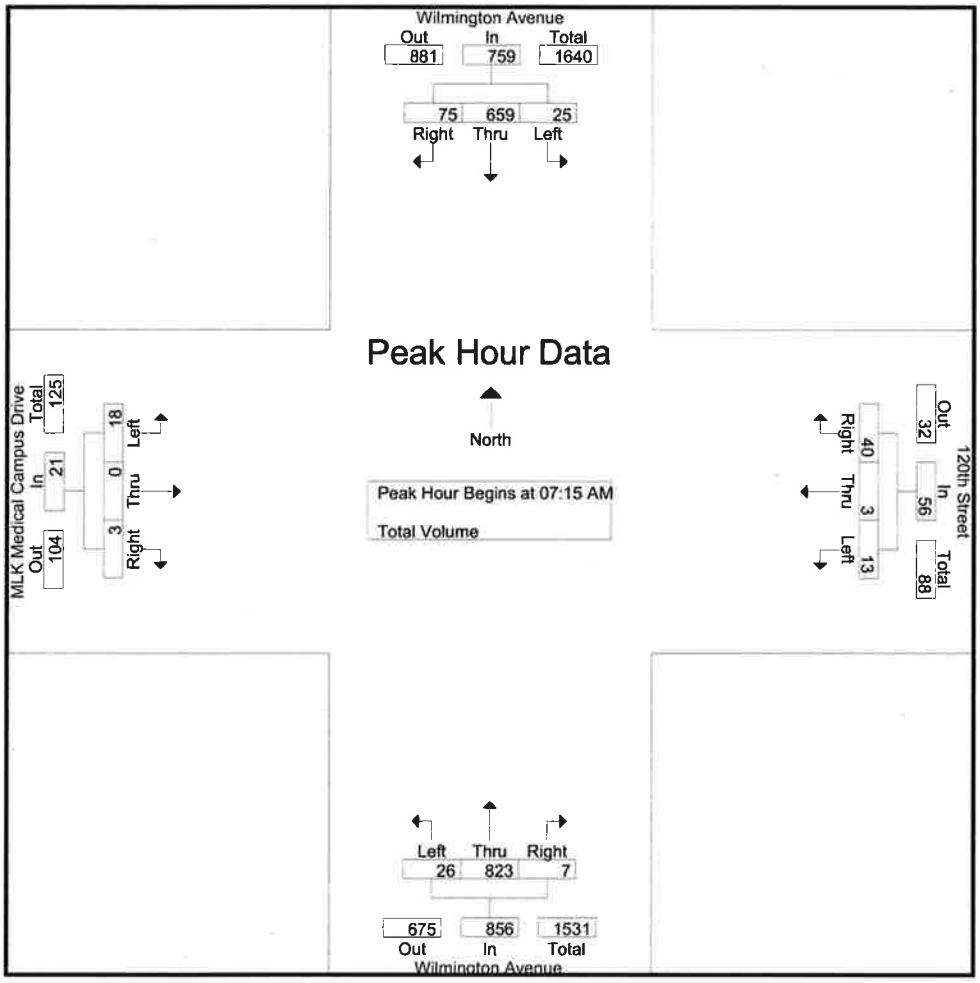
County of Los Angeles
N/S: Wilmington Avenue
E/W: 119th Street
Weather: Clear

File Name : CLAWI120AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:15 AM			
+0 mins.	7	**177**	17	201	0	1	8	9	3	198	1	202	2	0	0	2
+15 mins.	3	172	19	194	**4**	0	13	17	5	219	1	225	2	0	**1**	3
+30 mins.	**11**	177	**25**	**213**	3	1	**14**	**18**	**8**	**241**	0	**249**	**8**	0	1	**9**
+45 mins.	9	158	13	180	3	**2**	10	15	8	205	**2**	215	6	0	1	7
Total Volume	30	684	74	788	10	4	45	59	24	863	4	891	18	0	3	21
% App. Total	3.8	86.8	9.4		16.9	6.8	76.3		2.7	96.9	0.4		85.7	0	14.3	
PHF	.682	.966	.740	.925	.625	.500	.804	.819	.750	.895	.500	.895	.563	.000	.750	.583

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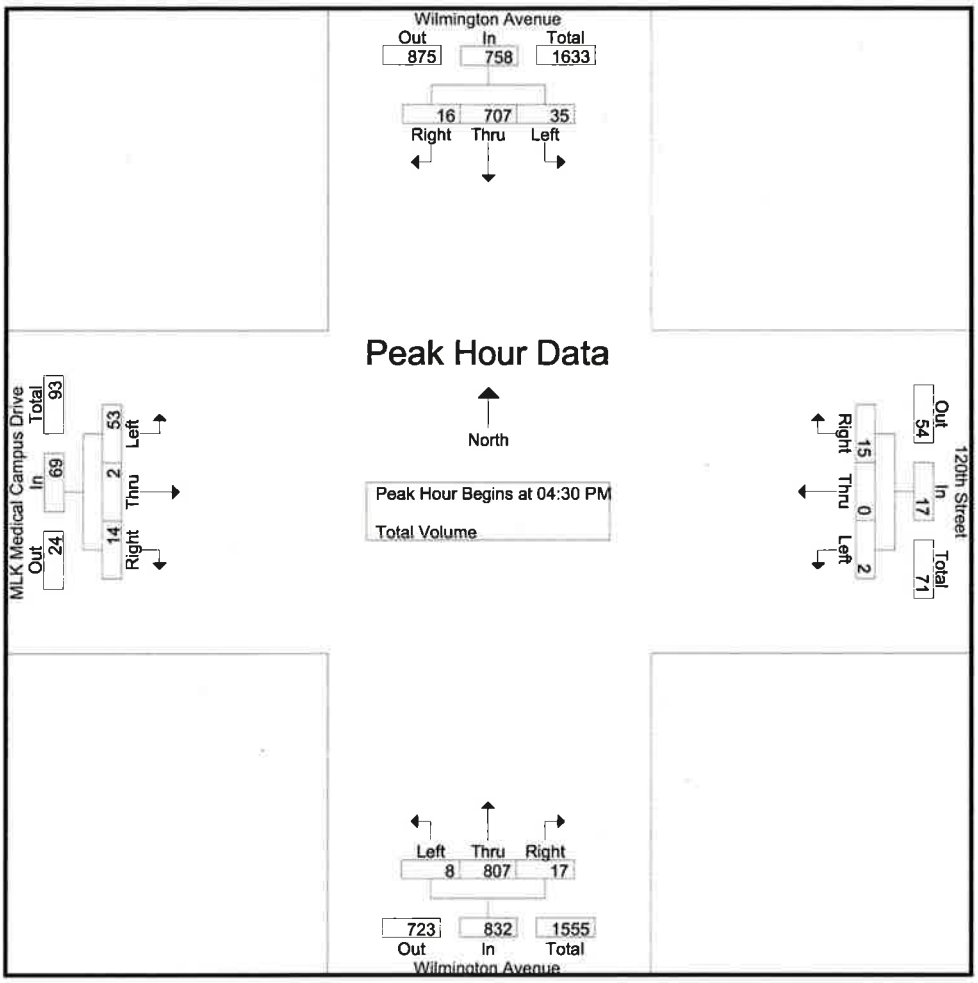
County of Los Angeles
N/S: Wilmington Avenue
E/W: 119th Street
Weather: Clear

File Name : CLAWI120PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:30 PM				04:15 PM			
+0 mins.	5	162	2	169	1	0	**6**	7	**3**	**218**	2	223	10	0	**5**	15
+15 mins.	9	**198**	**6**	**213**	1	0	4	5	1	201	4	206	**17**	**2**	3	**22**
+30 mins.	**11**	181	5	197	0	0	4	4	2	171	5	178	15	0	3	18
+45 mins.	7	174	2	183	**3**	0	6	**9**	2	217	**6**	**225**	10	0	5	15
Total Volume	32	715	15	762	5	0	20	25	8	807	17	832	52	2	16	70
% App. Total	4.2	93.8	2		20	0	80		1	97	2		74.3	2.9	22.9	
PHF	.727	.903	.625	.894	.417	.000	.833	.694	.667	.925	.708	.924	.765	.250	.800	.795

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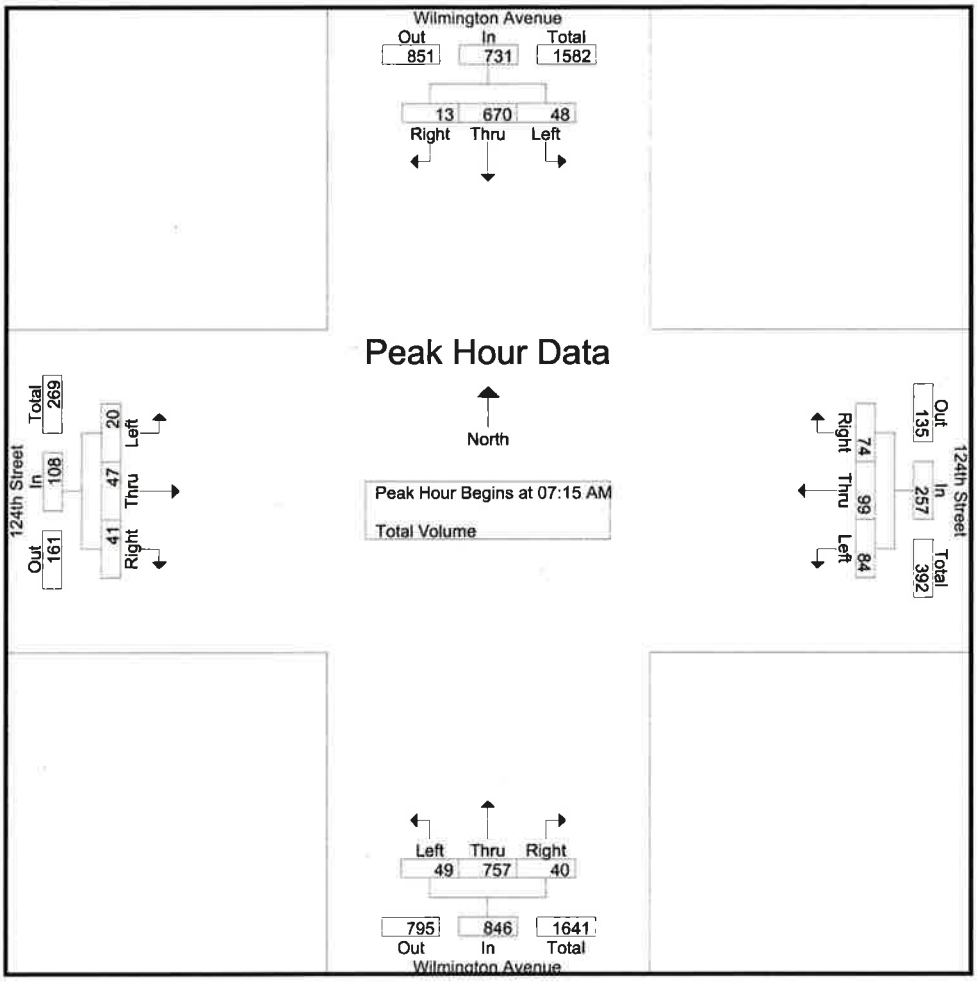
County of Los Angeles
N/S: Wilmington Avenue
E/W: 124th Street
Weather: Clear

File Name : CLAWI124AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	10	**185**	3	**198**	10	21	**21**	52	5	169	8	182	**9**	8	6	23
+15 mins.	12	169	**4**	185	25	28	17	70	11	199	7	217	4	10	11	25
+30 mins.	**16**	166	2	184	**34**	**33**	19	**86**	12	**219**	**13**	**244**	5	**18**	**15**	**38**
+45 mins.	12	158	1	171	15	17	17	49	**19**	199	9	227	2	11	9	22
Total Volume	50	678	10	738	84	99	74	257	47	786	37	870	20	47	41	108
% App. Total	6.8	91.9	1.4		32.7	38.5	28.8		5.4	90.3	4.3		18.5	43.5	38	
PHF	.781	.916	.625	.932	.618	.750	.881	.747	.618	.897	.712	.891	.556	.653	.683	.711

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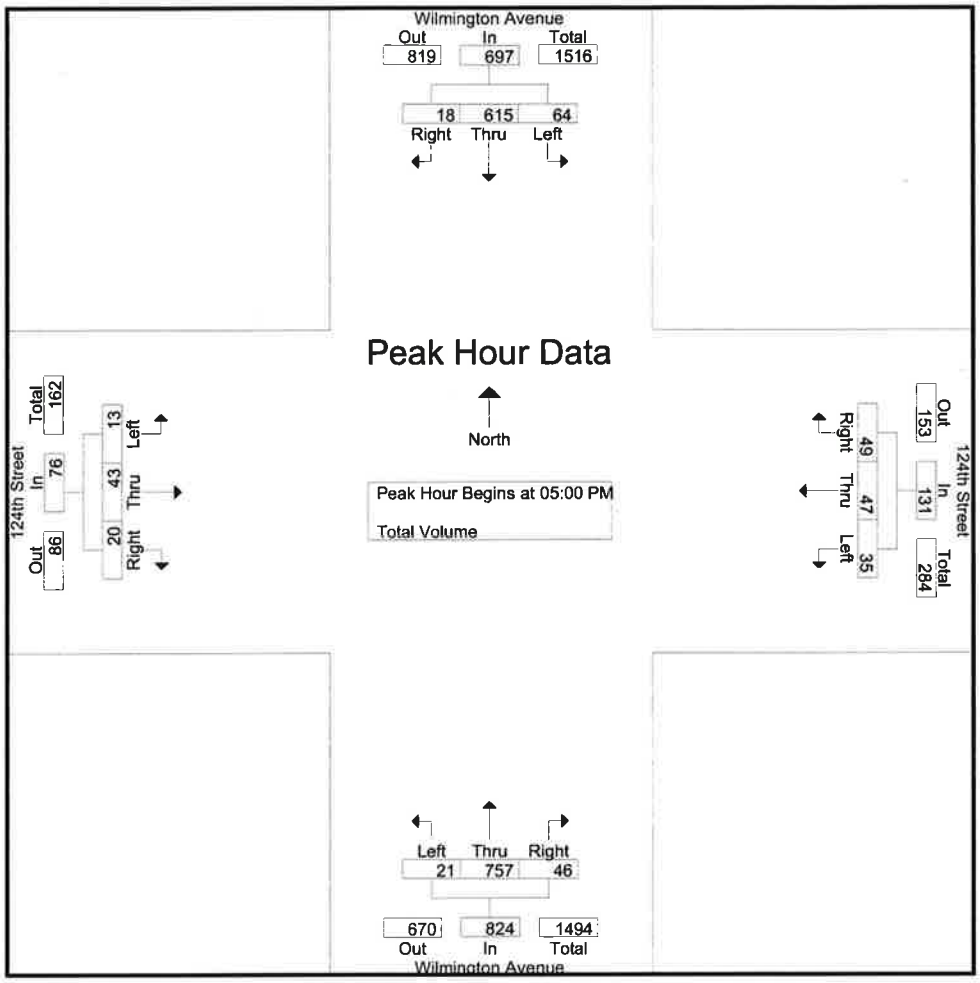
County of Los Angeles
N/S: Wilmington Avenue
E/W: 124th Street
Weather: Clear

File Name : CLAWI124PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:30 PM				05:00 PM			
+0 mins.	13	156	0	169	9	12	6	27	2	200	12	214	4	11	3	18
+15 mins.	16	**177**	**10**	**203**	9	**17**	10	**36**	2	186	10	198	4	**12**	6	**22**
+30 mins.	13	151	9	173	7	8	**21**	36	**10**	166	**13**	189	0	12	4	16
+45 mins.	**18**	154	5	177	**10**	10	12	32	4	**209**	13	**226**	**5**	8	**7**	20
Total Volume	60	638	24	722	35	47	49	131	18	761	48	827	13	43	20	76
% App. Total	8.3	88.4	3.3		26.7	35.9	37.4		2.2	92	5.8		17.1	56.6	26.3	
PHF	.833	.901	.600	.889	.875	.691	.583	.910	.450	.910	.923	.915	.650	.896	.714	.864

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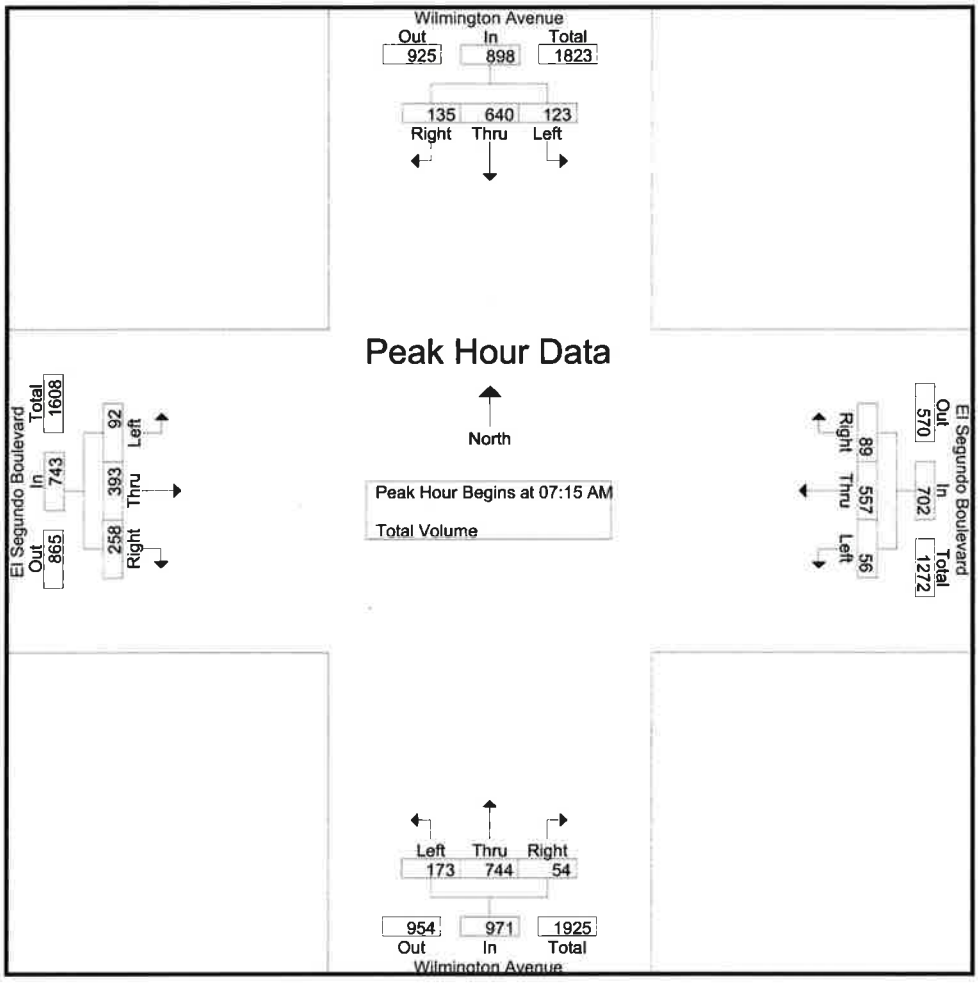
County of Los Angeles
N/S: Wilmington Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CPTWIELAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	25	177	**42**	244	9	151	10	170	48	149	2	199	18	100	69	187
+15 mins.	**40**	**193**	40	**273**	8	**153**	21	182	27	192	10	229	**27**	**118**	**91**	**236**
+30 mins.	36	148	21	205	**15**	137	**31**	**183**	**52**	210	**16**	**278**	26	103	64	193
+45 mins.	23	138	24	185	13	140	19	172	46	**211**	16	273	25	75	41	141
Total Volume	124	656	127	907	45	581	81	707	173	762	44	979	96	396	265	757
% App. Total	13.7	72.3	14		6.4	82.2	11.5		17.7	77.8	4.5		12.7	52.3	35	
PHF	.775	.850	.756	.831	.750	.949	.653	.966	.832	.903	.688	.880	.889	.839	.728	.802

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County of Los Angeles
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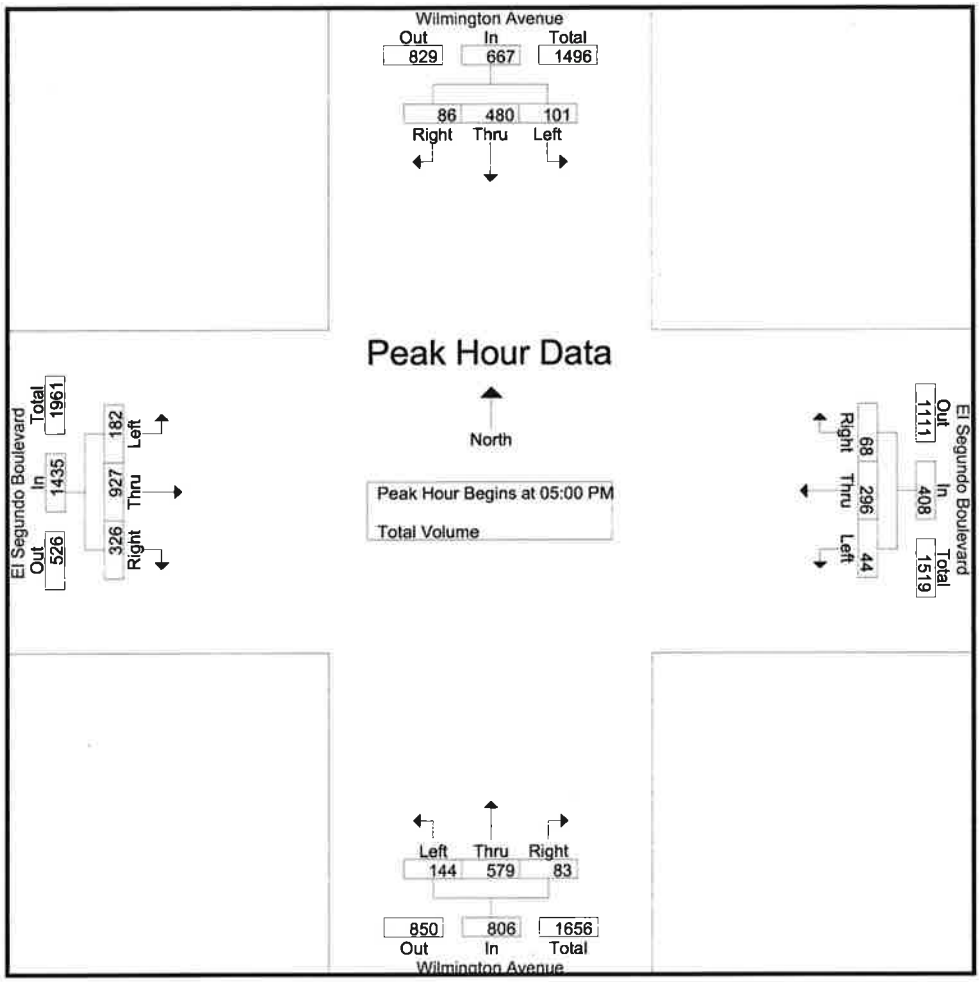
E/W: El Segundo Boulevard
Weather: Clear

File Name : CPTWIELPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:45 PM				05:00 PM			
+0 mins.	24	122	24	170	**12**	71	18	101	39	141	**20**	200	38	213	69	320
+15 mins.	24	**152**	17	**193**	12	**77**	18	**107**	40	134	18	192	**56**	**255**	**87**	**398**
+30 mins.	24	107	**28**	159	11	73	**20**	104	31	142	20	193	42	219	87	348
+45 mins.	**29**	120	22	171	9	75	12	96	**44**	**170**	18	**232**	46	240	83	369
Total Volume	101	501	91	693	44	296	68	408	154	587	76	817	182	927	326	1435
% App. Total	14.6	72.3	13.1		10.8	72.5	16.7		18.8	71.8	9.3		12.7	64.6	22.7	
PHF	.871	.824	.813	.898	.917	.961	.850	.953	.875	.863	.950	.880	.813	.909	.937	.901

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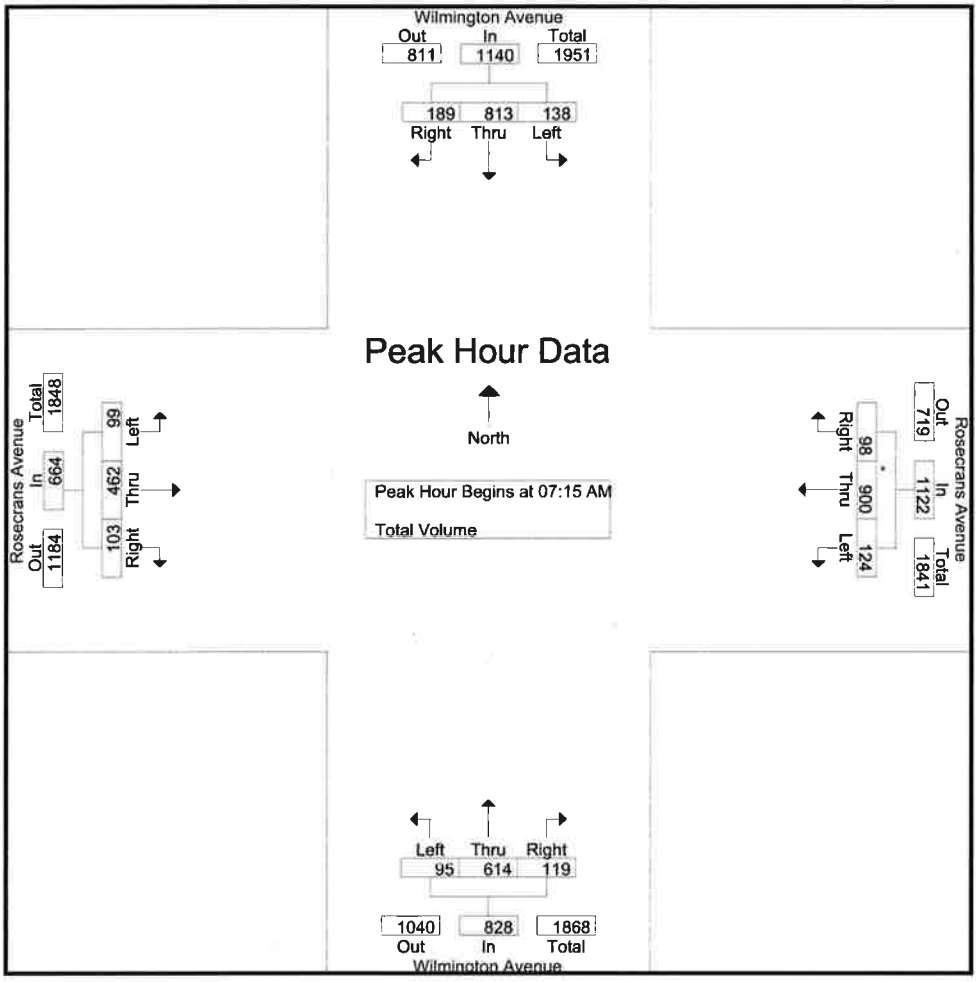
County of Los Angeles
N/S: Wilmington Avenue
E/W: Rosecrans Avenue
Weather: Clear

File Name : CPTWIROAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	25	174	30	229	21	**260**	18	299	22	125	17	164	18	107	24	149
+15 mins.	36	223	46	305	38	219	22	279	**28**	**170**	31	**229**	27	115	**31**	173
+30 mins.	36	**225**	**59**	**320**	18	232	23	273	20	169	**38**	227	25	**147**	22	**194**
+45 mins.	**41**	191	54	286	**42**	247	**26**	**315**	25	150	33	208	**29**	93	26	148
Total Volume	138	813	189	1140	119	958	89	1166	95	614	119	828	99	462	103	664
% App. Total	12.1	71.3	16.6		10.2	82.2	7.6		11.5	74.2	14.4		14.9	69.6	15.5	
PHF	.841	.903	.801	.891	.708	.921	.856	.925	.848	.903	.783	.904	.853	.786	.831	.856

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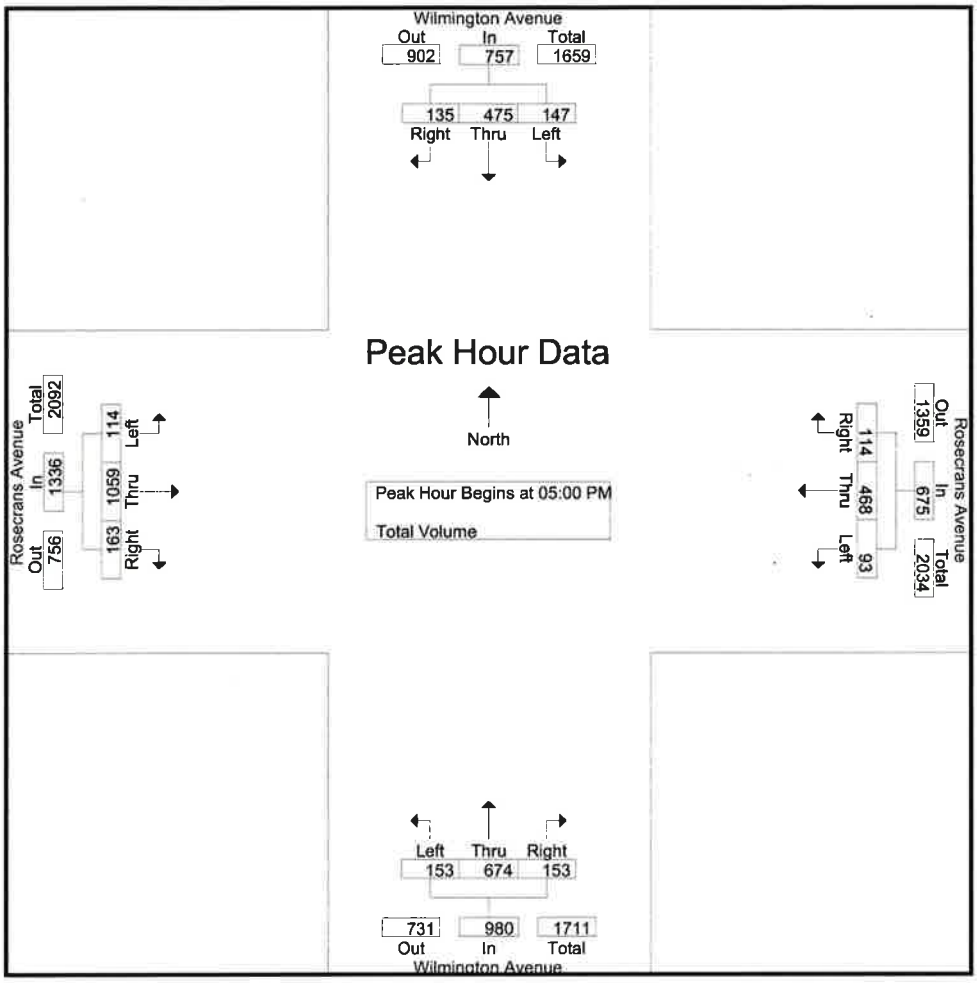
County of Los Angeles
N/S: Wilmington Avenue
E/W: Rosecrans Avenue
Weather: Clear

File Name : CPTWIROPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				05:00 PM			
+0 mins.	31	117	36	184	**36**	111	29	176	32	185	36	253	20	263	37	320
+15 mins.	27	104	33	164	27	**126**	**34**	**187**	30	**194**	**41**	**265**	33	267	44	344
+30 mins.	44	**127**	25	196	18	116	22	156	**37**	165	35	237	23	**278**	**48**	**349**
+45 mins.	**45**	127	**41**	**213**	32	98	26	156	32	176	39	247	**38**	251	34	323
Total Volume	147	475	135	757	113	451	111	675	131	720	151	1002	114	1059	163	1336
% App. Total	19.4	62.7	17.8		16.7	66.8	16.4		13.1	71.9	15.1		8.5	79.3	12.2	
PHF	.817	.935	.823	.888	.785	.895	.816	.902	.885	.928	.921	.945	.750	.952	.849	.957

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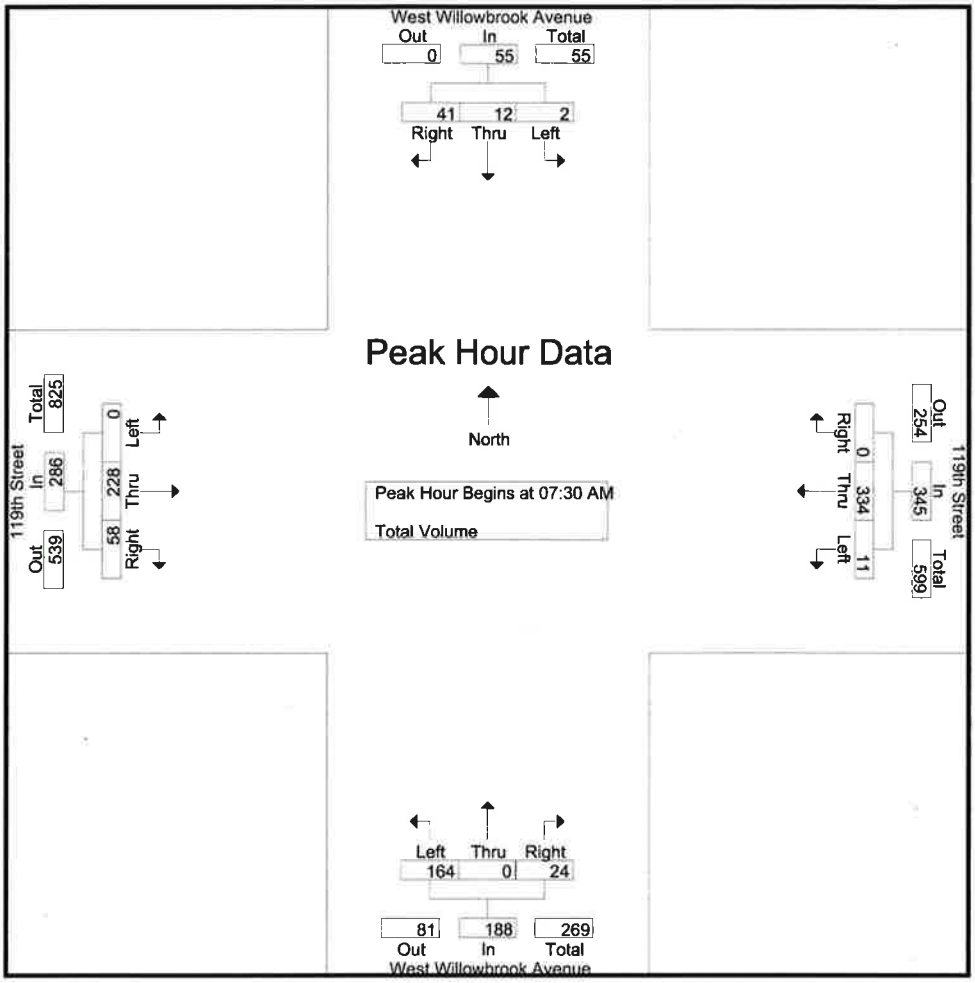
County of Los Angeles
N/S: West Willowbrook Avenue
E/W: 119th Street
Weather: Clear

File Name : CLASW119AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:15 AM				07:30 AM			
+0 mins.	0	2	**15**	**17**	3	92	0	95	40	0	3	43	0	53	10	63
+15 mins.	**1**	3	6	10	1	80	0	81	46	0	6	52	0	53	17	70
+30 mins.	0	**5**	12	17	**4**	**96**	0	**100**	**57**	0	**7**	**64**	0	**65**	**18**	**83**
+45 mins.	1	3	11	15	3	66	0	69	32	0	6	38	0	57	13	70
Total Volume	2	13	44	59	11	334	0	345	175	0	22	197	0	228	58	286
% App. Total	3.4	22	74.6		3.2	96.8	0		88.8	0	11.2		0	79.7	20.3	
PHF	.500	.650	.733	.868	.688	.870	.000	.863	.768	.000	.786	.770	.000	.877	.806	.861

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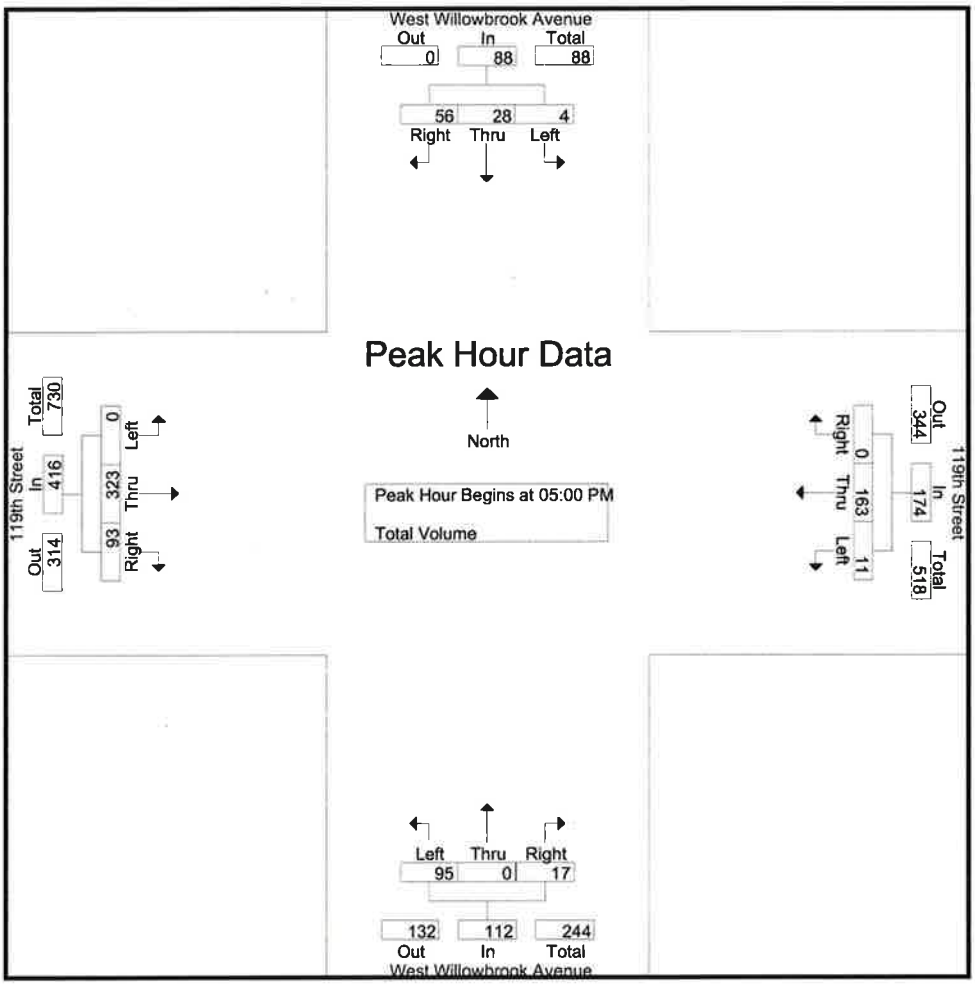
County of Los Angeles
N/S: West Willowbrook Avenue
E/W: 119th Street
Weather: Clear

File Name : CLASW119PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:30 PM				05:00 PM			
+0 mins.	**1**	4	14	19	2	**47**	0	**49**	23	0	5	28	0	81	18	99
+15 mins.	1	8	**18**	**27**	**5**	40	0	45	**27**	0	**6**	**33**	0	**88**	14	102
+30 mins.	1	6	11	18	2	43	0	45	27	0	2	29	0	76	25	101
+45 mins.	1	**10**	13	24	2	45	0	47	27	0	4	31	0	78	**36**	**114**
Total Volume	4	28	56	88	11	175	0	186	104	0	17	121	0	323	93	416
% App. Total	4.5	31.8	63.6		5.9	94.1	0		86	0	14		0	77.6	22.4	
PHF	1.000	.700	.778	.815	.550	.931	.000	.949	.963	.000	.708	.917	.000	.918	.646	.912

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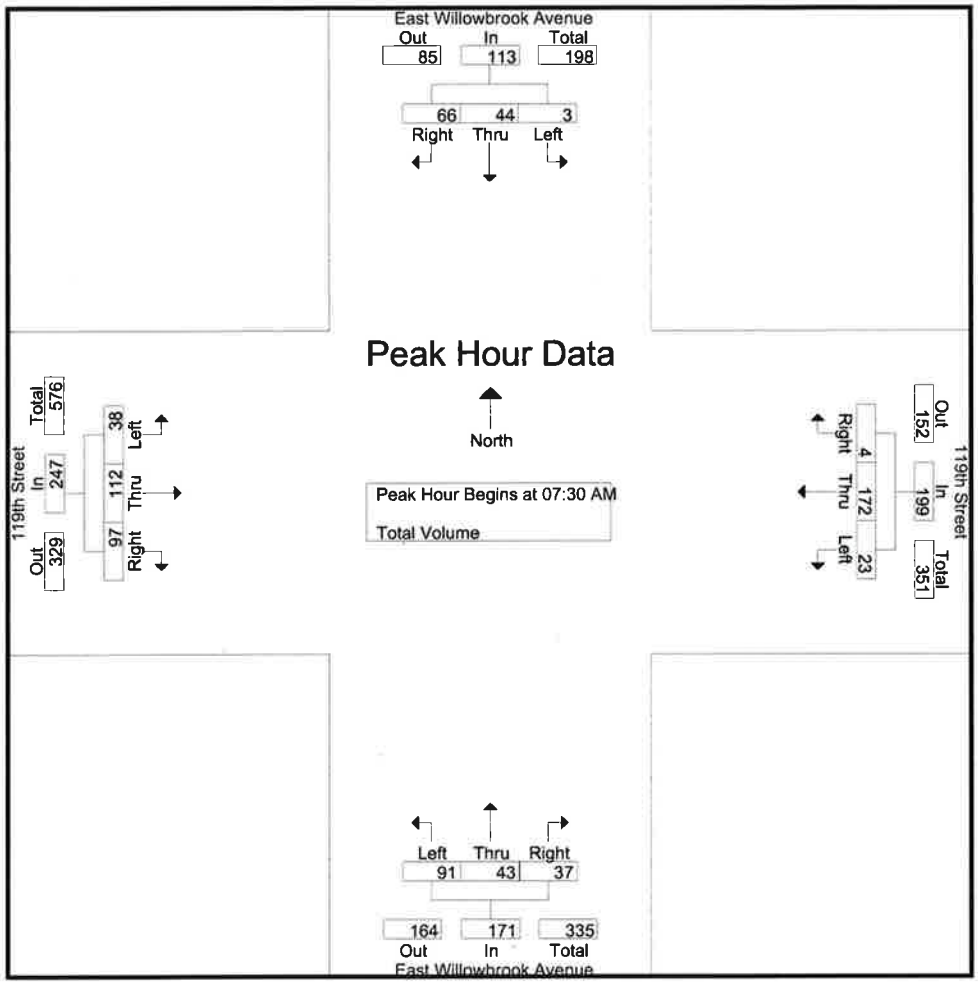
County of Los Angeles
N/S: East Willowbrook Avenue
E/W: 119th Street
Weather: Clear

File Name : CLANW119AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	**2**	4	17	23	1	44	0	45	17	5	5	27	4	29	25	58
+15 mins.	0	**21**	21	**42**	**10**	47	1	**58**	22	12	9	43	10	21	**28**	59
+30 mins.	2	14	**24**	40	8	**49**	1	58	**32**	**18**	**15**	**65**	**12**	**31**	26	**69**
+45 mins.	0	8	11	19	4	47	**2**	53	20	8	8	36	12	31	18	61
Total Volume	4	47	73	124	23	187	4	214	91	43	37	171	38	112	97	247
% App. Total	3.2	37.9	58.9		10.7	87.4	1.9		53.2	25.1	21.6		15.4	45.3	39.3	
PHF	.500	.560	.760	.738	.575	.954	.500	.922	.711	.597	.617	.658	.792	.903	.866	.895

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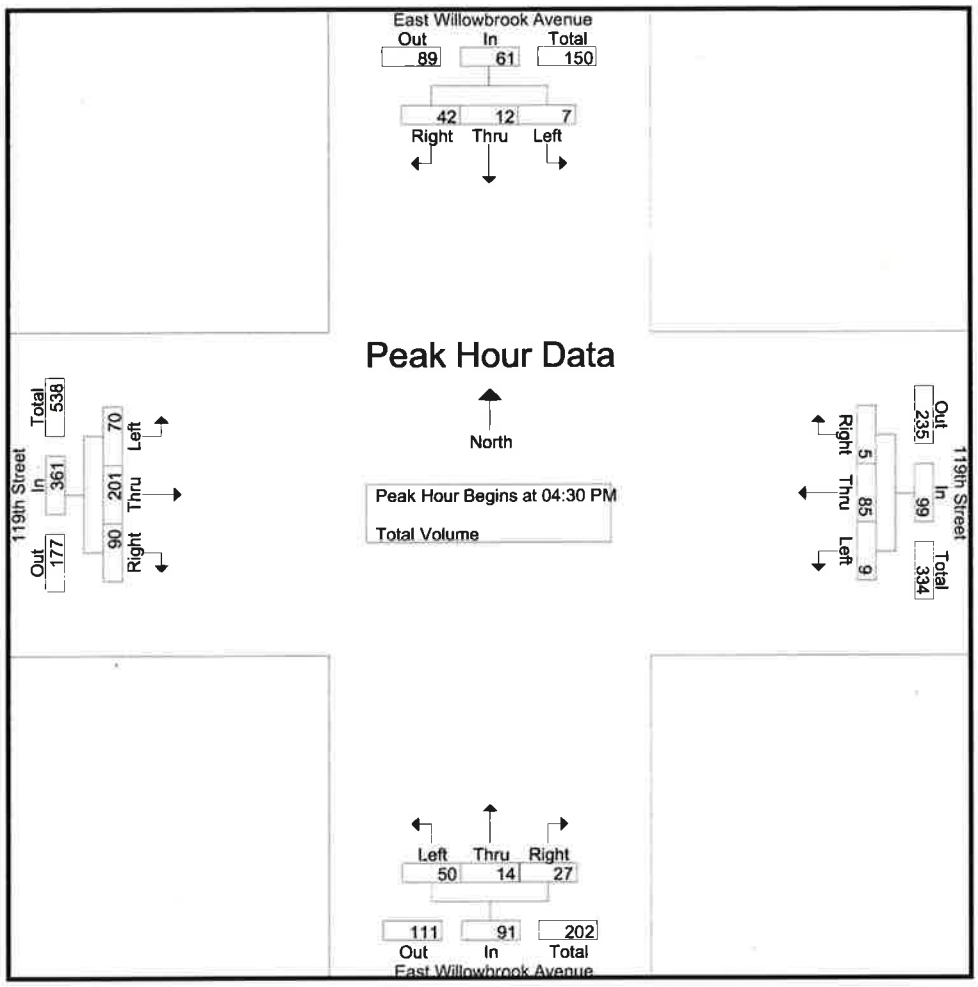
County of Los Angeles
N/S: East Willowbrook Avenue
E/W: 119th Street
Weather: Clear

File Name : CLANW119PM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				05:00 PM				04:30 PM			
+0 mins.	2	3	**12**	17	2	**30**	0	**32**	**13**	1	4	18	17	45	**26**	88
+15 mins.	2	**9**	7	**18**	2	18	**4**	24	8	6	8	22	18	**56**	23	**97**
+30 mins.	**3**	3	9	15	**4**	22	0	26	13	**10**	8	**31**	**19**	44	17	80
+45 mins.	2	3	12	17	2	18	1	21	9	7	**10**	26	16	56	24	96
Total Volume	9	18	40	67	10	88	5	103	43	24	30	97	70	201	90	361
% App. Total	13.4	26.9	59.7		9.7	85.4	4.9		44.3	24.7	30.9		19.4	55.7	24.9	
PHF	.750	.500	.833	.931	.625	.733	.313	.805	.827	.600	.750	.782	.921	.897	.865	.930

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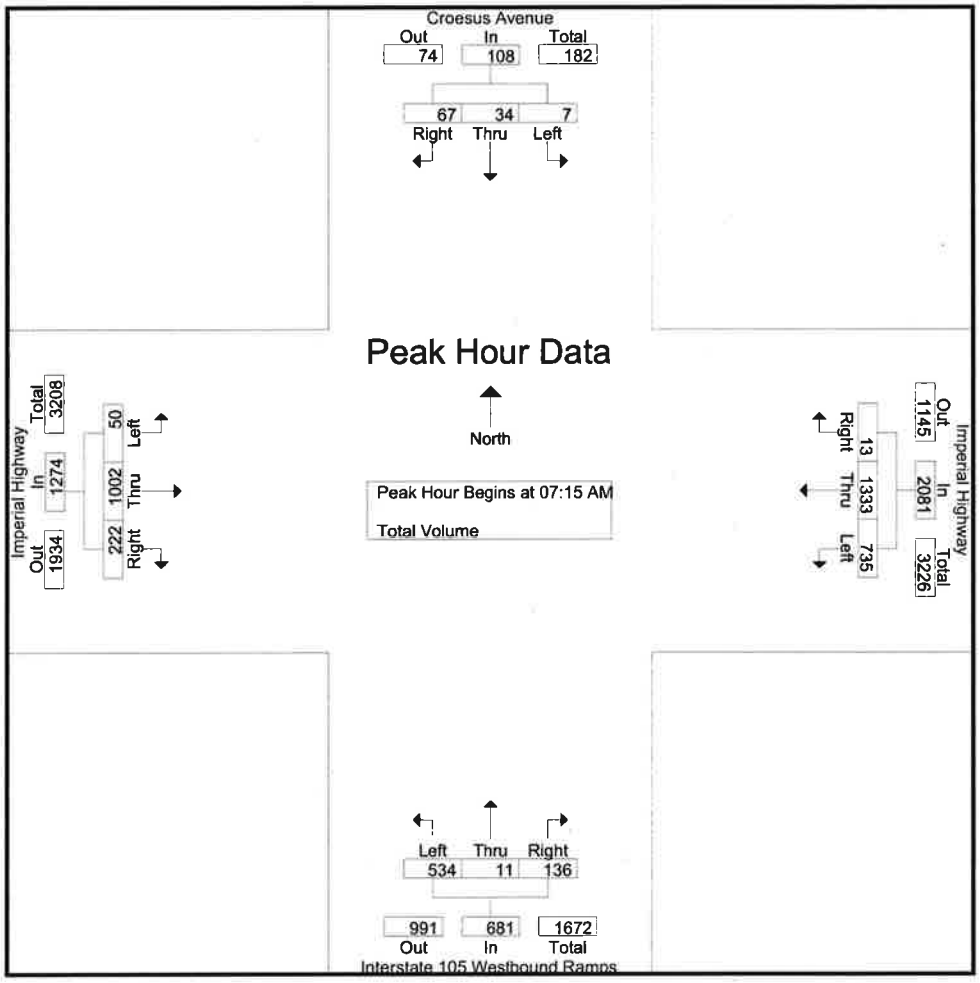
County of Los Angeles
N/S: Interstate 105 Westbound Ramps
E/W: Imperial Highway
Weather: Clear

File Name : LAC105WIMAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				08:00 AM				07:15 AM			
+0 mins.	**4**	**17**	18	**39**	155	292	3	450	156	**7**	40	203	5	240	**67**	312
+15 mins.	0	9	19	28	**215**	**382**	1	**598**	152	3	44	199	13	232	56	301
+30 mins.	1	7	**20**	28	197	322	0	519	105	0	40	145	**20**	**290**	59	**369**
+45 mins.	4	12	17	33	155	365	**6**	526	**162**	0	**49**	**211**	12	240	40	292
Total Volume	9	45	74	128	722	1361	10	2093	575	10	173	758	50	1002	222	1274
% App. Total	7	35.2	57.8		34.5	65	0.5		75.9	1.3	22.8		3.9	78.6	17.4	
PHF	.563	.662	.925	.821	.840	.891	.417	.875	.887	.357	.883	.898	.625	.864	.828	.863

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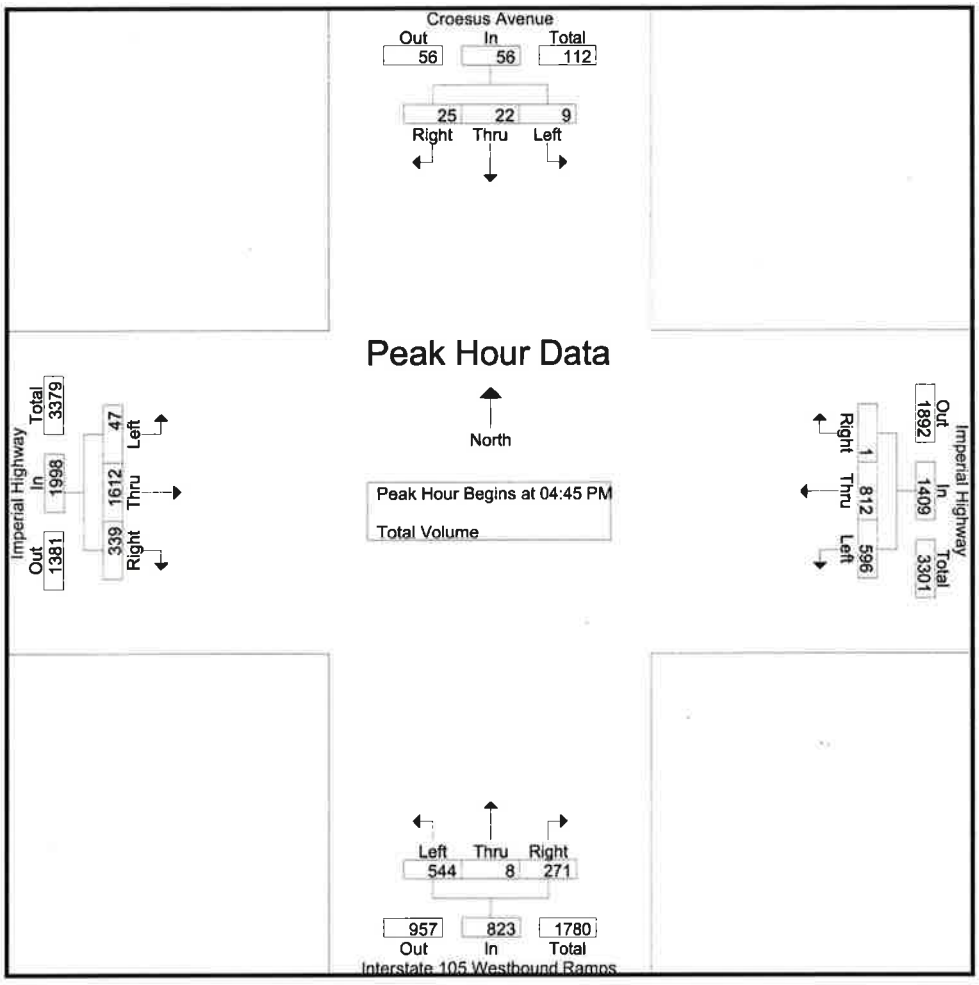
County of Los Angeles
N/S: Interstate 105 Westbound Ramps
E/W: Imperial Highway
Weather: Clear

File Name : LAC105WIMPM
Site Code : 12815514
Start Date : 9/23/2015



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:30 PM				04:45 PM			
+0 mins.	3	**8**	13	24	134	201	**1**	336	133	**4**	**81**	218	10	398	**90**	498
+15 mins.	**5**	8	**15**	**28**	**170**	**216**	0	**386**	**156**	2	68	226	**16**	401	87	504
+30 mins.	5	5	11	21	137	196	0	333	111	2	70	183	10	383	81	474
+45 mins.	0	7	6	13	155	199	0	354	153	1	75	**229**	11	**430**	81	**522**
Total Volume	13	28	45	86	596	812	1	1409	553	9	294	856	47	1612	339	1998
% App. Total	15.1	32.6	52.3		42.3	57.6	0.1		64.6	1.1	34.3		2.4	80.7	17	
PHF	.650	.875	.750	.768	.876	.940	.250	.913	.886	.563	.907	.934	.734	.937	.942	.957

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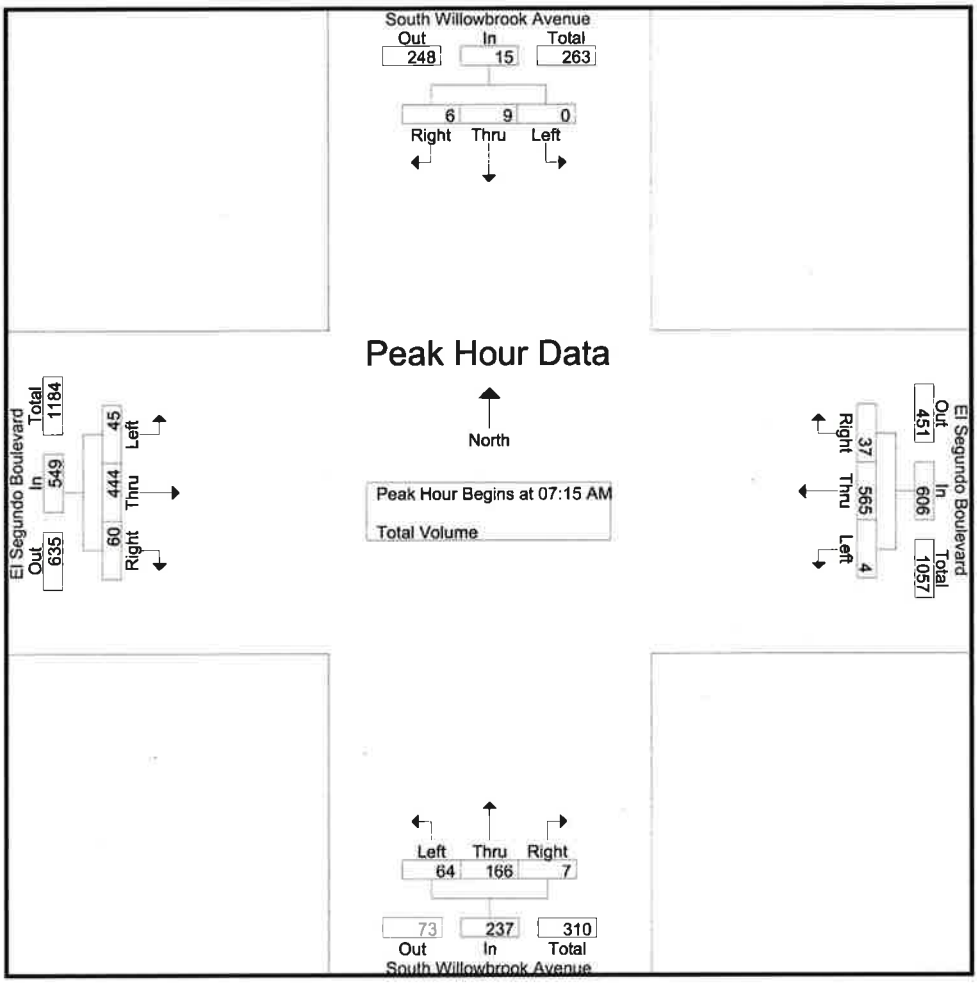
County of Los Angeles
N/S: South Willowbrook Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLASWELAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				07:00 AM				07:15 AM			
+0 mins.	0	2	**4**	6	0	152	2	154	**19**	28	**4**	51	5	103	5	113
+15 mins.	0	2	0	2	**2**	151	7	160	16	43	2	61	9	112	12	133
+30 mins.	0	1	2	3	1	**159**	8	**168**	18	**53**	3	**74**	**17**	**121**	19	**157**
+45 mins.	**8**	**8**	4	**20**	1	132	**16**	149	17	49	1	67	14	108	**24**	146
Total Volume	8	13	10	31	4	594	33	631	70	173	10	253	45	444	60	549
% App. Total	25.8	41.9	32.3		0.6	94.1	5.2		27.7	68.4	4		8.2	80.9	10.9	
PHF	.250	.406	.625	.388	.500	.934	.516	.939	.921	.816	.625	.855	.662	.917	.625	.874

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County of Los Angeles
N/S: South Willowbrook Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLASWELPM
Site Code : 12815514
Start Date : 9/23/2015
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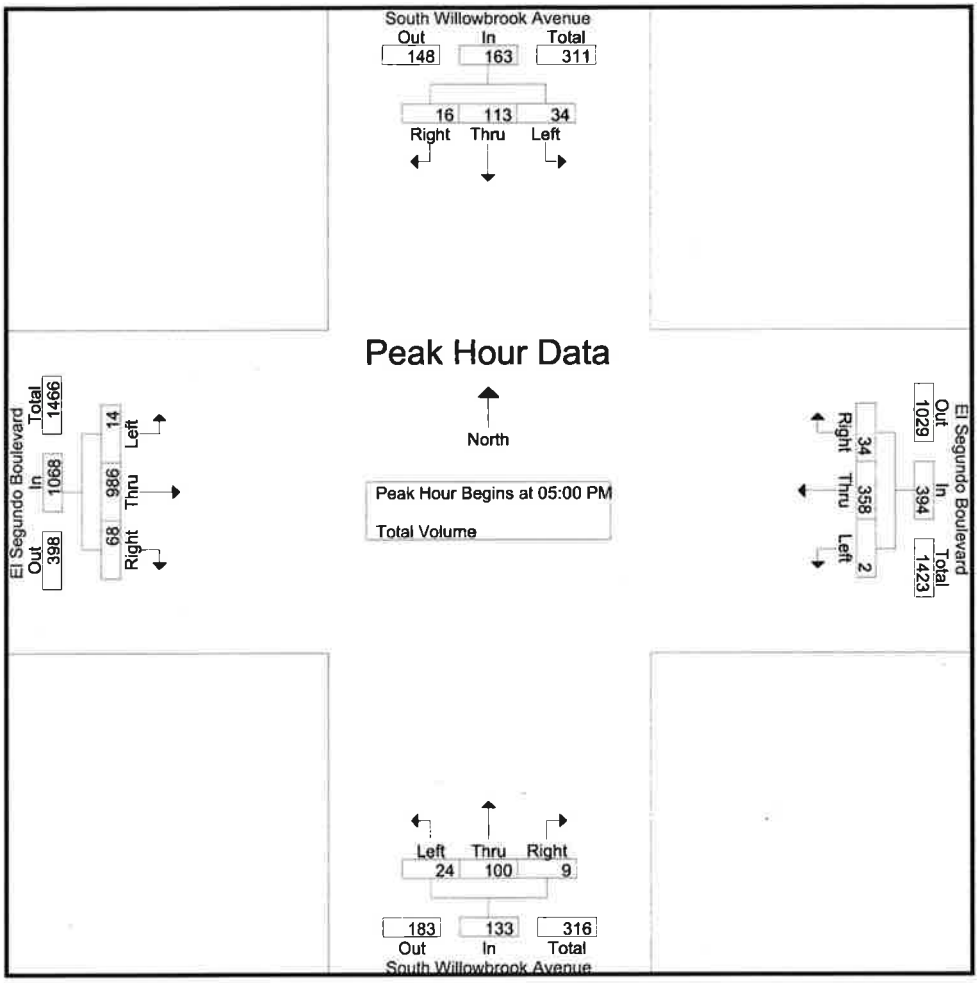

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:15 PM				05:00 PM			
+0 mins.	7	28	2	37	0	96	3	99	**9**	26	**5**	40	**5**	243	**24**	272
+15 mins.	7	23	4	34	**1**	88	6	95	9	**28**	4	**41**	4	**254**	12	270
+30 mins.	**10**	27	4	41	0	**99**	**9**	**108**	7	17	3	27	1	239	11	251
+45 mins.	10	**35**	**6**	**51**	1	88	9	98	5	26	3	34	4	250	21	**275**
Total Volume	34	113	16	163	2	371	27	400	30	97	15	142	14	986	68	1068
% App. Total	20.9	69.3	9.8		0.5	92.8	6.8		21.1	68.3	10.6		1.3	92.3	6.4	
PHF	.850	.807	.667	.799	.500	.937	.750	.926	.833	.866	.750	.866	.700	.970	.708	.971

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County of Los Angeles
N/S: North Willowbrook Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLANWELAM
Site Code : 12815514
Start Date : 9/23/2015
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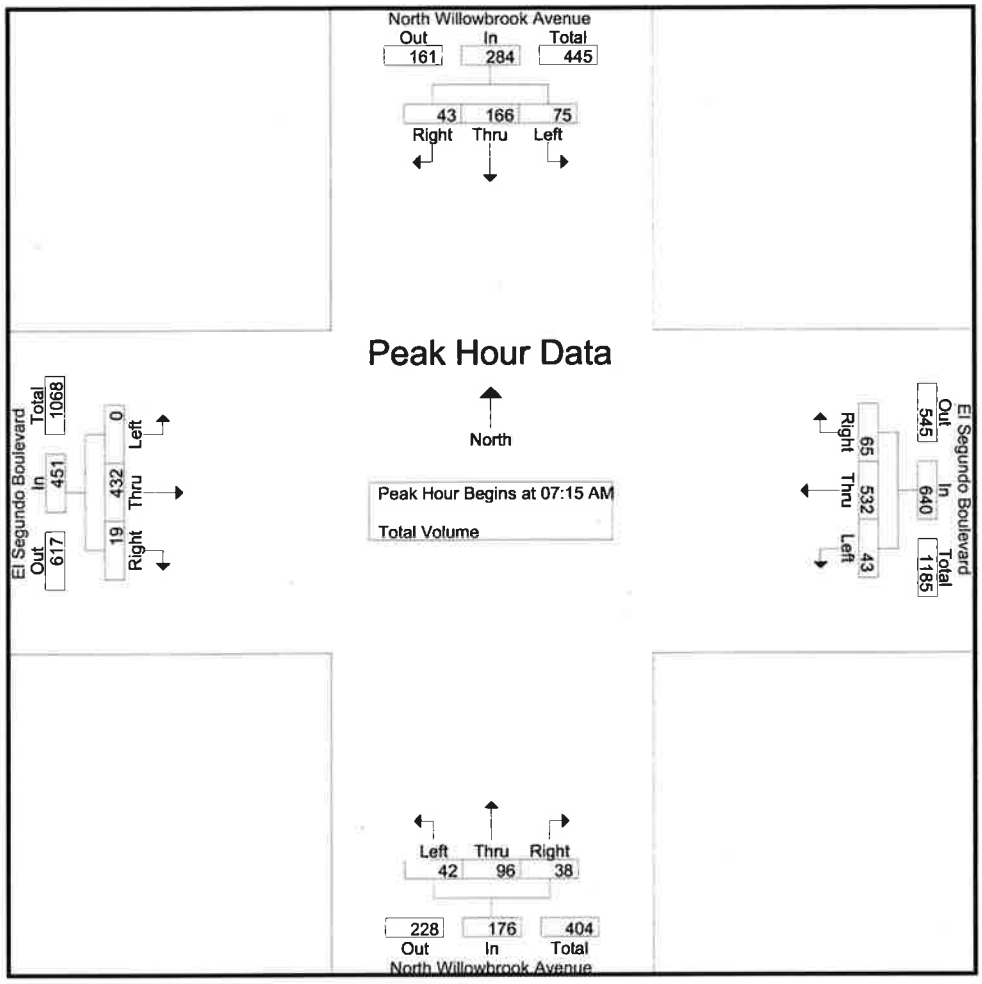

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	15	19	10	44	2	**145**	9	156	**12**	9	5	26	0	83	4	87
+15 mins.	20	38	**16**	74	4	141	12	157	11	**33**	8	**52**	0	116	4	120
+30 mins.	**21**	51	9	81	**19**	144	**23**	**186**	11	27	11	49	0	**130**	**6**	**136**
+45 mins.	19	**58**	8	**85**	17	131	19	167	8	27	**14**	49	0	103	5	108
Total Volume	75	166	43	284	42	561	63	666	42	96	38	176	0	432	19	451
% App. Total	26.4	58.5	15.1		6.3	84.2	9.5		23.9	54.5	21.6		0	95.8	4.2	
PHF	.893	.716	.672	.835	.553	.967	.685	.895	.875	.727	.679	.846	.000	.831	.792	.829

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County of Los Angeles
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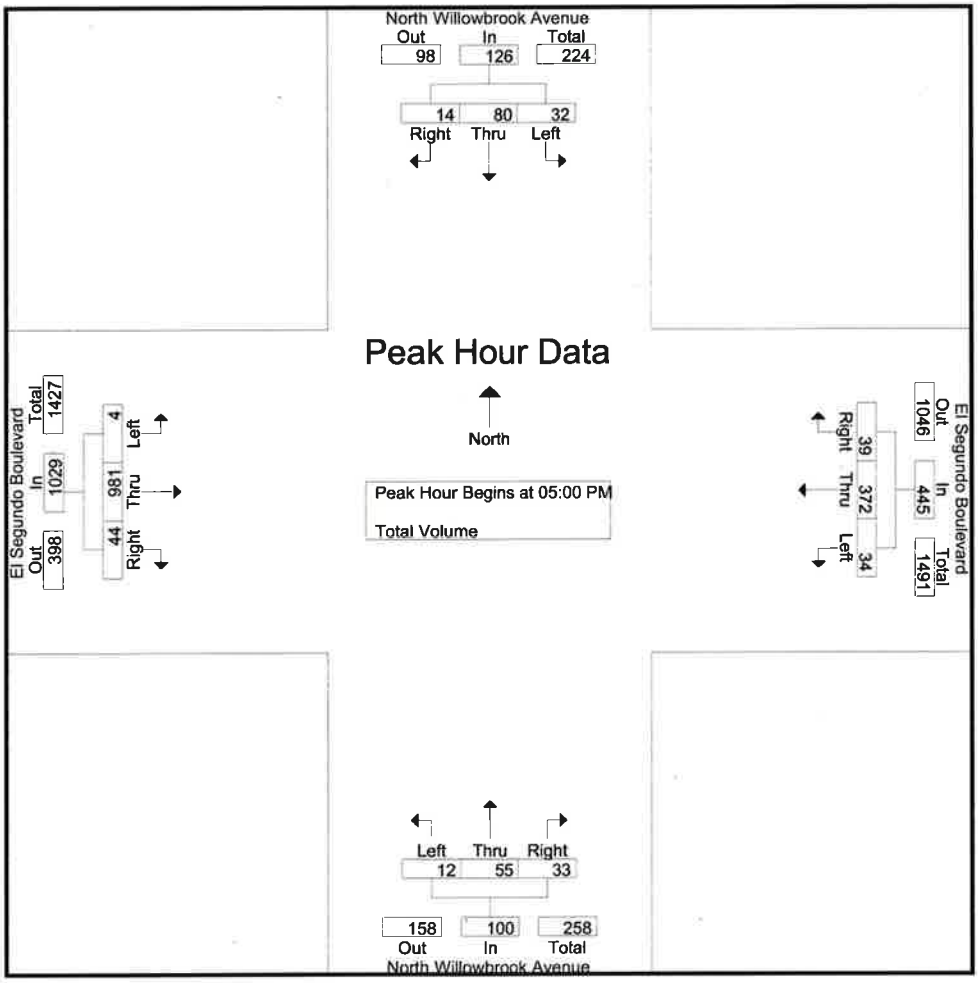
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLANWELPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:00 PM				05:00 PM			
+0 mins.	6	22	3	31	10	86	10	106	**6**	17	**12**	**35**	**2**	235	9	246
+15 mins.	**9**	13	3	25	**14**	91	**15**	120	4	11	4	19	1	**256**	6	263
+30 mins.	9	18	**4**	31	4	86	12	102	5	**18**	9	32	1	237	13	251
+45 mins.	8	**27**	4	**39**	8	**104**	13	**125**	3	17	7	27	0	253	**16**	**269**
Total Volume	32	80	14	126	36	367	50	453	18	63	32	113	4	981	44	1029
% App. Total	25.4	63.5	11.1		7.9	81	11		15.9	55.8	28.3		0.4	95.3	4.3	
PHF	.889	.741	.875	.808	.643	.882	.833	.906	.750	.875	.667	.807	.500	.958	.688	.956

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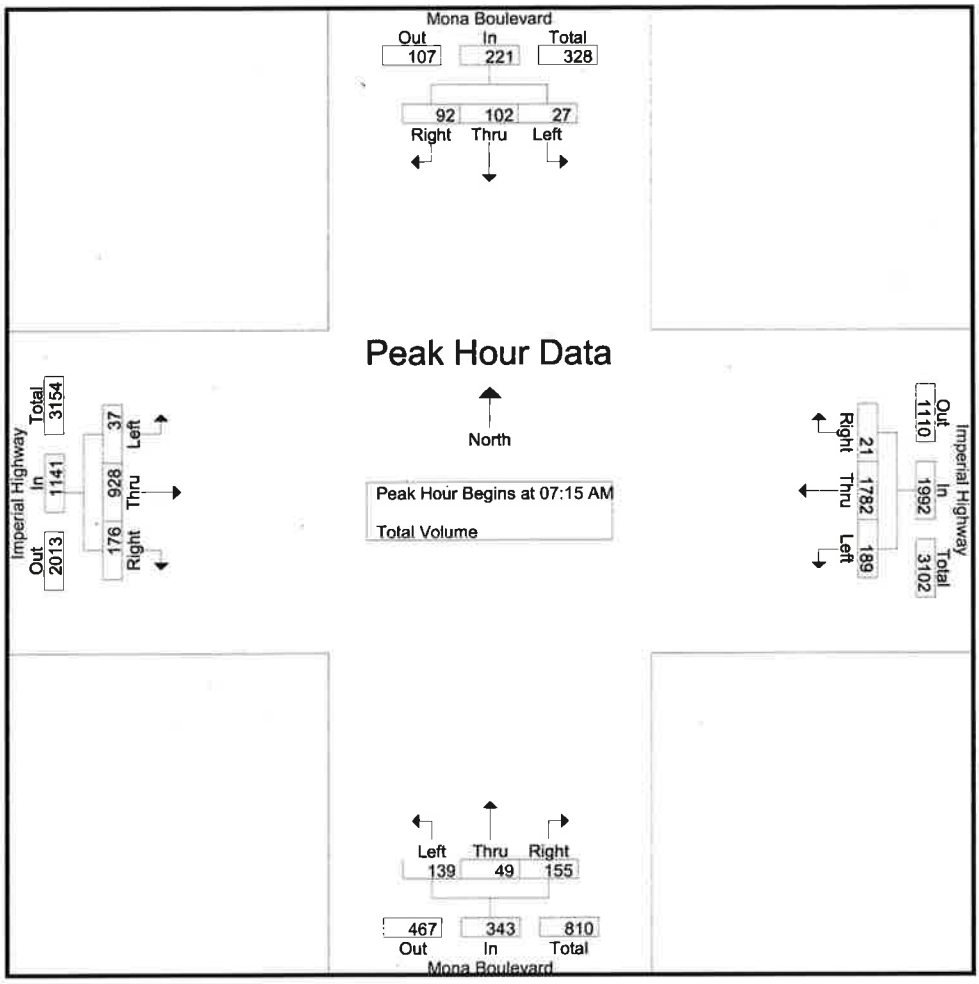
County of Los Angeles
N/S: Mona Boulevard
E/W: Imperial Highway
Weather: Clear

File Name : CLAMOIMAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:30 AM			
+0 mins.	6	22	**25**	53	28	446	**10**	484	**47**	9	41	**97**	11	238	41	290
+15 mins.	7	30	24	**61**	37	**495**	3	**535**	31	9	38	78	11	**259**	**51**	**321**
+30 mins.	**8**	**32**	21	61	48	477	2	527	30	**18**	32	80	11	227	49	287
+45 mins.	6	18	22	46	**53**	430	9	492	31	13	**44**	88	**21**	210	51	282
Total Volume	27	102	92	221	166	1848	24	2038	139	49	155	343	54	934	192	1180
% App. Total	12.2	46.2	41.6		8.1	90.7	1.2		40.5	14.3	45.2		4.6	79.2	16.3	
PHF	.844	.797	.920	.906	.783	.933	.600	.952	.739	.681	.881	.884	.643	.902	.941	.919

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County of Los Angeles
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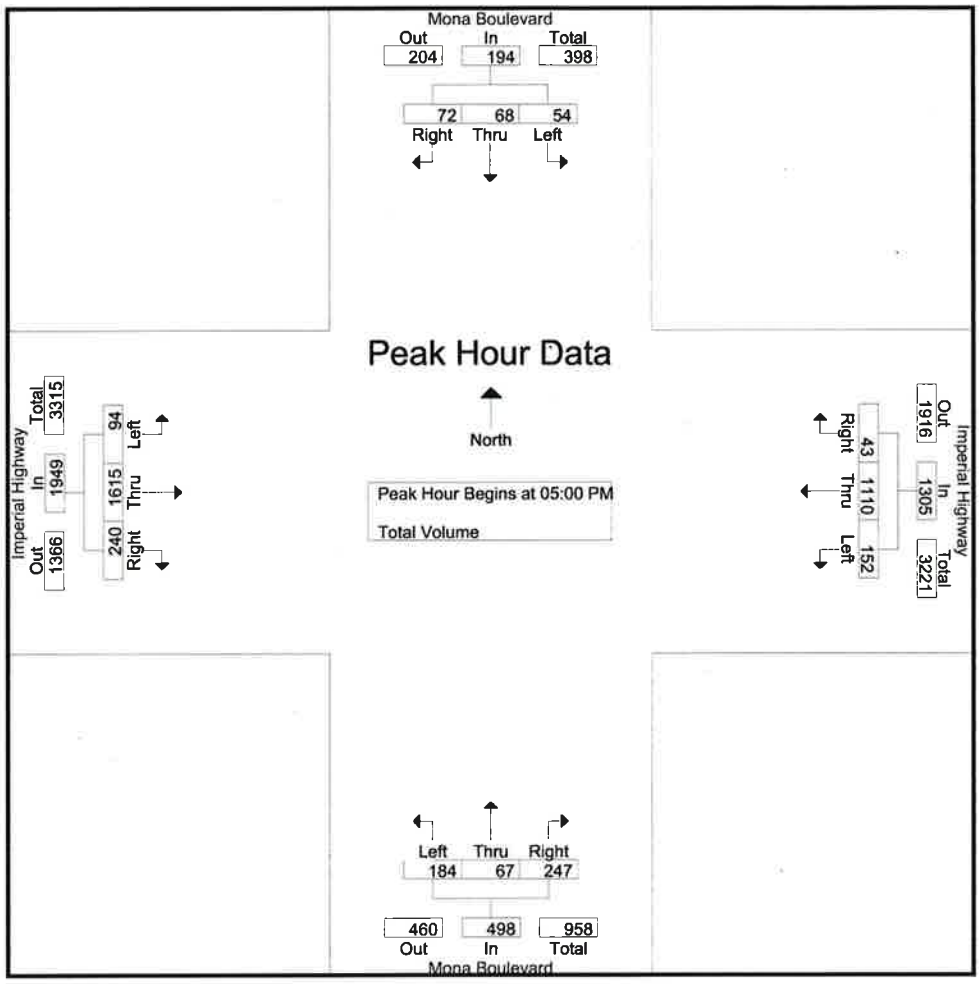
Weather: Clear

File Name : CLAMOIMPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				05:00 PM				05:00 PM			
+0 mins.	12	15	16	43	36	286	8	330	**50**	13	**63**	126	13	392	57	462
+15 mins.	10	14	17	41	**47**	**304**	**11**	**362**	44	17	61	122	25	403	68	496
+30 mins.	**18**	**21**	18	**57**	36	286	10	332	48	**19**	60	**127**	**30**	399	44	473
+45 mins.	14	18	**21**	53	28	263	9	300	42	18	63	123	26	**421**	**71**	**518**
Total Volume	54	68	72	194	147	1139	38	1324	184	67	247	498	94	1615	240	1949
% App. Total	27.8	35.1	37.1		11.1	86	2.9		36.9	13.5	49.6		4.8	82.9	12.3	
PHF	.750	.810	.857	.851	.782	.937	.864	.914	.920	.882	.980	.980	.783	.959	.845	.941

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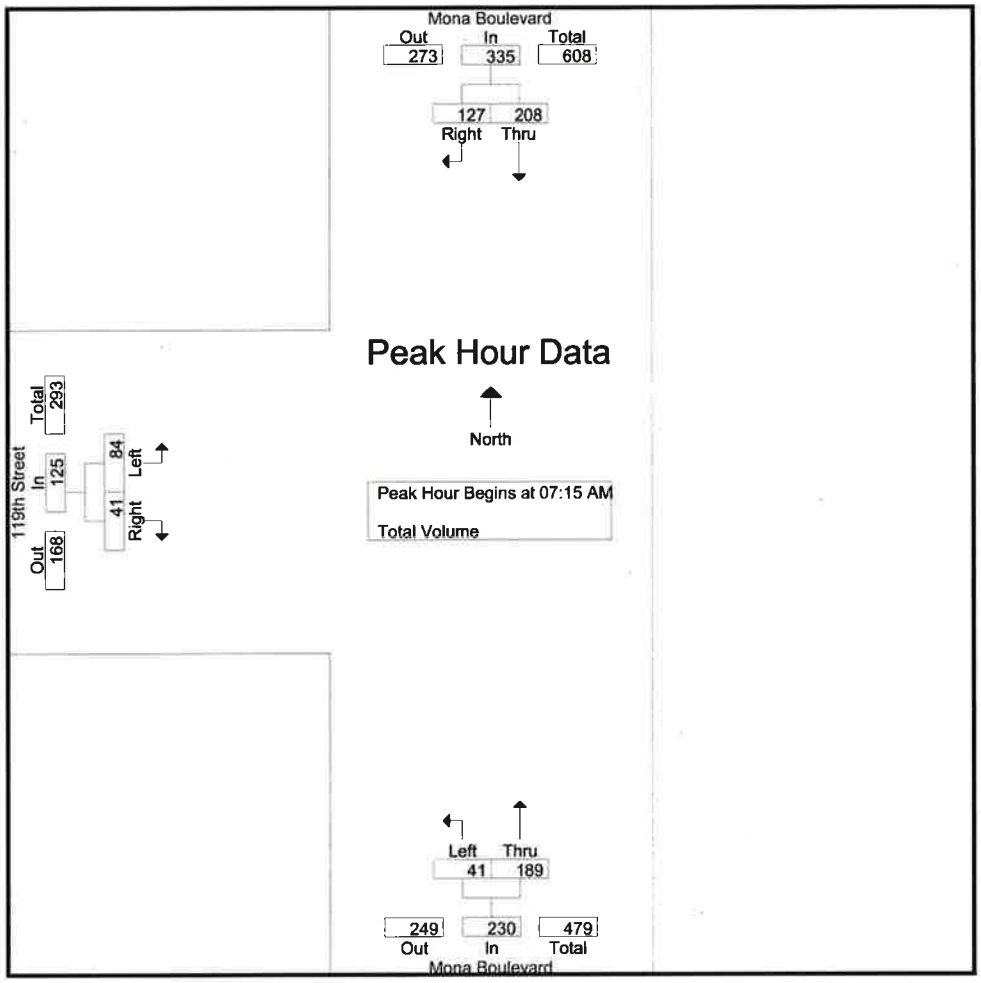
County of Los Angeles
N/S: Mona Boulevard
E/W: 119th Street
Weather: Clear

File Name : CLAMO119AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:30 AM		
+0 mins.	45	**35**	80	6	36	42	**24**	10	34
+15 mins.	59	35	94	9	**63**	**72**	23	**13**	**36**
+30 mins.	**61**	34	**95**	**15**	46	61	22	12	34
+45 mins.	43	23	66	11	44	55	24	9	33
Total Volume	208	127	335	41	189	230	93	44	137
% App. Total	62.1	37.9		17.8	82.2		67.9	32.1	
PHF	.852	.907	.882	.683	.750	.799	.969	.846	.951

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County of Los Angeles
N/S: Mona Boulevard
E/W: 119th Street
Weather: Clear

File Name : CLAMO119PM
Site Code : 12815514
Start Date : 9/23/2015
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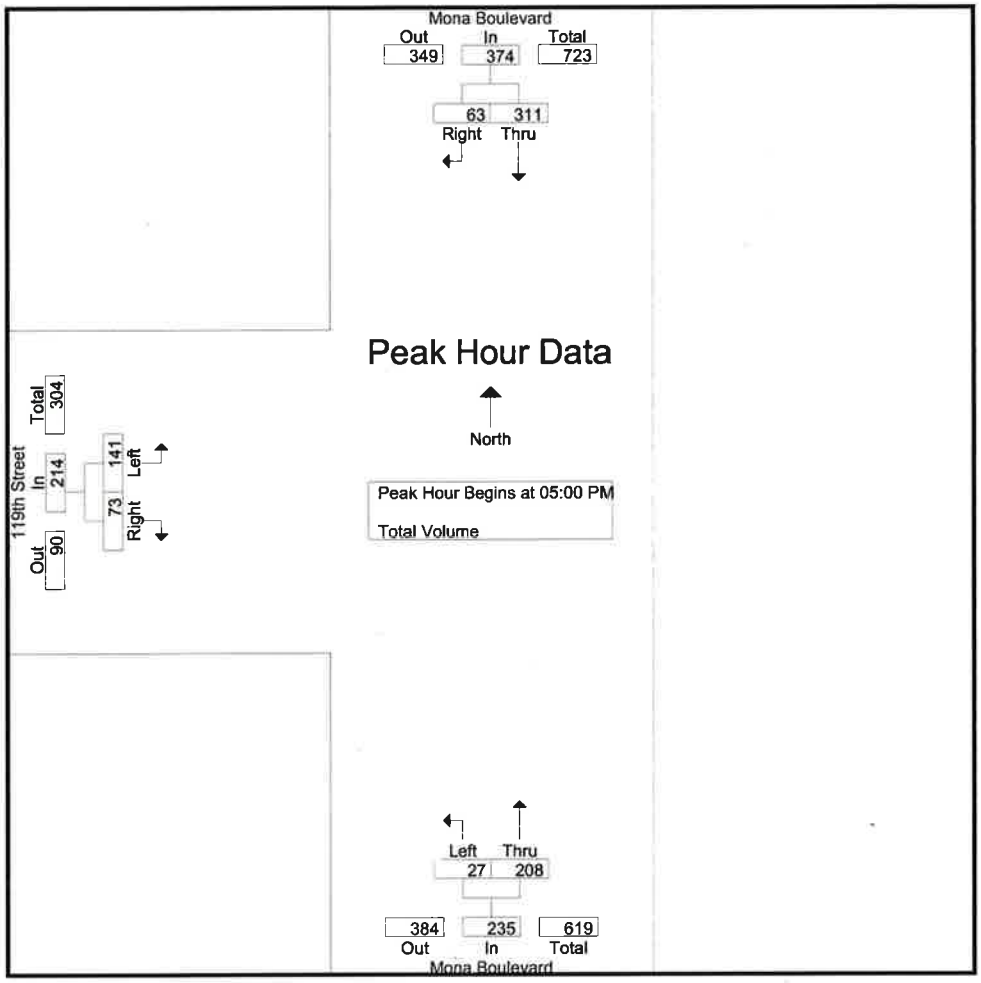

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	74	**23**	**97**	**9**	**55**	**64**	38	17	**55**
+15 mins.	**82**	13	95	6	51	57	31	22	53
+30 mins.	81	14	95	4	52	56	**40**	11	51
+45 mins.	74	13	87	8	50	58	32	**23**	55
Total Volume	311	63	374	27	208	235	141	73	214
% App. Total	83.2	16.8		11.5	88.5		65.9	34.1	
PHF	.948	.685	.964	.750	.945	.918	.881	.793	.973

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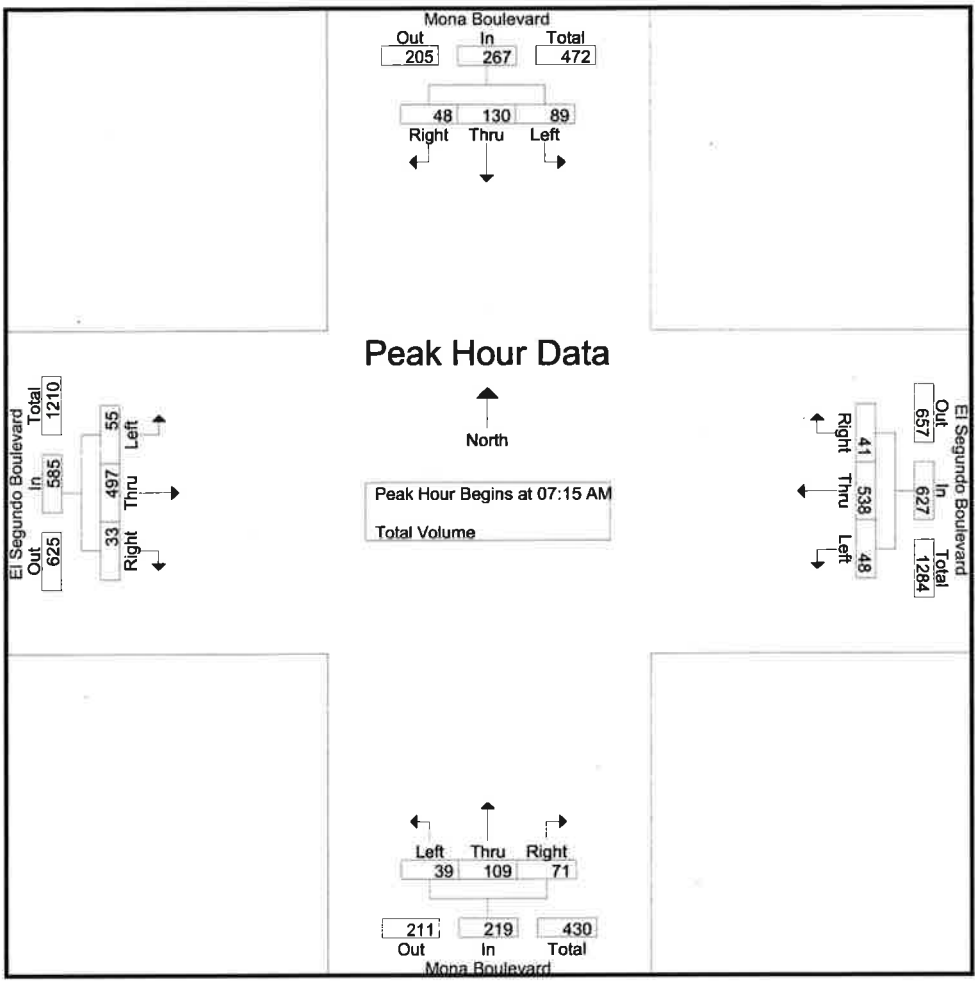
County of Los Angeles
N/S: Mona Boulevard
E/W: El Segundo Boulevard
Weather: Clear

File Name : CLAMOELAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	16	17	11	44	7	136	10	153	**13**	16	**20**	49	10	107	8	125
+15 mins.	**29**	**39**	13	**81**	**18**	137	**15**	**170**	12	**42**	18	**72**	16	139	6	161
+30 mins.	24	38	**15**	77	15	**139**	9	163	6	33	14	53	**20**	**140**	9	**169**
+45 mins.	20	36	9	65	8	126	7	141	8	18	19	45	9	111	**10**	130
Total Volume	89	130	48	267	48	538	41	627	39	109	71	219	55	497	33	585
% App. Total	33.3	48.7	18		7.7	85.8	6.5		17.8	49.8	32.4		9.4	85	5.6	
PHF	.767	.833	.800	.824	.667	.968	.683	.922	.750	.649	.888	.760	.688	.888	.825	.865

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County of Los Angeles
N/S: Mona Boulevard
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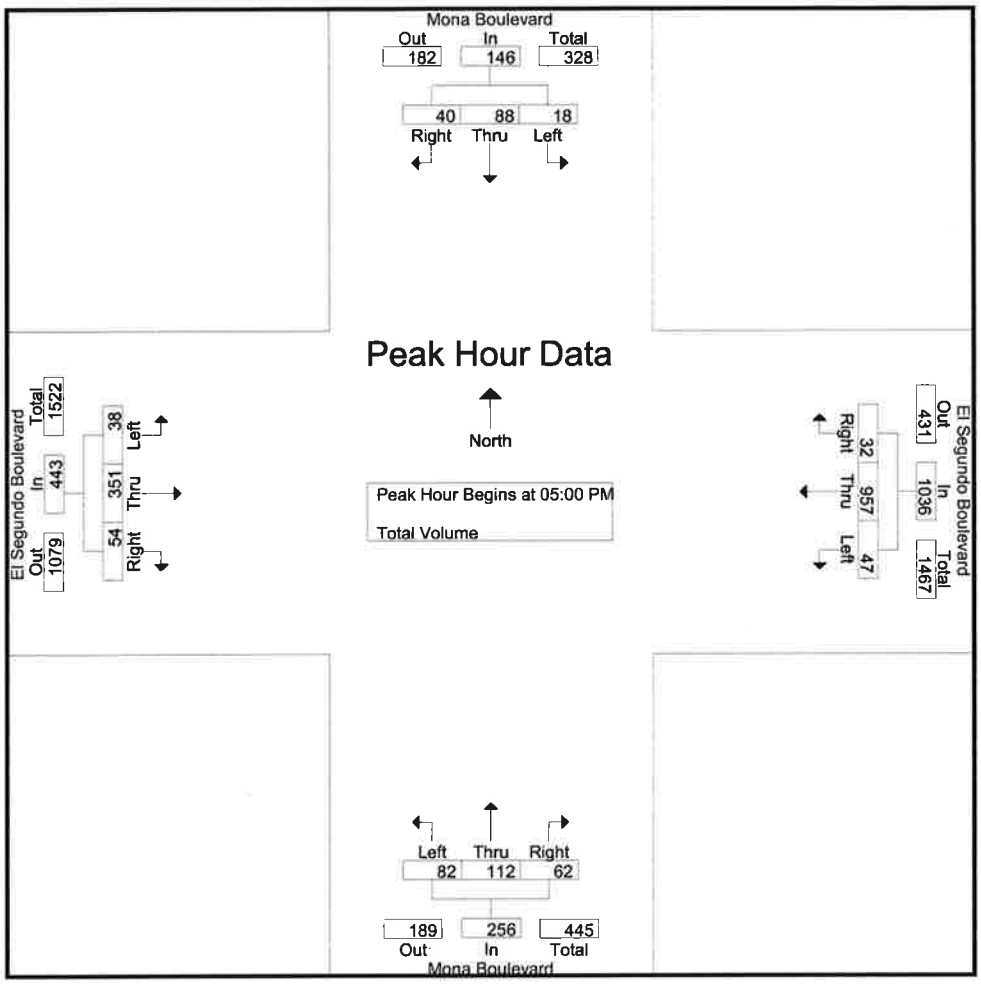
Weather: Clear

File Name : CLAMOELPM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				05:00 PM				04:30 PM			
+0 mins.	**5**	17	13	35	9	227	8	244	20	28	16	64	7	**100**	13	**120**
+15 mins.	4	24	10	38	**19**	**255**	7	**281**	20	**32**	14	66	5	94	12	111
+30 mins.	5	18	4	27	10	225	5	240	18	22	**19**	59	**9**	92	13	114
+45 mins.	5	**26**	**15**	**46**	9	250	**12**	271	**24**	30	13	**67**	9	89	**17**	115
Total Volume	19	85	42	146	47	957	32	1036	82	112	62	256	30	375	55	460
% App. Total	13	58.2	28.8		4.5	92.4	3.1		32	43.8	24.2		6.5	81.5	12	
PHF	.950	.817	.700	.793	.618	.938	.667	.922	.854	.875	.816	.955	.833	.938	.809	.958

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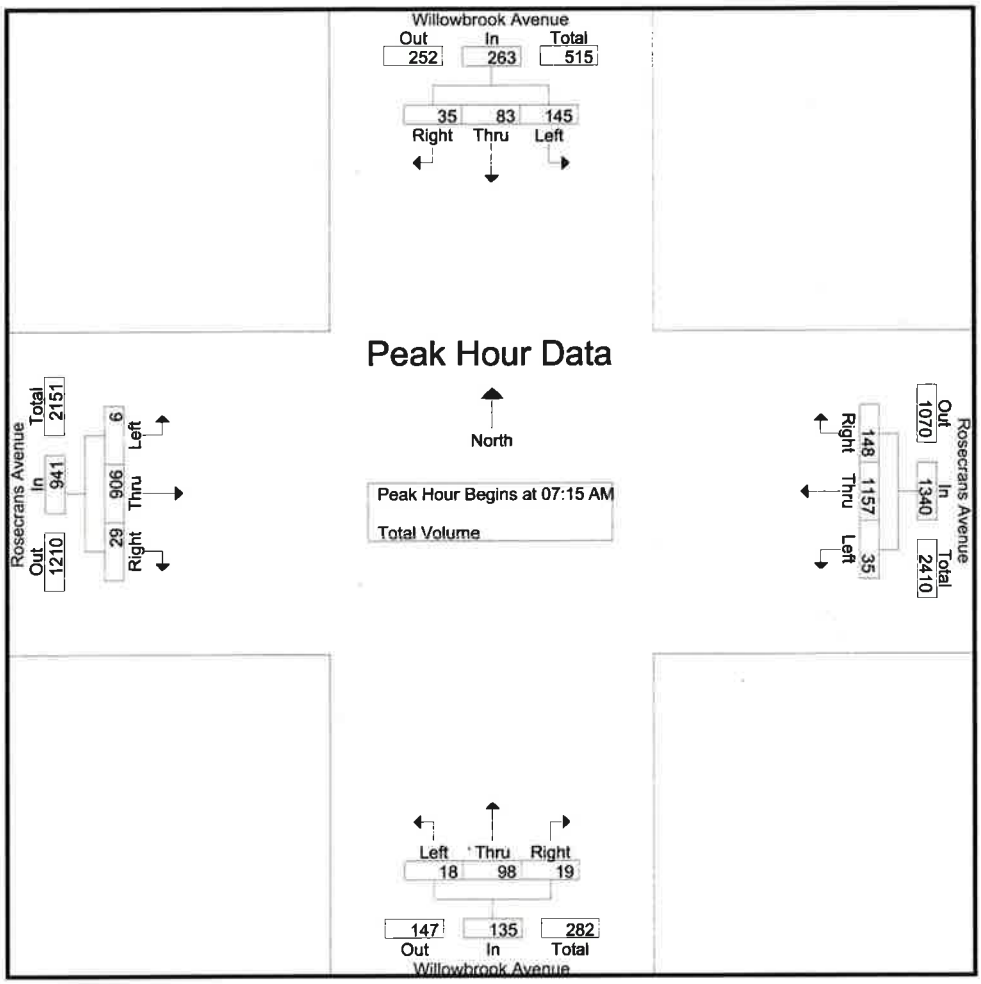
County of Los Angeles
N/S: Willowbrook Avenue
E/W: Rosecrans Avenue
Weather: Clear

File Name : CLASWROAM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	33	15	6	54	5	277	38	320	2	22	2	26	1	195	5	201
+15 mins.	41	**26**	**10**	**77**	10	**307**	**46**	**363**	**6**	**29**	3	**38**	1	235	4	240
+30 mins.	**43**	21	9	73	8	299	39	346	4	24	**7**	35	**3**	**246**	9	**258**
+45 mins.	28	21	10	59	**12**	274	25	311	6	23	7	36	1	230	**11**	242
Total Volume	145	83	35	263	35	1157	148	1340	18	98	19	135	6	906	29	941
% App. Total	55.1	31.6	13.3		2.6	86.3	11		13.3	72.6	14.1		0.6	96.3	3.1	
PHF	.843	.798	.875	.854	.729	.942	.804	.923	.750	.845	.679	.888	.500	.921	.659	.912

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County of Los Angeles
N/S: Willowbrook Avenue
E/W: Rosecrans Avenue
Weather: Clear

File Name : CLASWROPM
Site Code : 12815514
Start Date : 9/23/2015
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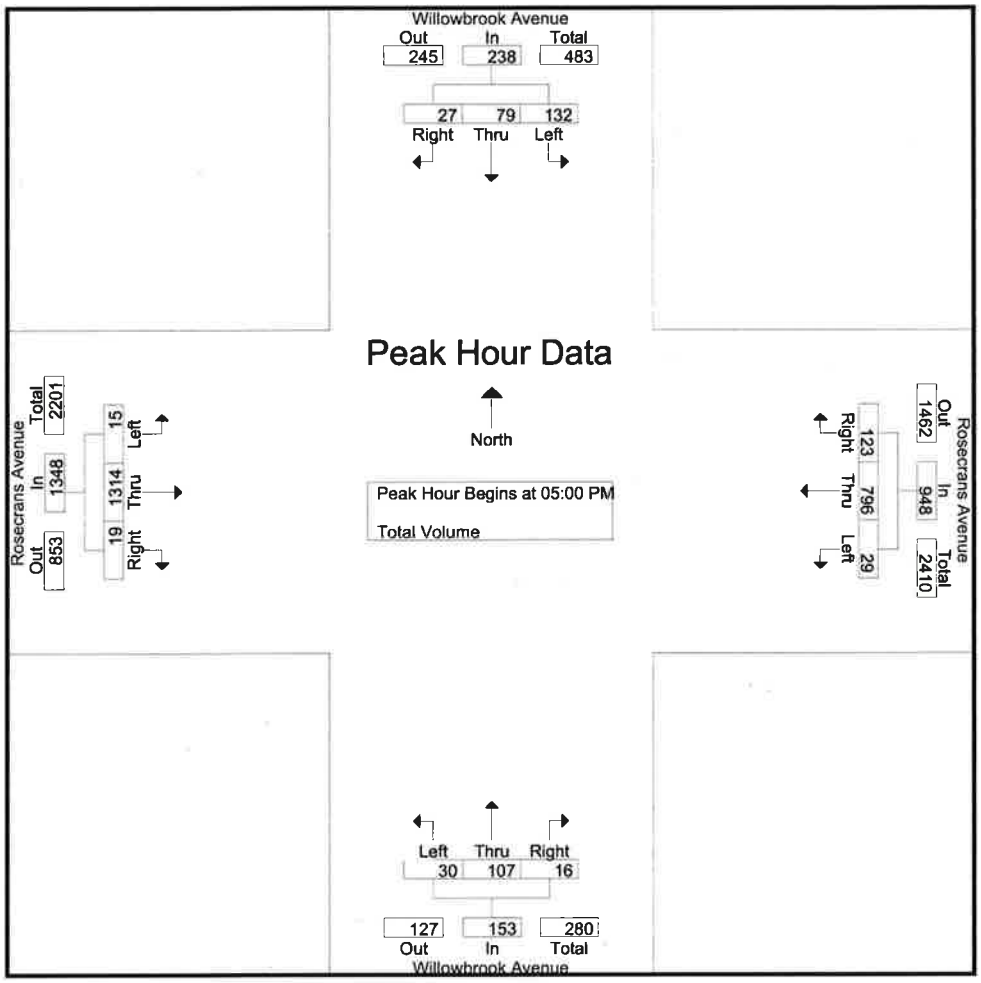

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:30 PM				04:45 PM			
+0 mins.	28	22	6	56	**11**	192	31	234	4	**32**	7	43	5	**347**	**6**	**358**
+15 mins.	35	15	**9**	59	9	181	**34**	224	**12**	24	2	38	3	328	4	335
+30 mins.	30	**18**	6	54	4	**223**	30	**257**	5	27	4	36	4	317	2	323
+45 mins.	**39**	**24**	6	**69**	5	200	28	233	8	29	**8**	**45**	**6**	334	6	346
Total Volume	132	79	27	238	29	796	123	948	29	112	21	162	18	1326	18	1362
% App. Total	55.5	33.2	11.3		3.1	84	13		17.9	69.1	13		1.3	97.4	1.3	
PHF	.846	.823	.750	.862	.659	.892	.904	.922	.604	.875	.656	.900	.750	.955	.750	.951

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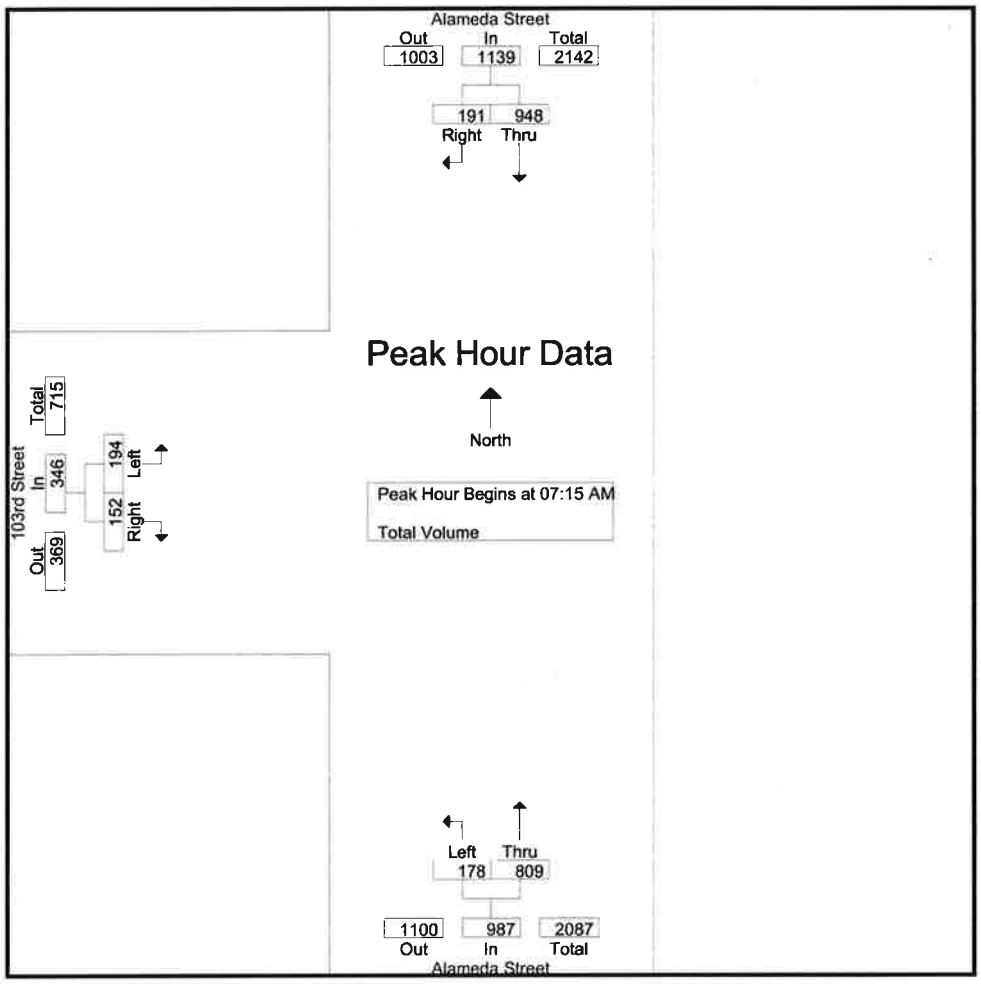
County of Los Angeles
N/S: Alameda Street
E/W: 103rd Street
Weather: Clear

File Name : LWDAL103AM
Site Code : 12815514
Start Date : 9/23/2015
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			08:00 AM		
+0 mins.	227	43	270	**50**	195	245	**58**	43	**101**
+15 mins.	207	44	251	44	194	238	39	26	65
+30 mins.	**263**	**64**	**327**	42	**223**	**265**	49	40	89
+45 mins.	251	40	291	42	197	239	44	**49**	93
Total Volume	948	191	1139	178	809	987	190	158	348
% App. Total	83.2	16.8		18	82		54.6	45.4	
PHF	.901	.746	.871	.890	.907	.931	.819	.806	.861

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County of Los Angeles
N/S: Alameda Street
E/W: 103rd Street
Weather: Clear

File Name : LWDAL103PM
Site Code : 12815514
Start Date : 9/23/2015
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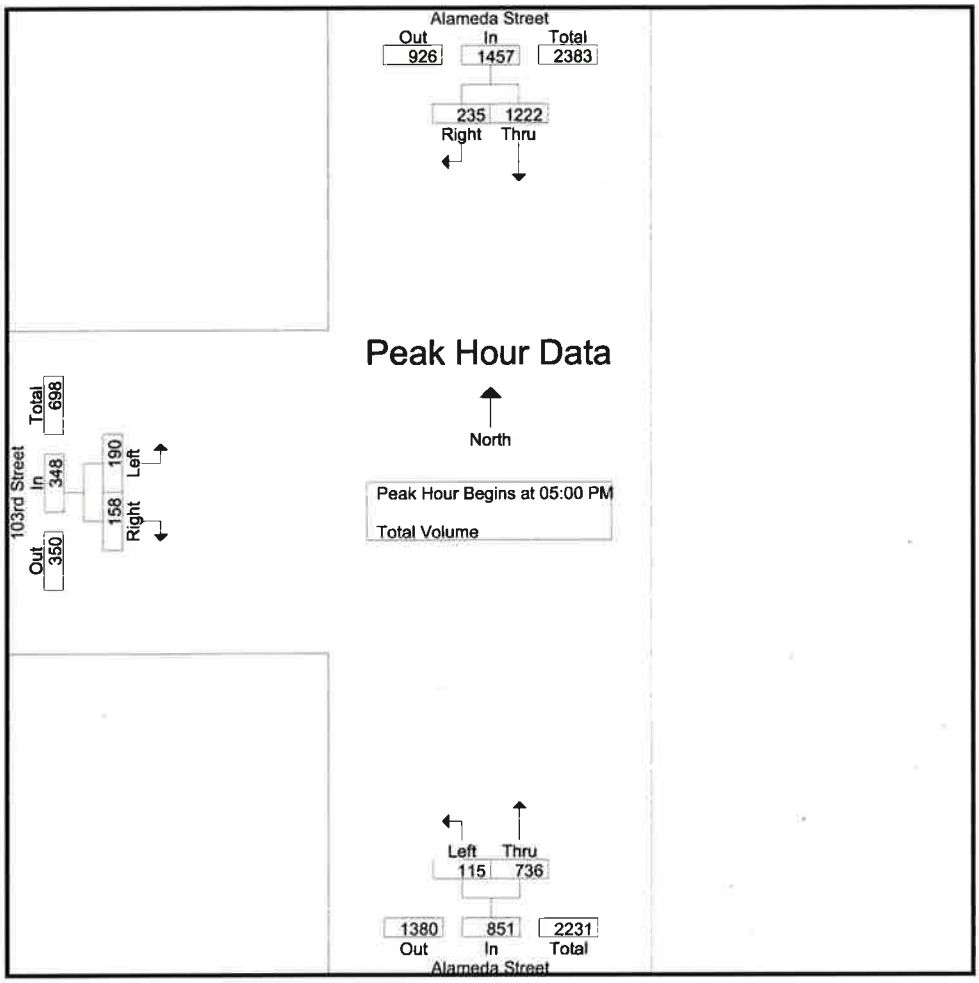

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			05:00 PM		
+0 mins.	300	55	355	30	191	221	**58**	43	**101**
+15 mins.	**328**	**74**	**402**	28	174	202	39	26	65
+30 mins.	282	55	337	**32**	**194**	**226**	49	40	89
+45 mins.	312	51	363	29	176	205	44	**49**	93
Total Volume	1222	235	1457	119	735	854	190	158	348
% App. Total	83.9	16.1		13.9	86.1		54.6	45.4	
PHF	.931	.794	.906	.930	.947	.945	.819	.806	.861

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County of Los Angeles
N/S: Alameda Street
E/W: Martin Luther King Jr. Boulevard
Weather: Clear

File Name : LWDALMLAM
Site Code : 12815514
Start Date : 9/23/2015
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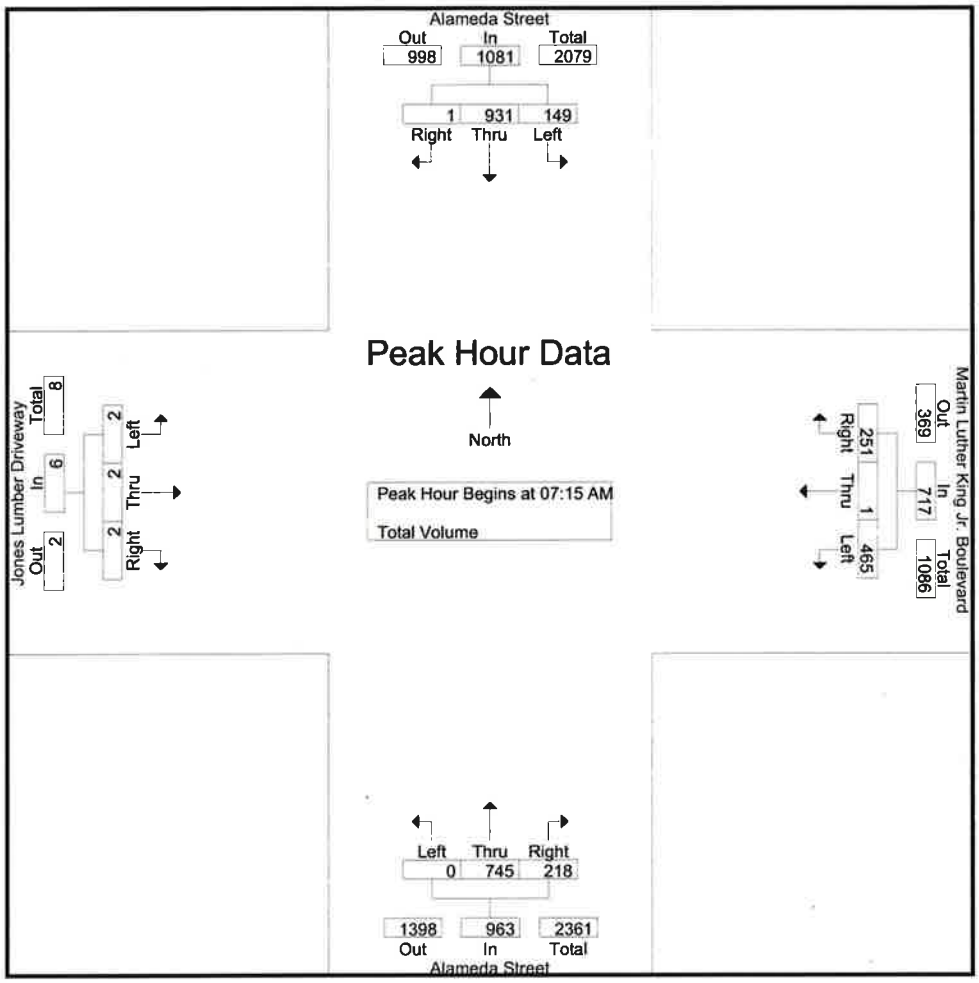

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:00 AM			
+0 mins.	34	228	1	263	108	0	57	165	0	177	55	232	**3**	**1**	0	**4**
+15 mins.	37	215	0	252	**153**	0	**67**	**220**	0	194	**79**	**273**	0	1	0	1
+30 mins.	**42**	243	0	**285**	122	0	63	185	0	171	37	208	1	0	**1**	2
+45 mins.	36	**245**	0	281	82	**1**	64	147	0	**203**	47	250	0	1	1	2
Total Volume	149	931	1	1081	465	1	251	717	0	745	218	963	4	3	2	9
% App. Total	13.8	86.1	0.1		64.9	0.1	35		0	77.4	22.6		44.4	33.3	22.2	
PHF	.887	.950	.250	.948	.760	.250	.937	.815	.000	.917	.690	.882	.333	.750	.500	.563

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County of Los Angeles
N/S: Alameda Street
E/W: Martin Luther King Jr. Boulevard
Weather: Clear

File Name : LWDALMLPM
Site Code : 12815514
Start Date : 9/23/2015
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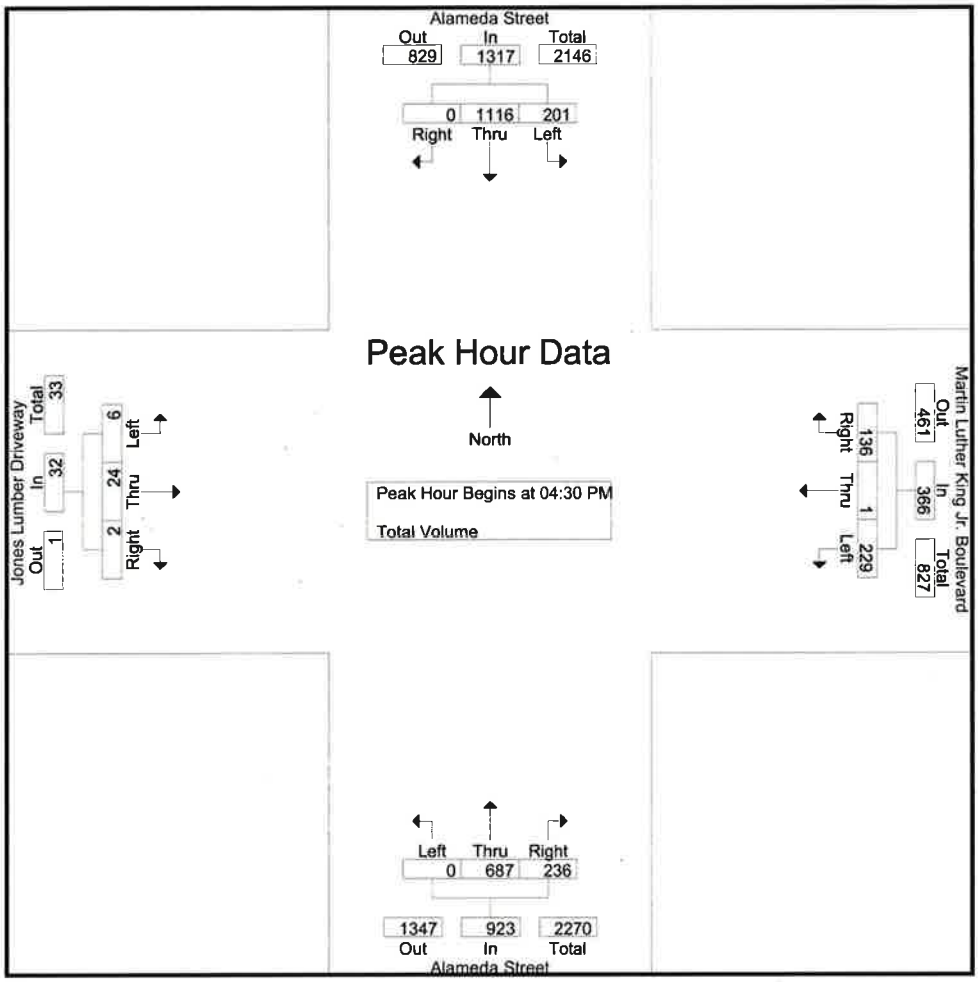

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	**54**	273	0	327	48	**1**	**40**	89	0	**192**	**68**	**260**	**3**	2	**1**	6
+15 mins.	54	280	0	**334**	55	0	32	87	0	177	59	236	1	5	1	7
+30 mins.	54	274	0	328	**68**	0	29	**97**	0	150	49	199	1	**11**	0	**12**
+45 mins.	39	**289**	0	328	58	0	35	93	0	168	60	228	1	6	0	7
Total Volume	201	1116	0	1317	229	1	136	366	0	687	236	923	6	24	2	32
% App. Total	15.3	84.7	0		62.6	0.3	37.2		0	74.4	25.6		18.8	75	6.2	
PHF	.931	.965	.000	.986	.842	.250	.850	.943	.000	.895	.868	.888	.500	.545	.500	.667

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County of Los Angeles
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Weather: Clear

File Name : CPTALIMAM
Site Code : 12815514
Start Date : 9/23/2015
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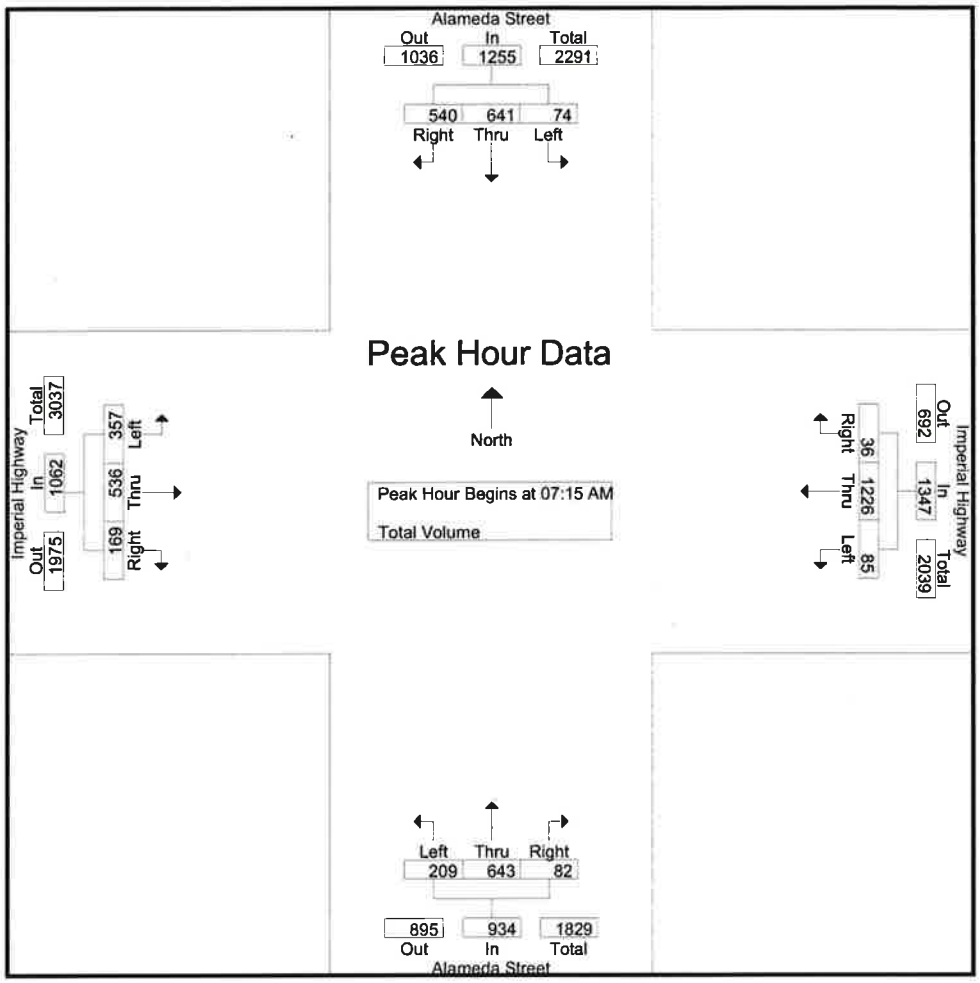

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:30 AM			
+0 mins.	11	149	**149**	309	14	307	7	328	42	**208**	16	**266**	83	**166**	40	**289**
+15 mins.	21	172	139	332	15	318	7	340	52	136	20	208	**97**	120	**48**	265
+30 mins.	18	**180**	141	**339**	25	**349**	9	**383**	**61**	157	**23**	241	72	145	45	262
+45 mins.	**24**	140	111	275	**28**	269	**11**	308	54	142	23	219	77	155	31	263
Total Volume	74	641	540	1255	82	1243	34	1359	209	643	82	934	329	586	164	1079
% App. Total	5.9	51.1	43		6	91.5	2.5		22.4	68.8	8.8		30.5	54.3	15.2	
PHF	.771	.890	.906	.926	.732	.890	.773	.887	.857	.773	.891	.878	.848	.883	.854	.933

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File Name : CPTALIMPM
Site Code : 12815514
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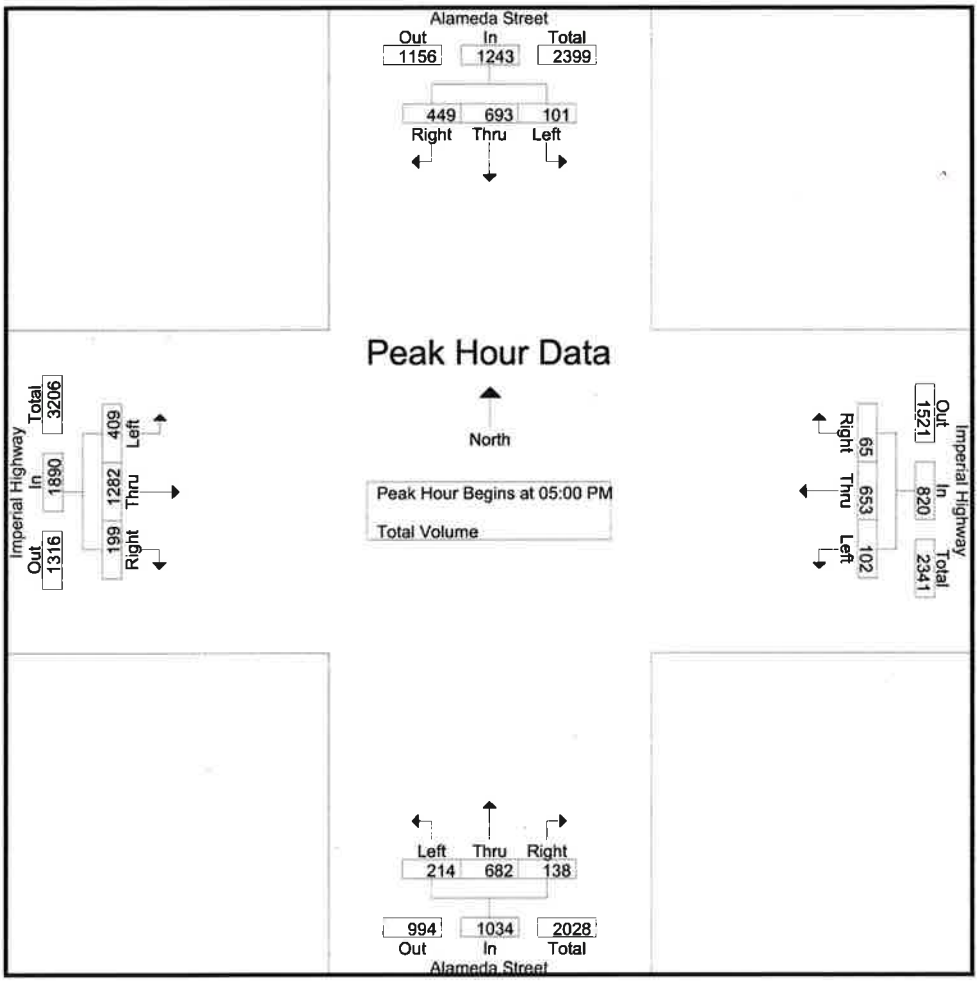

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:45 PM				05:00 PM				05:00 PM			
+0 mins.	31	131	86	248	**29**	162	14	205	48	149	35	232	95	**346**	47	488
+15 mins.	29	193	110	332	28	**203**	**22**	**253**	**59**	**207**	29	**295**	96	295	48	439
+30 mins.	**38**	152	117	307	24	155	17	196	56	144	27	227	102	342	**55**	**499**
+45 mins.	28	**214**	**128**	**370**	25	169	15	209	51	182	**47**	280	**116**	299	49	464
Total Volume	126	690	441	1257	106	689	68	863	214	682	138	1034	409	1282	199	1890
% App. Total	10	54.9	35.1		12.3	79.8	7.9		20.7	66	13.3		21.6	67.8	10.5	
PHF	.829	.806	.861	.849	.914	.849	.773	.853	.907	.824	.734	.876	.881	.926	.905	.947

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Weather: Clear

File Name : CPTALELAM
Site Code : 12815514
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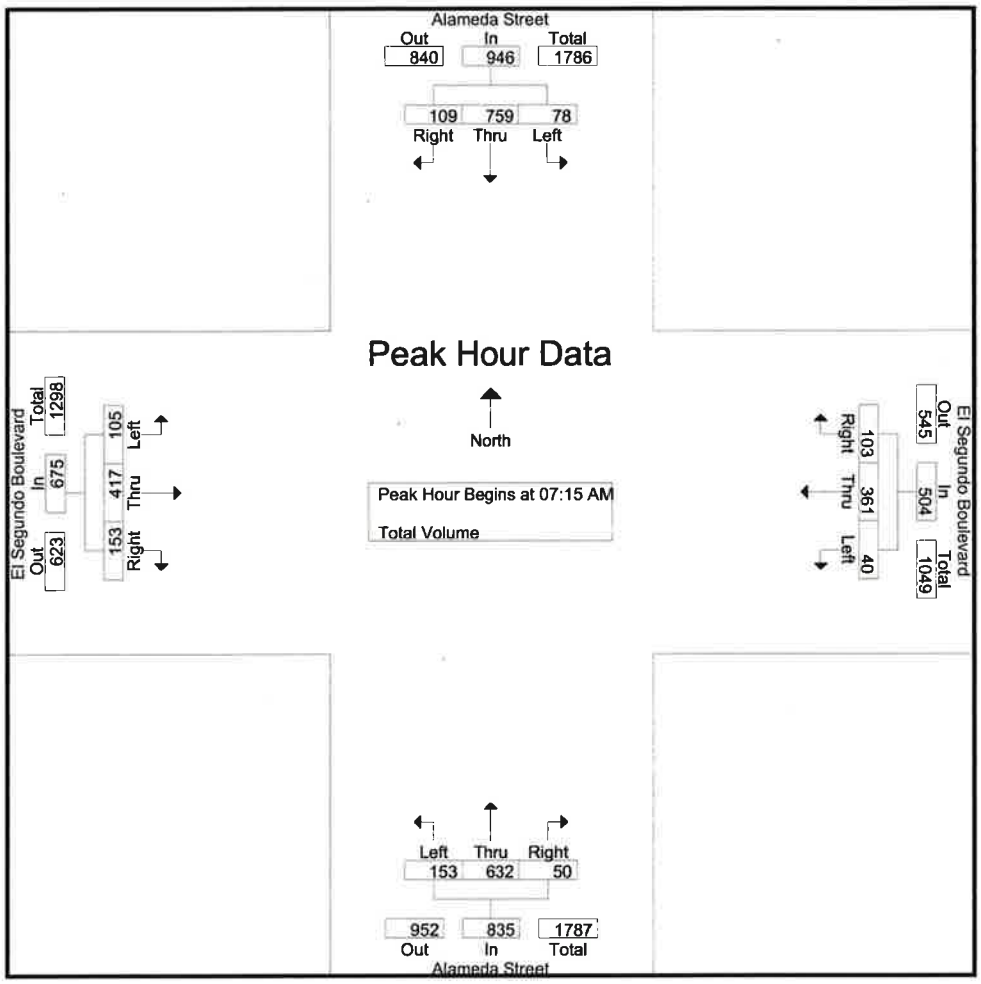

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	13	149	28	190	7	**95**	25	127	35	163	3	201	**33**	71	**43**	147
+15 mins.	**23**	**235**	**38**	**296**	10	95	22	127	**40**	149	8	197	32	**121**	40	**193**
+30 mins.	22	202	22	246	5	95	**34**	**134**	34	**190**	**14**	**238**	18	119	39	176
+45 mins.	20	173	21	214	**18**	76	22	116	37	151	13	201	22	106	31	159
Total Volume	78	759	109	946	40	361	103	504	146	653	38	837	105	417	153	675
% App. Total	8.2	80.2	11.5		7.9	71.6	20.4		17.4	78	4.5		15.6	61.8	22.7	
PHF	.848	.807	.717	.799	.556	.950	.757	.940	.913	.859	.679	.879	.795	.862	.890	.874

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File Name : CPTALELPM
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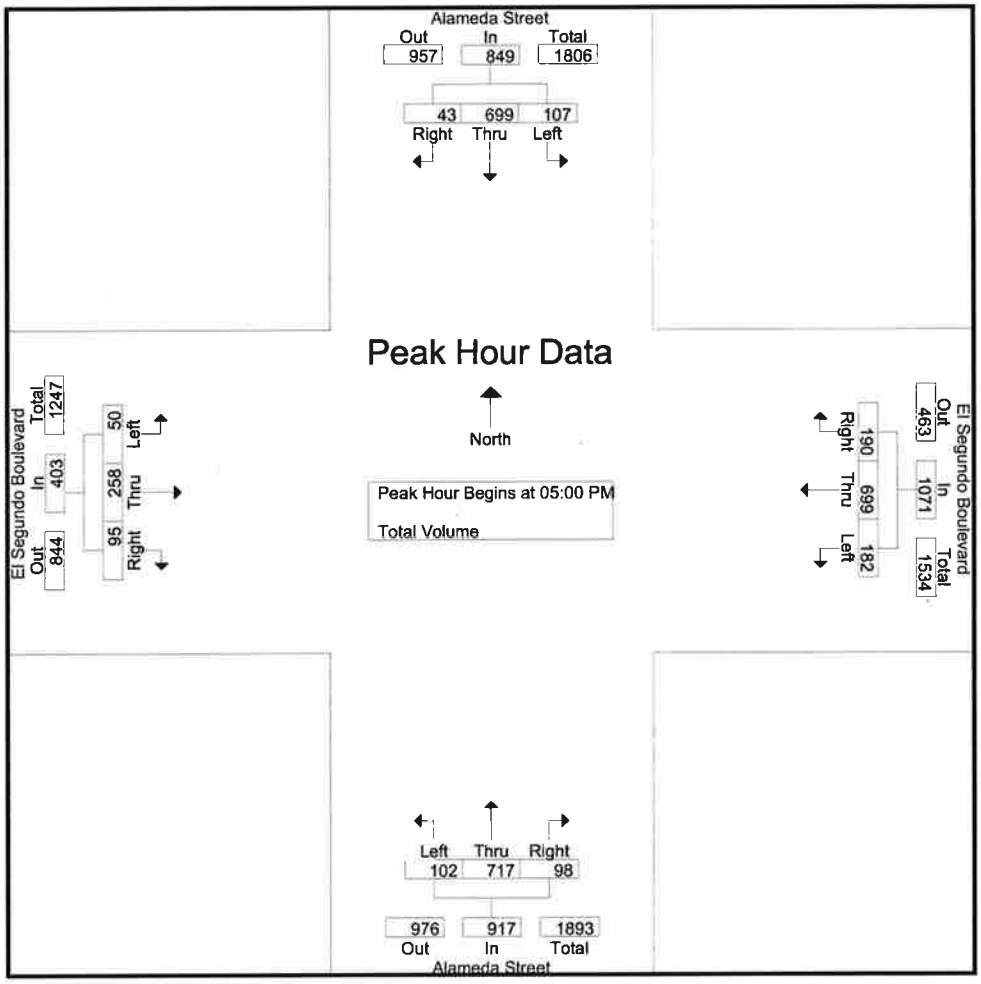

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	28	156	12	196	37	172	34	243	22	**191**	24	**237**	8	64	27	99
+15 mins.	**30**	172	**14**	216	**55**	**194**	48	**297**	**30**	172	25	227	**19**	70	21	110
+30 mins.	25	179	8	212	43	151	46	240	25	180	**32**	237	10	50	18	78
+45 mins.	26	**198**	13	**237**	47	182	**62**	291	25	174	17	216	13	**74**	**29**	**116**
Total Volume	109	705	47	861	182	699	190	1071	102	717	98	917	50	258	95	403
% App. Total	12.7	81.9	5.5		17	65.3	17.7		11.1	78.2	10.7		12.4	64	23.6	
PHF	.908	.890	.839	.908	.827	.901	.766	.902	.850	.938	.766	.967	.658	.872	.819	.869

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City of Los Angeles
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E/W: 102nd Street/103rd Street
Weather: Clear

File Name : LACAV102nAM
Site Code : 12816682
Start Date : 12/7/2016
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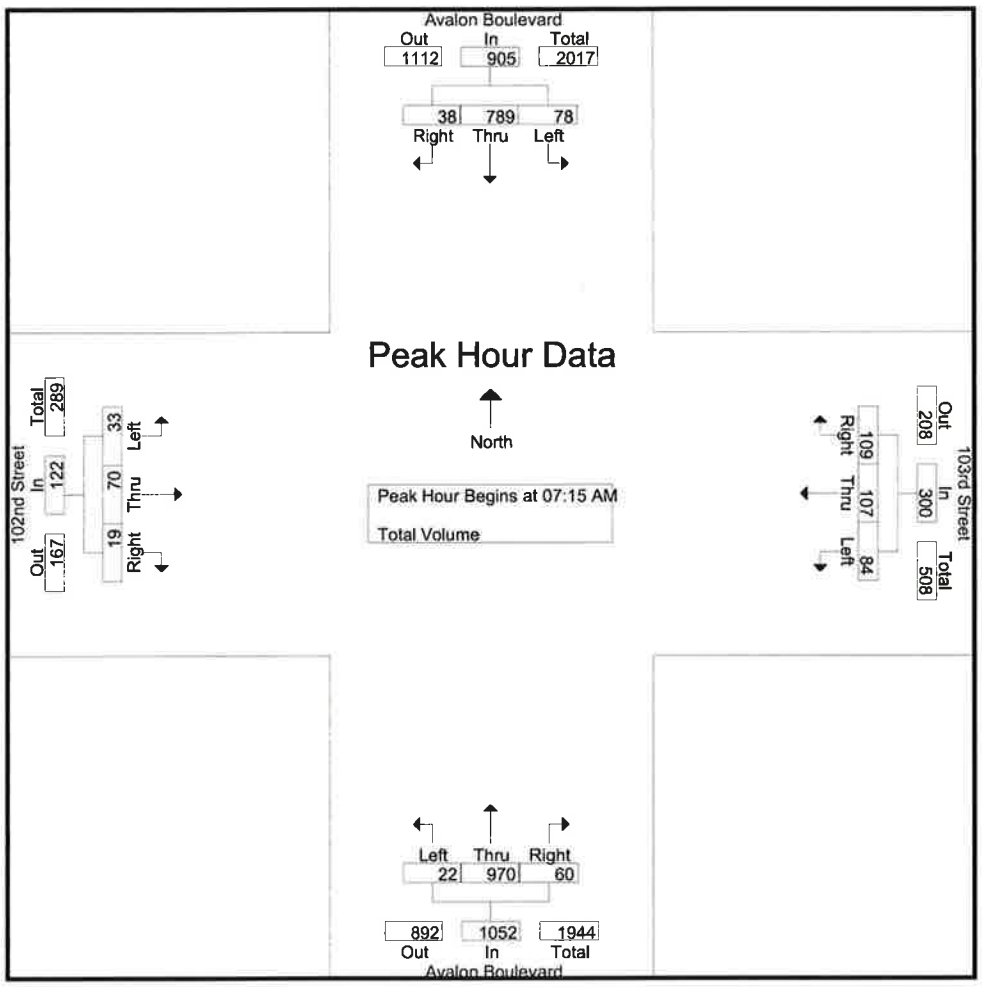

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:30 AM			
+0 mins.	14	173	3	190	23	24	29	76	2	231	6	239	7	**23**	5	35
+15 mins.	17	208	9	234	14	29	**31**	74	**7**	**264**	13	**284**	6	20	3	29
+30 mins.	21	**216**	11	**248**	**27**	**32**	20	**79**	4	254	**15**	273	**10**	15	9	34
+45 mins.	**26**	192	**15**	233	20	22	29	71	5	240	11	256	8	21	**12**	**41**
Total Volume	78	789	38	905	84	107	109	300	18	989	45	1052	31	79	29	139
% App. Total	8.6	87.2	4.2		28	35.7	36.3		1.7	94	4.3		22.3	56.8	20.9	
PHF	.750	.913	.633	.912	.778	.836	.879	.949	.643	.937	.750	.926	.775	.859	.604	.848

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City of Los Angeles
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Weather: Clear

File Name : LACAV102nPM
Site Code : 12816682
Start Date : 12/7/2016
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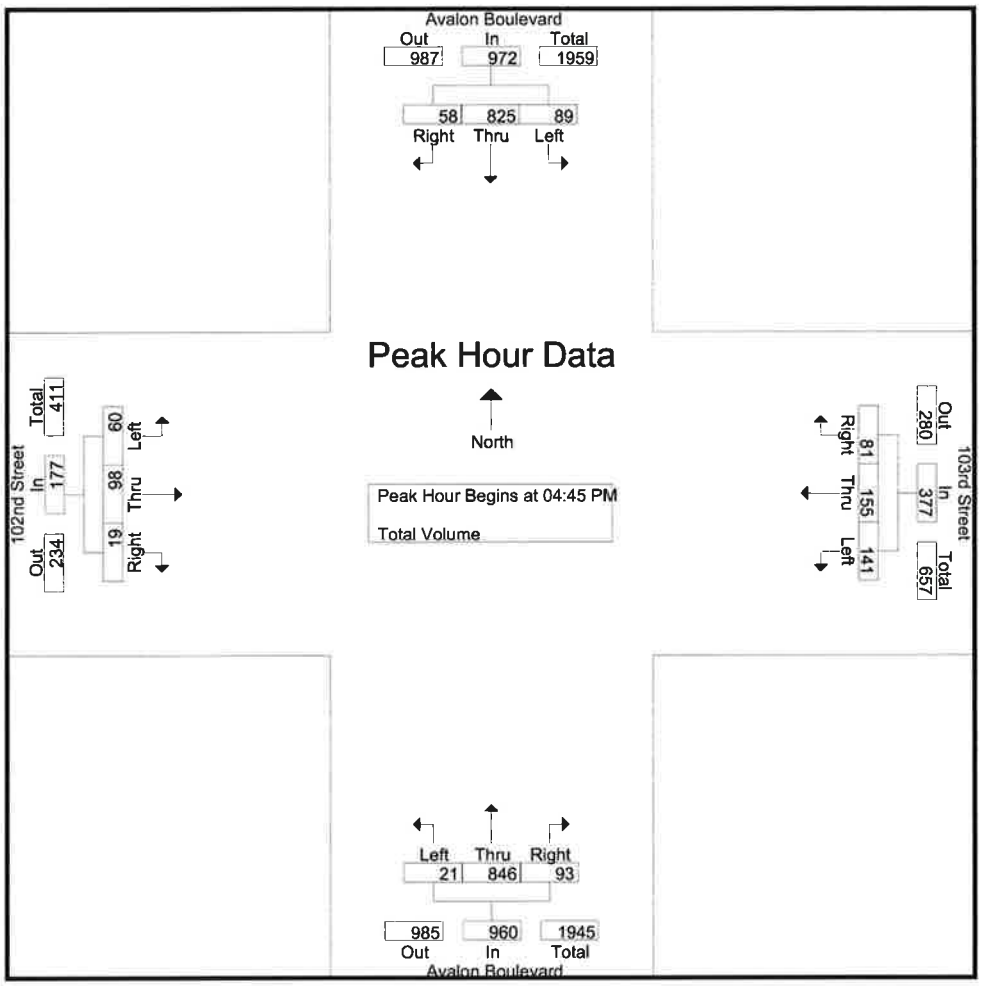

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	**34**	211	7	252	23	27	19	69	2	212	25	239	12	28	6	46
+15 mins.	25	201	15	241	**42**	**47**	19	108	3	212	**27**	242	**17**	**30**	4	**51**
+30 mins.	21	181	**16**	218	41	46	**24**	**111**	**9**	**225**	21	**255**	17	22	**7**	46
+45 mins.	20	**232**	12	**264**	35	35	19	89	7	197	20	224	14	27	4	45
Total Volume	100	825	50	975	141	155	81	377	21	846	93	960	60	107	21	188
% App. Total	10.3	84.6	5.1		37.4	41.1	21.5		2.2	88.1	9.7		31.9	56.9	11.2	
PHF	.735	.889	.781	.923	.839	.824	.844	.849	.583	.940	.861	.941	.882	.892	.750	.922

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Weather: Clear

File Name : LACAV108tAM
Site Code : 12816682
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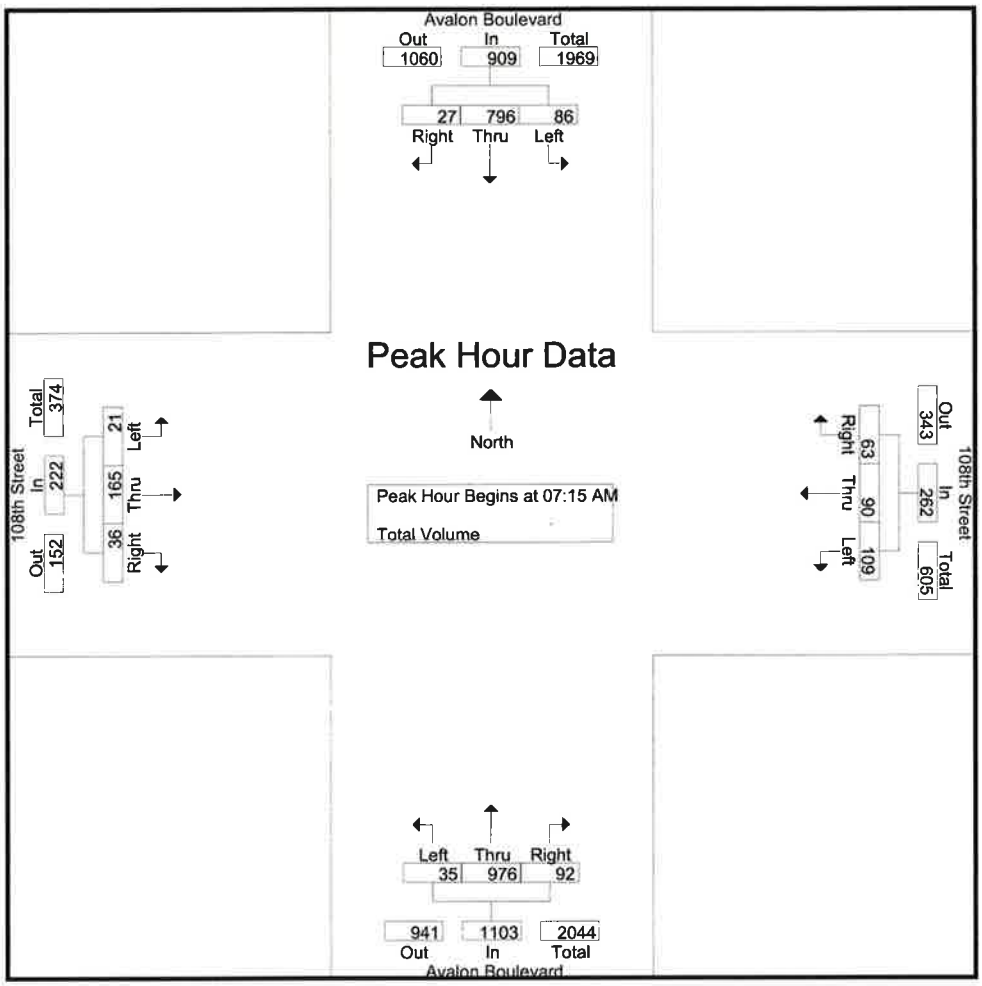

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	14	178	6	198	25	**26**	12	63	**10**	249	17	276	4	37	8	49
+15 mins.	19	**229**	6	**254**	**33**	23	13	**69**	9	244	18	271	**8**	**59**	**14**	**81**
+30 mins.	**29**	208	**11**	248	32	19	18	69	9	232	26	267	6	45	9	60
+45 mins.	24	181	4	209	19	22	**20**	61	7	**251**	**31**	**289**	4	27	7	38
Total Volume	86	796	27	909	109	90	63	262	35	976	92	1103	22	168	38	228
% App. Total	9.5	87.6	3		41.6	34.4	24		3.2	88.5	8.3		9.6	73.7	16.7	
PHF	.741	.869	.614	.895	.826	.865	.788	.949	.875	.972	.742	.954	.688	.712	.679	.704

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City of Los Angeles
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Weather: Clear

File Name : LACAV108tPM
Site Code : 12816682
Start Date : 12/7/2016
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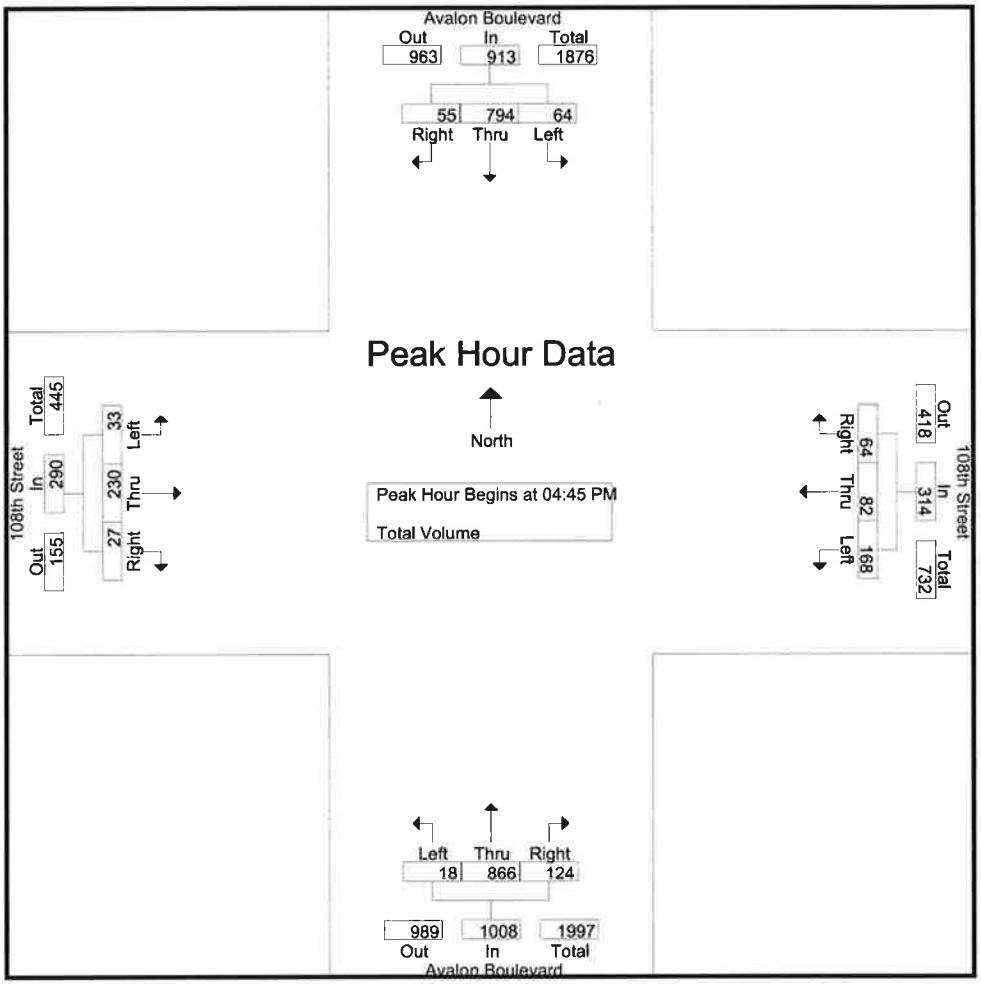

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	15	186	11	212	39	**23**	12	74	3	**246**	28	**277**	9	56	7	72
+15 mins.	16	199	**16**	231	41	22	17	80	**6**	238	30	274	9	60	6	75
+30 mins.	**17**	**213**	15	**245**	43	19	16	78	5	202	32	239	6	**69**	7	**82**
+45 mins.	16	196	13	225	**45**	18	**19**	**82**	4	180	**34**	218	**10**	61	**8**	79
Total Volume	64	794	55	913	168	82	64	314	18	866	124	1008	34	246	28	308
% App. Total	7	87	6		53.5	26.1	20.4		1.8	85.9	12.3		11	79.9	9.1	
PHF	.941	.932	.859	.932	.933	.891	.842	.957	.750	.880	.912	.910	.850	.891	.875	.939

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City of Los Angeles
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E/W: Imperial Highway
Weather: Clear

File Name : LACMAIMAM
Site Code : 12816682
Start Date : 12/7/2016
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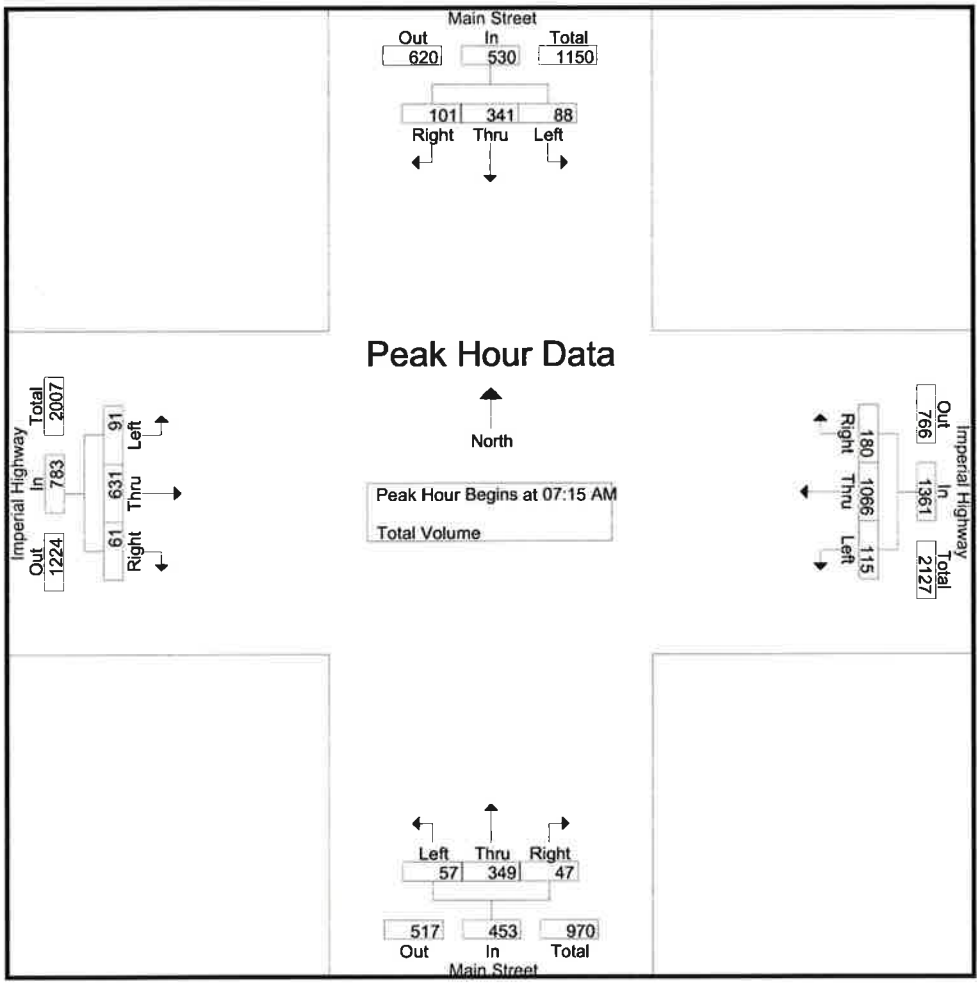

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	18	83	20	121	19	**309**	26	354	10	86	**14**	110	17	130	12	159
+15 mins.	19	81	21	121	28	278	51	**357**	13	78	11	102	**29**	176	19	224
+30 mins.	**30**	**108**	26	**164**	**31**	242	**52**	325	16	**97**	13	**126**	25	**184**	**21**	**230**
+45 mins.	21	69	**34**	124	31	261	38	330	**18**	88	9	115	20	141	9	170
Total Volume	88	341	101	530	109	1090	167	1366	57	349	47	453	91	631	61	783
% App. Total	16.6	64.3	19.1		8	79.8	12.2		12.6	77	10.4		11.6	80.6	7.8	
PHF	.733	.789	.743	.808	.879	.882	.803	.957	.792	.899	.839	.899	.784	.857	.726	.851

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City of Los Angeles
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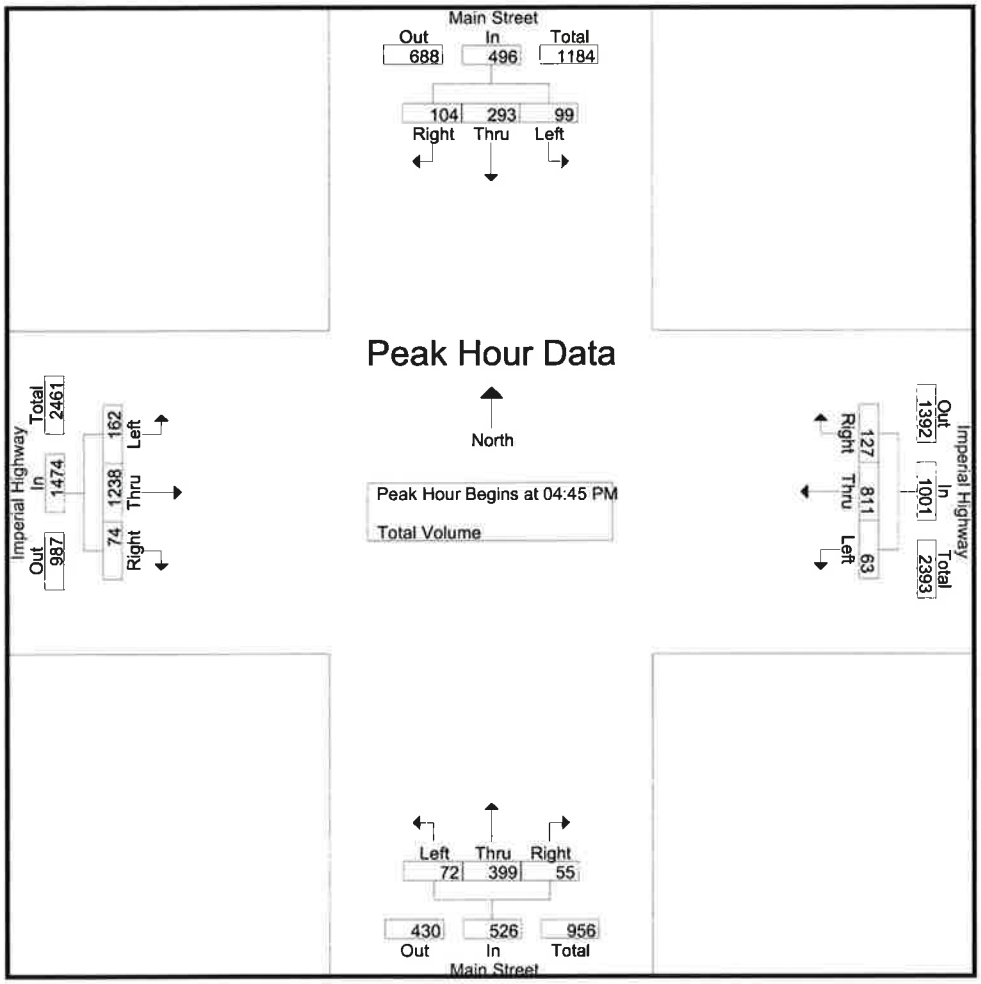

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:30 PM				04:45 PM			
+0 mins.	26	**81**	22	**129**	16	192	38	246	11	83	6	100	38	314	**20**	372
+15 mins.	22	74	27	123	**17**	**218**	**43**	**278**	19	**127**	15	**161**	39	285	17	341
+30 mins.	26	69	**29**	124	16	211	24	251	16	107	**17**	140	42	313	19	374
+45 mins.	**27**	70	27	124	14	190	22	226	**22**	86	17	125	**43**	**326**	18	**387**
Total Volume	101	294	105	500	63	811	127	1001	68	403	55	526	162	1238	74	1474
% App. Total	20.2	58.8	21		6.3	81	12.7		12.9	76.6	10.5		11	84	5	
PHF	.935	.907	.905	.969	.926	.930	.738	.900	.773	.793	.809	.817	.942	.949	.925	.952

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File Name : LACSPIMAM
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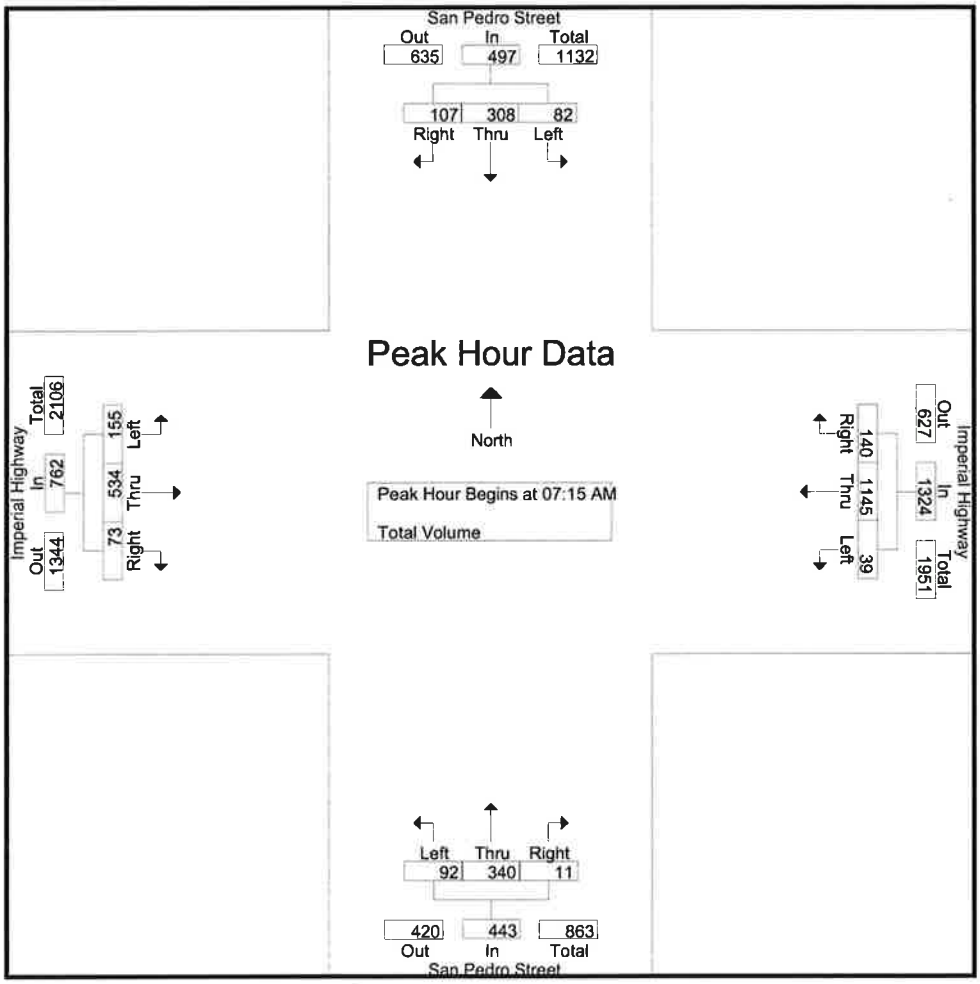

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	17	**95**	27	139	2	302	34	338	23	76	**7**	106	31	122	10	163
+15 mins.	**30**	93	26	**149**	8	**324**	28	**360**	22	80	1	103	**53**	128	22	203
+30 mins.	24	69	**32**	125	**12**	290	30	332	**24**	**99**	1	**124**	39	**156**	**26**	**221**
+45 mins.	12	51	23	86	12	260	**42**	314	23	85	2	110	32	128	15	175
Total Volume	83	308	108	499	34	1176	134	1344	92	340	11	443	155	534	73	762
% App. Total	16.6	61.7	21.6		2.5	87.5	10		20.8	76.7	2.5		20.3	70.1	9.6	
PHF	.692	.811	.844	.837	.708	.907	.798	.933	.958	.859	.393	.893	.731	.856	.702	.862

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City of Los Angeles
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Weather: Clear

File Name : LACSPIMPM
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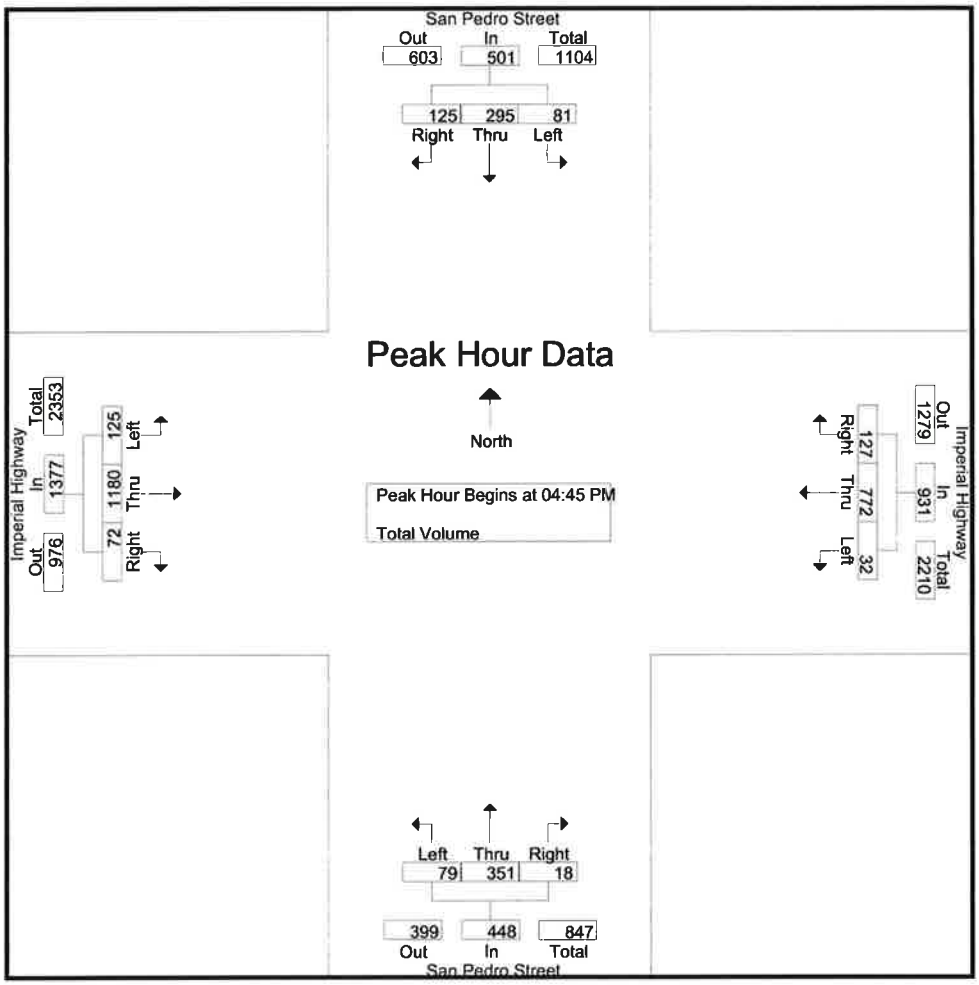

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				04:45 PM				05:00 PM			
+0 mins.	22	**86**	24	132	5	**214**	**48**	**267**	21	**97**	2	**120**	**36**	311	15	362
+15 mins.	**27**	75	**41**	**143**	11	213	26	250	**22**	91	3	116	33	293	**24**	350
+30 mins.	20	74	32	126	10	165	27	202	18	75	6	99	24	294	14	332
+45 mins.	12	60	28	100	**12**	175	36	223	18	88	**7**	113	28	**327**	17	**372**
Total Volume	81	295	125	501	38	767	137	942	79	351	18	448	121	1225	70	1416
% App. Total	16.2	58.9	25		4	81.4	14.5		17.6	78.3	4		8.5	86.5	4.9	
PHF	.750	.858	.762	.876	.792	.896	.714	.882	.898	.905	.643	.933	.840	.937	.729	.952

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Start Date : 12/7/2016
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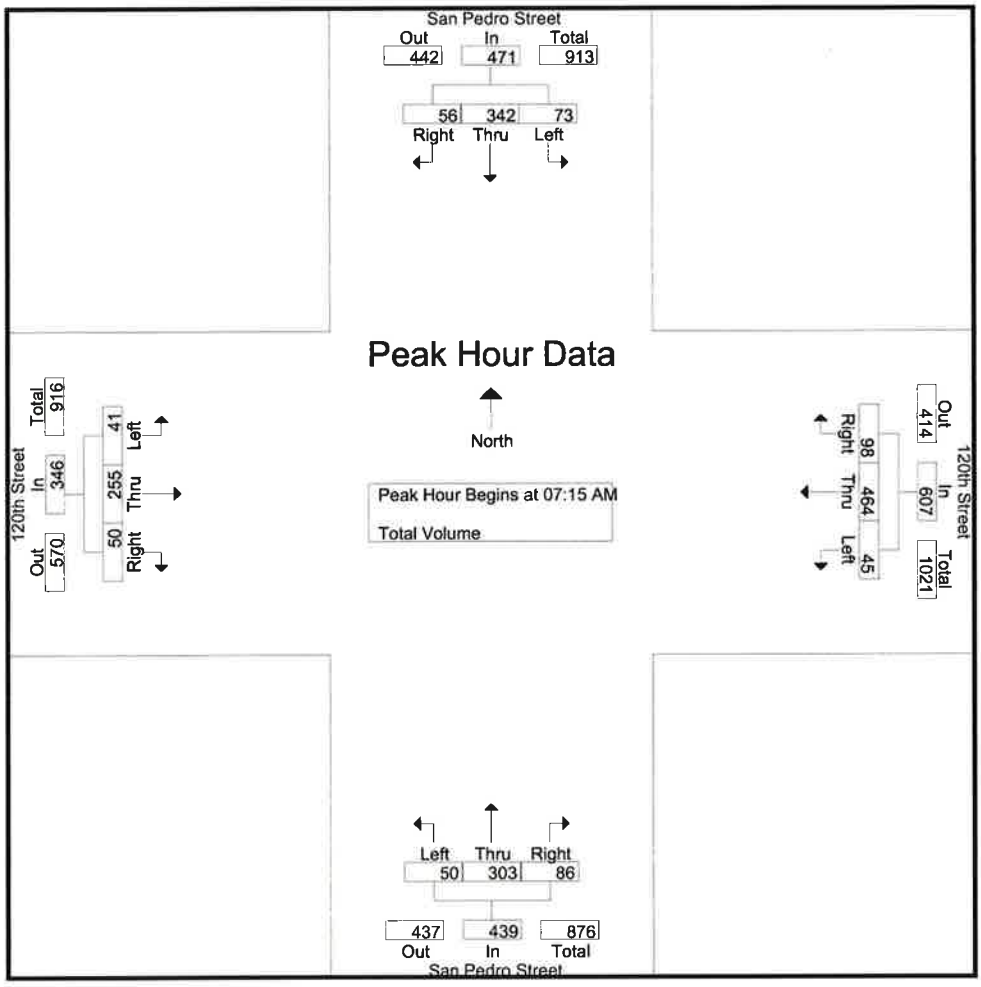

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	15	72	9	96	7	**120**	26	153	12	68	15	95	6	51	11	68
+15 mins.	19	**96**	15	130	8	118	16	142	11	76	23	110	12	**74**	13	**99**
+30 mins.	**20**	93	**19**	**132**	**17**	117	**33**	**167**	10	**93**	**28**	**131**	**14**	65	**17**	96
+45 mins.	19	81	13	113	13	109	23	145	**17**	66	20	103	9	65	9	83
Total Volume	73	342	56	471	45	464	98	607	50	303	86	439	41	255	50	346
% App. Total	15.5	72.6	11.9		7.4	76.4	16.1		11.4	69	19.6		11.8	73.7	14.5	
PHF	.913	.891	.737	.892	.662	.967	.742	.909	.735	.815	.768	.838	.732	.861	.735	.874

Counts Unlimited
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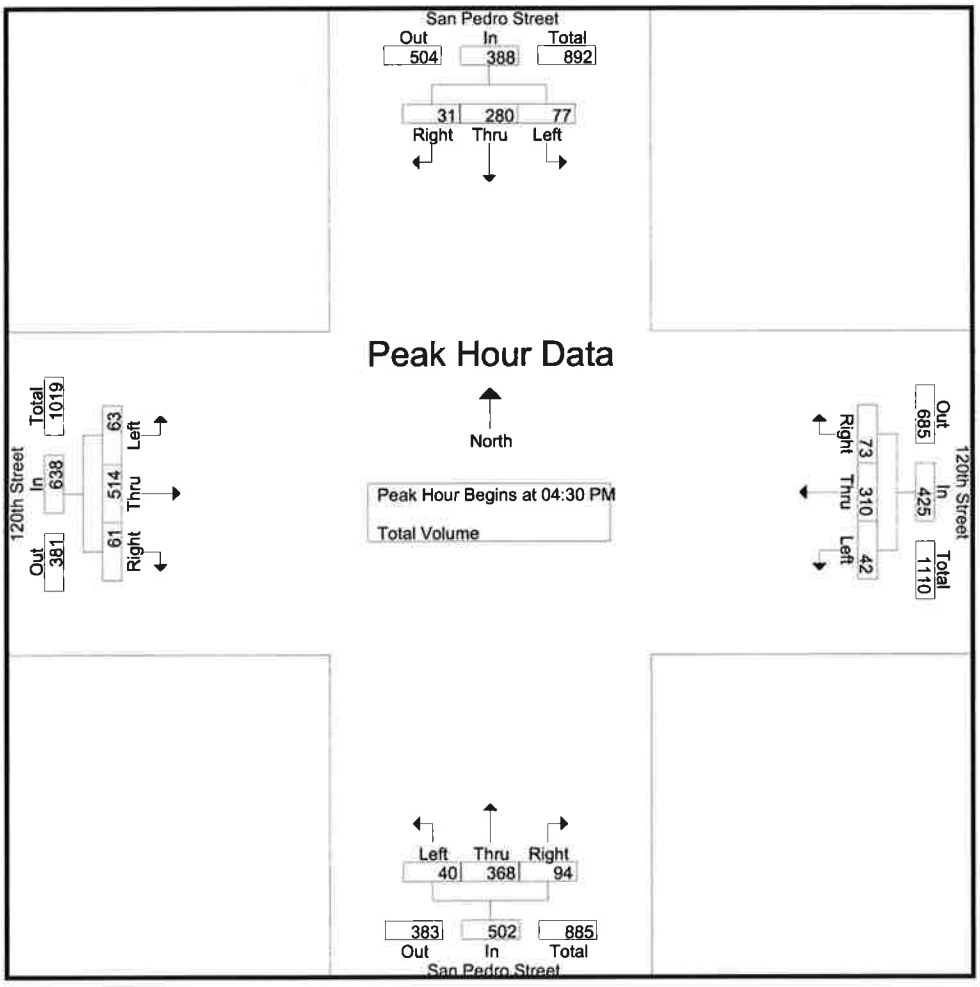
City of Los Angeles
N/S: San Pedro Street
E/W: 120th Street
Weather: Clear

File Name : LACSP120tPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:30 PM			
+0 mins.	**24**	72	7	103	**13**	71	17	101	8	91	14	113	12	**134**	10	156
+15 mins.	15	62	**11**	88	11	72	15	98	**15**	**107**	**27**	**149**	**20**	128	15	**163**
+30 mins.	18	**80**	9	**107**	10	**87**	**21**	**118**	5	93	24	122	16	125	**19**	160
+45 mins.	23	59	9	91	8	80	20	108	14	85	21	120	15	127	17	159
Total Volume	80	273	36	389	42	310	73	425	42	376	86	504	63	514	61	638
% App. Total	20.6	70.2	9.3		9.9	72.9	17.2		8.3	74.6	17.1		9.9	80.6	9.6	
PHF	.833	.853	.818	.909	.808	.891	.869	.900	.700	.879	.796	.846	.788	.959	.803	.979

Counts Unlimited
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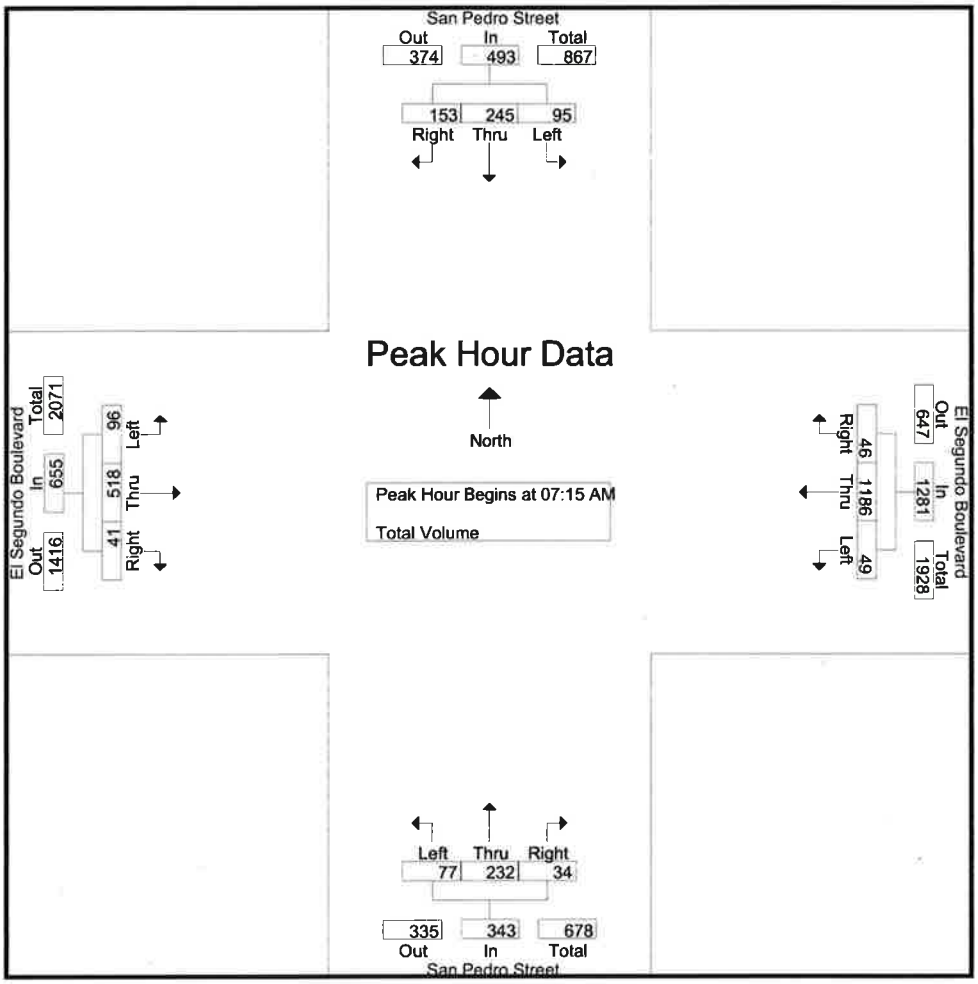
City of Los Angeles
N/S: San Pedro Street
E/W: El Segundo Boulevard
Weather: Clear

File Name : LACSPELAM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	23	49	28	100	6	274	9	289	20	59	6	85	15	123	7	145
+15 mins.	20	57	**50**	127	5	**327**	11	**343**	**26**	50	8	84	24	**143**	10	**177**
+30 mins.	21	**80**	37	**138**	11	299	10	320	14	**72**	6	**92**	**31**	126	10	167
+45 mins.	**31**	59	38	128	**19**	301	**12**	332	17	51	**14**	82	26	126	**14**	166
Total Volume	95	245	153	493	41	1201	42	1284	77	232	34	343	96	518	41	655
% App. Total	19.3	49.7	31		3.2	93.5	3.3		22.4	67.6	9.9		14.7	79.1	6.3	
PHF	.766	.766	.765	.893	.539	.918	.875	.936	.740	.806	.607	.932	.774	.906	.732	.925

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City of Los Angeles
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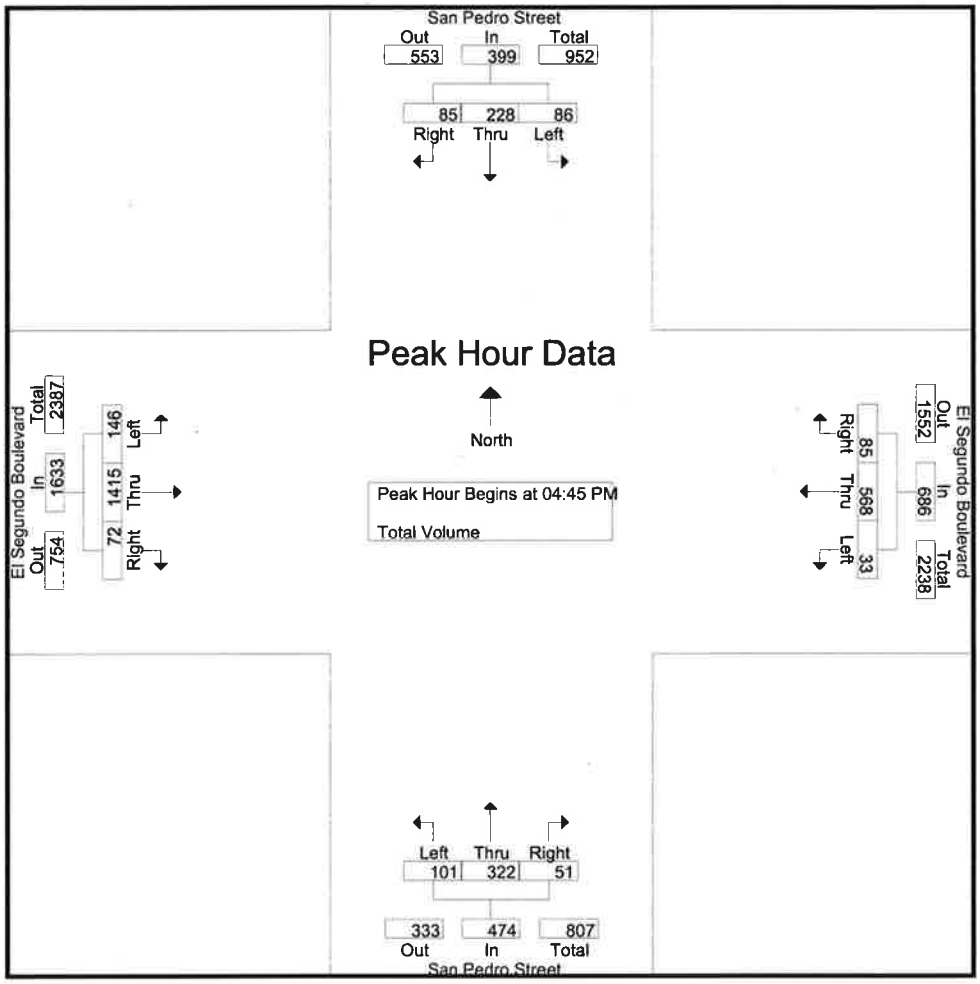
E/W: El Segundo Boulevard
Weather: Clear

File Name : LACSPELPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				04:15 PM			
+0 mins.	**22**	53	18	93	**11**	136	18	165	18	77	9	104	43	331	**25**	399
+15 mins.	22	**64**	16	102	6	134	27	167	24	74	**14**	112	39	352	10	401
+30 mins.	21	61	**27**	**109**	5	151	20	176	**30**	79	14	123	**44**	**366**	17	**427**
+45 mins.	21	50	24	95	6	**154**	**32**	**192**	29	**92**	14	**135**	40	363	23	426
Total Volume	86	228	85	399	28	575	97	700	101	322	51	474	166	1412	75	1653
% App. Total	21.6	57.1	21.3		4	82.1	13.9		21.3	67.9	10.8		10	85.4	4.5	
PHF	.977	.891	.787	.915	.636	.933	.758	.911	.842	.875	.911	.878	.943	.964	.750	.968

Counts Unlimited
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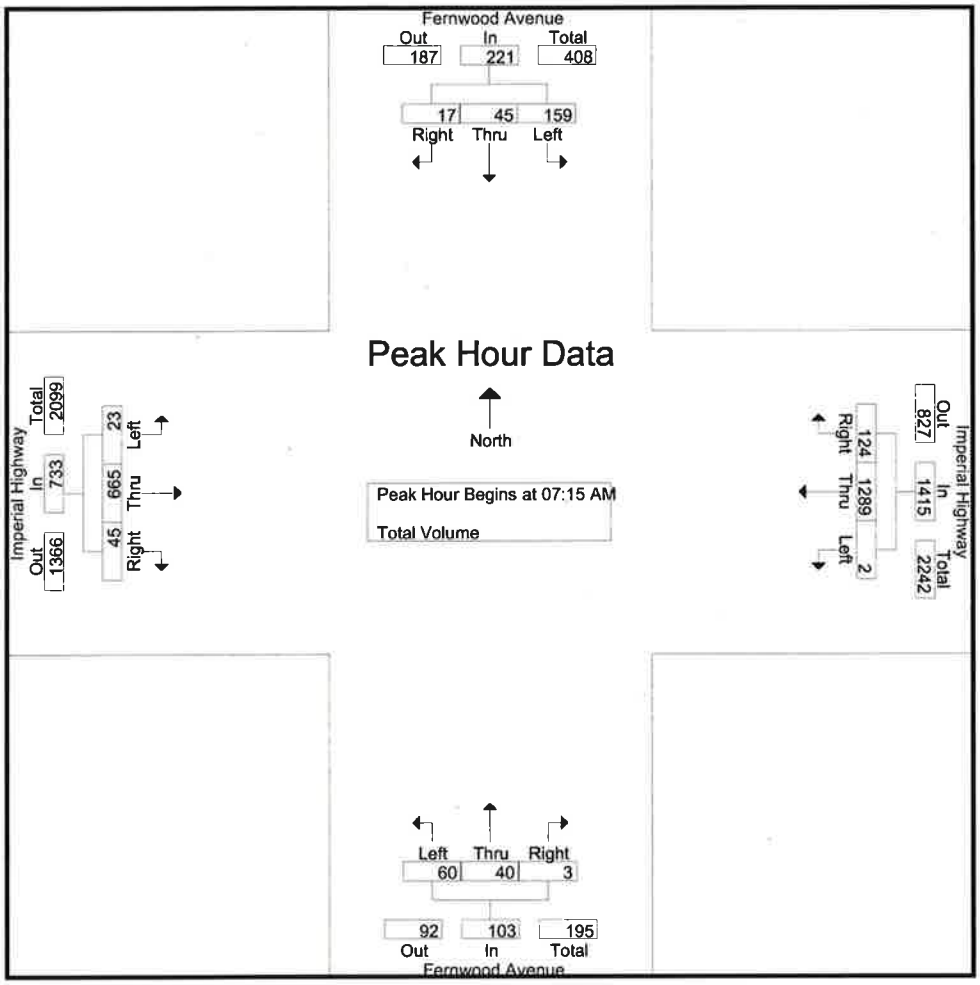
City of Lynwood
N/S: Fernwood Avenue
E/W: Imperial Highway
Weather: Clear

File Name : LWDFEIMAM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:30 AM				07:15 AM			
+0 mins.	30	**13**	**7**	50	0	344	23	367	15	10	0	25	**7**	163	7	177
+15 mins.	43	10	4	57	0	**361**	**34**	**395**	7	7	**1**	15	5	174	12	191
+30 mins.	39	13	3	55	**1**	310	28	339	**21**	15	0	**36**	4	**179**	**13**	**196**
+45 mins.	**47**	9	3	**59**	1	323	29	353	17	**17**	1	35	7	149	13	169
Total Volume	159	45	17	221	2	1338	114	1454	60	49	2	111	23	665	45	733
% App. Total	71.9	20.4	7.7		0.1	92	7.8		54.1	44.1	1.8		3.1	90.7	6.1	
PHF	.846	.865	.607	.936	.500	.927	.838	.920	.714	.721	.500	.771	.821	.929	.865	.935

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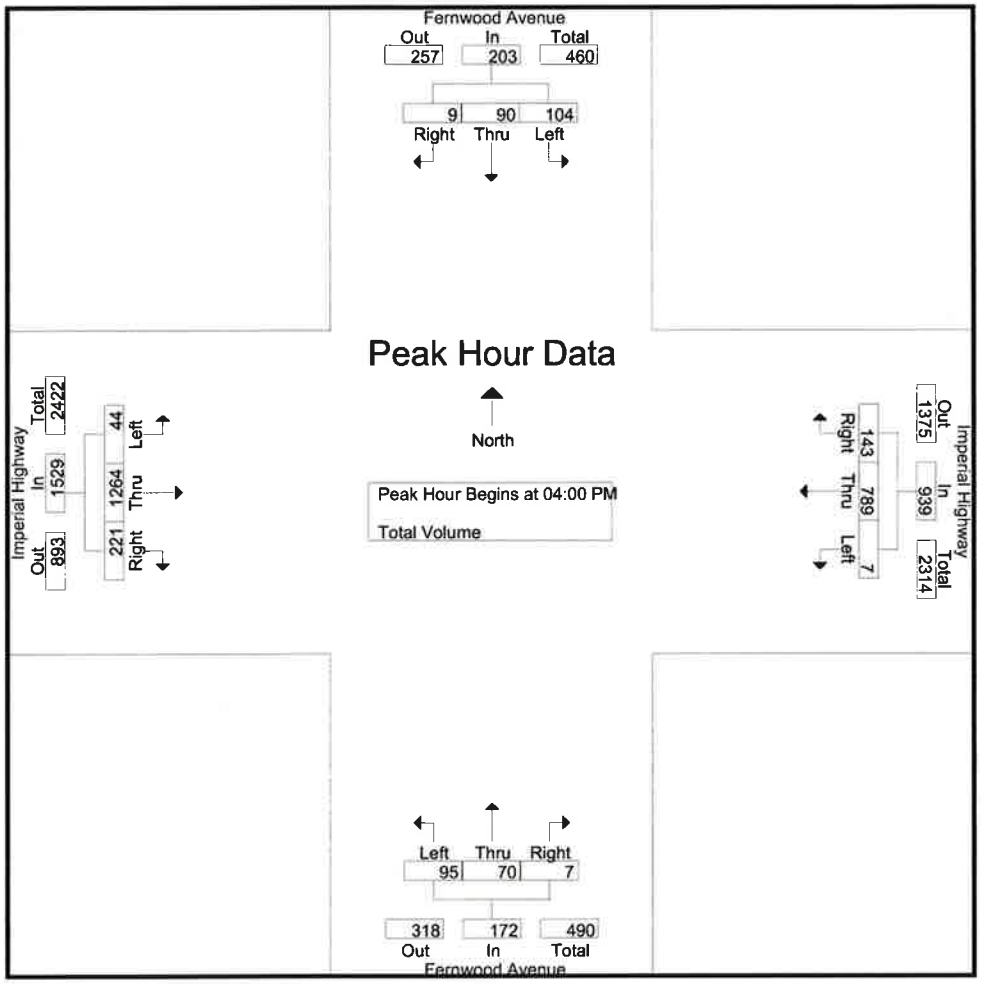
City of Lynwood
N/S: Fernwood Avenue
E/W: Imperial Highway
Weather: Clear

File Name : LWDFEIMPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:15 PM				04:45 PM			
+0 mins.	28	**30**	1	59	0	187	**43**	230	25	**20**	1	46	**17**	325	**69**	411
+15 mins.	24	20	**2**	46	2	**207**	29	238	**27**	20	**4**	**51**	7	302	69	378
+30 mins.	**33**	25	2	**60**	2	207	33	**242**	22	15	1	38	8	289	33	330
+45 mins.	32	23	1	56	**3**	188	38	229	25	14	2	41	10	**384**	56	**450**
Total Volume	117	98	6	221	7	789	143	939	99	69	8	176	42	1300	227	1569
% App. Total	52.9	44.3	2.7		0.7	84	15.2		56.2	39.2	4.5		2.7	82.9	14.5	
PHF	.886	.817	.750	.921	.583	.953	.831	.970	.917	.863	.500	.863	.618	.846	.822	.872

Counts Unlimited
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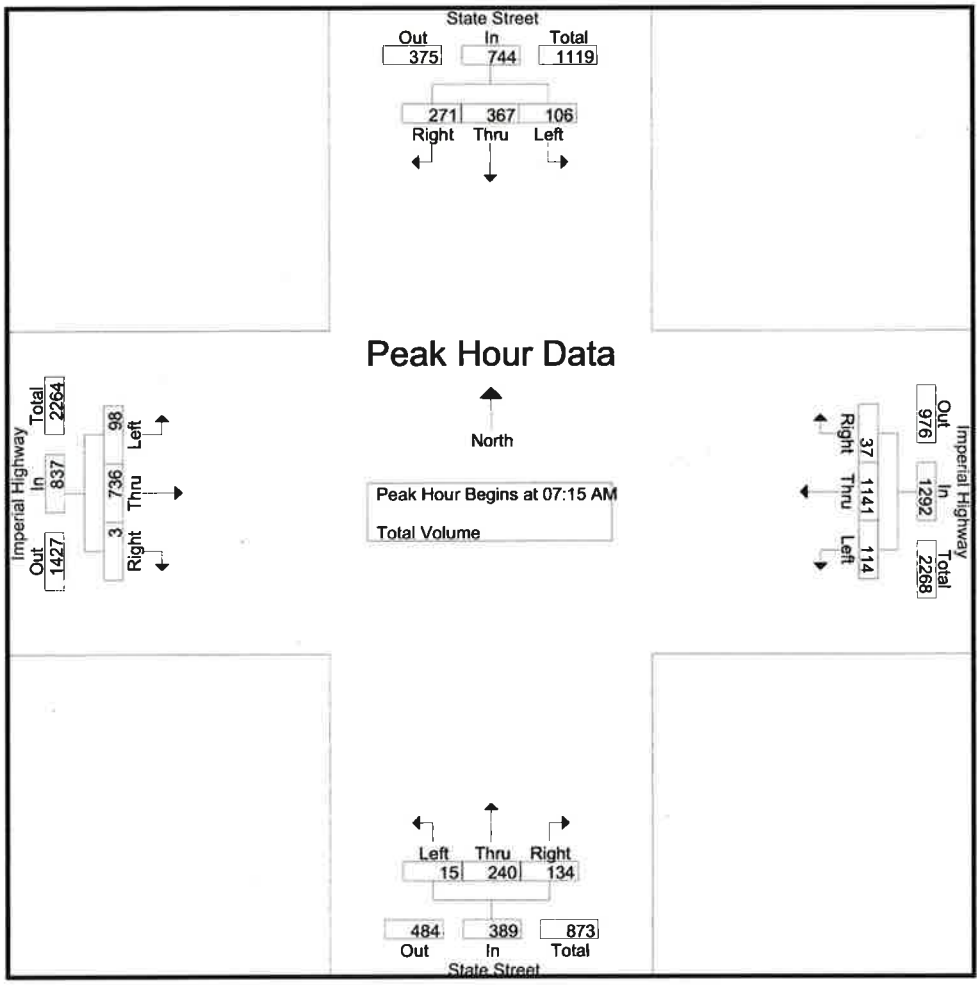
City of Lynwood
N/S: State Street
E/W: Imperial Highway
Weather: Clear

File Name : LWDSTIMAM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:00 AM				07:15 AM			
+0 mins.	20	91	66	177	19	**322**	4	**345**	**7**	58	33	98	22	169	0	191
+15 mins.	**31**	91	**77**	199	25	282	6	313	2	61	22	85	**31**	**210**	**2**	**243**
+30 mins.	29	**101**	71	**201**	20	302	4	326	1	**80**	**42**	**123**	21	178	0	199
+45 mins.	26	84	57	167	**36**	273	**14**	323	7	56	36	99	24	179	1	204
Total Volume	106	367	271	744	100	1179	28	1307	17	255	133	405	98	736	3	837
% App. Total	14.2	49.3	36.4		7.7	90.2	2.1		4.2	63	32.8		11.7	87.9	0.4	
PHF	.855	.908	.880	.925	.694	.915	.500	.947	.607	.797	.792	.823	.790	.876	.375	.861

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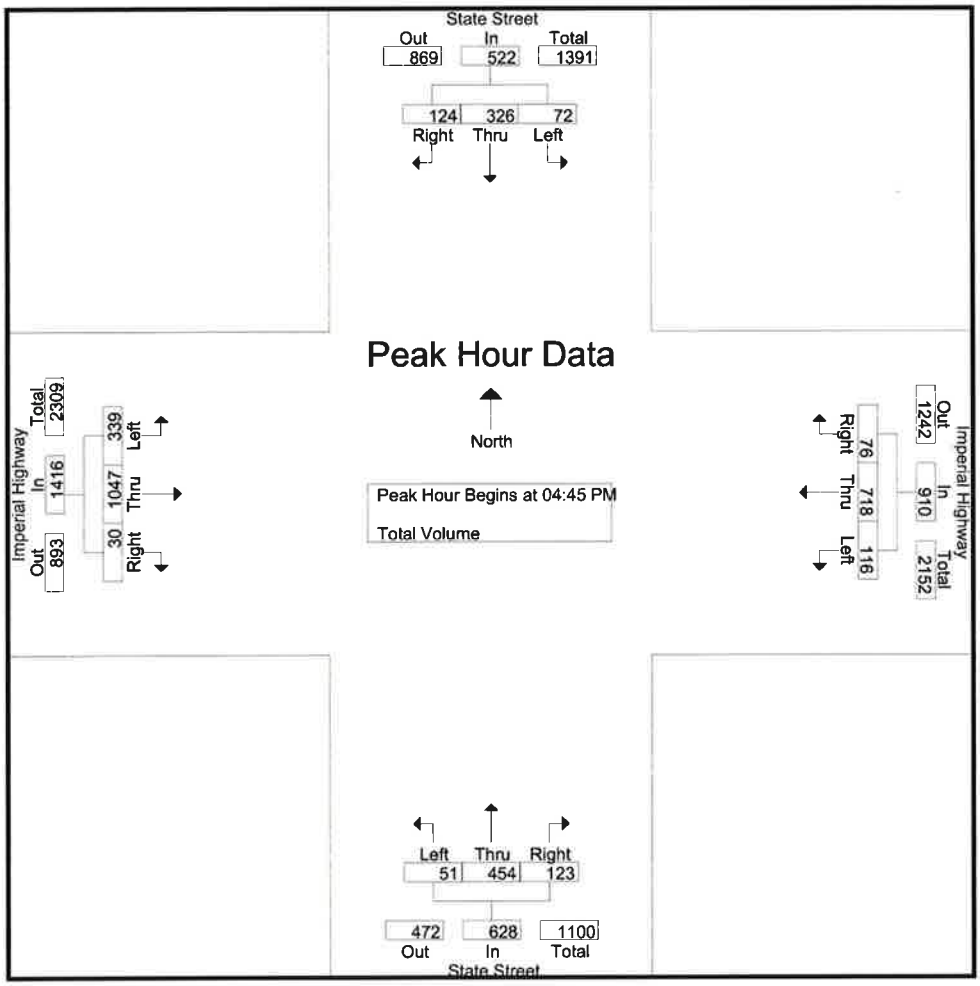
City of Lynwood
N/S: State Street
E/W: Imperial Highway
Weather: Clear

File Name : LWDSTIMPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:45 PM				04:45 PM			
+0 mins.	6	83	**39**	128	**36**	193	15	244	12	114	25	151	75	264	5	344
+15 mins.	**20**	91	35	**146**	35	**202**	20	**257**	11	**126**	22	159	73	246	**11**	330
+30 mins.	19	74	39	132	22	200	**26**	248	**17**	100	34	151	93	261	3	357
+45 mins.	20	**98**	26	144	25	185	21	231	11	114	**42**	**167**	**98**	**276**	11	**385**
Total Volume	65	346	139	550	118	780	82	980	51	454	123	628	339	1047	30	1416
% App. Total	11.8	62.9	25.3		12	79.6	8.4		8.1	72.3	19.6		23.9	73.9	2.1	
PHF	.813	.883	.891	.942	.819	.965	.788	.953	.750	.901	.732	.940	.865	.948	.682	.919

Counts Unlimited
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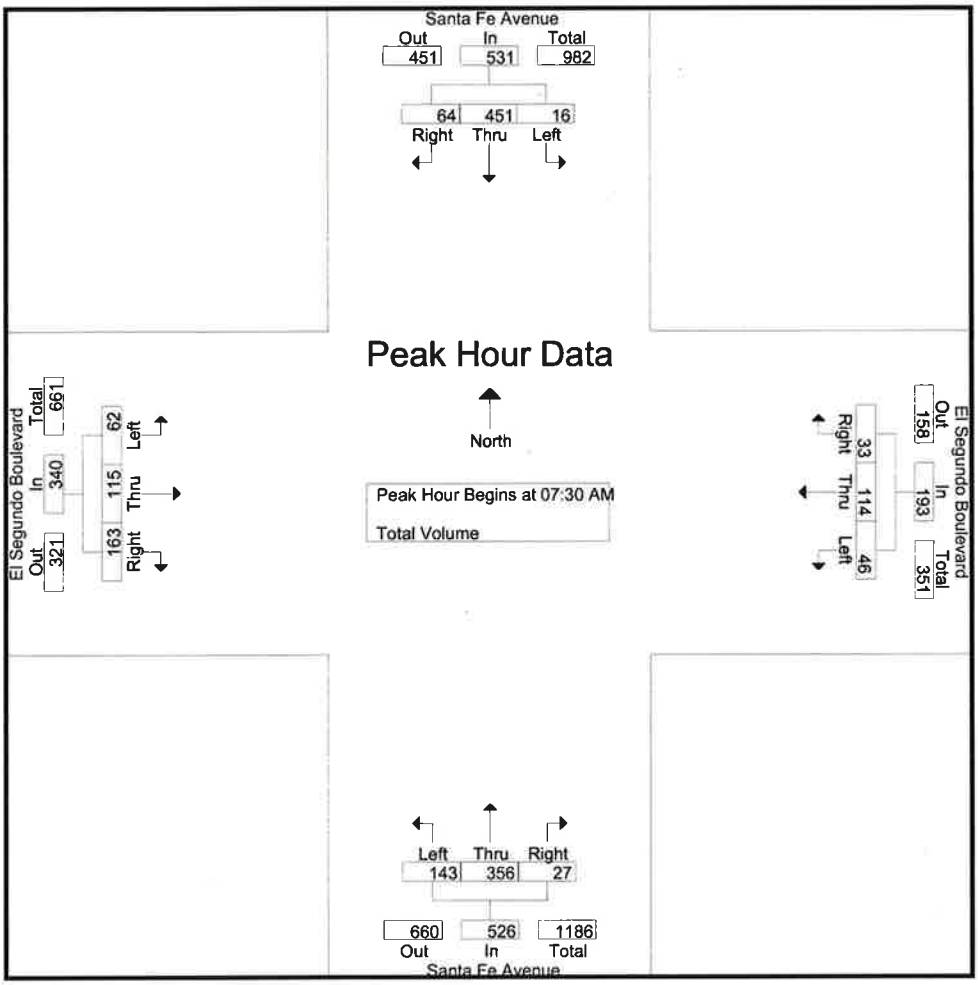
City of Compton
N/S: Santa Fe Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CPTSAELAM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	4	**138**	15	**157**	**17**	26	7	50	37	76	5	118	18	**33**	31	82
+15 mins.	3	113	**20**	136	11	25	5	41	29	**104**	7	**140**	**23**	26	46	**95**
+30 mins.	3	107	15	125	6	28	8	42	**41**	87	**8**	136	14	33	**47**	94
+45 mins.	**6**	93	14	113	12	**35**	**13**	**60**	36	89	7	132	7	23	39	69
Total Volume	16	451	64	531	46	114	33	193	143	356	27	526	62	115	163	340
% App. Total	3	84.9	12.1		23.8	59.1	17.1		27.2	67.7	5.1		18.2	33.8	47.9	
PHF	.667	.817	.800	.846	.676	.814	.635	.804	.872	.856	.844	.939	.674	.871	.867	.895

Counts Unlimited
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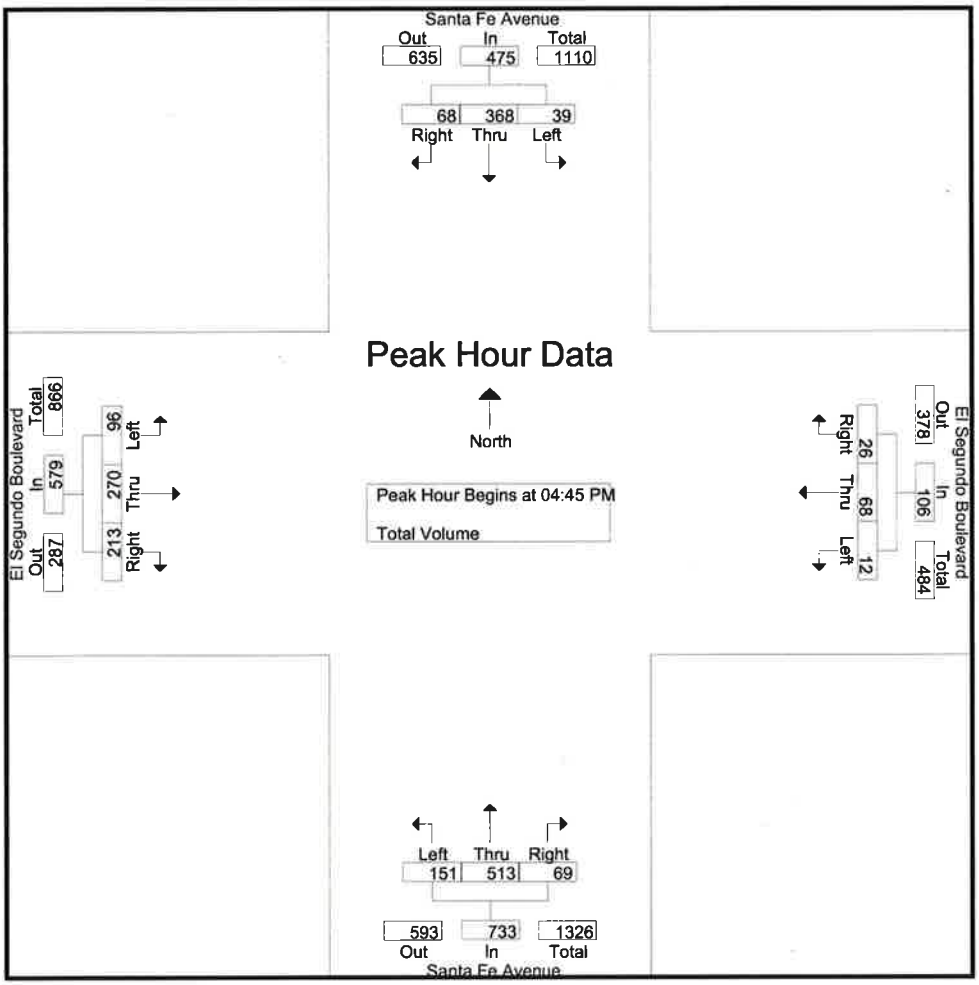
City of Compton
N/S: Santa Fe Avenue
E/W: El Segundo Boulevard
Weather: Clear

File Name : CPTSAELPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:45 PM				04:45 PM			
+0 mins.	**9**	99	20	128	3	22	7	32	32	**140**	**20**	192	22	**74**	56	**152**
+15 mins.	4	96	**21**	121	**6**	18	**8**	32	32	120	17	169	**25**	66	54	145
+30 mins.	9	84	19	112	2	11	7	20	**49**	139	16	**204**	25	70	43	138
+45 mins.	9	**105**	21	**135**	6	**27**	8	**41**	38	114	16	168	24	60	**60**	144
Total Volume	31	384	81	496	17	78	30	125	151	513	69	733	96	270	213	579
% App. Total	6.2	77.4	16.3		13.6	62.4	24		20.6	70	9.4		16.6	46.6	36.8	
PHF	.861	.914	.964	.919	.708	.722	.938	.762	.770	.916	.863	.898	.960	.912	.888	.952

Counts Unlimited
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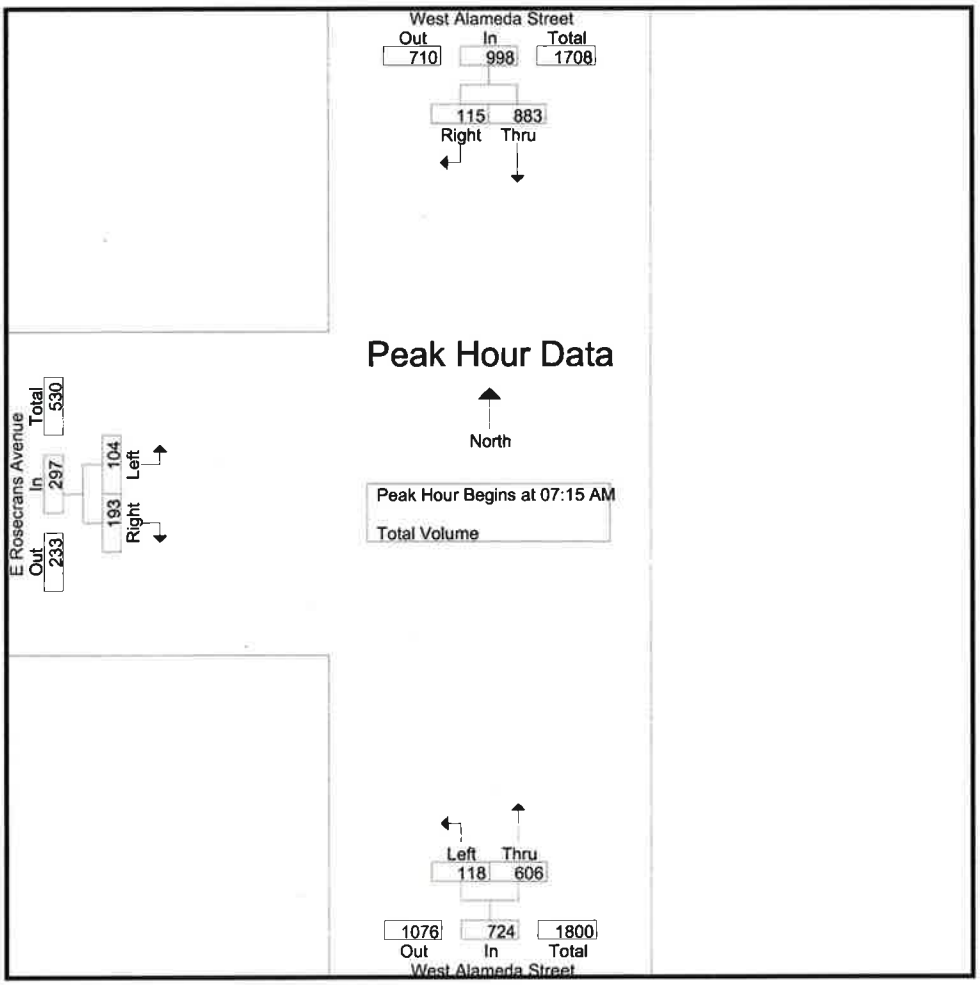
City of Compton
N/S: West Alameda Street
E/W: E Rosecrans Avenue
Weather: Clear

File Name : CPTAL1ROAM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:00 AM			07:30 AM		
+0 mins.	192	15	207	12	154	166	**33**	45	78
+15 mins.	**256**	**36**	**292**	20	**175**	**195**	31	**56**	**87**
+30 mins.	248	34	282	19	165	184	20	53	73
+45 mins.	187	30	217	**45**	137	182	23	45	68
Total Volume	883	115	998	96	631	727	107	199	306
% App. Total	88.5	11.5		13.2	86.8		35	65	
PHF	.862	.799	.854	.533	.901	.932	.811	.888	.879

Counts Unlimited
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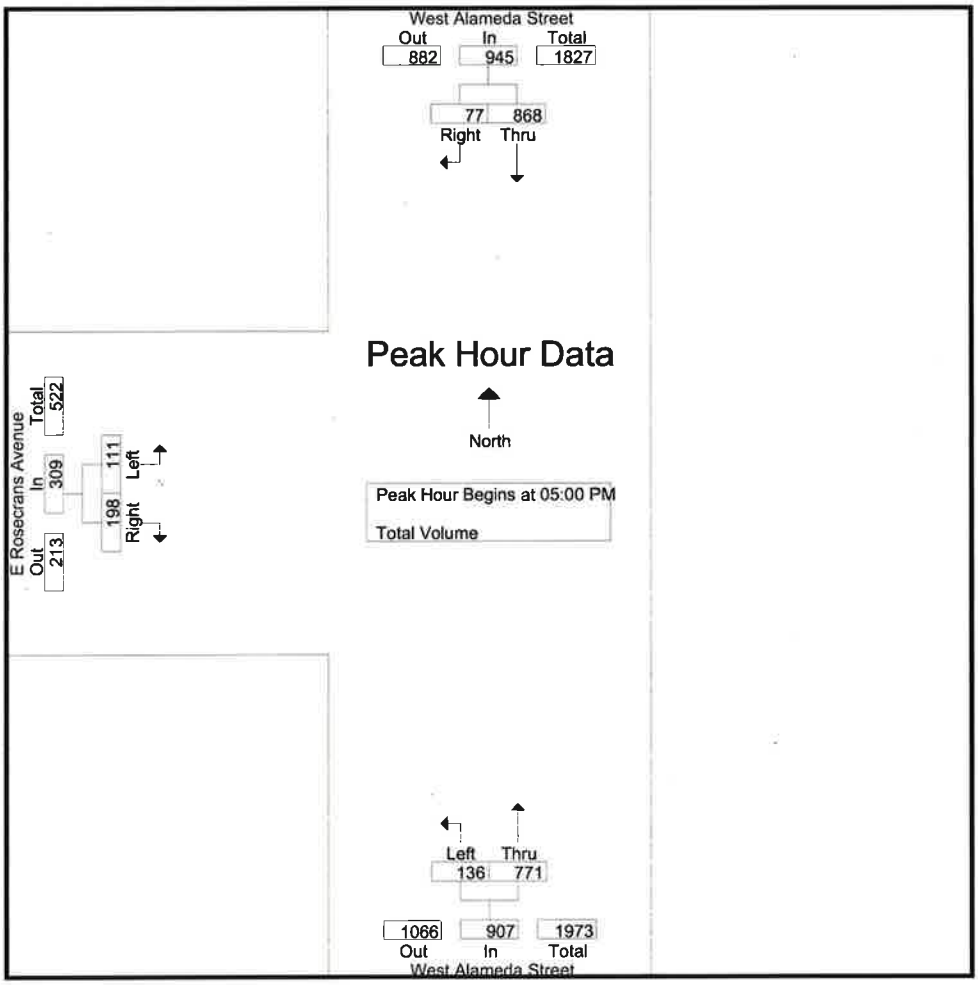
City of Compton
N/S: West Alameda Street
E/W: E Rosecrans Avenue
Weather: Clear

File Name : CPTAL1ROPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:15 PM			05:00 PM		
+0 mins.	205	21	226	**40**	189	229	27	46	73
+15 mins.	**238**	18	**256**	38	**210**	**248**	**33**	41	74
+30 mins.	235	15	250	32	174	206	25	50	75
+45 mins.	190	**23**	213	33	203	236	26	**61**	**87**
Total Volume	868	77	945	143	776	919	111	198	309
% App. Total	91.9	8.1		15.6	84.4		35.9	64.1	
PHF	.912	.837	.923	.894	.924	.926	.841	.811	.888

Counts Unlimited
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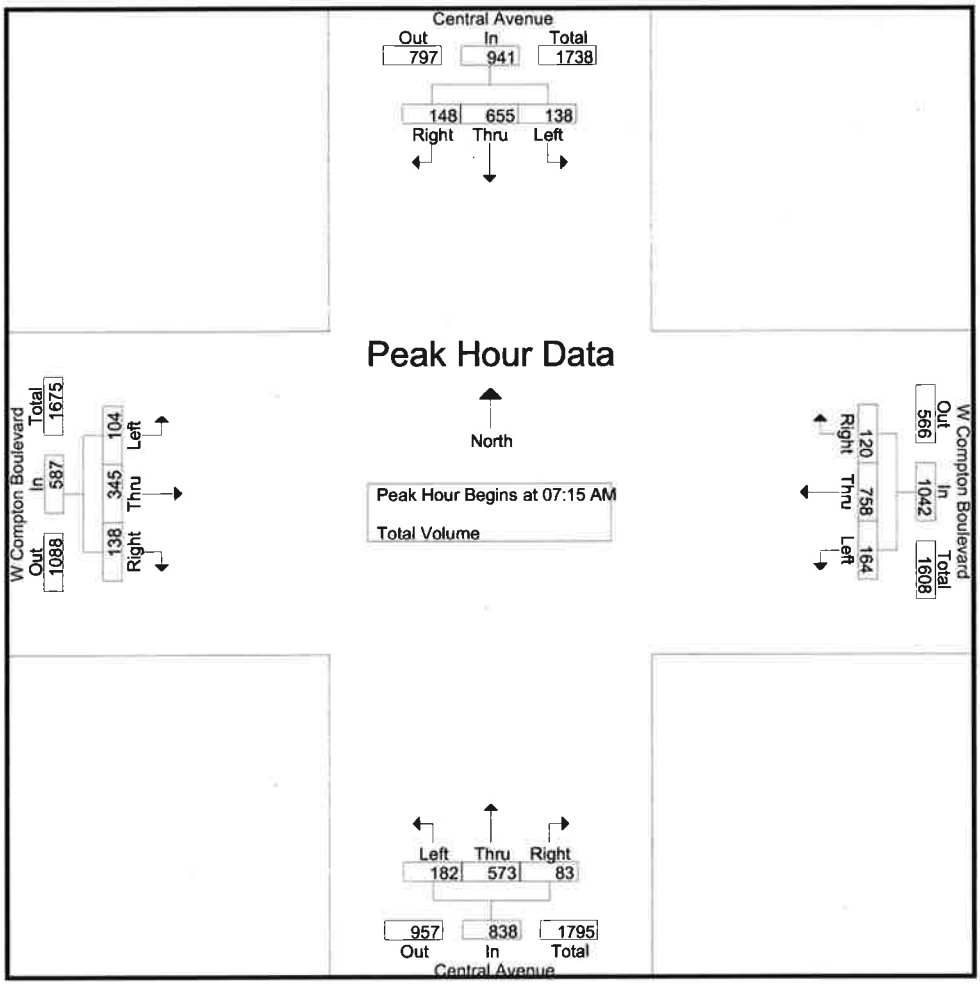
(951) 268-6268

City of Compton
N/S: Central Avenue
E/W: W Compton Boulevard
Weather: Clear

File Name : CPTCEWCAM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	29	131	30	190	21	200	21	242	38	126	12	176	25	72	39	136
+15 mins.	35	179	**51**	265	43	195	26	264	46	148	20	214	**34**	**117**	**46**	**197**
+30 mins.	**37**	**210**	39	**286**	**59**	**219**	31	**309**	**53**	**151**	23	**227**	25	107	29	161
+45 mins.	37	135	28	200	41	144	**42**	227	45	148	**28**	221	24	77	30	131
Total Volume	138	655	148	941	164	758	120	1042	182	573	83	838	108	373	144	625
% App. Total	14.7	69.6	15.7		15.7	72.7	11.5		21.7	68.4	9.9		17.3	59.7	23	
PHF	.932	.780	.725	.823	.695	.865	.714	.843	.858	.949	.741	.923	.794	.797	.783	.793

Counts Unlimited
PO Box 1178
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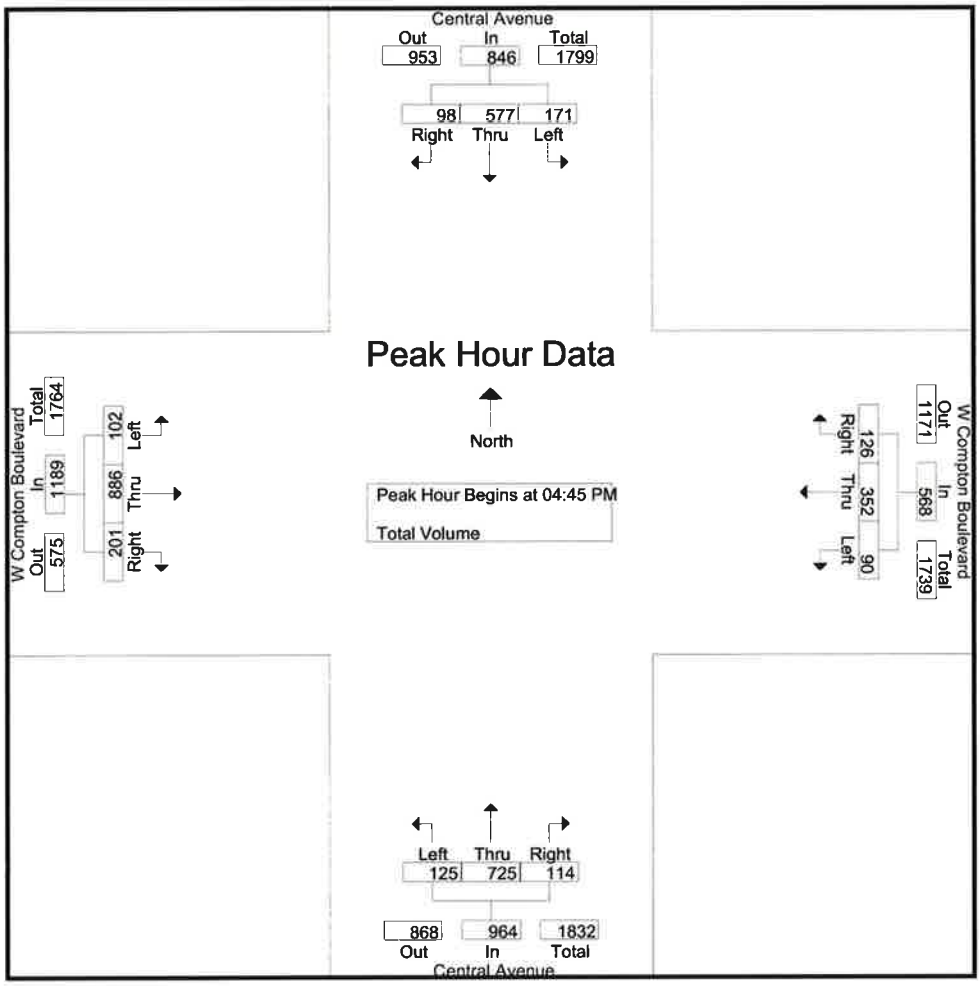
City of Compton
N/S: Central Avenue
E/W: W Compton Boulevard
Weather: Clear

File Name : CPTCEWCPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	44	118	23	185	30	96	**49**	**175**	35	156	**33**	224	**27**	220	52	299
+15 mins.	40	155	**25**	220	**34**	88	28	150	25	184	21	230	25	210	**63**	298
+30 mins.	41	**175**	22	**238**	14	72	36	122	**39**	188	32	**259**	23	224	44	291
+45 mins.	**48**	148	23	219	32	**97**	22	151	26	**197**	28	251	27	**232**	42	**301**
Total Volume	173	596	93	862	110	353	135	598	125	725	114	964	102	886	201	1189
% App. Total	20.1	69.1	10.8		18.4	59	22.6		13	75.2	11.8		8.6	74.5	16.9	
PHF	.901	.851	.930	.905	.809	.910	.689	.854	.801	.920	.864	.931	.944	.955	.798	.988

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City of Compton
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Weather: Clear

File Name : CPTWICOAM
Site Code : 12816682
Start Date : 12/7/2016
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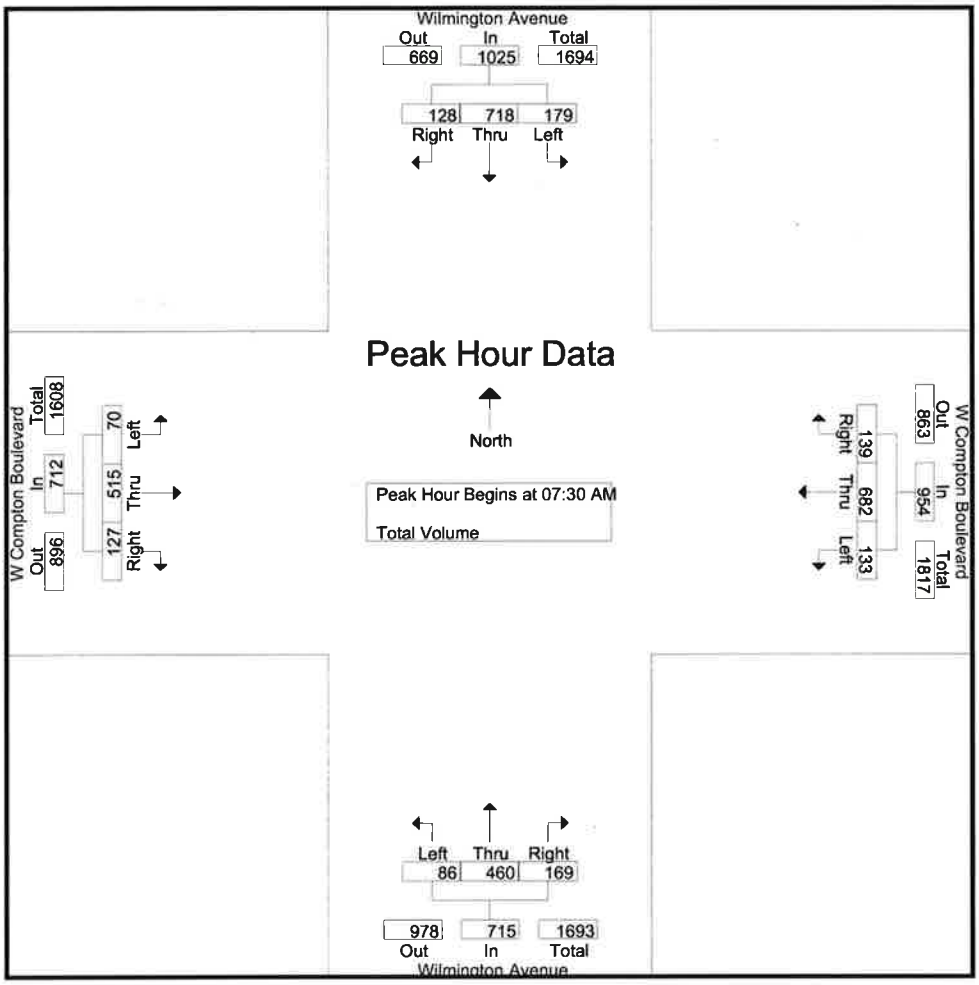

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	46	190	35	271	34	174	29	237	20	118	38	176	20	113	36	169
+15 mins.	40	**205**	**43**	**288**	**36**	**211**	**39**	**286**	**23**	118	**49**	190	**21**	131	**41**	193
+30 mins.	46	180	29	255	35	153	33	221	23	**126**	48	**197**	15	**153**	27	**195**
+45 mins.	**47**	143	21	211	28	144	38	210	20	98	34	152	14	118	23	155
Total Volume	179	718	128	1025	133	682	139	954	86	460	169	715	70	515	127	712
% App. Total	17.5	70	12.5		13.9	71.5	14.6		12	64.3	23.6		9.8	72.3	17.8	
PHF	.952	.876	.744	.890	.924	.808	.891	.834	.935	.913	.862	.907	.833	.842	.774	.913

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City of Compton
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Weather: Clear

File Name : CPTWICOPM
Site Code : 12816682
Start Date : 12/7/2016
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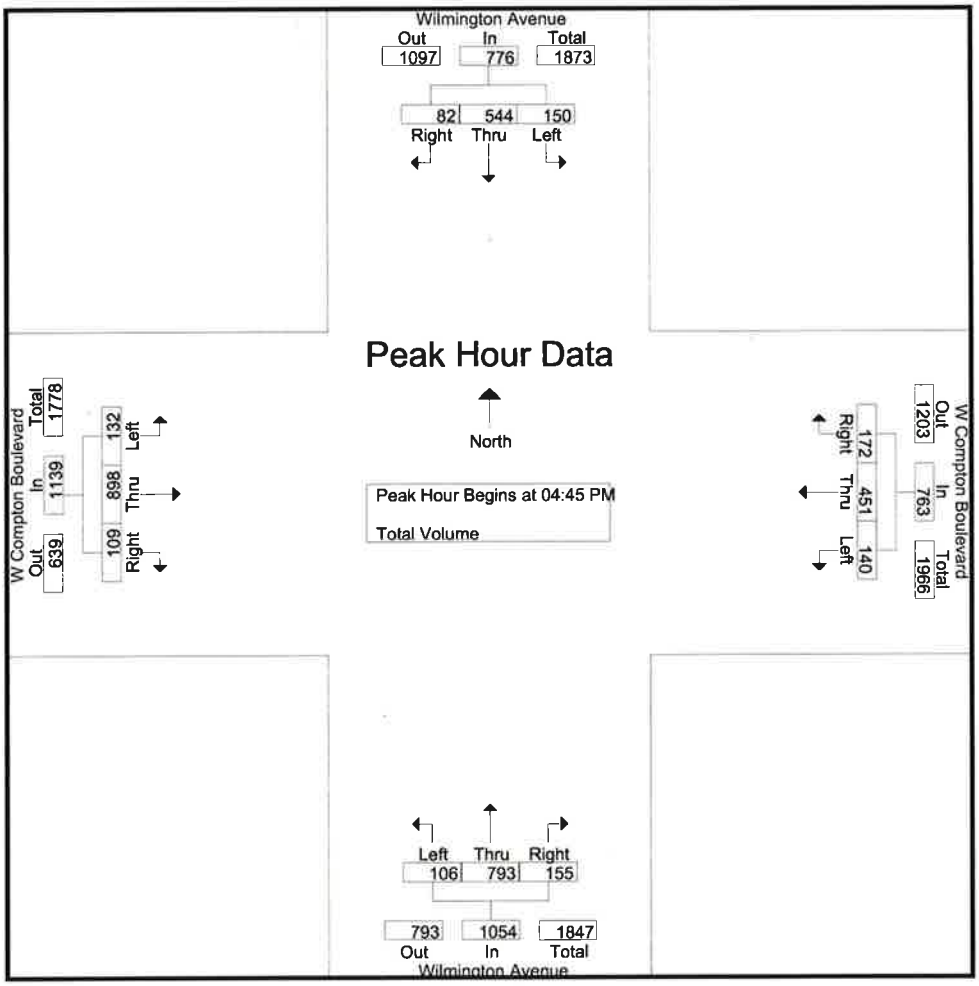

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	33	**154**	**26**	**213**	**44**	143	41	228	29	185	24	238	35	**226**	**32**	**293**
+15 mins.	**49**	125	24	198	36	127	45	208	18	**212**	**46**	**276**	34	225	25	284
+30 mins.	32	153	19	204	31	85	38	154	**34**	193	44	271	21	222	26	269
+45 mins.	35	108	26	169	37	**144**	**55**	**236**	25	203	41	269	**42**	225	26	293
Total Volume	149	540	95	784	148	499	179	826	106	793	155	1054	132	898	109	1139
% App. Total	19	68.9	12.1		17.9	60.4	21.7		10.1	75.2	14.7		11.6	78.8	9.6	
PHF	.760	.877	.913	.920	.841	.866	.814	.875	.779	.935	.842	.955	.786	.993	.852	.972

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File Name : CPTWB1COAM
Site Code : 12816682
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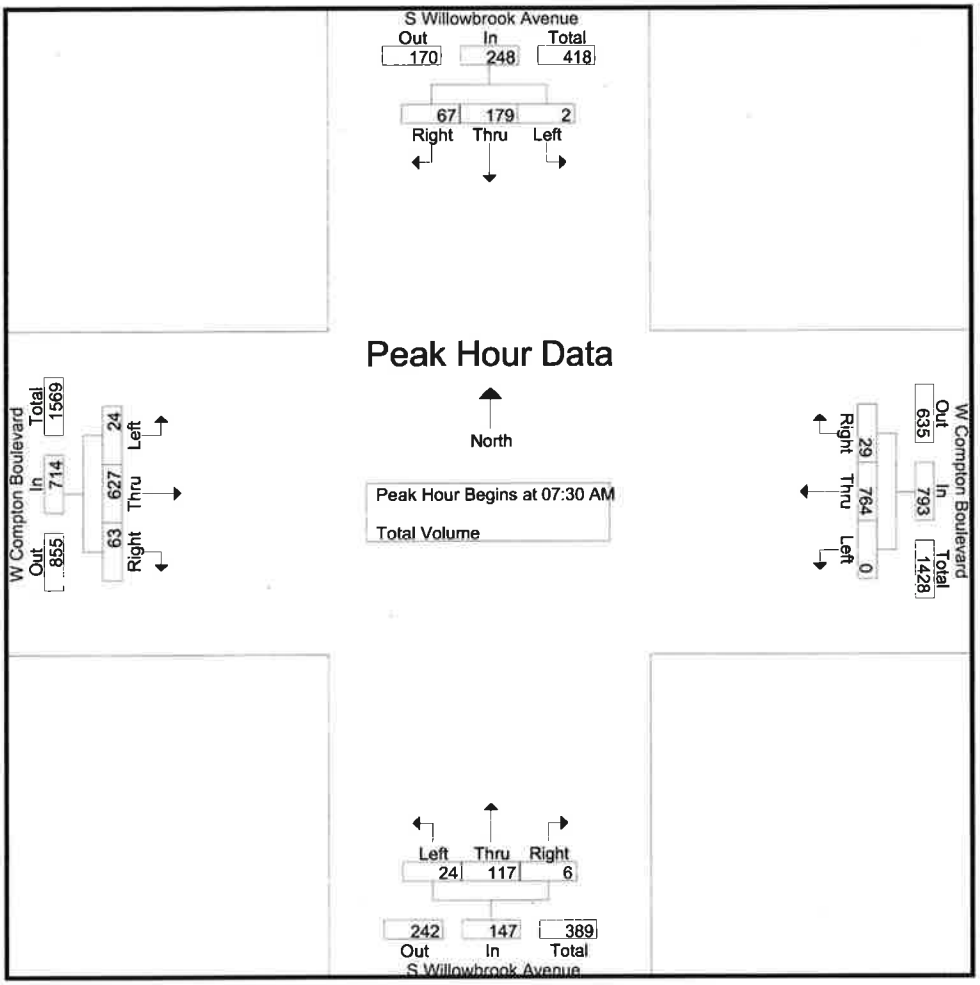

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	0	39	13	52	0	189	5	194	3	13	0	16	3	145	13	161
+15 mins.	**1**	**52**	15	68	0	189	5	194	3	**45**	1	**49**	**13**	153	**17**	183
+30 mins.	0	52	20	**72**	0	198	5	203	7	34	**4**	45	4	**171**	17	**192**
+45 mins.	1	45	**23**	69	0	**203**	**11**	**214**	**11**	25	1	37	4	158	16	178
Total Volume	2	188	71	261	0	779	26	805	24	117	6	147	24	627	63	714
% App. Total	0.8	72	27.2		0	96.8	3.2		16.3	79.6	4.1		3.4	87.8	8.8	
PHF	.500	.904	.772	.906	.000	.959	.591	.940	.545	.650	.375	.750	.462	.917	.926	.930

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File Name : CPTWB1COPM
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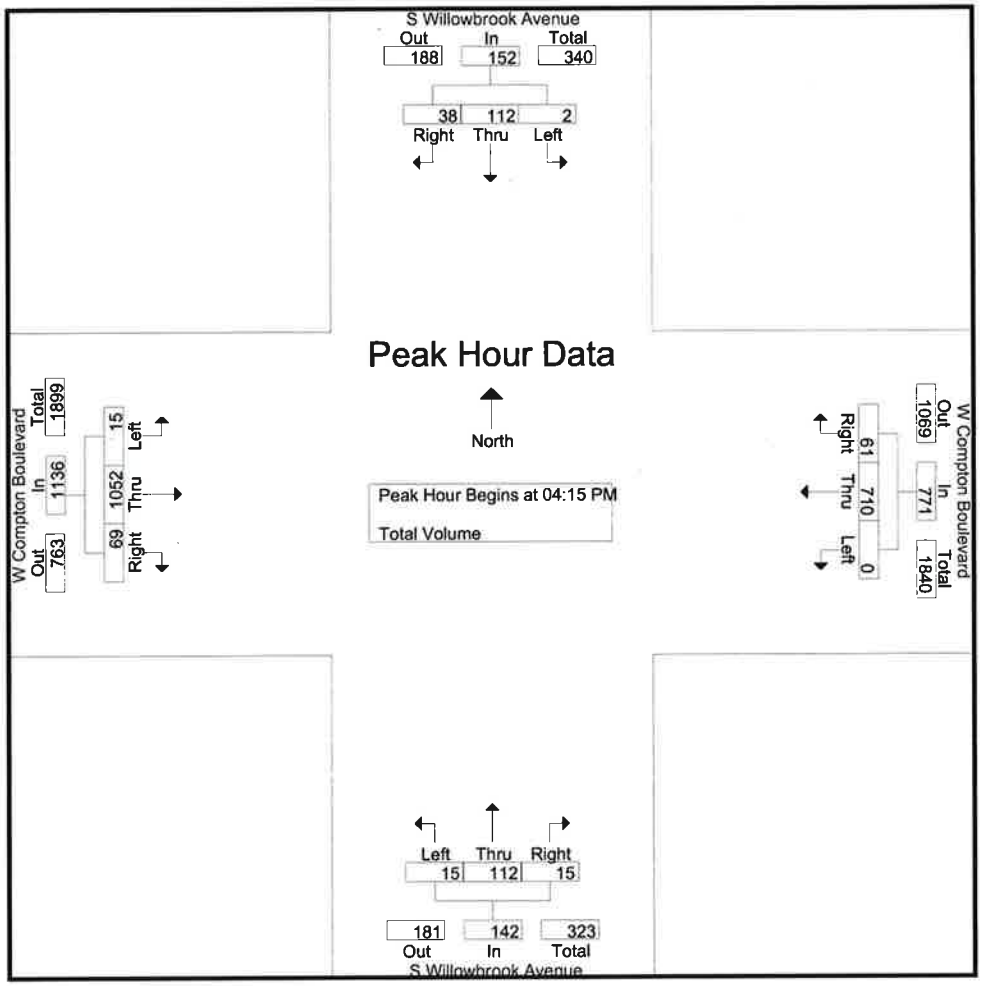

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				05:00 PM				04:15 PM			
+0 mins.	0	26	8	34	0	183	14	197	5	30	0	35	4	**283**	**22**	**309**
+15 mins.	0	27	**12**	39	0	183	16	199	6	29	2	37	2	250	19	271
+30 mins.	0	**38**	8	**46**	0	153	14	167	7	31	1	39	**5**	260	15	280
+45 mins.	**2**	24	8	34	0	**191**	**17**	**208**	**8**	**34**	**4**	**46**	4	259	13	276
Total Volume	2	115	36	153	0	710	61	771	26	124	7	157	15	1052	69	1136
% App. Total	1.3	75.2	23.5		0	92.1	7.9		16.6	79	4.5		1.3	92.6	6.1	
PHF	.250	.757	.750	.832	.000	.929	.897	.927	.813	.912	.438	.853	.750	.929	.784	.919

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City of Compton
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File Name : CPTCEALAM
Site Code : 12816682
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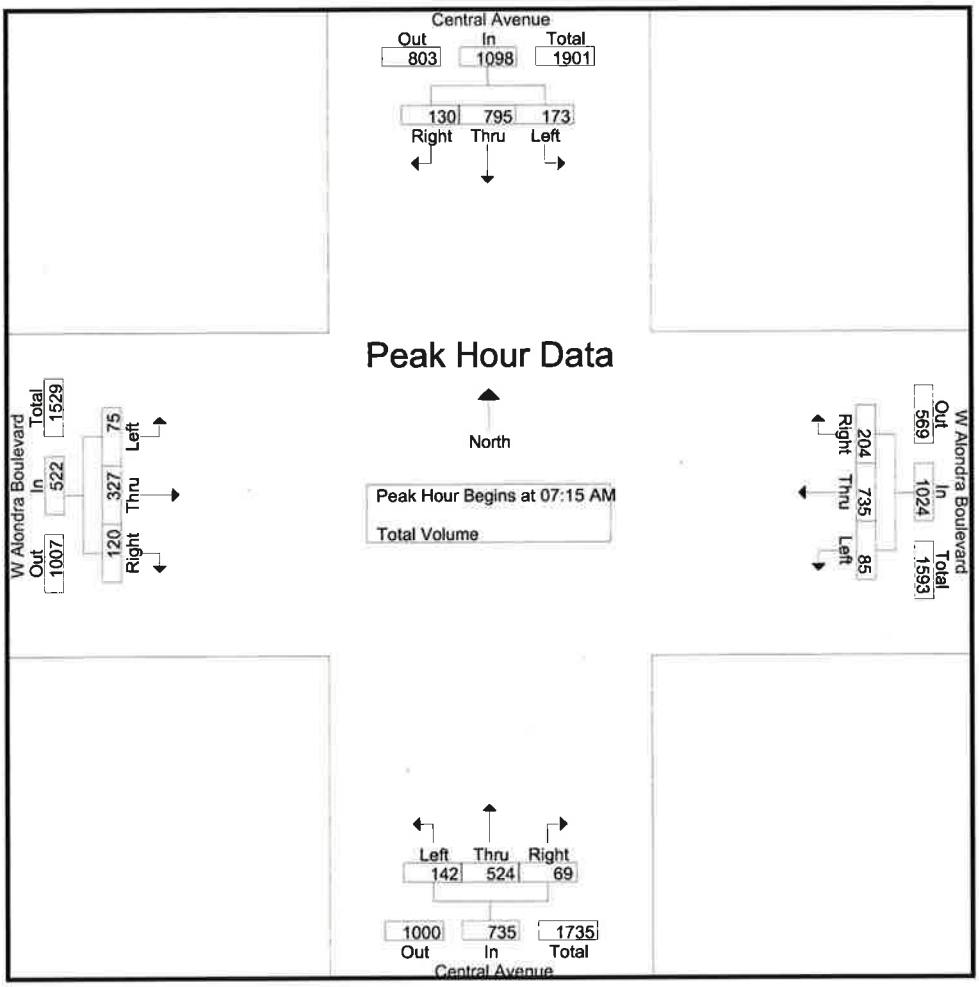

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	33	154	20	207	16	146	40	202	33	112	11	156	20	69	25	114
+15 mins.	46	187	38	271	19	**228**	51	**298**	**41**	131	**20**	192	19	94	**44**	**157**
+30 mins.	**52**	**275**	**39**	**366**	**26**	180	**61**	267	29	**151**	20	**200**	**21**	**96**	32	149
+45 mins.	42	179	33	254	24	181	52	257	39	130	18	187	18	85	31	134
Total Volume	173	795	130	1098	85	735	204	1024	142	524	69	735	78	344	132	554
% App. Total	15.8	72.4	11.8		8.3	71.8	19.9		19.3	71.3	9.4		14.1	62.1	23.8	
PHF	.832	.723	.833	.750	.817	.806	.836	.859	.866	.868	.863	.919	.929	.896	.750	.882

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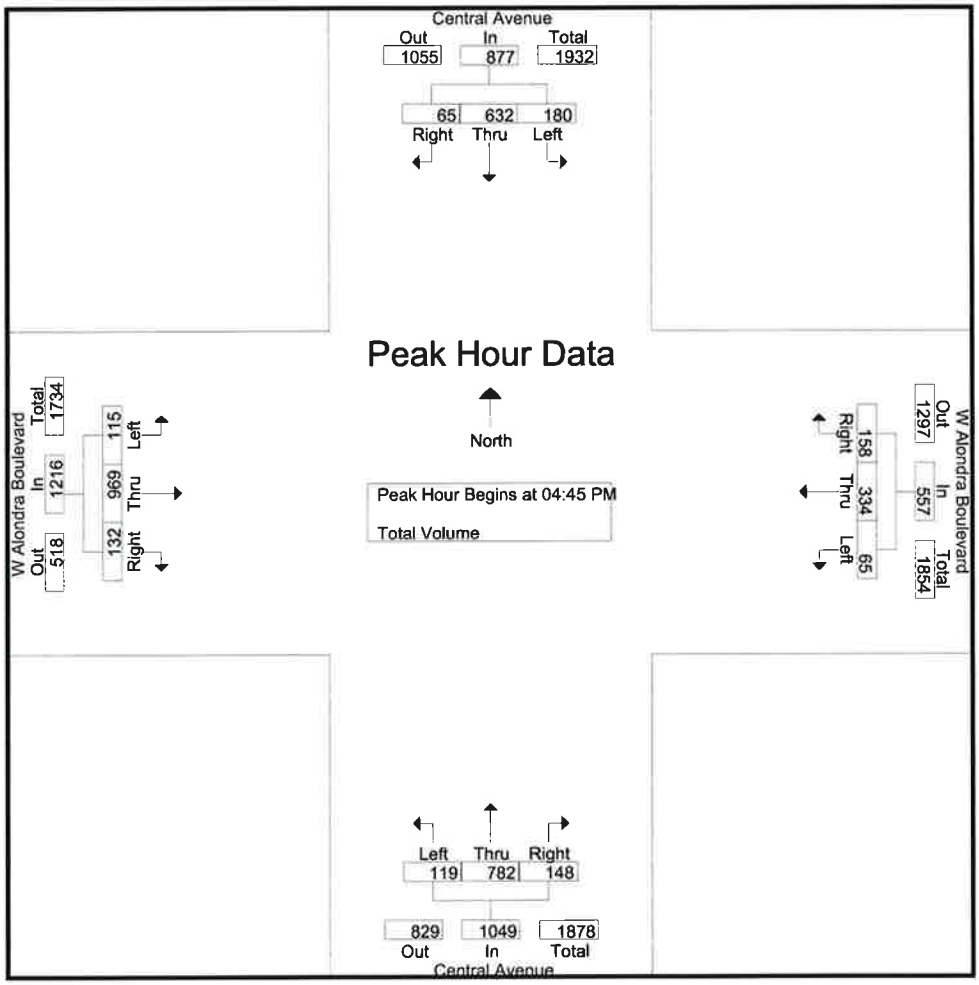

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	43	149	15	207	**17**	**96**	31	144	23	188	**47**	258	25	**265**	25	315
+15 mins.	48	**178**	13	**239**	16	91	40	**147**	32	**224**	32	**288**	26	222	28	276
+30 mins.	**50**	160	**18**	228	17	71	37	125	28	208	30	266	**34**	244	**48**	**326**
+45 mins.	41	163	18	222	15	76	**50**	141	**36**	162	39	237	30	238	31	299
Total Volume	182	650	64	896	65	334	158	557	119	782	148	1049	115	969	132	1216
% App. Total	20.3	72.5	7.1		11.7	60	28.4		11.3	74.5	14.1		9.5	79.7	10.9	
PHF	.910	.913	.889	.937	.956	.870	.790	.947	.826	.873	.787	.911	.846	.914	.688	.933

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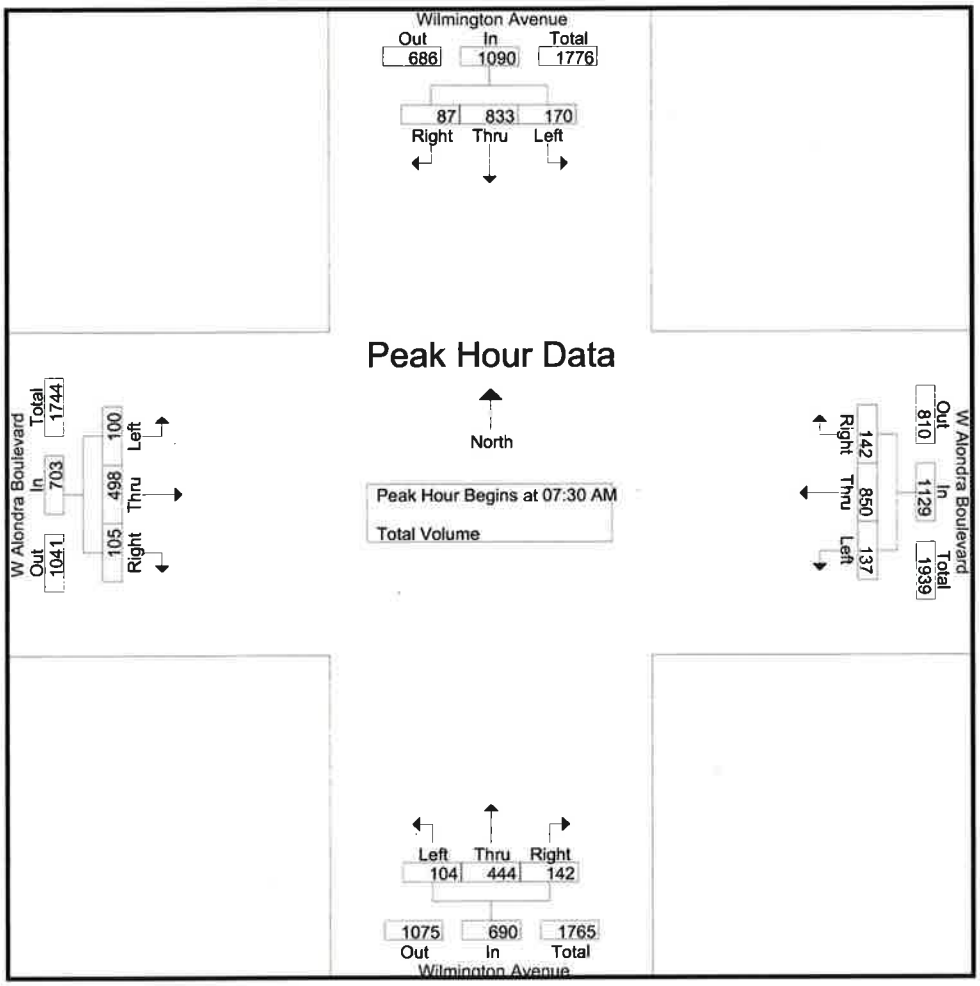

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	19	211	20	250	25	154	25	204	25	114	27	166	22	119	25	166
+15 mins.	29	216	23	268	31	**251**	31	313	20	93	32	145	22	**158**	**34**	**214**
+30 mins.	**54**	**260**	**26**	**340**	37	249	**48**	**334**	27	**128**	**42**	**197**	**33**	134	20	187
+45 mins.	52	196	25	273	**38**	214	43	295	**32**	109	41	182	23	87	26	136
Total Volume	154	883	94	1131	131	868	147	1146	104	444	142	690	100	498	105	703
% App. Total	13.6	78.1	8.3		11.4	75.7	12.8		15.1	64.3	20.6		14.2	70.8	14.9	
PHF	.713	.849	.904	.832	.862	.865	.766	.858	.813	.867	.845	.876	.758	.788	.772	.821

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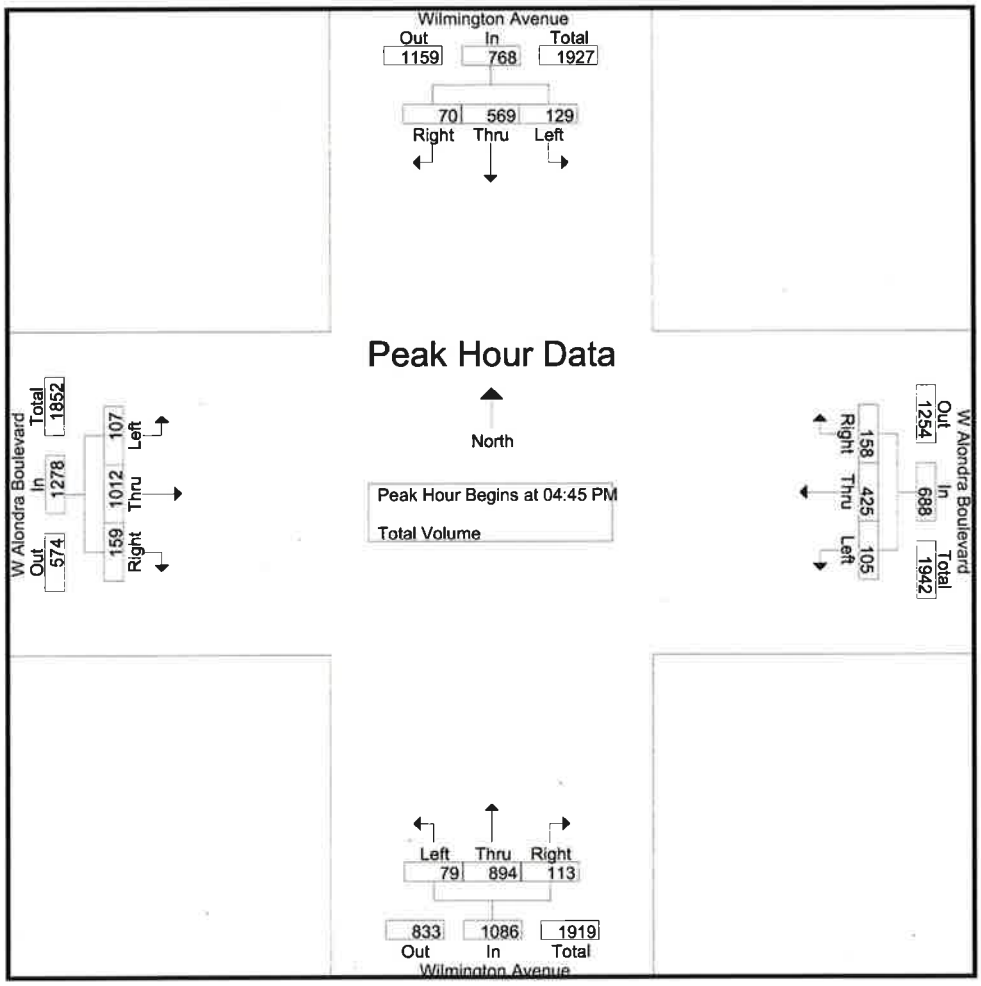

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:30 PM				04:45 PM			
+0 mins.	43	135	19	197	26	98	28	152	19	210	**37**	266	24	**281**	28	**333**
+15 mins.	**46**	141	18	**205**	**32**	112	41	185	17	231	26	274	**34**	239	40	313
+30 mins.	30	131	**22**	183	17	96	**51**	164	**29**	219	31	279	16	249	45	310
+45 mins.	33	**150**	20	203	30	**119**	38	**187**	14	**246**	25	**285**	33	243	**46**	322
Total Volume	152	557	79	788	105	425	158	688	79	906	119	1104	107	1012	159	1278
% App. Total	19.3	70.7	10		15.3	61.8	23		7.2	82.1	10.8		8.4	79.2	12.4	
PHF	.826	.928	.898	.961	.820	.893	.775	.920	.681	.921	.804	.968	.787	.900	.864	.959

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City of Compton
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File Name : CPTWIGRAM
Site Code : 12816682
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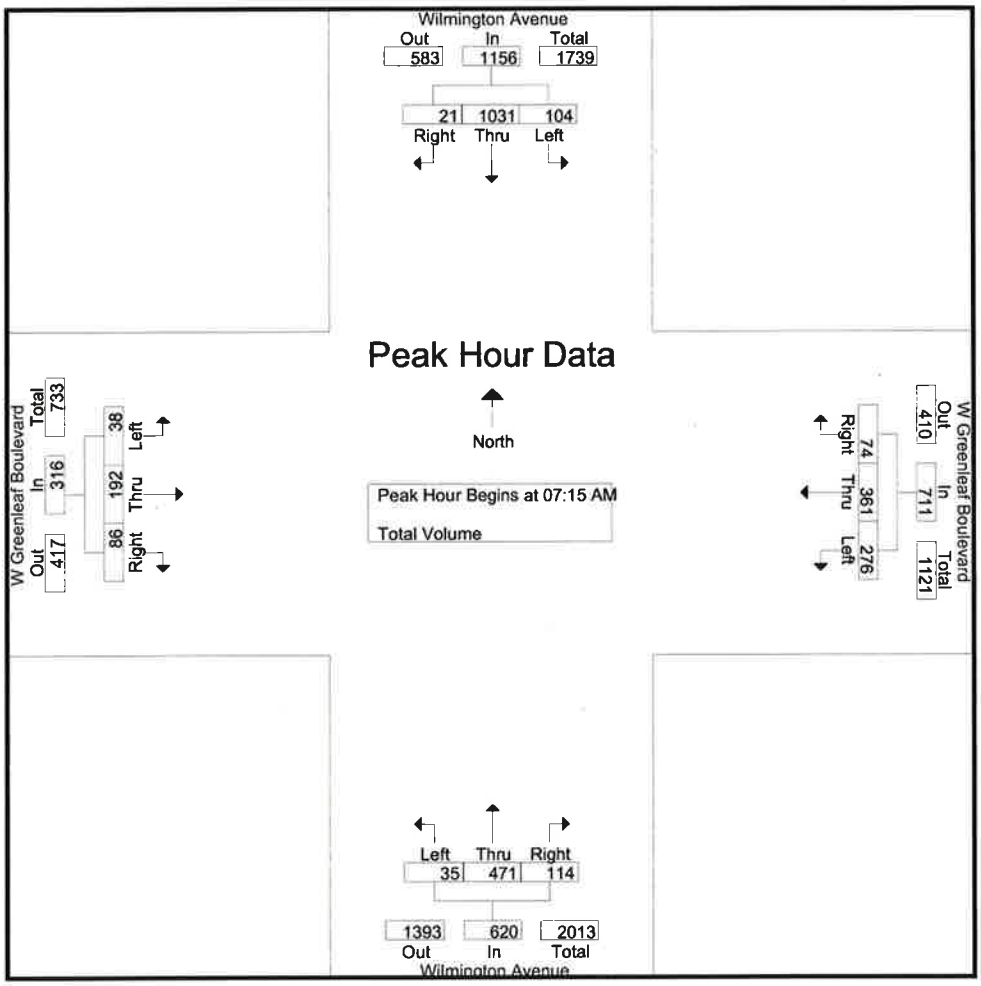

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	19	236	**7**	262	60	65	11	136	**17**	127	**34**	**178**	5	29	19	53
+15 mins.	18	287	6	311	70	103	17	190	8	115	29	152	9	45	26	80
+30 mins.	**35**	**302**	4	**341**	**78**	**109**	22	**209**	7	**128**	30	165	**16**	**64**	**27**	**107**
+45 mins.	32	206	4	242	68	84	**24**	176	8	124	28	160	8	54	14	76
Total Volume	104	1031	21	1156	276	361	74	711	40	494	121	655	38	192	86	316
% App. Total	9	89.2	1.8		38.8	50.8	10.4		6.1	75.4	18.5		12	60.8	27.2	
PHF	.743	.853	.750	.848	.885	.828	.771	.850	.588	.965	.890	.920	.594	.750	.796	.738

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City of Compton
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Weather: Clear

File Name : CPTWIGRPM
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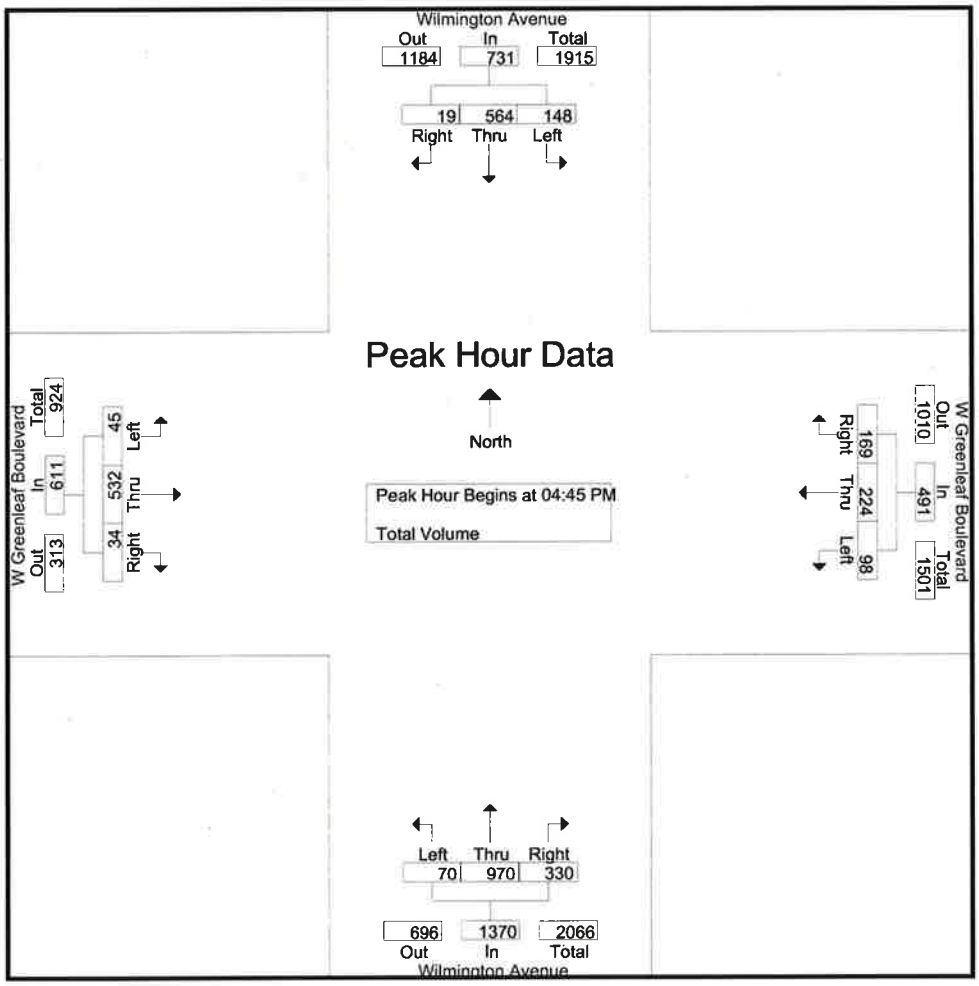

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	39	135	6	180	**31**	**60**	**43**	**134**	20	**263**	70	353	**13**	134	9	156
+15 mins.	33	141	**7**	181	20	51	42	113	19	248	**117**	**384**	11	**141**	7	**159**
+30 mins.	36	**146**	2	184	19	59	41	119	**21**	246	77	344	13	132	8	153
+45 mins.	**40**	142	4	**186**	28	54	43	125	10	213	66	289	10	132	**15**	157
Total Volume	148	564	19	731	98	224	169	491	70	970	330	1370	47	539	39	625
% App. Total	20.2	77.2	2.6		20	45.6	34.4		5.1	70.8	24.1		7.5	86.2	6.2	
PHF	.925	.966	.679	.983	.790	.933	.983	.916	.833	.922	.705	.892	.904	.956	.650	.983

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File Name : CPTWIWAAM
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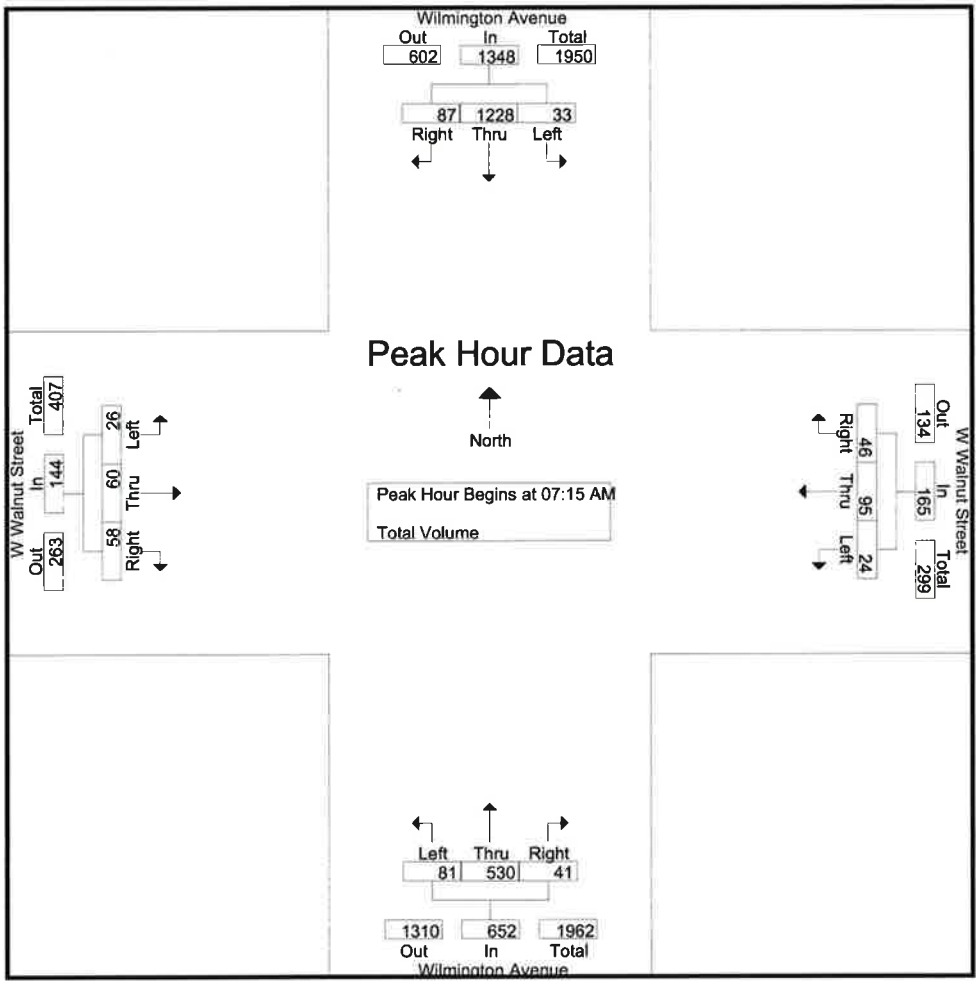

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	**10**	268	9	287	4	22	10	36	17	**156**	9	**182**	7	14	13	34
+15 mins.	5	**360**	18	**383**	**11**	17	13	41	**31**	131	**12**	174	**11**	**20**	**22**	**53**
+30 mins.	10	330	**41**	381	8	**38**	6	**52**	25	130	9	164	6	17	17	40
+45 mins.	8	270	19	297	1	18	**17**	36	17	141	8	166	8	15	19	42
Total Volume	33	1228	87	1348	24	95	46	165	90	558	38	686	32	66	71	169
% App. Total	2.4	91.1	6.5		14.5	57.6	27.9		13.1	81.3	5.5		18.9	39.1	42	
PHF	.825	.853	.530	.880	.545	.625	.676	.793	.726	.894	.792	.942	.727	.825	.807	.797

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City of Compton
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Weather: Clear

File Name : CPTWIWAPM
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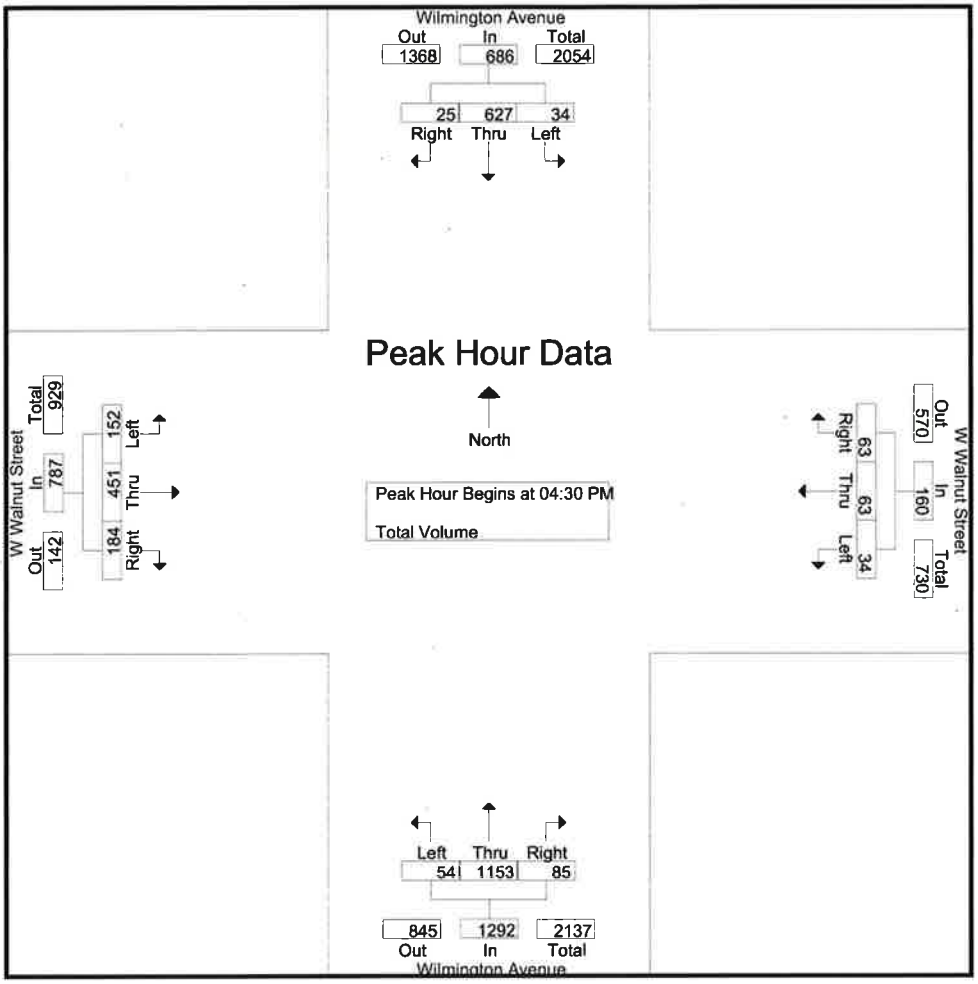

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	9	162	6	177	9	12	**24**	45	**15**	263	14	292	39	108	52	199
+15 mins.	6	**175**	4	**185**	6	14	6	26	13	288	21	322	25	117	34	176
+30 mins.	9	161	6	176	7	15	20	42	11	**319**	**28**	**358**	**53**	108	**57**	**218**
+45 mins.	**13**	159	**8**	180	**12**	**22**	13	**47**	15	283	22	320	35	**118**	41	194
Total Volume	37	657	24	718	34	63	63	160	54	1153	85	1292	152	451	184	787
% App. Total	5.2	91.5	3.3		21.2	39.4	39.4		4.2	89.2	6.6		19.3	57.3	23.4	
PHF	.712	.939	.750	.970	.708	.716	.656	.851	.900	.904	.759	.902	.717	.956	.807	.903

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File Name : CPTCEGRAM
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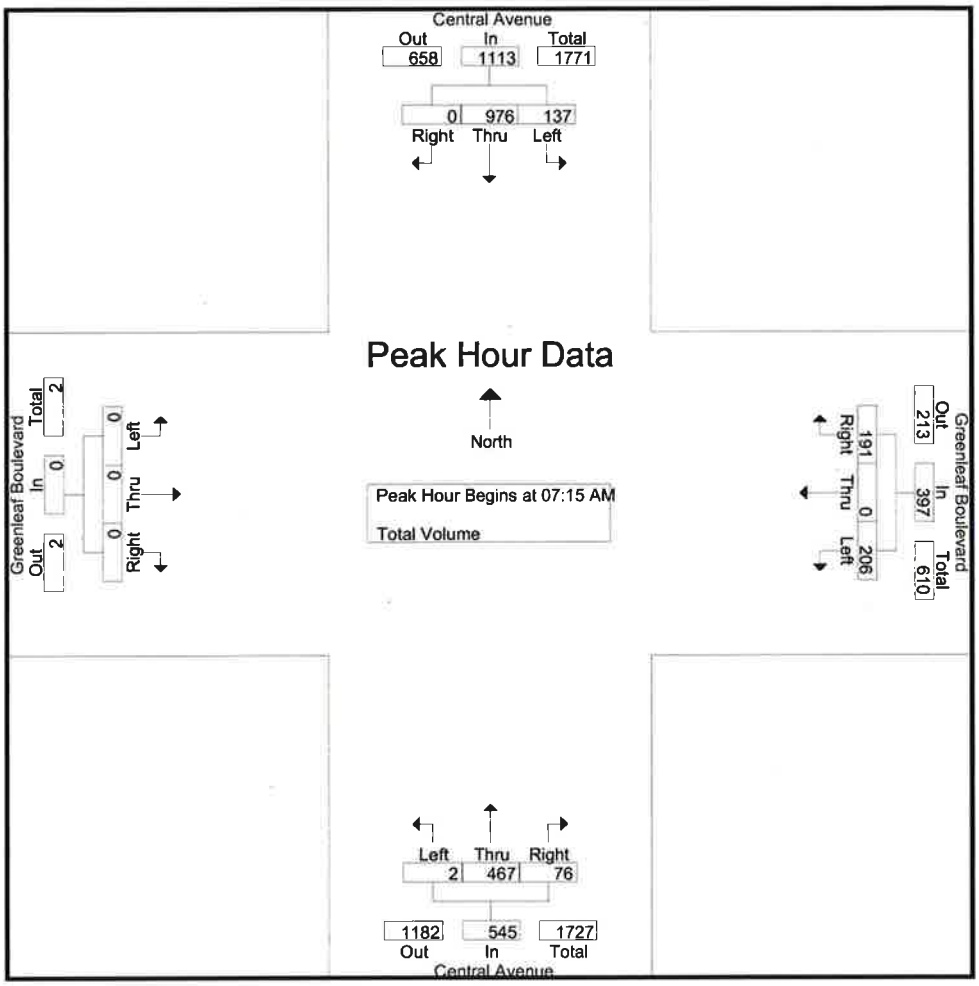


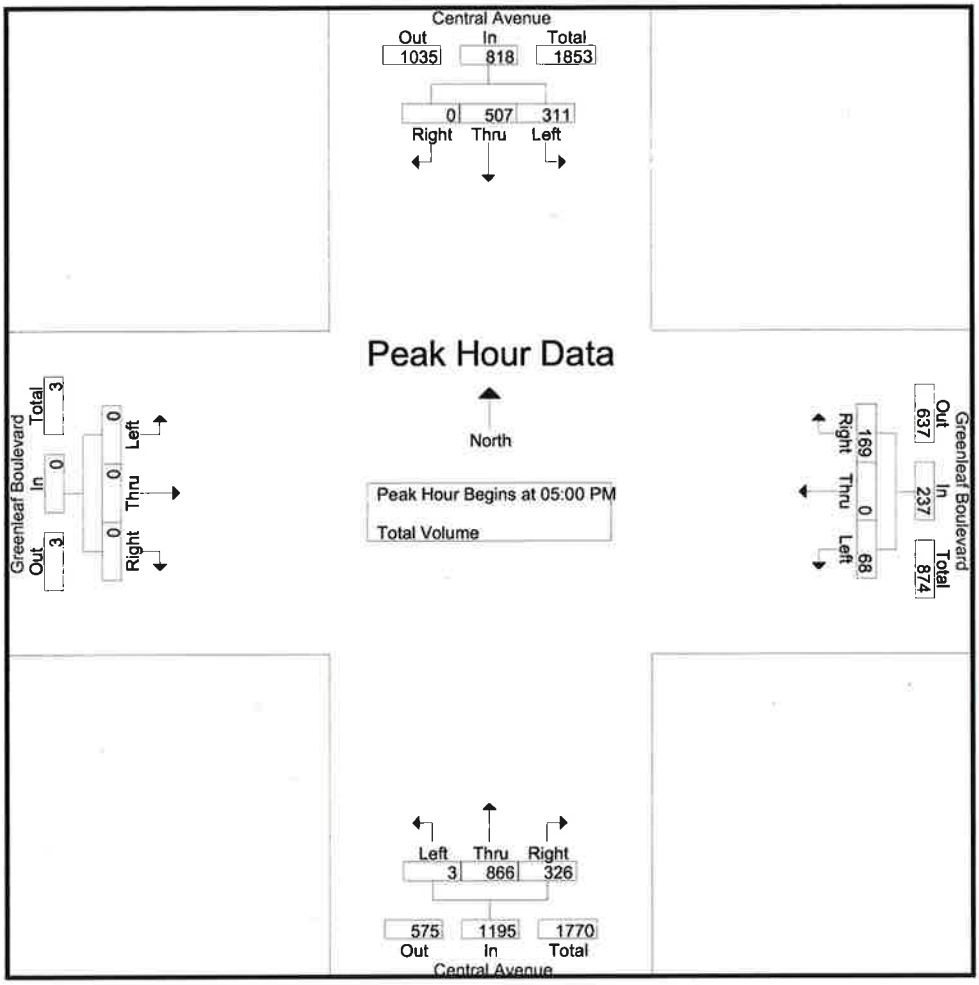
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:45 AM				07:00 AM			
+0 mins.	22	210	0	232	42	0	40	82	0	106	**30**	136	0	0	0	0
+15 mins.	27	237	0	264	**65**	0	50	**115**	2	125	13	140	0	0	0	0
+30 mins.	**47**	**306**	0	**353**	55	0	**53**	108	0	96	27	123	0	0	0	0
+45 mins.	41	223	0	264	44	0	48	92	**4**	**131**	19	**154**	0	0	0	0
Total Volume	137	976	0	1113	206	0	191	397	6	458	89	553	0	0	0	0
% App. Total	12.3	87.7	0		51.9	0	48.1		1.1	82.8	16.1		0	0	0	
PHF	.729	.797	.000	.788	.792	.000	.901	.863	.375	.874	.742	.898	.000	.000	.000	.000

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Compton
N/S: Central Avenue
E/W: Greenleaf Boulevard
Weather: Clear

File Name : CPTCEGRPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



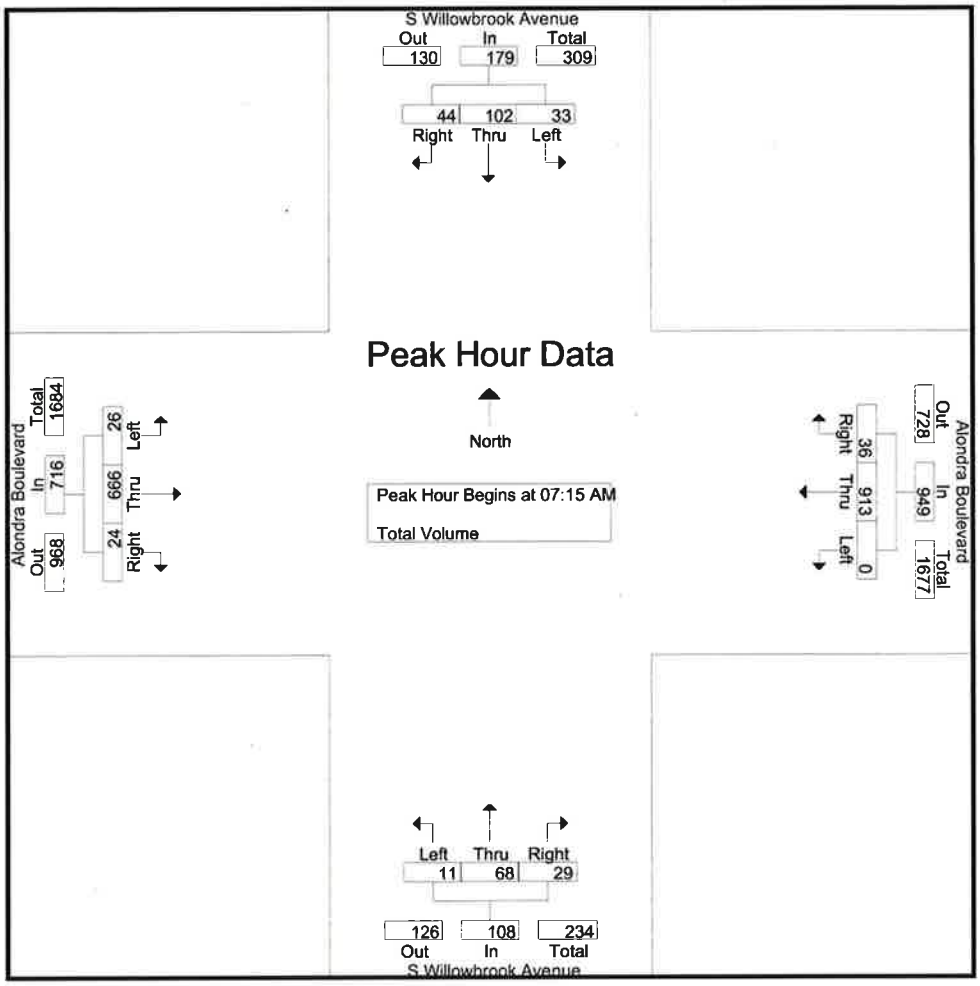
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				05:00 PM				04:00 PM			
+0 mins.	80	111	0	191	**29**	0	42	**71**	0	216	**94**	**310**	0	0	0	0
+15 mins.	**87**	128	0	**215**	21	0	44	65	**2**	**219**	76	297	0	0	0	0
+30 mins.	81	128	0	209	18	0	**48**	66	0	213	75	288	0	0	0	0
+45 mins.	63	**140**	0	203	22	0	44	66	1	218	81	300	0	0	0	0
Total Volume	311	507	0	818	90	0	178	268	3	866	326	1195	0	0	0	0
% App. Total	38	62	0		33.6	0	66.4		0.3	72.5	27.3		0	0	0	
PHF	.894	.905	.000	.951	.776	.000	.927	.944	.375	.989	.867	.964	.000	.000	.000	.000

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Compton
N/S: S Willowbrook Avenue
E/W: Alondra Boulevard
Weather: Clear

File Name : CPTWB1ALAM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



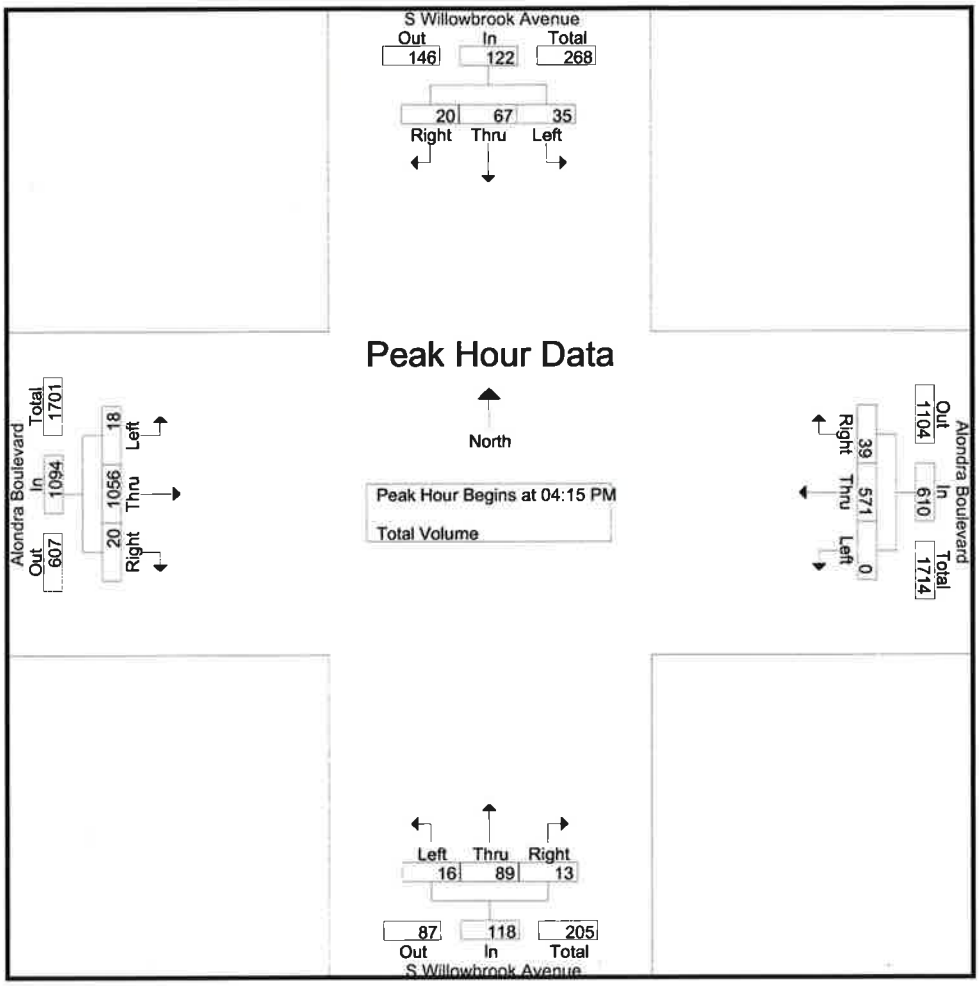
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	5	21	11	37	0	200	6	206	**4**	15	**9**	28	7	154	4	165
+15 mins.	**13**	26	4	43	0	242	7	249	2	19	8	29	8	**212**	7	**227**
+30 mins.	3	23	14	40	0	**279**	**12**	**291**	3	22	2	27	8	175	**9**	192
+45 mins.	12	**32**	**15**	**59**	0	192	11	203	3	**23**	4	**30**	**9**	134	4	147
Total Volume	33	102	44	179	0	913	36	949	12	79	23	114	32	675	24	731
% App. Total	18.4	57	24.6		0	96.2	3.8		10.5	69.3	20.2		4.4	92.3	3.3	
PHF	.635	.797	.733	.758	.000	.818	.750	.815	.750	.859	.639	.950	.889	.796	.667	.805

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Compton
N/S: S Willowbrook Avenue
E/W: Alondra Boulevard
Weather: Clear

File Name : CPTWB1ALPM
Site Code : 12816682
Start Date : 12/7/2016
Page No : 2



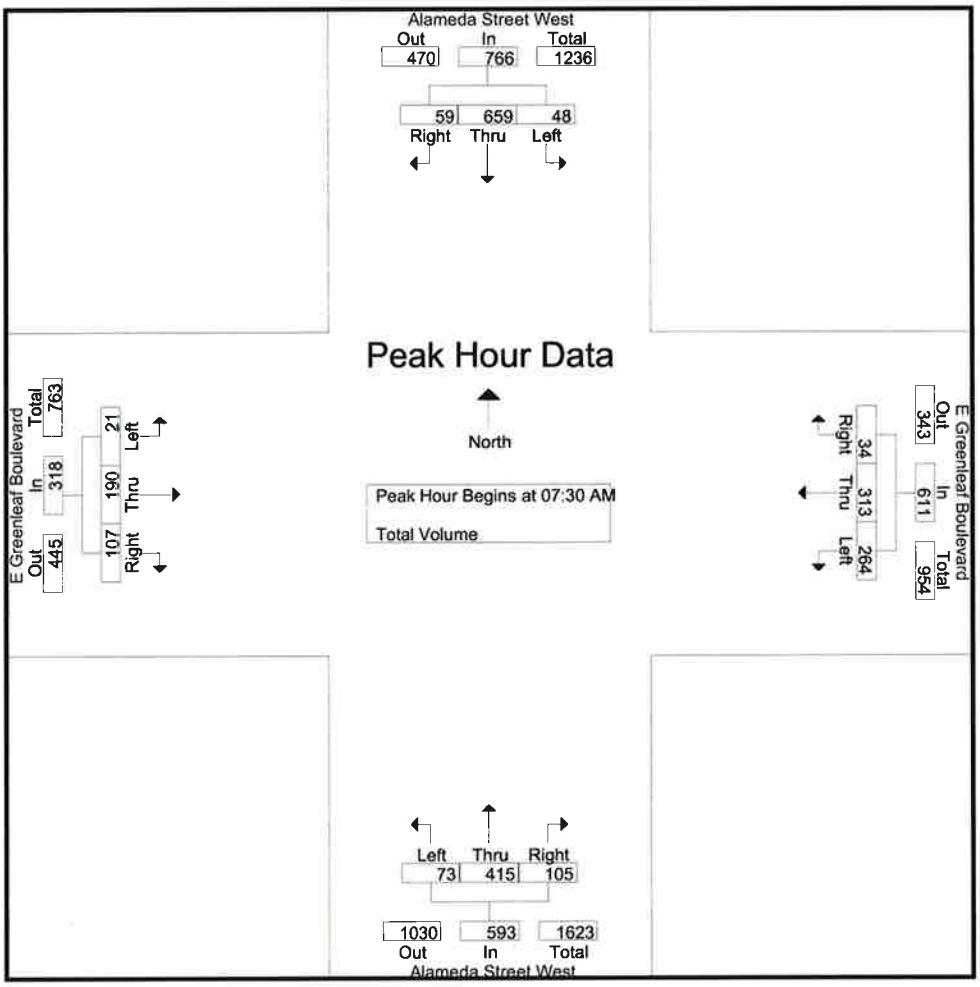
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				05:00 PM				04:45 PM			
+0 mins.	12	19	**9**	**40**	0	144	**17**	**161**	2	22	2	26	5	266	**6**	277
+15 mins.	11	20	3	34	0	146	10	156	3	15	3	21	6	287	4	297
+30 mins.	5	**25**	6	36	0	131	12	143	3	29	**6**	38	**9**	183	5	197
+45 mins.	**14**	10	5	29	0	**149**	11	160	**4**	**40**	3	**47**	1	**337**	3	**341**
Total Volume	42	74	23	139	0	570	50	620	12	106	14	132	21	1073	18	1112
% App. Total	30.2	53.2	16.5		0	91.9	8.1		9.1	80.3	10.6		1.9	96.5	1.6	
PHF	.750	.740	.639	.869	.000	.956	.735	.963	.750	.663	.583	.702	.583	.796	.750	.815

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Compton
N/S: Alameda Street West
E/W: E Greenleaf Boulevard
Weather: Clear

File Name : CPTWALGRAM
Site Code : 12817055
Start Date : 2/2/2017
Page No : 2



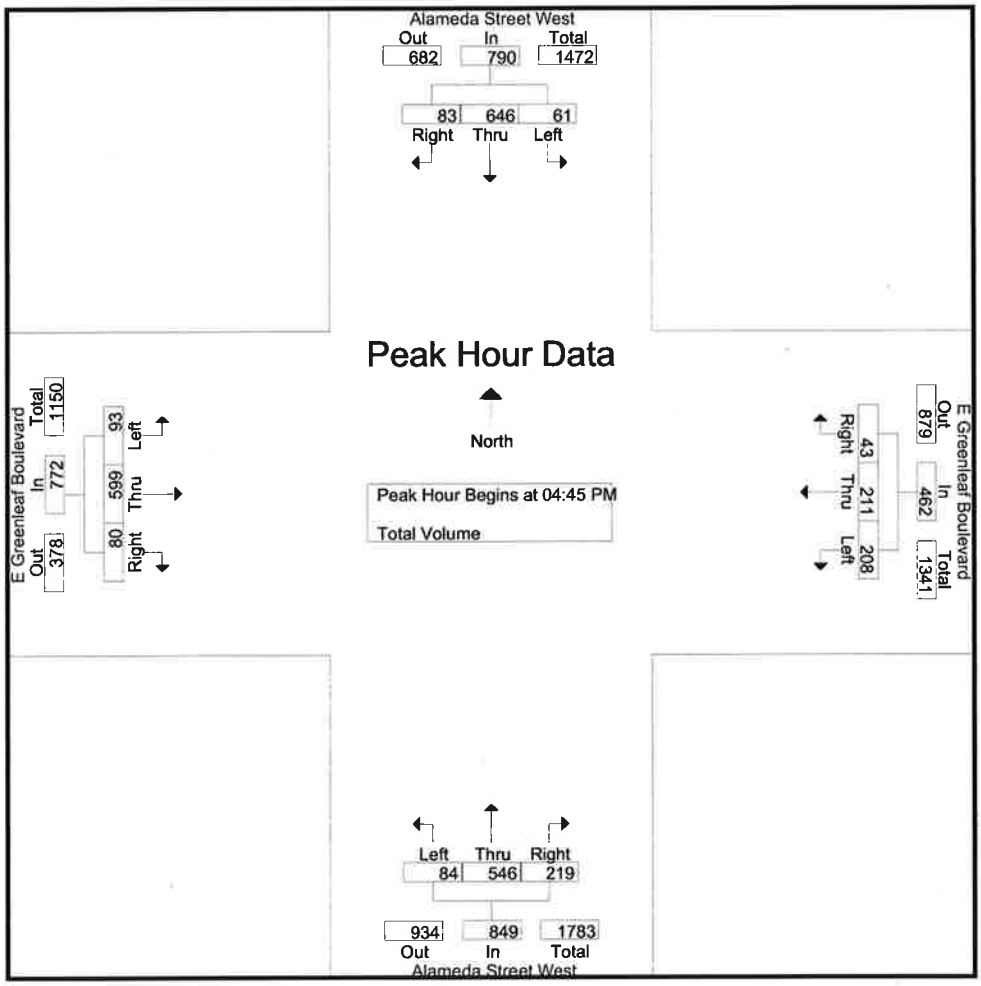
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:45 AM				07:15 AM			
+0 mins.	**18**	165	11	194	72	86	4	162	19	107	**33**	159	3	38	**36**	77
+15 mins.	15	**186**	**22**	**223**	**76**	**91**	10	**177**	12	104	19	135	**6**	46	28	80
+30 mins.	7	159	10	176	64	72	7	143	**27**	**115**	29	**171**	3	50	36	**89**
+45 mins.	8	149	16	173	52	64	**13**	129	19	99	19	137	6	**57**	25	88
Total Volume	48	659	59	766	264	313	34	611	77	425	100	602	18	191	125	334
% App. Total	6.3	86	7.7		43.2	51.2	5.6		12.8	70.6	16.6		5.4	57.2	37.4	
PHF	.667	.886	.670	.859	.868	.860	.654	.863	.713	.924	.758	.880	.750	.838	.868	.938

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Compton
N/S: Alameda Street West
E/W: E Greenleaf Boulevard
Weather: Clear

File Name : CPTWALGRPM
Site Code : 12817055
Start Date : 2/2/2017
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				05:00 PM				04:45 PM			
+0 mins.	19	158	**23**	200	56	43	**13**	112	21	122	63	206	24	145	**28**	197
+15 mins.	**20**	149	22	191	51	**56**	10	117	17	145	**68**	**230**	23	138	14	175
+30 mins.	9	165	19	193	**61**	56	13	**130**	**23**	**159**	45	227	**26**	**166**	19	**211**
+45 mins.	13	**174**	19	**206**	46	52	12	110	16	141	49	206	20	150	19	189
Total Volume	61	646	83	790	214	207	48	469	77	567	225	869	93	599	80	772
% App. Total	7.7	81.8	10.5		45.6	44.1	10.2		8.9	65.2	25.9		12	77.6	10.4	
PHF	.763	.928	.902	.959	.877	.924	.923	.902	.837	.892	.827	.945	.894	.902	.714	.915

Appendix D

Intersection Level of Service Analysis

Intersection LOS Analysis Sheets

County of Los Angeles
City of Compton
City of Lynwood

Intersections LOS Analysis Sheets

Existing Conditions

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Avalon Blvd & El Segundo

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	76	514	93	81	556	113	165	383	69	110	997	252
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	77	519	94	82	562	114	167	387	70	111	1007	255
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	519	94	82	562	114	167	387	70	111	1007	255
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	519	94	82	562	114	167	387	70	111	1007	255
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	519	94	82	562	114	167	387	70	111	1007	255
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.69	0.31	1.00	1.66	0.34	1.00	2.54	0.46	1.00	2.39	0.61
Final Sat.:	1600	2710	490	1600	2659	541	1600	4067	733	1600	3832	968
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.19	0.05	0.21	0.21	0.10	0.10	0.10	0.07	0.26	0.26
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #4 Avalon Blvd & Rosecrans Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.652	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	45	Level Of Service:	B	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	103	470	58	160	470	99	48	392	63	113	1049	159
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	104	475	59	162	475	100	48	396	64	114	1059	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	475	59	162	475	100	48	396	64	114	1059	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	475	59	162	475	100	48	396	64	114	1059	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	475	59	162	475	100	48	396	64	114	1059	161
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	1.00	1.65	0.35	1.00	2.58	0.42	1.00	2.61	0.39
Final Sat.:	1600	2848	352	1600	2643	557	1600	4135	665	1600	4168	632
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.10	0.18	0.18	0.03	0.10	0.10	0.07	0.25	0.25
Crit Moves:		****		****			****				****	

****

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.899
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	204	659	194	125	687	209	89	400	76	170	965	85
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	206	666	196	126	694	211	90	404	77	172	975	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	206	666	196	126	694	211	90	404	77	172	975	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	666	196	126	694	211	90	404	77	172	975	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	206	666	196	126	694	211	90	404	77	172	975	86
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	1.53	0.47	1.00	2.00	1.00	1.00	1.84	0.16
Final Sat.:	1600	2472	728	1600	2454	746	1600	3200	1600	1600	2941	259
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.27	0.08	0.28	0.28	0.06	0.13	0.05	0.11	0.33	0.33
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Central Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 2	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	135	571	71	95	644	207	121	346	125	117	979	153
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	136	577	72	96	650	209	122	349	126	118	989	155
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	577	72	96	650	209	122	349	126	118	989	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	577	72	96	650	209	122	349	126	118	989	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	577	72	96	650	209	122	349	126	118	989	155
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.20	0.80	1.00	1.73	0.27
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3526	1274	1600	2767	433
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.04	0.06	0.20	0.13	0.08	0.10	0.10	0.07	0.36	0.36
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Slater Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	42	41	66	46	37	45	43	757	35	44	730	18
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	42	41	67	46	37	45	43	765	35	44	737	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	41	67	46	37	45	43	765	35	44	737	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	41	67	46	37	45	43	765	35	44	737	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	41	67	46	37	45	43	765	35	44	737	18
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.28	0.44	0.36	0.29	0.35	1.00	1.91	0.09	1.00	1.95	0.05
Final Sat.:	451	440	709	575	463	563	1600	3059	141	1600	3123	77
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.09	0.03	0.08	0.08	0.03	0.25	0.25	0.03	0.24	0.24
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #17 Compton Ave & Imperial Hwy

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Cycle (sec):	100	Critical Vol./Cap.(X):	1.007
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	2 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	114	332	167	113	289	134	75	660	171	190	1489	161
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	115	335	169	114	292	135	76	667	173	192	1504	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	115	335	169	114	292	135	76	667	173	192	1504	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	335	169	114	292	135	76	667	173	192	1504	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	335	169	114	292	135	76	667	173	192	1504	163
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.68	0.32	1.00	2.38	0.62	1.00	1.80	0.20
Final Sat.:	1600	1600	1600	1600	1093	507	1600	3812	988	1600	2888	312
Capacity Analysis Module:												
Vol/Sat:	0.07	0.21	0.11	0.07	0.27	0.27	0.05	0.17	0.17	0.12	0.52	0.52
Crit Moves:	****				****		****				****	

****

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Compton Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.438
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	479	86	56	539	5	39	58	36	60	17	49
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	9	484	87	57	544	5	39	59	36	61	17	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	484	87	57	544	5	39	59	36	61	17	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	484	87	57	544	5	39	59	36	61	17	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	484	87	57	544	5	39	59	36	61	17	49
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	1.67	0.30	0.19	1.79	0.02	0.29	0.44	0.27	0.48	0.13	0.39
Final Sat.:	50	2670	479	299	2875	27	469	698	433	762	216	622
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.18	0.04	0.19	0.19	0.02	0.08	0.08	0.04	0.08	0.08
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Compton Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.574
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	106	296	85	129	308	115	122	465	88	88	460	160
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	107	299	86	130	311	116	123	470	89	89	465	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	299	86	130	311	116	123	470	89	89	465	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	299	86	130	311	116	123	470	89	89	465	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	107	299	86	130	311	116	123	470	89	89	465	162
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	1.46	0.54	1.00	1.68	0.32	1.00	1.48	0.52
Final Sat.:	1600	2486	714	1600	2330	870	1600	2691	509	1600	2374	826
Capacity Analysis Module:												
Vol/Sat:	0.07	0.12	0.12	0.08	0.13	0.13	0.08	0.17	0.17	0.06	0.20	0.20
Crit Moves:		****			****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Compton Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.378
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	360	25	59	426	7	5	12	3	36	40	108
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	1	364	25	60	430	7	5	12	3	36	40	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	364	25	60	430	7	5	12	3	36	40	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	364	25	60	430	7	5	12	3	36	40	109
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	364	25	60	430	7	5	12	3	36	40	109
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.86	0.13	0.24	1.73	0.03	0.25	0.60	0.15	0.19	0.22	0.59
Final Sat.:	8	2984	207	384	2771	46	400	960	240	313	348	939
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.04	0.16	0.16	0.00	0.01	0.01	0.02	0.12	0.12
Crit Moves:		****			****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Wilmington Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	175	422	51	31	835	143	142	23	218	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	177	426	52	31	843	144	143	23	220	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	177	426	52	31	843	144	143	23	220	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	177	426	52	31	843	144	143	23	220	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	177	426	52	31	843	144	143	23	220	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	1.00	1.71	0.29	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2855	345	1600	2732	468	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.15	0.15	0.02	0.31	0.31	0.09	0.01	0.14	0.00	0.00	0.00
Crit Moves:	****				****				****			

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Wilmington Ave & I-105 e/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.848
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 0	2	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	325	644	0	0	655	481	407	0	532	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	328	650	0	0	662	486	411	0	537	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	328	650	0	0	662	486	411	0	537	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	328	650	0	0	662	486	411	0	537	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	328	650	0	0	662	486	411	0	537	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.00	2.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	3200	3200	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.14	0.00	0.00	0.21	0.15	0.26	0.00	0.34	0.00	0.00	0.00
Crit Moves:	****				****				****			

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	2 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	129	843	60	92	939	164	59	18	80	20	39	56
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	130	851	61	93	948	166	60	18	81	20	39	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	851	61	93	948	166	60	18	81	20	39	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	851	61	93	948	166	60	18	81	20	39	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	851	61	93	948	166	60	18	81	20	39	57
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.80	0.20	2.00	1.70	0.30	0.38	0.11	0.51	0.34	0.66	1.00
Final Sat.:	1600	4481	319	2880	2724	476	601	183	815	542	1058	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.19	0.03	0.35	0.35	0.04	0.10	0.10	0.01	0.04	0.04
Crit Moves:	****				****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 Wilmington Ave & 120th St (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.840
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	0 1	0
Volume Module:												
Base Vol:	35	713	141	111	619	314	143	148	109	65	308	184
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	35	720	142	112	625	317	144	149	110	66	311	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	720	142	112	625	317	144	149	110	66	311	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	720	142	112	625	317	144	149	110	66	311	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	720	142	112	625	317	144	149	110	66	311	186
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.67	0.33	1.00	1.33	0.67	1.00	1.00	1.00	1.00	0.63	0.37
Final Sat.:	1600	2672	528	1600	2123	1077	1600	1600	1600	1600	1002	598
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.27	0.07	0.29	0.29	0.09	0.09	0.07	0.04	0.31	0.31
Crit Moves:		****		****			****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 Wilmington Ave & 120th St (East)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.424
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1! 0	0
Volume Module:												
Base Vol:	26	823	7	25	659	75	18	0	3	13	3	40
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	26	831	7	25	666	76	18	0	3	13	3	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	831	7	25	666	76	18	0	3	13	3	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	831	7	25	666	76	18	0	3	13	3	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	831	7	25	666	76	18	0	3	13	3	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.80	0.20	1.00	0.00	1.00	0.23	0.05	0.72
Final Sat.:	1600	3173	27	1600	2873	327	1600	0	1600	371	86	1143
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.02	0.23	0.23	0.01	0.00	0.00	0.01	0.04	0.04
Crit Moves:		****			****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #31 Wilmington Ave & 124th St

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.557
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	49	757	40	48	670	13	20	47	41	84	99	74
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	49	765	40	48	677	13	20	47	41	85	100	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	765	40	48	677	13	20	47	41	85	100	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	765	40	48	677	13	20	47	41	85	100	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	765	40	48	677	13	20	47	41	85	100	75
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.96	0.04	0.18	0.44	0.38	0.33	0.38	0.29
Final Sat.:	1600	3039	161	1600	3139	61	296	696	607	523	616	461
Capacity Analysis Module:												
Vol/Sat:	0.03	0.25	0.25	0.03	0.22	0.22	0.01	0.07	0.07	0.05	0.16	0.16
Crit Moves:		****		****			****				****	

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Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	173	744	54	123	640	135	92	393	258	56	557	89
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	175	751	55	124	646	136	93	397	261	57	563	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	175	751	55	124	646	136	93	397	261	57	563	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	751	55	124	646	136	93	397	261	57	563	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	175	751	55	124	646	136	93	397	261	57	563	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.65	0.35	1.00	1.21	0.79	1.00	1.72	0.28
Final Sat.:	1600	2983	217	1600	2643	557	1600	1932	1268	1600	2759	441
Capacity Analysis Module:												
Vol/Sat:	0.11	0.25	0.25	0.08	0.24	0.24	0.06	0.21	0.21	0.04	0.20	0.20
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 Willowbrook Ave W & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0 1	1 0	0	0	0 1 0	0	1 0	0 0
Volume Module:												
Base Vol:	164	0	24	0	12	41	0	228	58	11	334	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	166	0	24	0	12	41	0	230	59	11	337	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	166	0	24	0	12	41	0	230	59	11	337	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	0	24	0	12	41	0	230	59	11	337	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	166	0	24	0	12	41	0	230	59	11	337	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.80	0.20	0.03	0.97	0.00
Final Sat.:	1600	0	1600	0	1600	1600	0	1276	324	51	1549	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.02	0.00	0.01	0.03	0.00	0.18	0.18	0.01	0.22	0.00
Crit Moves:	****					****	****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 Willowbrook Ave E & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.375
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	91	43	37	3	44	66	38	112	97	23	172	4
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	92	43	37	3	44	67	38	113	98	23	174	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	43	37	3	44	67	38	113	98	23	174	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	43	37	3	44	67	38	113	98	23	174	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	43	37	3	44	67	38	113	98	23	174	4
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.53	0.25	0.22	0.03	0.39	0.58	1.00	0.54	0.46	1.00	0.98	0.02
Final Sat.:	851	402	346	42	623	935	1600	857	743	1600	1564	36
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.00	0.07	0.07	0.02	0.13	0.13	0.01	0.11	0.11
Crit Moves:	****				****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 1	0	0 1	0	0 1!	0 0	1	0 3	1 1	2	0 2	1 0
Volume Module:												
Base Vol:	534	11	136	7	34	67	50	1002	222	735	1333	13
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	539	11	137	7	34	68	51	1012	224	742	1346	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	539	11	137	7	34	68	51	1012	224	742	1346	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	539	11	137	7	34	68	51	1012	224	742	1346	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	539	11	137	7	34	68	51	1012	224	742	1346	13
OvlAdjVol:									0			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.96	0.04	1.00	0.06	0.31	0.63	1.00	4.00	1.00	2.00	2.97	0.03
Final Sat.:	2822	58	1600	104	504	993	1600	6400	1600	2880	4754	46
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.09	0.07	0.07	0.07	0.03	0.16	0.14	0.26	0.28	0.28
OvlAdjV/S:									0.00			
Crit Moves:	****			****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #37 Willowbrook Ave W & El Segundo Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0 1	0	1	0 0 1	0	1	0 2 0 1	0	0	2 0 1
Volume Module:												
Base Vol:	64	166	7	0	9	6	45	444	60	0	565	37
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	65	168	7	0	9	6	45	448	61	0	571	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	168	7	0	9	6	45	448	61	0	571	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	168	7	0	9	6	45	448	61	0	571	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	168	7	0	9	6	45	448	61	0	571	37
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	1.00	0.60	0.40	1.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1600	1535	65	1600	960	640	1600	3200	1600	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.00	0.01	0.01	0.03	0.14	0.04	0.00	0.18	0.02
Crit Moves:		****			****			****			****	

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Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #38 Willowbrook Ave E & El Segundo Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0 1	0	1	0	0 1	0	0 2	0 1	1	0 1
Volume Module:												
Base Vol:	42	96	38	75	166	43	0	432	19	43	532	65
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	42	97	38	76	168	43	0	436	19	43	537	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	97	38	76	168	43	0	436	19	43	537	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	97	38	76	168	43	0	436	19	43	537	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	97	38	76	168	43	0	436	19	43	537	66
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.72	0.28	1.00	0.79	0.21	0.00	2.00	1.00	1.00	1.78	0.22
Final Sat.:	1600	1146	454	1600	1271	329	0	3200	1600	1600	2852	348
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.08	0.05	0.13	0.13	0.00	0.14	0.01	0.03	0.19	0.19
Crit Moves:	****			****			****				****	

****

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #39 Mona Blvd & Imperial Hwy

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 1	0	1 0	2 1 0
Volume Module:												
Base Vol:	139	49	155	27	102	92	37	928	176	189	1782	21
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	140	49	157	27	103	93	37	937	178	191	1800	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	49	157	27	103	93	37	937	178	191	1800	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	49	157	27	103	93	37	937	178	191	1800	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	49	157	27	103	93	37	937	178	191	1800	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.74	0.26	1.00	0.12	0.46	0.42	1.00	2.52	0.48	1.00	2.97	0.03
Final Sat.:	1183	417	1600	195	738	666	1600	4035	765	1600	4744	56
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.10	0.02	0.14	0.14	0.02	0.23	0.23	0.12	0.38	0.38
Crit Moves:	****				****			****				****

****

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	85	41	41	191	210	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.956				0.943	
Flt Protected	0.968			0.991		
Satd. Flow (prot)	1724	0	0	3507	3337	0
Flt Permitted	0.968			0.991		
Satd. Flow (perm)	1724	0	0	3507	3337	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	266			283	255	
Travel Time (s)	6.0			6.4	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	45	45	208	228	139
Shared Lane Traffic (%)						
Lane Group Flow (vph)	137	0	0	253	367	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	85	41	41	191	210	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	45	45	208	228	139

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	491	184	367	0	-	0
Stage 1	298	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	507	827	1188	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	485	827	1188	-	-	-
Mov Cap-2 Maneuver	485	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	786	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.5	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1188	-	560	-	-
HCM Lane V/C Ratio	0.038	-	0.245	-	-
HCM Control Delay (s)	8.1	0.1	13.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1	-	-

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 Mona Blvd & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	39	109	71	89	130	48	55	497	33	48	538	41
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	39	110	72	90	131	48	56	502	33	48	543	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	110	72	90	131	48	56	502	33	48	543	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	110	72	90	131	48	56	502	33	48	543	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	110	72	90	131	48	56	502	33	48	543	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.50	0.32	0.41	0.59	1.00	1.00	1.88	0.12	1.00	1.86	0.14
Final Sat.:	285	796	519	650	950	1600	1600	3001	199	1600	2973	227
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.14	0.06	0.14	0.03	0.03	0.17	0.17	0.03	0.18	0.18
Crit Moves:		****		****			****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #43 Alameda St & 103rd St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	178	809	0	0	948	191	194	0	152	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	180	817	0	0	957	193	196	0	154	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	817	0	0	957	193	196	0	154	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	817	0	0	957	193	196	0	154	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	817	0	0	957	193	196	0	154	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.66	0.34	0.56	0.01	0.43	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2663	537	897	0	703	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.26	0.00	0.00	0.36	0.36	0.12	0.00	0.22	0.00	0.00	0.00
Crit Moves:	****				****				****			

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #45 Alameda St & Imperial Hwy

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	61	Level Of Service:	C	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 1	1 0		1 0 2	0 1		2 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	209	643	82	74	641	540	357	536	169	85	1226	36
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	211	649	83	75	647	545	361	541	171	86	1238	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	211	649	83	75	647	545	361	541	171	86	1238	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	211	649	83	75	647	545	361	541	171	86	1238	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	211	649	83	75	647	545	361	541	171	86	1238	36
OvlAdjVol:						345						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.77	0.23	1.00	2.00	1.00	2.00	2.28	0.72	1.00	3.00	1.00
Final Sat.:	2880	2838	362	1600	3200	1600	2880	3649	1151	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.23	0.05	0.20	0.34	0.13	0.15	0.15	0.05	0.26	0.02
OvlAdjV/S:						0.22						
Crit Moves:	****					****	****				****	

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Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.765
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	153	632	50	78	759	109	105	417	153	40	361	103
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	638	51	79	767	110	106	421	155	40	365	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	155	638	51	79	767	110	106	421	155	40	365	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	638	51	79	767	110	106	421	155	40	365	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	155	638	51	79	767	110	106	421	155	40	365	104
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.75	0.25	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2965	235	1600	2798	402	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.22	0.22	0.05	0.27	0.27	0.07	0.13	0.10	0.03	0.23	0.07
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #52 El Segundo Blvd & San Pedro St

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.589
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Permitted						Permitted						Permitted						Permitted					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Y+R:	4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0				4.0	4.0	4.0			
Lanes:	1	0	1	1	0		1	0	1	1	0		1	0	2	1	0		1	0	2	1	0	
Volume Module:																								
Base Vol:	77	232	34				95	245	153				96	518	41				49	1186	46			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	77	232	34				95	245	153				96	518	41				49	1186	46			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	77	232	34				95	245	153				96	518	41				49	1186	46			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	77	232	34				95	245	153				96	518	41				49	1186	46			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	77	232	34				95	245	153				96	518	41				49	1186	46			
Saturation Flow Module:																								
Sat/Lane:	1600	1600	1600				1600	1600	1600				1600	1600	1600				1600	1600	1600			
Adjustment:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	1.00	1.74	0.26				1.00	1.23	0.77				1.00	2.78	0.22				1.00	2.89	0.11			
Final Sat.:	1600	2791	409				1600	1970	1230				1600	4448	352				1600	4621	179			
Capacity Analysis Module:																								
Vol/Sat:	0.05	0.08	0.08				0.06	0.12	0.12				0.06	0.12	0.12				0.03	0.26	0.26			
Crit Moves:	****							****					****							****				

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Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Slater Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.687
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1	0 0	0 1	1	0 2	0 0	0	0 1	1 0
Volume Module:												
Base Vol:	0	0	0	34	0	177	62	869	0	0	1370	11
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	34	0	179	63	878	0	0	1384	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	34	0	179	63	878	0	0	1384	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	34	0	179	63	878	0	0	1384	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	34	0	179	63	878	0	0	1384	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.98	0.02
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	3175	25
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.11	0.04	0.27	0.00	0.00	0.44	0.44
Crit Moves:						****	****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #21 Compton Ave & El Segundo Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.804
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	172	102	27	136	69	276	148	594	93	12	927	111
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	174	103	27	137	70	279	149	600	94	12	936	112
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	174	103	27	137	70	279	149	600	94	12	936	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	103	27	137	70	279	149	600	94	12	936	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	103	27	137	70	279	149	600	94	12	936	112
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.58	0.42	1.00	1.00	1.00	1.00	1.73	0.27	1.00	1.79	0.21
Final Sat.:	1600	2530	670	1600	1600	1600	1600	2767	433	1600	2858	342
Capacity Analysis Module:												
Vol/Sat:	0.11	0.04	0.04	0.09	0.04	0.17	0.09	0.22	0.22	0.01	0.33	0.33
Crit Moves:	****					****	****				****	

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Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	95	614	119	138	813	189	99	462	103	124	900	98
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	96	620	120	139	821	191	100	467	104	125	909	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	620	120	139	821	191	100	467	104	125	909	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	620	120	139	821	191	100	467	104	125	909	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	620	120	139	821	191	100	467	104	125	909	99
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	1.62	0.38	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1600	2680	520	1600	2596	604	1600	3200	1600	1600	2886	314
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.09	0.32	0.32	0.06	0.15	0.07	0.08	0.31	0.31
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #42 Willowbrook Ave & Rosecrans Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.693	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	49	Level Of Service:	B	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	18	98	19	145	83	35	6	906	29	35	1157	148
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	18	99	19	146	84	35	6	915	29	35	1169	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	99	19	146	84	35	6	915	29	35	1169	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	99	19	146	84	35	6	915	29	35	1169	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	99	19	146	84	35	6	915	29	35	1169	149
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.73	0.14	0.55	0.32	0.13	1.00	1.94	0.06	1.00	1.77	0.23
Final Sat.:	213	1161	225	882	505	213	1600	3101	99	1600	2837	363
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.09	0.17	0.17	0.00	0.30	0.30	0.02	0.41	0.41
Crit Moves:	****				****			****				****

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Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #55 El Segundo Blvd & Santa Fe Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.592
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	143	356	27	16	451	64	62	115	163	46	114	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	356	27	16	451	64	62	115	163	46	114	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	356	27	16	451	64	62	115	163	46	114	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	356	27	16	451	64	62	115	163	46	114	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	356	27	16	451	64	62	115	163	46	114	33
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.75	0.25	0.18	0.34	0.48	0.24	0.59	0.17
Final Sat.:	1600	2974	226	1600	2802	398	292	541	767	381	945	274
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.12	0.01	0.16	0.16	0.04	0.21	0.21	0.03	0.12	0.12
Crit Moves:	****				****			****			****	

Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #56 Alameda St & Rosecrans Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.606	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	41	Level Of Service:	B	

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	118	606	0	0	883	115	104	0	193	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	606	0	0	883	115	104	0	193	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	118	606	0	0	883	115	104	0	193	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	606	0	0	883	115	104	0	193	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	118	606	0	0	883	115	104	0	193	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.77	0.23	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2831	369	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.19	0.00	0.00	0.31	0.31	0.07	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****			

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Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #57 Central Ave & W Compton Bvld

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.758
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 2	0 1	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	182	573	83	138	655	148	104	345	138	164	758	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	182	573	83	138	655	148	104	345	138	164	758	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	182	573	83	138	655	148	104	345	138	164	758	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	573	83	138	655	148	104	345	138	164	758	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	182	573	83	138	655	148	104	345	138	164	758	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.73	0.27
Final Sat.:	1600	2795	405	1600	3200	1600	1600	3200	1600	1600	2763	437
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.20	0.09	0.20	0.09	0.07	0.11	0.09	0.10	0.27	0.27
Crit Moves:	****				****			****				****

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Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #58 Wilmington Ave & W Compton Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.702
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	86	460	169	179	718	128	70	515	127	133	682	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	460	169	179	718	128	70	515	127	133	682	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	460	169	179	718	128	70	515	127	133	682	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	460	169	179	718	128	70	515	127	133	682	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	86	460	169	179	718	128	70	515	127	133	682	139
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.70	0.30	1.00	1.60	0.40	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2716	484	1600	2567	633	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.11	0.11	0.26	0.26	0.04	0.20	0.20	0.08	0.21	0.09
Crit Moves:	****				****			****			****	

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Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 Willowbrook Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	1	0	1	0	2	1 0
Volume Module:												
Base Vol:	24	117	6	0	179	67	24	627	63	0	764	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	117	6	0	179	67	24	627	63	0	764	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	117	6	0	179	67	24	627	63	0	764	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	117	6	0	179	67	24	627	63	0	764	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	117	6	0	179	67	24	627	63	0	764	29
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.16	0.80	0.04	0.00	0.73	0.27	1.00	2.73	0.27	0.00	1.93	0.07
Final Sat.:	261	1273	65	0	1164	436	1600	4362	438	0	3083	117
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.00	0.15	0.15	0.02	0.14	0.14	0.00	0.25	0.25
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #60 Central Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	142	524	69	173	795	130	75	327	120	85	735	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	142	524	69	173	795	130	75	327	120	85	735	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	142	524	69	173	795	130	75	327	120	85	735	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	524	69	173	795	130	75	327	120	85	735	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	142	524	69	173	795	130	75	327	120	85	735	204
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.77	0.23	1.00	1.72	0.28	1.00	1.46	0.54	1.00	2.00	1.00
Final Sat.:	1600	2828	372	1600	2750	450	1600	2341	859	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.19	0.19	0.11	0.29	0.29	0.05	0.14	0.14	0.05	0.23	0.13
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #61 Wilmington Ave & Alondra Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.825	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	73	Level Of Service:	D	

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	104	444	142	170	833	87	100	498	105	137	850	142
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	444	142	170	833	87	100	498	105	137	850	142
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	444	142	170	833	87	100	498	105	137	850	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	444	142	170	833	87	100	498	105	137	850	142
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	444	142	170	833	87	100	498	105	137	850	142
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	1.81	0.19	1.00	2.00	1.00	1.00	1.71	0.29
Final Sat.:	1600	2425	775	1600	2897	303	1600	3200	1600	1600	2742	458
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.18	0.11	0.29	0.29	0.06	0.16	0.07	0.09	0.31	0.31
Crit Moves:	****				****		****				****	

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Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #62 Wilmington Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	35	471	114	104	1031	21	38	192	86	276	361	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	471	114	104	1031	21	38	192	86	276	361	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	471	114	104	1031	21	38	192	86	276	361	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	471	114	104	1031	21	38	192	86	276	361	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	471	114	104	1031	21	38	192	86	276	361	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.96	0.04	1.00	0.69	0.31	1.00	0.83	0.17
Final Sat.:	1600	3200	1600	1600	3136	64	1600	1105	495	1600	1328	272
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.07	0.07	0.33	0.33	0.02	0.17	0.17	0.17	0.27	0.27
Crit Moves:	****				****			****		****		

Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #63 Wilmington Ave & Walnut St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	81	530	41	33	1228	87	26	60	58	24	95	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	81	530	41	33	1228	87	26	60	58	24	95	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	530	41	33	1228	87	26	60	58	24	95	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	530	41	33	1228	87	26	60	58	24	95	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	81	530	41	33	1228	87	26	60	58	24	95	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.35	0.65
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	2156	1044
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.03	0.02	0.38	0.05	0.02	0.04	0.04	0.02	0.04	0.04
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #64 Central Ave & Greenleaf Blvd

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Cycle (sec):	100					Critical Vol./Cap.(X):						0.534					
Loss Time (sec):	10					Average Delay (sec/veh):						xxxxxx					
Optimal Cycle:	48					Level Of Service:						A					

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	467	76	137	976	0	0	0	0	206	0	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	467	76	137	976	0	0	0	0	206	0	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	467	76	137	976	0	0	0	0	206	0	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	467	76	137	976	0	0	0	0	206	0	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	467	76	137	976	0	0	0	0	206	0	191
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.05	0.09	0.31	0.00	0.00	0.00	0.00	0.13	0.00	0.12
Crit Moves:					****					****		

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Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #65 Willowbrook Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 0	1	0 0	1 1	0
Volume Module:												
Base Vol:	11	68	29	33	102	44	26	666	24	0	913	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	68	29	33	102	44	26	666	24	0	913	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	68	29	33	102	44	26	666	24	0	913	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	68	29	33	102	44	26	666	24	0	913	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	68	29	33	102	44	26	666	24	0	913	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	0.63	0.27	0.18	0.57	0.25	1.00	2.00	1.00	0.00	1.92	0.08
Final Sat.:	163	1007	430	295	912	393	1600	3200	1600	0	3079	121
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.02	0.11	0.11	0.02	0.21	0.02	0.00	0.30	0.30
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #66 Alameda St. West & Greenleaf Blvd.

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	42	Level Of Service:	B	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	73	415	105	48	659	59	21	190	107	264	313	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	415	105	48	659	59	21	190	107	264	313	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	415	105	48	659	59	21	190	107	264	313	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	415	105	48	659	59	21	190	107	264	313	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	415	105	48	659	59	21	190	107	264	313	34
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.84	0.16	1.00	1.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	2554	646	1600	2937	263	1600	2047	1153	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.03	0.22	0.22	0.01	0.09	0.09	0.17	0.20	0.02
Crit Moves:	****				****			****			****	

****

Wilowbrook TOD Specific Plan
Run 3- Existing AM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #44 Alameda St & Abbott Rd

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.660
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	1 0	1 0	1	1 0	0 0	1!	0 0	1 1	0	0 1
Volume Module:												
Base Vol:	0	745	218	149	931	1	2	2	2	465	1	251
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	752	220	150	940	1	2	2	2	470	1	254
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	752	220	150	940	1	2	2	2	470	1	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	752	220	150	940	1	2	2	2	470	1	254
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	752	220	150	940	1	2	2	2	470	1	254
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.55	0.45	1.00	1.99	0.01	0.34	0.33	0.33	1.99	0.01	1.00
Final Sat.:	0	2476	724	1600	3197	3	533	533	533	3193	7	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.09	0.29	0.29	0.00	0.00	0.00	0.15	0.15	0.16
Crit Moves:		****		****				****				****

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Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #53 Imperial Hway & Fernwood Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	54	Level Of Service:	C	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	0	1	0 1
Volume Module:												
Base Vol:	60	40	3	159	45	17	23	665	45	2	1289	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	40	3	159	45	17	23	665	45	2	1289	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	40	3	159	45	17	23	665	45	2	1289	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	40	3	159	45	17	23	665	45	2	1289	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	40	3	159	45	17	23	665	45	2	1289	124
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.58	0.39	0.03	0.72	0.20	0.08	1.00	1.87	0.13	1.00	1.82	0.18
Final Sat.:	932	621	47	1151	326	123	1600	2997	203	1600	2919	281
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.10	0.14	0.14	0.01	0.22	0.22	0.00	0.44	0.44
Crit Moves:	****				****		****				****	

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Wilowbrook TOD Specific Plan
Existing AM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #54 Imperial Hwy & State St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.738
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	15	240	134	106	367	271	98	736	3	114	1141	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	240	134	106	367	271	98	736	3	114	1141	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	240	134	106	367	271	98	736	3	114	1141	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	240	134	106	367	271	98	736	3	114	1141	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	240	134	106	367	271	98	736	3	114	1141	37
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.28	0.72	1.00	1.15	0.85	1.00	1.99	0.01	1.00	1.94	0.06
Final Sat.:	1600	2053	1147	1600	1841	1359	1600	3187	13	1600	3099	101
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.12	0.07	0.20	0.20	0.06	0.23	0.23	0.07	0.37	0.37
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Avalon Blvd & El Segundo

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	121	704	170	148	531	93	134	1370	104	102	461	112
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	122	711	172	149	536	94	135	1384	105	103	466	113
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	711	172	149	536	94	135	1384	105	103	466	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	711	172	149	536	94	135	1384	105	103	466	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	711	172	149	536	94	135	1384	105	103	466	113
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	1.70	0.30	1.00	2.79	0.21	1.00	2.41	0.59
Final Sat.:	1600	2578	622	1600	2723	477	1600	4461	339	1600	3862	938
Capacity Analysis Module:												
Vol/Sat:	0.08	0.28	0.28	0.09	0.20	0.20	0.08	0.31	0.31	0.06	0.12	0.12
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Avalon Blvd & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.804
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	132	625	158	217	484	59	124	1148	112	86	469	119
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	133	631	160	219	489	60	125	1159	113	87	474	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	631	160	219	489	60	125	1159	113	87	474	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	631	160	219	489	60	125	1159	113	87	474	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	631	160	219	489	60	125	1159	113	87	474	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.78	0.22	1.00	2.73	0.27	1.00	2.39	0.61
Final Sat.:	1600	2554	646	1600	2852	348	1600	4373	427	1600	3829	971
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.25	0.14	0.17	0.17	0.08	0.27	0.27	0.05	0.12	0.12
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	114	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	82	634	213	178	655	153	195	1238	145	86	483	79
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	83	640	215	180	662	155	197	1250	146	87	488	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	640	215	180	662	155	197	1250	146	87	488	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	640	215	180	662	155	197	1250	146	87	488	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	640	215	180	662	155	197	1250	146	87	488	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.62	0.38	1.00	2.00	1.00	1.00	1.72	0.28
Final Sat.:	1600	2395	805	1600	2594	606	1600	3200	1600	1600	2750	450
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.11	0.26	0.26	0.12	0.39	0.09	0.05	0.18	0.18
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #11 Central Ave & Rosecrans Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	2	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	138	567	111	181	706	107	148	1164	177	109	466	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	139	573	112	183	713	108	149	1176	179	110	471	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	573	112	183	713	108	149	1176	179	110	471	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	573	112	183	713	108	149	1176	179	110	471	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	573	112	183	713	108	149	1176	179	110	471	115
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.60	0.40	1.00	1.61	0.39
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4166	634	1600	2571	629
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.07	0.11	0.22	0.07	0.09	0.28	0.28	0.07	0.18	0.18
Crit Moves:	****				****			****			****	

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Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Slater Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.367
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1	0	1	0 1 0
Volume Module:												
Base Vol:	15	7	31	12	6	16	9	397	21	23	680	19
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	15	7	31	12	6	16	9	401	21	23	687	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	7	31	12	6	16	9	401	21	23	687	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	7	31	12	6	16	9	401	21	23	687	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	7	31	12	6	16	9	401	21	23	687	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.13	0.59	0.35	0.18	0.47	1.00	1.90	0.10	1.00	1.95	0.05
Final Sat.:	453	211	936	565	282	753	1600	3039	161	1600	3113	87
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.01	0.02	0.02	0.01	0.13	0.13	0.01	0.22	0.22
Crit Moves:		****			****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Compton Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	0 1	1	0 0	1 0	1	0 2	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	98	304	167	214	257	101	78	1434	86	63	735	232
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	99	307	169	216	260	102	79	1448	87	64	742	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	307	169	216	260	102	79	1448	87	64	742	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	307	169	216	260	102	79	1448	87	64	742	234
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	307	169	216	260	102	79	1448	87	64	742	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.72	0.28	1.00	2.83	0.17	1.00	1.52	0.48
Final Sat.:	1600	1600	1600	1600	1149	451	1600	4528	272	1600	2432	768
Capacity Analysis Module:												
Vol/Sat:	0.06	0.19	0.11	0.14	0.23	0.23	0.05	0.32	0.32	0.04	0.31	0.31
Crit Moves:		****		****			****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Compton Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.367
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	1 0	0 1	0	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	7	477	49	44	311	7	9	13	7	44	14	46
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	7	482	49	44	314	7	9	13	7	44	14	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	482	49	44	314	7	9	13	7	44	14	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	482	49	44	314	7	9	13	7	44	14	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	482	49	44	314	7	9	13	7	44	14	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	1.79	0.18	0.24	1.72	0.04	0.31	0.45	0.24	0.42	0.13	0.45
Final Sat.:	42	2864	294	389	2749	62	497	717	386	677	215	708
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.03	0.11	0.11	0.01	0.02	0.02	0.03	0.07	0.07
Crit Moves:		****			****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Compton Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	65	241	70	78	281	69	45	273	89	136	416	111
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	66	243	71	79	284	70	45	276	90	137	420	112
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	66	243	71	79	284	70	45	276	90	137	420	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	243	71	79	284	70	45	276	90	137	420	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	243	71	79	284	70	45	276	90	137	420	112
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	1.61	0.39	1.00	1.51	0.49	1.00	1.58	0.42
Final Sat.:	1600	2480	720	1600	2569	631	1600	2413	787	1600	2526	674
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.10	0.05	0.11	0.11	0.03	0.11	0.11	0.09	0.17	0.17
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #20 Compton Ave & 124th St

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.287
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	349	25	46	302	4	1	4	3	17	3	42
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	352	25	46	305	4	1	4	3	17	3	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	352	25	46	305	4	1	4	3	17	3	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	352	25	46	305	4	1	4	3	17	3	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	352	25	46	305	4	1	4	3	17	3	42
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.87	0.13	0.26	1.72	0.02	0.12	0.50	0.38	0.27	0.05	0.68
Final Sat.:	0	2986	214	418	2745	36	200	800	600	439	77	1084
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.03	0.11	0.11	0.00	0.01	0.01	0.01	0.04	0.04
Crit Moves:		****			****			****			****	

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Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Wilmington Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.654
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	159	451	47	30	618	70	137	15	375	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	161	456	47	30	624	71	138	15	379	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	456	47	30	624	71	138	15	379	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	456	47	30	624	71	138	15	379	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	456	47	30	624	71	138	15	379	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.80	0.20	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2898	302	1600	2874	326	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.16	0.02	0.22	0.22	0.09	0.01	0.24	0.00	0.00	0.00
Crit Moves:	****				****				****			

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Wilmington Ave & I-105 e/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 0	2	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	326	902	0	0	529	421	328	0	179	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	329	911	0	0	534	425	331	0	181	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	329	911	0	0	534	425	331	0	181	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	329	911	0	0	534	425	331	0	181	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	329	911	0	0	534	425	331	0	181	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.00	2.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	3200	3200	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.19	0.00	0.00	0.17	0.13	0.21	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.527
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	2 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	28	992	84	132	547	32	108	50	50	37	44	137
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	28	1002	85	133	552	32	109	51	51	37	44	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	1002	85	133	552	32	109	51	51	37	44	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	1002	85	133	552	32	109	51	51	37	44	138
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	1002	85	133	552	32	109	51	51	37	44	138
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.77	0.23	2.00	1.89	0.11	0.52	0.24	0.24	0.46	0.54	1.00
Final Sat.:	1600	4425	375	2880	3023	177	831	385	385	731	869	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.23	0.05	0.18	0.18	0.07	0.13	0.13	0.02	0.05	0.09
Crit Moves:		****		****			****					****

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #29 Wilmington Ave & 120th St (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	0 1	0
Volume Module:												
Base Vol:	74	718	80	79	485	45	295	298	184	91	146	136
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	75	725	81	80	490	45	298	301	186	92	147	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	725	81	80	490	45	298	301	186	92	147	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	725	81	80	490	45	298	301	186	92	147	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	725	81	80	490	45	298	301	186	92	147	137
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.83	0.17	1.00	1.00	1.00	1.00	0.52	0.48
Final Sat.:	1600	2879	321	1600	2928	272	1600	1600	1600	1600	828	772
Capacity Analysis Module:												
Vol/Sat:	0.05	0.25	0.25	0.05	0.17	0.17	0.19	0.19	0.12	0.06	0.18	0.18
Crit Moves:		****		****			****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 Wilmington Ave & 120th St (East)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.426
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	8	807	17	35	707	16	53	2	14	2	0	15
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	8	815	17	35	714	16	54	2	14	2	0	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	815	17	35	714	16	54	2	14	2	0	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	815	17	35	714	16	54	2	14	2	0	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	8	815	17	35	714	16	54	2	14	2	0	15
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.96	0.04	0.96	0.04	1.00	0.12	0.00	0.88
Final Sat.:	1600	3134	66	1600	3129	71	1542	58	1600	188	0	1412
Capacity Analysis Module:												
Vol/Sat:	0.01	0.26	0.26	0.02	0.23	0.23	0.03	0.03	0.01	0.00	0.00	0.01
Crit Moves:		****		****			****					****

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Wilmington Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.485
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	21	757	46	64	615	18	13	43	20	35	47	49
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	21	765	46	65	621	18	13	43	20	35	47	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	765	46	65	621	18	13	43	20	35	47	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	765	46	65	621	18	13	43	20	35	47	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	765	46	65	621	18	13	43	20	35	47	49
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.94	0.06	0.17	0.57	0.26	0.27	0.36	0.37
Final Sat.:	1600	3017	183	1600	3109	91	274	905	421	427	574	598
Capacity Analysis Module:												
Vol/Sat:	0.01	0.25	0.25	0.04	0.20	0.20	0.01	0.05	0.05	0.02	0.08	0.08
Crit Moves:		****		****			****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #32 Wilmington Ave & El Segundo Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.793
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	144	579	83	101	480	86	182	927	326	44	296	68
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	145	585	84	102	485	87	184	936	329	44	299	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	145	585	84	102	485	87	184	936	329	44	299	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	585	84	102	485	87	184	936	329	44	299	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	585	84	102	485	87	184	936	329	44	299	69
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.70	0.30	1.00	1.48	0.52	1.00	1.63	0.37
Final Sat.:	1600	2799	401	1600	2714	486	1600	2367	833	1600	2602	598
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.06	0.18	0.18	0.11	0.40	0.40	0.03	0.11	0.11
Crit Moves:	****			****			****			****		

****

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #34 Willowbrook Ave W & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.436
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0 1	1 0	0	0 0	0 1 0	0	1 0	0 0
Volume Module:												
Base Vol:	50	0	17	0	28	56	0	323	93	11	163	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	51	0	17	0	28	57	0	326	94	11	165	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	0	17	0	28	57	0	326	94	11	165	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	0	17	0	28	57	0	326	94	11	165	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	0	17	0	28	57	0	326	94	11	165	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.78	0.22	0.06	0.94	0.00
Final Sat.:	1600	0	1600	0	1600	1600	0	1242	358	101	1499	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.01	0.00	0.02	0.04	0.00	0.26	0.26	0.01	0.11	0.00
Crit Moves:	****					****		****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #35 Willowbrook Ave E & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.359
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0	1	0	0 1 0
Volume Module:												
Base Vol:	50	14	27	7	12	42	70	201	90	9	85	5
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	51	14	27	7	12	42	71	203	91	9	86	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	14	27	7	12	42	71	203	91	9	86	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	14	27	7	12	42	71	203	91	9	86	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	14	27	7	12	42	71	203	91	9	86	5
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.55	0.15	0.30	0.11	0.20	0.69	1.00	0.69	0.31	1.00	0.94	0.06
Final Sat.:	879	246	475	184	315	1102	1600	1105	495	1600	1511	89
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.00	0.04	0.04	0.04	0.18	0.18	0.01	0.06	0.06
Crit Moves:	****				****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 1	0	0 1	0	0	1! 0	0	1 0	3 1	1	2 0	2 1 0
Volume Module:												
Base Vol:	544	8	271	9	22	25	47	1612	339	596	812	1
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	549	8	274	9	22	25	47	1628	342	602	820	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	549	8	274	9	22	25	47	1628	342	602	820	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	549	8	274	9	22	25	47	1628	342	602	820	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	549	8	274	9	22	25	47	1628	342	602	820	1
OvlAdjVol:									33			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	1.00	0.16	0.39	0.45	1.00	4.00	1.00	2.00	2.99	0.01
Final Sat.:	2838	42	1600	257	629	714	1600	6400	1600	2880	4794	6
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.17	0.04	0.04	0.04	0.03	0.25	0.21	0.21	0.17	0.17
OvlAdjV/S:									0.02			
Crit Moves:	****					****		****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #37 Willowbrook Ave W & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	2	0 1	0 0	2	0 1
Volume Module:												
Base Vol:	24	100	9	34	113	16	14	986	68	0	358	34
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	24	101	9	34	114	16	14	996	69	0	362	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	101	9	34	114	16	14	996	69	0	362	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	101	9	34	114	16	14	996	69	0	362	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	101	9	34	114	16	14	996	69	0	362	34
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.88	0.12	1.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1600	1468	132	1600	1402	198	1600	3200	1600	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.07	0.07	0.02	0.08	0.08	0.01	0.31	0.04	0.00	0.11	0.02
Crit Moves:	****				****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #38 Willowbrook Ave E & El Segundo Blvd

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.507
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	12	55	33	32	80	14	0	981	44	34	372	39
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	12	56	33	32	81	14	0	991	44	34	376	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	56	33	32	81	14	0	991	44	34	376	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	56	33	32	81	14	0	991	44	34	376	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	56	33	32	81	14	0	991	44	34	376	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.62	0.38	1.00	0.85	0.15	0.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1600	1000	600	1600	1362	238	0	3200	1600	1600	2896	304
Capacity Analysis Module:												
Vol/Sat:	0.01	0.06	0.06	0.02	0.06	0.06	0.00	0.31	0.03	0.02	0.13	0.13
Crit Moves:		****		****				****		****		

****

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #39 Mona Blvd & Imperial Hwy

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.825
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 1	0	1 0	2 1 0
Volume Module:												
Base Vol:	184	67	247	54	68	72	94	1615	240	152	1110	43
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	186	68	249	55	69	73	95	1631	242	154	1121	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	186	68	249	55	69	73	95	1631	242	154	1121	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	68	249	55	69	73	95	1631	242	154	1121	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	186	68	249	55	69	73	95	1631	242	154	1121	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.73	0.27	1.00	0.28	0.35	0.37	1.00	2.61	0.39	1.00	2.89	0.11
Final Sat.:	1173	427	1600	445	561	594	1600	4179	621	1600	4621	179
Capacity Analysis Module:												
Vol/Sat:	0.12	0.16	0.16	0.03	0.12	0.12	0.06	0.39	0.39	0.10	0.24	0.24
Crit Moves:	****				****			****			****	

****

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	142	74	27	210	314	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.954				0.974	
Flt Protected	0.968			0.994		
Satd. Flow (prot)	1720	0	0	3518	3447	0
Flt Permitted	0.968			0.994		
Satd. Flow (perm)	1720	0	0	3518	3447	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	266			283	255	
Travel Time (s)	6.0			6.4	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	154	80	29	228	341	70
Shared Lane Traffic (%)						
Lane Group Flow (vph)	234	0	0	257	411	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	142	74	27	210	314	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	154	80	29	228	341	70

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	549	205	411	0	-	0
Stage 1	376	-	-	-	-	-
Stage 2	173	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	466	802	1144	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	452	802	1144	-	-	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	816	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1144	-	531	-	-
HCM Lane V/C Ratio	0.026	-	0.442	-	-
HCM Control Delay (s)	8.2	0.1	17	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	2.2	-	-

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #41 Mona Blvd & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	0	1	0	1
Volume Module:												
Base Vol:	82	112	62	18	88	40	38	351	54	47	957	32
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	83	113	63	18	89	40	38	355	55	47	967	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	113	63	18	89	40	38	355	55	47	967	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	113	63	18	89	40	38	355	55	47	967	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	113	63	18	89	40	38	355	55	47	967	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.32	0.44	0.24	0.17	0.83	1.00	1.00	1.73	0.27	1.00	1.94	0.06
Final Sat.:	513	700	388	272	1328	1600	1600	2773	427	1600	3096	104
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.01	0.07	0.03	0.02	0.13	0.13	0.03	0.31	0.31
Crit Moves:		****		****			****				****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #43 Alameda St & 103rd St

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.852
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	Level Of Service:	D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	115	736	0	0	1222	235	190	0	158	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	116	743	0	0	1234	237	192	0	160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	116	743	0	0	1234	237	192	0	160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	743	0	0	1234	237	192	0	160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	116	743	0	0	1234	237	192	0	160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.68	0.32	0.55	0.00	0.45	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2684	516	874	0	726	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.00	0.00	0.46	0.46	0.12	0.00	0.22	0.00	0.00	0.00
Crit Moves:	****				****				****			

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Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #45 Alameda St & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.799
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 1	1 0	1	0 2	0 1	2	0 2	1 0	1	0 3	0 1
Volume Module:												
Base Vol:	214	682	138	101	693	449	409	1282	199	102	653	65
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	216	689	139	102	700	453	413	1295	201	103	660	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	216	689	139	102	700	453	413	1295	201	103	660	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	216	689	139	102	700	453	413	1295	201	103	660	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	216	689	139	102	700	453	413	1295	201	103	660	66
OvlAdjVol:						224						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.66	0.34	1.00	2.00	1.00	2.00	2.60	0.40	1.00	3.00	1.00
Final Sat.:	2880	2661	539	1600	3200	1600	2880	4155	645	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.06	0.22	0.28	0.14	0.31	0.31	0.06	0.14	0.04
OvlAdjV/S:						0.14						
Crit Moves:		****			****				****		****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	102	717	98	107	699	43	50	258	95	182	699	190
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	103	724	99	108	706	43	51	261	96	184	706	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	724	99	108	706	43	51	261	96	184	706	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	724	99	108	706	43	51	261	96	184	706	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	724	99	108	706	43	51	261	96	184	706	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.88	0.12	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2815	385	1600	3015	185	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.07	0.23	0.23	0.03	0.08	0.06	0.11	0.44	0.12
Crit Moves:		****		****			****				****	

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #52 El Segundo Blvd & San Pedro St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.601
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	101	322	51	86	228	85	146	1415	72	33	568	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	322	51	86	228	85	146	1415	72	33	568	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	322	51	86	228	85	146	1415	72	33	568	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	322	51	86	228	85	146	1415	72	33	568	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	101	322	51	86	228	85	146	1415	72	33	568	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	1.46	0.54	1.00	2.85	0.15	1.00	2.61	0.39
Final Sat.:	1600	2762	438	1600	2331	869	1600	4568	232	1600	4175	625
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.12	0.05	0.10	0.10	0.09	0.31	0.31	0.02	0.14	0.14
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Slater Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module:												
Base Vol:	0	0	0	10	0	48	46	1643	0	0	692	16
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	10	0	48	46	1659	0	0	699	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	48	46	1659	0	0	699	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	48	46	1659	0	0	699	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	48	46	1659	0	0	699	16
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.95	0.05
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	3128	72
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.03	0.03	0.52	0.00	0.00	0.22	0.22
Crit Moves:						****		****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #21 Compton Ave & El Segundo Blvd

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Cycle (sec):	100			Critical Vol./Cap.(X):			0.706					
Loss Time (sec):	10			Average Delay (sec/veh):			xxxxxx					
Optimal Cycle:	51			Level Of Service:			C					

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	67	31	16	111	64	152	235	1347	103	16	449	74
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	68	31	16	112	65	154	237	1360	104	16	453	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	31	16	112	65	154	237	1360	104	16	453	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	31	16	112	65	154	237	1360	104	16	453	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	31	16	112	65	154	237	1360	104	16	453	75
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.32	0.68	1.00	1.00	1.00	1.00	1.86	0.14	1.00	1.72	0.28
Final Sat.:	1600	2111	1089	1600	1600	1600	1600	2973	227	1600	2747	453
Capacity Analysis Module:												
Vol/Sat:	0.04	0.01	0.01	0.07	0.04	0.10	0.15	0.46	0.46	0.01	0.17	0.17
Crit Moves:	****					****		****		****		

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Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	153	674	153	147	475	135	114	1059	163	93	468	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	681	155	148	480	136	115	1070	165	94	473	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	155	681	155	148	480	136	115	1070	165	94	473	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	681	155	148	480	136	115	1070	165	94	473	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	155	681	155	148	480	136	115	1070	165	94	473	115
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.56	0.44	1.00	2.00	1.00	1.00	1.61	0.39
Final Sat.:	1600	2608	592	1600	2492	708	1600	3200	1600	1600	2573	627
Capacity Analysis Module:												
Vol/Sat:	0.10	0.26	0.26	0.09	0.19	0.19	0.07	0.33	0.10	0.06	0.18	0.18
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #42 Willowbrook Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	1	0	1 0
Volume Module:												
Base Vol:	30	107	16	132	79	27	15	1314	19	29	796	123
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	30	108	16	133	80	27	15	1327	19	29	804	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	108	16	133	80	27	15	1327	19	29	804	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	108	16	133	80	27	15	1327	19	29	804	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	108	16	133	80	27	15	1327	19	29	804	124
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.70	0.10	0.56	0.33	0.11	1.00	1.97	0.03	1.00	1.73	0.27
Final Sat.:	314	1119	167	887	531	182	1600	3154	46	1600	2772	428
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.08	0.15	0.15	0.01	0.42	0.42	0.02	0.29	0.29
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #55 El Segundo Blvd & Santa Fe Ave

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.700
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	151	513	69	39	368	68	96	270	213	12	68	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	513	69	39	368	68	96	270	213	12	68	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	513	69	39	368	68	96	270	213	12	68	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	513	69	39	368	68	96	270	213	12	68	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	513	69	39	368	68	96	270	213	12	68	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.69	0.31	0.16	0.47	0.37	0.11	0.64	0.25
Final Sat.:	1600	2821	379	1600	2701	499	265	746	589	181	1026	392
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.18	0.02	0.14	0.14	0.06	0.36	0.36	0.01	0.07	0.07
Crit Moves:	****				****			****			****	

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Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #56 Alameda St & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	136	771	0	0	868	77	111	0	198	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	771	0	0	868	77	111	0	198	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	771	0	0	868	77	111	0	198	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	771	0	0	868	77	111	0	198	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	771	0	0	868	77	111	0	198	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.84	0.16	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2939	261	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.24	0.00	0.00	0.30	0.30	0.07	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****			

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #57 Central Ave & W Compton Bvld

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	125	725	114	171	577	98	102	886	201	90	352	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	725	114	171	577	98	102	886	201	90	352	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	725	114	171	577	98	102	886	201	90	352	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	725	114	171	577	98	102	886	201	90	352	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	725	114	171	577	98	102	886	201	90	352	126
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.47	0.53
Final Sat.:	1600	2765	435	1600	3200	1600	1600	3200	1600	1600	2356	844
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.11	0.18	0.06	0.06	0.28	0.13	0.06	0.15	0.15
Crit Moves:		****		****				****		****		

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Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #58 Wilmington Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	106	793	155	150	544	82	132	898	109	140	451	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	793	155	150	544	82	132	898	109	140	451	172
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	793	155	150	544	82	132	898	109	140	451	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	793	155	150	544	82	132	898	109	140	451	172
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	793	155	150	544	82	132	898	109	140	451	172
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.74	0.26	1.00	1.78	0.22	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2781	419	1600	2854	346	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.25	0.10	0.09	0.20	0.20	0.08	0.31	0.31	0.09	0.14	0.11
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #59 Willowbrook Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	0	0 1	0	1 0	2 1 0	0 0	1	1 0
Volume Module:												
Base Vol:	15	112	15	0	112	38	15	1052	69	0	710	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	112	15	0	112	38	15	1052	69	0	710	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	112	15	0	112	38	15	1052	69	0	710	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	112	15	0	112	38	15	1052	69	0	710	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	112	15	0	112	38	15	1052	69	0	710	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	0.79	0.11	0.00	0.75	0.25	1.00	2.82	0.18	0.00	1.84	0.16
Final Sat.:	169	1262	169	0	1195	405	1600	4505	295	0	2947	253
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.00	0.09	0.09	0.01	0.23	0.23	0.00	0.24	0.24
Crit Moves:	****				****		****				****	

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #60 Central Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.888
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	94	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	119	782	148	180	632	65	115	969	132	65	334	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	782	148	180	632	65	115	969	132	65	334	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	782	148	180	632	65	115	969	132	65	334	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	782	148	180	632	65	115	969	132	65	334	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	782	148	180	632	65	115	969	132	65	334	158
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	1.81	0.19	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	1600	2691	509	1600	2902	298	1600	2816	384	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.29	0.29	0.11	0.22	0.22	0.07	0.34	0.34	0.04	0.10	0.10
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.877
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	79	894	113	129	569	70	107	1012	159	105	425	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	894	113	129	569	70	107	1012	159	105	425	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	894	113	129	569	70	107	1012	159	105	425	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	894	113	129	569	70	107	1012	159	105	425	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	894	113	129	569	70	107	1012	159	105	425	158
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	1.00	1.78	0.22	1.00	2.00	1.00	1.00	1.46	0.54
Final Sat.:	1600	2841	359	1600	2849	351	1600	3200	1600	1600	2333	867
Capacity Analysis Module:												
Vol/Sat:	0.05	0.31	0.31	0.08	0.20	0.20	0.07	0.32	0.10	0.07	0.18	0.18
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #62 Wilmington Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.911
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	106	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	70	970	330	148	564	19	45	532	34	98	224	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	970	330	148	564	19	45	532	34	98	224	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	970	330	148	564	19	45	532	34	98	224	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	970	330	148	564	19	45	532	34	98	224	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	970	330	148	564	19	45	532	34	98	224	169
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	0.94	0.06	1.00	0.57	0.43
Final Sat.:	1600	3200	1600	1600	3096	104	1600	1504	96	1600	912	688
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.21	0.09	0.18	0.18	0.03	0.35	0.35	0.06	0.25	0.25
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #63 Wilmington Ave & Walnut St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	54	1153	85	34	627	25	152	451	184	34	63	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	1153	85	34	627	25	152	451	184	34	63	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	1153	85	34	627	25	152	451	184	34	63	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	1153	85	34	627	25	152	451	184	34	63	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	1153	85	34	627	25	152	451	184	34	63	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.36	0.05	0.02	0.20	0.02	0.10	0.28	0.12	0.02	0.04	0.04
Crit Moves:		****		****				****		****		

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

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Intersection #64 Central Ave & Greenleaf Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.671	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	47	Level Of Service:	B	

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	866	326	311	507	0	0	0	0	68	0	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	866	326	311	507	0	0	0	0	68	0	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	866	326	311	507	0	0	0	0	68	0	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	866	326	311	507	0	0	0	0	68	0	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	866	326	311	507	0	0	0	0	68	0	169
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.20	0.19	0.16	0.00	0.00	0.00	0.00	0.04	0.00	0.11
Crit Moves:		****		****								****

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Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #65 Willowbrook Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.526
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 2	0	1	0 0 1
Volume Module:												
Base Vol:	16	89	13	35	67	20	18	1056	20	0	571	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	89	13	35	67	20	18	1056	20	0	571	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	89	13	35	67	20	18	1056	20	0	571	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	89	13	35	67	20	18	1056	20	0	571	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	89	13	35	67	20	18	1056	20	0	571	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.75	0.11	0.29	0.55	0.16	1.00	2.00	1.00	0.00	1.87	0.13
Final Sat.:	217	1207	176	459	879	262	1600	3200	1600	0	2995	205
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.02	0.08	0.08	0.01	0.33	0.01	0.00	0.19	0.19
Crit Moves:		****		****				****				

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #66 Alameda St. West & Greenleaf Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	84	546	219	61	646	83	93	599	80	208	211	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	546	219	61	646	83	93	599	80	208	211	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	546	219	61	646	83	93	599	80	208	211	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	546	219	61	646	83	93	599	80	208	211	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	546	219	61	646	83	93	599	80	208	211	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.43	0.57	1.00	1.77	0.23	1.00	1.76	0.24	1.00	1.00	1.00
Final Sat.:	1600	2284	916	1600	2836	364	1600	2823	377	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.04	0.23	0.23	0.06	0.21	0.21	0.13	0.13	0.03
Crit Moves:	****				****			****			****	

Wilowbrook TOD Specific Plan
Run 3- Existing PM - 9-29-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #44 Alameda St & Abbott Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 1	1 0	0	0 1!	0 0	1	1 0	0 1
Volume Module:												
Base Vol:	0	687	236	201	1116	0	6	24	2	229	1	136
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	694	238	203	1127	0	6	24	2	231	1	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	694	238	203	1127	0	6	24	2	231	1	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	694	238	203	1127	0	6	24	2	231	1	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	694	238	203	1127	0	6	24	2	231	1	137
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.49	0.51	1.00	2.00	0.00	0.19	0.75	0.06	1.99	0.01	1.00
Final Sat.:	0	2382	818	1600	3200	0	300	1200	100	3186	14	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.13	0.35	0.00	0.02	0.02	0.02	0.07	0.07	0.09
Crit Moves:		****		****				****				****

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #53 Imperial Hway & Fernwood Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	1	0	1 0
Volume Module:												
Base Vol:	95	70	7	104	90	9	44	1264	221	7	789	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	70	7	104	90	9	44	1264	221	7	789	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	70	7	104	90	9	44	1264	221	7	789	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	70	7	104	90	9	44	1264	221	7	789	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	70	7	104	90	9	44	1264	221	7	789	143
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.55	0.41	0.04	0.52	0.44	0.04	1.00	1.70	0.30	1.00	1.69	0.31
Final Sat.:	884	651	65	820	709	71	1600	2724	476	1600	2709	491
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.07	0.13	0.13	0.03	0.46	0.46	0.00	0.29	0.29
Crit Moves:	****				****			****			****	

****

Wilowbrook TOD Specific Plan
Existing PM - 2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #54 Imperial Hwy & State St

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	51	454	123	72	326	124	339	1047	30	116	718	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	454	123	72	326	124	339	1047	30	116	718	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	454	123	72	326	124	339	1047	30	116	718	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	454	123	72	326	124	339	1047	30	116	718	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	454	123	72	326	124	339	1047	30	116	718	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	1.00	1.45	0.55	1.00	1.94	0.06	1.00	1.81	0.19
Final Sat.:	1600	2518	682	1600	2318	882	1600	3111	89	1600	2894	306
Capacity Analysis Module:												
Vol/Sat:	0.03	0.18	0.18	0.05	0.14	0.14	0.21	0.34	0.34	0.07	0.25	0.25
Crit Moves:		****		****			****				****	

****

Intersections LOS Analysis Sheets

Existing + Project Conditions

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Avalon Blvd & El Segundo

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	76	514	93	81	556	113	165	383	69	110	997	252
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	77	519	94	82	562	114	167	387	70	111	1007	255
Added Vol:	0	9	18	0	6	0	0	48	0	11	33	0
PasserByVol:	0	13	0	0	5	0	0	32	0	0	13	0
Initial Fut:	77	541	112	82	573	114	167	467	70	122	1053	255
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	541	112	82	573	114	167	467	70	122	1053	255
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	541	112	82	573	114	167	467	70	122	1053	255
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	541	112	82	573	114	167	467	70	122	1053	255
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.66	0.34	1.00	1.67	0.33	1.00	2.61	0.39	1.00	2.42	0.58
Final Sat.:	1600	2652	548	1600	2668	532	1600	4177	623	1600	3866	934
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.20	0.05	0.21	0.21	0.10	0.11	0.11	0.08	0.27	0.27
Crit Moves:	****			****			****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Avalon Blvd & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.667
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	103	470	58	160	470	99	48	392	63	113	1049	159
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	104	475	59	162	475	100	48	396	64	114	1059	161
Added Vol:	0	22	0	0	15	2	4	18	0	0	13	0
PasserByVol:	0	8	0	0	4	0	0	8	0	0	3	0
Initial Fut:	104	505	59	162	494	102	52	422	64	114	1075	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	505	59	162	494	102	52	422	64	114	1075	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	505	59	162	494	102	52	422	64	114	1075	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	505	59	162	494	102	52	422	64	114	1075	161
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.79	0.21	1.00	1.66	0.34	1.00	2.61	0.39	1.00	2.61	0.39
Final Sat.:	1600	2867	333	1600	2652	548	1600	4171	629	1600	4176	624
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.18	0.10	0.19	0.19	0.03	0.10	0.10	0.07	0.26	0.26
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.933
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	120	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	204	659	194	125	687	209	89	400	76	170	965	85
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	206	666	196	126	694	211	90	404	77	172	975	86
Added Vol:	0	10	34	0	7	0	0	66	0	21	45	0
PasserByVol:	0	29	0	0	12	3	16	15	0	0	10	0
Initial Fut:	206	705	230	126	713	214	106	485	77	193	1030	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	206	705	230	126	713	214	106	485	77	193	1030	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	705	230	126	713	214	106	485	77	193	1030	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	206	705	230	126	713	214	106	485	77	193	1030	86
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.54	0.46	1.00	2.00	1.00	1.00	1.85	0.15
Final Sat.:	1600	2413	787	1600	2461	739	1600	3200	1600	1600	2954	246
Capacity Analysis Module:												
Vol/Sat:	0.13	0.29	0.29	0.08	0.29	0.29	0.07	0.15	0.05	0.12	0.35	0.35
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Central Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.844
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	135	571	71	95	644	207	121	346	125	117	979	153
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	136	577	72	96	650	209	122	349	126	118	989	155
Added Vol:	0	33	0	0	22	6	10	7	0	0	7	0
PasserByVol:	0	20	0	0	8	2	5	5	0	0	2	0
Initial Fut:	136	630	72	96	680	217	137	361	126	118	998	155
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	630	72	96	680	217	137	361	126	118	998	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	630	72	96	680	217	137	361	126	118	998	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	630	72	96	680	217	137	361	126	118	998	155
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.22	0.78	1.00	1.73	0.27
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3557	1243	1600	2771	429
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.04	0.06	0.21	0.14	0.09	0.10	0.10	0.07	0.36	0.36
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Slater Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	42	41	66	46	37	45	43	757	35	44	730	18
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	42	41	67	46	37	45	43	765	35	44	737	18
Added Vol:	0	0	0	0	0	0	0	52	0	0	43	0
PasserByVol:	0	0	18	9	0	0	0	209	0	8	83	4
Initial Fut:	42	41	85	55	37	45	43	1026	35	52	863	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	41	85	55	37	45	43	1026	35	52	863	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	41	85	55	37	45	43	1026	35	52	863	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	41	85	55	37	45	43	1026	35	52	863	22
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.25	0.25	0.50	0.40	0.27	0.33	1.00	1.93	0.07	1.00	1.95	0.05
Final Sat.:	403	393	804	642	432	526	1600	3093	107	1600	3120	80
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.03	0.09	0.09	0.03	0.33	0.33	0.03	0.28	0.28
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Compton Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	1.120
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	2 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	114	332	167	113	289	134	75	660	171	190	1489	161
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	115	335	169	114	292	135	76	667	173	192	1504	163
Added Vol:	92	25	37	5	39	0	0	40	166	86	19	1
PasserByVol:	2	14	0	0	34	0	0	17	3	0	7	0
Initial Fut:	209	374	206	119	365	135	76	724	342	278	1530	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	374	206	119	365	135	76	724	342	278	1530	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	374	206	119	365	135	76	724	342	278	1530	164
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	209	374	206	119	365	135	76	724	342	278	1530	164
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.73	0.27	1.00	2.04	0.96	1.00	1.81	0.19
Final Sat.:	1600	1600	1600	1600	1167	433	1600	3260	1540	1600	2891	309
Capacity Analysis Module:												
Vol/Sat:	0.13	0.23	0.13	0.07	0.31	0.31	0.05	0.22	0.22	0.17	0.53	0.53
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Compton Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.561
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	479	86	56	539	5	39	58	36	60	17	49
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	9	484	87	57	544	5	39	59	36	61	17	49
Added Vol:	0	52	86	53	29	0	0	0	0	56	0	25
PasserByVol:	4	16	0	0	37	0	0	0	9	0	0	0
Initial Fut:	13	552	173	110	610	5	39	59	45	117	17	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	552	173	110	610	5	39	59	45	117	17	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	552	173	110	610	5	39	59	45	117	17	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	552	173	110	610	5	39	59	45	117	17	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	1.50	0.47	0.30	1.69	0.01	0.27	0.41	0.32	0.56	0.08	0.36
Final Sat.:	57	2393	750	484	2694	22	440	654	506	896	132	572
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.23	0.07	0.23	0.23	0.02	0.09	0.09	0.07	0.13	0.13
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Compton Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.919
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	110	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	106	296	85	129	308	115	122	465	88	88	460	160
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	107	299	86	130	311	116	123	470	89	89	465	162
Added Vol:	0	115	10	4	68	13	22	30	0	3	30	2
PasserByVol:	0	0	34	48	0	0	0	247	0	17	98	20
Initial Fut:	107	414	130	182	379	129	145	747	89	109	593	184
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	414	130	182	379	129	145	747	89	109	593	184
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	414	130	182	379	129	145	747	89	109	593	184
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	107	414	130	182	379	129	145	747	89	109	593	184
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	1.49	0.51	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2436	764	1600	2387	813	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.11	0.16	0.16	0.09	0.47	0.06	0.07	0.37	0.11
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Compton Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.428
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	360	25	59	426	7	5	12	3	36	40	108
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	1	364	25	60	430	7	5	12	3	36	40	109
Added Vol:	0	126	0	0	71	0	0	0	0	0	0	0
PasserByVol:	0	33	0	0	17	0	0	0	0	0	0	0
Initial Fut:	1	523	25	60	518	7	5	12	3	36	40	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	523	25	60	518	7	5	12	3	36	40	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	523	25	60	518	7	5	12	3	36	40	109
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	523	25	60	518	7	5	12	3	36	40	109
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.90	0.09	0.20	1.78	0.02	0.25	0.60	0.15	0.19	0.22	0.59
Final Sat.:	6	3047	147	326	2835	39	400	960	240	313	348	939
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.04	0.18	0.18	0.00	0.01	0.01	0.02	0.12	0.12
Crit Moves:		****			****			****				****

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Wilmington Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	175	422	51	31	835	143	142	23	218	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	177	426	52	31	843	144	143	23	220	0	0	0
Added Vol:	13	24	0	0	183	4	10	0	29	0	0	0
PasserByVol:	7	16	0	0	203	0	0	0	17	0	0	0
Initial Fut:	197	466	52	31	1229	148	153	23	266	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	197	466	52	31	1229	148	153	23	266	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	466	52	31	1229	148	153	23	266	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	197	466	52	31	1229	148	153	23	266	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.78	0.22	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2882	318	1600	2855	345	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.16	0.16	0.02	0.43	0.43	0.10	0.01	0.17	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #27 Wilmington Ave & I-105 e/b Ramps

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Cycle (sec):	100	Critical Vol./Cap.(X):	1.196
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 0	2	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	325	644	0	0	655	481	407	0	532	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	328	650	0	0	662	486	411	0	537	0	0	0
Added Vol:	98	180	0	0	185	27	4	0	125	0	0	0
PasserByVol:	53	73	0	0	219	0	0	0	79	0	0	0
Initial Fut:	479	903	0	0	1066	513	415	0	741	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	479	903	0	0	1066	513	415	0	741	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	479	903	0	0	1066	513	415	0	741	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	479	903	0	0	1066	513	415	0	741	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.00	2.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	3200	3200	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.30	0.19	0.00	0.00	0.33	0.16	0.26	0.00	0.46	0.00	0.00	0.00
Crit Moves:	****				****				****			

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Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	1.161
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	1 0	2	0 1	1 0	0	0 1!	0 0	0	1 0	0 1
Volume Module:												
Base Vol:	129	843	60	92	939	164	59	18	80	20	39	56
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	130	851	61	93	948	166	60	18	81	20	39	57
Added Vol:	185	31	8	17	10	283	199	1	129	22	2	49
PasserByVol:	0	125	0	0	298	0	0	0	0	0	0	0
Initial Fut:	315	1007	69	110	1256	449	259	19	210	42	41	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	315	1007	69	110	1256	449	259	19	210	42	41	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	315	1007	69	110	1256	449	259	19	210	42	41	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	315	1007	69	110	1256	449	259	19	210	42	41	106
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.81	0.19	2.00	1.47	0.53	0.53	0.04	0.43	0.50	0.50	1.00
Final Sat.:	1600	4494	306	2880	2358	842	849	63	688	808	792	1600
Capacity Analysis Module:												
Vol/Sat:	0.20	0.22	0.22	0.04	0.53	0.53	0.16	0.30	0.30	0.03	0.05	0.07
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #29 Wilmington Ave & 120th St (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.907
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	103	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	35	713	141	111	619	314	143	148	109	65	308	184
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	35	720	142	112	625	317	144	149	110	66	311	186
Added Vol:	19	212	1	1	151	9	10	6	6	3	16	2
PasserByVol:	0	95	0	0	140	171	33	6	0	11	15	0
Initial Fut:	54	1027	143	113	916	497	187	161	116	80	342	188
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	1027	143	113	916	497	187	161	116	80	342	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	1027	143	113	916	497	187	161	116	80	342	188
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	1027	143	113	916	497	187	161	116	80	342	188
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.30	0.70	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2808	392	1600	2074	1126	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.37	0.37	0.07	0.44	0.44	0.12	0.10	0.07	0.05	0.21	0.12
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Wilmington Ave & 120th St (East)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	0	1 0	0 1	0	0 1!	0 0
Volume Module:												
Base Vol:	26	823	7	25	659	75	18	0	3	13	3	40
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	26	831	7	25	666	76	18	0	3	13	3	40
Added Vol:	0	227	1	5	155	0	0	0	0	1	0	4
PasserByVol:	170	0	0	0	0	151	95	14	72	0	35	0
Initial Fut:	196	1058	8	30	821	227	113	14	75	14	38	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	196	1058	8	30	821	227	113	14	75	14	38	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	1058	8	30	821	227	113	14	75	14	38	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	196	1058	8	30	821	227	113	14	75	14	38	44
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.57	0.43	0.89	0.11	1.00	0.15	0.39	0.46
Final Sat.:	1600	3176	24	1600	2507	693	1424	176	1600	234	630	736
Capacity Analysis Module:												
Vol/Sat:	0.12	0.33	0.33	0.02	0.33	0.33	0.07	0.08	0.05	0.01	0.06	0.06
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #31 Wilmington Ave & 124th St

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	49	757	40	48	670	13	20	47	41	84	99	74
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	49	765	40	48	677	13	20	47	41	85	100	75
Added Vol:	0	229	0	0	156	0	0	0	0	0	0	0
PasserByVol:	0	133	0	13	55	0	0	0	0	0	0	31
Initial Fut:	49	1127	40	61	888	13	20	47	41	85	100	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	1127	40	61	888	13	20	47	41	85	100	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	1127	40	61	888	13	20	47	41	85	100	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	1127	40	61	888	13	20	47	41	85	100	106
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.93	0.07	1.00	1.97	0.03	0.18	0.44	0.38	0.29	0.34	0.37
Final Sat.:	1600	3089	111	1600	3153	47	296	696	607	467	551	582
Capacity Analysis Module:												
Vol/Sat:	0.03	0.36	0.36	0.04	0.28	0.28	0.01	0.07	0.07	0.05	0.18	0.18
Crit Moves:		****			****			****			****	

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Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	173	744	54	123	640	135	92	393	258	56	557	89
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	175	751	55	124	646	136	93	397	261	57	563	90
Added Vol:	26	172	0	32	113	11	6	3	15	0	8	51
PasserByVol:	0	102	0	11	42	0	0	0	0	0	0	26
Initial Fut:	201	1025	55	167	801	147	99	400	276	57	571	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	201	1025	55	167	801	147	99	400	276	57	571	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	1025	55	167	801	147	99	400	276	57	571	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	201	1025	55	167	801	147	99	400	276	57	571	167
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.69	0.31	1.00	1.18	0.82	1.00	1.55	0.45
Final Sat.:	1600	3038	162	1600	2703	497	1600	1895	1305	1600	2476	724
Capacity Analysis Module:												
Vol/Sat:	0.13	0.34	0.34	0.10	0.30	0.30	0.06	0.21	0.21	0.04	0.23	0.23
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #34 Willowbrook Ave W & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.478
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0 0	1 0	0	0 0	1 0	0	1 0	0 0
Volume Module:												
Base Vol:	164	0	24	0	12	41	0	228	58	11	334	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	166	0	24	0	12	41	0	230	59	11	337	0
Added Vol:	3	0	0	0	0	0	0	7	9	0	8	0
PasserByVol:	0	0	0	0	0	0	0	6	0	0	26	0
Initial Fut:	169	0	24	0	12	41	0	243	68	11	371	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	0	24	0	12	41	0	243	68	11	371	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	0	24	0	12	41	0	243	68	11	371	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	0	24	0	12	41	0	243	68	11	371	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.23	0.77	0.00	0.78	0.22	0.03	0.97	0.00
Final Sat.:	1600	0	1600	0	362	1238	0	1252	348	46	1554	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.02	0.00	0.03	0.03	0.00	0.19	0.19	0.01	0.24	0.00
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #35 Willowbrook Ave E & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.388
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	91	43	37	3	44	66	38	112	97	23	172	4
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	92	43	37	3	44	67	38	113	98	23	174	4
Added Vol:	0	0	0	0	1	4	2	5	0	0	5	0
PasserByVol:	0	0	0	0	0	0	0	6	0	0	26	0
Initial Fut:	92	43	37	3	45	71	40	124	98	23	205	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	43	37	3	45	71	40	124	98	23	205	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	43	37	3	45	71	40	124	98	23	205	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	43	37	3	45	71	40	124	98	23	205	4
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.53	0.25	0.22	0.03	0.38	0.59	1.00	0.56	0.44	1.00	0.98	0.02
Final Sat.:	851	402	346	41	610	949	1600	894	706	1600	1569	31
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.00	0.07	0.07	0.03	0.14	0.14	0.01	0.13	0.13
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.906
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	103	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 1	0	0 1	0	0	1! 0	0	1 0	3 1	1	2 0	2 1 0
Volume Module:												
Base Vol:	534	11	136	7	34	67	50	1002	222	735	1333	13
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	539	11	137	7	34	68	51	1012	224	742	1346	13
Added Vol:	178	9	1	0	0	0	7	70	107	2	100	4
PasserByVol:	116	0	11	0	0	0	0	19	32	0	42	0
Initial Fut:	833	20	149	7	34	68	58	1101	363	744	1488	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	833	20	149	7	34	68	58	1101	363	744	1488	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	833	20	149	7	34	68	58	1101	363	744	1488	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	833	20	149	7	34	68	58	1101	363	744	1488	17
OvlAdjVol:									0			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.95	0.05	1.00	0.06	0.31	0.63	1.00	3.76	1.24	2.00	2.97	0.03
Final Sat.:	2812	68	1600	104	504	993	1600	6016	1984	2880	4745	55
Capacity Analysis Module:												
Vol/Sat:	0.30	0.30	0.09	0.07	0.07	0.07	0.04	0.18	0.18	0.26	0.31	0.31
OvlAdjV/S:									0.00			
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #37 Willowbrook Ave W & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	2	0 1	0 0	2	0 1
Volume Module:												
Base Vol:	64	166	7	0	9	6	45	444	60	0	565	37
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	65	168	7	0	9	6	45	448	61	0	571	37
Added Vol:	0	2	0	5	4	0	0	35	0	0	59	2
PasserByVol:	0	6	0	0	2	0	0	7	0	0	17	0
Initial Fut:	65	176	7	5	15	6	45	490	61	0	647	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	176	7	5	15	6	45	490	61	0	647	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	176	7	5	15	6	45	490	61	0	647	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	176	7	5	15	6	45	490	61	0	647	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	1.00	0.71	0.29	1.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1600	1538	62	1600	1142	458	1600	3200	1600	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.00	0.01	0.01	0.03	0.15	0.04	0.00	0.20	0.02
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #38 Willowbrook Ave E & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.473
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	42	96	38	75	166	43	0	432	19	43	532	65
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	42	97	38	76	168	43	0	436	19	43	537	66
Added Vol:	0	0	0	0	0	1	0	40	0	0	60	0
PasserByVol:	0	5	0	0	2	0	0	7	0	0	17	0
Initial Fut:	42	102	38	76	170	44	0	483	19	43	614	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	102	38	76	170	44	0	483	19	43	614	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	102	38	76	170	44	0	483	19	43	614	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	102	38	76	170	44	0	483	19	43	614	66
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.73	0.27	1.00	0.79	0.21	0.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1600	1162	438	1600	1268	332	0	3200	1600	1600	2891	309
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.09	0.05	0.13	0.13	0.00	0.15	0.01	0.03	0.21	0.21
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #39 Mona Blvd & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 1	0	1 0	2 1 0
Volume Module:												
Base Vol:	139	49	155	27	102	92	37	928	176	189	1782	21
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	140	49	157	27	103	93	37	937	178	191	1800	21
Added Vol:	4	0	5	0	0	0	0	65	6	2	102	0
PasserByVol:	0	2	0	0	5	0	0	19	11	0	42	0
Initial Fut:	144	51	162	27	108	93	37	1021	195	193	1944	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	51	162	27	108	93	37	1021	195	193	1944	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	51	162	27	108	93	37	1021	195	193	1944	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	51	162	27	108	93	37	1021	195	193	1944	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.74	0.26	1.00	0.12	0.47	0.41	1.00	2.52	0.48	1.00	2.97	0.03
Final Sat.:	1179	421	1600	191	757	651	1600	4031	769	1600	4748	52
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.10	0.02	0.14	0.14	0.02	0.25	0.25	0.12	0.41	0.41
Crit Moves:	****				****		****				****	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	90	41	50	195	218	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.958				0.946	
Flt Protected	0.967		0.950			
Satd. Flow (prot)	1726	0	1770	1863	1762	0
Flt Permitted	0.967		0.950			
Satd. Flow (perm)	1726	0	1770	1863	1762	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	266			283	255	
Travel Time (s)	6.0			6.4	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	45	54	212	237	157
Shared Lane Traffic (%)						
Lane Group Flow (vph)	143	0	54	212	394	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	90	41	50	195	218	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	45	54	212	237	157

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	636	315	393	0	-	0
Stage 1	315	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	442	725	1166	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	422	725	1166	-	-	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	701	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	1.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1166	-	486	-	-
HCM Lane V/C Ratio	0.047	-	0.293	-	-
HCM Control Delay (s)	8.2	-	15.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.2	-	-

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #41 Mona Blvd & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0	1 0	0 1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	39	109	71	89	130	48	55	497	33	48	538	41
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	39	110	72	90	131	48	56	502	33	48	543	41
Added Vol:	0	0	0	1	1	1	0	40	0	0	60	2
PasserByVol:	0	11	0	0	5	0	0	7	0	0	17	0
Initial Fut:	39	121	72	91	137	49	56	549	33	48	620	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	121	72	91	137	49	56	549	33	48	620	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	121	72	91	137	49	56	549	33	48	620	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	121	72	91	137	49	56	549	33	48	620	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.52	0.31	0.40	0.60	1.00	1.00	1.89	0.11	1.00	1.87	0.13
Final Sat.:	271	834	494	637	963	1600	1600	3017	183	1600	2991	209
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.15	0.06	0.14	0.03	0.03	0.18	0.18	0.03	0.21	0.21
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Alameda St & 103rd St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	178	809	0	0	948	191	194	0	152	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	180	817	0	0	957	193	196	0	154	0	0	0
Added Vol:	0	30	0	0	44	0	0	0	0	0	0	0
PasserByVol:	0	5	0	0	6	14	3	0	0	0	0	0
Initial Fut:	180	852	0	0	1007	207	199	0	154	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	852	0	0	1007	207	199	0	154	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	852	0	0	1007	207	199	0	154	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	852	0	0	1007	207	199	0	154	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.66	0.34	0.56	0.01	0.43	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2655	545	903	0	697	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.27	0.00	0.00	0.38	0.38	0.12	0.00	0.22	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #45 Alameda St & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.829
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 1	1 0	1	0 2	0 1	2	0 2	1 0	1	0 3	0 1
Volume Module:												
Base Vol:	209	643	82	74	641	540	357	536	169	85	1226	36
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	211	649	83	75	647	545	361	541	171	86	1238	36
Added Vol:	6	0	0	0	0	44	30	37	4	0	55	0
PasserByVol:	0	0	0	0	0	18	12	8	0	0	23	0
Initial Fut:	217	649	83	75	647	607	403	586	175	86	1316	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	649	83	75	647	607	403	586	175	86	1316	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	649	83	75	647	607	403	586	175	86	1316	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	649	83	75	647	607	403	586	175	86	1316	36
OvlAdjVol:						384						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.77	0.23	1.00	2.00	1.00	2.00	2.31	0.69	1.00	3.00	1.00
Final Sat.:	2880	2838	362	1600	3200	1600	2880	3698	1102	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.23	0.05	0.20	0.38	0.14	0.16	0.16	0.05	0.27	0.02
OvlAdjV/S:						0.24						
Crit Moves:	****					****	****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	153	632	50	78	759	109	105	417	153	40	361	103
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	638	51	79	767	110	106	421	155	40	365	104
Added Vol:	41	6	0	0	4	0	0	14	28	0	20	0
PasserByVol:	12	0	0	0	0	0	0	2	5	0	5	0
Initial Fut:	208	644	51	79	771	110	106	437	188	40	390	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	208	644	51	79	771	110	106	437	188	40	390	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	208	644	51	79	771	110	106	437	188	40	390	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	208	644	51	79	771	110	106	437	188	40	390	104
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.75	0.25	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2967	233	1600	2800	400	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.22	0.22	0.05	0.28	0.28	0.07	0.14	0.12	0.03	0.24	0.07
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #52 El Segundo Blvd & San Pedro St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	77	232	34	95	245	153	96	518	41	49	1186	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	232	34	95	245	153	96	518	41	49	1186	46
Added Vol:	0	0	0	0	0	0	0	48	0	0	33	0
PasserByVol:	0	0	0	0	0	0	0	26	0	0	11	0
Initial Fut:	77	232	34	95	245	153	96	592	41	49	1230	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	232	34	95	245	153	96	592	41	49	1230	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	232	34	95	245	153	96	592	41	49	1230	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	232	34	95	245	153	96	592	41	49	1230	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.23	0.77	1.00	2.81	0.19	1.00	2.89	0.11
Final Sat.:	1600	2791	409	1600	1970	1230	1600	4489	311	1600	4627	173
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.06	0.12	0.12	0.06	0.13	0.13	0.03	0.27	0.27
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Slater Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.710
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	34	0	177	62	869	0	0	1370	11
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	34	0	179	63	878	0	0	1384	11
Added Vol:	0	0	0	0	0	0	0	99	0	0	66	0
PasserByVol:	0	0	0	0	0	0	0	15	0	0	10	0
Initial Fut:	0	0	0	34	0	179	63	992	0	0	1460	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	34	0	179	63	992	0	0	1460	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	34	0	179	63	992	0	0	1460	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	34	0	179	63	992	0	0	1460	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.98	0.02
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	3176	24
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.11	0.04	0.31	0.00	0.00	0.46	0.46
Crit Moves:						****	****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Compton Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	114	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	172	102	27	136	69	276	148	594	93	12	927	111
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	174	103	27	137	70	279	149	600	94	12	936	112
Added Vol:	0	0	0	18	0	53	93	6	0	0	13	32
PasserByVol:	0	18	0	0	8	10	15	0	0	0	0	0
Initial Fut:	174	121	27	155	78	342	257	606	94	12	949	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	174	121	27	155	78	342	257	606	94	12	949	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	121	27	155	78	342	257	606	94	12	949	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	121	27	155	78	342	257	606	94	12	949	144
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.00	1.00	1.00	1.73	0.27	1.00	1.74	0.26
Final Sat.:	1600	2612	588	1600	1600	1600	1600	2771	429	1600	2778	422
Capacity Analysis Module:												
Vol/Sat:	0.11	0.05	0.05	0.10	0.05	0.21	0.16	0.22	0.22	0.01	0.34	0.34
Crit Moves:	****					****	****				****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #33 Wilmington Ave & Rosecrans Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.927
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	95	614	119	138	813	189	99	462	103	124	900	98
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	96	620	120	139	821	191	100	467	104	125	909	99
Added Vol:	0	141	0	30	92	6	7	0	0	0	0	50
PasserByVol:	0	61	0	9	26	5	11	0	0	0	0	21
Initial Fut:	96	822	120	178	939	202	118	467	104	125	909	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	822	120	178	939	202	118	467	104	125	909	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	822	120	178	939	202	118	467	104	125	909	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	822	120	178	939	202	118	467	104	125	909	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.65	0.35	1.00	2.00	1.00	1.00	1.68	0.32
Final Sat.:	1600	2792	408	1600	2634	566	1600	3200	1600	1600	2696	504
Capacity Analysis Module:												
Vol/Sat:	0.06	0.29	0.29	0.11	0.36	0.36	0.07	0.15	0.07	0.08	0.34	0.34
Crit Moves:	****				****			****				****

****

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Willowbrook Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	18	98	19	145	83	35	6	906	29	35	1157	148
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	18	99	19	146	84	35	6	915	29	35	1169	149
Added Vol:	0	0	0	4	0	0	0	30	0	0	50	2
PasserByVol:	0	2	0	2	1	0	0	7	0	0	17	5
Initial Fut:	18	101	19	152	85	35	6	952	29	35	1236	156
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	101	19	152	85	35	6	952	29	35	1236	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	101	19	152	85	35	6	952	29	35	1236	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	101	19	152	85	35	6	952	29	35	1236	156
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.73	0.14	0.56	0.31	0.13	1.00	1.94	0.06	1.00	1.78	0.22
Final Sat.:	210	1168	222	895	498	207	1600	3104	96	1600	2840	360
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.10	0.17	0.17	0.00	0.31	0.31	0.02	0.44	0.44
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #55 El Segundo Blvd & Santa Fe Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	143	356	27	16	451	64	62	115	163	46	114	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	356	27	16	451	64	62	115	163	46	114	33
Added Vol:	0	0	0	0	0	0	0	14	0	0	20	0
PasserByVol:	0	0	0	0	0	0	0	2	0	0	5	0
Initial Fut:	143	356	27	16	451	64	62	131	163	46	139	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	356	27	16	451	64	62	131	163	46	139	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	356	27	16	451	64	62	131	163	46	139	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	356	27	16	451	64	62	131	163	46	139	33
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.75	0.25	0.17	0.37	0.46	0.21	0.64	0.15
Final Sat.:	1600	2974	226	1600	2802	398	279	589	733	338	1020	242
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.12	0.01	0.16	0.16	0.04	0.22	0.22	0.03	0.14	0.14
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #56 Alameda St & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	118	606	0	0	883	115	104	0	193	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	606	0	0	883	115	104	0	193	0	0	0
Added Vol:	0	44	0	0	30	0	0	0	0	0	0	0
PasserByVol:	12	12	0	0	5	0	0	0	15	0	0	0
Initial Fut:	130	662	0	0	918	115	104	0	208	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	662	0	0	918	115	104	0	208	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	662	0	0	918	115	104	0	208	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	662	0	0	918	115	104	0	208	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.78	0.22	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2844	356	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.00	0.00	0.32	0.32	0.07	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #57 Central Ave & W Compton Bvld

Cycle (sec):	100	Critical Vol./Cap.(X):	0.767
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	182	573	83	138	655	148	104	345	138	164	758	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	182	573	83	138	655	148	104	345	138	164	758	120
Added Vol:	0	33	0	0	22	0	0	0	0	0	0	0
PasserByVol:	0	12	0	0	5	0	1	1	0	0	0	0
Initial Fut:	182	618	83	138	682	148	105	346	138	164	758	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	182	618	83	138	682	148	105	346	138	164	758	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	618	83	138	682	148	105	346	138	164	758	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	182	618	83	138	682	148	105	346	138	164	758	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.73	0.27
Final Sat.:	1600	2821	379	1600	3200	1600	1600	3200	1600	1600	2763	437
Capacity Analysis Module:												
Vol/Sat:	0.11	0.22	0.22	0.09	0.21	0.09	0.07	0.11	0.09	0.10	0.27	0.27
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #58 Wilmington Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	86	460	169	179	718	128	70	515	127	133	682	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	460	169	179	718	128	70	515	127	133	682	139
Added Vol:	0	141	0	0	92	0	0	0	0	0	0	0
PasserByVol:	0	48	0	3	20	0	1	0	0	0	0	7
Initial Fut:	86	649	169	182	830	128	71	515	127	133	682	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	649	169	182	830	128	71	515	127	133	682	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	649	169	182	830	128	71	515	127	133	682	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	86	649	169	182	830	128	71	515	127	133	682	146
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.60	0.40	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2772	428	1600	2567	633	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.11	0.11	0.30	0.30	0.04	0.20	0.20	0.08	0.21	0.09
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #59 Willowbrook Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.536
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	0 1	0	1 0	2 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	24	117	6	0	179	67	24	627	63	0	764	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	117	6	0	179	67	24	627	63	0	764	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	5	2	0	0	1	0	0	1	2	0	2	0
Initial Fut:	29	119	6	0	180	67	24	628	65	0	766	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	119	6	0	180	67	24	628	65	0	766	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	119	6	0	180	67	24	628	65	0	766	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	119	6	0	180	67	24	628	65	0	766	29
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.77	0.04	0.00	0.73	0.27	1.00	2.72	0.28	0.00	1.93	0.07
Final Sat.:	301	1236	62	0	1166	434	1600	4350	450	0	3083	117
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.00	0.15	0.15	0.02	0.14	0.14	0.00	0.25	0.25
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #60 Central Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	142	524	69	173	795	130	75	327	120	85	735	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	142	524	69	173	795	130	75	327	120	85	735	204
Added Vol:	0	33	0	0	22	0	0	0	0	0	0	0
PasserByVol:	0	5	0	0	2	0	1	1	0	0	0	0
Initial Fut:	142	562	69	173	819	130	76	328	120	85	735	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	142	562	69	173	819	130	76	328	120	85	735	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	562	69	173	819	130	76	328	120	85	735	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	142	562	69	173	819	130	76	328	120	85	735	204
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	1.00	1.73	0.27	1.00	1.46	0.54	1.00	2.00	1.00
Final Sat.:	1600	2850	350	1600	2762	438	1600	2343	857	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.20	0.11	0.30	0.30	0.05	0.14	0.14	0.05	0.23	0.13
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	104	444	142	170	833	87	100	498	105	137	850	142
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	444	142	170	833	87	100	498	105	137	850	142
Added Vol:	0	141	0	0	92	0	0	0	0	0	0	0
PasserByVol:	0	38	0	2	15	0	1	0	0	0	0	5
Initial Fut:	104	623	142	172	940	87	101	498	105	137	850	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	623	142	172	940	87	101	498	105	137	850	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	623	142	172	940	87	101	498	105	137	850	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	623	142	172	940	87	101	498	105	137	850	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.71	0.29
Final Sat.:	1600	2606	594	1600	2929	271	1600	3200	1600	1600	2728	472
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.24	0.11	0.32	0.32	0.06	0.16	0.07	0.09	0.31	0.31
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #62 Wilmington Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.829
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	35	471	114	104	1031	21	38	192	86	276	361	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	471	114	104	1031	21	38	192	86	276	361	74
Added Vol:	0	141	0	0	92	0	0	0	0	0	0	0
PasserByVol:	0	30	0	1	12	0	0	0	0	0	0	2
Initial Fut:	35	642	114	105	1135	21	38	192	86	276	361	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	642	114	105	1135	21	38	192	86	276	361	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	642	114	105	1135	21	38	192	86	276	361	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	642	114	105	1135	21	38	192	86	276	361	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.96	0.04	1.00	0.69	0.31	1.00	0.83	0.17
Final Sat.:	1600	3200	1600	1600	3142	58	1600	1105	495	1600	1322	278
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.07	0.07	0.36	0.36	0.02	0.17	0.17	0.17	0.27	0.27
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #63 Wilmington Ave & Walnut St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	81	530	41	33	1228	87	26	60	58	24	95	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	81	530	41	33	1228	87	26	60	58	24	95	46
Added Vol:	0	141	0	0	92	0	0	0	0	0	0	0
PasserByVol:	0	30	0	0	12	0	0	0	0	0	0	0
Initial Fut:	81	701	41	33	1332	87	26	60	58	24	95	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	701	41	33	1332	87	26	60	58	24	95	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	701	41	33	1332	87	26	60	58	24	95	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	81	701	41	33	1332	87	26	60	58	24	95	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.35	0.65
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	2156	1044
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.03	0.02	0.42	0.05	0.02	0.04	0.04	0.02	0.04	0.04
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #64 Central Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.541
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	467	76	137	976	0	0	0	0	206	0	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	467	76	137	976	0	0	0	0	206	0	191
Added Vol:	0	33	0	0	22	0	0	0	0	0	0	0
PasserByVol:	0	5	0	0	2	0	0	0	0	0	0	0
Initial Fut:	0	505	76	137	1000	0	0	0	0	206	0	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	505	76	137	1000	0	0	0	0	206	0	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	505	76	137	1000	0	0	0	0	206	0	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	505	76	137	1000	0	0	0	0	206	0	191
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.05	0.09	0.31	0.00	0.00	0.00	0.00	0.13	0.00	0.12
Crit Moves:					****					****		

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #65 Willowbrook Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 0	1	0 0	1 1	0
Volume Module:												
Base Vol:	11	68	29	33	102	44	26	666	24	0	913	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	68	29	33	102	44	26	666	24	0	913	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	7	0	0	3	0	0	3	0	0	5	0
Initial Fut:	11	75	29	33	105	44	26	669	24	0	918	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	75	29	33	105	44	26	669	24	0	918	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	75	29	33	105	44	26	669	24	0	918	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	75	29	33	105	44	26	669	24	0	918	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	0.65	0.25	0.18	0.58	0.24	1.00	2.00	1.00	0.00	1.92	0.08
Final Sat.:	153	1043	403	290	923	387	1600	3200	1600	0	3079	121
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.02	0.11	0.11	0.02	0.21	0.02	0.00	0.30	0.30
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #66 Alameda St. West & Greenleaf Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1
Volume Module:												
Base Vol:	73	415	105	48	659	59	21	190	107	264	313	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	415	105	48	659	59	21	190	107	264	313	34
Added Vol:	0	44	0	0	30	0	0	0	0	0	0	0
PasserByVol:	0	24	0	0	10	0	0	1	0	0	2	0
Initial Fut:	73	483	105	48	699	59	21	191	107	264	315	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	483	105	48	699	59	21	191	107	264	315	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	483	105	48	699	59	21	191	107	264	315	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	483	105	48	699	59	21	191	107	264	315	34
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	1.84	0.16	1.00	1.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	2629	571	1600	2951	249	1600	2051	1149	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.18	0.03	0.24	0.24	0.01	0.09	0.09	0.17	0.20	0.02
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - AM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Alameda St & Abbott Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.673
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	1 0	1	0 1	1 0	0	0	1! 0 0	1	1	0 0 1
Volume Module:												
Base Vol:	0	745	218	149	931	1	2	2	2	465	1	251
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	752	220	150	940	1	2	2	2	470	1	254
Added Vol:	0	30	0	0	44	0	0	0	0	0	0	0
PasserByVol:	0	5	7	0	6	0	0	0	0	13	0	0
Initial Fut:	0	787	227	150	990	1	2	2	2	483	1	254
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	787	227	150	990	1	2	2	2	483	1	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	787	227	150	990	1	2	2	2	483	1	254
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	787	227	150	990	1	2	2	2	483	1	254
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.55	0.45	1.00	1.99	0.01	0.34	0.33	0.33	1.99	0.01	1.00
Final Sat.:	0	2484	716	1600	3197	3	533	533	533	3193	7	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.09	0.31	0.31	0.00	0.00	0.00	0.15	0.15	0.16
Crit Moves:		****		****				****				****

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #53 Imperial Hway & Fernwood Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	60	40	3	159	45	17	23	665	45	2	1289	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	40	3	159	45	17	23	665	45	2	1289	124
Added Vol:	0	0	0	0	0	0	0	37	0	0	55	0
PasserByVol:	0	0	0	0	0	0	0	8	0	0	23	0
Initial Fut:	60	40	3	159	45	17	23	710	45	2	1367	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	40	3	159	45	17	23	710	45	2	1367	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	40	3	159	45	17	23	710	45	2	1367	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	40	3	159	45	17	23	710	45	2	1367	124
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.58	0.39	0.03	0.72	0.20	0.08	1.00	1.88	0.12	1.00	1.83	0.17
Final Sat.:	932	621	47	1151	326	123	1600	3009	191	1600	2934	266
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.10	0.14	0.14	0.01	0.24	0.24	0.00	0.47	0.47
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #54 Imperial Hwy & State St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	15	240	134	106	367	271	98	736	3	114	1141	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	240	134	106	367	271	98	736	3	114	1141	37
Added Vol:	0	0	0	0	0	0	0	37	0	0	55	0
PasserByVol:	0	0	0	0	0	2	3	0	5	0	21	0
Initial Fut:	15	240	134	106	367	273	101	773	8	114	1217	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	240	134	106	367	273	101	773	8	114	1217	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	240	134	106	367	273	101	773	8	114	1217	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	240	134	106	367	273	101	773	8	114	1217	37
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.28	0.72	1.00	1.15	0.85	1.00	1.98	0.02	1.00	1.94	0.06
Final Sat.:	1600	2053	1147	1600	1835	1365	1600	3167	33	1600	3106	94
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.12	0.07	0.20	0.20	0.06	0.24	0.24	0.07	0.39	0.39
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Avalon Blvd & El Segundo

Cycle (sec):	100	Critical Vol./Cap.(X):	0.877
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	121	704	170	148	531	93	134	1370	104	102	461	112
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	122	711	172	149	536	94	135	1384	105	103	466	113
Added Vol:	0	8	13	0	10	0	0	40	0	19	54	0
PasserByVol:	0	8	0	0	16	0	0	20	0	0	38	0
Initial Fut:	122	727	185	149	562	94	135	1444	105	122	558	113
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	727	185	149	562	94	135	1444	105	122	558	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	727	185	149	562	94	135	1444	105	122	558	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	727	185	149	562	94	135	1444	105	122	558	113
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	1.71	0.29	1.00	2.80	0.20	1.00	2.49	0.51
Final Sat.:	1600	2552	648	1600	2742	458	1600	4474	326	1600	3990	810
Capacity Analysis Module:												
Vol/Sat:	0.08	0.28	0.28	0.09	0.21	0.21	0.08	0.32	0.32	0.08	0.14	0.14
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Avalon Blvd & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	132	625	158	217	484	59	124	1148	112	86	469	119
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	133	631	160	219	489	60	125	1159	113	87	474	120
Added Vol:	0	18	0	0	25	4	3	16	0	0	20	0
PasserByVol:	0	5	0	0	9	0	0	5	0	0	11	0
Initial Fut:	133	654	160	219	523	64	128	1180	113	87	505	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	654	160	219	523	64	128	1180	113	87	505	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	654	160	219	523	64	128	1180	113	87	505	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	654	160	219	523	64	128	1180	113	87	505	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	1.78	0.22	1.00	2.74	0.26	1.00	2.42	0.58
Final Sat.:	1600	2573	627	1600	2853	347	1600	4380	420	1600	3877	923
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.25	0.14	0.18	0.18	0.08	0.27	0.27	0.05	0.13	0.13
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.983
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	172	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	82	634	213	178	655	153	195	1238	145	86	483	79
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	83	640	215	180	662	155	197	1250	146	87	488	80
Added Vol:	0	9	25	0	12	0	0	53	0	36	73	0
PasserByVol:	0	19	0	0	36	11	11	10	0	0	29	0
Initial Fut:	83	668	240	180	710	166	208	1313	146	123	590	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	668	240	180	710	166	208	1313	146	123	590	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	668	240	180	710	166	208	1313	146	123	590	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	668	240	180	710	166	208	1313	146	123	590	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.62	0.38	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1600	2354	846	1600	2595	605	1600	3200	1600	1600	2819	381
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.28	0.11	0.27	0.27	0.13	0.41	0.09	0.08	0.21	0.21
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Central Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.782
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	138	567	111	181	706	107	148	1164	177	109	466	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	139	573	112	183	713	108	149	1176	179	110	471	115
Added Vol:	0	27	0	0	37	11	7	9	0	0	10	0
PasserByVol:	0	13	0	0	24	5	3	3	0	0	5	0
Initial Fut:	139	613	112	183	774	124	159	1188	179	110	486	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	613	112	183	774	124	159	1188	179	110	486	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	613	112	183	774	124	159	1188	179	110	486	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	613	112	183	774	124	159	1188	179	110	486	115
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.61	0.39	1.00	1.62	0.38
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4172	628	1600	2587	613
Capacity Analysis Module:												
Vol/Sat:	0.09	0.19	0.07	0.11	0.24	0.08	0.10	0.28	0.28	0.07	0.19	0.19
Crit Moves:	****			****			****			****		

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Slater Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.480
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1!	0	0	0 1!	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	15	7	31	12	6	16	9	397	21	23	680	19
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	15	7	31	12	6	16	9	401	21	23	687	19
Added Vol:	0	0	0	0	0	0	0	54	0	0	66	0
PasserByVol:	0	0	12	6	0	0	0	134	0	23	249	11
Initial Fut:	15	7	43	18	6	16	9	589	21	46	1002	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	7	43	18	6	16	9	589	21	46	1002	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	7	43	18	6	16	9	589	21	46	1002	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	7	43	18	6	16	9	589	21	46	1002	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	0.11	0.66	0.45	0.15	0.40	1.00	1.93	0.07	1.00	1.94	0.06
Final Sat.:	370	173	1057	719	240	641	1600	3089	111	1600	3106	94
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.01	0.03	0.03	0.01	0.19	0.19	0.03	0.32	0.32
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Compton Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.954
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	137	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	2 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	98	304	167	214	257	101	78	1434	86	63	735	232
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	99	307	169	216	260	102	79	1448	87	64	742	234
Added Vol:	169	42	69	4	30	0	0	40	103	51	39	3
PasserByVol:	5	42	0	0	23	0	0	11	2	0	21	0
Initial Fut:	273	391	238	220	313	102	79	1499	192	115	802	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	273	391	238	220	313	102	79	1499	192	115	802	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	273	391	238	220	313	102	79	1499	192	115	802	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	273	391	238	220	313	102	79	1499	192	115	802	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.75	0.25	1.00	2.66	0.34	1.00	1.54	0.46
Final Sat.:	1600	1600	1600	1600	1206	394	1600	4255	545	1600	2470	730
Capacity Analysis Module:												
Vol/Sat:	0.17	0.24	0.15	0.14	0.26	0.26	0.05	0.35	0.35	0.07	0.32	0.32
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Compton Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	477	49	44	311	7	9	13	7	44	14	46
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	7	482	49	44	314	7	9	13	7	44	14	46
Added Vol:	0	33	66	38	54	0	0	0	0	95	0	36
PasserByVol:	11	46	0	0	24	0	0	0	6	0	0	0
Initial Fut:	18	561	115	82	392	7	9	13	13	139	14	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	561	115	82	392	7	9	13	13	139	14	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	561	115	82	392	7	9	13	13	139	14	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	561	115	82	392	7	9	13	13	139	14	82
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.05	1.62	0.33	0.34	1.63	0.03	0.26	0.37	0.37	0.59	0.06	0.35
Final Sat.:	83	2584	532	548	2605	47	412	595	593	945	96	559
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.22	0.05	0.15	0.15	0.01	0.02	0.02	0.09	0.15	0.15
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Compton Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.817
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	65	241	70	78	281	69	45	273	89	136	416	111
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	66	243	71	79	284	70	45	276	90	137	420	112
Added Vol:	0	78	5	3	122	25	17	37	0	9	41	4
PasserByVol:	0	0	23	32	0	0	0	160	0	54	299	61
Initial Fut:	66	321	99	114	406	95	62	473	90	200	760	177
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	66	321	99	114	406	95	62	473	90	200	760	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	321	99	114	406	95	62	473	90	200	760	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	321	99	114	406	95	62	473	90	200	760	177
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	1.62	0.38	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2448	752	1600	2595	605	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.07	0.16	0.16	0.04	0.30	0.06	0.13	0.48	0.11
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Compton Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.319
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	349	25	46	302	4	1	4	3	17	3	42
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	352	25	46	305	4	1	4	3	17	3	42
Added Vol:	0	82	0	0	131	0	0	0	0	0	0	0
PasserByVol:	0	22	0	0	51	0	0	0	0	0	0	0
Initial Fut:	0	456	25	46	487	4	1	4	3	17	3	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	456	25	46	487	4	1	4	3	17	3	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	456	25	46	487	4	1	4	3	17	3	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	456	25	46	487	4	1	4	3	17	3	42
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.90	0.10	0.17	1.81	0.02	0.12	0.50	0.38	0.27	0.05	0.68
Final Sat.:	0	3032	168	277	2899	24	200	800	600	439	77	1084
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.03	0.17	0.17	0.00	0.01	0.01	0.01	0.04	0.04
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Wilmington Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	159	451	47	30	618	70	137	15	375	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	161	456	47	30	624	71	138	15	379	0	0	0
Added Vol:	12	24	0	0	178	4	10	0	67	0	0	0
PasserByVol:	21	47	0	0	127	0	0	0	11	0	0	0
Initial Fut:	194	527	47	30	929	75	148	15	457	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	194	527	47	30	929	75	148	15	457	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	527	47	30	929	75	148	15	457	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	194	527	47	30	929	75	148	15	457	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	1.85	0.15	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2935	265	1600	2962	238	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.18	0.18	0.02	0.31	0.31	0.09	0.01	0.29	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilmington Ave & I-105 e/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.988
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	179	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 0	2	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	326	902	0	0	529	421	328	0	179	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	329	911	0	0	534	425	331	0	181	0	0	0
Added Vol:	150	247	0	0	185	60	3	0	125	0	0	0
PasserByVol:	160	219	0	0	137	0	0	0	48	0	0	0
Initial Fut:	639	1377	0	0	856	485	334	0	354	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	639	1377	0	0	856	485	334	0	354	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	639	1377	0	0	856	485	334	0	354	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	639	1377	0	0	856	485	334	0	354	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.00	2.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	3200	3200	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.40	0.29	0.00	0.00	0.27	0.15	0.21	0.00	0.22	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	1.019
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	2 0	1	1 0	0 0	1! 0	0	0	1 0	0 1
Volume Module:												
Base Vol:	28	992	84	132	547	32	108	50	50	37	44	137
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	28	1002	85	133	552	32	109	51	51	37	44	138
Added Vol:	147	39	29	64	17	230	315	2	203	19	2	44
PasserByVol:	0	379	0	0	186	0	0	0	0	0	0	0
Initial Fut:	175	1420	114	197	755	262	424	53	254	56	46	182
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	175	1420	114	197	755	262	424	53	254	56	46	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	1420	114	197	755	262	424	53	254	56	46	182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	175	1420	114	197	755	262	424	53	254	56	46	182
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.78	0.22	2.00	1.48	0.52	0.58	0.07	0.35	0.55	0.45	1.00
Final Sat.:	1600	4444	356	2880	2375	825	929	115	556	877	723	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.32	0.07	0.32	0.32	0.27	0.46	0.46	0.04	0.06	0.11
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #29 Wilmington Ave & 120th St (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	74	718	80	79	485	45	295	298	184	91	146	136
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	75	725	81	80	490	45	298	301	186	92	147	137
Added Vol:	8	185	2	3	230	5	27	20	17	5	18	2
PasserByVol:	0	289	0	0	93	103	110	20	0	7	11	0
Initial Fut:	83	1199	83	83	813	153	435	341	203	104	176	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	1199	83	83	813	153	435	341	203	104	176	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1199	83	83	813	153	435	341	203	104	176	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1199	83	83	813	153	435	341	203	104	176	139
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	1.68	0.32	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2993	207	1600	2692	508	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.40	0.40	0.05	0.30	0.30	0.27	0.21	0.13	0.06	0.11	0.09
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #30 Wilmington Ave & 120th St (East)

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1! 0	0
Volume Module:												
Base Vol:	8	807	17	35	707	16	53	2	14	2	0	15
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	8	815	17	35	714	16	54	2	14	2	0	15
Added Vol:	0	190	2	6	246	0	0	0	0	1	0	5
PasserByVol:	113	0	0	0	0	100	289	47	215	0	24	0
Initial Fut:	121	1005	19	41	960	116	343	49	229	3	24	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	1005	19	41	960	116	343	49	229	3	24	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	1005	19	41	960	116	343	49	229	3	24	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	121	1005	19	41	960	116	343	49	229	3	24	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.78	0.22	0.87	0.13	1.00	0.06	0.51	0.43
Final Sat.:	1600	3140	60	1600	2855	345	1400	200	1600	102	814	683
Capacity Analysis Module:												
Vol/Sat:	0.08	0.32	0.32	0.03	0.34	0.34	0.21	0.24	0.14	0.00	0.03	0.03
Crit Moves:	****				****		****				****	

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Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #31 Wilmington Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	21	757	46	64	615	18	13	43	20	35	47	49
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	21	765	46	65	621	18	13	43	20	35	47	49
Added Vol:	0	192	0	0	248	0	0	0	0	0	0	0
PasserByVol:	0	86	0	38	165	0	0	0	0	0	0	20
Initial Fut:	21	1043	46	103	1034	18	13	43	20	35	47	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	1043	46	103	1034	18	13	43	20	35	47	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	1043	46	103	1034	18	13	43	20	35	47	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	1043	46	103	1034	18	13	43	20	35	47	69
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	1.97	0.03	0.17	0.57	0.26	0.23	0.31	0.46
Final Sat.:	1600	3063	137	1600	3145	55	274	905	421	371	499	730
Capacity Analysis Module:												
Vol/Sat:	0.01	0.34	0.34	0.06	0.33	0.33	0.01	0.05	0.05	0.02	0.10	0.10
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.923
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	113	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	144	579	83	101	480	86	182	927	326	44	296	68
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	145	585	84	102	485	87	184	936	329	44	299	69
Added Vol:	16	139	0	52	187	8	14	7	27	0	6	39
PasserByVol:	0	66	0	32	127	0	0	0	0	0	0	16
Initial Fut:	161	790	84	186	799	95	198	943	356	44	305	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	790	84	186	799	95	198	943	356	44	305	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	790	84	186	799	95	198	943	356	44	305	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	790	84	186	799	95	198	943	356	44	305	124
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.79	0.21	1.00	1.45	0.55	1.00	1.42	0.58
Final Sat.:	1600	2893	307	1600	2860	340	1600	2323	877	1600	2277	923
Capacity Analysis Module:												
Vol/Sat:	0.10	0.27	0.27	0.12	0.28	0.28	0.12	0.41	0.41	0.03	0.13	0.13
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #34 Willowbrook Ave W & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.486
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0 0	1 0	0	0 0	1 0	0	1 0	0 0
Volume Module:												
Base Vol:	50	0	17	0	28	56	0	323	93	11	163	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	51	0	17	0	28	57	0	326	94	11	165	0
Added Vol:	12	0	0	0	0	0	0	11	9	0	17	0
PasserByVol:	0	0	0	0	0	0	0	19	0	0	17	0
Initial Fut:	63	0	17	0	28	57	0	356	103	11	199	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	0	17	0	28	57	0	356	103	11	199	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	0	17	0	28	57	0	356	103	11	199	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	0	17	0	28	57	0	356	103	11	199	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.33	0.67	0.00	0.78	0.22	0.05	0.95	0.00
Final Sat.:	1600	0	1600	0	533	1067	0	1241	359	85	1515	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.01	0.00	0.05	0.05	0.00	0.29	0.29	0.01	0.13	0.00
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #35 Willowbrook Ave E & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.377
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	0 1	0	1	0 0 1 0
Volume Module:												
Base Vol:	50	14	27	7	12	42	70	201	90	9	85	5
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	51	14	27	7	12	42	71	203	91	9	86	5
Added Vol:	0	1	0	0	1	3	6	5	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	19	0	0	17	0
Initial Fut:	51	15	27	7	13	45	77	227	91	9	117	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	15	27	7	13	45	77	227	91	9	117	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	15	27	7	13	45	77	227	91	9	117	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	15	27	7	13	45	77	227	91	9	117	5
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.55	0.16	0.29	0.11	0.20	0.69	1.00	0.71	0.29	1.00	0.96	0.04
Final Sat.:	870	261	470	172	320	1108	1600	1143	457	1600	1534	66
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.00	0.04	0.04	0.05	0.20	0.20	0.01	0.08	0.08
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.918
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	110	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 1	0	0 1	0	0	1! 0	0	1 0	3 1	1	2 0	2 1 0
Volume Module:												
Base Vol:	544	8	271	9	22	25	47	1612	339	596	812	1
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	549	8	274	9	22	25	47	1628	342	602	820	1
Added Vol:	146	7	3	0	0	0	18	130	158	2	77	3
PasserByVol:	71	0	7	0	0	0	0	56	95	0	26	0
Initial Fut:	766	15	284	9	22	25	65	1814	595	604	923	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	766	15	284	9	22	25	65	1814	595	604	923	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	766	15	284	9	22	25	65	1814	595	604	923	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	766	15	284	9	22	25	65	1814	595	604	923	4
OvlAdjVol:									59			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.96	0.04	1.00	0.16	0.39	0.45	1.00	3.76	1.24	2.00	2.99	0.01
Final Sat.:	2824	56	1600	257	629	714	1600	6023	1977	2880	4779	21
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.18	0.04	0.04	0.04	0.04	0.30	0.30	0.21	0.19	0.19
OvlAdjV/S:									0.03			
Crit Moves:	****					****		****		****		

Willowbrook
Existing+Project Conditions - PM Peak
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #37 Willowbrook Ave W & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.540
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	2	0 1	0 0	2	0 1
Volume Module:												
Base Vol:	24	100	9	34	113	16	14	986	68	0	358	34
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	24	101	9	34	114	16	14	996	69	0	362	34
Added Vol:	0	6	0	5	4	0	0	60	0	0	45	7
PasserByVol:	0	5	0	0	7	0	0	20	0	0	11	0
Initial Fut:	24	112	9	39	125	16	14	1076	69	0	418	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	112	9	39	125	16	14	1076	69	0	418	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	112	9	39	125	16	14	1076	69	0	418	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	112	9	39	125	16	14	1076	69	0	418	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.89	0.11	1.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1600	1480	120	1600	1417	183	1600	3200	1600	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.08	0.02	0.09	0.09	0.01	0.34	0.04	0.00	0.13	0.03
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #38 Willowbrook Ave E & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0 1	0	1	0	0 1	1	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	12	55	33	32	80	14	0	981	44	34	372	39
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	12	56	33	32	81	14	0	991	44	34	376	39
Added Vol:	0	0	0	0	0	1	1	64	0	0	51	0
PasserByVol:	0	3	0	0	6	0	0	20	0	0	11	0
Initial Fut:	12	59	33	32	87	15	1	1075	44	34	438	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	59	33	32	87	15	1	1075	44	34	438	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	59	33	32	87	15	1	1075	44	34	438	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	59	33	32	87	15	1	1075	44	34	438	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.64	0.36	1.00	0.85	0.15	0.01	1.99	1.00	1.00	1.83	0.17
Final Sat.:	1600	1020	580	1600	1362	238	3	3197	1600	1600	2936	264
Capacity Analysis Module:												
Vol/Sat:	0.01	0.06	0.06	0.02	0.06	0.06	0.00	0.34	0.03	0.02	0.15	0.15
Crit Moves:		****			****				****		****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #39 Mona Blvd & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1	0 2 1	0	1	0 2 1 0
Volume Module:												
Base Vol:	184	67	247	54	68	72	94	1615	240	152	1110	43
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	186	68	249	55	69	73	95	1631	242	154	1121	43
Added Vol:	3	0	5	0	0	0	0	116	17	8	79	0
PasserByVol:	0	7	0	0	4	0	0	56	7	0	26	0
Initial Fut:	189	75	254	55	73	73	95	1803	266	162	1226	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	189	75	254	55	73	73	95	1803	266	162	1226	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	75	254	55	73	73	95	1803	266	162	1226	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	189	75	254	55	73	73	95	1803	266	162	1226	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.72	0.28	1.00	0.27	0.37	0.36	1.00	2.61	0.39	1.00	2.90	0.10
Final Sat.:	1147	453	1600	436	582	582	1600	4182	618	1600	4636	164
Capacity Analysis Module:												
Vol/Sat:	0.12	0.16	0.16	0.03	0.12	0.12	0.06	0.43	0.43	0.10	0.26	0.26
Crit Moves:	****				****			****			****	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	147	74	27	220	331	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.955				0.974	
Flt Protected	0.968		0.950			
Satd. Flow (prot)	1722	0	1770	1863	1814	0
Flt Permitted	0.968		0.950			
Satd. Flow (perm)	1722	0	1770	1863	1814	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	266			283	255	
Travel Time (s)	6.0			6.4	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	160	80	29	239	360	87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	240	0	29	239	447	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	147	74	27	220	331	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	160	80	29	239	360	87

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	701	403	447	0	-	0
Stage 1	403	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	405	647	1113	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	394	647	1113	-	-	-
Mov Cap-2 Maneuver	394	-	-	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.6	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1113	-	453	-	-
HCM Lane V/C Ratio	0.026	-	0.53	-	-
HCM Control Delay (s)	8.3	-	21.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	3	-	-

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #41 Mona Blvd & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	0	0	1	0
Volume Module:												
Base Vol:	82	112	62	18	88	40	38	351	54	47	957	32
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	83	113	63	18	89	40	38	355	55	47	967	32
Added Vol:	0	1	0	3	1	2	0	64	0	0	49	2
PasserByVol:	0	7	0	0	13	0	0	20	0	0	11	0
Initial Fut:	83	121	63	21	103	42	38	439	55	47	1027	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	121	63	21	103	42	38	439	55	47	1027	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	121	63	21	103	42	38	439	55	47	1027	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	121	63	21	103	42	38	439	55	47	1027	34
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.31	0.46	0.23	0.17	0.83	1.00	1.00	1.78	0.22	1.00	1.94	0.06
Final Sat.:	497	727	376	273	1327	1600	1600	2846	354	1600	3096	104
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.17	0.01	0.08	0.03	0.02	0.15	0.15	0.03	0.33	0.33
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Alameda St & 103rd St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1	1 0	0 0	1! 0	0	0 0	0	0 0
Volume Module:												
Base Vol:	115	736	0	0	1222	235	190	0	158	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	116	743	0	0	1234	237	192	0	160	0	0	0
Added Vol:	0	49	0	0	36	0	0	0	0	0	0	0
PasserByVol:	0	16	0	0	4	9	8	0	0	0	0	0
Initial Fut:	116	808	0	0	1274	246	200	0	160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	116	808	0	0	1274	246	200	0	160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	808	0	0	1274	246	200	0	160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	116	808	0	0	1274	246	200	0	160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.68	0.32	0.56	0.00	0.44	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2682	518	890	0	710	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.25	0.00	0.00	0.48	0.48	0.12	0.00	0.22	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #45 Alameda St & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.818
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2	0 1	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	214	682	138	101	693	449	409	1282	199	102	653	65
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	216	689	139	102	700	453	413	1295	201	103	660	66
Added Vol:	5	0	0	0	0	36	49	61	11	0	45	0
PasserByVol:	0	0	0	0	0	12	37	23	0	0	15	0
Initial Fut:	221	689	139	102	700	501	499	1379	212	103	720	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	689	139	102	700	501	499	1379	212	103	720	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	689	139	102	700	501	499	1379	212	103	720	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	689	139	102	700	501	499	1379	212	103	720	66
OvlAdjVol:						224						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.66	0.34	1.00	2.00	1.00	2.00	2.60	0.40	1.00	3.00	1.00
Final Sat.:	2880	2661	539	1600	3200	1600	2880	4160	640	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.06	0.22	0.31	0.17	0.33	0.33	0.06	0.15	0.04
OvlAdjV/S:						0.14						
Crit Moves:		****			****				****		****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.912
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	106	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	0 1
Volume Module:												
Base Vol:	102	717	98	107	699	43	50	258	95	182	699	190
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	103	724	99	108	706	43	51	261	96	184	706	192
Added Vol:	34	5	0	0	11	0	0	22	44	0	17	0
PasserByVol:	8	0	0	0	0	0	0	5	15	0	3	0
Initial Fut:	145	729	99	108	717	43	51	288	155	184	726	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	145	729	99	108	717	43	51	288	155	184	726	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	729	99	108	717	43	51	288	155	184	726	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	729	99	108	717	43	51	288	155	184	726	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.89	0.11	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2818	382	1600	3017	183	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.26	0.26	0.07	0.24	0.24	0.03	0.09	0.10	0.11	0.45	0.12
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project Conditions - PM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #52 El Segundo Blvd & San Pedro St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	101	322	51	86	228	85	146	1415	72	33	568	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	322	51	86	228	85	146	1415	72	33	568	85
Added Vol:	0	0	0	0	0	0	0	40	0	0	54	0
PasserByVol:	0	0	0	0	0	0	0	16	0	0	31	0
Initial Fut:	101	322	51	86	228	85	146	1471	72	33	653	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	322	51	86	228	85	146	1471	72	33	653	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	322	51	86	228	85	146	1471	72	33	653	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	101	322	51	86	228	85	146	1471	72	33	653	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	1.46	0.54	1.00	2.86	0.14	1.00	2.65	0.35
Final Sat.:	1600	2762	438	1600	2331	869	1600	4576	224	1600	4247	553
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.12	0.05	0.10	0.10	0.09	0.32	0.32	0.02	0.15	0.15
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #13 Slater Ave & El Segundo Blvd

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	10	0	48	46	1643	0	0	692	16
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	10	0	48	46	1659	0	0	699	16
Added Vol:	0	0	0	0	0	0	0	78	0	0	108	0
PasserByVol:	0	0	0	0	0	0	0	10	0	0	29	0
Initial Fut:	0	0	0	10	0	48	46	1747	0	0	836	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	48	46	1747	0	0	836	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	48	46	1747	0	0	836	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	48	46	1747	0	0	836	16
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.96	0.04
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	3139	61
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.03	0.03	0.55	0.00	0.00	0.27	0.27
Crit Moves:						****		****		****		

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Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #21 Compton Ave & El Segundo Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.790	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	65	Level Of Service:	C	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	67	31	16	111	64	152	235	1347	103	16	449	74
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	68	31	16	112	65	154	237	1360	104	16	453	75
Added Vol:	0	0	0	33	0	98	63	15	0	0	11	19
PasserByVol:	0	12	0	0	23	29	10	0	0	0	0	0
Initial Fut:	68	43	16	145	88	281	310	1375	104	16	464	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	43	16	145	88	281	310	1375	104	16	464	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	43	16	145	88	281	310	1375	104	16	464	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	43	16	145	88	281	310	1375	104	16	464	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.46	0.54	1.00	1.00	1.00	1.00	1.86	0.14	1.00	1.66	0.34
Final Sat.:	1600	2330	870	1600	1600	1600	1600	2975	225	1600	2663	537
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.02	0.09	0.05	0.18	0.19	0.46	0.46	0.01	0.17	0.17
Crit Moves:	****					****		****		****		

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Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.941
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	126	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	153	674	153	147	475	135	114	1059	163	93	468	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	681	155	148	480	136	115	1070	165	94	473	115
Added Vol:	0	111	0	50	155	9	9	0	0	0	1	36
PasserByVol:	0	39	0	26	75	14	8	0	0	0	0	14
Initial Fut:	155	831	155	224	710	159	132	1070	165	94	474	165
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	155	831	155	224	710	159	132	1070	165	94	474	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	831	155	224	710	159	132	1070	165	94	474	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	155	831	155	224	710	159	132	1070	165	94	474	165
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.69	0.31	1.00	1.63	0.37	1.00	2.00	1.00	1.00	1.48	0.52
Final Sat.:	1600	2698	502	1600	2613	587	1600	3200	1600	1600	2373	827
Capacity Analysis Module:												
Vol/Sat:	0.10	0.31	0.31	0.14	0.27	0.27	0.08	0.33	0.10	0.06	0.20	0.20
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Willowbrook Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.748
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1!	0	0	0 1!	0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	30	107	16	132	79	27	15	1314	19	29	796	123
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	30	108	16	133	80	27	15	1327	19	29	804	124
Added Vol:	0	0	0	4	0	0	0	50	0	0	37	6
PasserByVol:	0	1	0	6	2	0	0	20	0	0	11	3
Initial Fut:	30	109	16	143	82	27	15	1397	19	29	852	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	109	16	143	82	27	15	1397	19	29	852	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	109	16	143	82	27	15	1397	19	29	852	133
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	109	16	143	82	27	15	1397	19	29	852	133
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.71	0.10	0.57	0.32	0.11	1.00	1.97	0.03	1.00	1.73	0.27
Final Sat.:	312	1122	166	909	519	173	1600	3157	43	1600	2767	433
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.09	0.16	0.16	0.01	0.44	0.44	0.02	0.31	0.31
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - PM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #55 El Segundo Blvd & Santa Fe Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.717
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	151	513	69	39	368	68	96	270	213	12	68	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	513	69	39	368	68	96	270	213	12	68	26
Added Vol:	0	0	0	0	0	0	0	22	0	0	17	0
PasserByVol:	0	0	0	0	0	0	0	5	0	0	3	0
Initial Fut:	151	513	69	39	368	68	96	297	213	12	88	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	513	69	39	368	68	96	297	213	12	88	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	513	69	39	368	68	96	297	213	12	88	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	513	69	39	368	68	96	297	213	12	88	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.69	0.31	0.16	0.49	0.35	0.09	0.70	0.21
Final Sat.:	1600	2821	379	1600	2701	499	253	784	562	152	1117	330
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.18	0.02	0.14	0.14	0.06	0.38	0.38	0.01	0.08	0.08
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #56 Alameda St & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	136	771	0	0	868	77	111	0	198	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	771	0	0	868	77	111	0	198	0	0	0
Added Vol:	0	36	0	0	49	0	0	0	0	0	0	0
PasserByVol:	7	8	0	0	15	0	0	0	15	0	0	0
Initial Fut:	143	815	0	0	932	77	111	0	213	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	815	0	0	932	77	111	0	213	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	815	0	0	932	77	111	0	213	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	815	0	0	932	77	111	0	213	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.85	0.15	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2956	244	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.25	0.00	0.00	0.32	0.32	0.07	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #57 Central Ave & W Compton Bvld

Cycle (sec):	100	Critical Vol./Cap.(X):	0.813
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	125	725	114	171	577	98	102	886	201	90	352	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	725	114	171	577	98	102	886	201	90	352	126
Added Vol:	0	27	0	0	37	0	0	0	0	0	0	0
PasserByVol:	0	8	0	0	14	1	1	1	0	0	1	0
Initial Fut:	125	760	114	171	628	99	103	887	201	90	353	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	760	114	171	628	99	103	887	201	90	353	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	760	114	171	628	99	103	887	201	90	353	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	760	114	171	628	99	103	887	201	90	353	126
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.47	0.53
Final Sat.:	1600	2783	417	1600	3200	1600	1600	3200	1600	1600	2358	842
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.11	0.20	0.06	0.06	0.28	0.13	0.06	0.15	0.15
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - PM Peak
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #58 Wilmington Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	97	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	106	793	155	150	544	82	132	898	109	140	451	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	793	155	150	544	82	132	898	109	140	451	172
Added Vol:	0	111	0	0	155	0	0	0	0	0	0	0
PasserByVol:	0	31	0	8	60	1	1	0	0	0	0	5
Initial Fut:	106	935	155	158	759	83	133	898	109	140	451	177
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	935	155	158	759	83	133	898	109	140	451	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	935	155	158	759	83	133	898	109	140	451	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	935	155	158	759	83	133	898	109	140	451	177
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.80	0.20	1.00	1.78	0.22	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2885	315	1600	2854	346	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.29	0.10	0.10	0.26	0.26	0.08	0.31	0.31	0.09	0.14	0.11
Crit Moves:		****		****				****		****		

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #59 Willowbrook Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.456
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	0 1	0	1 0	2 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	15	112	15	0	112	38	15	1052	69	0	710	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	112	15	0	112	38	15	1052	69	0	710	61
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	2	1	0	0	2	0	0	2	6	0	1	0
Initial Fut:	17	113	15	0	114	38	15	1054	75	0	711	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	113	15	0	114	38	15	1054	75	0	711	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	113	15	0	114	38	15	1054	75	0	711	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	113	15	0	114	38	15	1054	75	0	711	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.78	0.10	0.00	0.75	0.25	1.00	2.80	0.20	0.00	1.84	0.16
Final Sat.:	188	1247	166	0	1200	400	1600	4481	319	0	2947	253
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.00	0.10	0.10	0.01	0.24	0.24	0.00	0.24	0.24
Crit Moves:	****				****		****				****	

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #60 Central Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	119	782	148	180	632	65	115	969	132	65	334	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	782	148	180	632	65	115	969	132	65	334	158
Added Vol:	0	27	0	0	37	0	0	0	0	0	0	0
PasserByVol:	0	3	0	0	5	1	1	1	0	0	1	0
Initial Fut:	119	812	148	180	674	66	116	970	132	65	335	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	812	148	180	674	66	116	970	132	65	335	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	812	148	180	674	66	116	970	132	65	335	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	812	148	180	674	66	116	970	132	65	335	158
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.69	0.31	1.00	1.82	0.18	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	1600	2707	493	1600	2915	285	1600	2817	383	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.30	0.30	0.11	0.23	0.23	0.07	0.34	0.34	0.04	0.10	0.10
Crit Moves:		****		****				****		****		

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.924
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	114	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	79	894	113	129	569	70	107	1012	159	105	425	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	894	113	129	569	70	107	1012	159	105	425	158
Added Vol:	0	111	0	0	155	0	0	0	0	0	0	0
PasserByVol:	0	24	0	8	47	1	1	0	0	0	0	3
Initial Fut:	79	1029	113	137	771	71	108	1012	159	105	425	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	1029	113	137	771	71	108	1012	159	105	425	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	1029	113	137	771	71	108	1012	159	105	425	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	1029	113	137	771	71	108	1012	159	105	425	161
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.45	0.55
Final Sat.:	1600	2883	317	1600	2930	270	1600	3200	1600	1600	2321	879
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.36	0.09	0.26	0.26	0.07	0.32	0.10	0.07	0.18	0.18
Crit Moves:		****		****				****		****		

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #62 Wilmington Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.952
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	135	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	70	970	330	148	564	19	45	532	34	98	224	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	970	330	148	564	19	45	532	34	98	224	169
Added Vol:	0	111	0	0	155	0	0	0	0	0	0	0
PasserByVol:	0	18	0	2	36	0	0	0	0	0	0	1
Initial Fut:	70	1099	330	150	755	19	45	532	34	98	224	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	1099	330	150	755	19	45	532	34	98	224	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	1099	330	150	755	19	45	532	34	98	224	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	1099	330	150	755	19	45	532	34	98	224	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.95	0.05	1.00	0.94	0.06	1.00	0.57	0.43
Final Sat.:	1600	3200	1600	1600	3121	79	1600	1504	96	1600	910	690
Capacity Analysis Module:												
Vol/Sat:	0.04	0.34	0.21	0.09	0.24	0.24	0.03	0.35	0.35	0.06	0.25	0.25
Crit Moves:		****		****				****		****		

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #63 Wilmington Ave & Walnut St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.825
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	54	1153	85	34	627	25	152	451	184	34	63	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	1153	85	34	627	25	152	451	184	34	63	63
Added Vol:	0	111	0	0	155	0	0	0	0	0	0	0
PasserByVol:	0	19	0	0	37	0	0	0	0	0	0	0
Initial Fut:	54	1283	85	34	819	25	152	451	184	34	63	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	1283	85	34	819	25	152	451	184	34	63	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	1283	85	34	819	25	152	451	184	34	63	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	1283	85	34	819	25	152	451	184	34	63	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.40	0.05	0.02	0.26	0.02	0.10	0.28	0.12	0.02	0.04	0.04
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project Conditions - PM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #64 Central Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 0	1	1 0	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	866	326	311	507	0	0	0	0	68	0	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	866	326	311	507	0	0	0	0	68	0	169
Added Vol:	0	27	0	0	37	0	0	0	0	0	0	0
PasserByVol:	0	3	0	0	5	0	0	0	0	0	0	0
Initial Fut:	0	896	326	311	549	0	0	0	0	68	0	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	896	326	311	549	0	0	0	0	68	0	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	896	326	311	549	0	0	0	0	68	0	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	896	326	311	549	0	0	0	0	68	0	169
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.20	0.19	0.17	0.00	0.00	0.00	0.00	0.04	0.00	0.11
Crit Moves:		****		****								****

Willowbrook
Existing+Project Conditions - PM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #65 Willowbrook Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.530
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1!	0	0	0	1!	0	0	1	0	2	0	1	0	0	1	1	0
Volume Module:																			
Base Vol:	16	89	13	35	67	20	18	1056	20	0	571	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	89	13	35	67	20	18	1056	20	0	571	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	3	0	0	8	0	0	9	0	0	3	0
Initial Fut:	16	92	13	35	75	20	18	1065	20	0	574	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	92	13	35	75	20	18	1065	20	0	574	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	92	13	35	75	20	18	1065	20	0	574	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	92	13	35	75	20	18	1065	20	0	574	39
Saturation Flow Module:																			
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.76	0.11	0.27	0.58	0.15	1.00	2.00	1.00	0.00	1.87	0.13
Final Sat.:	212	1217	172	431	923	246	1600	3200	1600	0	2996	204
Capacity Analysis Module:																			
Vol/Sat:	0.01	0.08	0.08	0.02	0.08	0.08	0.01	0.33	0.01	0.00	0.19	0.19
Crit Moves:		****			****				****			

Willowbrook
Existing+Project Conditions - PM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #66 Alameda St. West & Greenleaf Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.748
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	84	546	219	61	646	83	93	599	80	208	211	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	546	219	61	646	83	93	599	80	208	211	43
Added Vol:	0	36	0	0	49	0	0	0	0	0	0	0
PasserByVol:	0	15	0	0	30	0	0	2	0	0	1	0
Initial Fut:	84	597	219	61	725	83	93	601	80	208	212	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	597	219	61	725	83	93	601	80	208	212	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	597	219	61	725	83	93	601	80	208	212	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	597	219	61	725	83	93	601	80	208	212	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.46	0.54	1.00	1.79	0.21	1.00	1.77	0.23	1.00	1.00	1.00
Final Sat.:	1600	2341	859	1600	2871	329	1600	2824	376	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.26	0.25	0.04	0.25	0.25	0.06	0.21	0.21	0.13	0.13	0.03
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
11-1-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Alameda St & Abbott Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.651
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	1 0	1 0	1	1 0	0 0	1! 0	0	1 1	0	0 1
Volume Module:												
Base Vol:	0	687	236	201	1116	0	6	24	2	229	1	136
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	694	238	203	1127	0	6	24	2	231	1	137
Added Vol:	0	49	0	0	36	0	0	0	0	0	0	0
PasserByVol:	0	16	21	0	4	0	0	0	0	8	0	0
Initial Fut:	0	759	259	203	1167	0	6	24	2	239	1	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	759	259	203	1167	0	6	24	2	239	1	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	759	259	203	1167	0	6	24	2	239	1	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	759	259	203	1167	0	6	24	2	239	1	137
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.49	0.51	1.00	2.00	0.00	0.19	0.75	0.06	1.99	0.01	1.00
Final Sat.:	0	2385	815	1600	3200	0	300	1200	100	3187	13	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.13	0.36	0.00	0.02	0.02	0.02	0.08	0.08	0.09
Crit Moves:		****		****				****				****

Willowbrook
Existing+Project Conditions - PM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #53 Imperial Hway & Fernwood Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	95	70	7	104	90	9	44	1264	221	7	789	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	70	7	104	90	9	44	1264	221	7	789	143
Added Vol:	0	0	0	0	0	0	0	61	0	0	45	0
PasserByVol:	0	0	0	0	0	0	0	23	0	0	15	0
Initial Fut:	95	70	7	104	90	9	44	1348	221	7	849	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	70	7	104	90	9	44	1348	221	7	849	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	70	7	104	90	9	44	1348	221	7	849	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	70	7	104	90	9	44	1348	221	7	849	143
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.55	0.41	0.04	0.52	0.44	0.04	1.00	1.72	0.28	1.00	1.71	0.29
Final Sat.:	884	651	65	820	709	71	1600	2749	451	1600	2739	461
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.07	0.13	0.13	0.03	0.49	0.49	0.00	0.31	0.31
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project Conditions - PM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #54 Imperial Hwy & State St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.809
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	51	454	123	72	326	124	339	1047	30	116	718	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	454	123	72	326	124	339	1047	30	116	718	76
Added Vol:	0	0	0	0	0	0	0	61	0	0	45	0
PasserByVol:	0	0	0	0	0	1	9	0	14	0	14	0
Initial Fut:	51	454	123	72	326	125	348	1108	44	116	777	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	454	123	72	326	125	348	1108	44	116	777	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	454	123	72	326	125	348	1108	44	116	777	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	454	123	72	326	125	348	1108	44	116	777	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	1.00	1.45	0.55	1.00	1.92	0.08	1.00	1.82	0.18
Final Sat.:	1600	2518	682	1600	2313	887	1600	3078	122	1600	2915	285
Capacity Analysis Module:												
Vol/Sat:	0.03	0.18	0.18	0.05	0.14	0.14	0.22	0.36	0.36	0.07	0.27	0.27
Crit Moves:		****		****			****				****	

Intersections LOS Analysis Sheets

Existing + Project + Cumulative Conditions

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Avalon Blvd & El Segundo

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	76	514	93	81	556	113	165	383	69	110	997	252
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	77	519	94	82	562	114	167	387	70	111	1007	255
Added Vol:	7	19	38	2	17	0	0	109	2	25	75	6
PasserByVol:	0	13	0	0	5	0	0	32	0	0	13	0
Initial Fut:	84	551	132	84	584	114	167	528	72	136	1095	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	551	132	84	584	114	167	528	72	136	1095	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	551	132	84	584	114	167	528	72	136	1095	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	551	132	84	584	114	167	528	72	136	1095	261
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	1.67	0.33	1.00	2.64	0.36	1.00	2.42	0.58
Final Sat.:	1600	2582	618	1600	2677	523	1600	4226	574	1600	3877	923
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.21	0.05	0.22	0.22	0.10	0.12	0.12	0.09	0.28	0.28
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Avalon Blvd & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	103	470	58	160	470	99	48	392	63	113	1049	159
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	104	475	59	162	475	100	48	396	64	114	1059	161
Added Vol:	0	47	5	8	35	4	5	47	0	1	20	2
PasserByVol:	0	8	0	0	4	0	0	8	0	0	3	0
Initial Fut:	104	530	64	170	514	104	53	451	64	115	1082	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	530	64	170	514	104	53	451	64	115	1082	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	530	64	170	514	104	53	451	64	115	1082	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	530	64	170	514	104	53	451	64	115	1082	163
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.79	0.21	1.00	1.66	0.34	1.00	2.63	0.37	1.00	2.61	0.39
Final Sat.:	1600	2857	343	1600	2661	539	1600	4206	594	1600	4173	627
Capacity Analysis Module:												
Vol/Sat:	0.07	0.19	0.19	0.11	0.19	0.19	0.03	0.11	0.11	0.07	0.26	0.26
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.971
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	155	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	204	659	194	125	687	209	89	400	76	170	965	85
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	206	666	196	126	694	211	90	404	77	172	975	86
Added Vol:	18	23	34	0	30	13	15	87	15	22	65	0
PasserByVol:	0	29	0	0	12	3	16	15	0	0	10	0
Initial Fut:	224	718	230	126	736	227	121	506	92	194	1050	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	224	718	230	126	736	227	121	506	92	194	1050	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	718	230	126	736	227	121	506	92	194	1050	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	224	718	230	126	736	227	121	506	92	194	1050	86
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.53	0.47	1.00	2.00	1.00	1.00	1.85	0.15
Final Sat.:	1600	2423	777	1600	2445	755	1600	3200	1600	1600	2958	242
Capacity Analysis Module:												
Vol/Sat:	0.14	0.30	0.30	0.08	0.30	0.30	0.08	0.16	0.06	0.12	0.35	0.35
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #11 Central Ave & Rosecrans Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.870
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	87	Level Of Service:	D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	135	571	71	95	644	207	121	346	125	117	979	153
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	136	577	72	96	650	209	122	349	126	118	989	155
Added Vol:	16	66	0	4	40	17	22	12	3	0	14	3
PasserByVol:	0	20	0	0	8	2	5	5	0	0	2	0
Initial Fut:	152	663	72	100	698	228	149	366	129	118	1005	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	663	72	100	698	228	149	366	129	118	1005	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	663	72	100	698	228	149	366	129	118	1005	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	663	72	100	698	228	149	366	129	118	1005	158
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.22	0.78	1.00	1.73	0.27
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3548	1252	1600	2766	434
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.04	0.06	0.22	0.14	0.09	0.10	0.10	0.07	0.36	0.36
Crit Moves:	****				****		****				****	

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Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Slater Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	42	41	66	46	37	45	43	757	35	44	730	18
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	42	41	67	46	37	45	43	765	35	44	737	18
Added Vol:	0	0	0	0	0	0	0	67	0	0	56	0
PasserByVol:	0	0	18	9	0	0	0	209	0	8	83	4
Initial Fut:	42	41	85	55	37	45	43	1041	35	52	876	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	41	85	55	37	45	43	1041	35	52	876	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	41	85	55	37	45	43	1041	35	52	876	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	41	85	55	37	45	43	1041	35	52	876	22
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.25	0.25	0.50	0.40	0.27	0.33	1.00	1.93	0.07	1.00	1.95	0.05
Final Sat.:	403	393	804	642	432	526	1600	3095	105	1600	3121	79
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.03	0.09	0.09	0.03	0.34	0.34	0.03	0.28	0.28
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Compton Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	1.127
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	0	1 0	1 0	2	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	114	332	167	113	289	134	75	660	171	190	1489	161
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	115	335	169	114	292	135	76	667	173	192	1504	163
Added Vol:	95	26	40	5	42	0	1	49	172	87	26	3
PasserByVol:	2	14	0	0	34	0	0	17	3	0	7	0
Initial Fut:	212	375	209	119	368	135	77	733	348	279	1537	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	212	375	209	119	368	135	77	733	348	279	1537	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	375	209	119	368	135	77	733	348	279	1537	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	212	375	209	119	368	135	77	733	348	279	1537	166
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.73	0.27	1.00	2.03	0.97	1.00	1.81	0.19
Final Sat.:	1600	1600	1600	1600	1170	430	1600	3255	1545	1600	2889	311
Capacity Analysis Module:												
Vol/Sat:	0.13	0.23	0.13	0.07	0.31	0.31	0.05	0.23	0.23	0.17	0.53	0.53
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Compton Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.579
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	479	86	56	539	5	39	58	36	60	17	49
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	9	484	87	57	544	5	39	59	36	61	17	49
Added Vol:	0	56	105	62	31	0	0	0	0	63	0	29
PasserByVol:	4	16	0	0	37	0	0	0	9	0	0	0
Initial Fut:	13	556	192	119	612	5	39	59	45	124	17	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	556	192	119	612	5	39	59	45	124	17	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	556	192	119	612	5	39	59	45	124	17	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	556	192	119	612	5	39	59	45	124	17	78
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	1.47	0.50	0.32	1.67	0.01	0.27	0.41	0.32	0.56	0.08	0.36
Final Sat.:	55	2338	807	515	2663	22	440	654	506	902	125	573
Capacity Analysis Module:												
Vol/Sat:	0.01	0.24	0.24	0.07	0.23	0.23	0.02	0.09	0.09	0.08	0.14	0.14
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Compton Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.926
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	115	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	106	296	85	129	308	115	122	465	88	88	460	160
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	107	299	86	130	311	116	123	470	89	89	465	162
Added Vol:	0	128	10	4	74	15	31	36	0	3	41	2
PasserByVol:	0	0	34	48	0	0	0	247	0	17	98	20
Initial Fut:	107	427	130	182	385	131	154	753	89	109	604	184
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	427	130	182	385	131	154	753	89	109	604	184
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	427	130	182	385	131	154	753	89	109	604	184
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	107	427	130	182	385	131	154	753	89	109	604	184
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	1.49	0.51	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2454	746	1600	2387	813	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.11	0.16	0.16	0.10	0.47	0.06	0.07	0.38	0.11
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Compton Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	1	360	25	59	426	7	5	12	3	36	40	108
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	1	364	25	60	430	7	5	12	3	36	40	109
Added Vol:	0	139	0	0	77	0	0	0	0	0	0	0
PasserByVol:	0	33	0	0	17	0	0	0	0	0	0	0
Initial Fut:	1	536	25	60	524	7	5	12	3	36	40	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	536	25	60	524	7	5	12	3	36	40	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	536	25	60	524	7	5	12	3	36	40	109
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	536	25	60	524	7	5	12	3	36	40	109
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.90	0.09	0.20	1.78	0.02	0.25	0.60	0.15	0.19	0.22	0.59
Final Sat.:	6	3050	144	323	2839	38	400	960	240	313	348	939
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.04	0.18	0.18	0.00	0.01	0.01	0.02	0.12	0.12
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Wilmington Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.832
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	175	422	51	31	835	143	142	23	218	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	177	426	52	31	843	144	143	23	220	0	0	0
Added Vol:	14	31	0	0	214	4	10	0	32	0	0	0
PasserByVol:	7	16	0	0	203	0	0	0	17	0	0	0
Initial Fut:	198	473	52	31	1260	148	153	23	269	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	198	473	52	31	1260	148	153	23	269	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	198	473	52	31	1260	148	153	23	269	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	198	473	52	31	1260	148	153	23	269	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.79	0.21	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2886	314	1600	2863	337	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.16	0.16	0.02	0.44	0.44	0.10	0.01	0.17	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #27 Wilmington Ave & I-105 e/b Ramps

****

Cycle (sec):	100	Critical Vol./Cap.(X):	1.218
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 0	2	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	325	644	0	0	655	481	407	0	532	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	328	650	0	0	662	486	411	0	537	0	0	0
Added Vol:	98	201	0	0	219	28	4	0	144	0	0	0
PasserByVol:	53	73	0	0	219	0	0	0	79	0	0	0
Initial Fut:	479	924	0	0	1100	514	415	0	760	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	479	924	0	0	1100	514	415	0	760	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	479	924	0	0	1100	514	415	0	760	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	479	924	0	0	1100	514	415	0	760	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.00	2.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	3200	3200	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.30	0.19	0.00	0.00	0.34	0.16	0.26	0.00	0.48	0.00	0.00	0.00
Crit Moves:	****				****				****			

****

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	1.208
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	2 0	1	1 0	0 0	1! 0	0	0	1 0	0 1
Volume Module:												
Base Vol:	129	843	60	92	939	164	59	18	80	20	39	56
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	130	851	61	93	948	166	60	18	81	20	39	57
Added Vol:	209	36	8	17	19	326	214	1	139	22	2	49
PasserByVol:	0	125	0	0	298	0	0	0	0	0	0	0
Initial Fut:	339	1012	69	110	1265	492	274	19	220	42	41	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	339	1012	69	110	1265	492	274	19	220	42	41	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	339	1012	69	110	1265	492	274	19	220	42	41	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	339	1012	69	110	1265	492	274	19	220	42	41	106
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.81	0.19	2.00	1.44	0.56	0.53	0.04	0.43	0.50	0.50	1.00
Final Sat.:	1600	4495	305	2880	2305	895	854	60	686	808	792	1600
Capacity Analysis Module:												
Vol/Sat:	0.21	0.23	0.23	0.04	0.55	0.55	0.17	0.32	0.32	0.03	0.05	0.07
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #29 Wilmington Ave & 120th St (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.916
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	108	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	35	713	141	111	619	314	143	148	109	65	308	184
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	35	720	142	112	625	317	144	149	110	66	311	186
Added Vol:	19	236	1	1	159	20	15	6	6	3	16	2
PasserByVol:	0	95	0	0	140	171	33	6	0	11	15	0
Initial Fut:	54	1051	143	113	924	508	192	161	116	80	342	188
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	1051	143	113	924	508	192	161	116	80	342	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	1051	143	113	924	508	192	161	116	80	342	188
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	1051	143	113	924	508	192	161	116	80	342	188
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.29	0.71	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2816	384	1600	2065	1135	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.37	0.37	0.07	0.45	0.45	0.12	0.10	0.07	0.05	0.21	0.12
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Wilmington Ave & 120th St (East)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	26	823	7	25	659	75	18	0	3	13	3	40
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	26	831	7	25	666	76	18	0	3	13	3	40
Added Vol:	0	251	1	5	163	0	0	0	0	1	0	4
PasserByVol:	170	0	0	0	0	151	95	14	72	0	35	0
Initial Fut:	196	1082	8	30	829	227	113	14	75	14	38	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	196	1082	8	30	829	227	113	14	75	14	38	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	1082	8	30	829	227	113	14	75	14	38	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	196	1082	8	30	829	227	113	14	75	14	38	44
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.57	0.43	0.89	0.11	1.00	0.15	0.39	0.46
Final Sat.:	1600	3176	24	1600	2512	688	1424	176	1600	234	630	736
Capacity Analysis Module:												
Vol/Sat:	0.12	0.34	0.34	0.02	0.33	0.33	0.07	0.08	0.05	0.01	0.06	0.06
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #31 Wilmington Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	49	757	40	48	670	13	20	47	41	84	99	74
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	49	765	40	48	677	13	20	47	41	85	100	75
Added Vol:	0	252	0	0	164	0	0	0	0	0	0	0
PasserByVol:	0	133	0	13	55	0	0	0	0	0	0	31
Initial Fut:	49	1150	40	61	896	13	20	47	41	85	100	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	1150	40	61	896	13	20	47	41	85	100	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	1150	40	61	896	13	20	47	41	85	100	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	1150	40	61	896	13	20	47	41	85	100	106
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.93	0.07	1.00	1.97	0.03	0.18	0.44	0.38	0.29	0.34	0.37
Final Sat.:	1600	3091	109	1600	3154	46	296	696	607	467	551	582
Capacity Analysis Module:												
Vol/Sat:	0.03	0.37	0.37	0.04	0.28	0.28	0.01	0.07	0.07	0.05	0.18	0.18
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	173	744	54	123	640	135	92	393	258	56	557	89
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	175	751	55	124	646	136	93	397	261	57	563	90
Added Vol:	34	185	0	36	117	11	6	11	18	0	17	62
PasserByVol:	0	102	0	11	42	0	0	0	0	0	0	26
Initial Fut:	209	1038	55	171	805	147	99	408	279	57	580	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	1038	55	171	805	147	99	408	279	57	580	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	1038	55	171	805	147	99	408	279	57	580	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	209	1038	55	171	805	147	99	408	279	57	580	178
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.69	0.31	1.00	1.19	0.81	1.00	1.53	0.47
Final Sat.:	1600	3040	160	1600	2705	495	1600	1901	1299	1600	2448	752
Capacity Analysis Module:												
Vol/Sat:	0.13	0.34	0.34	0.11	0.30	0.30	0.06	0.21	0.21	0.04	0.24	0.24
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #34 Willowbrook Ave W & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.478
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0	0 1 0	0	0	0 1 0	0	1 0	0 0
Volume Module:												
Base Vol:	164	0	24	0	12	41	0	228	58	11	334	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	166	0	24	0	12	41	0	230	59	11	337	0
Added Vol:	3	0	0	0	0	0	0	7	9	0	8	0
PasserByVol:	0	0	0	0	0	0	0	6	0	0	26	0
Initial Fut:	169	0	24	0	12	41	0	243	68	11	371	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	0	24	0	12	41	0	243	68	11	371	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	0	24	0	12	41	0	243	68	11	371	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	0	24	0	12	41	0	243	68	11	371	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.23	0.77	0.00	0.78	0.22	0.03	0.97	0.00
Final Sat.:	1600	0	1600	0	362	1238	0	1252	348	46	1554	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.02	0.00	0.03	0.03	0.00	0.19	0.19	0.01	0.24	0.00
Crit Moves:	****				****			****				****

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #35 Willowbrook Ave E & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.388
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	91	43	37	3	44	66	38	112	97	23	172	4
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	92	43	37	3	44	67	38	113	98	23	174	4
Added Vol:	0	0	0	0	1	4	2	5	0	0	5	0
PasserByVol:	0	0	0	0	0	0	0	6	0	0	26	0
Initial Fut:	92	43	37	3	45	71	40	124	98	23	205	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	43	37	3	45	71	40	124	98	23	205	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	43	37	3	45	71	40	124	98	23	205	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	43	37	3	45	71	40	124	98	23	205	4
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.53	0.25	0.22	0.03	0.38	0.59	1.00	0.56	0.44	1.00	0.98	0.02
Final Sat.:	851	402	346	41	610	949	1600	894	706	1600	1569	31
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.00	0.07	0.07	0.03	0.14	0.14	0.01	0.13	0.13
Crit Moves:	****				****			****				****

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 1	0	0 1	0	0	1! 0	0	1 0	3 1 1	2	0	2 1 0
Volume Module:												
Base Vol:	534	11	136	7	34	67	50	1002	222	735	1333	13
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	539	11	137	7	34	68	51	1012	224	742	1346	13
Added Vol:	181	9	1	0	0	0	7	89	112	2	131	4
PasserByVol:	116	0	11	0	0	0	0	19	32	0	42	0
Initial Fut:	836	20	149	7	34	68	58	1120	368	744	1519	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	836	20	149	7	34	68	58	1120	368	744	1519	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	836	20	149	7	34	68	58	1120	368	744	1519	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	836	20	149	7	34	68	58	1120	368	744	1519	17
OvlAdjVol:									0			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.95	0.05	1.00	0.06	0.31	0.63	1.00	3.76	1.24	2.00	2.97	0.03
Final Sat.:	2812	68	1600	104	504	993	1600	6021	1979	2880	4746	54
Capacity Analysis Module:												
Vol/Sat:	0.30	0.30	0.09	0.07	0.07	0.07	0.04	0.19	0.19	0.26	0.32	0.32
OvlAdjV/S:									0.00			
Crit Moves:	****			****				****		****		

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #37 Willowbrook Ave W & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.454
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	2 0	1	0 0	2 0	1
Volume Module:												
Base Vol:	64	166	7	0	9	6	45	444	60	0	565	37
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	65	168	7	0	9	6	45	448	61	0	571	37
Added Vol:	0	2	0	5	4	0	0	46	0	0	78	2
PasserByVol:	0	6	0	0	2	0	0	7	0	0	17	0
Initial Fut:	65	176	7	5	15	6	45	501	61	0	666	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	176	7	5	15	6	45	501	61	0	666	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	176	7	5	15	6	45	501	61	0	666	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	176	7	5	15	6	45	501	61	0	666	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.96	0.04	1.00	0.71	0.29	1.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1600	1538	62	1600	1142	458	1600	3200	1600	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.00	0.01	0.01	0.03	0.16	0.04	0.00	0.21	0.02
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #38 Willowbrook Ave E & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.479
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	0 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	42	96	38	75	166	43	0	432	19	43	532	65
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	42	97	38	76	168	43	0	436	19	43	537	66
Added Vol:	0	0	0	0	0	1	0	51	0	0	80	0
PasserByVol:	0	5	0	0	2	0	0	7	0	0	17	0
Initial Fut:	42	102	38	76	170	44	0	494	19	43	634	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	102	38	76	170	44	0	494	19	43	634	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	102	38	76	170	44	0	494	19	43	634	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	102	38	76	170	44	0	494	19	43	634	66
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.73	0.27	1.00	0.79	0.21	0.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1600	1162	438	1600	1268	332	0	3200	1600	1600	2900	300
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.09	0.05	0.13	0.13	0.00	0.15	0.01	0.03	0.22	0.22
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #39 Mona Blvd & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0 1!	0	0	1 0	2 1	0	1 0	2 1 0
Volume Module:												
Base Vol:	139	49	155	27	102	92	37	928	176	189	1782	21
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	140	49	157	27	103	93	37	937	178	191	1800	21
Added Vol:	4	0	5	0	0	0	0	84	6	2	133	0
PasserByVol:	0	2	0	0	5	0	0	19	11	0	42	0
Initial Fut:	144	51	162	27	108	93	37	1040	195	193	1975	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	51	162	27	108	93	37	1040	195	193	1975	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	51	162	27	108	93	37	1040	195	193	1975	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	51	162	27	108	93	37	1040	195	193	1975	21
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.74	0.26	1.00	0.12	0.47	0.41	1.00	2.53	0.47	1.00	2.97	0.03
Final Sat.:	1179	421	1600	191	757	651	1600	4043	757	1600	4749	51
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.10	0.02	0.14	0.14	0.02	0.26	0.26	0.12	0.42	0.42
Crit Moves:	****				****		****				****	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	90	41	50	195	218	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.958				0.946	
Flt Protected	0.967		0.950			
Satd. Flow (prot)	1726	0	1770	1863	1762	0
Flt Permitted	0.967		0.950			
Satd. Flow (perm)	1726	0	1770	1863	1762	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	266			283	255	
Travel Time (s)	6.0			6.4	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	45	54	212	237	157
Shared Lane Traffic (%)						
Lane Group Flow (vph)	143	0	54	212	394	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	90	41	50	195	218	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	45	54	212	237	157

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	636	315	393	0	-	0
Stage 1	315	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	442	725	1166	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	422	725	1166	-	-	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	701	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	1.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1166	-	486	-	-
HCM Lane V/C Ratio	0.047	-	0.293	-	-
HCM Control Delay (s)	8.2	-	15.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.2	-	-

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #41 Mona Blvd & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.550
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	0	1	0	1
Volume Module:												
Base Vol:	39	109	71	89	130	48	55	497	33	48	538	41
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	39	110	72	90	131	48	56	502	33	48	543	41
Added Vol:	0	0	0	1	1	1	0	51	0	0	79	2
PasserByVol:	0	11	0	0	5	0	0	7	0	0	17	0
Initial Fut:	39	121	72	91	137	49	56	560	33	48	639	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	121	72	91	137	49	56	560	33	48	639	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	121	72	91	137	49	56	560	33	48	639	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	121	72	91	137	49	56	560	33	48	639	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.52	0.31	0.40	0.60	1.00	1.00	1.89	0.11	1.00	1.87	0.13
Final Sat.:	271	834	494	637	963	1600	1600	3020	180	1600	2997	203
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.15	0.06	0.14	0.03	0.03	0.19	0.19	0.03	0.21	0.21
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Alameda St & 103rd St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.821
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	178	809	0	0	948	191	194	0	152	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	180	817	0	0	957	193	196	0	154	0	0	0
Added Vol:	5	31	0	0	48	4	1	0	4	0	0	0
PasserByVol:	0	5	0	0	6	14	3	0	0	0	0	0
Initial Fut:	185	853	0	0	1011	211	200	0	158	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	185	853	0	0	1011	211	200	0	158	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	853	0	0	1011	211	200	0	158	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	185	853	0	0	1011	211	200	0	158	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.65	0.35	0.55	0.01	0.44	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2648	552	895	0	705	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.27	0.00	0.00	0.38	0.38	0.12	0.00	0.22	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #45 Alameda St & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.837
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 1		1 0	1 0 2		0 1	2 0 2		1 0	1 0 3		0 1
Volume Module:												
Base Vol:	209	643	82	74	641	540	357	536	169	85	1226	36
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	211	649	83	75	647	545	361	541	171	86	1238	36
Added Vol:	6	1	0	0	0	48	31	55	4	0	82	0
PasserByVol:	0	0	0	0	0	18	12	8	0	0	23	0
Initial Fut:	217	650	83	75	647	611	404	604	175	86	1343	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	650	83	75	647	611	404	604	175	86	1343	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	650	83	75	647	611	404	604	175	86	1343	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	650	83	75	647	611	404	604	175	86	1343	36
OvlAdjVol:						387						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.77	0.23	1.00	2.00	1.00	2.00	2.33	0.67	1.00	3.00	1.00
Final Sat.:	2880	2839	361	1600	3200	1600	2880	3724	1076	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.23	0.05	0.20	0.38	0.14	0.16	0.16	0.05	0.28	0.02
OvlAdjV/S:						0.24						
Crit Moves:	****					****	****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.827
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	153	632	50	78	759	109	105	417	153	40	361	103
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	638	51	79	767	110	106	421	155	40	365	104
Added Vol:	47	7	0	0	4	0	0	23	29	0	34	0
PasserByVol:	12	0	0	0	0	0	0	2	5	0	5	0
Initial Fut:	214	645	51	79	771	110	106	446	189	40	404	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	214	645	51	79	771	110	106	446	189	40	404	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	214	645	51	79	771	110	106	446	189	40	404	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	214	645	51	79	771	110	106	446	189	40	404	104
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.75	0.25	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2968	232	1600	2800	400	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.22	0.22	0.05	0.28	0.28	0.07	0.14	0.12	0.03	0.25	0.07
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #52 El Segundo Blvd & San Pedro St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.611
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	77	232	34	95	245	153	96	518	41	49	1186	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	232	34	95	245	153	96	518	41	49	1186	46
Added Vol:	1	1	0	1	1	1	2	110	1	0	81	1
PasserByVol:	0	0	0	0	0	0	0	26	0	0	11	0
Initial Fut:	78	233	34	96	246	154	98	654	42	49	1278	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	233	34	96	246	154	98	654	42	49	1278	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	233	34	96	246	154	98	654	42	49	1278	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	233	34	96	246	154	98	654	42	49	1278	47
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.23	0.77	1.00	2.82	0.18	1.00	2.89	0.11
Final Sat.:	1600	2793	407	1600	1968	1232	1600	4510	290	1600	4630	170
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.06	0.13	0.13	0.06	0.14	0.15	0.03	0.28	0.28
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Slater Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.717
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	34	0	177	62	869	0	0	1370	11
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	34	0	179	63	878	0	0	1384	11
Added Vol:	0	0	0	0	0	0	0	121	0	0	87	0
PasserByVol:	0	0	0	0	0	0	0	15	0	0	10	0
Initial Fut:	0	0	0	34	0	179	63	1014	0	0	1481	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	34	0	179	63	1014	0	0	1481	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	34	0	179	63	1014	0	0	1481	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	34	0	179	63	1014	0	0	1481	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.99	0.01
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	3176	24
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.11	0.04	0.32	0.00	0.00	0.47	0.47
Crit Moves:						****	****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Compton Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	125	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	172	102	27	136	69	276	148	594	93	12	927	111
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	174	103	27	137	70	279	149	600	94	12	936	112
Added Vol:	0	1	0	18	2	58	105	16	0	0	29	32
PasserByVol:	0	18	0	0	8	10	15	0	0	0	0	0
Initial Fut:	174	122	27	155	80	347	269	616	94	12	965	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	174	122	27	155	80	347	269	616	94	12	965	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	122	27	155	80	347	269	616	94	12	965	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	122	27	155	80	347	269	616	94	12	965	144
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.00	1.00	1.00	1.74	0.26	1.00	1.74	0.26
Final Sat.:	1600	2615	585	1600	1600	1600	1600	2777	423	1600	2784	416
Capacity Analysis Module:												
Vol/Sat:	0.11	0.05	0.05	0.10	0.05	0.22	0.17	0.22	0.22	0.01	0.35	0.35
Crit Moves:	****					****	****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.935
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	95	614	119	138	813	189	99	462	103	124	900	98
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	96	620	120	139	821	191	100	467	104	125	909	99
Added Vol:	0	152	0	34	96	6	7	9	0	0	10	60
PasserByVol:	0	61	0	9	26	5	11	0	0	0	0	21
Initial Fut:	96	833	120	182	943	202	118	476	104	125	919	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	833	120	182	943	202	118	476	104	125	919	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	833	120	182	943	202	118	476	104	125	919	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	833	120	182	943	202	118	476	104	125	919	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.65	0.35	1.00	2.00	1.00	1.00	1.67	0.33
Final Sat.:	1600	2797	403	1600	2636	564	1600	3200	1600	1600	2676	524
Capacity Analysis Module:												
Vol/Sat:	0.06	0.30	0.30	0.11	0.36	0.36	0.07	0.15	0.07	0.08	0.34	0.34
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Willowbrook Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.727
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	18	98	19	145	83	35	6	906	29	35	1157	148
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	18	99	19	146	84	35	6	915	29	35	1169	149
Added Vol:	0	0	0	4	0	0	0	42	0	0	70	2
PasserByVol:	0	2	0	2	1	0	0	7	0	0	17	5
Initial Fut:	18	101	19	152	85	35	6	964	29	35	1256	156
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	101	19	152	85	35	6	964	29	35	1256	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	101	19	152	85	35	6	964	29	35	1256	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	101	19	152	85	35	6	964	29	35	1256	156
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.73	0.14	0.56	0.31	0.13	1.00	1.94	0.06	1.00	1.78	0.22
Final Sat.:	210	1168	222	895	498	207	1600	3106	94	1600	2845	355
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.10	0.17	0.17	0.00	0.31	0.31	0.02	0.44	0.44
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #55 El Segundo Blvd & Santa Fe Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.607
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	143	356	27	16	451	64	62	115	163	46	114	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	356	27	16	451	64	62	115	163	46	114	33
Added Vol:	0	0	0	0	0	0	0	23	0	0	34	0
PasserByVol:	0	0	0	0	0	0	0	2	0	0	5	0
Initial Fut:	143	356	27	16	451	64	62	140	163	46	153	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	356	27	16	451	64	62	140	163	46	153	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	356	27	16	451	64	62	140	163	46	153	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	356	27	16	451	64	62	140	163	46	153	33
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.75	0.25	0.17	0.38	0.45	0.20	0.66	0.14
Final Sat.:	1600	2974	226	1600	2802	398	272	614	715	317	1055	228
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.12	0.01	0.16	0.16	0.04	0.23	0.23	0.03	0.15	0.14
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #56 Alameda St & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	118	606	0	0	883	115	104	0	193	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	606	0	0	883	115	104	0	193	0	0	0
Added Vol:	0	50	0	0	31	0	0	0	0	0	0	0
PasserByVol:	12	12	0	0	5	0	0	0	15	0	0	0
Initial Fut:	130	668	0	0	919	115	104	0	208	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	668	0	0	919	115	104	0	208	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	668	0	0	919	115	104	0	208	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	668	0	0	919	115	104	0	208	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.78	0.22	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2844	356	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.00	0.00	0.32	0.32	0.07	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #57 Central Ave & W Compton Bvld

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	182	573	83	138	655	148	104	345	138	164	758	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	182	573	83	138	655	148	104	345	138	164	758	120
Added Vol:	0	79	0	1	42	0	0	0	0	0	0	3
PasserByVol:	0	12	0	0	5	0	1	1	0	0	0	0
Initial Fut:	182	664	83	139	702	148	105	346	138	164	758	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	182	664	83	139	702	148	105	346	138	164	758	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	664	83	139	702	148	105	346	138	164	758	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	182	664	83	139	702	148	105	346	138	164	758	123
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28
Final Sat.:	1600	2844	356	1600	3200	1600	1600	3200	1600	1600	2753	447
Capacity Analysis Module:												
Vol/Sat:	0.11	0.23	0.23	0.09	0.22	0.09	0.07	0.11	0.09	0.10	0.28	0.28
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #58 Wilmington Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.738
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	86	460	169	179	718	128	70	515	127	133	682	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	460	169	179	718	128	70	515	127	133	682	139
Added Vol:	0	152	0	0	96	0	0	1	0	0	3	0
PasserByVol:	0	48	0	3	20	0	1	0	0	0	0	7
Initial Fut:	86	660	169	182	834	128	71	516	127	133	685	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	660	169	182	834	128	71	516	127	133	685	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	660	169	182	834	128	71	516	127	133	685	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	86	660	169	182	834	128	71	516	127	133	685	146
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.73	0.27	1.00	1.60	0.40	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2774	426	1600	2568	632	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.11	0.11	0.30	0.30	0.04	0.20	0.20	0.08	0.21	0.09
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #59 Willowbrook Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.537
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	0 1	0	1 0	2 1	0	0 0	1 1	0
Volume Module:												
Base Vol:	24	117	6	0	179	67	24	627	63	0	764	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	117	6	0	179	67	24	627	63	0	764	29
Added Vol:	0	0	0	0	0	0	0	1	0	0	3	0
PasserByVol:	5	2	0	0	1	0	0	1	2	0	2	0
Initial Fut:	29	119	6	0	180	67	24	629	65	0	769	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	119	6	0	180	67	24	629	65	0	769	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	119	6	0	180	67	24	629	65	0	769	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	119	6	0	180	67	24	629	65	0	769	29
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.77	0.04	0.00	0.73	0.27	1.00	2.72	0.28	0.00	1.93	0.07
Final Sat.:	301	1236	62	0	1166	434	1600	4350	450	0	3084	116
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.00	0.15	0.15	0.02	0.14	0.14	0.00	0.25	0.25
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #60 Central Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	142	524	69	173	795	130	75	327	120	85	735	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	142	524	69	173	795	130	75	327	120	85	735	204
Added Vol:	0	79	0	0	42	0	0	0	0	0	0	0
PasserByVol:	0	5	0	0	2	0	1	1	0	0	0	0
Initial Fut:	142	608	69	173	839	130	76	328	120	85	735	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	142	608	69	173	839	130	76	328	120	85	735	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	608	69	173	839	130	76	328	120	85	735	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	142	608	69	173	839	130	76	328	120	85	735	204
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.73	0.27	1.00	1.46	0.54	1.00	2.00	1.00
Final Sat.:	1600	2874	326	1600	2771	429	1600	2343	857	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.11	0.30	0.30	0.05	0.14	0.14	0.05	0.23	0.13
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.862
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	104	444	142	170	833	87	100	498	105	137	850	142
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	444	142	170	833	87	100	498	105	137	850	142
Added Vol:	0	152	0	0	96	0	0	0	0	0	0	0
PasserByVol:	0	38	0	2	15	0	1	0	0	0	0	5
Initial Fut:	104	634	142	172	944	87	101	498	105	137	850	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	634	142	172	944	87	101	498	105	137	850	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	634	142	172	944	87	101	498	105	137	850	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	634	142	172	944	87	101	498	105	137	850	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.71	0.29
Final Sat.:	1600	2614	586	1600	2930	270	1600	3200	1600	1600	2728	472
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.24	0.11	0.32	0.32	0.06	0.16	0.07	0.09	0.31	0.31
Crit Moves:	****				****		****				****	

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #62 Wilmington Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.831
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	35	471	114	104	1031	21	38	192	86	276	361	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	471	114	104	1031	21	38	192	86	276	361	74
Added Vol:	0	152	0	0	96	0	0	0	0	0	0	0
PasserByVol:	0	30	0	1	12	0	0	0	0	0	0	2
Initial Fut:	35	653	114	105	1139	21	38	192	86	276	361	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	653	114	105	1139	21	38	192	86	276	361	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	653	114	105	1139	21	38	192	86	276	361	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	653	114	105	1139	21	38	192	86	276	361	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.96	0.04	1.00	0.69	0.31	1.00	0.83	0.17
Final Sat.:	1600	3200	1600	1600	3142	58	1600	1105	495	1600	1322	278
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.07	0.07	0.36	0.36	0.02	0.17	0.17	0.17	0.27	0.27
Crit Moves:	****				****			****			****	

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #63 Wilmington Ave & Walnut St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 2	0 1	1	0 1	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	81	530	41	33	1228	87	26	60	58	24	95	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	81	530	41	33	1228	87	26	60	58	24	95	46
Added Vol:	0	152	0	0	96	0	0	0	0	0	0	0
PasserByVol:	0	30	0	0	12	0	0	0	0	0	0	0
Initial Fut:	81	712	41	33	1336	87	26	60	58	24	95	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	712	41	33	1336	87	26	60	58	24	95	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	712	41	33	1336	87	26	60	58	24	95	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	81	712	41	33	1336	87	26	60	58	24	95	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.35	0.65
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	2156	1044
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.03	0.02	0.42	0.05	0.02	0.04	0.04	0.02	0.04	0.04
Crit Moves:	****				****		****				****	

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #64 Central Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.548
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	467	76	137	976	0	0	0	0	206	0	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	467	76	137	976	0	0	0	0	206	0	191
Added Vol:	0	79	0	0	42	0	0	0	0	0	0	0
PasserByVol:	0	5	0	0	2	0	0	0	0	0	0	0
Initial Fut:	0	551	76	137	1020	0	0	0	0	206	0	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	551	76	137	1020	0	0	0	0	206	0	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	551	76	137	1020	0	0	0	0	206	0	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	551	76	137	1020	0	0	0	0	206	0	191
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.05	0.09	0.32	0.00	0.00	0.00	0.00	0.13	0.00	0.12
Crit Moves:					****					****		

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #65 Willowbrook Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 0	1	0 0	1	1 0
Volume Module:												
Base Vol:	11	68	29	33	102	44	26	666	24	0	913	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	68	29	33	102	44	26	666	24	0	913	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	7	0	0	3	0	0	3	0	0	5	0
Initial Fut:	11	75	29	33	105	44	26	669	24	0	918	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	75	29	33	105	44	26	669	24	0	918	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	75	29	33	105	44	26	669	24	0	918	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	75	29	33	105	44	26	669	24	0	918	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	0.65	0.25	0.18	0.58	0.24	1.00	2.00	1.00	0.00	1.92	0.08
Final Sat.:	153	1043	403	290	923	387	1600	3200	1600	0	3079	121
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.02	0.11	0.11	0.02	0.21	0.02	0.00	0.30	0.30
Crit Moves:	****				****		****				****	

Willowbrook
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #66 Alameda St. West & Greenleaf Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1
Volume Module:												
Base Vol:	73	415	105	48	659	59	21	190	107	264	313	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	415	105	48	659	59	21	190	107	264	313	34
Added Vol:	0	50	0	0	31	0	0	0	0	0	0	0
PasserByVol:	0	24	0	0	10	0	0	1	0	0	2	0
Initial Fut:	73	489	105	48	700	59	21	191	107	264	315	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	489	105	48	700	59	21	191	107	264	315	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	489	105	48	700	59	21	191	107	264	315	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	489	105	48	700	59	21	191	107	264	315	34
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.65	0.35	1.00	1.84	0.16	1.00	1.28	0.72	1.00	1.00	1.00
Final Sat.:	1600	2634	566	1600	2951	249	1600	2051	1149	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.19	0.03	0.24	0.24	0.01	0.09	0.09	0.17	0.20	0.02
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Alameda St & Abbott Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 1	1 0	0	0 1!	0 0	1	1 0	0 1
Volume Module:												
Base Vol:	0	745	218	149	931	1	2	2	2	465	1	251
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	752	220	150	940	1	2	2	2	470	1	254
Added Vol:	0	31	0	4	48	0	0	0	0	0	0	4
PasserByVol:	0	5	7	0	6	0	0	0	0	13	0	0
Initial Fut:	0	788	227	154	994	1	2	2	2	483	1	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	788	227	154	994	1	2	2	2	483	1	258
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	788	227	154	994	1	2	2	2	483	1	258
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	788	227	154	994	1	2	2	2	483	1	258
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.55	0.45	1.00	1.99	0.01	0.34	0.33	0.33	1.99	0.01	1.00
Final Sat.:	0	2484	716	1600	3197	3	533	533	533	3193	7	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.10	0.31	0.31	0.00	0.00	0.00	0.15	0.15	0.16
Crit Moves:		****		****				****				****

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #53 Imperial Hway & Fernwood Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	60	40	3	159	45	17	23	665	45	2	1289	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	40	3	159	45	17	23	665	45	2	1289	124
Added Vol:	0	0	0	0	0	0	0	55	0	0	82	0
PasserByVol:	0	0	0	0	0	0	0	8	0	0	23	0
Initial Fut:	60	40	3	159	45	17	23	728	45	2	1394	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	40	3	159	45	17	23	728	45	2	1394	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	40	3	159	45	17	23	728	45	2	1394	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	40	3	159	45	17	23	728	45	2	1394	124
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.58	0.39	0.03	0.72	0.20	0.08	1.00	1.88	0.12	1.00	1.84	0.16
Final Sat.:	932	621	47	1151	326	123	1600	3014	186	1600	2939	261
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.10	0.14	0.14	0.01	0.24	0.24	0.00	0.47	0.47
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative Conditions - AM Peak
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #54 Imperial Hwy & State St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.773
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	15	240	134	106	367	271	98	736	3	114	1141	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	240	134	106	367	271	98	736	3	114	1141	37
Added Vol:	0	0	0	0	0	0	0	55	0	0	82	0
PasserByVol:	0	0	0	0	0	2	3	0	5	0	21	0
Initial Fut:	15	240	134	106	367	273	101	791	8	114	1244	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	240	134	106	367	273	101	791	8	114	1244	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	240	134	106	367	273	101	791	8	114	1244	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	240	134	106	367	273	101	791	8	114	1244	37
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.28	0.72	1.00	1.15	0.85	1.00	1.98	0.02	1.00	1.94	0.06
Final Sat.:	1600	2053	1147	1600	1835	1365	1600	3168	32	1600	3108	92
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.12	0.07	0.20	0.20	0.06	0.25	0.25	0.07	0.40	0.40
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Avalon Blvd & El Segundo

Cycle (sec):	100	Critical Vol./Cap.(X):	0.957
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	140	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	121	704	170	148	531	93	134	1370	104	102	461	112
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	122	711	172	149	536	94	135	1384	105	103	466	113
Added Vol:	4	18	65	7	19	0	0	184	7	59	174	4
PasserByVol:	0	8	0	0	16	0	0	20	0	0	38	0
Initial Fut:	126	737	237	156	571	94	135	1588	112	162	678	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	737	237	156	571	94	135	1588	112	162	678	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	737	237	156	571	94	135	1588	112	162	678	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	737	237	156	571	94	135	1588	112	162	678	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.72	0.28	1.00	2.80	0.20	1.00	2.56	0.44
Final Sat.:	1600	2422	778	1600	2748	452	1600	4484	316	1600	4093	707
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.10	0.21	0.21	0.08	0.35	0.35	0.10	0.17	0.17
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Avalon Blvd & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.842
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	132	625	158	217	484	59	124	1148	112	86	469	119
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	133	631	160	219	489	60	125	1159	113	87	474	120
Added Vol:	0	74	2	3	67	6	5	32	0	5	67	8
PasserByVol:	0	5	0	0	9	0	0	5	0	0	11	0
Initial Fut:	133	710	162	222	565	66	130	1196	113	92	552	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	710	162	222	565	66	130	1196	113	92	552	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	710	162	222	565	66	130	1196	113	92	552	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	710	162	222	565	66	130	1196	113	92	552	128
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.79	0.21	1.00	2.74	0.26	1.00	2.43	0.57
Final Sat.:	1600	2607	593	1600	2867	333	1600	4385	415	1600	3895	905
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.14	0.20	0.20	0.08	0.27	0.27	0.06	0.14	0.14
Crit Moves:		****		****				****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.014
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	82	634	213	178	655	153	195	1238	145	86	483	79
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	83	640	215	180	662	155	197	1250	146	87	488	80
Added Vol:	53	57	27	0	36	36	25	96	37	38	133	0
PasserByVol:	0	19	0	0	36	11	11	10	0	0	29	0
Initial Fut:	136	716	242	180	734	202	233	1356	183	125	650	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	716	242	180	734	202	233	1356	183	125	650	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	716	242	180	734	202	233	1356	183	125	650	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	716	242	180	734	202	233	1356	183	125	650	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.49	0.51	1.00	1.57	0.43	1.00	2.00	1.00	1.00	1.78	0.22
Final Sat.:	1600	2392	808	1600	2510	690	1600	3200	1600	1600	2850	350
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.11	0.29	0.29	0.15	0.42	0.11	0.08	0.23	0.23
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Central Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	138	567	111	181	706	107	148	1164	177	109	466	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	139	573	112	183	713	108	149	1176	179	110	471	115
Added Vol:	8	86	0	13	116	41	24	15	12	0	16	6
PasserByVol:	0	13	0	0	24	5	3	3	0	0	5	0
Initial Fut:	147	672	112	196	853	154	176	1194	191	110	492	121
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	147	672	112	196	853	154	176	1194	191	110	492	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	672	112	196	853	154	176	1194	191	110	492	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	147	672	112	196	853	154	176	1194	191	110	492	121
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.59	0.41	1.00	1.60	0.40
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4139	661	1600	2567	633
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.07	0.12	0.27	0.10	0.11	0.29	0.29	0.07	0.19	0.19
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Slater Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.494
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	15	7	31	12	6	16	9	397	21	23	680	19
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	15	7	31	12	6	16	9	401	21	23	687	19
Added Vol:	0	0	0	0	0	0	0	83	0	0	108	0
PasserByVol:	0	0	12	6	0	0	0	134	0	23	249	11
Initial Fut:	15	7	43	18	6	16	9	618	21	46	1044	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	7	43	18	6	16	9	618	21	46	1044	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	7	43	18	6	16	9	618	21	46	1044	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	7	43	18	6	16	9	618	21	46	1044	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.23	0.11	0.66	0.45	0.15	0.40	1.00	1.93	0.07	1.00	1.94	0.06
Final Sat.:	370	173	1057	719	240	641	1600	3094	106	1600	3110	90
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.01	0.03	0.03	0.01	0.20	0.20	0.03	0.34	0.34
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Compton Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	151	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1	0	1	1 0	0	1 0	1 0	2	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	98	304	167	214	257	101	78	1434	86	63	735	232
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	99	307	169	216	260	102	79	1448	87	64	742	234
Added Vol:	180	47	71	6	32	1	1	46	111	54	47	5
PasserByVol:	5	42	0	0	23	0	0	11	2	0	21	0
Initial Fut:	284	396	240	222	315	103	80	1505	200	118	810	239
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	284	396	240	222	315	103	80	1505	200	118	810	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	284	396	240	222	315	103	80	1505	200	118	810	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	284	396	240	222	315	103	80	1505	200	118	810	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.75	0.25	1.00	2.65	0.35	1.00	1.54	0.46
Final Sat.:	1600	1600	1600	1600	1205	395	1600	4237	563	1600	2470	730
Capacity Analysis Module:												
Vol/Sat:	0.18	0.25	0.15	0.14	0.26	0.26	0.05	0.36	0.36	0.07	0.33	0.33
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #18 Compton Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.562
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	7	477	49	44	311	7	9	13	7	44	14	46
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	7	482	49	44	314	7	9	13	7	44	14	46
Added Vol:	0	35	82	48	58	0	0	0	0	125	0	52
PasserByVol:	11	46	0	0	24	0	0	0	6	0	0	0
Initial Fut:	18	563	131	92	396	7	9	13	13	169	14	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	563	131	92	396	7	9	13	13	169	14	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	563	131	92	396	7	9	13	13	169	14	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	563	131	92	396	7	9	13	13	169	14	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.05	1.58	0.37	0.37	1.60	0.03	0.26	0.37	0.37	0.60	0.05	0.35
Final Sat.:	81	2528	591	597	2558	46	412	595	593	961	80	559
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.22	0.06	0.15	0.15	0.01	0.02	0.02	0.11	0.18	0.18
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Compton Ave & 120th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.843
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	65	241	70	78	281	69	45	273	89	136	416	111
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	66	243	71	79	284	70	45	276	90	137	420	112
Added Vol:	0	92	5	3	143	37	22	62	0	9	71	4
PasserByVol:	0	0	23	32	0	0	0	160	0	54	299	61
Initial Fut:	66	335	99	114	427	107	67	498	90	200	790	177
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	66	335	99	114	427	107	67	498	90	200	790	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	335	99	114	427	107	67	498	90	200	790	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	335	99	114	427	107	67	498	90	200	790	177
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	1.60	0.40	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2472	728	1600	2560	640	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.14	0.14	0.07	0.17	0.17	0.04	0.31	0.06	0.13	0.49	0.11
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #20 Compton Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.324
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	349	25	46	302	4	1	4	3	17	3	42
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	352	25	46	305	4	1	4	3	17	3	42
Added Vol:	0	96	0	0	153	0	0	0	0	0	0	0
PasserByVol:	0	22	0	0	51	0	0	0	0	0	0	0
Initial Fut:	0	470	25	46	509	4	1	4	3	17	3	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	470	25	46	509	4	1	4	3	17	3	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	470	25	46	509	4	1	4	3	17	3	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	470	25	46	509	4	1	4	3	17	3	42
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.90	0.10	0.17	1.82	0.01	0.12	0.50	0.38	0.27	0.05	0.68
Final Sat.:	0	3037	163	266	2911	23	200	800	600	439	77	1084
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.03	0.17	0.17	0.00	0.01	0.01	0.01	0.04	0.04
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Wilmington Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.840
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	159	451	47	30	618	70	137	15	375	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	161	456	47	30	624	71	138	15	379	0	0	0
Added Vol:	16	43	0	0	231	4	10	0	68	0	0	0
PasserByVol:	21	47	0	0	127	0	0	0	11	0	0	0
Initial Fut:	198	546	47	30	982	75	148	15	458	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	198	546	47	30	982	75	148	15	458	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	198	546	47	30	982	75	148	15	458	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	198	546	47	30	982	75	148	15	458	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.86	0.14	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2944	256	1600	2974	226	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.19	0.19	0.02	0.33	0.33	0.09	0.01	0.29	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilmington Ave & I-105 e/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.010
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 0	2	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	326	902	0	0	529	421	328	0	179	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	329	911	0	0	534	425	331	0	181	0	0	0
Added Vol:	150	334	0	0	236	64	3	0	135	0	0	0
PasserByVol:	160	219	0	0	137	0	0	0	48	0	0	0
Initial Fut:	639	1464	0	0	907	489	334	0	364	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	639	1464	0	0	907	489	334	0	364	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	639	1464	0	0	907	489	334	0	364	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	639	1464	0	0	907	489	334	0	364	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.00	2.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	3200	3200	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.40	0.31	0.00	0.00	0.28	0.15	0.21	0.00	0.23	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	1.119
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	2 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	28	992	84	132	547	32	108	50	50	37	44	137
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	28	1002	85	133	552	32	109	51	51	37	44	138
Added Vol:	171	60	29	64	44	263	380	2	244	19	2	44
PasserByVol:	0	379	0	0	186	0	0	0	0	0	0	0
Initial Fut:	199	1441	114	197	782	295	489	53	295	56	46	182
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	199	1441	114	197	782	295	489	53	295	56	46	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	1441	114	197	782	295	489	53	295	56	46	182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	199	1441	114	197	782	295	489	53	295	56	46	182
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.78	0.22	2.00	1.45	0.55	0.59	0.06	0.35	0.55	0.45	1.00
Final Sat.:	1600	4449	351	2880	2323	877	936	100	564	877	723	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.32	0.32	0.07	0.34	0.34	0.31	0.52	0.52	0.04	0.06	0.11
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #29 Wilmington Ave & 120th St (West)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.956
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	139	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	74	718	80	79	485	45	295	298	184	91	146	136
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	75	725	81	80	490	45	298	301	186	92	147	137
Added Vol:	8	207	2	3	268	35	51	20	17	5	18	2
PasserByVol:	0	289	0	0	93	103	110	20	0	7	11	0
Initial Fut:	83	1221	83	83	851	183	459	341	203	104	176	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	1221	83	83	851	183	459	341	203	104	176	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1221	83	83	851	183	459	341	203	104	176	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1221	83	83	851	183	459	341	203	104	176	139
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	1.65	0.35	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2997	203	1600	2632	568	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.41	0.41	0.05	0.32	0.32	0.29	0.21	0.13	0.06	0.11	0.09
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Wilmington Ave & 120th St (East)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.767
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 0	1! 0	0
Volume Module:												
Base Vol:	8	807	17	35	707	16	53	2	14	2	0	15
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	8	815	17	35	714	16	54	2	14	2	0	15
Added Vol:	0	212	2	6	284	0	0	0	0	1	0	5
PasserByVol:	113	0	0	0	0	100	289	47	215	0	24	0
Initial Fut:	121	1027	19	41	998	116	343	49	229	3	24	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	1027	19	41	998	116	343	49	229	3	24	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	1027	19	41	998	116	343	49	229	3	24	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	121	1027	19	41	998	116	343	49	229	3	24	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.79	0.21	0.87	0.13	1.00	0.06	0.51	0.43
Final Sat.:	1600	3141	59	1600	2866	334	1400	200	1600	102	814	683
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.33	0.03	0.35	0.35	0.21	0.24	0.14	0.00	0.03	0.03
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #31 Wilmington Ave & 124th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	21	757	46	64	615	18	13	43	20	35	47	49
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	21	765	46	65	621	18	13	43	20	35	47	49
Added Vol:	0	213	0	0	285	0	0	0	0	0	0	0
PasserByVol:	0	86	0	38	165	0	0	0	0	0	0	20
Initial Fut:	21	1064	46	103	1071	18	13	43	20	35	47	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	1064	46	103	1071	18	13	43	20	35	47	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	1064	46	103	1071	18	13	43	20	35	47	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	1064	46	103	1071	18	13	43	20	35	47	69
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.97	0.03	0.17	0.57	0.26	0.23	0.31	0.46
Final Sat.:	1600	3066	134	1600	3147	53	274	905	421	371	499	730
Capacity Analysis Module:												
Vol/Sat:	0.01	0.35	0.35	0.06	0.34	0.34	0.01	0.05	0.05	0.02	0.10	0.10
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.948
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	132	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	144	579	83	101	480	86	182	927	326	44	296	68
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	145	585	84	102	485	87	184	936	329	44	299	69
Added Vol:	36	152	0	69	209	8	14	26	42	0	31	48
PasserByVol:	0	66	0	32	127	0	0	0	0	0	0	16
Initial Fut:	181	803	84	203	821	95	198	962	371	44	330	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	803	84	203	821	95	198	962	371	44	330	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	803	84	203	821	95	198	962	371	44	330	133
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	803	84	203	821	95	198	962	371	44	330	133
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.79	0.21	1.00	1.44	0.56	1.00	1.43	0.57
Final Sat.:	1600	2897	303	1600	2868	332	1600	2309	891	1600	2282	918
Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.28	0.13	0.29	0.29	0.12	0.42	0.42	0.03	0.14	0.14
Crit Moves:		****			****				****		****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #34 Willowbrook Ave W & 119th Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.486
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	0	0 0	1 0	0	0 0	1 0	0	1 0	0 0
Volume Module:												
Base Vol:	50	0	17	0	28	56	0	323	93	11	163	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	51	0	17	0	28	57	0	326	94	11	165	0
Added Vol:	12	0	0	0	0	0	0	11	9	0	17	0
PasserByVol:	0	0	0	0	0	0	0	19	0	0	17	0
Initial Fut:	63	0	17	0	28	57	0	356	103	11	199	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	0	17	0	28	57	0	356	103	11	199	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	0	17	0	28	57	0	356	103	11	199	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	0	17	0	28	57	0	356	103	11	199	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.33	0.67	0.00	0.78	0.22	0.05	0.95	0.00
Final Sat.:	1600	0	1600	0	533	1067	0	1241	359	85	1515	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.01	0.00	0.05	0.05	0.00	0.29	0.29	0.01	0.13	0.00
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #35 Willowbrook Ave E & 119th Street

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.377
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	50	14	27	7	12	42	70	201	90	9	85	5
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	51	14	27	7	12	42	71	203	91	9	86	5
Added Vol:	0	1	0	0	1	3	6	5	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	19	0	0	17	0
Initial Fut:	51	15	27	7	13	45	77	227	91	9	117	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	15	27	7	13	45	77	227	91	9	117	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	15	27	7	13	45	77	227	91	9	117	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	15	27	7	13	45	77	227	91	9	117	5
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.55	0.16	0.29	0.11	0.20	0.69	1.00	0.71	0.29	1.00	0.96	0.04
Final Sat.:	870	261	470	172	320	1108	1600	1143	457	1600	1534	66
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.00	0.04	0.04	0.05	0.20	0.20	0.01	0.08	0.08
Crit Moves:	****				****			****			****	

****

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.928
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 1	0	0 1	0	0	1! 0	0	1 0	3 1	1	2 0	2 1 0
Volume Module:												
Base Vol:	544	8	271	9	22	25	47	1612	339	596	812	1
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	549	8	274	9	22	25	47	1628	342	602	820	1
Added Vol:	150	7	3	0	0	0	18	178	182	2	123	3
PasserByVol:	71	0	7	0	0	0	0	56	95	0	26	0
Initial Fut:	770	15	284	9	22	25	65	1862	619	604	969	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	770	15	284	9	22	25	65	1862	619	604	969	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	770	15	284	9	22	25	65	1862	619	604	969	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	770	15	284	9	22	25	65	1862	619	604	969	4
OvlAdjVol:									75			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.96	0.04	1.00	0.16	0.39	0.45	1.00	3.75	1.25	2.00	2.99	0.01
Final Sat.:	2825	55	1600	257	629	714	1600	6003	1997	2880	4780	20
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.18	0.04	0.04	0.04	0.04	0.31	0.31	0.21	0.20	0.20
OvlAdjV/S:									0.04			
Crit Moves:	****					****		****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #37 Willowbrook Ave W & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.551
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	2	0 1	0 0	2	0 1
Volume Module:												
Base Vol:	24	100	9	34	113	16	14	986	68	0	358	34
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	24	101	9	34	114	16	14	996	69	0	362	34
Added Vol:	0	6	0	5	4	0	0	95	0	0	79	7
PasserByVol:	0	5	0	0	7	0	0	20	0	0	11	0
Initial Fut:	24	112	9	39	125	16	14	1111	69	0	452	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	112	9	39	125	16	14	1111	69	0	452	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	112	9	39	125	16	14	1111	69	0	452	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	112	9	39	125	16	14	1111	69	0	452	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.89	0.11	1.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1600	1480	120	1600	1417	183	1600	3200	1600	0	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.08	0.02	0.09	0.09	0.01	0.35	0.04	0.00	0.14	0.03
Crit Moves:	****			****			****			****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #38 Willowbrook Ave E & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	0 1	1	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	12	55	33	32	80	14	0	981	44	34	372	39
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	12	56	33	32	81	14	0	991	44	34	376	39
Added Vol:	0	0	0	0	0	1	1	99	0	0	85	0
PasserByVol:	0	3	0	0	6	0	0	20	0	0	11	0
Initial Fut:	12	59	33	32	87	15	1	1110	44	34	472	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	59	33	32	87	15	1	1110	44	34	472	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	59	33	32	87	15	1	1110	44	34	472	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	59	33	32	87	15	1	1110	44	34	472	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.64	0.36	1.00	0.85	0.15	0.01	1.99	1.00	1.00	1.85	0.15
Final Sat.:	1600	1020	580	1600	1362	238	3	3197	1600	1600	2953	247
Capacity Analysis Module:												
Vol/Sat:	0.01	0.06	0.06	0.02	0.06	0.06	0.00	0.35	0.03	0.02	0.16	0.16
Crit Moves:		****			****				****		****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #39 Mona Blvd & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	93	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	1! 0	0	1 0	2 1	0	1 0	2 1 0
Volume Module:												
Base Vol:	184	67	247	54	68	72	94	1615	240	152	1110	43
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	186	68	249	55	69	73	95	1631	242	154	1121	43
Added Vol:	3	0	5	0	0	0	0	164	17	8	124	0
PasserByVol:	0	7	0	0	4	0	0	56	7	0	26	0
Initial Fut:	189	75	254	55	73	73	95	1851	266	162	1271	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	189	75	254	55	73	73	95	1851	266	162	1271	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	75	254	55	73	73	95	1851	266	162	1271	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	189	75	254	55	73	73	95	1851	266	162	1271	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.72	0.28	1.00	0.27	0.37	0.36	1.00	2.62	0.38	1.00	2.90	0.10
Final Sat.:	1147	453	1600	436	582	582	1600	4196	604	1600	4641	159
Capacity Analysis Module:												
Vol/Sat:	0.12	0.16	0.16	0.03	0.12	0.12	0.06	0.44	0.44	0.10	0.27	0.27
Crit Moves:	****				****			****			****	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	147	74	27	220	331	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.955				0.974	
Flt Protected	0.968		0.950			
Satd. Flow (prot)	1722	0	1770	1863	1814	0
Flt Permitted	0.968		0.950			
Satd. Flow (perm)	1722	0	1770	1863	1814	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	266			283	255	
Travel Time (s)	6.0			6.4	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	160	80	29	239	360	87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	240	0	29	239	447	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	147	74	27	220	331	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	160	80	29	239	360	87

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	701	403	447	0	-	0
Stage 1	403	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	405	647	1113	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	394	647	1113	-	-	-
Mov Cap-2 Maneuver	394	-	-	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.6	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1113	-	453	-	-
HCM Lane V/C Ratio	0.026	-	0.53	-	-
HCM Control Delay (s)	8.3	-	21.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	3	-	-

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #41 Mona Blvd & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	82	112	62	18	88	40	38	351	54	47	957	32
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	83	113	63	18	89	40	38	355	55	47	967	32
Added Vol:	0	1	0	3	1	2	0	99	0	0	83	2
PasserByVol:	0	7	0	0	13	0	0	20	0	0	11	0
Initial Fut:	83	121	63	21	103	42	38	474	55	47	1061	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	121	63	21	103	42	38	474	55	47	1061	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	121	63	21	103	42	38	474	55	47	1061	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	121	63	21	103	42	38	474	55	47	1061	34
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.31	0.46	0.23	0.17	0.83	1.00	1.00	1.79	0.21	1.00	1.94	0.06
Final Sat.:	497	727	376	273	1327	1600	1600	2869	331	1600	3100	100
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.17	0.01	0.08	0.03	0.02	0.17	0.17	0.03	0.34	0.34
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Alameda St & 103rd St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.884
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	93	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	115	736	0	0	1222	235	190	0	158	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	116	743	0	0	1234	237	192	0	160	0	0	0
Added Vol:	4	54	0	0	38	6	7	0	4	0	0	0
PasserByVol:	0	16	0	0	4	9	8	0	0	0	0	0
Initial Fut:	120	813	0	0	1276	252	207	0	164	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	813	0	0	1276	252	207	0	164	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	813	0	0	1276	252	207	0	164	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	813	0	0	1276	252	207	0	164	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.67	0.33	0.56	0.00	0.44	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2672	528	894	0	706	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.00	0.00	0.48	0.48	0.13	0.00	0.23	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #45 Alameda St & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.828
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 1	1 0		1 0 2	0 1		2 0 2	1 0		1 0 3	0 1	
Volume Module:												
Base Vol:	214	682	138	101	693	449	409	1282	199	102	653	65
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	216	689	139	102	700	453	413	1295	201	103	660	66
Added Vol:	5	1	0	0	1	38	54	104	11	0	89	0
PasserByVol:	0	0	0	0	0	12	37	23	0	0	15	0
Initial Fut:	221	690	139	102	701	503	504	1422	212	103	764	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	690	139	102	701	503	504	1422	212	103	764	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	690	139	102	701	503	504	1422	212	103	764	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	690	139	102	701	503	504	1422	212	103	764	66
OvlAdjVol:						223						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.66	0.34	1.00	2.00	1.00	2.00	2.61	0.39	1.00	3.00	1.00
Final Sat.:	2880	2662	538	1600	3200	1600	2880	4177	623	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.06	0.22	0.31	0.18	0.34	0.34	0.06	0.16	0.04
OvlAdjV/S:						0.14						
Crit Moves:		****			****				****		****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.931
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	119	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	2 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	102	717	98	107	699	43	50	258	95	182	699	190
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	103	724	99	108	706	43	51	261	96	184	706	192
Added Vol:	37	6	0	0	12	0	0	51	52	0	48	0
PasserByVol:	8	0	0	0	0	0	0	5	15	0	3	0
Initial Fut:	148	730	99	108	718	43	51	317	163	184	757	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	148	730	99	108	718	43	51	317	163	184	757	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	730	99	108	718	43	51	317	163	184	757	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	148	730	99	108	718	43	51	317	163	184	757	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.89	0.11	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2818	382	1600	3017	183	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.26	0.26	0.07	0.24	0.24	0.03	0.10	0.10	0.11	0.47	0.12
Crit Moves:		****			****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #52 El Segundo Blvd & San Pedro St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	101	322	51	86	228	85	146	1415	72	33	568	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	322	51	86	228	85	146	1415	72	33	568	85
Added Vol:	2	2	0	2	2	3	2	189	1	0	176	2
PasserByVol:	0	0	0	0	0	0	0	16	0	0	31	0
Initial Fut:	103	324	51	88	230	88	148	1620	73	33	775	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	324	51	88	230	88	148	1620	73	33	775	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	324	51	88	230	88	148	1620	73	33	775	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	324	51	88	230	88	148	1620	73	33	775	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	1.45	0.55	1.00	2.87	0.13	1.00	2.70	0.30
Final Sat.:	1600	2765	435	1600	2314	886	1600	4593	207	1600	4316	484
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.12	0.06	0.10	0.10	0.09	0.35	0.35	0.02	0.18	0.18
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Slater Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.690
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module:												
Base Vol:	0	0	0	10	0	48	46	1643	0	0	692	16
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	10	0	48	46	1659	0	0	699	16
Added Vol:	0	0	0	0	0	0	0	122	0	0	171	0
PasserByVol:	0	0	0	0	0	0	0	10	0	0	29	0
Initial Fut:	0	0	0	10	0	48	46	1791	0	0	899	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	48	46	1791	0	0	899	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	48	46	1791	0	0	899	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	48	46	1791	0	0	899	16
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.96	0.04
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	3143	57
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.03	0.03	0.56	0.00	0.00	0.29	0.29
Crit Moves:						****		****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Compton Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	67	31	16	111	64	152	235	1347	103	16	449	74
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	68	31	16	112	65	154	237	1360	104	16	453	75
Added Vol:	0	4	0	33	4	115	73	50	0	0	56	19
PasserByVol:	0	12	0	0	23	29	10	0	0	0	0	0
Initial Fut:	68	47	16	145	92	298	320	1410	104	16	509	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	47	16	145	92	298	320	1410	104	16	509	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	47	16	145	92	298	320	1410	104	16	509	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	47	16	145	92	298	320	1410	104	16	509	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.49	0.51	1.00	1.00	1.00	1.00	1.86	0.14	1.00	1.69	0.31
Final Sat.:	1600	2385	815	1600	1600	1600	1600	2980	220	1600	2703	497
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.02	0.09	0.06	0.19	0.20	0.47	0.47	0.01	0.19	0.19
Crit Moves:	****					****		****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.962
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	145	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	153	674	153	147	475	135	114	1059	163	93	468	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	681	155	148	480	136	115	1070	165	94	473	115
Added Vol:	0	122	0	69	173	9	9	19	0	0	13	57
PasserByVol:	0	39	0	26	75	14	8	0	0	0	0	14
Initial Fut:	155	842	155	243	728	159	132	1089	165	94	486	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	155	842	155	243	728	159	132	1089	165	94	486	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	842	155	243	728	159	132	1089	165	94	486	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	155	842	155	243	728	159	132	1089	165	94	486	186
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.69	0.31	1.00	1.64	0.36	1.00	2.00	1.00	1.00	1.45	0.55
Final Sat.:	1600	2704	496	1600	2625	575	1600	3200	1600	1600	2313	887
Capacity Analysis Module:												
Vol/Sat:	0.10	0.31	0.31	0.15	0.28	0.28	0.08	0.34	0.10	0.06	0.21	0.21
Crit Moves:		****			****				****		****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #42 Willowbrook Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.760
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	30	107	16	132	79	27	15	1314	19	29	796	123
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	30	108	16	133	80	27	15	1327	19	29	804	124
Added Vol:	0	0	0	4	0	0	0	88	0	0	70	6
PasserByVol:	0	1	0	6	2	0	0	20	0	0	11	3
Initial Fut:	30	109	16	143	82	27	15	1435	19	29	885	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	109	16	143	82	27	15	1435	19	29	885	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	109	16	143	82	27	15	1435	19	29	885	133
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	109	16	143	82	27	15	1435	19	29	885	133
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.71	0.10	0.57	0.32	0.11	1.00	1.97	0.03	1.00	1.74	0.26
Final Sat.:	312	1122	166	909	519	173	1600	3158	42	1600	2781	419
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.09	0.16	0.16	0.01	0.45	0.45	0.02	0.32	0.32
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #55 El Segundo Blvd & Santa Fe Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.735
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	151	513	69	39	368	68	96	270	213	12	68	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	513	69	39	368	68	96	270	213	12	68	26
Added Vol:	0	0	0	0	0	0	0	51	0	0	48	0
PasserByVol:	0	0	0	0	0	0	0	5	0	0	3	0
Initial Fut:	151	513	69	39	368	68	96	326	213	12	119	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	513	69	39	368	68	96	326	213	12	119	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	513	69	39	368	68	96	326	213	12	119	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	513	69	39	368	68	96	326	213	12	119	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.69	0.31	0.15	0.51	0.34	0.08	0.76	0.16
Final Sat.:	1600	2821	379	1600	2701	499	242	821	537	122	1213	265
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.18	0.02	0.14	0.14	0.06	0.40	0.40	0.01	0.10	0.10
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #56 Alameda St & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	136	771	0	0	868	77	111	0	198	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	771	0	0	868	77	111	0	198	0	0	0
Added Vol:	0	40	0	0	58	0	0	0	0	0	0	0
PasserByVol:	7	8	0	0	15	0	0	0	15	0	0	0
Initial Fut:	143	819	0	0	941	77	111	0	213	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	819	0	0	941	77	111	0	213	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	819	0	0	941	77	111	0	213	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	819	0	0	941	77	111	0	213	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.85	0.15	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2958	242	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.26	0.00	0.00	0.32	0.32	0.07	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #57 Central Ave & W Compton Bvld

Cycle (sec):	100	Critical Vol./Cap.(X):	0.836
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	125	725	114	171	577	98	102	886	201	90	352	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	725	114	171	577	98	102	886	201	90	352	126
Added Vol:	0	93	0	3	125	0	0	0	0	0	0	1
PasserByVol:	0	8	0	0	14	1	1	1	0	0	1	0
Initial Fut:	125	826	114	174	716	99	103	887	201	90	353	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	826	114	174	716	99	103	887	201	90	353	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	826	114	174	716	99	103	887	201	90	353	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	826	114	174	716	99	103	887	201	90	353	127
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.47	0.53
Final Sat.:	1600	2812	388	1600	3200	1600	1600	3200	1600	1600	2353	847
Capacity Analysis Module:												
Vol/Sat:	0.08	0.29	0.29	0.11	0.22	0.06	0.06	0.28	0.13	0.06	0.15	0.15
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #58 Wilmington Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.897
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	106	793	155	150	544	82	132	898	109	140	451	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	793	155	150	544	82	132	898	109	140	451	172
Added Vol:	0	122	0	0	173	0	0	3	0	0	1	0
PasserByVol:	0	31	0	8	60	1	1	0	0	0	0	5
Initial Fut:	106	946	155	158	777	83	133	901	109	140	452	177
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	946	155	158	777	83	133	901	109	140	452	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	946	155	158	777	83	133	901	109	140	452	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	946	155	158	777	83	133	901	109	140	452	177
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.81	0.19	1.00	1.78	0.22	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2891	309	1600	2855	345	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.30	0.10	0.10	0.27	0.27	0.08	0.32	0.32	0.09	0.14	0.11
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #59 Willowbrook Ave & W Compton Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	0	0 1	0	1 0	2 1	0	0 1	1 0
Volume Module:												
Base Vol:	15	112	15	0	112	38	15	1052	69	0	710	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	112	15	0	112	38	15	1052	69	0	710	61
Added Vol:	0	0	0	0	0	0	0	3	0	0	1	0
PasserByVol:	2	1	0	0	2	0	0	2	6	0	1	0
Initial Fut:	17	113	15	0	114	38	15	1057	75	0	712	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	113	15	0	114	38	15	1057	75	0	712	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	113	15	0	114	38	15	1057	75	0	712	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	113	15	0	114	38	15	1057	75	0	712	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.78	0.10	0.00	0.75	0.25	1.00	2.80	0.20	0.00	1.84	0.16
Final Sat.:	188	1247	166	0	1200	400	1600	4482	318	0	2947	253
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.00	0.10	0.10	0.01	0.24	0.24	0.00	0.24	0.24
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #60 Central Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.918
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	110	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	119	782	148	180	632	65	115	969	132	65	334	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	782	148	180	632	65	115	969	132	65	334	158
Added Vol:	0	93	0	0	125	0	0	0	0	0	0	0
PasserByVol:	0	3	0	0	5	1	1	1	0	0	1	0
Initial Fut:	119	878	148	180	762	66	116	970	132	65	335	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	878	148	180	762	66	116	970	132	65	335	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	878	148	180	762	66	116	970	132	65	335	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	878	148	180	762	66	116	970	132	65	335	158
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.71	0.29	1.00	1.84	0.16	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	1600	2738	462	1600	2945	255	1600	2817	383	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.32	0.32	0.11	0.26	0.26	0.07	0.34	0.34	0.04	0.10	0.10
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.928
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	79	894	113	129	569	70	107	1012	159	105	425	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	894	113	129	569	70	107	1012	159	105	425	158
Added Vol:	0	122	0	0	173	0	0	0	0	0	0	0
PasserByVol:	0	24	0	8	47	1	1	0	0	0	0	3
Initial Fut:	79	1040	113	137	789	71	108	1012	159	105	425	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	1040	113	137	789	71	108	1012	159	105	425	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	1040	113	137	789	71	108	1012	159	105	425	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	1040	113	137	789	71	108	1012	159	105	425	161
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.45	0.55
Final Sat.:	1600	2886	314	1600	2936	264	1600	3200	1600	1600	2321	879
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.36	0.09	0.27	0.27	0.07	0.32	0.10	0.07	0.18	0.18
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #62 Wilmington Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.956
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	139	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	70	970	330	148	564	19	45	532	34	98	224	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	970	330	148	564	19	45	532	34	98	224	169
Added Vol:	0	122	0	0	173	0	0	0	0	0	0	0
PasserByVol:	0	18	0	2	36	0	0	0	0	0	0	1
Initial Fut:	70	1110	330	150	773	19	45	532	34	98	224	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	1110	330	150	773	19	45	532	34	98	224	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	1110	330	150	773	19	45	532	34	98	224	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	1110	330	150	773	19	45	532	34	98	224	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.95	0.05	1.00	0.94	0.06	1.00	0.57	0.43
Final Sat.:	1600	3200	1600	1600	3123	77	1600	1504	96	1600	910	690
Capacity Analysis Module:												
Vol/Sat:	0.04	0.35	0.21	0.09	0.25	0.25	0.03	0.35	0.35	0.06	0.25	0.25
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #63 Wilmington Ave & Walnut St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.829	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	74	Level Of Service:	D	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	54	1153	85	34	627	25	152	451	184	34	63	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	1153	85	34	627	25	152	451	184	34	63	63
Added Vol:	0	122	0	0	173	0	0	0	0	0	0	0
PasserByVol:	0	19	0	0	37	0	0	0	0	0	0	0
Initial Fut:	54	1294	85	34	837	25	152	451	184	34	63	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	1294	85	34	837	25	152	451	184	34	63	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	1294	85	34	837	25	152	451	184	34	63	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	1294	85	34	837	25	152	451	184	34	63	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.40	0.05	0.02	0.26	0.02	0.10	0.28	0.12	0.02	0.04	0.04
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #64 Central Ave & Greenleaf Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	866	326	311	507	0	0	0	0	68	0	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	866	326	311	507	0	0	0	0	68	0	169
Added Vol:	0	93	0	0	125	0	0	0	0	0	0	0
PasserByVol:	0	3	0	0	5	0	0	0	0	0	0	0
Initial Fut:	0	962	326	311	637	0	0	0	0	68	0	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	962	326	311	637	0	0	0	0	68	0	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	962	326	311	637	0	0	0	0	68	0	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	962	326	311	637	0	0	0	0	68	0	169
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3200	1600	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.20	0.19	0.20	0.00	0.00	0.00	0.00	0.04	0.00	0.11
Crit Moves:		****		****								****

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #65 Willowbrook Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.530
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 0	1	0 0	1 1	0
Volume Module:												
Base Vol:	16	89	13	35	67	20	18	1056	20	0	571	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	89	13	35	67	20	18	1056	20	0	571	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	3	0	0	8	0	0	9	0	0	3	0
Initial Fut:	16	92	13	35	75	20	18	1065	20	0	574	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	92	13	35	75	20	18	1065	20	0	574	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	92	13	35	75	20	18	1065	20	0	574	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	92	13	35	75	20	18	1065	20	0	574	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.76	0.11	0.27	0.58	0.15	1.00	2.00	1.00	0.00	1.87	0.13
Final Sat.:	212	1217	172	431	923	246	1600	3200	1600	0	2996	204
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.08	0.02	0.08	0.08	0.01	0.33	0.01	0.00	0.19	0.19
Crit Moves:		****		****				****				

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #66 Alameda St. West & Greenleaf Blvd.

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1
Volume Module:												
Base Vol:	84	546	219	61	646	83	93	599	80	208	211	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	546	219	61	646	83	93	599	80	208	211	43
Added Vol:	0	40	0	0	58	0	0	0	0	0	0	0
PasserByVol:	0	15	0	0	30	0	0	2	0	0	1	0
Initial Fut:	84	601	219	61	734	83	93	601	80	208	212	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	601	219	61	734	83	93	601	80	208	212	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	601	219	61	734	83	93	601	80	208	212	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	601	219	61	734	83	93	601	80	208	212	43
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.80	0.20	1.00	1.77	0.23	1.00	1.00	1.00
Final Sat.:	1600	2345	855	1600	2875	325	1600	2824	376	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.26	0.26	0.04	0.26	0.26	0.06	0.21	0.21	0.13	0.13	0.03
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
10-4-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #44 Alameda St & Abbott Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 1	1 0	0	0 1!	0 0	1	1 0	0 1
Volume Module:												
Base Vol:	0	687	236	201	1116	0	6	24	2	229	1	136
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	694	238	203	1127	0	6	24	2	231	1	137
Added Vol:	0	55	0	3	40	0	0	0	0	0	0	3
PasserByVol:	0	16	21	0	4	0	0	0	0	8	0	0
Initial Fut:	0	765	259	206	1171	0	6	24	2	239	1	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	765	259	206	1171	0	6	24	2	239	1	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	765	259	206	1171	0	6	24	2	239	1	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	765	259	206	1171	0	6	24	2	239	1	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.49	0.51	1.00	2.00	0.00	0.19	0.75	0.06	1.99	0.01	1.00
Final Sat.:	0	2390	810	1600	3200	0	300	1200	100	3187	13	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.13	0.37	0.00	0.02	0.02	0.02	0.08	0.08	0.09
Crit Moves:		****		****				****				****

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #53 Imperial Hway & Fernwood Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.794
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1! 0	1	0	1 1	0	1	0 1 0
Volume Module:												
Base Vol:	95	70	7	104	90	9	44	1264	221	7	789	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	70	7	104	90	9	44	1264	221	7	789	143
Added Vol:	0	0	0	0	0	0	0	104	0	0	89	0
PasserByVol:	0	0	0	0	0	0	0	23	0	0	15	0
Initial Fut:	95	70	7	104	90	9	44	1391	221	7	893	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	70	7	104	90	9	44	1391	221	7	893	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	70	7	104	90	9	44	1391	221	7	893	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	70	7	104	90	9	44	1391	221	7	893	143
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.55	0.41	0.04	0.52	0.44	0.04	1.00	1.73	0.27	1.00	1.72	0.28
Final Sat.:	884	651	65	820	709	71	1600	2761	439	1600	2758	442
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.07	0.13	0.13	0.03	0.50	0.50	0.00	0.32	0.32
Crit Moves:	****			****			****			****		

Willowbrook
Existing+Project+Cumulative - PM Peak Hour
2-9-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #54 Imperial Hwy & State St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.823
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	51	454	123	72	326	124	339	1047	30	116	718	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	454	123	72	326	124	339	1047	30	116	718	76
Added Vol:	0	0	0	0	0	0	0	104	0	0	89	0
PasserByVol:	0	0	0	0	0	1	9	0	14	0	14	0
Initial Fut:	51	454	123	72	326	125	348	1151	44	116	821	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	454	123	72	326	125	348	1151	44	116	821	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	454	123	72	326	125	348	1151	44	116	821	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	454	123	72	326	125	348	1151	44	116	821	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.57	0.43	1.00	1.45	0.55	1.00	1.93	0.07	1.00	1.83	0.17
Final Sat.:	1600	2518	682	1600	2313	887	1600	3082	118	1600	2929	271
Capacity Analysis Module:												
Vol/Sat:	0.03	0.18	0.18	0.05	0.14	0.14	0.22	0.37	0.37	0.07	0.28	0.28
Crit Moves:		****		****			****				****	

Intersections LOS Analysis Sheets

Existing + Project + Mitigation

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.839
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	204	659	194	125	687	209	89	400	76	170	965	85
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	206	666	196	126	694	211	90	404	77	172	975	86
Added Vol:	0	10	34	0	7	0	0	66	0	21	45	0
PasserByVol:	0	29	0	0	12	3	16	15	0	0	10	0
Initial Fut:	206	705	230	126	713	214	106	485	77	193	1030	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	206	705	230	126	713	214	106	485	77	193	1030	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	705	230	126	713	214	106	485	77	193	1030	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	206	705	230	126	713	214	106	485	77	193	1030	86
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.22	0.14	0.08	0.22	0.13	0.07	0.15	0.05	0.12	0.32	0.05
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Central Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.795
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	135	571	71	95	644	207	121	346	125	117	979	153
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	136	577	72	96	650	209	122	349	126	118	989	155
Added Vol:	0	33	0	0	22	6	10	7	0	0	7	0
PasserByVol:	0	20	0	0	8	2	5	5	0	0	2	0
Initial Fut:	136	630	72	96	680	217	137	361	126	118	998	155
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	630	72	96	680	217	137	361	126	118	998	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	630	72	96	680	217	137	361	126	118	998	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	630	72	96	680	217	137	361	126	118	998	155
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.22	0.78	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3557	1243	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.04	0.06	0.21	0.14	0.09	0.10	0.10	0.07	0.31	0.10
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #17 Compton Ave & Imperial Hwy

****

Cycle (sec):	100	Critical Vol./Cap.(X):	1.069	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	180	Level Of Service:	F	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	114	332	167	113	289	134	75	660	171	190	1489	161
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	115	335	169	114	292	135	76	667	173	192	1504	163
Added Vol:	92	25	37	5	39	0	0	40	166	86	19	1
PasserByVol:	2	14	0	0	34	0	0	17	3	0	7	0
Initial Fut:	209	374	206	119	365	135	76	724	342	278	1530	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	374	206	119	365	135	76	724	342	278	1530	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	374	206	119	365	135	76	724	342	278	1530	164
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	209	374	206	119	365	135	76	724	342	278	1530	164
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.73	0.27	1.00	2.04	0.96	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	1600	1167	433	1600	3260	1540	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.23	0.13	0.07	0.31	0.31	0.05	0.22	0.22	0.17	0.48	0.10
Crit Moves:	****				****		****				****	

****

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilmington Ave & I-105 e/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.824
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2 0	2	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	325	644	0	0	655	481	407	0	532	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	328	650	0	0	662	486	411	0	537	0	0	0
Added Vol:	98	180	0	0	185	27	4	0	125	0	0	0
PasserByVol:	53	73	0	0	219	0	0	0	79	0	0	0
Initial Fut:	479	903	0	0	1066	513	415	0	741	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	479	903	0	0	1066	513	415	0	741	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	479	903	0	0	1066	513	415	0	741	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	479	903	0	0	1066	513	415	0	741	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.00	2.00	1.07	0.01	1.92	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	3200	3200	1723	0	3077	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.00	0.00	0.33	0.16	0.24	0.00	0.24	0.00	0.00	0.00
Crit Moves:	****				****		****					

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	1.057
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	1 0	2	0 1	1 0	0	1 0	0 1	0	1 0	0 1
Volume Module:												
Base Vol:	129	843	60	92	939	164	59	18	80	20	39	56
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	130	851	61	93	948	166	60	18	81	20	39	57
Added Vol:	185	31	8	17	10	283	199	1	129	22	2	49
PasserByVol:	0	125	0	0	298	0	0	0	0	0	0	0
Initial Fut:	315	1007	69	110	1256	449	259	19	210	42	41	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	315	1007	69	110	1256	449	259	19	210	42	41	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	315	1007	69	110	1256	449	259	19	210	42	41	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	315	1007	69	110	1256	449	259	19	210	42	41	106
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.81	0.19	2.00	1.47	0.53	0.93	0.07	1.00	0.50	0.50	1.00
Final Sat.:	1600	4494	306	2880	2358	842	1490	110	1600	808	792	1600
Capacity Analysis Module:												
Vol/Sat:	0.20	0.22	0.22	0.04	0.53	0.53	0.16	0.17	0.13	0.03	0.05	0.07
Crit Moves:	****				****		****					****

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.782
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	173	744	54	123	640	135	92	393	258	56	557	89
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	175	751	55	124	646	136	93	397	261	57	563	90
Added Vol:	26	172	0	32	113	11	6	3	15	0	8	51
PasserByVol:	0	102	0	11	42	0	0	0	0	0	0	26
Initial Fut:	201	1025	55	167	801	147	99	400	276	57	571	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	201	1025	55	167	801	147	99	400	276	57	571	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	1025	55	167	801	147	99	400	276	57	571	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	201	1025	55	167	801	147	99	400	276	57	571	167
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	3038	162	1600	2703	497	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.34	0.34	0.10	0.30	0.30	0.06	0.12	0.17	0.04	0.18	0.10
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.807
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 1	0	0 1	0	0	1! 0	0	1 0	3 1	1	2 0	2 1	0
Volume Module:												
Base Vol:	534	11	136	7	34	67	50	1002	222	735	1333	13
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	539	11	137	7	34	68	51	1012	224	742	1346	13
Added Vol:	178	9	1	0	0	0	7	70	107	2	100	4
PasserByVol:	116	0	11	0	0	0	0	19	32	0	42	0
Initial Fut:	833	20	149	7	34	68	58	1101	363	744	1488	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	833	20	149	7	34	68	58	1101	363	744	1488	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	833	20	149	7	34	68	58	1101	363	744	1488	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	833	20	149	7	34	68	58	1101	363	744	1488	17
OvlAdjVol:									0			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.93	0.07	1.00	0.06	0.31	0.63	1.00	3.76	1.24	2.00	2.97	0.03
Final Sat.:	4218	102	1600	104	504	993	1600	6016	1984	2880	4745	55
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.09	0.07	0.07	0.07	0.04	0.18	0.18	0.26	0.31	0.31
OvlAdjV/S:									0.00			
Crit Moves:	****			****				****		****		

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #45 Alameda St & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	1 0	2 0	2	2 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	209	643	82	74	641	540	357	536	169	85	1226	36
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	211	649	83	75	647	545	361	541	171	86	1238	36
Added Vol:	6	0	0	0	0	44	30	37	4	0	55	0
PasserByVol:	0	0	0	0	0	18	12	8	0	0	23	0
Initial Fut:	217	649	83	75	647	607	403	586	175	86	1316	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	649	83	75	647	607	403	586	175	86	1316	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	649	83	75	647	607	403	586	175	86	1316	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	649	83	75	647	607	403	586	175	86	1316	36
OvlAdjVol:						160						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.77	0.23	1.00	2.00	2.00	2.00	2.31	0.69	1.00	3.00	1.00
Final Sat.:	2880	2838	362	1600	3200	3200	2880	3698	1102	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.23	0.05	0.20	0.19	0.14	0.16	0.16	0.05	0.27	0.02
OvlAdjV/S:						0.05						
Crit Moves:	****				****			****				****

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.780
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	153	632	50	78	759	109	105	417	153	40	361	103
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	638	51	79	767	110	106	421	155	40	365	104
Added Vol:	41	6	0	0	4	0	0	14	28	0	20	0
PasserByVol:	12	0	0	0	0	0	0	2	5	0	5	0
Initial Fut:	208	644	51	79	771	110	106	437	188	40	390	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	208	644	51	79	771	110	106	437	188	40	390	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	208	644	51	79	771	110	106	437	188	40	390	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	208	644	51	79	771	110	106	437	188	40	390	104
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.20	0.03	0.05	0.24	0.07	0.07	0.14	0.12	0.03	0.24	0.07
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Compton Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	91	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	172	102	27	136	69	276	148	594	93	12	927	111
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	174	103	27	137	70	279	149	600	94	12	936	112
Added Vol:	0	0	0	18	0	53	93	6	0	0	13	32
PasserByVol:	0	18	0	0	8	10	15	0	0	0	0	0
Initial Fut:	174	121	27	155	78	342	257	606	94	12	949	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	174	121	27	155	78	342	257	606	94	12	949	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	121	27	155	78	342	257	606	94	12	949	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	121	27	155	78	342	257	606	94	12	949	144
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2612	588	1600	1600	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.05	0.05	0.10	0.05	0.21	0.16	0.19	0.06	0.01	0.30	0.09
Crit Moves:	****					****	****				****	

Willowbrook
Existing+Project+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.927
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	95	614	119	138	813	189	99	462	103	124	900	98
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	96	620	120	139	821	191	100	467	104	125	909	99
Added Vol:	0	141	0	30	92	6	7	0	0	0	0	50
PasserByVol:	0	61	0	9	26	5	11	0	0	0	0	21
Initial Fut:	96	822	120	178	939	202	118	467	104	125	909	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	822	120	178	939	202	118	467	104	125	909	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	822	120	178	939	202	118	467	104	125	909	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	822	120	178	939	202	118	467	104	125	909	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.65	0.35	1.00	2.00	1.00	1.00	1.68	0.32
Final Sat.:	1600	3200	1600	1600	2634	566	1600	3200	1600	1600	2696	504
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.08	0.11	0.36	0.36	0.07	0.15	0.07	0.08	0.34	0.34
Crit Moves:	****				****			****				****

Willowbrook
Existing+Project+Mitigation Conditions - AM Peak
1-30-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	104	444	142	170	833	87	100	498	105	137	850	142
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	444	142	170	833	87	100	498	105	137	850	142
Added Vol:	0	141	0	0	92	0	0	0	0	0	0	0
PasserByVol:	0	38	0	2	15	0	1	0	0	0	0	5
Initial Fut:	104	623	142	172	940	87	101	498	105	137	850	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	623	142	172	940	87	101	498	105	137	850	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	623	142	172	940	87	101	498	105	137	850	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	623	142	172	940	87	101	498	105	137	850	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.83	0.17	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2606	594	1600	2929	271	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.24	0.11	0.32	0.32	0.06	0.16	0.07	0.09	0.27	0.09
Crit Moves:	****				****			****				****

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Avalon Blvd & El Segundo

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	121	704	170	148	531	93	134	1370	104	102	461	112
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	122	711	172	149	536	94	135	1384	105	103	466	113
Added Vol:	0	8	13	0	10	0	0	40	0	19	54	0
PasserByVol:	0	8	0	0	16	0	0	20	0	0	38	0
Initial Fut:	122	727	185	149	562	94	135	1444	105	122	558	113
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	727	185	149	562	94	135	1444	105	122	558	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	727	185	149	562	94	135	1444	105	122	558	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	727	185	149	562	94	135	1444	105	122	558	113
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.80	0.20	1.00	2.49	0.51
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4474	326	1600	3990	810
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.12	0.09	0.18	0.06	0.08	0.32	0.32	0.08	0.14	0.14
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.908
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	104	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	0 1	1 0	2	0 1	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	82	634	213	178	655	153	195	1238	145	86	483	79
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	83	640	215	180	662	155	197	1250	146	87	488	80
Added Vol:	0	9	25	0	12	0	0	53	0	36	73	0
PasserByVol:	0	19	0	0	36	11	11	10	0	0	29	0
Initial Fut:	83	668	240	180	710	166	208	1313	146	123	590	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	668	240	180	710	166	208	1313	146	123	590	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	668	240	180	710	166	208	1313	146	123	590	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	668	240	180	710	166	208	1313	146	123	590	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.15	0.11	0.22	0.10	0.13	0.41	0.09	0.08	0.18	0.05
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Compton Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.954
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	137	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	98	304	167	214	257	101	78	1434	86	63	735	232
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	99	307	169	216	260	102	79	1448	87	64	742	234
Added Vol:	169	42	69	4	30	0	0	40	103	51	39	3
PasserByVol:	5	42	0	0	23	0	0	11	2	0	21	0
Initial Fut:	273	391	238	220	313	102	79	1499	192	115	802	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	273	391	238	220	313	102	79	1499	192	115	802	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	273	391	238	220	313	102	79	1499	192	115	802	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	273	391	238	220	313	102	79	1499	192	115	802	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.75	0.25	1.00	2.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	1600	1206	394	1600	4255	545	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.24	0.15	0.14	0.26	0.26	0.05	0.35	0.35	0.07	0.25	0.15
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilmington Ave & I-105 e/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.711
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2 0	2	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	326	902	0	0	529	421	328	0	179	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	329	911	0	0	534	425	331	0	181	0	0	0
Added Vol:	150	247	0	0	185	60	3	0	125	0	0	0
PasserByVol:	160	219	0	0	137	0	0	0	48	0	0	0
Initial Fut:	639	1377	0	0	856	485	334	0	354	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	639	1377	0	0	856	485	334	0	354	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	639	1377	0	0	856	485	334	0	354	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	639	1377	0	0	856	485	334	0	354	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.00	2.00	1.46	0.00	1.54	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	3200	3200	2332	0	2468	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.20	0.29	0.00	0.00	0.27	0.15	0.14	0.00	0.14	0.00	0.00	0.00
Crit Moves:	****				****		****					

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.907
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	103	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	2 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	28	992	84	132	547	32	108	50	50	37	44	137
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	28	1002	85	133	552	32	109	51	51	37	44	138
Added Vol:	147	39	29	64	17	230	315	2	203	19	2	44
PasserByVol:	0	379	0	0	186	0	0	0	0	0	0	0
Initial Fut:	175	1420	114	197	755	262	424	53	254	56	46	182
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	175	1420	114	197	755	262	424	53	254	56	46	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	1420	114	197	755	262	424	53	254	56	46	182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	175	1420	114	197	755	262	424	53	254	56	46	182
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.78	0.22	2.00	1.48	0.52	0.89	0.11	1.00	0.55	0.45	1.00
Final Sat.:	1600	4444	356	2880	2375	825	1424	176	1600	877	723	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.32	0.07	0.32	0.32	0.27	0.30	0.16	0.04	0.06	0.11
Crit Moves:	****				****		****					****

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Wilmington Ave & 120th St (East)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.685
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	2 0	1	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	8	807	17	35	707	16	53	2	14	2	0	15
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	8	815	17	35	714	16	54	2	14	2	0	15
Added Vol:	0	190	2	6	246	0	0	0	0	1	0	5
PasserByVol:	113	0	0	0	0	100	289	47	215	0	24	0
Initial Fut:	121	1005	19	41	960	116	343	49	229	3	24	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	1005	19	41	960	116	343	49	229	3	24	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	1005	19	41	960	116	343	49	229	3	24	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	121	1005	19	41	960	116	343	49	229	3	24	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.78	0.22	2.00	1.00	1.00	0.06	0.51	0.43
Final Sat.:	1600	3140	60	1600	2855	345	2880	1600	1600	102	814	683
Capacity Analysis Module:												
Vol/Sat:	0.08	0.32	0.32	0.03	0.34	0.34	0.12	0.03	0.14	0.03	0.03	0.03
Crit Moves:	****				****				****		****	

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	144	579	83	101	480	86	182	927	326	44	296	68
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	145	585	84	102	485	87	184	936	329	44	299	69
Added Vol:	16	139	0	52	187	8	14	7	27	0	6	39
PasserByVol:	0	66	0	32	127	0	0	0	0	0	0	16
Initial Fut:	161	790	84	186	799	95	198	943	356	44	305	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	790	84	186	799	95	198	943	356	44	305	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	790	84	186	799	95	198	943	356	44	305	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	790	84	186	799	95	198	943	356	44	305	124
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.79	0.21	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2893	307	1600	2860	340	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.27	0.27	0.12	0.28	0.28	0.12	0.29	0.22	0.03	0.10	0.08
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.827
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 1	0	0 1	0	0	1! 0	0	1	0 3 1	1	2 0	2 1 0
Volume Module:												
Base Vol:	544	8	271	9	22	25	47	1612	339	596	812	1
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	549	8	274	9	22	25	47	1628	342	602	820	1
Added Vol:	146	7	3	0	0	0	18	130	158	2	77	3
PasserByVol:	71	0	7	0	0	0	0	56	95	0	26	0
Initial Fut:	766	15	284	9	22	25	65	1814	595	604	923	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	766	15	284	9	22	25	65	1814	595	604	923	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	766	15	284	9	22	25	65	1814	595	604	923	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	766	15	284	9	22	25	65	1814	595	604	923	4
OvlAdjVol:									238			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.94	0.06	1.00	0.16	0.39	0.45	1.00	3.76	1.24	2.00	2.99	0.01
Final Sat.:	4237	83	1600	257	629	714	1600	6023	1977	2880	4779	21
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.04	0.04	0.04	0.04	0.30	0.30	0.21	0.19	0.19
OvlAdjV/S:									0.12			
Crit Moves:	****					****		****		****		

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Alameda St & 103rd St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.760
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	115	736	0	0	1222	235	190	0	158	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	116	743	0	0	1234	237	192	0	160	0	0	0
Added Vol:	0	49	0	0	36	0	0	0	0	0	0	0
PasserByVol:	0	16	0	0	4	9	8	0	0	0	0	0
Initial Fut:	116	808	0	0	1274	246	200	0	160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	116	808	0	0	1274	246	200	0	160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	808	0	0	1274	246	200	0	160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	116	808	0	0	1274	246	200	0	160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.68	0.32	1.11	0.00	0.89	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2682	518	1779	0	1421	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.25	0.00	0.00	0.48	0.48	0.11	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Compton Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.758
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	67	31	16	111	64	152	235	1347	103	16	449	74
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	68	31	16	112	65	154	237	1360	104	16	453	75
Added Vol:	0	0	0	33	0	98	63	15	0	0	11	19
PasserByVol:	0	12	0	0	23	29	10	0	0	0	0	0
Initial Fut:	68	43	16	145	88	281	310	1375	104	16	464	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	43	16	145	88	281	310	1375	104	16	464	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	43	16	145	88	281	310	1375	104	16	464	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	43	16	145	88	281	310	1375	104	16	464	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.46	0.54	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2330	870	1600	1600	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.02	0.09	0.05	0.18	0.19	0.43	0.07	0.01	0.15	0.06
Crit Moves:	****					****		****		****		

Willowbrook
Existing+Project+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	97	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	153	674	153	147	475	135	114	1059	163	93	468	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	681	155	148	480	136	115	1070	165	94	473	115
Added Vol:	0	111	0	50	155	9	9	0	0	0	1	36
PasserByVol:	0	39	0	26	75	14	8	0	0	0	0	14
Initial Fut:	155	831	155	224	710	159	132	1070	165	94	474	165
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	155	831	155	224	710	159	132	1070	165	94	474	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	831	155	224	710	159	132	1070	165	94	474	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	155	831	155	224	710	159	132	1070	165	94	474	165
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.63	0.37	1.00	2.00	1.00	1.00	1.48	0.52
Final Sat.:	1600	3200	1600	1600	2613	587	1600	3200	1600	1600	2373	827
Capacity Analysis Module:												
Vol/Sat:	0.10	0.26	0.10	0.14	0.27	0.27	0.08	0.33	0.10	0.06	0.20	0.20
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Mitigation Conditions - PM Peak
1-30-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.924
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	114	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	79	894	113	129	569	70	107	1012	159	105	425	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	894	113	129	569	70	107	1012	159	105	425	158
Added Vol:	0	111	0	0	155	0	0	0	0	0	0	0
PasserByVol:	0	24	0	8	47	1	1	0	0	0	0	3
Initial Fut:	79	1029	113	137	771	71	108	1012	159	105	425	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	1029	113	137	771	71	108	1012	159	105	425	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	1029	113	137	771	71	108	1012	159	105	425	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	1029	113	137	771	71	108	1012	159	105	425	161
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.83	0.17	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2883	317	1600	2930	270	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.36	0.09	0.26	0.26	0.07	0.32	0.10	0.07	0.13	0.10
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Mitigation Conditions - PM Peak
1-30-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #63 Wilmington Ave & Walnut St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.742
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	54	1153	85	34	627	25	152	451	184	34	63	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	1153	85	34	627	25	152	451	184	34	63	63
Added Vol:	0	111	0	0	155	0	0	0	0	0	0	0
PasserByVol:	0	19	0	0	37	0	0	0	0	0	0	0
Initial Fut:	54	1283	85	34	819	25	152	451	184	34	63	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	1283	85	34	819	25	152	451	184	34	63	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	1283	85	34	819	25	152	451	184	34	63	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	1283	85	34	819	25	152	451	184	34	63	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.42	0.58	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2273	927	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.40	0.05	0.02	0.26	0.02	0.10	0.20	0.20	0.02	0.04	0.04
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Mitigation Conditions - PM Peak
1-30-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #54 Imperial Hwy & State St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.771
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	51	454	123	72	326	124	339	1047	30	116	718	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	454	123	72	326	124	339	1047	30	116	718	76
Added Vol:	0	0	0	0	0	0	0	61	0	0	45	0
PasserByVol:	0	0	0	0	0	1	9	0	14	0	14	0
Initial Fut:	51	454	123	72	326	125	348	1108	44	116	777	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	454	123	72	326	125	348	1108	44	116	777	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	454	123	72	326	125	348	1108	44	116	777	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	454	123	72	326	125	348	1108	44	116	777	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.92	0.08	1.00	1.82	0.18
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3078	122	1600	2915	285
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.08	0.05	0.10	0.08	0.22	0.36	0.36	0.07	0.27	0.27
Crit Moves:		****			****			****			****	

Intersections LOS Analysis Sheets

Existing + Project + Cumulative + Mitigation

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.874
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	204	659	194	125	687	209	89	400	76	170	965	85
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	206	666	196	126	694	211	90	404	77	172	975	86
Added Vol:	18	23	34	0	30	13	15	87	15	22	65	0
PasserByVol:	0	29	0	0	12	3	16	15	0	0	10	0
Initial Fut:	224	718	230	126	736	227	121	506	92	194	1050	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	224	718	230	126	736	227	121	506	92	194	1050	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	718	230	126	736	227	121	506	92	194	1050	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	224	718	230	126	736	227	121	506	92	194	1050	86
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.14	0.22	0.14	0.08	0.23	0.14	0.08	0.16	0.06	0.12	0.33	0.05
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Central Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.821
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	0	1	1	0 2	0	1	1	0 2	1	0	1	0 2	0	1
Volume Module:																
Base Vol:	135	571		71	95	644		207	121	346		125	117	979		153
Growth Adj:	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01		1.01
Initial Bse:	136	577		72	96	650		209	122	349		126	118	989		155
Added Vol:	16	66		0	4	40		17	22	12		3	0	14		3
PasserByVol:	0	20		0	0	8		2	5	5		0	0	2		0
Initial Fut:	152	663		72	100	698		228	149	366		129	118	1005		158
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	152	663		72	100	698		228	149	366		129	118	1005		158
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	152	663		72	100	698		228	149	366		129	118	1005		158
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	152	663		72	100	698		228	149	366		129	118	1005		158
Saturation Flow Module:																
Sat/Lane:	1600	1600		1600	1600	1600		1600	1600	1600		1600	1600	1600		1600
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	1.00	2.00		1.00	1.00	2.00		1.00	1.00	2.22		0.78	1.00	2.00		1.00
Final Sat.:	1600	3200		1600	1600	3200		1600	1600	3548		1252	1600	3200		1600
Capacity Analysis Module:																
Vol/Sat:	0.10	0.21		0.04	0.06	0.22		0.14	0.09	0.10		0.10	0.07	0.31		0.10
Crit Moves:	****					****			****					****		

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Compton Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	1.075
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	114	332	167	113	289	134	75	660	171	190	1489	161
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	115	335	169	114	292	135	76	667	173	192	1504	163
Added Vol:	95	26	40	5	42	0	1	49	172	87	26	3
PasserByVol:	2	14	0	0	34	0	0	17	3	0	7	0
Initial Fut:	212	375	209	119	368	135	77	733	348	279	1537	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	212	375	209	119	368	135	77	733	348	279	1537	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	375	209	119	368	135	77	733	348	279	1537	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	212	375	209	119	368	135	77	733	348	279	1537	166
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.73	0.27	1.00	2.03	0.97	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	1600	1170	430	1600	3255	1545	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.23	0.13	0.07	0.31	0.31	0.05	0.23	0.23	0.17	0.48	0.10
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilmington Ave & I-105 e/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2 0	2	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	325	644	0	0	655	481	407	0	532	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	328	650	0	0	662	486	411	0	537	0	0	0
Added Vol:	98	201	0	0	219	28	4	0	144	0	0	0
PasserByVol:	53	73	0	0	219	0	0	0	79	0	0	0
Initial Fut:	479	924	0	0	1100	514	415	0	760	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	479	924	0	0	1100	514	415	0	760	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	479	924	0	0	1100	514	415	0	760	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	479	924	0	0	1100	514	415	0	760	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.00	2.00	1.06	0.00	1.94	0.00	0.00	0.00
Final Sat.:	2880	4800	0	0	3200	3200	1695	0	3105	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.19	0.00	0.00	0.34	0.16	0.24	0.00	0.24	0.00	0.00	0.00
Crit Moves:	****				****		****					

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	1.098
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	2 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	129	843	60	92	939	164	59	18	80	20	39	56
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	130	851	61	93	948	166	60	18	81	20	39	57
Added Vol:	209	36	8	17	19	326	214	1	139	22	2	49
PasserByVol:	0	125	0	0	298	0	0	0	0	0	0	0
Initial Fut:	339	1012	69	110	1265	492	274	19	220	42	41	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	339	1012	69	110	1265	492	274	19	220	42	41	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	339	1012	69	110	1265	492	274	19	220	42	41	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	339	1012	69	110	1265	492	274	19	220	42	41	106
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.81	0.19	2.00	1.44	0.56	0.93	0.07	1.00	0.50	0.50	1.00
Final Sat.:	1600	4495	305	2880	2305	895	1495	105	1600	808	792	1600
Capacity Analysis Module:												
Vol/Sat:	0.21	0.23	0.23	0.04	0.55	0.55	0.17	0.18	0.14	0.03	0.05	0.07
Crit Moves:	****				****		****					****

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	173	744	54	123	640	135	92	393	258	56	557	89
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	175	751	55	124	646	136	93	397	261	57	563	90
Added Vol:	34	185	0	36	117	11	6	11	18	0	17	62
PasserByVol:	0	102	0	11	42	0	0	0	0	0	0	26
Initial Fut:	209	1038	55	171	805	147	99	408	279	57	580	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	1038	55	171	805	147	99	408	279	57	580	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	1038	55	171	805	147	99	408	279	57	580	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	209	1038	55	171	805	147	99	408	279	57	580	178
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	3040	160	1600	2705	495	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.34	0.34	0.11	0.30	0.30	0.06	0.13	0.17	0.04	0.18	0.11
Crit Moves:		****		****			****				****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.811
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 1	0	0 1	0	0	1! 0	0	1 0	3 1	1	2 0	2 1 0
Volume Module:												
Base Vol:	534	11	136	7	34	67	50	1002	222	735	1333	13
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	539	11	137	7	34	68	51	1012	224	742	1346	13
Added Vol:	181	9	1	0	0	0	7	89	112	2	131	4
PasserByVol:	116	0	11	0	0	0	0	19	32	0	42	0
Initial Fut:	836	20	149	7	34	68	58	1120	368	744	1519	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	836	20	149	7	34	68	58	1120	368	744	1519	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	836	20	149	7	34	68	58	1120	368	744	1519	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	836	20	149	7	34	68	58	1120	368	744	1519	17
OvlAdjVol:									0			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.93	0.07	1.00	0.06	0.31	0.63	1.00	3.76	1.24	2.00	2.97	0.03
Final Sat.:	4219	101	1600	104	504	993	1600	6021	1979	2880	4746	54
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.09	0.07	0.07	0.07	0.04	0.19	0.19	0.26	0.32	0.32
OvlAdjV/S:									0.00			
Crit Moves:	****			****				****		****		

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #45 Alameda St & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.798	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	66	Level Of Service:	C	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2	0 2	2 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	209	643	82	74	641	540	357	536	169	85	1226	36
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	211	649	83	75	647	545	361	541	171	86	1238	36
Added Vol:	6	1	0	0	0	48	31	55	4	0	82	0
PasserByVol:	0	0	0	0	0	18	12	8	0	0	23	0
Initial Fut:	217	650	83	75	647	611	404	604	175	86	1343	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	650	83	75	647	611	404	604	175	86	1343	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	650	83	75	647	611	404	604	175	86	1343	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	650	83	75	647	611	404	604	175	86	1343	36
OvlAdjVol:						163						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.77	0.23	1.00	2.00	2.00	2.00	2.33	0.67	1.00	3.00	1.00
Final Sat.:	2880	2839	361	1600	3200	3200	2880	3724	1076	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.23	0.05	0.20	0.19	0.14	0.16	0.16	0.05	0.28	0.02
OvlAdjV/S:						0.05						
Crit Moves:	****				****			****				****

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.793
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	153	632	50	78	759	109	105	417	153	40	361	103
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	638	51	79	767	110	106	421	155	40	365	104
Added Vol:	47	7	0	0	4	0	0	23	29	0	34	0
PasserByVol:	12	0	0	0	0	0	0	2	5	0	5	0
Initial Fut:	214	645	51	79	771	110	106	446	189	40	404	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	214	645	51	79	771	110	106	446	189	40	404	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	214	645	51	79	771	110	106	446	189	40	404	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	214	645	51	79	771	110	106	446	189	40	404	104
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.20	0.03	0.05	0.24	0.07	0.07	0.14	0.12	0.03	0.25	0.07
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Compton Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.895	
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	98	Level Of Service:	D	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	172	102	27	136	69	276	148	594	93	12	927	111
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	174	103	27	137	70	279	149	600	94	12	936	112
Added Vol:	0	1	0	18	2	58	105	16	0	0	29	32
PasserByVol:	0	18	0	0	8	10	15	0	0	0	0	0
Initial Fut:	174	122	27	155	80	347	269	616	94	12	965	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	174	122	27	155	80	347	269	616	94	12	965	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	122	27	155	80	347	269	616	94	12	965	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	122	27	155	80	347	269	616	94	12	965	144
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2615	585	1600	1600	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.05	0.05	0.10	0.05	0.22	0.17	0.19	0.06	0.01	0.30	0.09
Crit Moves:	****					****	****				****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation AM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.935
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	95	614	119	138	813	189	99	462	103	124	900	98
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	96	620	120	139	821	191	100	467	104	125	909	99
Added Vol:	0	152	0	34	96	6	7	9	0	0	10	60
PasserByVol:	0	61	0	9	26	5	11	0	0	0	0	21
Initial Fut:	96	833	120	182	943	202	118	476	104	125	919	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	833	120	182	943	202	118	476	104	125	919	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	833	120	182	943	202	118	476	104	125	919	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	96	833	120	182	943	202	118	476	104	125	919	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.65	0.35	1.00	2.00	1.00	1.00	1.67	0.33
Final Sat.:	1600	3200	1600	1600	2636	564	1600	3200	1600	1600	2676	524
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.08	0.11	0.36	0.36	0.07	0.15	0.07	0.08	0.34	0.34
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative+Mitigation Conditions - AM Peak
1-24-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	104	444	142	170	833	87	100	498	105	137	850	142
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	444	142	170	833	87	100	498	105	137	850	142
Added Vol:	0	152	0	0	96	0	0	0	0	0	0	0
PasserByVol:	0	38	0	2	15	0	1	0	0	0	0	5
Initial Fut:	104	634	142	172	944	87	101	498	105	137	850	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	634	142	172	944	87	101	498	105	137	850	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	634	142	172	944	87	101	498	105	137	850	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	634	142	172	944	87	101	498	105	137	850	147
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.83	0.17	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2614	586	1600	2930	270	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.24	0.11	0.32	0.32	0.06	0.16	0.07	0.09	0.27	0.09
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Avalon Blvd & El Segundo

Cycle (sec):	100	Critical Vol./Cap.(X):	0.884
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	121	704	170	148	531	93	134	1370	104	102	461	112
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	122	711	172	149	536	94	135	1384	105	103	466	113
Added Vol:	4	18	65	7	19	0	0	184	7	59	174	4
PasserByVol:	0	8	0	0	16	0	0	20	0	0	38	0
Initial Fut:	126	737	237	156	571	94	135	1588	112	162	678	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	737	237	156	571	94	135	1588	112	162	678	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	737	237	156	571	94	135	1588	112	162	678	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	737	237	156	571	94	135	1588	112	162	678	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.80	0.20	1.00	2.56	0.44
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4484	316	1600	4093	707
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.15	0.10	0.18	0.06	0.08	0.35	0.35	0.10	0.17	0.17
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #10 Central Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.938
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	124	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	82	634	213	178	655	153	195	1238	145	86	483	79
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	83	640	215	180	662	155	197	1250	146	87	488	80
Added Vol:	53	57	27	0	36	36	25	96	37	38	133	0
PasserByVol:	0	19	0	0	36	11	11	10	0	0	29	0
Initial Fut:	136	716	242	180	734	202	233	1356	183	125	650	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	716	242	180	734	202	233	1356	183	125	650	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	716	242	180	734	202	233	1356	183	125	650	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	716	242	180	734	202	233	1356	183	125	650	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.22	0.15	0.11	0.23	0.13	0.15	0.42	0.11	0.08	0.20	0.05
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 Central Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	138	567	111	181	706	107	148	1164	177	109	466	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	139	573	112	183	713	108	149	1176	179	110	471	115
Added Vol:	8	86	0	13	116	41	24	15	12	0	16	6
PasserByVol:	0	13	0	0	24	5	3	3	0	0	5	0
Initial Fut:	147	672	112	196	853	154	176	1194	191	110	492	121
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	147	672	112	196	853	154	176	1194	191	110	492	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	672	112	196	853	154	176	1194	191	110	492	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	147	672	112	196	853	154	176	1194	191	110	492	121
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.59	0.41	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4139	661	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.07	0.12	0.27	0.10	0.11	0.29	0.29	0.07	0.15	0.08
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Compton Ave & Imperial Hwy

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	151	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	98	304	167	214	257	101	78	1434	86	63	735	232
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	99	307	169	216	260	102	79	1448	87	64	742	234
Added Vol:	180	47	71	6	32	1	1	46	111	54	47	5
PasserByVol:	5	42	0	0	23	0	0	11	2	0	21	0
Initial Fut:	284	396	240	222	315	103	80	1505	200	118	810	239
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	284	396	240	222	315	103	80	1505	200	118	810	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	284	396	240	222	315	103	80	1505	200	118	810	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	284	396	240	222	315	103	80	1505	200	118	810	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.75	0.25	1.00	2.65	0.35	1.00	2.00	1.00
Final Sat.:	1600	1600	1600	1600	1205	395	1600	4237	563	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.25	0.15	0.14	0.26	0.26	0.05	0.36	0.36	0.07	0.25	0.15
Crit Moves:	****				****			****			****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #27 Wilmington Ave & I-105 e/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2 0	2	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	326	902	0	0	529	421	328	0	179	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	329	911	0	0	534	425	331	0	181	0	0	0
Added Vol:	150	334	0	0	236	64	3	0	135	0	0	0
PasserByVol:	160	219	0	0	137	0	0	0	48	0	0	0
Initial Fut:	639	1464	0	0	907	489	334	0	364	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	639	1464	0	0	907	489	334	0	364	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	639	1464	0	0	907	489	334	0	364	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	639	1464	0	0	907	489	334	0	364	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.00	2.00	1.44	xxxx	1.56	0.00	0.00	0.00
Final Sat.:	2880	4800	0	0	3200	3200	2299	0	2501	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.31	0.00	0.00	0.28	0.15	0.15	0.00	0.15	0.00	0.00	0.00
Crit Moves:	****				****		****					

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #28 Wilmington Ave & 118th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.981
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	168	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	2 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	28	992	84	132	547	32	108	50	50	37	44	137
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	28	1002	85	133	552	32	109	51	51	37	44	138
Added Vol:	171	60	29	64	44	263	380	2	244	19	2	44
PasserByVol:	0	379	0	0	186	0	0	0	0	0	0	0
Initial Fut:	199	1441	114	197	782	295	489	53	295	56	46	182
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	199	1441	114	197	782	295	489	53	295	56	46	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	1441	114	197	782	295	489	53	295	56	46	182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	199	1441	114	197	782	295	489	53	295	56	46	182
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.78	0.22	2.00	1.45	0.55	0.90	0.10	1.00	0.55	0.45	1.00
Final Sat.:	1600	4449	351	2880	2323	877	1445	155	1600	877	723	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.32	0.32	0.07	0.34	0.34	0.31	0.34	0.18	0.04	0.06	0.11
Crit Moves:	****				****		****					****

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #30 Wilmington Ave & 120th St (East)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	2 0	1	0 1	0 0	1! 0	0
Volume Module:												
Base Vol:	8	807	17	35	707	16	53	2	14	2	0	15
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	8	815	17	35	714	16	54	2	14	2	0	15
Added Vol:	0	212	2	6	284	0	0	0	0	1	0	5
PasserByVol:	113	0	0	0	0	100	289	47	215	0	24	0
Initial Fut:	121	1027	19	41	998	116	343	49	229	3	24	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	1027	19	41	998	116	343	49	229	3	24	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	1027	19	41	998	116	343	49	229	3	24	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	121	1027	19	41	998	116	343	49	229	3	24	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.96	0.04	1.00	1.79	0.21	2.00	1.00	1.00	0.06	0.51	0.43
Final Sat.:	1600	3141	59	1600	2866	334	2880	1600	1600	102	814	683
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.33	0.03	0.35	0.35	0.12	0.03	0.14	0.03	0.03	0.03
Crit Moves:	****				****				****		****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #32 Wilmington Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.832
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	144	579	83	101	480	86	182	927	326	44	296	68
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	145	585	84	102	485	87	184	936	329	44	299	69
Added Vol:	36	152	0	69	209	8	14	26	42	0	31	48
PasserByVol:	0	66	0	32	127	0	0	0	0	0	0	16
Initial Fut:	181	803	84	203	821	95	198	962	371	44	330	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	803	84	203	821	95	198	962	371	44	330	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	803	84	203	821	95	198	962	371	44	330	133
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	803	84	203	821	95	198	962	371	44	330	133
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.79	0.21	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2897	303	1600	2868	332	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.28	0.13	0.29	0.29	0.12	0.30	0.23	0.03	0.10	0.08
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #36 Imperial Hwy & I-105 w/b Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.837
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 1	0	0 1	0	0	1! 0	0	1 0	3 1	1	2 0	2 1 0
Volume Module:												
Base Vol:	544	8	271	9	22	25	47	1612	339	596	812	1
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	549	8	274	9	22	25	47	1628	342	602	820	1
Added Vol:	150	7	3	0	0	0	18	178	182	2	123	3
PasserByVol:	71	0	7	0	0	0	0	56	95	0	26	0
Initial Fut:	770	15	284	9	22	25	65	1862	619	604	969	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	770	15	284	9	22	25	65	1862	619	604	969	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	770	15	284	9	22	25	65	1862	619	604	969	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	770	15	284	9	22	25	65	1862	619	604	969	4
OvlAdjVol:									256			
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.94	0.06	1.00	0.16	0.39	0.45	1.00	3.75	1.25	2.00	2.99	0.01
Final Sat.:	4237	83	1600	257	629	714	1600	6003	1997	2880	4780	20
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.04	0.04	0.04	0.04	0.31	0.31	0.21	0.20	0.20
OvlAdjV/S:									0.13			
Crit Moves:	****					****		****		****		

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #43 Alameda St & 103rd St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	115	736	0	0	1222	235	190	0	158	0	0	0
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	116	743	0	0	1234	237	192	0	160	0	0	0
Added Vol:	4	54	0	0	38	6	7	0	4	0	0	0
PasserByVol:	0	16	0	0	4	9	8	0	0	0	0	0
Initial Fut:	120	813	0	0	1276	252	207	0	164	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	813	0	0	1276	252	207	0	164	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	813	0	0	1276	252	207	0	164	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	813	0	0	1276	252	207	0	164	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.67	0.33	1.12	0.00	0.88	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	2672	528	1787	0	1413	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.00	0.00	0.48	0.48	0.12	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****		****					

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #46 Alameda St & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.922
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	112	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	102	717	98	107	699	43	50	258	95	182	699	190
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	103	724	99	108	706	43	51	261	96	184	706	192
Added Vol:	37	6	0	0	12	0	0	51	52	0	48	0
PasserByVol:	8	0	0	0	0	0	0	5	15	0	3	0
Initial Fut:	148	730	99	108	718	43	51	317	163	184	757	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	148	730	99	108	718	43	51	317	163	184	757	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	730	99	108	718	43	51	317	163	184	757	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	148	730	99	108	718	43	51	317	163	184	757	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.06	0.07	0.22	0.03	0.03	0.10	0.10	0.11	0.47	0.12
Crit Moves:	****				****		****				****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Compton Ave & El Segundo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.779
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	67	31	16	111	64	152	235	1347	103	16	449	74
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	68	31	16	112	65	154	237	1360	104	16	453	75
Added Vol:	0	4	0	33	4	115	73	50	0	0	56	19
PasserByVol:	0	12	0	0	23	29	10	0	0	0	0	0
Initial Fut:	68	47	16	145	92	298	320	1410	104	16	509	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	47	16	145	92	298	320	1410	104	16	509	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	47	16	145	92	298	320	1410	104	16	509	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	47	16	145	92	298	320	1410	104	16	509	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.49	0.51	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2385	815	1600	1600	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.02	0.09	0.06	0.19	0.20	0.44	0.07	0.01	0.16	0.06
Crit Moves:	****					****		****			****	

Willowbrook
Existing+Project+Cumulative+TMG Mitigation PM Peak
11-8-2016

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #33 Wilmington Ave & Rosecrans Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.914
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	108	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	153	674	153	147	475	135	114	1059	163	93	468	114
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	155	681	155	148	480	136	115	1070	165	94	473	115
Added Vol:	0	122	0	69	173	9	9	19	0	0	13	57
PasserByVol:	0	39	0	26	75	14	8	0	0	0	0	14
Initial Fut:	155	842	155	243	728	159	132	1089	165	94	486	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	155	842	155	243	728	159	132	1089	165	94	486	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	842	155	243	728	159	132	1089	165	94	486	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	155	842	155	243	728	159	132	1089	165	94	486	186
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.64	0.36	1.00	2.00	1.00	1.00	1.45	0.55
Final Sat.:	1600	3200	1600	1600	2625	575	1600	3200	1600	1600	2313	887
Capacity Analysis Module:												
Vol/Sat:	0.10	0.26	0.10	0.15	0.28	0.28	0.08	0.34	0.10	0.06	0.21	0.21
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative+Mitigation - PM Peak Hour
1-31-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #57 Central Ave & W Compton Bvld

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	125	725	114	171	577	98	102	886	201	90	352	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	725	114	171	577	98	102	886	201	90	352	126
Added Vol:	0	93	0	3	125	0	0	0	0	0	0	1
PasserByVol:	0	8	0	0	14	1	1	1	0	0	1	0
Initial Fut:	125	826	114	174	716	99	103	887	201	90	353	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	826	114	174	716	99	103	887	201	90	353	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	826	114	174	716	99	103	887	201	90	353	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	826	114	174	716	99	103	887	201	90	353	127
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.47	0.53
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3200	1600	1600	2353	847
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.07	0.11	0.22	0.06	0.06	0.28	0.13	0.06	0.15	0.15
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative+Mitigation - PM Peak Hour
1-24-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #60 Central Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	119	782	148	180	632	65	115	969	132	65	334	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	782	148	180	632	65	115	969	132	65	334	158
Added Vol:	0	93	0	0	125	0	0	0	0	0	0	0
PasserByVol:	0	3	0	0	5	1	1	1	0	0	1	0
Initial Fut:	119	878	148	180	762	66	116	970	132	65	335	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	878	148	180	762	66	116	970	132	65	335	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	878	148	180	762	66	116	970	132	65	335	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	878	148	180	762	66	116	970	132	65	335	158
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2817	383	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.27	0.09	0.11	0.24	0.04	0.07	0.34	0.34	0.04	0.10	0.10
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative+Mitigation - PM Peak Hour
1-31-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #61 Wilmington Ave & Alondra Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.928
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	79	894	113	129	569	70	107	1012	159	105	425	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	894	113	129	569	70	107	1012	159	105	425	158
Added Vol:	0	122	0	0	173	0	0	0	0	0	0	0
PasserByVol:	0	24	0	8	47	1	1	0	0	0	0	3
Initial Fut:	79	1040	113	137	789	71	108	1012	159	105	425	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	1040	113	137	789	71	108	1012	159	105	425	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	1040	113	137	789	71	108	1012	159	105	425	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	1040	113	137	789	71	108	1012	159	105	425	161
OvlAdjVol:									80			24
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.83	0.17	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	2886	314	1600	2936	264	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.36	0.09	0.27	0.27	0.07	0.32	0.10	0.07	0.13	0.10
OvlAdjV/S:									0.05			0.02
Crit Moves:	****			****				****		****		

Willowbrook
Existing+Project+Cumulative+Mitigation - PM Peak Hour
1-31-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #63 Wilmington Ave & Walnut St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	54	1153	85	34	627	25	152	451	184	34	63	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	1153	85	34	627	25	152	451	184	34	63	63
Added Vol:	0	122	0	0	173	0	0	0	0	0	0	0
PasserByVol:	0	19	0	0	37	0	0	0	0	0	0	0
Initial Fut:	54	1294	85	34	837	25	152	451	184	34	63	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	1294	85	34	837	25	152	451	184	34	63	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	1294	85	34	837	25	152	451	184	34	63	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	1294	85	34	837	25	152	451	184	34	63	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.42	0.58	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2273	927	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.40	0.05	0.02	0.26	0.02	0.10	0.20	0.20	0.02	0.04	0.04
Crit Moves:		****		****				****		****		

Willowbrook
Existing+Project+Cumulative+Mitigation - PM Peak Hour
1-24-17

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #54 Imperial Hwy & State St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	51	454	123	72	326	124	339	1047	30	116	718	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	454	123	72	326	124	339	1047	30	116	718	76
Added Vol:	0	0	0	0	0	0	0	104	0	0	89	0
PasserByVol:	0	0	0	0	0	1	9	0	14	0	14	0
Initial Fut:	51	454	123	72	326	125	348	1151	44	116	821	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	454	123	72	326	125	348	1151	44	116	821	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	454	123	72	326	125	348	1151	44	116	821	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	454	123	72	326	125	348	1151	44	116	821	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.93	0.07	1.00	1.83	0.17
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3082	118	1600	2929	271
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.08	0.05	0.10	0.08	0.22	0.37	0.37	0.07	0.28	0.28
Crit Moves:		****			****			****			****	

Intersection LOS Analysis Sheets

City of Los Angeles

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Avalon Blvd	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
1	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			4			4			4				4				4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
	EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	
NORTHBOUND Left	137	1	137	0	137	137	3	153	1	153	0	153	1	153		153	1	153
NORTHBOUND Left-Through		0							0				0				0	
NORTHBOUND Through	616	1	**360**	11	627	**369**	13	689	1	**406**	11	700	1	**415**		700	1	**415**
NORTHBOUND Through-Right		1							1				1				1	
NORTHBOUND Right	104	0	104	7	111	111	8	122	0	122	7	129	0	129		129	0	129
NORTHBOUND Left-Through-Right		0							0				0				0	
NORTHBOUND Left-Right		0							0				0				0	
SOUTHBOUND Left	209	1	**209**	31	240	**240**	6	235	1	**235**	31	266	1	**266**		266	1	**266**
SOUTHBOUND Left-Through		0							0				0				0	
SOUTHBOUND Through	591	1	334	12	603	340	17	666	1	375	12	678	1	381		678	1	381
SOUTHBOUND Through-Right		1							1				1				1	
SOUTHBOUND Right	76	0	76	0	76	76	0	83	0	83	0	83	0	83		83	0	83
SOUTHBOUND Left-Through-Right		0							0				0				0	
SOUTHBOUND Left-Right		0							0				0				0	
EASTBOUND Left	112	1	**112**	0	112	**112**	0	123	1	**123**	0	123	1	**123**		123	1	**123**
EASTBOUND Left-Through		0							0				0				0	
EASTBOUND Through	548	2	209	66	614	231	14	615	2	236	66	681	2	258		681	2	258
EASTBOUND Through-Right		1							1				1				1	
EASTBOUND Right	79	0	79	0	79	79	5	92	0	92	0	92	0	92		92	0	92
EASTBOUND Left-Through-Right		0							0				0				0	
EASTBOUND Left-Right		0							0				0				0	
WESTBOUND Left	125	1	125	3	128	128	9	146	1	146	3	149	1	149		149	1	149
WESTBOUND Left-Through		0							0				0				0	
WESTBOUND Through	1096	2	**442**	42	1138	**462**	12	1215	2	**491**	42	1257	2	**511**		1257	2	**511**
WESTBOUND Through-Right		1							1				1				1	
WESTBOUND Right	231	0	231	16	247	247	6	259	0	259	16	275	0	275		275	0	275
WESTBOUND Left-Through-Right		0							0				0				0	
WESTBOUND Left-Right		0							0				0				0	
CRITICAL VOLUMES North-South:			569			609				641				681				681
CRITICAL VOLUMES East-West:			554			574				614				634				634
CRITICAL VOLUMES SUM:			1123			1183				1255				1315				1315
VOLUME/CAPACITY (V/C) RATIO:			0.817			0.860				0.913				0.956				0.956
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.747			0.790				0.813				0.856				0.856
LEVEL OF SERVICE (LOS):			C			C				D				D				D

PROJECT IMPACT

Change in *v/c* due to project:	0.043	Δ*v/c* after mitigation:	0.043
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Avalon Blvd	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
2	East-West Street:	120th St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 EB-- 0	SB-- WB--	0 0	NB-- 0 EB-- 0	SB-- WB--	0 0	NB-- 0 EB-- 0	SB-- WB--	0 0		NB-- 0 EB-- 0	SB-- WB--	0 0		NB-- 0 EB-- 0	SB-- WB--	0 0	
	ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	70	1	70	0	70	70	2	79	1	79	0	79	1	79		79	1	79
	Left-Through		0							0				0				0	
	Through	569	1	**368**	7	576	**379**	21	645	1	**416**	7	652	1	**427**		652	1	**427**
	Through-Right		1							1				1				1	
	Right	166	0	166	15	181	181	4	186	0	186	15	201	0	201		201	0	201
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	90	1	**90**	16	106	**106**	4	103	1	**103**	16	119	1	**119**		119	1	**119**
	Left-Through		0							0				0				0	
	Through	676	1	362	3	679	364	24	766	1	411	3	769	1	412		769	1	412
	Through-Right		1							1				1				1	
	Right	48	0	48	0	48	48	2	55	0	55	0	55	0	55		55	0	55
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	60	1	**60**	0	60	**60**	2	68	1	**68**	0	68	1	**68**		68	1	**68**
	Left-Through		0							0				0				0	
	Through	323	1	323	51	374	374	6	360	1	360	51	411	1	411		411	1	411
	Through-Right		0							0				0				0	
	Right	53	1	18	0	53	18	4	62	1	23	0	62	1	23		62	1	23
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	132	1	132	8	140	140	0	145	1	145	8	153	1	153		153	1	153
	Left-Through		0							0				0				0	
	Through	475	1	**475**	27	502	**502**	3	524	1	**524**	27	551	1	**551**		551	1	**551**
	Through-Right		0							0				0				0	
	Right	84	1	39	12	96	43	2	94	1	43	12	106	1	47		106	1	47
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		458	*North-South:*		485	*North-South:*			519	*North-South:*			546	*North-South:*			546
		East-West:		535	*East-West:*		562	*East-West:*			592	*East-West:*			619	*East-West:*			619
		SUM:		993	*SUM:*		1047	*SUM:*			1111	*SUM:*			1165	*SUM:*			1165
	VOLUME/CAPACITY *(V/C)* RATIO:			0.662			0.698				0.741				0.777				0.777
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.592			0.628				0.641				0.677				0.677
	LEVEL OF SERVICE (LOS):			A			B				B				B				B

PROJECT IMPACT

Change in *v/c* due to project: 0.036 — Δ*v/c* after mitigation: 0.036

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
5	East-West Street:	103rd St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	43	1	**43**	0	43	**43**	0	47	1	**47**	0	47	1	**47**		47	1	**47**
	Left-Through		0							0				0				0	
	Through	1159	2	457	39	1198	470	19	1291	2	508	39	1330	2	521		1330	2	521
	Through-Right		1							1				1				1	
	Right	211	0	211	0	211	211	0	232	0	232	0	232	0	232		232	0	232
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	110	1	110	0	110	110	0	121	1	121	0	121	1	121		121	1	121
	Left-Through		0							0				0				0	
	Through	1155	2	**578**	60	1215	**608**	27	1294	2	**647**	60	1354	2	**677**		1354	2	**677**
	Through-Right		0							0				0				0	
	Right	18	1	0	0	18	0	0	20	1	0	0	20	1	0		20	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	44	1	**44**	0	44	**44**	0	48	1	**48**	0	48	1	**48**		48	1	**48**
	Left-Through		0							0				0				0	
	Through	192	1	192	2	194	194	4	215	1	215	2	217	1	217		217	1	217
	Through-Right		0							0				0				0	
	Right	49	1	28	0	49	28	0	54	1	31	0	54	1	31		54	1	31
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	188	1	188	0	188	188	0	206	1	206	0	206	1	206		206	1	206
	Left-Through		0							0				0				0	
	Through	216	0	**396**	1	217	**397**	4	241	0	**439**	1	242	0	**440**		242	0	**440**
	Through-Right		1							1				1				1	
	Right	180	0	0	0	180	0	0	198	0	0	0	198	0	0		198	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		621	North-South:		651	North-South:			694	North-South:			724	North-South:			724
		East-West:		440	East-West:		441	East-West:			487	East-West:			488	East-West:			488
		SUM:		1061	SUM:		1092	SUM:			1181	SUM:			1212	SUM:			1212
VOLUME/CAPACITY (V/C) RATIO:				0.707			0.728				0.787				0.808				0.808
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.637			0.658				0.687				0.708				0.708
LEVEL OF SERVICE (LOS):				B			B				B				C				C

PROJECT IMPACT

Change in *v/c* due to project:	0.021	Δ*v/c* after mitigation:	0.021
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
6	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	340	2	187	4	344	189	2	375	2	206	4	379	2	208		379	2	208
Left-Through		0							0				0				0	
Through	1074	2	**537**	16	1090	**545**	14	1193	2	**597**	16	1209	2	**605**		1209	2	**605**
Through-Right		0							0				0				0	
Right	284	1	197	63	347	244	0	312	1	216	63	375	1	263		375	1	263
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	74	2	**41**	51	125	**69**	6	87	2	**48**	51	138	2	**76**		138	2	**76**
Left-Through		0							0				0				0	
Through	518	2	259	18	536	268	20	588	2	294	18	606	2	303		606	2	303
Through-Right		0							0				0				0	
Right	262	1	198	0	262	198	2	289	1	218	0	289	1	218		289	1	218
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	234	2	**129**	0	234	**129**	2	259	2	**142**	0	259	2	**142**		259	2	**142**
Left-Through		0							0				0				0	
Through	1061	2	411	103	1164	448	10	1174	2	455	103	1277	2	492		1277	2	492
Through-Right		1							1				1				1	
Right	171	0	171	9	180	180	2	190	0	190	9	199	0	199		199	0	199
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	159	2	87	29	188	103	0	174	2	96	29	203	2	112		203	2	112
Left-Through		0							0				0				0	
Through	1141	2	**402**	61	1202	**431**	7	1259	2	**445**	61	1320	2	**474**		1320	2	**474**
Through-Right		1							1				1				1	
Right	66	0	66	26	92	92	3	75	0	75	26	101	0	101		101	0	101
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		578	*North-South:*		614	*North-South:*			645	*North-South:*			681	*North-South:*			681
	East-West:		531	*East-West:*		560	*East-West:*			587	*East-West:*			616	*East-West:*			616
	SUM:		1109	*SUM:*		1174	*SUM:*			1232	*SUM:*			1297	*SUM:*			1297
VOLUME/CAPACITY *(V/C)* RATIO:			0.807			0.854				0.896				0.943				0.943
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.737			0.784				0.796				0.843				0.843
LEVEL OF SERVICE (LOS):			C			C				C				D				D

	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--
No. of Phases				4				4				4				4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	3	0		0	3	0		0	3	0		0	3	0		0	3	0		0
			0	0			0	0			0	0			0	0			0	0
ATSAC-1 or ATSAC+ATCS-2?				1				1				2				2				2
Override Capacity				0				0				0				0				0

PROJECT IMPACT

Change in *v/c* due to project:	0.047	Δ*v/c* after mitigation:	0.047
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
7	East-West Street:	I-105 w/b Ramps	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			3			3			3				3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
	EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2			2
Override Capacity			0			0			0				0			0
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	301	2	**166**	29	330	**182**	5	335	2	**184**	29	364	2	**200**		364	2	**200**
Left-Through		0							0				0				0	
Through	1119	2	560	83	1202	601	16	1244	2	622	83	1327	2	664		1327	2	664
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
Left-Through		0							0				0				0	
Through	1086	2	543	30	1116	558	22	1214	2	607	30	1244	2	622		1244	2	622
Through-Right		0							0				0				0	
Right	734	1	**734**	26	760	**760**	1	806	1	**806**	26	832	1	**832**		832	1	**832**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	0	0	**0**		0	**0**	0	0	0	**0**	0	0	0	**0**		0	0	**0**
Left-Through		0							0				0				0	
Through	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
Through-Right		0							0				0				0	
Right	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	116	1	60	0	116	60	24	151	1	78	0	151	1	78		151	1	78
Left-Through		1							1				1				1	
Through	4	0	60	0	4	60	0	4	0	78	0	4	0	78		4	0	78
Through-Right		0							0				0				0	
Right	372	1	**372**	0	372	**372**	0	408	1	**408**	0	408	1	**408**		408	1	**408**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		900	*North-South:*		942	*North-South:*			990	*North-South:*			1032	*North-South:*			1032
	East-West:		372	*East-West:*		372	*East-West:*			408	*East-West:*			408	*East-West:*			408
	SUM:		1272	*SUM:*		1314	*SUM:*			1398	*SUM:*			1440	*SUM:*			1440
VOLUME/CAPACITY *(V/C)* RATIO:			0.893			0.922				0.981				1.011				1.011
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.823			0.852				0.881				0.911				0.911
LEVEL OF SERVICE (LOS):			D			D				D				E				E

PROJECT IMPACT

Change in *v/c* due to project: 0.030 — Δ*v/c* after mitigation: 0.030

Significant impacted? YES — Fully mitigated? NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
8	East-West Street:	I-105 e/b Ramps	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			3			3			3				3				3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0		EB-- 0	WB--	0		EB-- 0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through		0							0				0				0	
	Through	768	3	256	55	823	274	18	861	3	287	55	916	3	305		916	3	305
	Through-Right		0							0				0				0	
	Right	335	1	**335**	0	335	**335**	15	383	1	**383**	0	383	1	**383**		383	1	**383**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	567	2	**312**	0	567	**312**	0	622	2	**342**	0	622	2	**342**		622	2	**342**
	Left-Through		0							0				0				0	
	Through	669	2	335	30	699	350	46	780	2	390	30	810	2	405		810	2	405
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	664	1	405	56	720	449	3	732	1	449	56	788	1	494		788	1	494
	Left-Through		0							0				0				0	
	Through	13	0	**405**	0	13	**449**	0	14	0	**449**	0	14	0	**494**		14	0	**494**
	Through-Right		0							0				0				0	
	Right	538	1	0	77	615	0	12	602	1	0	77	679	1	0		679	1	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	0	0	**0**		0	**0**	0	0	0	**0**	0	0	0	**0**		0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*	647		*North-South:*	647		*North-South:*	725			*North-South:*	725			*North-South:*	725		
		East-West:	405		*East-West:*	449		*East-West:*	449			*East-West:*	494			*East-West:*	494		
		SUM:	1052		*SUM:*	1096		*SUM:*	1174			*SUM:*	1219			*SUM:*	1219		
VOLUME/CAPACITY *(V/C)* RATIO:			0.738			0.769			0.824				0.855				0.855		
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.668			0.699			0.724				0.755				0.755		
LEVEL OF SERVICE (LOS):			B			B			C				C				C		

PROJECT IMPACT

Change in *v/c* due to project: 0.031 — Δ*v/c* after mitigation: 0.031

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
9	East-West Street:	120th St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
			2			2			2				2			2
			0			0			0				0			0
	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0		EB-- 0	WB--	0		EB-- 0	WB--	0	
			1			1			2				2			2
			0			0			0				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	67	1	67	0	67	67	0	74	1	74	0	74	1	74		74	1	74
	Left-Through		0							0				0				0	
	Through	686	1	**410**	7	693	**450**	20	773	1	**465**	7	780	1	**504**		780	1	**504**
	Through-Right		1							1				1				1	
	Right	134	0	134	72	206	206	9	156	0	156	72	228	0	228		228	0	228
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	176	1	**176**	112	288	**288**	0	193	1	**193**	112	305	1	**305**		305	1	**305**
	Left-Through		0							0				0				0	
	Through	856	1	477	3	859	479	26	965	1	553	3	968	1	555		968	1	555
	Through-Right		1							1				1				1	
	Right	98	0	98	0	98	98	33	141	0	141	0	141	0	141		141	0	141
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	119	1	**119**	0	119	**119**	13	144	1	**144**	0	144	1	**144**		144	1	**144**
	Left-Through		0							0				0				0	
	Through	464	1	255	91	555	300	6	515	1	282	91	606	1	328		606	1	328
	Through-Right		1							1				1				1	
	Right	45	0	45	0	45	45	0	49	0	49	0	49	0	49		49	0	49
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	126	1	126	24	150	150	10	148	1	148	24	172	1	172		172	1	172
	Left-Through		0							0				0				0	
	Through	530	1	**530**	50	580	**580**	3	585	1	**585**	50	635	1	**635**		635	1	**635**
	Through-Right		0							0				0				0	
	Right	212	1	124	53	265	121	0	233	1	137	53	286	1	134		286	1	134
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES		*North-South:*	586		*North-South:*	738		*North-South:*		658		*North-South:*		809		*North-South:*		809
			East-West:	649		*East-West:*	699		*East-West:*		729		*East-West:*		779		*East-West:*		779
			SUM:	1235		*SUM:*	1437		*SUM:*		1387		*SUM:*		1588		*SUM:*		1588
	VOLUME/CAPACITY *(V/C)* RATIO:			0.823			0.958				0.925				1.059				1.059
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.753			0.888				0.825				0.959				0.959
	LEVEL OF SERVICE (LOS):			C			D				D				E				E

PROJECT IMPACT

Change in *v/c* due to project:	0.134	Δ*v/c* after mitigation:	0.134
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Compton Ave	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
14	East-West Street:	103rd St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	103	1	**103**	3	106	**106**	0	113	1	**113**	3	116	1	**116**		116	1	**116**
Left-Through		0							0				0				0	
Through	423	1	256	29	452	270	3	467	1	282	29	496	1	297		496	1	297
Through-Right		1							1				1				1	
Right	88	0	88	0	88	88	0	97	0	97	0	97	0	97		97	0	97
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	65	1	65	0	65	65	0	71	1	71	0	71	1	71		71	1	71
Left-Through		0							0				0				0	
Through	444	1	**260**	49	493	**285**	4	491	1	**287**	49	540	1	**312**		540	1	**312**
Through-Right		1							1				1				1	
Right	76	0	76	0	76	76	0	83	0	83	0	83	0	83		83	0	83
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	100	0	**100**	0	100	**100**	0	110	0	**110**	0	110	0	**110**		110	0	**110**
Left-Through		1							1				1				1	
Through	265	0	365	0	265	365	4	295	0	405	0	295	0	405		295	0	405
Through-Right		0							0				0				0	
Right	122	1	71	8	130	77	0	134	1	78	8	142	1	84		142	1	84
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	75	0	75	0	75	75	0	82	0	82	0	82	0	82		82	0	82
Left-Through		0							0				0				0	
Through	351	0	**548**	0	351	**548**	4	389	0	**605**	0	389	0	**605**		389	0	**605**
Through-Right		0							0				0				0	
Right	122	0	0	0	122	0	0	134	0	0	0	134	0	0		134	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		363	*North-South:*		391	*North-South:*			400	*North-South:*			428	*North-South:*			428
	East-West:		648	*East-West:*		648	*East-West:*			715	*East-West:*			715	*East-West:*			715
	SUM:		1011	*SUM:*		1039	*SUM:*			1115	*SUM:*			1143	*SUM:*			1143
VOLUME/CAPACITY *(V/C)* RATIO:			0.674			0.693				0.743				0.762				0.762
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.604			0.623				0.643				0.662				0.662
LEVEL OF SERVICE (LOS):			B			B				B				B				B

	NB--	SB--	EB--	WB--		NB--	SB--	EB--	WB--		NB--	SB--	EB--	WB--		NB--	SB--	EB--	WB--	
No. of Phases					2					2					2					2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0					0					0					0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATSAC-1 or ATSAC+ATCS-2?					1					1					2					2
Override Capacity					0					0					0					0

PROJECT IMPACT

Change in *v/c* due to project: 0.019 — Δ*v/c* after mitigation: 0.019

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Compton Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
15	East-West Street:	108th St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0		NB-- 0 SB-- EB-- 0 WB--		0		NB-- 0 SB-- EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	23	0	23	2	25	25	0	25	0	25	2	27	0	27		27	0	27
	Left-Through		0							0				0				0	
	Through	622	0	714	35	657	751	3	686	0	787	35	721	0	824		721	0	824
	Through-Right		0							0				0				0	
	Right	69	0	0	0	69	0	0	76	0	0	0	76	0	0		76	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	47	0	47	0	47	47	0	52	0	52	0	52	0	52		52	0	52
	Left-Through		0							0				0				0	
	Through	513	0	608	61	574	669	4	567	0	672	61	628	0	733		628	0	733
	Through-Right		0							0				0				0	
	Right	48	0	0	0	48	0	0	53	0	0	0	53	0	0		53	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	60	0	60	0	60	60	0	66	0	66	0	66	0	66		66	0	66
	Left-Through		0							0				0				0	
	Through	67	0	150	0	67	156	0	74	0	165	0	74	0	171		74	0	171
	Through-Right		0							0				0				0	
	Right	23	0	0	6	29	0	0	25	0	0	6	31	0	0		31	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	77	0	77	0	77	77	0	84	0	84	0	84	0	84		84	0	84
	Left-Through		0							0				0				0	
	Through	130	0	278	1	131	279	0	143	0	305	1	144	0	306		144	0	306
	Through-Right		0							0				0				0	
	Right	71	0	0	0	71	0	0	78	0	0	0	78	0	0		78	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		761	North-South:		798	North-South:			839	North-South:			876	North-South:			876
		East-West:		338	East-West:		339	East-West:			371	East-West:			372	East-West:			372
		SUM:		1099	SUM:		1137	SUM:			1210	SUM:			1248	SUM:			1248
	VOLUME/CAPACITY (V/C) RATIO:			0.733			0.758				0.807				0.832				0.832
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.663			0.688				0.707				0.732				0.732
	LEVEL OF SERVICE (LOS):			B			B				C				C				C

PROJECT IMPACT

Change in *v/c* due to project: 0.025 — Δ*v/c* after mitigation: 0.025

Significant impacted? NO — Fully mitigated? N/A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	23	4	36	17	13	23	33	556	18	9	506	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1688	0	0	1725	0	0	1850	0	0	1850	0
Flt Permitted		0.982			0.984			0.997			0.999	
Satd. Flow (perm)	0	1688	0	0	1725	0	0	1850	0	0	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	0	0	57	0	0	660	0	0	585	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	23	4	36	17	13	23	33	556	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	4	39	18	14	25	36	604	20

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1287	1278	563	1290	1281	614	575	0	0
Stage 1	582	582	-	686	686	-	-	-	-
Stage 2	705	696	-	604	595	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	141	166	526	140	166	492	998	-	-
Stage 1	499	499	-	438	448	-	-	-	-
Stage 2	427	443	-	485	492	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	118	155	526	120	155	492	998	-	-
Mov Cap-2 Maneuver	118	155	-	120	155	-	-	-	-
Stage 1	472	492	-	414	423	-	-	-	-
Stage 2	370	419	-	438	485	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	28.9	31	0.5
HCM LOS	D	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	998	-	-	218	195	957	-	-
HCM Lane V/C Ratio	0.036	-	-	0.314	0.295	0.01	-	-
HCM Control Delay (s)	8.7	0	-	28.9	31	8.8	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	1.2	0	-	-

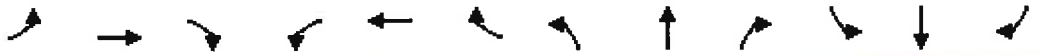
Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	9	506	23
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	10	550	25

Major/Minor	Major2		
Conflicting Flow All	624	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	957	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	957	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	4	43	20	13	23	36	593	20	9	573	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.917			0.945			0.996			0.995	
Flt Protected		0.984			0.982			0.997			0.999	
Satd. Flow (prot)	0	1681	0	0	1729	0	0	1850	0	0	1852	0
Flt Permitted		0.984			0.982			0.997			0.999	
Satd. Flow (perm)	0	1681	0	0	1729	0	0	1850	0	0	1852	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	4	47	22	14	25	39	645	22	10	623	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	76	0	0	61	0	0	706	0	0	658	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	23	4	43	20	13	23	36	593	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	4	47	22	14	25	39	645	22

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1408	1400	635	1414	1401	655	648	0	0
Stage 1	655	655	-	734	734	-	-	-	-
Stage 2	753	745	-	680	667	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	116	140	478	115	140	466	938	-	-
Stage 1	455	463	-	412	426	-	-	-	-
Stage 2	402	421	-	441	457	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	94	129	478	95	129	466	938	-	-
Mov Cap-2 Maneuver	94	129	-	95	129	-	-	-	-
Stage 1	425	455	-	385	398	-	-	-	-
Stage 2	343	393	-	387	449	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	35.8	42.5	0.5
HCM LOS	E	E	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	938	-	-	191	155	923	-	-
HCM Lane V/C Ratio	0.042	-	-	0.398	0.393	0.011	-	-
HCM Control Delay (s)	9	0	-	35.8	42.5	8.9	0	-
HCM Lane LOS	A	A	-	E	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.8	1.7	0	-	-

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	9	573	23
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	10	623	25

Major/Minor	Major2		
Conflicting Flow All	666	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	923	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	923	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt

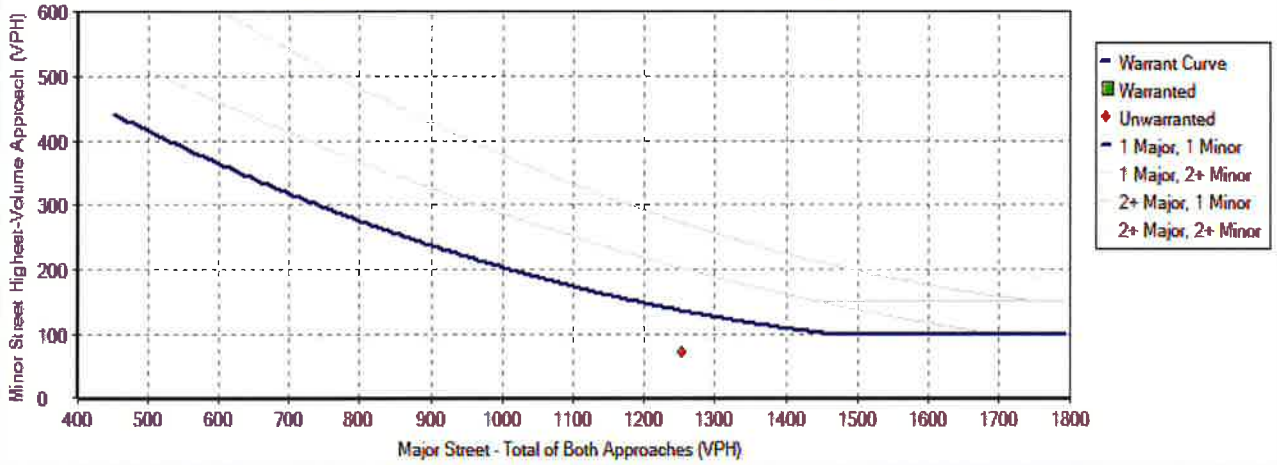
Warrant 3: Peak Hour

1: Compton & 112th -EWP - AM

Warrant 3

Peak Hour Vehicular Volume

Community Population Greater Than 10,000 and Major Street Approach Speed Below 40 mph



Note: Please turn over for volume information.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	25	4	40	19	14	25	36	609	20	10	556	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.922			0.942			0.996			0.994	
Flt Protected		0.982			0.984			0.997			0.999	
Satd. Flow (prot)	0	1687	0	0	1727	0	0	1850	0	0	1850	0
Flt Permitted		0.982			0.984			0.997			0.999	
Satd. Flow (perm)	0	1687	0	0	1727	0	0	1850	0	0	1850	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	4	43	21	15	27	39	662	22	11	604	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	74	0	0	63	0	0	723	0	0	642	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.4%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	25	4	40	19	14	25	36	609	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	4	43	21	15	27	39	662	22

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1412	1402	618	1415	1404	673	632	0	0
Stage 1	640	640	-	751	751	-	-	-	-
Stage 2	772	762	-	664	653	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	116	140	489	115	140	455	951	-	-
Stage 1	464	470	-	403	418	-	-	-	-
Stage 2	392	414	-	450	464	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	93	128	489	96	128	455	951	-	-
Mov Cap-2 Maneuver	93	128	-	96	128	-	-	-	-
Stage 1	433	461	-	376	390	-	-	-	-
Stage 2	331	387	-	398	455	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	38.3	41.4	0.5
HCM LOS	E	E	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	951	-	-	181	160	909	-	-
HCM Lane V/C Ratio	0.041	-	-	0.414	0.394	0.012	-	-
HCM Control Delay (s)	8.9	0	-	38.3	41.4	9	0	-
HCM Lane LOS	A	A	-	E	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.9	1.7	0	-	-

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	10	556	25
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	11	604	27

Major/Minor	Major2		
Conflicting Flow All	684	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	909	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	909	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.2
HCM LOS	

Minor Lane/Major Mvmt

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	25	4	47	22	14	25	39	646	22	10	623	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.916			0.945			0.996			0.995	
Flt Protected		0.984			0.982			0.997			0.999	
Satd. Flow (prot)	0	1679	0	0	1729	0	0	1850	0	0	1852	0
Flt Permitted		0.984			0.982			0.997			0.999	
Satd. Flow (perm)	0	1679	0	0	1729	0	0	1850	0	0	1852	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	4	51	24	15	27	42	702	24	11	677	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	82	0	0	66	0	0	768	0	0	715	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	25	4	47	22	14	25	39	646	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	4	51	24	15	27	42	702	24

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1533	1524	691	1539	1525	714	704	0	0
Stage 1	713	713	-	799	799	-	-	-	-
Stage 2	820	811	-	740	726	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	95	118	445	94	118	431	894	-	-
Stage 1	423	435	-	379	398	-	-	-	-
Stage 2	369	393	-	409	430	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	73	106	445	75	106	431	894	-	-
Mov Cap-2 Maneuver	73	106	-	75	106	-	-	-	-
Stage 1	390	426	-	349	367	-	-	-	-
Stage 2	305	362	-	351	421	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	51.5	61.6	0.5
HCM LOS	F	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	894	-	-	156	126	877	-	-
HCM Lane V/C Ratio	0.047	-	-	0.53	0.526	0.012	-	-
HCM Control Delay (s)	9.2	0	-	51.5	61.6	9.2	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	2.6	2.5	0	-	-

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	10	623	25
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	11	677	27

Major/Minor	Major2		
Conflicting Flow All	726	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	877	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	877	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt

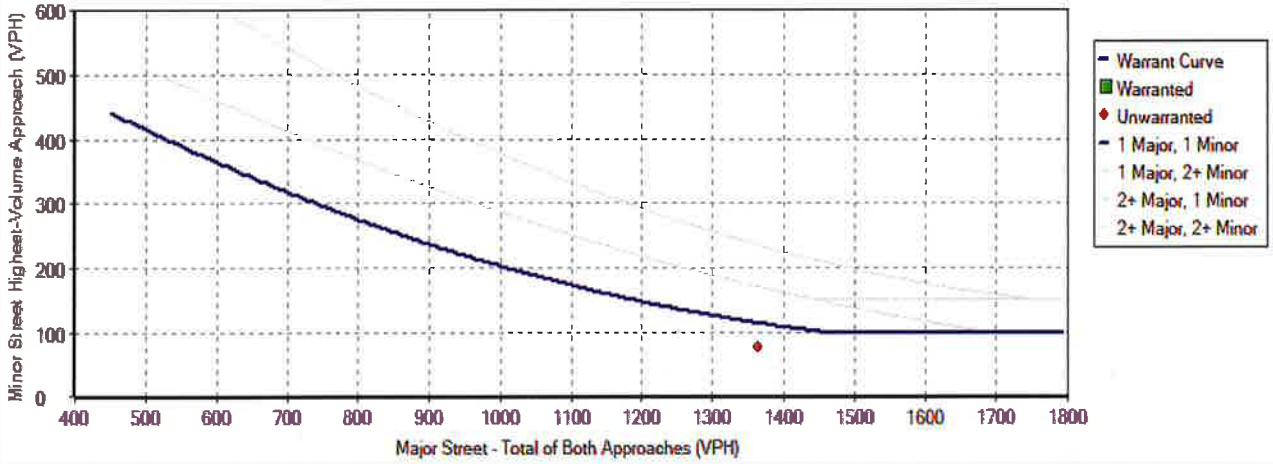
Warrant 3: Peak Hour

1: Compton & 112th -FWP - AM

Warrant 3

Peak Hour Vehicular Volume

Community Population Greater Than 10,000 and Major Street Approach Speed Below 40 mph



Note: Please turn over for volume information.

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Wilmington Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
22	East-West Street:	103rd St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	192	1	192	0	192	**192**	0	211	1	211	0	211	1	**211**		211	1	**211**
Left-Through		0							0				0				0	
Through	542	1	**542**	12	554	554	9	604	1	**604**	12	616	1	616		616	1	616
Through-Right		0							0				0				0	
Right	72	1	28	3	75	24	0	79	1	30	3	82	1	26		82	1	26
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	84	1	**84**	0	84	84	1	93	1	**93**	0	93	1	93		93	1	93
Left-Through		0							0				0				0	
Through	430	1	430	18	448	**448**	10	482	1	482	18	500	1	**500**		500	1	**500**
Through-Right		0							0				0				0	
Right	77	1	49	0	77	49	0	84	1	53	0	84	1	53		84	1	53
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	57	1	**57**	0	57	**57**	0	63	1	**63**	0	63	1	**63**		63	1	**63**
Left-Through		0							0				0				0	
Through	251	1	251	0	251	251	4	279	1	279	0	279	1	279		279	1	279
Through-Right		0							0				0				0	
Right	89	1	0	0	89	0	0	98	1	0	0	98	1	0		98	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	89	1	89	14	103	103	0	98	1	98	14	112	1	112		112	1	112
Left-Through		0							0				0				0	
Through	348	0	**412**	0	348	**412**	4	386	0	**461**	0	386	0	**461**		386	0	**461**
Through-Right		1							1				1				1	
Right	64	0	0	0	64	0	5	75	0	0	0	75	0	0		75	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		626	*North-South:*		640	*North-South:*			697	*North-South:*			711	*North-South:*			711
	East-West:		469	*East-West:*		469	*East-West:*			524	*East-West:*			524	*East-West:*			524
	SUM:		1095	*SUM:*		1109	*SUM:*			1221	*SUM:*			1235	*SUM:*			1235
VOLUME/CAPACITY *(V/C)* RATIO:			0.730			0.739				0.814				0.823				0.823
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.660			0.669				0.714				0.723				0.723
LEVEL OF SERVICE (LOS):			B			B				C				C				C

No. of Phases	2	2	2	2	2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0
ATSAC-1 or ATSAC+ATCS-2?	1	1	2	2	2
Override Capacity	0	0	0	0	0

PROJECT IMPACT

Change in *v/c* due to project:	0.009	Δ*v/c* after mitigation:	0.009
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Wilmington Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
23	East-West Street:	Santa Ana Blvd N	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	12	1	12	2	14	14	0	13	1	13	2	15	1	15		15	1	15
	Left-Through		0							0				0				0	
	Through	575	0	635	17	592	652	9	640	0	706	17	657	0	723		657	0	723
	Through-Right		1							1				1				1	
	Right	60	0	0	0	60	0	0	66	0	0	0	66	0	0		66	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	32	1	32	0	32	32	0	35	1	35	0	35	1	35		35	1	35
	Left-Through		0							0				0				0	
	Through	557	0	564	37	594	601	10	621	0	629	37	658	0	666		658	0	666
	Through-Right		1							1				1				1	
	Right	7	0	0	0	7	0	0	8	0	0	0	8	0	0		8	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	7	0	7	0	7	7	0	8	0	8	0	8	0	8		8	0	8
	Left-Through		0							0				0				0	
	Through	11	0	48	0	11	53	0	12	0	53	0	12	0	58		12	0	58
	Through-Right		0							0				0				0	
	Right	30	0	0	5	35	0	0	33	0	0	5	38	0	0		38	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	100	0	100	0	100	100	0	110	0	110	0	110	0	110		110	0	110
	Left-Through		1							1				1				1	
	Through	36	0	136	0	36	136	0	40	0	150	0	40	0	150		40	0	150
	Through-Right		0							0				0				0	
	Right	135	1	119	0	135	119	0	148	1	131	0	148	1	131		148	1	131
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		667	North-South:		684	North-South:			741	North-South:			758	North-South:			758
		East-West:		148	East-West:		153	East-West:			163	East-West:			168	East-West:			168
		SUM:		815	SUM:		837	SUM:			904	SUM:			926	SUM:			926
VOLUME/CAPACITY (V/C) RATIO:				0.543			0.558				0.603				0.617				0.617
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.473			0.488				0.503				0.517				0.517
LEVEL OF SERVICE (LOS):				A			A				A				A				A

PROJECT IMPACT

Change in v/c due to project:	0.014	Δv/c after mitigation:	0.014
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Wilmington Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
24	East-West Street:	108th St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			2			2			2				2				2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 2	WB--	0	EB-- 2	WB--	0	EB-- 2	WB--	0		EB-- 2	WB--	0		EB-- 2	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	

MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	32	1	**32**	2	34	**34**	0	35	1	**35**	2	37	1	**37**		37	1	**37**
	Left-Through		0							0				0				0	
	Through	573	0	597	20	593	617	9	638	0	664	20	658	0	684		658	0	684
	Through-Right		1							1				1				1	
	Right	24	0	0	0	24	0	0	26	0	0	0	26	0	0		26	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	28	1	28	0	28	28	0	31	1	31	0	31	1	31		31	1	31
	Left-Through		0							0				0				0	
	Through	605	0	**660**	40	645	**700**	10	674	0	**734**	40	714	0	**774**		714	0	**774**
	Through-Right		1							1				1				1	
	Right	55	0	0	0	55	0	0	60	0	0	0	60	0	0		60	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	53	0	**53**	0	53	**53**	0	58	0	**58**	0	58	0	**58**		58	0	**58**
	Left-Through		0							0				0				0	
	Through	87	0	165	0	87	165	0	95	0	180	0	95	0	180		95	0	180
	Through-Right		0							0				0				0	
	Right	25	0	0	0	25	0	0	27	0	0	0	27	0	0		27	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	101	0	101	0	101	101	0	111	0	111	0	111	0	111		111	0	111
	Left-Through		0							0				0				0	
	Through	126	0	**249**	0	126	**249**	0	138	0	**273**	0	138	0	**273**		138	0	**273**
	Through-Right		0							0				0				0	
	Right	22	0	0	0	22	0	0	24	0	0	0	24	0	0		24	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*	692		*North-South:*	734		*North-South:*	769			*North-South:*	811			*North-South:*	811	
		East-West:	302		*East-West:*	302		*East-West:*	331			*East-West:*	331			*East-West:*	331	
		SUM:	994		*SUM:*	1036		*SUM:*	1100			*SUM:*	1142			*SUM:*	1142	
VOLUME/CAPACITY *(V/C)* RATIO:			0.663			0.691			0.733				0.761				0.761	
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.593			0.621			0.633				0.661				0.661	
LEVEL OF SERVICE (LOS):			A			B			B				B				B	

PROJECT IMPACT

Change in *v/c* due to project:	0.028	Δ*v/c* after mitigation:	0.028
Significant impacted?	NO	Fully mitigated?	N/A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (vph)	0	0	47	17	0	43	34	654	29	10	769	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865			0.902			0.994			0.999	
Flt Protected					0.986			0.998			0.999	
Satd. Flow (prot)	0	1611	0	0	1657	0	0	1848	0	0	1859	0
Flt Permitted					0.986			0.998			0.999	
Satd. Flow (perm)	0	1611	0	0	1657	0	0	1848	0	0	1859	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	51	18	0	47	37	711	32	11	836	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	51	0	0	65	0	0	780	0	0	851	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.5%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	47	17	0	43	34	654	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	51	18	0	47	37	711	32

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1684	1676	838	1686	1663	727	840	0	0
Stage 1	860	860	-	801	801	-	-	-	-
Stage 2	824	816	-	885	862	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	75	95	366	74	97	424	795	-	-
Stage 1	351	373	-	378	397	-	-	-	-
Stage 2	367	391	-	340	372	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	62	85	366	59	87	424	795	-	-
Mov Cap-2 Maneuver	62	85	-	59	87	-	-	-	-
Stage 1	323	364	-	348	365	-	-	-	-
Stage 2	300	360	-	286	363	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	16.4	44.5	0.5
HCM LOS	C	E	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	795	-	-	366	154	865	-	-
HCM Lane V/C Ratio	0.046	-	-	0.14	0.423	0.013	-	-
HCM Control Delay (s)	9.7	0	-	16.4	44.5	9.2	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	1.9	0	-	-

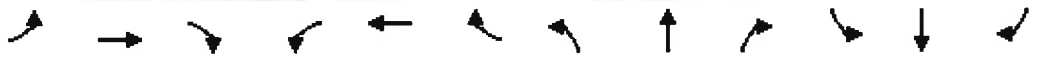
Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	10	769	4
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	11	836	4

Major/Minor	Major2		
Conflicting Flow All	742	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	865	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	865	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	0	0	175	63	0	43	37	676	32	10	809	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865			0.945			0.994			0.999	
Flt Protected					0.971			0.998			0.999	
Satd. Flow (prot)	0	1611	0	0	1709	0	0	1848	0	0	1859	0
Flt Permitted					0.971			0.998			0.999	
Satd. Flow (perm)	0	1611	0	0	1709	0	0	1848	0	0	1859	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	190	68	0	47	40	735	35	11	879	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	190	0	0	115	0	0	810	0	0	894	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 87.0%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	65.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	175	63	0	43	37	676	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	190	68	0	47	40	735	35

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1759	1753	882	1831	1738	752	884	0	0
Stage 1	903	903	-	833	833	-	-	-	-
Stage 2	856	850	-	998	905	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	66	85	345	~ 59	87	410	765	-	-
Stage 1	332	356	-	363	384	-	-	-	-
Stage 2	352	377	-	294	355	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	53	75	345	~ 24	77	410	765	-	-
Mov Cap-2 Maneuver	53	75	-	~ 24	77	-	-	-	-
Stage 1	301	347	-	330	349	-	-	-	-
Stage 2	283	342	-	128	346	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	27.5	$ 1099.2	0.5
HCM LOS	D	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	765	-	-	345	39	844	-	-
HCM Lane V/C Ratio	0.053	-	-	0.551	2.954	0.013	-	-
HCM Control Delay (s)	10	0	-	27.5	$ 1099.2	9.3	0	-
HCM Lane LOS	A	A	-	D	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	3.2	12.9	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	10	809	4
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	11	879	4

Major/Minor	Major2		
Conflicting Flow All	770	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	844	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	844	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt

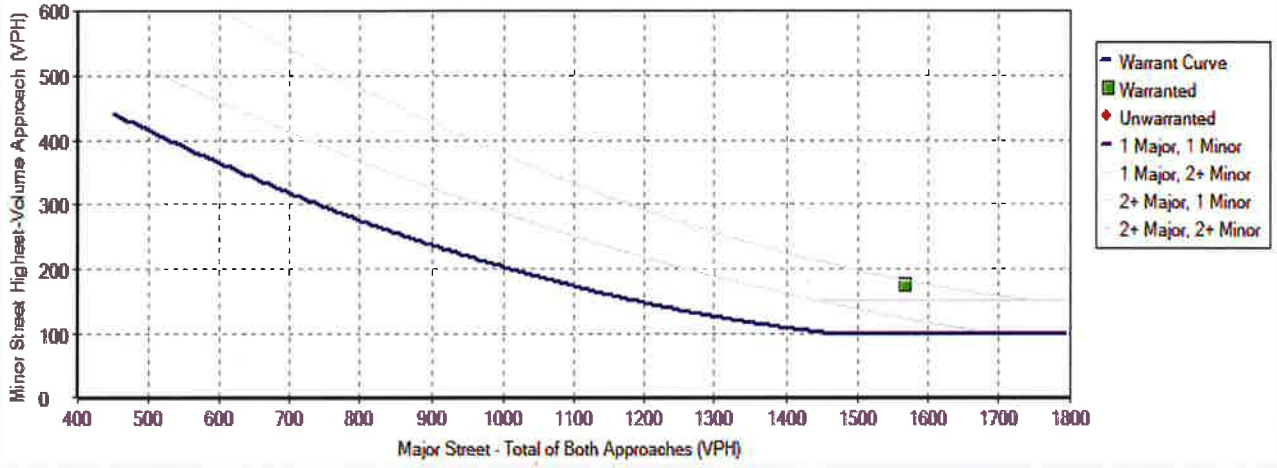
Warrant 3: Peak Hour

1: Wilmington & 112th -EWP - AM

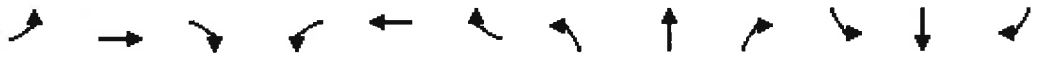
Warrant 3

Peak Hour Vehicular Volume

Community Population Greater Than 10,000 and Major Street Approach Speed Below 40 mph



Note: Please turn over for volume information.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	0	0	52	19	0	47	37	723	32	11	849	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865			0.904			0.995			0.999	
Flt Protected					0.986			0.998			0.999	
Satd. Flow (prot)	0	1611	0	0	1660	0	0	1850	0	0	1859	0
Flt Permitted					0.986			0.998			0.999	
Satd. Flow (perm)	0	1611	0	0	1660	0	0	1850	0	0	1859	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	57	21	0	51	40	786	35	12	923	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	72	0	0	861	0	0	939	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 79.5%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	52	19	0	47	37	723	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	57	21	0	51	40	786	35

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1858	1850	925	1861	1835	803	927	0	0
Stage 1	949	949	-	884	884	-	-	-	-
Stage 2	909	901	-	977	951	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	56	74	326	56	76	383	737	-	-
Stage 1	313	339	-	340	363	-	-	-	-
Stage 2	329	357	-	302	338	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	44	65	326	42	66	383	737	-	-
Mov Cap-2 Maneuver	44	65	-	42	66	-	-	-	-
Stage 1	282	328	-	306	327	-	-	-	-
Stage 2	257	321	-	242	328	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	18.3	78	0.5
HCM LOS	C	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	737	-	-	326	115	808	-	-
HCM Lane V/C Ratio	0.055	-	-	0.173	0.624	0.015	-	-
HCM Control Delay (s)	10.2	0	-	18.3	78	9.5	0	-
HCM Lane LOS	B	A	-	C	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	3.1	0	-	-

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	11	849	4
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	12	923	4

Major/Minor	Major2		
Conflicting Flow All	821	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	808	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	808	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	0	0	180	65	0	47	40	745	35	11	890	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865			0.944			0.994			0.999	
Flt Protected					0.972			0.998			0.999	
Satd. Flow (prot)	0	1611	0	0	1709	0	0	1848	0	0	1859	0
Flt Permitted					0.972			0.998			0.999	
Satd. Flow (perm)	0	1611	0	0	1709	0	0	1848	0	0	1859	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	196	71	0	51	43	810	38	12	967	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	196	0	0	122	0	0	891	0	0	983	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	129.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	180	65	0	47	40	745	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	196	71	0	51	43	810	38

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1934	1928	970	2007	1912	829	972	0	0
Stage 1	993	993	-	916	916	-	-	-	-
Stage 2	941	935	-	1091	996	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	50	66	307	~ 44	68	370	709	-	-
Stage 1	296	323	-	326	351	-	-	-	-
Stage 2	316	344	-	260	322	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	38	56	307	~ 14	58	370	709	-	-
Mov Cap-2 Maneuver	38	56	-	~ 14	58	-	-	-	-
Stage 1	262	312	-	288	310	-	-	-	-
Stage 2	241	304	-	91	311	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	35.2	$ 2270.2	0.5
HCM LOS	E	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	709	-	-	307	23	790	-	-
HCM Lane V/C Ratio	0.061	-	-	0.637	5.293	0.015	-	-
HCM Control Delay (s)	10.4	0	-	35.2	$ 2270.2	9.6	0	-
HCM Lane LOS	B	A	-	E	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	4.1	15.3	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection			
Int Delay, s/veh			

Movement	SBL	SBT	SBR
Vol, veh/h	11	890	4
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	12	967	4

Major/Minor	Major2		
Conflicting Flow All	848	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	790	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	790	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt

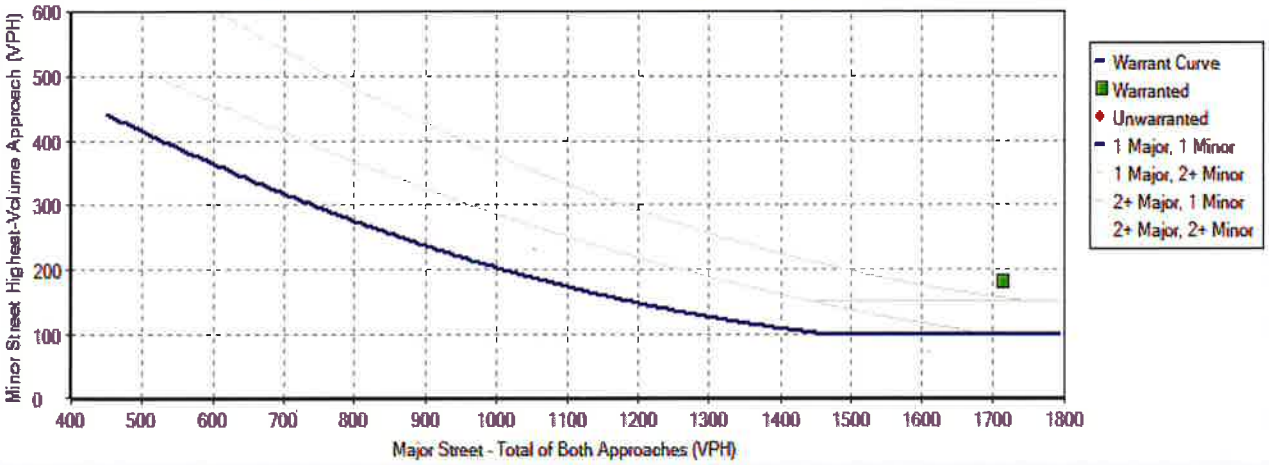
Warrant 3: Peak Hour

1: Wilmington & 112th -FWP - AM

Warrant 3

Peak Hour Vehicular Volume

Community Population Greater Than 10,000 and Major Street Approach Speed Below 40 mph



Note: Please turn over for volume information.

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Avalon Blvd	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/20/2017
47	East-West Street:	103rd St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			2			2				2				2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 2	SB--	0	NB-- 2	SB--	0	NB-- 2	SB--		0	NB-- 2	SB--		0	NB-- 2	SB--		0
	EB-- 0	WB--	2	EB-- 0	WB--	2	EB-- 0	WB--		2	EB-- 0	WB--		2	EB-- 0	WB--		2
ATSAC-1 or ATSAC+ATCS-2?			1			1				2				2				2
Override Capacity			0			0				0				0				0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	22	1	22	0	22	22	0	24	1	24	0	24	1	24		24	1	24
	Left-Through		0							0				0				0	
	Through	970	1	**515**	25	995	**528**	13	1077	1	**574**	25	1102	1	**586**		1102	1	**586**
	Through-Right		1							1				1				1	
	Right	60	0	60	0	60	60	4	70	0	70	0	70	0	70		70	0	70
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	78	1	**78**	0	78	**78**	0	86	1	**86**	0	86	1	**86**		86	1	**86**
	Left-Through		0							0				0				0	
	Through	789	1	414	41	830	434	17	883	1	463	41	924	1	483		924	1	483
	Through-Right		1							1				1				1	
	Right	38	0	38	0	38	38	0	42	0	42	0	42	0	42		42	0	42
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	33	1	33	0	33	33	0	36	1	36	0	36	1	36		36	1	36
	Left-Through		0							0				0				0	
	Through	70	0	**89**	2	72	**91**	0	77	0	**98**	2	79	0	**100**		79	0	**100**
	Through-Right		1							1				1				1	
	Right	19	0	0	0	19	0	0	21	0	0	0	21	0	0		21	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	84	1	**84**	0	84	**84**	4	96	1	**96**	0	96	1	**96**		96	1	**96**
	Left-Through		0							0				0				0	
	Through	107	1	107	1	108	108	0	117	1	117	1	118	1	118		118	1	118
	Through-Right		0							0				0				0	
	Right	109	1	109	0	109	109	0	120	1	120	0	120	1	120		120	1	120
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		593	*North-South:*		606	*North-South:*			660	*North-South:*			672	*North-South:*			672
		East-West:		173	*East-West:*		175	*East-West:*			194	*East-West:*			196	*East-West:*			196
		SUM:		766	*SUM:*		781	*SUM:*			854	*SUM:*			868	*SUM:*			868
VOLUME/CAPACITY (*V/C*) RATIO:				0.511			0.521				0.569				0.579				0.579
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.441			0.451				0.469				0.479				0.479
LEVEL OF SERVICE (LOS):				A			A				A				A				A

PROJECT IMPACT

Change in *v/c* due to project:	0.010	Δ*v/c* after mitigation:	0.010
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Avalon Blvd	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	1/18/2017
48	East-West Street:	108th St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	
	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	35	1	35	2	37	37	2	40	1	40	2	42	1	42		42	1	42
	Left-Through		0							0				0				0	
	Through	976	1	**534**	25	1001	**547**	17	1088	1	**595**	25	1113	1	**607**		1113	1	**607**
	Through-Right		1							1				1				1	
	Right	92	0	92	0	92	92	0	101	0	101	0	101	0	101		101	0	101
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	86	1	**86**	0	86	**86**	0	94	1	**94**	0	94	1	**94**		94	1	**94**
	Left-Through		0							0				0				0	
	Through	796	1	412	41	837	432	21	894	1	462	41	935	1	483		935	1	483
	Through-Right		1							1				1				1	
	Right	27	0	27	0	27	27	0	30	0	30	0	30	0	30		30	0	30
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	21	0	21	0	21	21	0	23	0	23	0	23	0	23		23	0	23
	Left-Through		0							0				0				0	
	Through	165	0	**222**	6	171	**230**	1	182	0	**247**	6	188	0	**255**		188	0	**255**
	Through-Right		0							0				0				0	
	Right	36	0	0	2	38	0	2	42	0	0	2	44	0	0		44	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	109	0	**109**	0	109	**109**	0	120	0	**120**	0	120	0	**120**		120	0	**120**
	Left-Through		1							1				1				1	
	Through	90	0	199	2	92	201	1	100	0	220	2	102	0	222		102	0	222
	Through-Right		0							0				0				0	
	Right	63	1	20	1	64	21	0	69	1	22	1	70	1	23		70	1	23
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		620	*North-South:*		633	*North-South:*			689	*North-South:*			701	*North-South:*			701
		East-West:		331	*East-West:*		339	*East-West:*			367	*East-West:*			375	*East-West:*			375
		SUM:		951	*SUM:*		972	*SUM:*			1056	*SUM:*			1076	*SUM:*			1076
VOLUME/CAPACITY *(V/C)* RATIO:				0.634			0.648				0.704				0.717				0.717
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.564			0.578				0.604				0.617				0.617
LEVEL OF SERVICE (LOS):				A			A				B				B				B

PROJECT IMPACT

Change in *v/c* due to project:	0.013	Δ*v/c* after mitigation:	0.013
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Main St	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/18/2017
49	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	57	1	57	0	57	57	0	63	1	63	0	63	1	63		63	1	63
	Left-Through		0							0				0				0	
	Through	349	0	**396**	3	352	**399**	4	387	0	**441**	3	390	0	**444**		390	0	**444**
	Through-Right		1							1				1				1	
	Right	47	0	0	0	47	0	2	54	0	0	0	54	0	0		54	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	88	1	**88**	0	88	**88**	0	97	1	**97**	0	97	1	**97**		97	1	**97**
	Left-Through		0							0				0				0	
	Through	341	1	341	8	349	349	10	384	1	384	8	392	1	392		392	1	392
	Through-Right		0							0				0				0	
	Right	101	1	56	0	101	56	0	111	1	61	0	111	1	61		111	1	61
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	91	1	**91**	0	91	**91**	0	100	1	**100**	0	100	1	**100**		100	1	**100**
	Left-Through		0							0				0				0	
	Through	631	2	231	66	697	253	15	707	2	258	66	773	2	280		773	2	280
	Through-Right		1							1				1				1	
	Right	61	0	61	0	61	61	0	67	0	67	0	67	0	67		67	0	67
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	115	1	115	0	115	115	2	128	1	128	0	128	1	128		128	1	128
	Left-Through		0							0				0				0	
	Through	1066	2	**415**	42	1108	**429**	11	1181	2	**460**	42	1223	2	**474**		1223	2	**474**
	Through-Right		1							1				1				1	
	Right	180	0	180	0	180	180	0	198	0	198	0	198	0	198		198	0	198
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		484	*North-South:*		487	*North-South:*			538	*North-South:*			541	*North-South:*			541
		East-West:		506	*East-West:*		520	*East-West:*			560	*East-West:*			574	*East-West:*			574
		SUM:		990	*SUM:*		1007	*SUM:*			1098	*SUM:*			1115	*SUM:*			1115
	VOLUME/CAPACITY (*V/C*) RATIO:			0.660			0.671				0.732				0.743				0.743
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.590			0.601				0.632				0.643				0.643
	LEVEL OF SERVICE (LOS):			A			B				B				B				B

PROJECT IMPACT

Change in *v/c* due to project:	0.011	Δ*v/c* after mitigation:	0.011
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	San Pedro St.	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/18/2017
50	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

No. of Phases			4			4			4			4			4			4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2
Override Capacity			0			0			0			0			0			0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	92	1	92	0	92	92	0	101	1	101	0	101	1	101		101	1	101
	Left-Through		0							0				0				0	
	Through	340	1	**340**	2	342	**342**	1	374	1	**374**	2	376	1	**376**		376	1	**376**
	Through-Right		0							0				0				0	
	Right	11	1	0	0	11	0	0	12	1	0	0	12	1	0		12	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	82	1	**82**	0	82	**82**	2	92	1	**92**	0	92	1	**92**		92	1	**92**
	Left-Through		0							0				0				0	
	Through	308	1	308	6	314	314	1	339	1	339	6	345	1	345		345	1	345
	Through-Right		0							0				0				0	
	Right	107	1	30	0	107	30	0	117	1	32	0	117	1	32		117	1	32
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	155	1	**155**	0	155	**155**	0	170	1	**170**	0	170	1	**170**		170	1	**170**
	Left-Through		0							0				0				0	
	Through	354	2	177	66	420	210	17	405	2	203	66	471	2	236		471	2	236
	Through-Right		0							0				0				0	
	Right	73	1	27	0	73	27	0	80	1	30	0	80	1	30		80	1	30
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	39	1	39	0	39	39	0	43	1	43	0	43	1	43		43	1	43
	Left-Through		0							0				0				0	
	Through	1145	2	**428**	42	1187	**442**	13	1269	2	**475**	42	1311	2	**489**		1311	2	**489**
	Through-Right		1							1				1				1	
	Right	140	0	140	0	140	140	2	156	0	156	0	156	0	156		156	0	156
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		422	*North-South:*		424	*North-South:*			466	*North-South:*			468	*North-South:*			468
		East-West:		583	*East-West:*		597	*East-West:*			645	*East-West:*			659	*East-West:*			659
		SUM:		1005	*SUM:*		1021	*SUM:*			1111	*SUM:*			1127	*SUM:*			1127
VOLUME/CAPACITY *(V/C)* RATIO:				0.731			0.743				0.808				0.820				0.820
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.661			0.673				0.708				0.720				0.720
LEVEL OF SERVICE (LOS):				B			B				C				C				C

PROJECT IMPACT

Change in *v/c* due to project:	0.012	Δ*v/c* after mitigation:	0.012
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	San Pedro St	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/18/2017
51	East-West Street:	120th St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	50	1	**50**	0	50	**50**	0	55	1	**55**	0	55	1	**55**		55	1	**55**
	Left-Through		0							0				0				0	
	Through	303	1	303	0	303	303	1	333	1	333	0	333	1	333		333	1	333
	Through-Right		0							0				0				0	
	Right	86	1	64	5	91	68	0	94	1	70	5	99	1	74		99	1	74
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	73	1	73	6	79	79	0	80	1	80	6	86	1	86		86	1	86
	Left-Through		0							0				0				0	
	Through	342	1	**342**	0	342	**342**	1	376	1	**376**	0	376	1	**376**		376	1	**376**
	Through-Right		0							0				0				0	
	Right	56	1	36	0	56	36	0	61	1	39	0	61	1	39		61	1	39
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	41	1	**41**	0	41	**41**	0	45	1	**45**	0	45	1	**45**		45	1	**45**
	Left-Through		0							0				0				0	
	Through	255	1	255	35	290	290	12	292	1	292	35	327	1	327		327	1	327
	Through-Right		0							0				0				0	
	Right	50	1	25	0	50	25	0	55	1	28	0	55	1	28		55	1	28
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	45	1	45	2	47	47	0	49	1	49	2	51	1	51		51	1	51
	Left-Through		0							0				0				0	
	Through	464	1	**464**	20	484	**484**	7	516	1	**516**	20	536	1	**536**		536	1	**536**
	Through-Right		0							0				0				0	
	Right	98	1	62	2	100	61	0	108	1	68	2	110	1	67		110	1	67
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		392	*North-South:*		392	*North-South:*			431	*North-South:*			431	*North-South:*			431
		East-West:		505	*East-West:*		525	*East-West:*			561	*East-West:*			581	*East-West:*			581
		SUM:		897	*SUM:*		917	*SUM:*			992	*SUM:*			1012	*SUM:*			1012
VOLUME/CAPACITY *(V/C)* RATIO:				0.598			0.611				0.661				0.675				0.675
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.528			0.541				0.561				0.575				0.575
LEVEL OF SERVICE (LOS):				A			A				A				A				A

PROJECT IMPACT

Change in *v/c* due to project:	0.014	Δ*v/c* after mitigation:	0.014
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Compton Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
17	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	115	1	**115**	94	209	**209**	3	129	1	**129**	94	223	1	**223**		223	1	**223**
Left-Through		0							0				0				0	
Through	335	1	335	39	374	374	1	369	1	369	39	408	1	408		408	1	408
Through-Right		0							0				0				0	
Right	169	1	73	37	206	67	3	188	1	82	37	225	1	76		225	1	76
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	114	1	114	5	119	119	0	125	1	125	5	130	1	130		130	1	130
Left-Through		0							0				0				0	
Through	292	0	**427**	73	365	**500**	4	324	0	**472**	73	397	0	**545**		397	0	**545**
Through-Right		1							1				1				1	
Right	135	0	0	0	135	0	0	148	0	0	0	148	0	0		148	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	76	1	**76**	0	76	**76**	1	84	1	**84**	0	84	1	**84**		84	1	**84**
Left-Through		0							0				0				0	
Through	667	2	280	57	724	355	9	741	2	312	57	798	2	388		798	2	388
Through-Right		1							1				1				1	
Right	173	0	173	169	342	342	6	196	0	196	169	365	0	365		365	0	365
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	192	1	192	86	278	278	1	212	1	212	86	298	1	298		298	1	298
Left-Through		0							0				0				0	
Through	1504	1	**834**	26	1530	**847**	7	1657	1	**919**	26	1683	1	**932**		1683	1	**932**
Through-Right		1							1				1				1	
Right	163	0	163	1	164	164	1	180	0	180	1	181	0	181		181	0	181
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		542	*North-South:*		709	*North-South:*			601	*North-South:*			768	*North-South:*			768
	East-West:		910	*East-West:*		923	*East-West:*			1003	*East-West:*			1016	*East-West:*			1016
	SUM:		1452	*SUM:*		1632	*SUM:*			1604	*SUM:*			1784	*SUM:*			1784
VOLUME/CAPACITY *(V/C)* RATIO:			0.968			1.088				1.069				1.189				1.189
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.898			1.018				0.969				1.089				1.089
LEVEL OF SERVICE (LOS):			D			F				E				F				F

	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--
No. of Phases				2				2				2				2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATSAC-1 or ATSAC+ATCS-2?				1				1				2				2				2
Override Capacity				0				0				0				0				0

PROJECT IMPACT

Change in *v/c* due to project:	0.120	Δ*v/c* after mitigation:	0.120
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Wilmington Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
26	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

No. of Phases			3			3			3			3			3			3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	
	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	177	1	**177**	20	197	**197**	1	195	1	**195**	20	215	1	**215**		215	1	**215**
	Left-Through		0							0				0				0	
	Through	426	1	239	40	466	259	6	473	1	265	40	513	1	285		513	1	285
	Through-Right		1							1				1				1	
	Right	52	0	52	0	52	52	0	57	0	57	0	57	0	57		57	0	57
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	31	1	31	0	31	31	0	34	1	34	0	34	1	34		34	1	34
	Left-Through		0							0				0				0	
	Through	843	1	**494**	386	1229	**689**	32	957	1	**558**	386	1343	1	**753**		1343	1	**753**
	Through-Right		1							1				1				1	
	Right	144	0	144	4	148	148	0	158	0	158	4	162	0	162		162	0	162
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	143	1	**143**	10	153	153	0	157	1	**157**	10	167	1	167		167	1	167
	Left-Through		0							0				0				0	
	Through	23	1	23	0	23	23	0	25	1	25	0	25	1	25		25	1	25
	Through-Right		0							0				0				0	
	Right	220	1	132	46	266	**168**	3	244	1	147	46	290	1	**183**		290	1	**183**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**		0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0		0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		671	*North-South:*		886	*North-South:*			753	*North-South:*			968	*North-South:*			968
		East-West:		143	*East-West:*		168	*East-West:*			157	*East-West:*			183	*East-West:*			183
		SUM:		814	*SUM:*		1054	*SUM:*			910	*SUM:*			1151	*SUM:*			1151
VOLUME/CAPACITY *(V/C)* RATIO:				0.571			0.740				0.639				0.808				0.808
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.501			0.670				0.539				0.708				0.708
LEVEL OF SERVICE (LOS):				A			B				A				C				C

PROJECT IMPACT

Change in *v/c* due to project:	0.169	Δ*v/c* after mitigation:	0.169
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Imperial Hwy	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
36	East-West Street:	I-105 w/b Ramps	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
			4			4			4				4			4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			1			1			1				1			1
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 3	WB--	0	EB-- 3	WB--	0	EB-- 0	WB--	0		EB-- 3	WB--	0		EB-- 3	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2			2
Override Capacity			0			0			0				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	539	1	**275**	294	833	**427**	3	594	1	**303**	294	888	1	**455**		888	1	**455**
	Left-Through		1							1				1				1	
	Through	11	0	275	9	20	427	0	12	0	303	9	21	0	455		21	0	455
	Through-Right		0							0				0				0	
	Right	137	1	0	12	149	0	0	150	1	0	12	162	1	0		162	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	7	0	7	0	7	7	0	8	0	8	0	8	0	8		8	0	8
	Left-Through		0							0				0				0	
	Through	34	0	**109**	0	34	**109**	0	37	0	**120**	0	37	0	**120**		37	0	**120**
	Through-Right		0							0				0				0	
	Right	68	0	0	0	68	0	0	75	0	0	0	75	0	0		75	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	51	1	51	7	58	58	0	56	1	56	7	63	1	63		63	1	63
	Left-Through		0							0				0				0	
	Through	1012	3	**253**	89	1101	**293**	19	1129	3	**282**	89	1218	3	**322**		1218	3	**322**
	Through-Right		1							1				1				1	
	Right	224	1	0	139	363	0	5	251	1	100	139	390	1	0		390	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	742	2	**408**	2	744	**409**	0	814	2	**448**	2	816	2	**449**		816	2	**449**
	Left-Through		0							0				0				0	
	Through	1346	2	453	142	1488	502	30	1507	2	507	142	1649	2	556		1649	2	556
	Through-Right		1							1				1				1	
	Right	13	0	13	4	17	17	0	14	0	14	4	18	0	18		18	0	18
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES		*North-South:*	384		*North-South:*	536		*North-South:*		423		*North-South:*		575		*North-South:*		575
			East-West:	661		*East-West:*	702		*East-West:*		730		*East-West:*		771		*East-West:*		771
			SUM:	1045		*SUM:*	1238		*SUM:*		1153		*SUM:*		1346		*SUM:*		1346
	VOLUME/CAPACITY *(V/C)* RATIO:			0.760			0.900				0.839				0.979				0.979
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.690**			**0.830**				**0.739**				**0.879**				**0.879**
	LEVEL OF SERVICE (LOS):			**B**			**D**				**C**				**D**				**D**

PROJECT IMPACT

Change in *v/c* due to project:	0.140	Δ*v/c* after mitigation:	0.140
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Mona Blvd	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
39	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	140	0	**140**	4	144	**144**	0	154	0	**154**	4	158	0	**158**		158	0	**158**
	Left-Through		1							1				1				1	
	Through	49	0	189	2	51	195	0	54	0	208	2	56	0	214		56	0	214
	Through-Right		0							0				0				0	
	Right	157	1	62	5	162	66	0	172	1	67	5	177	1	71		177	1	71
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	27	0	27	0	27	27	0	30	0	30	0	30	0	30		30	0	30
	Left-Through		0							0				0				0	
	Through	103	0	**223**	5	108	**228**	0	113	0	**245**	5	118	0	**250**		118	0	**250**
	Through-Right		0							0				0				0	
	Right	93	0	0	0	93	0	0	102	0	0	0	102	0	0		102	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	37	1	**37**	0	37	**37**	0	41	1	**41**	0	41	1	**41**		41	1	**41**
	Left-Through		0							0				0				0	
	Through	937	2	372	84	1021	405	19	1047	2	414	84	1131	2	448		1131	2	448
	Through-Right		1							1				1				1	
	Right	178	0	178	17	195	195	0	195	0	195	17	212	0	212		212	0	212
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	191	1	191	2	193	193	0	210	1	210	2	212	1	212		212	1	212
	Left-Through		0							0				0				0	
	Through	1800	2	**607**	144	1944	**655**	30	2005	2	**676**	144	2149	2	**724**		2149	2	**724**
	Through-Right		1							1				1				1	
	Right	21	0	21	0	21	21	0	23	0	23	0	23	0	23		23	0	23
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		363	*North-South:*		372	*North-South:*			399	*North-South:*			408	*North-South:*			408
		East-West:		644	*East-West:*		692	*East-West:*			717	*East-West:*			765	*East-West:*			765
		SUM:		1007	*SUM:*		1064	*SUM:*			1116	*SUM:*			1173	*SUM:*			1173
VOLUME/CAPACITY *(V/C)* RATIO:				0.671			0.709				0.744				0.782				0.782
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.601			0.639				0.644				0.682				0.682
LEVEL OF SERVICE (LOS):				B			B				B				B				B

PROJECT IMPACT

Change in *v/c* due to project:	0.038	Δ*v/c* after mitigation:	0.038
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Avalon Blvd	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
1	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			4			4			4				4				4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
	EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	
NORTHBOUND Left	100	1	100	0	100	100	10	120	1	120	0	120	1	120		120	1	120
NORTHBOUND Left-Through		0							0				0				0	
NORTHBOUND Through	655	1	**366**	18	673	**377**	30	749	1	**419**	18	767	1	**431**		767	1	**431**
NORTHBOUND Through-Right		1							1				1				1	
NORTHBOUND Right	76	0	76	5	81	81	6	89	0	89	5	94	0	94		94	0	94
NORTHBOUND Left-Through-Right		0							0				0				0	
NORTHBOUND Left-Right		0							0				0				0	
SOUTHBOUND Left	150	1	**150**	20	170	**170**	5	170	1	**170**	20	190	1	**190**		190	1	**190**
SOUTHBOUND Left-Through		0							0				0				0	
SOUTHBOUND Through	548	1	316	15	563	324	37	638	1	365	15	653	1	373		653	1	373
SOUTHBOUND Through-Right		1							1				1				1	
SOUTHBOUND Right	84	0	84	0	84	84	0	92	0	92	0	92	0	92		92	0	92
SOUTHBOUND Left-Through-Right		0							0				0				0	
SOUTHBOUND Left-Right		0							0				0				0	
EASTBOUND Left	165	1	165	0	165	165	0	181	1	181	0	181	1	181		181	1	181
EASTBOUND Left-Through		0							0				0				0	
EASTBOUND Through	1296	2	**477**	52	1348	**495**	10	1432	2	**532**	52	1484	2	**549**		1484	2	**549**
EASTBOUND Through-Right		1							1				1				1	
EASTBOUND Right	136	0	136	0	136	136	14	163	0	163	0	163	0	163		163	0	163
EASTBOUND Left-Through-Right		0							0				0				0	
EASTBOUND Left-Right		0							0				0				0	
WESTBOUND Left	84	1	**84**	6	90	**90**	6	98	1	**98**	6	104	1	**104**		104	1	**104**
WESTBOUND Left-Through		0							0				0				0	
WESTBOUND Through	582	2	251	75	657	286	12	651	2	281	75	726	2	316		726	2	316
WESTBOUND Through-Right		1							1				1				1	
WESTBOUND Right	171	0	171	30	201	201	4	192	0	192	30	222	0	222		222	0	222
WESTBOUND Left-Through-Right		0							0				0				0	
WESTBOUND Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		516	*North-South:*		547	*North-South:*			589	*North-South:*			621	*North-South:*			621
	East-West:		561	*East-West:*		585	*East-West:*			630	*East-West:*			653	*East-West:*			653
	SUM:		1077	*SUM:*		1132	*SUM:*			1219	*SUM:*			1274	*SUM:*			1274
VOLUME/CAPACITY *(V/C)* RATIO:			0.783			0.823				0.887				0.927				0.927
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.713			0.753				0.787				0.827				0.827
LEVEL OF SERVICE (LOS):			C			C				C				D				D

PROJECT IMPACT

Change in *v/c* due to project:	0.040	Δ*v/c* after mitigation:	0.040
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Avalon Blvd	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
2	East-West Street:	120th St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	79	1	**79**	0	79	**79**	9	96	1	**96**	0	96	1	**96**		96	1	**96**
Left-Through		0							0				0				0	
Through	529	1	291	5	534	299	36	616	1	347	5	621	1	355		621	1	355
Through-Right		1							1				1				1	
Right	52	0	52	11	63	63	21	78	0	78	11	89	0	89		89	0	89
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	48	1	48	17	65	65	12	65	1	65	17	82	1	82		82	1	82
Left-Through		0							0				0				0	
Through	703	1	**433**	6	709	**436**	43	814	1	**497**	6	820	1	**500**		820	1	**500**
Through-Right		1							1				1				1	
Right	163	0	163	0	163	163	1	180	0	180	0	180	0	180		180	0	180
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	109	1	**109**	0	109	**109**	2	122	1	**122**	0	122	1	**122**		122	1	**122**
Left-Through		0							0				0				0	
Through	257	1	257	37	294	294	8	290	1	290	37	327	1	327		327	1	327
Through-Right		0							0				0				0	
Right	90	1	51	0	90	51	12	111	1	63	0	111	1	63		111	1	63
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	87	1	87	20	107	107	0	95	1	95	20	115	1	115		115	1	115
Left-Through		0							0				0				0	
Through	492	1	**492**	61	553	**553**	11	551	1	**551**	61	612	1	**612**		612	1	**612**
Through-Right		0							0				0				0	
Right	64	1	40	22	86	54	9	79	1	47	22	101	1	60		101	1	60
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		512	*North-South:*		515	*North-South:*			593	*North-South:*			596	*North-South:*			596
	East-West:		601	*East-West:*		662	*East-West:*			673	*East-West:*			734	*East-West:*			734
	SUM:		1113	*SUM:*		1177	*SUM:*			1266	*SUM:*			1330	*SUM:*			1330
VOLUME/CAPACITY *(V/C)* RATIO:			0.742			0.785				0.844				0.887				0.887
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.672			0.715				0.744				0.787				0.787
LEVEL OF SERVICE (LOS):			B			C				C				C				C

	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--
No. of Phases				2				2				2				2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATSAC-1 or ATSAC+ATCS-2?				1				1				2				2				2
Override Capacity				0				0				0				0				0

PROJECT IMPACT

Change in *v/c* due to project:	0.043	Δ*v/c* after mitigation:	0.043
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
5	East-West Street:	103rd St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	59	1	**59**	0	59	**59**	0	65	1	**65**	0	65	1	**65**		65	1	**65**
	Left-Through		0							0				0				0	
	Through	1105	2	432	66	1171	454	55	1268	2	493	66	1334	2	515		1334	2	515
	Through-Right		1							1				1				1	
	Right	191	0	191	0	191	191	0	210	0	210	0	210	0	210		210	0	210
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	140	1	140	0	140	140	0	154	1	154	0	154	1	154		154	1	154
	Left-Through		0							0				0				0	
	Through	1203	2	**602**	48	1251	**626**	56	1376	2	**688**	48	1424	2	**712**		1424	2	**712**
	Through-Right		0							0				0				0	
	Right	46	1	29	0	46	29	0	50	1	31	0	50	1	31		50	1	31
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	35	1	**35**	0	35	**35**	0	38	1	**38**	0	38	1	**38**		38	1	**38**
	Left-Through		0							0				0				0	
	Through	197	1	197	2	199	199	3	219	1	219	2	221	1	221		221	1	221
	Through-Right		0							0				0				0	
	Right	59	1	30	0	59	30	0	65	1	33	0	65	1	33		65	1	33
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	162	1	162	0	162	162	0	178	1	178	0	178	1	178		178	1	178
	Left-Through		0							0				0				0	
	Through	217	0	**405**	3	220	**408**	3	241	0	**447**	3	244	0	**450**		244	0	**450**
	Through-Right		1							1				1				1	
	Right	188	0	0	0	188	0	0	206	0	0	0	206	0	0		206	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		661	*North-South:*		685	*North-South:*			753	*North-South:*			777	*North-South:*			777
		East-West:		440	*East-West:*		443	*East-West:*			485	*East-West:*			488	*East-West:*			488
		SUM:		1101	*SUM:*		1128	*SUM:*			1238	*SUM:*			1265	*SUM:*			1265
VOLUME/CAPACITY *(V/C)* RATIO:				0.734			0.752				0.825				0.843				0.843
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.664			0.682				0.725				0.743				0.743
LEVEL OF SERVICE (LOS):				B			B				C				C				C

PROJECT IMPACT

Change in *v/c* due to project:	0.018	Δ*v/c* after mitigation:	0.018
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
6	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			4			4			4			4			4			4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	3	SB-- 0	NB--	3	SB-- 0	NB--	3	SB-- 0	NB--	3	SB-- 0	NB--	3	SB-- 0	NB--	3	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	68	2	37	11	79	43	2	77	2	42	11	88	2	48		88	2	48
	Left-Through		0							0				0				0	
	Through	982	2	**491**	26	1008	**504**	44	1122	2	**561**	26	1148	2	**574**		1148	2	**574**
	Through-Right		0							0				0				0	
	Right	283	1	167	41	324	175	0	311	1	183	41	352	1	191		352	1	191
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	211	2	**116**	33	244	**134**	6	238	2	**131**	33	271	2	**149**		271	2	**149**
	Left-Through		0							0				0				0	
	Through	563	2	282	22	585	293	49	667	2	334	22	689	2	345		689	2	345
	Through-Right		0							0				0				0	
	Right	178	1	127	0	178	127	2	197	1	141	0	197	1	141		197	1	141
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	185	2	**102**	0	185	**102**	1	204	2	**112**	0	204	2	**112**		204	2	**112**
	Left-Through		0							0				0				0	
	Through	1050	2	366	77	1127	394	7	1159	2	405	77	1236	2	432		1236	2	432
	Through-Right		1							1				1				1	
	Right	49	0	49	6	55	55	1	55	0	55	6	61	0	61		61	0	61
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	211	2	116	60	271	149	0	232	2	128	60	292	2	161		292	2	161
	Left-Through		0							0				0				0	
	Through	965	2	**428**	111	1076	**481**	10	1069	2	**476**	111	1180	2	**530**		1180	2	**530**
	Through-Right		1							1				1				1	
	Right	318	0	318	50	368	368	11	360	0	360	50	410	0	410		410	0	410
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		607	*North-South:*		638	*North-South:*			692	*North-South:*			723	*North-South:*			723
		East-West:		530	*East-West:*		583	*East-West:*			588	*East-West:*			642	*East-West:*			642
		SUM:		1137	*SUM:*		1221	*SUM:*			1280	*SUM:*			1365	*SUM:*			1365
VOLUME/CAPACITY *(V/C)* RATIO:				0.827			0.888				0.931				0.993				0.993
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.757			0.818				0.831				0.893				0.893
LEVEL OF SERVICE (LOS):				C			D				D				D				D

PROJECT IMPACT

Change in *v/c* due to project:	0.062	Δ*v/c* after mitigation:	0.062
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
7	East-West Street:	I-105 w/b Ramps	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	329	2	**181**	88	417	**229**	27	388	2	**213**	88	476	2	**262**		476	2	**262**
Left-Through		0							0				0				0	
Through	944	2	472	78	1022	511	45	1081	2	541	78	1159	2	580		1159	2	580
Through-Right		0							0				0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
Left-Through		0							0				0				0	
Through	1000	2	500	32	1032	516	46	1143	2	572	32	1175	2	588		1175	2	588
Through-Right		0							0				0				0	
Right	556	1	**556**	55	611	**611**	5	615	1	**615**	55	670	1	**670**		670	1	**670**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	0	0	**0**		0	**0**	0	0	0	**0**	0	0	0	**0**		0	0	**0**
Left-Through		0							0				0				0	
Through	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
Through-Right		0							0				0				0	
Right	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	265	1	135	0	265	135	41	332	1	168	0	332	1	168		332	1	168
Left-Through		1							1				1				1	
Through	4	0	135	0	4	135	0	4	0	168	0	4	0	168		4	0	168
Through-Right		0							0				0				0	
Right	536	1	**536**	0	536	**536**	0	588	1	**588**	0	588	1	**588**		588	1	**588**
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		737	*North-South:*		840	*North-South:*			828	*North-South:*			932	*North-South:*			932
	East-West:		536	*East-West:*		536	*East-West:*			588	*East-West:*			588	*East-West:*			588
	SUM:		1273	*SUM:*		1376	*SUM:*			1416	*SUM:*			1520	*SUM:*			1520
VOLUME/CAPACITY *(V/C)* RATIO:			0.893			0.966				0.994				1.067				1.067
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.823			0.896				0.894				0.967				0.967
LEVEL OF SERVICE (LOS):			D			D				D				E				E

NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0
EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0

No. of Phases			3			3			3			3			3			3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?			0			0			0			0			0			0
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2
Override Capacity			0			0			0			0			0			0

PROJECT IMPACT

Change in *v/c* due to project:	0.073	Δ*v/c* after mitigation:	0.073
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
8	East-West Street:	I-105 e/b Ramps	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			3			3			3				3				3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0		EB-- 0	WB--	0		EB-- 0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	

MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through		0							0				0				0	
	Through	825	3	275	130	955	318	68	973	3	324	130	1103	3	368		1103	3	368
	Through-Right		0							0				0				0	
	Right	385	1	**385**	0	385	**385**	51	473	1	**473**	0	473	1	**473**		473	1	**473**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	463	2	**255**	0	463	**255**	0	508	2	**279**	0	508	2	**279**		508	2	**279**
	Left-Through		0							0				0				0	
	Through	793	2	397	32	825	413	87	957	2	479	32	989	2	495		989	2	495
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	477	1	365	36	513	392	4	527	1	411	36	563	1	438		563	1	438
	Left-Through		0							0				0				0	
	Through	240	0	**365**	0	240	**392**	0	263	0	**411**	0	263	0	**438**		263	0	**438**
	Through-Right		0							0				0				0	
	Right	378	1	0	44	422	0	29	444	1	0	44	488	1	0		488	1	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	0	0	**0**		0	**0**	0	0	0	**0**	0	0	0	**0**		0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*	640		*North-South:*	640		*North-South:*			752	*North-South:*			752		*North-South:*		752
		East-West:	365		*East-West:*	392		*East-West:*			411	*East-West:*			438		*East-West:*		438
		SUM:	1005		*SUM:*	1032		*SUM:*			1163	*SUM:*			1190		*SUM:*		1190
VOLUME/CAPACITY *(V/C)* RATIO:			0.705			0.724					0.816				0.835				0.835
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.635			0.654					0.716				0.735				0.735
LEVEL OF SERVICE (LOS):			B			B					C				C				C

PROJECT IMPACT

Change in *v/c* due to project:	0.019	Δ*v/c* after mitigation:	0.019
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
9	East-West Street:	120th St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0		NB-- 0 SB-- EB-- 0 WB--		0		NB-- 0 SB-- EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	144	1	**144**	0	144	144	0	158	1	**158**	0	158	1	158		158	1	158
	Left-Through		0							0				0				0	
	Through	845	1	489	5	850	**511**	52	979	1	573	5	984	1	**595**		984	1	**595**
	Through-Right		1							1				1				1	
	Right	132	0	132	40	172	172	21	166	0	166	40	206	0	206		206	0	206
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	75	1	75	78	153	**153**	0	82	1	82	78	160	1	**160**		160	1	**160**
	Left-Through		0							0				0				0	
	Through	770	1	**445**	6	776	448	30	875	1	**547**	6	881	1	550		881	1	550
	Through-Right		1							1				1				1	
	Right	120	0	120	0	120	120	87	219	0	219	0	219	0	219		219	0	219
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	76	1	**76**	0	76	**76**	67	150	1	**150**	0	150	1	**150**		150	1	**150**
	Left-Through		0							0				0				0	
	Through	225	1	182	71	296	218	8	255	1	204	71	326	1	240		326	1	240
	Through-Right		1							1				1				1	
	Right	139	0	139	0	139	139	0	153	0	153	0	153	0	153		153	0	153
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	169	1	169	65	234	234	31	216	1	216	65	281	1	281		281	1	281
	Left-Through		0							0				0				0	
	Through	475	1	**475**	115	590	**590**	11	532	1	**532**	115	647	1	**647**		647	1	**647**
	Through-Right		0							0				0				0	
	Right	80	1	43	136	216	140	0	88	1	47	136	224	1	144		224	1	144
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*	589		*North-South:*	664		*North-South:*	705			*North-South:*	755			*North-South:*	755		
		East-West:	551		*East-West:*	666		*East-West:*	682			*East-West:*	797			*East-West:*	797		
		SUM:	1140		*SUM:*	1330		*SUM:*	1387			*SUM:*	1552			*SUM:*	1552		
	VOLUME/CAPACITY *(V/C)* RATIO:		0.760			0.887			0.925				1.035				1.035		
	V/C LESS ATSAC/ATCS ADJUSTMENT:		0.690			0.817			0.825				0.935				0.935		
	LEVEL OF SERVICE (LOS):		B			D			D				E				E		

PROJECT IMPACT

Change in *v/c* due to project:	0.110	Δ*v/c* after mitigation:	0.110
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Compton Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
14	East-West Street:	103rd St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	101	1	101	10	111	111	0	111	1	111	10	121	1	121		121	1	121
Left-Through		0							0				0				0	
Through	451	1	**268**	53	504	**294**	8	503	1	**298**	53	556	1	**324**		556	1	**324**
Through-Right		1							1				1				1	
Right	84	0	84	0	84	84	0	92	0	92	0	92	0	92		92	0	92
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	82	1	**82**	0	82	**82**	0	90	1	**90**	0	90	1	**90**		90	1	**90**
Left-Through		0							0				0				0	
Through	361	1	212	36	397	230	6	402	1	235	36	438	1	253		438	1	253
Through-Right		1							1				1				1	
Right	62	0	62	0	62	62	0	68	0	68	0	68	0	68		68	0	68
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	79	0	**79**	0	79	**79**	0	87	0	**87**	0	87	0	**87**		87	0	**87**
Left-Through		1							1				1				1	
Through	352	0	431	0	352	431	3	389	0	476	0	389	0	476		389	0	476
Through-Right		0							0				0				0	
Right	81	1	31	5	86	31	0	89	1	34	5	94	1	34		94	1	34
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	93	0	93	0	93	93	0	102	0	102	0	102	0	102		102	0	102
Left-Through		0							0				0				0	
Through	380	0	**556**	0	380	**556**	3	420	0	**613**	0	420	0	**613**		420	0	**613**
Through-Right		0							0				0				0	
Right	83	0	0	0	83	0	0	91	0	0	0	91	0	0		91	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		350	*North-South:*		376	*North-South:*			388	*North-South:*			414	*North-South:*			414
	East-West:		635	*East-West:*		635	*East-West:*			700	*East-West:*			700	*East-West:*			700
	SUM:		985	*SUM:*		1011	*SUM:*			1088	*SUM:*			1114	*SUM:*			1114
VOLUME/CAPACITY *(V/C)* RATIO:			0.657			0.674				0.725				0.743				0.743
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.587			0.604				0.625				0.643				0.643
LEVEL OF SERVICE (LOS):			A			B				B				B				B

	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--	NB--	SB--	EB--	WB--
No. of Phases				2				2				2				2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATSAC-1 or ATSAC+ATCS-2?				1				1				2				2				2
Override Capacity				0				0				0				0				0

PROJECT IMPACT

Change in *v/c* due to project:	0.018	Δ*v/c* after mitigation:	0.018
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Compton Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
15	East-West Street:	108th St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	
	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	34	0	**34**	8	42	42	0	37	0	**37**	8	45	0	45		45	0	45
	Left-Through		0							0				0				0	
	Through	515	0	620	68	583	**696**	8	573	0	688	68	641	0	**764**		641	0	**764**
	Through-Right		0							0				0				0	
	Right	71	0	0	0	71	0	0	78	0	0	0	78	0	0		78	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	29	0	29	0	29	**29**	0	32	0	32	0	32	0	**32**		32	0	**32**
	Left-Through		0							0				0				0	
	Through	568	0	**628**	44	612	672	6	629	0	**695**	44	673	0	739		673	0	739
	Through-Right		0							0				0				0	
	Right	31	0	0	0	31	0	0	34	0	0	0	34	0	0		34	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	43	0	43	0	43	43	0	47	0	47	0	47	0	47		47	0	47
	Left-Through		0							0				0				0	
	Through	107	0	**197**	0	107	**202**	0	117	0	**216**	0	117	0	**221**		117	0	**221**
	Through-Right		0							0				0				0	
	Right	47	0	0	5	52	0	0	52	0	0	5	57	0	0		57	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	37	0	**37**	0	37	**37**	0	41	0	**41**	0	41	0	**41**		41	0	**41**
	Left-Through		0							0				0				0	
	Through	73	0	135	4	77	140	0	80	0	148	4	84	0	153		84	0	153
	Through-Right		0							0				0				0	
	Right	25	0	0	1	26	0	0	27	0	0	1	28	0	0		28	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES			*North-South:*	662		*North-South:*	725		*North-South:*		732		*North-South:*		796		*North-South:*		796
			East-West:	234		*East-West:*	239		*East-West:*		257		*East-West:*		262		*East-West:*		262
			SUM:	896		*SUM:*	964		*SUM:*		989		*SUM:*		1058		*SUM:*		1058
VOLUME/CAPACITY *(V/C)* RATIO:				0.597			0.643				0.659				0.705				0.705
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.527			0.573				0.559				0.605				0.605
LEVEL OF SERVICE (LOS):				A			A				A				B				B

PROJECT IMPACT

Change in *v/c* due to project:	0.046	Δ*v/c* after mitigation:	0.046
Significant impacted?	NO	Fully mitigated?	N/A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	4	53	11	5	7	44	570	22	9	573	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.913			0.957			0.995			0.995	
Flt Protected		0.985			0.977			0.997			0.999	
Satd. Flow (prot)	0	1675	0	0	1742	0	0	1848	0	0	1852	0
Flt Permitted		0.985			0.977			0.997			0.999	
Satd. Flow (perm)	0	1675	0	0	1742	0	0	1848	0	0	1852	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	4	58	12	5	8	48	620	24	10	623	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	0	0	25	0	0	692	0	0	658	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.2%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	26	4	53	11	5	7	44	570	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	4	58	12	5	8	48	620	24

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1389	1394	635	1413	1394	632	648	0	0
Stage 1	655	655	-	727	727	-	-	-	-
Stage 2	734	739	-	686	667	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	120	141	478	115	141	480	938	-	-
Stage 1	455	463	-	415	429	-	-	-	-
Stage 2	412	424	-	438	457	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	106	128	478	91	128	480	938	-	-
Mov Cap-2 Maneuver	106	128	-	91	128	-	-	-	-
Stage 1	419	455	-	382	395	-	-	-	-
Stage 2	368	390	-	375	449	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	33.6	38.5	0.6
HCM LOS	D	E	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	938	-	-	214	132	942	-	-
HCM Lane V/C Ratio	0.051	-	-	0.422	0.189	0.01	-	-
HCM Control Delay (s)	9	0	-	33.6	38.5	8.9	0	-
HCM Lane LOS	A	A	-	D	E	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.9	0.7	0	-	-

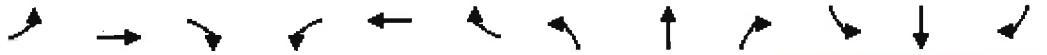
Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	9	573	23
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	10	623	25

Major/Minor	Major2		
Conflicting Flow All	643	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	942	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	942	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	4	58	13	5	7	52	645	26	9	623	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.910			0.960			0.995			0.995	
Flt Protected		0.985			0.975			0.996			0.999	
Satd. Flow (prot)	0	1670	0	0	1744	0	0	1846	0	0	1852	0
Flt Permitted		0.985			0.975			0.996			0.999	
Satd. Flow (perm)	0	1670	0	0	1744	0	0	1846	0	0	1852	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	4	63	14	5	8	57	701	28	10	677	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	95	0	0	27	0	0	786	0	0	712	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 79.0%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	26	4	58	13	5	7	52	645	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	4	63	14	5	8	57	701	28

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1544	1551	690	1571	1550	715	702	0	0
Stage 1	709	709	-	828	828	-	-	-	-
Stage 2	835	842	-	743	722	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	94	114	445	90	114	431	895	-	-
Stage 1	425	437	-	365	386	-	-	-	-
Stage 2	362	380	-	407	431	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	80	100	445	68	100	431	895	-	-
Mov Cap-2 Maneuver	80	100	-	68	100	-	-	-	-
Stage 1	379	429	-	326	344	-	-	-	-
Stage 2	312	339	-	339	423	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	46.5	56	0.7
HCM LOS	E	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	895	-	-	178	97	875	-	-
HCM Lane V/C Ratio	0.063	-	-	0.537	0.28	0.011	-	-
HCM Control Delay (s)	9.3	0	-	46.5	56	9.2	0	-
HCM Lane LOS	A	A	-	E	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.8	1	0	-	-

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	9	623	23
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	10	677	25

Major/Minor	Major2		
Conflicting Flow All	729	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	875	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	875	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt

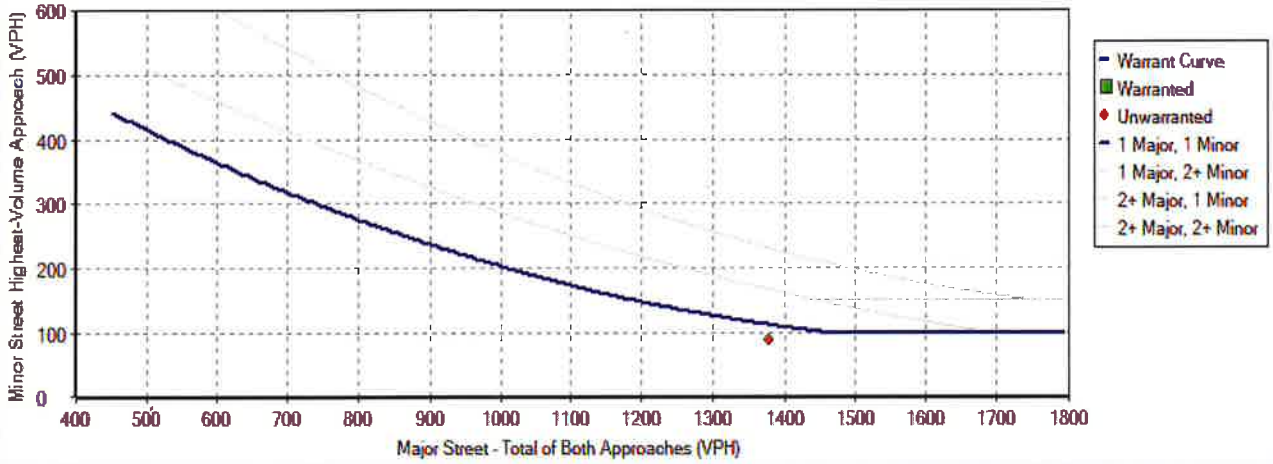
Warrant 3: Peak Hour

1: Compton & 112th -EWP - PM

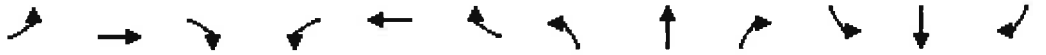
Warrant 3

Peak Hour Vehicular Volume

Community Population Greater Than 10,000 and Major Street Approach Speed Below 40 mph



Note: Please turn over for volume information.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	29	4	57	12	6	8	48	630	24	10	631	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.915			0.958			0.995			0.995	
Flt Protected		0.984			0.978			0.997			0.999	
Satd. Flow (prot)	0	1677	0	0	1745	0	0	1848	0	0	1852	0
Flt Permitted		0.984			0.978			0.997			0.999	
Satd. Flow (perm)	0	1677	0	0	1745	0	0	1848	0	0	1852	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	4	62	13	7	9	52	685	26	11	686	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	98	0	0	29	0	0	763	0	0	724	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 75.3%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	29	4	57	12	6	8	48	630	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	4	62	13	7	9	52	685	26

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1531	1536	699	1556	1537	698	713	0	0
Stage 1	721	721	-	802	802	-	-	-	-
Stage 2	810	815	-	754	735	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	96	116	440	92	116	440	887	-	-
Stage 1	419	432	-	378	396	-	-	-	-
Stage 2	374	391	-	401	425	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	82	103	440	70	103	440	887	-	-
Mov Cap-2 Maneuver	82	103	-	70	103	-	-	-	-
Stage 1	378	423	-	341	358	-	-	-	-
Stage 2	325	353	-	334	416	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	50.4	51.5	0.6
HCM LOS	F	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	887	-	-	172	105	888	-	-
HCM Lane V/C Ratio	0.059	-	-	0.569	0.269	0.012	-	-
HCM Control Delay (s)	9.3	0	-	50.4	51.5	9.1	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	3	1	0	-	-

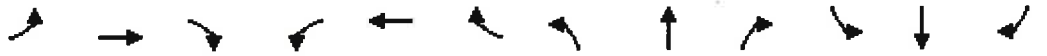
Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	10	631	25
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	11	686	27

Major/Minor	Major2		
Conflicting Flow All	711	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	888	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	888	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	29	4	62	14	6	8	56	705	28	10	680	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.912			0.961			0.995			0.995	
Flt Protected		0.985			0.976			0.996			0.999	
Satd. Flow (prot)	0	1673	0	0	1747	0	0	1846	0	0	1852	0
Flt Permitted		0.985			0.976			0.996			0.999	
Satd. Flow (perm)	0	1673	0	0	1747	0	0	1846	0	0	1852	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	4	67	15	7	9	61	766	30	11	739	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	103	0	0	31	0	0	857	0	0	777	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 85.0%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	29	4	62	14	6	8	56	705	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	4	67	15	7	9	61	766	30

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1685	1692	753	1713	1691	782	766	0	0
Stage 1	774	774	-	903	903	-	-	-	-
Stage 2	911	918	-	810	788	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	75	93	410	71	93	394	847	-	-
Stage 1	391	408	-	332	356	-	-	-	-
Stage 2	328	350	-	374	402	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	61	79	410	50	79	394	847	-	-
Mov Cap-2 Maneuver	61	79	-	50	79	-	-	-	-
Stage 1	340	399	-	289	310	-	-	-	-
Stage 2	273	305	-	302	393	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	81.3	84.1	0.7
HCM LOS	F	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	847	-	-	140	74	825	-	-
HCM Lane V/C Ratio	0.072	-	-	0.738	0.411	0.013	-	-
HCM Control Delay (s)	9.6	0	-	81.3	84.1	9.4	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	4.3	1.6	0	-	-

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	10	680	25
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	11	739	27

Major/Minor	Major2		
Conflicting Flow All	797	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	825	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	825	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.1
HCM LOS	

Minor Lane/Major Mvmt

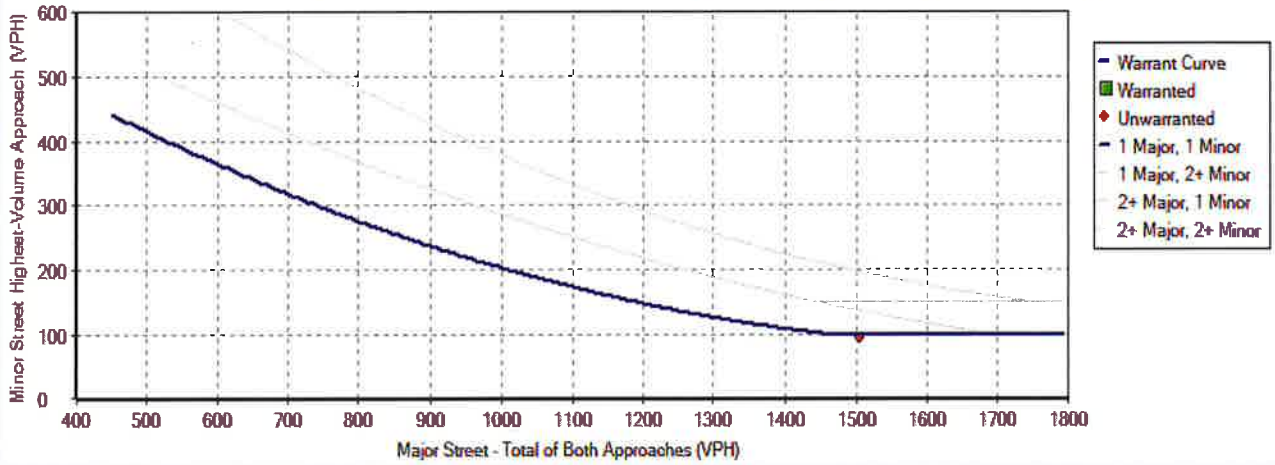
Warrant 3: Peak Hour

1: Compton & 112th -FWP - PM

Warrant 3

Peak Hour Vehicular Volume

Community Population Greater Than 10,000 and Major Street Approach Speed Below 40 mph



Note: Please turn over for volume information.

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Wilmington Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
22	East-West Street:	103rd St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
		EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0		EB-- 0	WB--	0		EB-- 0	WB--	0	
	ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	127	1	**127**	0	127	**127**	0	139	1	**139**	0	139	1	**139**		139	1	**139**
	Left-Through		0							0				0				0	
	Through	373	1	373	22	395	**395**	24	433	1	**433**	22	455	1	**455**		455	1	**455**
	Through-Right		0							0				0				0	
	Right	67	1	38	8	75	42	0	74	1	42	8	82	1	46		82	1	46
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	95	1	95	0	95	**95**	8	112	1	**112**	0	112	1	**112**		112	1	**112**
	Left-Through		0							0				0				0	
	Through	343	1	**343**	15	358	358	18	394	1	394	15	409	1	409		409	1	409
	Through-Right		0							0				0				0	
	Right	40	1	19	0	40	19	0	44	1	21	0	44	1	21		44	1	21
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	42	1	**42**	0	42	**42**	0	46	1	**46**	0	46	1	**46**		46	1	**46**
	Left-Through		0							0				0				0	
	Through	237	1	237	0	237	237	3	263	1	263	0	263	1	263		263	1	263
	Through-Right		0							0				0				0	
	Right	135	1	72	0	135	72	0	148	1	79	0	148	1	79		148	1	79
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	58	1	58	9	67	67	0	64	1	64	9	73	1	73		73	1	73
	Left-Through		0							0				0				0	
	Through	246	0	**289**	0	246	**289**	3	273	0	**328**	0	273	0	**328**		273	0	**328**
	Through-Right		1							1				1				1	
	Right	43	0	0	0	43	0	8	55	0	0	0	55	0	0		55	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		470	*North-South:*		490	*North-South:*			545	*North-South:*			567	*North-South:*			567
		East-West:		331	*East-West:*		331	*East-West:*			374	*East-West:*			374	*East-West:*			374
		SUM:		801	*SUM:*		821	*SUM:*			919	*SUM:*			941	*SUM:*			941
	VOLUME/CAPACITY *(V/C)* RATIO:			0.534			0.547				0.613				0.627				0.627
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.464**			**0.477**				**0.513**				**0.527**				**0.527**
	LEVEL OF SERVICE (LOS):			**A**			**A**				**A**				**A**				**A**

PROJECT IMPACT

Change in *v/c* due to project:	0.014	Δ*v/c* after mitigation:	0.014
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Wilmington Ave	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
23	East-West Street:	Santa Ana Blvd N	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	16	1	16	7	23	23	0	18	1	18	7	25	1	25		25	1	25
Left-Through		0							0				0				0	
Through	581	0	**643**	37	618	**680**	24	662	0	**730**	37	699	0	**767**		699	0	**767**
Through-Right		1							1				1				1	
Right	62	0	0	0	62	0	0	68	0	0	0	68	0	0		68	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	46	1	**46**	0	46	**46**	0	50	1	**50**	0	50	1	**50**		50	1	**50**
Left-Through		0							0				0				0	
Through	449	0	453	28	477	481	18	511	0	515	28	539	0	543		539	0	543
Through-Right		1							1				1				1	
Right	4	0	0	0	4	0	0	4	0	0	0	4	0	0		4	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	2	0	2	0	2	2	0	2	0	2	0	2	0	2		2	0	2
Left-Through		0							0				0				0	
Through	11	0	**26**	0	11	**30**	0	12	0	**28**	0	12	0	**32**		12	0	**32**
Through-Right		0							0				0				0	
Right	13	0	0	4	17	0	0	14	0	0	4	18	0	0		18	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	52	0	**52**	0	52	**52**	0	57	0	**57**	0	57	0	**57**		57	0	**57**
Left-Through		1							1				1				1	
Through	14	0	66	0	14	66	0	15	0	72	0	15	0	72		15	0	72
Through-Right		0							0				0				0	
Right	66	1	43	0	66	43	0	72	1	47	0	72	1	47		72	1	47
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		689	*North-South:*		726	*North-South:*			780	*North-South:*			817	*North-South:*			817
	East-West:		78	*East-West:*		82	*East-West:*			85	*East-West:*			89	*East-West:*			89
	SUM:		767	*SUM:*		808	*SUM:*			865	*SUM:*			906	*SUM:*			906
VOLUME/CAPACITY *(V/C)* RATIO:			0.511			0.539				0.577				0.604				0.604
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.441			0.469				0.477				0.504				0.504
LEVEL OF SERVICE (LOS):			A			A				A				A				A

PROJECT IMPACT

Change in *v/c* due to project:	0.027	Δ*v/c* after mitigation:	0.027
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

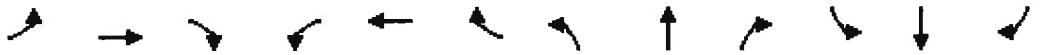
Weekday - PM Peak Hour

I/S #:	North-South Street:	Wilmington Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
24	East-West Street:	108th St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2				2				2				2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0				0				0				0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--			0	NB-- 0 SB--			0	NB-- 0 SB--			0
		EB-- 2 WB--		0	EB-- 2 WB--		0	EB-- 2 WB--			0	EB-- 2 WB--			0	EB-- 2 WB--			0
	ATSAC-1 or ATSAC+ATCS-2?			1			1				2				2				2
	Override Capacity			0			0				0				0				0
NORTHBOUND	Left	37	1	37	5	42	42	0	41	1	41	5	46	1	46		46	1	46
	Left-Through		0							0				0				0	
	Through	602	0	**631**	44	646	**675**	24	685	0	**717**	44	729	0	**761**		729	0	**761**
	Through-Right		1							1				1				1	
	Right	29	0	0	0	29	0	0	32	0	0	0	32	0	0		32	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	32	1	**32**	0	32	**32**	0	35	1	**35**	0	35	1	**35**		35	1	**35**
	Left-Through		0							0				0				0	
	Through	461	0	482	32	493	514	18	524	0	547	32	556	0	579		556	0	579
	Through-Right		1							1				1				1	
	Right	21	0	0	0	21	0	0	23	0	0	0	23	0	0		23	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	36	0	36	0	36	36	0	40	0	40	0	40	0	40		40	0	40
	Left-Through		0							0				0				0	
	Through	77	0	**139**	0	77	**139**	0	84	0	**153**	0	84	0	**153**		84	0	**153**
	Through-Right		0							0				0				0	
	Right	26	0	0	0	26	0	0	29	0	0	0	29	0	0		29	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	47	0	**47**	0	47	**47**	0	52	0	**52**	0	52	0	**52**		52	0	**52**
	Left-Through		0							0				0				0	
	Through	22	0	87	0	22	87	0	24	0	96	0	24	0	96		24	0	96
	Through-Right		0							0				0				0	
	Right	18	0	0	0	18	0	0	20	0	0	0	20	0	0		20	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		663	*North-South:*		707	*North-South:*			752	*North-South:*			796	*North-South:*			796
		East-West:		186	*East-West:*		186	*East-West:*			205	*East-West:*			205	*East-West:*			205
		SUM:		849	*SUM:*		893	*SUM:*			957	*SUM:*			1001	*SUM:*			1001
	VOLUME/CAPACITY *(V/C)* RATIO:			0.566			0.595				0.638				0.667				0.667
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.496			0.525				0.538				0.567				0.567
	LEVEL OF SERVICE (LOS):			A			A				A				A				A

PROJECT IMPACT

Change in *v/c* due to project:	0.029	Δ*v/c* after mitigation:	0.029
Significant impacted?	NO	Fully mitigated?	N/A



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	1	1	35	18	0	13	21	730	31	17	532	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.872			0.944			0.995			0.998	
Flt Protected		0.999			0.971			0.999			0.999	
Satd. Flow (prot)	0	1623	0	0	1707	0	0	1852	0	0	1857	0
Flt Permitted		0.999			0.971			0.999			0.999	
Satd. Flow (perm)	0	1623	0	0	1707	0	0	1852	0	0	1857	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	1	38	20	0	14	23	793	34	18	578	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	40	0	0	34	0	0	850	0	0	604	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.4%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	1	35	18	0	13	21	730	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	38	20	0	14	23	793	34

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1482	1492	582	1495	1479	810	586	0	0
Stage 1	619	619	-	856	856	-	-	-	-
Stage 2	863	873	-	639	623	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	103	123	513	101	126	380	989	-	-
Stage 1	476	480	-	352	374	-	-	-	-
Stage 2	349	368	-	464	478	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	94	114	513	88	117	380	989	-	-
Mov Cap-2 Maneuver	94	114	-	88	117	-	-	-	-
Stage 1	456	464	-	337	358	-	-	-	-
Stage 2	322	352	-	414	462	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	14.4	42.1	0.2
HCM LOS	B	E	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	989	-	-	422	130	804	-	-
HCM Lane V/C Ratio	0.023	-	-	0.095	0.259	0.023	-	-
HCM Control Delay (s)	8.7	0	-	14.4	42.1	9.6	0	-
HCM Lane LOS	A	A	-	B	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	1	0.1	-	-

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	17	532	7
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	18	578	8

Major/Minor	Major2		
Conflicting Flow All	827	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	804	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	804	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.3
HCM LOS	

Minor Lane/Major Mvmt

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	1	1	106	55	0	13	29	779	42	17	564	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.867			0.974			0.993			0.998	
Flt Protected					0.961			0.998			0.999	
Satd. Flow (prot)	0	1615	0	0	1744	0	0	1846	0	0	1857	0
Flt Permitted					0.961			0.998			0.999	
Satd. Flow (perm)	0	1615	0	0	1744	0	0	1846	0	0	1857	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	1	115	60	0	14	32	847	46	18	613	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	74	0	0	925	0	0	639	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	12

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	1	106	55	0	13	29	779	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	115	60	0	14	32	847	46

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1594	1609	617	1645	1591	870	621	0	0
Stage 1	654	654	-	933	933	-	-	-	-
Stage 2	940	955	-	712	658	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	86	105	490	79	107	351	960	-	-
Stage 1	456	463	-	319	345	-	-	-	-
Stage 2	316	337	-	423	461	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	76	94	490	~ 55	96	351	960	-	-
Mov Cap-2 Maneuver	76	94	-	~ 55	96	-	-	-	-
Stage 1	425	446	-	298	322	-	-	-	-
Stage 2	283	314	-	311	444	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	15.8	254.5	0.3
HCM LOS	C	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	960	-	-	450	66	760	-	-
HCM Lane V/C Ratio	0.033	-	-	0.261	1.12	0.024	-	-
HCM Control Delay (s)	8.9	0	-	15.8	254.5	9.9	0	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1	5.8	0.1	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	17	564	7
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	18	613	8

Major/Minor	Major2		
Conflicting Flow All	892	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	760	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	760	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.3
HCM LOS	

Minor Lane/Major Mvmt

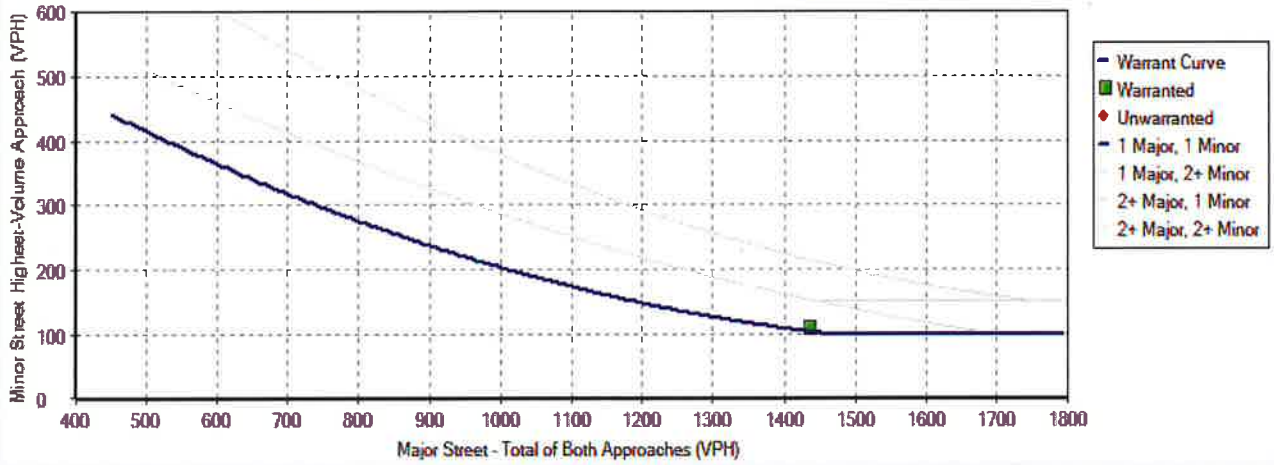
Warrant 3: Peak Hour

1: Wilmington & 112th -EWP - PM

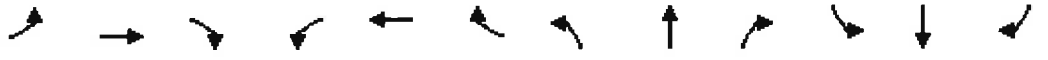
Warrant 3

Peak Hour Vehicular Volume

Community Population Greater Than 10,000 and Major Street Approach Speed Below 40 mph



Note: Please turn over for volume information.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	1	1	39	20	0	14	23	821	34	19	599	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.871			0.945			0.995			0.998	
Flt Protected		0.999			0.971			0.999			0.998	
Satd. Flow (prot)	0	1621	0	0	1709	0	0	1852	0	0	1855	0
Flt Permitted		0.999			0.971			0.999			0.998	
Satd. Flow (perm)	0	1621	0	0	1709	0	0	1852	0	0	1855	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	1	42	22	0	15	25	892	37	21	651	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	37	0	0	954	0	0	681	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	1	39	20	0	14	23	821	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	42	22	0	15	25	892	37

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1665	1676	655	1679	1662	911	660	0	0
Stage 1	697	697	-	961	961	-	-	-	-
Stage 2	968	979	-	718	701	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	77	95	466	75	97	332	928	-	-
Stage 1	431	443	-	308	335	-	-	-	-
Stage 2	305	328	-	420	441	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	68	86	466	62	87	332	928	-	-
Mov Cap-2 Maneuver	68	86	-	62	87	-	-	-	-
Stage 1	407	423	-	291	316	-	-	-	-
Stage 2	275	310	-	364	421	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	16	67.2	0.2
HCM LOS	C	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	928	-	-	373	93	736	-	-
HCM Lane V/C Ratio	0.027	-	-	0.119	0.397	0.028	-	-
HCM Control Delay (s)	9	0	-	16	67.2	10	0	-
HCM Lane LOS	A	A	-	C	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	1.6	0.1	-	-

Intersection	
Int Delay, s/veh	

Movement	SBL	SBT	SBR
Vol, veh/h	19	599	8
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	21	651	9

Major/Minor	Major2		
Conflicting Flow All	929	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	736	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	736	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.3
HCM LOS	

Minor Lane/Major Mvmt

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	1	1	110	57	0	14	31	870	45	19	630	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.867			0.974			0.994			0.998	
Flt Protected					0.961			0.998			0.999	
Satd. Flow (prot)	0	1615	0	0	1744	0	0	1848	0	0	1857	0
Flt Permitted					0.961			0.998			0.999	
Satd. Flow (perm)	0	1615	0	0	1744	0	0	1848	0	0	1857	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			341			283			255	
Travel Time (s)		6.0			7.8			6.4			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	1	120	62	0	15	34	946	49	21	685	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	122	0	0	77	0	0	1029	0	0	715	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 79.6%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	22.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	1	110	57	0	14	31	870	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	120	62	0	15	34	946	49

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1775	1792	689	1829	1773	970	693	0	0
Stage 1	730	730	-	1038	1038	-	-	-	-
Stage 2	1045	1062	-	791	735	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	64	81	446	~ 59	83	307	902	-	-
Stage 1	414	428	-	279	308	-	-	-	-
Stage 2	276	300	-	383	425	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	55	70	446	~ 38	72	307	902	-	-
Mov Cap-2 Maneuver	55	70	-	~ 38	72	-	-	-	-
Stage 1	379	407	-	255	282	-	-	-	-
Stage 2	240	275	-	266	404	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	17.8	$ 522.7	0.3
HCM LOS	C	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	902	-	-	401	46	695	-	-
HCM Lane V/C Ratio	0.037	-	-	0.304	1.678	0.03	-	-
HCM Control Delay (s)	9.1	0	-	17.8	$ 522.7	10.3	0	-
HCM Lane LOS	A	A	-	C	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	7.7	0.1	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection			
Int Delay, s/veh			

Movement	SBL	SBT	SBR
Vol, veh/h	19	630	8
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	2	2	2
Mvmt Flow	21	685	9

Major/Minor	Major2		
Conflicting Flow All	995	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	695	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	695	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	0.3
HCM LOS	

Minor Lane/Major Mvmt

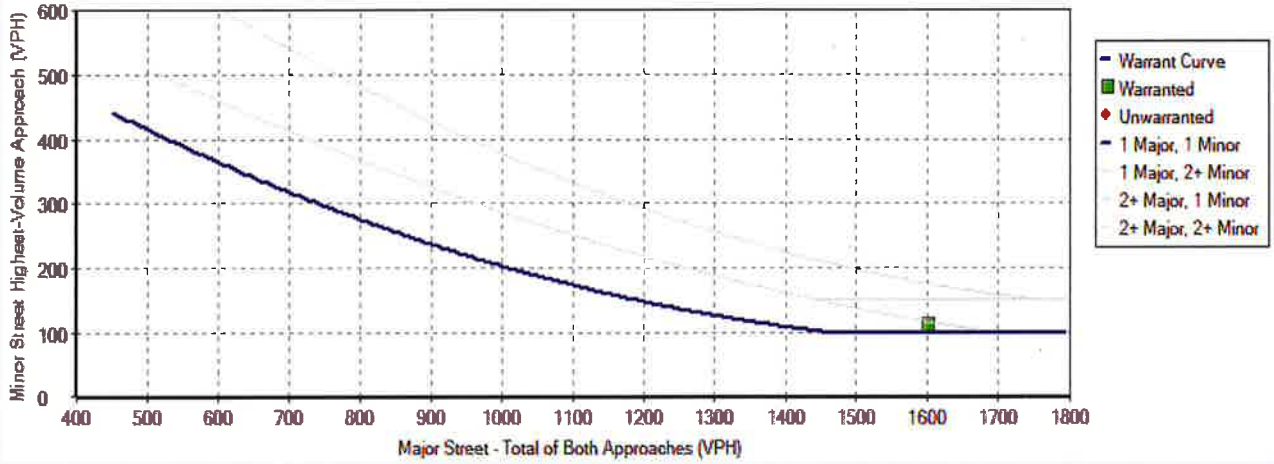
Warrant 3: Peak Hour

1: Wilmington & 112th -FWP - PM

Warrant 3

Peak Hour Vehicular Volume

Community Population Greater Than 10,000 and Major Street Approach Speed Below 40 mph



Note: Please turn over for volume information.

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Avalon Blvd	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/20/2017
47	East-West Street:	103rd St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			2			2			2				2			2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0			0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 2	SB--	0	NB-- 2	SB--	0	NB-- 2	SB--	0		NB-- 2	SB--	0		NB-- 2	SB--	0	
	EB-- 0	WB--	2	EB-- 0	WB--	2	EB-- 0	WB--	2		EB-- 0	WB--	2		EB-- 0	WB--	2	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2			2		
Override Capacity			0			0			0				0			0		

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	21	1	21	0	21	21	0	23	1	23	0	23	1	23		23	1	23
	Left-Through		0							0				0				0	
	Through	846	1	**470**	46	892	**493**	30	958	1	**532**	46	1004	1	**555**		1004	1	**555**
	Through-Right		1							1				1				1	
	Right	93	0	93	0	93	93	3	105	0	105	0	105	0	105		105	0	105
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	89	1	**89**	0	89	**89**	0	98	1	**98**	0	98	1	**98**		98	1	**98**
	Left-Through		0							0				0				0	
	Through	825	1	442	32	857	458	37	942	1	503	32	974	1	519		974	1	519
	Through-Right		1							1				1				1	
	Right	58	0	58	0	58	58	0	64	0	64	0	64	0	64		64	0	64
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	60	1	60	0	60	60	0	66	1	66	0	66	1	66		66	1	66
	Left-Through		0							0				0				0	
	Through	98	0	**117**	2	100	**119**	0	108	0	**129**	2	110	0	**131**		110	0	**131**
	Through-Right		1							1				1				1	
	Right	19	0	0	0	19	0	0	21	0	0	0	21	0	0		21	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	141	1	**141**	0	141	**141**	3	158	1	**158**	0	158	1	**158**		158	1	**158**
	Left-Through		0							0				0				0	
	Through	155	1	155	3	158	158	0	170	1	170	3	173	1	173		173	1	173
	Through-Right		0							0				0				0	
	Right	81	1	81	0	81	81	0	89	1	89	0	89	1	89		89	1	89
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		559	*North-South:*		582	*North-South:*			630	*North-South:*			653	*North-South:*			653
		East-West:		258	*East-West:*		260	*East-West:*			287	*East-West:*			289	*East-West:*			289
		SUM:		817	*SUM:*		842	*SUM:*			917	*SUM:*			942	*SUM:*			942
VOLUME/CAPACITY *(V/C)* RATIO:				0.545			0.561				0.611				0.628				0.628
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.475			0.491				0.511				0.528				0.528
LEVEL OF SERVICE (LOS):				A			A				A				A				A

PROJECT IMPACT

Change in *v/c* due to project:	0.017	Δ*v/c* after mitigation:	0.017
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Avalon Blvd	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/18/2017
48	East-West Street:	108th St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	18	1	18	4	22	22	1	21	1	21	4	25	1	25		25	1	25
	Left-Through		0							0				0				0	
	Through	866	1	**495**	44	910	**517**	33	983	1	**560**	44	1027	1	**582**		1027	1	**582**
	Through-Right		1							1				1				1	
	Right	124	0	124	0	124	124	0	136	0	136	0	136	0	136		136	0	136
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	64	1	**64**	0	64	**64**	0	70	1	**70**	0	70	1	**70**		70	1	**70**
	Left-Through		0							0				0				0	
	Through	794	1	425	27	821	441	40	911	1	486	27	938	1	502		938	1	502
	Through-Right		1							1				1				1	
	Right	55	0	55	5	60	60	0	60	0	60	5	65	0	65		65	0	65
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	33	0	33	0	33	33	0	36	0	36	0	36	0	36		36	0	36
	Left-Through		0							0				0				0	
	Through	230	0	**290**	5	235	**297**	2	254	0	**322**	5	259	0	**329**		259	0	**329**
	Through-Right		0							0				0				0	
	Right	27	0	0	2	29	0	2	32	0	0	2	34	0	0		34	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	168	0	**168**	0	168	**168**	0	184	0	**184**	0	184	0	**184**		184	0	**184**
	Left-Through		1							1				1				1	
	Through	82	0	250	2	84	252	2	92	0	276	2	94	0	278		94	0	278
	Through-Right		0							0				0				0	
	Right	64	1	32	1	65	33	0	70	1	35	1	71	1	36		71	1	36
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		559	*North-South:*		581	*North-South:*			630	*North-South:*			652		*North-South:*		652
		East-West:		458	*East-West:*		465	*East-West:*			506	*East-West:*			513		*East-West:*		513
		SUM:		1017	*SUM:*		1046	*SUM:*			1136	*SUM:*			1165		*SUM:*		1165
	VOLUME/CAPACITY *(V/C)* RATIO:			0.678			0.697				0.757				0.777				0.777
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.608			0.627				0.657				0.677				0.677
	LEVEL OF SERVICE (LOS):			B			B				B				B				B

PROJECT IMPACT

Change in *v/c* due to project:	0.020	Δ*v/c* after mitigation:	0.020
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Main St	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/18/2017
49	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			2			2			2				2				2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--		0	NB-- 0 SB-- EB-- 0 WB--			0	NB-- 0 SB-- EB-- 0 WB--			0	NB-- 0 SB-- EB-- 0 WB--			0
ATSAC-1 or ATSAC+ATCS-2?			1			1				2				2				2
Override Capacity			0			0				0				0				0
NORTHBOUND Left	72	1	72	0	72	72	0	79	1	79	0	79	1	79		79	1	79
Left-Through		0							0				0				0	
Through	399	0	**454**	11	410	**465**	21	459	0	**521**	11	470	0	**532**		470	0	**532**
Through-Right		1							1				1				1	
Right	55	0	0	0	55	0	2	62	0	0	0	62	0	0		62	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND Left	99	1	**99**	0	99	**99**	0	109	1	**109**	0	109	1	**109**		109	1	**109**
Left-Through		0							0				0				0	
Through	293	1	293	5	298	298	28	350	1	350	5	355	1	355		355	1	355
Through-Right		0							0				0				0	
Right	104	1	23	0	104	23	0	114	1	25	0	114	1	25		114	1	25
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND Left	162	1	162	0	162	162	0	178	1	178	0	178	1	178		178	1	178
Left-Through		0							0				0				0	
Through	1238	2	**437**	52	1290	**455**	21	1379	2	**487**	52	1431	2	**504**		1431	2	**504**
Through-Right		1							1				1				1	
Right	74	0	74	0	74	74	0	81	0	81	0	81	0	81		81	0	81
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND Left	63	1	**63**	0	63	**63**	1	70	1	**70**	0	70	1	**70**		70	1	**70**
Left-Through		0							0				0				0	
Through	811	2	313	75	886	338	20	910	2	350	75	985	2	375		985	2	375
Through-Right		1							1				1				1	
Right	127	0	127	0	127	127	0	139	0	139	0	139	0	139		139	0	139
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		553	*North-South:*		564	*North-South:*			630	*North-South:*			641	*North-South:*			641
	East-West:		500	*East-West:*		518	*East-West:*			557	*East-West:*			574	*East-West:*			574
	SUM:		1053	*SUM:*		1082	*SUM:*			1187	*SUM:*			1215	*SUM:*			1215
VOLUME/CAPACITY *(V/C)* RATIO:			0.702			0.721				0.791				0.810				0.810
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.632			0.651				0.691				0.710				0.710
LEVEL OF SERVICE (LOS):			B			B				B				C				C

PROJECT IMPACT

Change in *v/c* due to project:	0.019	Δ*v/c* after mitigation:	0.019
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	San Pedro St.	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/18/2017
50	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			4				4				4				4				4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0				0				0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				1				1				2				2				2				2
Override Capacity				0				0				0				0				0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	79	1	79	0	79	79	0	87	1	87	0	87	1	87		87	1	87
	Left-Through		0							0				0				0	
	Through	351	1	**351**	8	359	**359**	1	386	1	**386**	8	394	1	**394**		394	1	**394**
	Through-Right		0							0				0				0	
	Right	18	1	2	0	18	2	0	20	1	3	0	20	1	3		20	1	3
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	81	1	**81**	0	81	**81**	2	91	1	**91**	0	91	1	**91**		91	1	**91**
	Left-Through		0							0				0				0	
	Through	295	1	295	5	300	300	2	326	1	326	5	331	1	331		331	1	331
	Through-Right		0							0				0				0	
	Right	125	1	63	0	125	63	0	137	1	69	0	137	1	69		137	1	69
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	125	1	125	0	125	125	0	137	1	137	0	137	1	137		137	1	137
	Left-Through		0							0				0				0	
	Through	1180	2	**590**	52	1232	**616**	22	1317	2	**659**	52	1369	2	**685**		1369	2	**685**
	Through-Right		0							0				0				0	
	Right	72	1	33	0	72	33	0	79	1	36	0	79	1	36		79	1	36
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	32	1	**32**	0	32	**32**	0	35	1	**35**	0	35	1	**35**		35	1	**35**
	Left-Through		0							0				0				0	
	Through	772	2	300	75	847	325	21	868	2	336	75	943	2	361		943	2	361
	Through-Right		1							1				1				1	
	Right	127	0	127	0	127	127	1	140	0	140	0	140	0	140		140	0	140
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		432	*North-South:*		440	*North-South:*			477	*North-South:*			485	*North-South:*			485
		East-West:		622	*East-West:*		648	*East-West:*			694	*East-West:*			720	*East-West:*			720
		SUM:		1054	*SUM:*		1088	*SUM:*			1171	*SUM:*			1205	*SUM:*			1205
VOLUME/CAPACITY (*V/C*) RATIO:				0.767			0.791				0.852				0.876				0.876
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.697			0.721				0.752				0.776				0.776
LEVEL OF SERVICE (LOS):				B			C				C				C				C

PROJECT IMPACT

Change in *v/c* due to project:	0.024	Δ*v/c* after mitigation:	0.024
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	San Pedro St	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Shiva Delparastaran	Date:	1/18/2017
51	East-West Street:	120th St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	40	1	40	0	40	40	0	44	1	44	0	44	1	44		44	1	44
Left-Through		0							0				0				0	
Through	368	1	**368**	0	368	**368**	1	405	1	**405**	0	405	1	**405**		405	1	**405**
Through-Right		0							0				0				0	
Right	94	1	73	4	98	74	0	103	1	80	4	107	1	81		107	1	81
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	77	1	**77**	5	82	**82**	0	84	1	**84**	5	89	1	**89**		89	1	**89**
Left-Through		0							0				0				0	
Through	280	1	280	0	280	280	2	309	1	309	0	309	1	309		309	1	309
Through-Right		0							0				0				0	
Right	31	1	0	0	31	0	0	34	1	0	0	34	1	0		34	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	63	1	63	0	63	63	0	69	1	69	0	69	1	69		69	1	69
Left-Through		0							0				0				0	
Through	514	1	**514**	26	540	**540**	21	585	1	**585**	26	611	1	**611**		611	1	**611**
Through-Right		0							0				0				0	
Right	61	1	41	0	61	41	0	67	1	45	0	67	1	45		67	1	45
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	42	1	**42**	7	49	**49**	0	46	1	**46**	7	53	1	**53**		53	1	**53**
Left-Through		0							0				0				0	
Through	310	1	310	41	351	351	22	362	1	362	41	403	1	403		403	1	403
Through-Right		0							0				0				0	
Right	73	1	35	8	81	40	0	80	1	38	8	88	1	44		88	1	44
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		445	*North-South:*		450	*North-South:*			489	*North-South:*			494	*North-South:*			494
	East-West:		556	*East-West:*		589	*East-West:*			631	*East-West:*			664	*East-West:*			664
	SUM:		1001	*SUM:*		1039	*SUM:*			1120	*SUM:*			1158	*SUM:*			1158
VOLUME/CAPACITY *(V/C)* RATIO:			0.667			0.693				0.747				0.772				0.772
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.597			0.623				0.647				0.672				0.672
LEVEL OF SERVICE (LOS):			A			B				B				B				B

Opposed Ø'ing: N/S-1, E/W-2 or Both-3?																		
No. of Phases			2			2			2				2				2	
			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			1			1				2				2				2
Override Capacity			0			0				0				0				0

PROJECT IMPACT

Change in *v/c* due to project:	0.025	Δ*v/c* after mitigation:	0.025
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Compton Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
17	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			2			2			2				2				2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 EB-- 0	SB-- WB--	0 0	NB-- 0 EB-- 0	SB-- WB--	0 0	NB-- 0 EB-- 0	SB-- WB--	0 0		NB-- 0 EB-- 0	SB-- WB--	0 0		NB-- 0 EB-- 0	SB-- WB--	0 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	
NORTHBOUND																		
Left	99	1	99	174	273	**273**	11	120	1	120	174	294	1	**294**		294	1	**294**
Left-Through		0							0				0				0	
Through	307	1	**307**	84	391	391	5	342	1	**342**	84	426	1	426		426	1	426
Through-Right		0							0				0				0	
Right	169	1	137	69	238	181	2	187	1	150	69	256	1	194		256	1	194
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	216	1	**216**	4	220	220	2	239	1	**239**	4	243	1	243		243	1	243
Left-Through		0							0				0				0	
Through	260	0	362	53	313	**415**	2	287	0	400	53	340	0	**453**		340	0	**453**
Through-Right		1							1				1				1	
Right	102	0	0	0	102	0	1	113	0	0	0	113	0	0		113	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	79	1	79	0	79	79	1	88	1	88	0	88	1	88		88	1	88
Left-Through		0							0				0				0	
Through	1448	2	**512**	51	1499	**564**	6	1595	2	**566**	51	1646	2	**618**		1646	2	**618**
Through-Right		1							1				1				1	
Right	87	0	87	105	192	192	8	103	0	103	105	208	0	208		208	0	208
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	64	1	**64**	51	115	**115**	4	74	1	**74**	51	125	1	**125**		125	1	**125**
Left-Through		0							0				0				0	
Through	742	1	488	60	802	520	8	822	1	541	60	882	1	572		882	1	572
Through-Right		1							1				1				1	
Right	234	0	234	3	237	237	2	259	0	259	3	262	0	262		262	0	262
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		523	*North-South:*		688	*North-South:*			581	*North-South:*			747	*North-South:*			747
	East-West:		576	*East-West:*		679	*East-West:*			640	*East-West:*			743	*East-West:*			743
	SUM:		1099	*SUM:*		1367	*SUM:*			1221	*SUM:*			1490	*SUM:*			1490
VOLUME/CAPACITY *(V/C)* RATIO:			0.733			0.911				0.814				0.993				0.993
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.663			0.841				0.714				0.893				0.893
LEVEL OF SERVICE (LOS):			B			D				C				D				D

PROJECT IMPACT

Change in *v/c* due to project: 0.179 — Δ*v/c* after mitigation: 0.179

Significant impacted? YES — Fully mitigated? NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Wilmington Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
26	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			3			3			3			3			3			3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	161	1	**161**	33	194	**194**	4	181	1	**181**	33	214	1	**214**		214	1	**214**
	Left-Through		0							0				0				0	
	Through	456	1	252	71	527	287	20	520	1	286	71	591	1	322		591	1	322
	Through-Right		1							1				1				1	
	Right	47	0	47	0	47	47	0	52	0	52	0	52	0	52		52	0	52
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	30	1	30	0	30	30	0	33	1	33	0	33	1	33		33	1	33
	Left-Through		0							0				0				0	
	Through	624	1	**348**	305	929	**502**	53	738	1	**408**	305	1043	1	**563**		1043	1	**563**
	Through-Right		1							1				1				1	
	Right	71	0	71	4	75	75	0	78	0	78	4	82	0	82		82	0	82
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	138	1	138	10	148	148	0	151	1	151	10	161	1	161		161	1	161
	Left-Through		0							0				0				0	
	Through	15	1	15	0	15	15	0	16	1	16	0	16	1	16		16	1	16
	Through-Right		0							0				0				0	
	Right	379	1	**299**	78	457	**360**	1	417	1	**327**	78	495	1	**388**		495	1	**388**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**		0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		509	*North-South:*		696	*North-South:*			589	*North-South:*			777	*North-South:*			777
		East-West:		299	*East-West:*		360	*East-West:*			327	*East-West:*			388	*East-West:*			388
		SUM:		808	*SUM:*		1056	*SUM:*			916	*SUM:*			1165	*SUM:*			1165
VOLUME/CAPACITY *(V/C)* RATIO:				0.567			0.741				0.643				0.818				0.818
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.497			0.671				0.543				0.718				0.718
LEVEL OF SERVICE (LOS):				A			B				A				C				C

PROJECT IMPACT

Change in *v/c* due to project:	0.175	Δ*v/c* after mitigation:	0.175
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Imperial Hwy	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
36	East-West Street:	I-105 w/b Ramps	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			4			4			4				4				4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			1			1			1				1				1	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 3	WB--	0	EB-- 3	WB--	0	EB-- 0	WB--	0		EB-- 3	WB--	0		EB-- 3	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	549	1	**279**	217	766	**391**	4	606	1	**308**	217	823	1	**420**		823	1	**420**
	Left-Through		1							1				1				1	
	Through	8	0	279	7	15	391	0	9	0	308	7	16	0	420		16	0	420
	Through-Right		0							0				0				0	
	Right	274	1	109	10	284	118	0	301	1	119	10	311	1	129		311	1	129
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	9	0	9	0	9	9	0	10	0	10	0	10	0	10		10	0	10
	Left-Through		0							0				0				0	
	Through	22	0	**56**	0	22	**56**	0	24	0	**61**	0	24	0	**61**		24	0	**61**
	Through-Right		0							0				0				0	
	Right	25	0	0	0	25	0	0	27	0	0	0	27	0	0		27	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	47	1	47	18	65	65	0	52	1	52	18	70	1	70		70	1	70
	Left-Through		0							0				0				0	
	Through	1628	3	**407**	186	1814	**482**	48	1834	3	**459**	186	2020	3	**535**		2020	3	**535**
	Through-Right		1							1				1				1	
	Right	342	1	63	253	595	0	25	400	1	246	253	653	1	0		653	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	602	2	**331**	2	604	**332**	0	661	2	**364**	2	663	2	**365**		663	2	**365**
	Left-Through		0							0				0				0	
	Through	820	2	274	103	923	309	46	946	2	316	103	1049	2	351		1049	2	351
	Through-Right		1							1				1				1	
	Right	1	0	1	3	4	4	0	1	0	1	3	4	0	4		4	0	4
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*	335		*North-South:*	447		*North-South:*	369			*North-South:*	481			*North-South:*	481	
		East-West:	738		*East-West:*	814		*East-West:*	823			*East-West:*	900			*East-West:*	900	
		SUM:	1073		*SUM:*	1261		*SUM:*	1192			*SUM:*	1381			*SUM:*	1381	
VOLUME/CAPACITY *(V/C)* RATIO:			0.780			0.917			0.867				1.004				1.004	
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.710			0.847			0.767				0.904				0.904	
LEVEL OF SERVICE (LOS):			C			D			C				E				E	

PROJECT IMPACT

Change in *v/c* due to project:	0.137	Δ*v/c* after mitigation:	0.137
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Mona Blvd	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	9/30/2016
39	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	NB--	0 SB--	0	
	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	EB--	0 WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	186	0	**186**	3	189	**189**	0	204	0	**204**	3	207	0	**207**		207	0	**207**
	Left-Through		1							1				1				1	
	Through	68	0	254	7	75	264	0	75	0	279	7	82	0	289		82	0	289
	Through-Right		0							0				0				0	
	Right	249	1	172	5	254	173	0	273	1	189	5	278	1	190		278	1	190
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	55	0	55	0	55	55	0	60	0	60	0	60	0	60		60	0	60
	Left-Through		0							0				0				0	
	Through	69	0	**197**	4	73	**201**	0	76	0	**216**	4	80	0	**220**		80	0	**220**
	Through-Right		0							0				0				0	
	Right	73	0	0	0	73	0	0	80	0	0	0	80	0	0		80	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	95	1	95	0	95	95	0	104	1	104	0	104	1	104		104	1	104
	Left-Through		0							0				0				0	
	Through	1631	2	**624**	172	1803	**690**	48	1838	2	**701**	172	2010	2	**767**		2010	2	**767**
	Through-Right		1							1				1				1	
	Right	242	0	242	24	266	266	0	266	0	266	24	290	0	290		290	0	290
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	154	1	**154**	8	162	**162**	0	169	1	**169**	8	177	1	**177**		177	1	**177**
	Left-Through		0							0				0				0	
	Through	1121	2	388	105	1226	423	46	1276	2	441	105	1381	2	476		1381	2	476
	Through-Right		1							1				1				1	
	Right	43	0	43	0	43	43	0	47	0	47	0	47	0	47		47	0	47
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES			*North-South:*	383		*North-South:*	390		*North-South:*		420		*North-South:*		427		*North-South:*		427
			East-West:	778		*East-West:*	852		*East-West:*		870		*East-West:*		944		*East-West:*		944
			SUM:	1161		*SUM:*	1242		*SUM:*		1290		*SUM:*		1371		*SUM:*		1371
VOLUME/CAPACITY *(V/C)* RATIO:				0.774			0.828				0.860				0.914				0.914
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.704			0.758				0.760				0.814				0.814
LEVEL OF SERVICE (LOS):				C			C				C				D				D

PROJECT IMPACT

Change in *v/c* due to project:	0.054	Δ*v/c* after mitigation:	0.054
Significant impacted?	YES	Fully mitigated?	NO

Intersection LOS Analysis Sheets

City of Los Angeles
Mitigation

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	10/3/2016
7	East-West Street:	I-105 w/b Ramps	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			3			3			3				3				3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0		EB-- 0	WB--	0		EB-- 0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	301	2	**166**	29	330	**182**	5	335	2	**184**	29	364	2	**200**		364	2	**200**
	Left-Through		0							0				0				0	
	Through	1119	2	560	83	1202	601	16	1244	2	622	83	1327	2	664		1327	2	664
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through		0							0				0				0	
	Through	1086	2	543	30	1116	558	22	1214	2	607	30	1244	2	622		1244	2	622
	Through-Right		0							0				0				0	
	Right	734	1	**734**	26	760	**760**	1	806	1	**806**	26	832	1	**832**		832	1	**832**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	**0**		0	**0**	0	0	0	**0**	0	0	0	**0**		0	0	**0**
	Left-Through		0							0				0				0	
	Through	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	116	1	116	0	116	116	24	151	1	78	0	151	1	78		151	1	151
	Left-Through		0							1				1				0	
	Through	4	0	**188**	0	4	**188**	0	4	0	78	0	4	0	78		4	0	**206**
	Through-Right		1							0				0				1	
	Right	372	1	0	0	372	0	0	408	1	**408**	0	408	1	**408**		408	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES		*North-South:*	900		*North-South:*	942		*North-South:*		990		*North-South:*		1032		*North-South:*		1032
			East-West:	188		*East-West:*	188		*East-West:*		408		*East-West:*		408		*East-West:*		206
			SUM:	1088		*SUM:*	1130		*SUM:*		1398		*SUM:*		1440		*SUM:*		1238
	VOLUME/CAPACITY *(V/C)* RATIO:			0.764			0.793				0.981				1.011				0.869
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.694			0.723				0.881				0.911				0.769
	LEVEL OF SERVICE (LOS):			B			C				D				E				C

PROJECT IMPACT

Change in *v/c* due to project:	0.030	Δ*v/c* after mitigation:	-0.112
Significant impacted?	YES	Fully mitigated?	YES

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	10/3/2016
9	East-West Street:	120th St	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	67	1	**67**	0	67	67	0	74	1	74	0	74	1	74		74	1	74
Left-Through		0							0				0				0	
Through	686	2	343	7	693	**347**	20	773	1	**465**	7	780	1	**504**		780	2	**390**
Through-Right		0							1				1				0	
Right	134	1	71	72	206	131	9	156	0	156	72	228	0	228		228	1	142
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	176	1	176	112	288	**288**	0	193	1	**193**	112	305	1	**305**		305	1	**305**
Left-Through		0							0				0				0	
Through	856	1	**477**	3	859	479	26	965	1	553	3	968	1	555		968	1	555
Through-Right		1							1				1				1	
Right	98	0	98	0	98	98	33	141	0	141	0	141	0	141		141	0	141
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	119	1	**119**	0	119	**119**	13	144	1	**144**	0	144	1	**144**		144	1	**144**
Left-Through		0							0				0				0	
Through	464	1	255	91	555	300	6	515	1	282	91	606	1	328		606	1	328
Through-Right		1							1				1				1	
Right	45	0	45	0	45	45	0	49	0	49	0	49	0	49		49	0	49
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	126	1	126	24	150	150	10	148	1	148	24	172	1	172		172	1	172
Left-Through		0							0				0				0	
Through	530	1	**530**	50	580	**580**	3	585	1	**585**	50	635	1	**635**		635	1	**635**
Through-Right		0							0				0				0	
Right	212	1	124	53	265	121	0	233	1	137	53	286	1	134		286	1	134
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		544	*North-South:*		635	*North-South:*			658	*North-South:*			809	*North-South:*			695
	East-West:		649	*East-West:*		699	*East-West:*			729	*East-West:*			779	*East-West:*			779
	SUM:		1193	*SUM:*		1334	*SUM:*			1387	*SUM:*			1588	*SUM:*			1474
VOLUME/CAPACITY *(V/C)* RATIO:			0.795			0.889				0.925				1.059				0.983
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.725			0.819				0.825				0.959				0.883
LEVEL OF SERVICE (LOS):			C			D				D				E				D

No. of Phases	2	2	2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0
ATSAC-1 or ATSAC+ATCS-2?	1	1	2
Override Capacity	0	0	0

No. of Phases	2	2	2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0
ATSAC-1 or ATSAC+ATCS-2?	2	2	2
Override Capacity	0	0	0

No. of Phases	2	2	2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0	NB-- 0 SB-- 0 EB-- 0 WB-- 0
ATSAC-1 or ATSAC+ATCS-2?	2	2	2
Override Capacity	0	0	0

PROJECT IMPACT

Change in *v/c* due to project:	0.134	Δ*v/c* after mitigation:	0.058
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Compton Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	10/3/2016
17	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2			2			2			2	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	115	1	**115**	94	209	**209**	3	129	1	**129**	94	223	1	**223**		223	1	**223**
	Left-Through		0							0				0				0	
	Through	335	1	335	39	374	374	1	369	1	369	39	408	1	408		408	1	408
	Through-Right		0							0				0				0	
	Right	169	1	73	37	206	67	3	188	1	82	37	225	1	76		225	1	76
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	114	1	114	5	119	119	0	125	1	125	5	130	1	130		130	1	130
	Left-Through		0							0				0				0	
	Through	292	0	**427**	73	365	**500**	4	324	0	**472**	73	397	0	**545**		397	0	**545**
	Through-Right		1							1				1				1	
	Right	135	0	0	0	135	0	0	148	0	0	0	148	0	0		148	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	76	1	**76**	0	76	**76**	1	84	1	**84**	0	84	1	**84**		84	1	**84**
	Left-Through		0							0				0				0	
	Through	667	2	280	57	724	355	9	741	2	312	57	798	2	388		798	2	388
	Through-Right		1							1				1				1	
	Right	173	0	173	169	342	342	6	196	0	196	169	365	0	365		365	0	365
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	192	1	192	86	278	278	1	212	1	212	86	298	1	298		298	1	298
	Left-Through		0							0				0				0	
	Through	1504	2	**752**	26	1530	**765**	7	1657	1	**919**	26	1683	1	**932**		1683	2	**842**
	Through-Right		0							1				1				0	
	Right	163	1	106	1	164	105	1	180	0	180	1	181	0	181		181	1	116
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		542	*North-South:*		709	*North-South:*			601	*North-South:*			768	*North-South:*			768
		East-West:		828	*East-West:*		841	*East-West:*			1003	*East-West:*			1016	*East-West:*			926
		SUM:		1370	*SUM:*		1550	*SUM:*			1604	*SUM:*			1784	*SUM:*			1694
VOLUME/CAPACITY *(V/C)* RATIO:				0.913			1.033				1.069				1.189				1.129
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.843			0.963				0.969				1.089				1.029
LEVEL OF SERVICE (LOS):				D			E				E				F				F

PROJECT IMPACT

Change in *v/c* due to project:	0.120	Δ*v/c* after mitigation:	0.060
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - AM Peak Hour

I/S #:	North-South Street:	Imperial Hwy	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	10/3/2016
36	East-West Street:	I-105 w/b Ramps	Projection Year:	2035	Peak Hour:	AM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			4			4			4				4				4	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			1			1			1				1				1	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB-- 0		NB-- 0	SB-- 0		NB-- 0	SB-- 0			NB-- 0	SB-- 0			NB-- 0	SB-- 0		
	EB-- 3	WB-- 0		EB-- 3	WB-- 0		EB-- 0	WB-- 0			EB-- 3	WB-- 0			EB-- 3	WB-- 0		
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	539	2	183	294	833	284	3	594	1	303	294	888	1	455		888	2	303
	Left-Through		1							1				1				1	
	Through	11	0	183	9	20	284	0	12	0	303	9	21	0	455		21	0	303
	Through-Right		0							0				0				0	
	Right	137	1	0	12	149	0	0	150	1	0	12	162	1	0		162	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	7	0	7	0	7	7	0	8	0	8	0	8	0	8		8	0	8
	Left-Through		0							0				0				0	
	Through	34	0	109	0	34	109	0	37	0	120	0	37	0	120		37	0	120
	Through-Right		0							0				0				0	
	Right	68	0	0	0	68	0	0	75	0	0	0	75	0	0		75	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	51	1	51	7	58	58	0	56	1	56	7	63	1	63		63	1	63
	Left-Through		0							0				0				0	
	Through	1012	3	253	89	1101	293	19	1129	3	282	89	1218	3	322		1218	3	322
	Through-Right		1							1				1				1	
	Right	224	1	41	139	363	0	5	251	1	100	139	390	1	0		390	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	742	2	408	2	744	409	0	814	2	448	2	816	2	449		816	2	449
	Left-Through		0							0				0				0	
	Through	1346	2	453	142	1488	502	30	1507	2	507	142	1649	2	556		1649	2	556
	Through-Right		1							1				1				1	
	Right	13	0	13	4	17	17	0	14	0	14	4	18	0	18		18	0	18
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		292	North-South:		393	North-South:			423	North-South:			575	North-South:			423
		East-West:		661	East-West:		702	East-West:			730	East-West:			771	East-West:			771
		SUM:		953	SUM:		1095	SUM:			1153	SUM:			1346	SUM:			1194
VOLUME/CAPACITY (V/C) RATIO:				0.693			0.796				0.839				0.979				0.868
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.623			0.726				0.739				0.879				0.768
LEVEL OF SERVICE (LOS):				B			C				C				D				C

PROJECT IMPACT

Change in *v/c* due to project: 0.140 — $\Delta v/c$ after mitigation: 0.029

Significant impacted? YES — Fully mitigated? YES

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	10/3/2016
7	East-West Street:	I-105 w/b Ramps	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			3			3			3				3				3		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2		
Override Capacity			0			0			0				0				0		

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	329	2	**181**	88	417	**229**	27	388	2	**213**	88	476	2	**262**		476	2	**262**
	Left-Through		0							0				0				0	
	Through	944	2	472	78	1022	511	45	1081	2	541	78	1159	2	580		1159	2	580
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through		0							0				0				0	
	Through	1000	2	500	32	1032	516	46	1143	2	572	32	1175	2	588		1175	2	588
	Through-Right		0							0				0				0	
	Right	556	1	**556**	55	611	**611**	5	615	1	**615**	55	670	1	**670**		670	1	**670**
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	**0**		0	**0**	0	0	0	**0**	0	0	0	**0**		0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	**0**
	Through-Right		0							0				0				0	
	Right	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	265	1	265	0	265	265	41	332	1	168	0	332	1	168		332	1	**332**
	Left-Through		0							1				1				0	
	Through	4	0	**270**	0	4	**270**	0	4	0	168	0	4	0	168		4	0	296
	Through-Right		1							0				0				1	
	Right	536	1	0	0	536	0	0	588	1	**588**	0	588	1	**588**		588	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		737	North-South:		840	North-South:			828	North-South:			932	North-South:			932
		East-West:		270	East-West:		270	East-West:			588	East-West:			588	East-West:			332
		SUM:		1007	SUM:		1110	SUM:			1416	SUM:			1520	SUM:			1264
VOLUME/CAPACITY (V/C) RATIO:				0.707			0.779				0.994				1.067				0.887
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.637			0.709				0.894				0.967				0.787
LEVEL OF SERVICE (LOS):				B			C				D				E				C

PROJECT IMPACT

Change in v/c due to project:	0.073	Δv/c after mitigation:	-0.107
Significant impacted?	YES	Fully mitigated?	YES

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Central Ave	Year of Count:	2016	Ambient Growth (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	10/3/2016
9	East-West Street:	120th St	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			2			2			2				2				2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB-- 0	WB--	0		EB-- 0	WB--	0		EB-- 0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1			2				2				2	
Override Capacity			0			0			0				0				0	

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	144	1	**144**	0	144	**144**	0	158	1	**158**	0	158	1	158		158	1	**158**
	Left-Through		0							0				0				0	
	Through	845	2	423	5	850	425	52	979	1	573	5	984	1	**595**		984	2	492
	Through-Right		0							1				1				0	
	Right	132	1	48	40	172	55	21	166	0	166	40	206	0	206		206	1	66
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	75	1	75	78	153	153	0	82	1	82	78	160	1	**160**		160	1	160
	Left-Through		0							0				0				0	
	Through	770	1	**445**	6	776	**448**	30	875	1	**547**	6	881	1	550		881	1	**550**
	Through-Right		1							1				1				1	
	Right	120	0	120	0	120	120	87	219	0	219	0	219	0	219		219	0	219
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	76	1	**76**	0	76	**76**	67	150	1	**150**	0	150	1	**150**		150	1	**150**
	Left-Through		0							0				0				0	
	Through	225	1	182	71	296	218	8	255	1	204	71	326	1	240		326	1	240
	Through-Right		1							1				1				1	
	Right	139	0	139	0	139	139	0	153	0	153	0	153	0	153		153	0	153
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	169	1	169	65	234	234	31	216	1	216	65	281	1	281		281	1	281
	Left-Through		0							0				0				0	
	Through	475	1	**475**	115	590	**590**	11	532	1	**532**	115	647	1	**647**		647	1	**647**
	Through-Right		0							0				0				0	
	Right	80	1	43	136	216	140	0	88	1	47	136	224	1	144		224	1	144
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*	589		*North-South:*	592		*North-South:*	705			*North-South:*	755			*North-South:*	708		
		East-West:	551		*East-West:*	666		*East-West:*	682			*East-West:*	797			*East-West:*	797		
		SUM:	1140		*SUM:*	1258		*SUM:*	1387			*SUM:*	1552			*SUM:*	1505		
VOLUME/CAPACITY (*V/C*) RATIO:			0.760			0.839			0.925				1.035				1.003		
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.690			0.769			0.825				0.935				0.903		
LEVEL OF SERVICE (LOS):			B			C			D				E				E		

PROJECT IMPACT

Change in *v/c* due to project:	0.110	Δ*v/c* after mitigation:	0.078
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Compton Ave	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	10/3/2016
17	East-West Street:	Imperial Hwy	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				1				1				2			2				2
Override Capacity				0				0				0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	99	1	99	174	273	**273**	11	120	1	120	174	294	1	**294**		294	1	**294**
	Left-Through		0							0				0				0	
	Through	307	1	**307**	84	391	391	5	342	1	**342**	84	426	1	426		426	1	426
	Through-Right		0							0				0				0	
	Right	169	1	137	69	238	181	2	187	1	150	69	256	1	194		256	1	194
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	216	1	**216**	4	220	220	2	239	1	**239**	4	243	1	243		243	1	243
	Left-Through		0							0				0				0	
	Through	260	0	362	53	313	**415**	2	287	0	400	53	340	0	**453**		340	0	**453**
	Through-Right		1							1				1				1	
	Right	102	0	0	0	102	0	1	113	0	0	0	113	0	0		113	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	79	1	79	0	79	79	1	88	1	88	0	88	1	88		88	1	88
	Left-Through		0							0				0				0	
	Through	1448	2	**512**	51	1499	**564**	6	1595	2	**566**	51	1646	2	**618**		1646	2	**618**
	Through-Right		1							1				1				1	
	Right	87	0	87	105	192	192	8	103	0	103	105	208	0	208		208	0	208
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	64	1	**64**	51	115	**115**	4	74	1	**74**	51	125	1	**125**		125	1	**125**
	Left-Through		0							0				0				0	
	Through	742	2	371	60	802	401	8	822	1	541	60	882	1	572		882	2	441
	Through-Right		0							1				1				0	
	Right	234	1	126	3	237	127	2	259	0	259	3	262	0	262		262	1	141
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		523	*North-South:*		688	*North-South:*			581	*North-South:*			747	*North-South:*			747
		East-West:		576	*East-West:*		679	*East-West:*			640	*East-West:*			743	*East-West:*			743
		SUM:		1099	*SUM:*		1367	*SUM:*			1221	*SUM:*			1490	*SUM:*			1490
VOLUME/CAPACITY (*V/C*) RATIO:				0.733			0.911				0.814				0.993				0.993
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.663			0.841				0.714				0.893				0.893
LEVEL OF SERVICE (LOS):				B			D				C				D				D

PROJECT IMPACT

Change in *v/c* due to project:	0.179	Δ*v/c* after mitigation:	0.179
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet

Willowbrook TOD Specific Plan

Weekday - PM Peak Hour

I/S #:	North-South Street:	Imperial Hwy	Year of Count:	2016	Ambient Growth: (%):	0.49	Conducted by:	Saeedeh Farivar	Date:	10/3/2016
36	East-West Street:	I-105 w/b Ramps	Projection Year:	2035	Peak Hour:	PM	Reviewed by:		Project:	Willowbrook

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			4			4				4				4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			1			1				1				1				1
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB-- 0	SB--	0		NB-- 0	SB--	0		NB-- 0	SB--	0	
	EB-- 3	WB--	0	EB-- 3	WB--	0	EB-- 0	WB--	0		EB-- 3	WB--	0		EB-- 3	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?			1			1				2				2				2
Override Capacity			0			0				0				0				0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	549	2	**186**	217	766	**260**	4	606	1	**308**	217	823	1	**420**		823	2	**280**
	Left-Through		1							1				1				1	
	Through	8	0	186	7	15	260	0	9	0	308	7	16	0	420		16	0	280
	Through-Right		0							0				0				0	
	Right	274	1	109	10	284	118	0	301	1	119	10	311	1	129		311	1	129
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	9	0	9	0	9	**9**	0	10	0	**10**	0	10	0	**10**		10	0	10
	Left-Through		0							0				0				0	
	Through	22	0	**56**	0	22	**56**	0	24	0	**61**	0	24	0	**61**		24	0	**61**
	Through-Right		0							0				0				0	
	Right	25	0	0	0	25	0	0	27	0	0	0	27	0	0		27	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	47	1	**47**	18	65	65	0	52	1	**52**	18	70	1	**70**		70	1	70
	Left-Through		0							0				0				0	
	Through	1628	3	**407**	186	1814	**482**	48	1834	3	**459**	186	2020	3	**535**		2020	3	**535**
	Through-Right		1							1				1				1	
	Right	342	1	156	253	595	0	25	400	1	246	253	653	1	0		653	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	602	2	**331**	2	604	**332**	0	661	2	**364**	2	663	2	**365**		663	2	**365**
	Left-Through		0							0				0				0	
	Through	820	2	274	103	923	309	46	946	2	316	103	1049	2	351		1049	2	351
	Through-Right		1							1				1				1	
	Right	1	0	1	3	4	4	0	1	0	1	3	4	0	4		4	0	4
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*	242		*North-South:*	316		*North-South:*			369	*North-South:*			481	*North-South:*			341
		East-West:	738		*East-West:*	814		*East-West:*			823	*East-West:*			900	*East-West:*			900
		SUM:	980		*SUM:*	1130		*SUM:*			1192	*SUM:*			1381	*SUM:*			1241
VOLUME/CAPACITY *(V/C)* RATIO:			0.713			0.822					0.867				1.004				0.903
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.643			0.752					0.767				0.904				0.803
LEVEL OF SERVICE (LOS):			B			C					C				E				D

PROJECT IMPACT

Change in *v/c* due to project: 0.137 — Δ*v/c* after mitigation: 0.036

Significant impacted? YES — Fully mitigated? NO

Appendix E

Freeway Off-Ramp Analysis

Freeway Off-Ramp Analysis

Existing Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	944	241	97	1139	702	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.970	
Flt Protected			0.950		0.962	
Satd. Flow (prot)	3471	1553	1736	4988	3307	0
Flt Permitted			0.950		0.962	
Satd. Flow (perm)	3471	1553	1736	4988	3307	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		223			38	
Link Speed (mph)	30			30	30	
Link Distance (ft)	568			630	393	
Travel Time (s)	12.9			14.3	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1026	262	105	1238	763	192
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1026	262	105	1238	955	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	4	2	3	8	2	
Permitted Phases		4				
Minimum Split (s)	22.0	22.0	10.0	22.0	22.0	
Total Split (s)	41.0	37.0	14.0	55.0	37.0	
Total Split (%)	44.6%	40.2%	15.2%	59.8%	40.2%	
Maximum Green (s)	35.0	32.0	8.0	49.0	32.0	
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	5.0	6.0	6.0	5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	35.0	73.0	8.0	49.0	32.0	
Actuated g/C Ratio	0.38	0.79	0.09	0.53	0.35	
v/c Ratio	0.78	0.21	0.70	0.47	0.81	
Control Delay	30.0	0.9	66.3	14.1	32.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	30.0	0.9	66.3	14.1	32.9	
LOS	C	A	E	B	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	24.1			18.2	32.9	
Approach LOS	C			B	C	

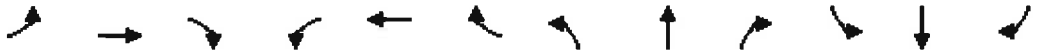
Intersection Summary			
Area Type:	Other		
Cycle Length: 92			
Actuated Cycle Length: 92			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 24.2		Intersection LOS: C	
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 NB Off-ramp & El Segundo Blvd- Existing AM

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1026	262	105	1238	955
v/c Ratio	0.78	0.21	0.70	0.47	0.81
Control Delay	30.0	0.9	66.3	14.1	32.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	0.9	66.3	14.1	32.9
Queue Length 50th (ft)	326	4	73	185	297
Queue Length 95th (ft)	421	20	#167	228	392
Internal Link Dist (ft)	488			550	313
Turn Bay Length (ft)					
Base Capacity (vph)	1320	1278	150	2656	1175
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.78	0.21	0.70	0.47	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



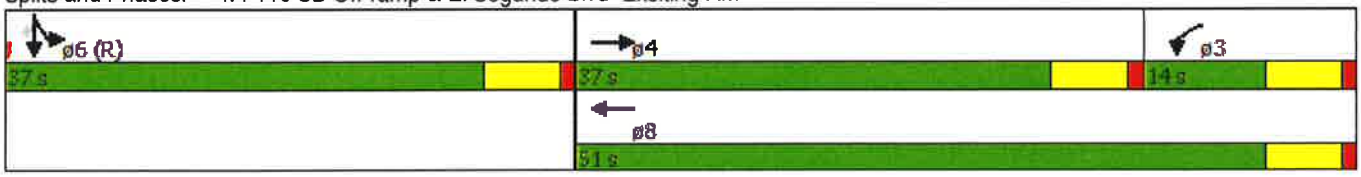
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	702	541	304	1656	0	0	0	0	511	0	839
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Frt		0.935									0.867	0.850
Flt Protected				0.950						0.950	0.994	
Satd. Flow (prot)	0	4663	0	1736	4988	0	0	0	0	1649	1433	1475
Flt Permitted				0.950						0.950	0.994	
Satd. Flow (perm)	0	4663	0	1736	4988	0	0	0	0	1649	1433	1475
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		244									112	112
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		802			783			340			320	
Travel Time (s)		18.2			17.8			7.7			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	763	588	330	1800	0	0	0	0	555	0	912
Shared Lane Traffic (%)										10%		47%
Lane Group Flow (vph)	0	1351	0	330	1800	0	0	0	0	499	485	483
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		4		3	8					6	6	
Permitted Phases												6
Minimum Split (s)		22.0		10.0	22.0					22.0	22.0	22.0
Total Split (s)		37.0		14.0	51.0					37.0	37.0	37.0
Total Split (%)		42.0%		15.9%	58.0%					42.0%	42.0%	42.0%
Maximum Green (s)		31.0		8.0	45.0					31.0	31.0	31.0
Yellow Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	6.0
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0			5.0					5.0	5.0	5.0
Flash Dont Walk (s)		11.0			11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0					0	0	0
Act Effct Green (s)		31.0		8.0	45.0					31.0	31.0	31.0
Actuated g/C Ratio		0.35		0.09	0.51					0.35	0.35	0.35
v/c Ratio		0.75		2.10	0.71					0.86	0.84	0.82
Control Delay		23.4		540.8	18.4					43.4	35.2	32.8
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		23.4		540.8	18.4					43.4	35.2	32.8
LOS		C		F	B					D	D	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		23.4			99.3						37.2	
Approach LOS		C			F						D	

Intersection Summary

Area Type:	Other		
Cycle Length: 88			
Actuated Cycle Length: 88			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 2.10			
Intersection Signal Delay: 60.2		Intersection LOS: E	
Intersection Capacity Utilization 80.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 SB Off-ramp & El Segundo Blvd- Exsiting AM



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1351	330	1800	499	485	483
v/c Ratio	0.75	2.10	0.71	0.86	0.84	0.82
Control Delay	23.4	540.8	18.4	43.4	35.2	32.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	540.8	18.4	43.4	35.2	32.8
Queue Length 50th (ft)	236	~352	317	320	254	237
Queue Length 95th (ft)	302	#546	383	#546	#492	#457
Internal Link Dist (ft)	722		703		240	
Turn Bay Length (ft)						
Base Capacity (vph)	1800	157	2550	580	577	592
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	2.10	0.71	0.86	0.84	0.82

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

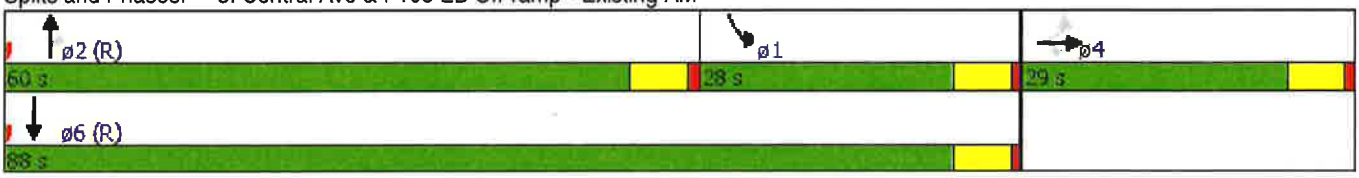
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	664	13	538	0	0	0	0	768	335	567	669	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.91	0.95	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.00
Frt		0.943	0.850						0.850			
Flt Protected	0.950	0.971								0.950		
Satd. Flow (prot)	1633	1508	1461	0	0	0	0	4940	1538	3335	3438	0
Flt Permitted	0.950	0.971								0.950		
Satd. Flow (perm)	1633	1508	1461	0	0	0	0	4940	1538	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23	283						364			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	722	14	585	0	0	0	0	835	364	616	727	0
Shared Lane Traffic (%)	37%		29%									
Lane Group Flow (vph)	455	451	415	0	0	0	0	835	364	616	727	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Minimum Split (s)	22.0	22.0	22.0					22.0	22.0	10.0	22.0	
Total Split (s)	29.0	29.0	29.0					60.0	60.0	28.0	88.0	
Total Split (%)	24.8%	24.8%	24.8%					51.3%	51.3%	23.9%	75.2%	
Maximum Green (s)	23.0	23.0	23.0					54.0	54.0	22.0	82.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0					6.0	6.0	6.0	6.0	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0	5.0					5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0	11.0					11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0		0	
Act Effct Green (s)	23.0	23.0	23.0					54.0	54.0	22.0	82.0	
Actuated g/C Ratio	0.20	0.20	0.20					0.46	0.46	0.19	0.70	
v/c Ratio	1.42	1.44	0.81					0.37	0.40	0.98	0.30	
Control Delay	241.1	247.5	27.6					21.0	3.3	79.6	7.0	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay	241.1	247.5	27.6					21.0	3.3	79.6	7.0	
LOS	F	F	C					C	A	E	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		176.2						15.6			40.3	
Approach LOS		F						B			D	

Intersection Summary

Area Type: Other
Cycle Length: 117
Actuated Cycle Length: 117
Offset: 68 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 1.44
Intersection Signal Delay: 79.1 Intersection LOS: E
Intersection Capacity Utilization 76.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: Central Ave & I-105 EB Off-ramp - Existing AM



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	455	451	415	835	364	616	727
v/c Ratio	1.42	1.44	0.81	0.37	0.40	0.98	0.30
Control Delay	241.1	247.5	27.6	21.0	3.3	79.6	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	241.1	247.5	27.6	21.0	3.3	79.6	7.0
Queue Length 50th (ft)	~584	~593	121	175	0	289	117
Queue Length 95th (ft)	#842	#867	#330	215	62	#431	149
Internal Link Dist (ft)		575		502			478
Turn Bay Length (ft)							
Base Capacity (vph)	321	314	514	2280	905	627	2409
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.42	1.44	0.81	0.37	0.40	0.98	0.30

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

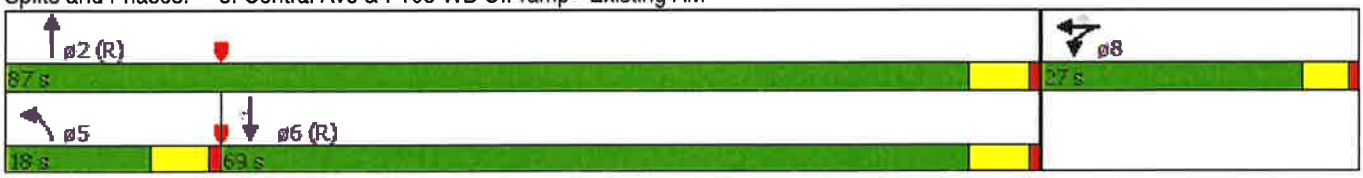
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	116	4	372	301	1119	0	0	1086	734
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950	0.955		0.950					
Satd. Flow (prot)	0	0	0	1633	1642	1538	3335	3438	0	0	3438	1538
Flt Permitted				0.950	0.955		0.950					
Satd. Flow (perm)	0	0	0	1633	1642	1538	3335	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						113						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	126	4	404	327	1216	0	0	1180	798
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	66	64	404	327	1216	0	0	1180	798
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Minimum Split (s)				21.1	21.1	21.1	10.0	22.0			22.0	22.0
Total Split (s)				27.0	27.0	27.0	18.0	87.0			69.0	69.0
Total Split (%)				23.7%	23.7%	23.7%	15.8%	76.3%			60.5%	60.5%
Maximum Green (s)				22.0	22.0	22.0	12.0	81.0			63.0	63.0
Yellow Time (s)				4.0	4.0	4.0	5.0	5.0			5.0	5.0
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	6.0	6.0			6.0	6.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Walk Time (s)				5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)				11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)				22.0	22.0	22.0	12.0	81.0			63.0	63.0
Actuated g/C Ratio				0.19	0.19	0.19	0.11	0.71			0.55	0.55
v/c Ratio				0.21	0.20	1.04	0.93	0.50			0.62	0.94
Control Delay				40.8	40.7	89.8	84.6	8.2			19.2	44.3
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				40.8	40.7	89.8	84.6	8.2			19.2	44.3
LOS				D	D	F	F	A			B	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					77.9			24.4			29.3	
Approach LOS					E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 33.8		Intersection LOS: C	
Intersection Capacity Utilization 71.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 WB Off-ramp - Existing AM



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	66	64	404	327	1216	1180	798
v/c Ratio	0.21	0.20	1.04	0.93	0.50	0.62	0.94
Control Delay	40.8	40.7	89.8	84.6	8.2	19.2	44.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	40.7	89.8	84.6	8.2	19.2	44.3
Queue Length 50th (ft)	51	50	~299	149	222	354	622
Queue Length 95th (ft)	104	101	#536	#254	274	437	#968
Internal Link Dist (ft)		665			502	478	
Turn Bay Length (ft)							
Base Capacity (vph)	315	316	388	351	2442	1899	849
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.20	1.04	0.93	0.50	0.62	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

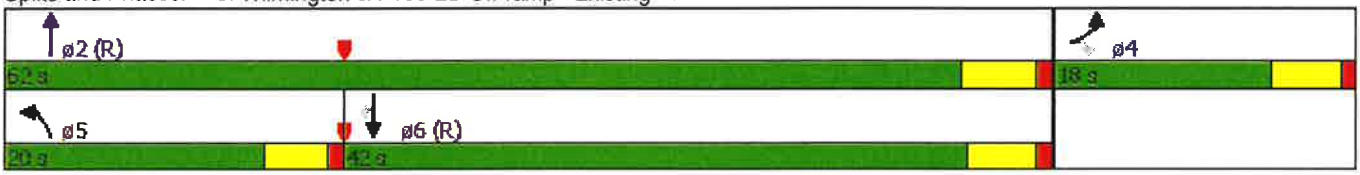
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	411	537	328	650	662	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	120			0
Storage Lanes	1	1	1			2
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.88
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	4940	3438	2707
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	4940	3438	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		420				528
Link Speed (mph)	30			30	30	
Link Distance (ft)	1070			942	903	
Travel Time (s)	24.3			21.4	20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	447	584	357	707	720	528
Shared Lane Traffic (%)						
Lane Group Flow (vph)	447	584	357	707	720	528
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Minimum Split (s)	21.1	21.1	8.7	21.4	21.1	21.1
Total Split (s)	18.0	18.0	20.0	62.0	42.0	42.0
Total Split (%)	22.5%	22.5%	25.0%	77.5%	52.5%	52.5%
Maximum Green (s)	12.9	12.9	15.3	56.6	36.9	36.9
Yellow Time (s)	4.1	4.1	3.7	4.4	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.7	5.4	5.1	5.1
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?						
Walk Time (s)	5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	12.9	12.9	15.3	56.6	36.9	36.9
Actuated g/C Ratio	0.16	0.16	0.19	0.71	0.46	0.46
v/c Ratio	1.61	0.97	1.09	0.20	0.45	0.34
Control Delay	319.4	42.9	109.2	4.2	15.8	1.9

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	319.4	42.9	109.2	4.2	15.8	1.9
LOS	F	D	F	A	B	A
Approach Delay	162.8			39.4	10.0	
Approach LOS	F			D	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 1.61			
Intersection Signal Delay: 66.5		Intersection LOS: E	
Intersection Capacity Utilization 71.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington & I-105 EB Off-ramp - Existing AM

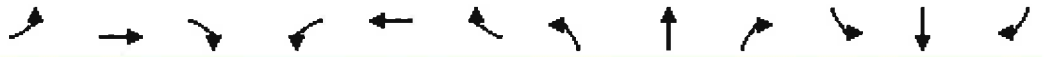


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	447	584	357	707	720	528
v/c Ratio	1.61	0.97	1.09	0.20	0.45	0.34
Control Delay	319.4	42.9	109.2	4.2	15.8	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	319.4	42.9	109.2	4.2	15.8	1.9
Queue Length 50th (ft)	~391	101	~244	43	148	0
Queue Length 95th (ft)	#600	#361	#437	58	202	32
Internal Link Dist (ft)	990			862	823	
Turn Bay Length (ft)			120			
Base Capacity (vph)	277	600	328	3495	1585	1533
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.61	0.97	1.09	0.20	0.45	0.34

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

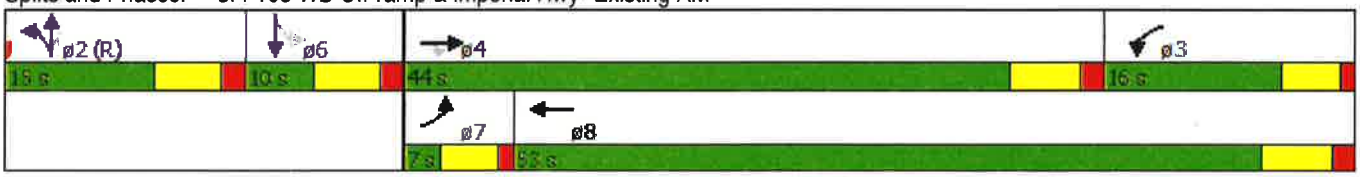


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	1012	224	742	1346	13	539	11	137	7	37	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	340		0	0		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	0.81	0.97	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.997	0.850		0.999				0.850		0.918	
Flt Protected	0.950			0.950			0.950	0.954			0.997	
Satd. Flow (prot)	1719	5845	1246	3335	4935	0	1633	1640	1538	0	1656	0
Flt Permitted	0.950			0.950			0.950	0.954			0.944	
Satd. Flow (perm)	1719	5845	1246	3335	4935	0	1633	1640	1538	0	1568	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6	219		3				245		69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1132			1053			585			490	
Travel Time (s)		25.7			23.9			13.3			11.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	1100	243	807	1463	14	586	12	149	8	40	74
Shared Lane Traffic (%)			10%				49%					
Lane Group Flow (vph)	55	1124	219	807	1477	0	299	299	149	0	122	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		2	2			6	
Permitted Phases			4						2	6		
Minimum Split (s)	8.7	21.9	21.9	8.7	21.9		21.6	21.6	21.6	21.6	21.6	
Total Split (s)	7.0	44.0	44.0	16.0	53.0		15.0	15.0	15.0	10.0	10.0	
Total Split (%)	8.2%	51.8%	51.8%	18.8%	62.4%		17.6%	17.6%	17.6%	11.8%	11.8%	
Maximum Green (s)	2.3	38.1	38.1	11.3	47.1		9.4	9.4	9.4	4.4	4.4	
Yellow Time (s)	3.7	4.4	4.4	3.7	4.4		4.1	4.1	4.1	4.1	4.1	
All-Red Time (s)	1.0	1.5	1.5	1.0	1.5		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.7	5.9	5.9	4.7	5.9		5.6	5.6	5.6		5.6	
Lead/Lag	Lead	Lead	Lead	Lag	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	2.3	38.1	38.1	11.3	47.1		9.4	9.4	9.4		4.4	
Actuated g/C Ratio	0.03	0.45	0.45	0.13	0.55		0.11	0.11	0.11		0.05	
v/c Ratio	1.20	0.43	0.32	1.82	0.54		1.66	1.65	0.39		0.84	
Control Delay	236.5	16.6	3.5	404.5	12.9		349.0	345.1	3.2		63.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	236.5	16.6	3.5	404.5	12.9		349.0	345.1	3.2		63.1	
LOS	F	B	A	F	B		F	F	A		E	
Approach Delay		23.2			151.3			278.5			63.1	
Approach LOS		C			F			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.82			
Intersection Signal Delay: 130.4		Intersection LOS: F	
Intersection Capacity Utilization 72.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: I-105 WB Off-ramp & Imperial Hwy- Existing AM

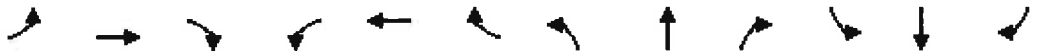


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	55	1124	219	807	1477	299	299	149	122
v/c Ratio	1.20	0.43	0.32	1.82	0.54	1.66	1.65	0.39	0.84
Control Delay	236.5	16.6	3.5	404.5	12.9	349.0	345.1	3.2	63.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	236.5	16.6	3.5	404.5	12.9	349.0	345.1	3.2	63.1
Queue Length 50th (ft)	~43	145	0	~407	205	~296	~295	0	34
Queue Length 95th (ft)	#132	181	55	#541	252	#491	#491	4	#149
Internal Link Dist (ft)		1052			973		505		410
Turn Bay Length (ft)	100			340					
Base Capacity (vph)	46	2623	679	443	2735	180	181	387	146
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.20	0.43	0.32	1.82	0.54	1.66	1.65	0.39	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

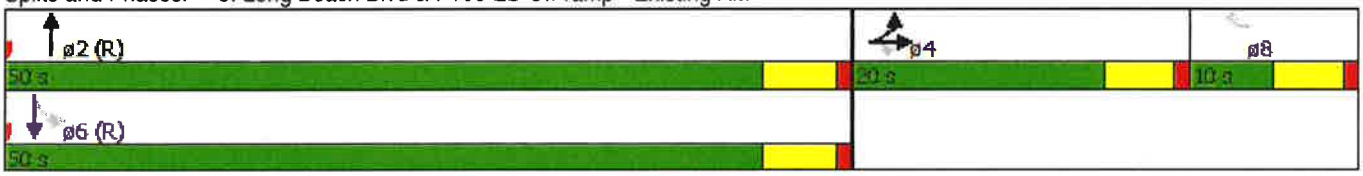


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	614	3	346	0	0	11	0	907	14	30	602	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		110	0		0	0		0	180		0
Storage Lanes	1		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850			0.865		0.998				
Flt Protected	0.950	0.953								0.950		
Satd. Flow (prot)	1633	1638	1538	0	0	1565	0	4930	0	1719	3438	0
Flt Permitted	0.950	0.953								0.252		
Satd. Flow (perm)	1633	1638	1538	0	0	1565	0	4930	0	456	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			288			102		4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		817			156			598			555	
Travel Time (s)		18.6			3.5			13.6			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	667	3	376	0	0	12	0	986	15	33	654	0
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	333	337	376	0	0	12	0	1001	0	33	654	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	Perm			Perm		NA		Perm	NA	
Protected Phases	4	4						2			6	
Permitted Phases			4			8				6		
Minimum Split (s)	21.1	21.1	21.1			21.1		21.4		21.4	21.4	
Total Split (s)	20.0	20.0	20.0			10.0		50.0		50.0	50.0	
Total Split (%)	25.0%	25.0%	25.0%			12.5%		62.5%		62.5%	62.5%	
Maximum Green (s)	14.9	14.9	14.9			4.9		44.6		44.6	44.6	
Yellow Time (s)	4.1	4.1	4.1			4.1		4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0			1.0		1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.1			5.1		5.4		5.4	5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0			5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0			0		0		0	0	
Act Effct Green (s)	14.9	14.9	14.9			4.9		44.6		44.6	44.6	
Actuated g/C Ratio	0.19	0.19	0.19			0.06		0.56		0.56	0.56	
v/c Ratio	1.10	1.10	0.72			0.06		0.36		0.13	0.34	
Control Delay	113.5	116.4	17.3			0.6		10.2		10.1	10.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Delay	113.5	116.4	17.3			0.6		10.2		10.1	10.3	
LOS	F	F	B			A		B		B	B	
Approach Delay		79.9						10.2			10.3	
Approach LOS		E						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 36.7		Intersection LOS: D	
Intersection Capacity Utilization 51.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 EB Off-ramp - Existing AM



Lane Group	EBL	EBT	EBR	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	333	337	376	12	1001	33	654
v/c Ratio	1.10	1.10	0.72	0.06	0.36	0.13	0.34
Control Delay	113.5	116.4	17.3	0.6	10.2	10.1	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.5	116.4	17.3	0.6	10.2	10.1	10.3
Queue Length 50th (ft)	~241	~246	46	0	112	9	104
Queue Length 95th (ft)	#438	#445	#172	0	144	26	143
Internal Link Dist (ft)		737			518		475
Turn Bay Length (ft)			110			180	
Base Capacity (vph)	304	305	520	191	2750	254	1916
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.10	1.10	0.72	0.06	0.36	0.13	0.34

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

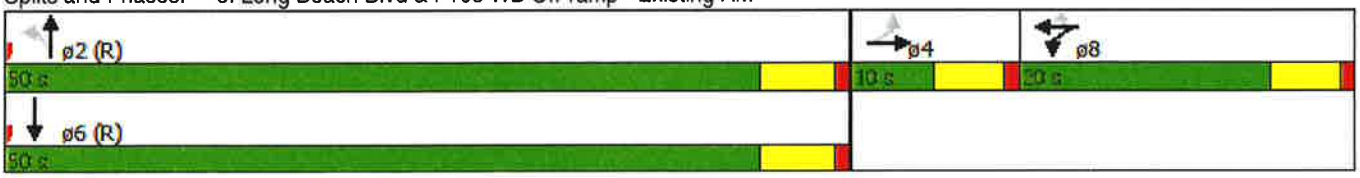
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	0	5	165	27	792	11	1123	0	0	1218	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.964			0.860	0.850					0.995	
Flt Protected		0.964		0.950			0.950					
Satd. Flow (prot)	0	1682	0	1719	1478	1461	1719	4940	0	0	4915	0
Flt Permitted		0.709		0.950			0.151					
Satd. Flow (perm)	0	1237	0	1719	1478	1461	273	4940	0	0	4915	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			133	133					11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	0	5	179	29	861	12	1221	0	0	1324	48
Shared Lane Traffic (%)						49%						
Lane Group Flow (vph)	0	19	0	179	451	439	12	1221	0	0	1372	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Split	NA	Perm	Perm	NA			NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4					8	2					
Minimum Split (s)	21.1	21.1		21.1	21.1	21.1	31.4	31.4			21.4	
Total Split (s)	10.0	10.0		20.0	20.0	20.0	50.0	50.0			50.0	
Total Split (%)	12.5%	12.5%		25.0%	25.0%	25.0%	62.5%	62.5%			62.5%	
Maximum Green (s)	4.9	4.9		14.9	14.9	14.9	44.6	44.6			44.6	
Yellow Time (s)	4.1	4.1		4.1	4.1	4.1	4.4	4.4			4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0			1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)		5.1		5.1	5.1	5.1	5.4	5.4			5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		4.9		14.9	14.9	14.9	44.6	44.6			44.6	
Actuated g/C Ratio		0.06		0.19	0.19	0.19	0.56	0.56			0.56	
v/c Ratio		0.11		0.56	1.18	1.16	0.08	0.44			0.50	
Control Delay		1.3		37.2	127.9	119.7	9.9	11.0			11.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		1.3		37.2	127.9	119.7	9.9	11.0			11.5	
LOS		A		D	F	F	A	B			B	
Approach Delay		1.3			109.4			11.0			11.5	
Approach LOS		A			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 1.18			
Intersection Signal Delay: 39.6		Intersection LOS: D	
Intersection Capacity Utilization 70.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 WB Off-ramp - Existing AM

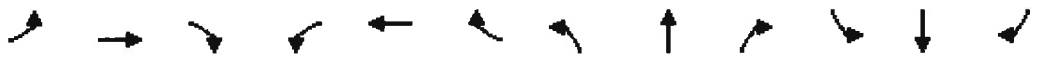


Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	19	179	451	439	12	1221	1372
v/c Ratio	0.11	0.56	1.18	1.16	0.08	0.44	0.50
Control Delay	1.3	37.2	127.9	119.7	9.9	11.0	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.3	37.2	127.9	119.7	9.9	11.0	11.5
Queue Length 50th (ft)	0	98	~272	~257	3	145	169
Queue Length 95th (ft)	0	175	#500	#482	13	183	212
Internal Link Dist (ft)	135		493			413	470
Turn Bay Length (ft)				140	150		
Base Capacity (vph)	171	320	383	380	152	2754	2744
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.56	1.18	1.16	0.08	0.44	0.50

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

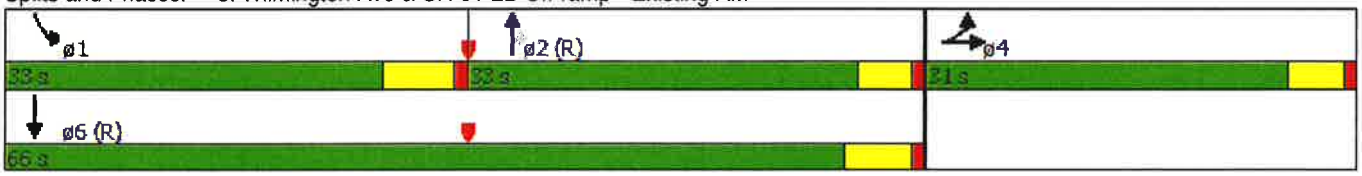


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	771	445	225	0	0	0	0	973	217	162	495	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt		0.965							0.850			
Flt Protected	0.950	0.985								0.950		
Satd. Flow (prot)	1564	3130	0	0	0	0	0	3438	2707	3335	3438	0
Flt Permitted	0.950	0.985								0.950		
Satd. Flow (perm)	1564	3130	0	0	0	0	0	3438	2707	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		38							236			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	838	484	245	0	0	0	0	1058	236	176	538	0
Shared Lane Traffic (%)	37%											
Lane Group Flow (vph)	528	1039	0	0	0	0	0	1058	236	176	538	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Minimum Split (s)	21.1	21.1						21.4	21.4	10.0	26.5	
Total Split (s)	31.0	31.0						33.0	33.0	33.0	66.0	
Total Split (%)	32.0%	32.0%						34.0%	34.0%	34.0%	68.0%	
Maximum Green (s)	26.0	26.0						28.0	28.0	27.0	60.0	
Yellow Time (s)	4.0	4.0						4.0	4.0	5.0	5.0	
All-Red Time (s)	1.0	1.0						1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0						5.0	5.0	6.0	6.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0						5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0						11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0						0	0		0	
Act Effct Green (s)	26.0	26.0						28.0	28.0	27.0	60.0	
Actuated g/C Ratio	0.27	0.27						0.29	0.29	0.28	0.62	
v/c Ratio	1.26	1.20						1.07	0.25	0.19	0.25	
Control Delay	167.6	133.1						82.5	4.3	27.4	8.7	
Queue Delay	0.0	0.0						0.0	0.0	0.0	0.0	
Total Delay	167.6	133.1						82.5	4.3	27.4	8.7	
LOS	F	F						F	A	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		144.7						68.2			13.3	
Approach LOS		F						E			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 97			
Actuated Cycle Length: 97			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay: 90.8		Intersection LOS: F	
Intersection Capacity Utilization 72.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington Ave & SR-91 EB Off-ramp - Existing AM



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	528	1039	1058	236	176	538
v/c Ratio	1.26	1.20	1.07	0.25	0.19	0.25
Control Delay	167.6	133.1	82.5	4.3	27.4	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	167.6	133.1	82.5	4.3	27.4	8.7
Queue Length 50th (ft)	~542	~506	~458	0	51	86
Queue Length 95th (ft)	#805	#669	#612	35	83	117
Internal Link Dist (ft)		510	324			339
Turn Bay Length (ft)						
Base Capacity (vph)	419	866	992	949	928	2126
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.26	1.20	1.07	0.25	0.19	0.25

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

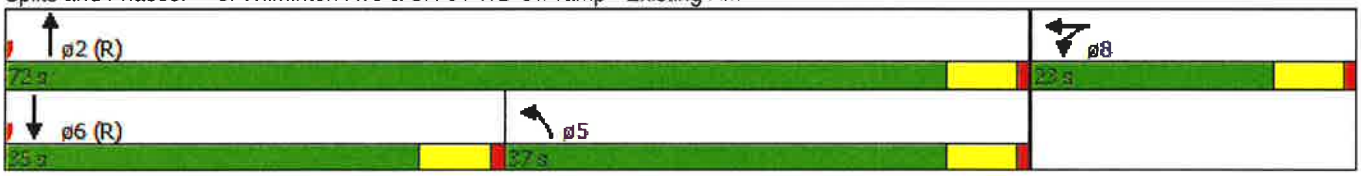
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	175	90	576	536	1234	0	0	455	482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.91	0.91
Frt					0.874						0.923	
Flt Protected				0.950	0.999		0.950					
Satd. Flow (prot)	0	0	0	1564	2875	0	1719	3438	0	0	4560	0
Flt Permitted				0.950	0.999		0.950					
Satd. Flow (perm)	0	0	0	1564	2875	0	1719	3438	0	0	4560	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					84						257	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	190	98	626	583	1341	0	0	495	524
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	171	743	0	583	1341	0	0	1019	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases												
Minimum Split (s)				22.0	22.0		10.0	22.0			22.0	
Total Split (s)				23.0	23.0		37.0	72.0			35.0	
Total Split (%)				24.2%	24.2%		38.9%	75.8%			36.8%	
Maximum Green (s)				17.0	17.0		31.0	66.0			29.0	
Yellow Time (s)				5.0	5.0		5.0	5.0			5.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				5.0	5.0			5.0			5.0	
Flash Dont Walk (s)				11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				17.0	17.0		31.0	66.0			29.0	
Actuated g/C Ratio				0.18	0.18		0.33	0.69			0.31	
v/c Ratio				0.61	1.90dr		1.04	0.56			0.65	
Control Delay				46.4	167.3		82.2	8.4			23.2	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				46.4	167.3		82.2	8.4			23.2	
LOS				D	F		F	A			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					144.7			30.7			23.2	
Approach LOS					F			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.27			
Intersection Signal Delay: 55.8		Intersection LOS: E	
Intersection Capacity Utilization 81.8%		ICU Level of Service D	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilminton Ave & SR-91 WB Off-ramp - Existing AM



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	171	743	583	1341	1019
v/c Ratio	0.61	1.90dr	1.04	0.56	0.65
Control Delay	46.4	167.3	82.2	8.4	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	46.4	167.3	82.2	8.4	23.2
Queue Length 50th (ft)	126	~349	~459	222	173
Queue Length 95th (ft)	218	#497	#705	282	230
Internal Link Dist (ft)		500		324	339
Turn Bay Length (ft)					
Base Capacity (vph)	279	583	560	2388	1570
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	1.27	1.04	0.56	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1473	443	268	707	318	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.932	
Flt Protected			0.950		0.973	
Satd. Flow (prot)	3471	1553	1736	4988	3214	0
Flt Permitted			0.950		0.973	
Satd. Flow (perm)	3471	1553	1736	4988	3214	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		81			221	
Link Speed (mph)	30			30	30	
Link Distance (ft)	568			630	393	
Travel Time (s)	12.9			14.3	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1601	482	291	768	346	288
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1601	482	291	768	634	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	4	2	3	8	2	
Permitted Phases		4				
Minimum Split (s)	22.0	21.1	10.0	22.0	21.1	
Total Split (s)	44.0	24.0	19.0	63.0	24.0	
Total Split (%)	50.6%	27.6%	21.8%	72.4%	27.6%	
Maximum Green (s)	38.0	19.0	13.0	57.0	19.0	
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	5.0	6.0	6.0	5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	38.0	63.0	13.0	57.0	19.0	
Actuated g/C Ratio	0.44	0.72	0.15	0.66	0.22	
v/c Ratio	1.06	0.42	1.12	0.24	0.73	
Control Delay	65.2	5.1	130.0	6.3	25.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	65.2	5.1	130.0	6.3	25.7	
LOS	E	A	F	A	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	51.3			40.3	25.7	
Approach LOS	D			D	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 87			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 43.9		Intersection LOS: D	
Intersection Capacity Utilization 87.2%		ICU Level of Service E	
Analysis Period (min) 15			

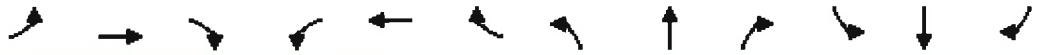
Splits and Phases: 4: I-110 NB Off-ramp & El Segundo Blvd- Existing PM

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1601	482	291	768	634
v/c Ratio	1.06	0.42	1.12	0.24	0.73
Control Delay	65.2	5.1	130.0	6.3	25.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	5.1	130.0	6.3	25.7
Queue Length 50th (ft)	~614	81	~223	66	129
Queue Length 95th (ft)	#775	137	#409	86	202
Internal Link Dist (ft)	488			550	313
Turn Bay Length (ft)					
Base Capacity (vph)	1516	1146	259	3268	874
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.06	0.42	1.12	0.24	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1508	607	157	883	0	0	0	0	437	0	424
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Frt		0.957									0.920	0.850
Flt Protected				0.950						0.950	0.977	
Satd. Flow (prot)	0	4773	0	1736	4988	0	0	0	0	1649	1494	1475
Flt Permitted				0.950						0.950	0.977	
Satd. Flow (perm)	0	4773	0	1736	4988	0	0	0	0	1649	1494	1475
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		145									107	158
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		802			783			340			320	
Travel Time (s)		18.2			17.8			7.7			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1639	660	171	960	0	0	0	0	475	0	461
Shared Lane Traffic (%)										31%		36%
Lane Group Flow (vph)	0	2299	0	171	960	0	0	0	0	328	313	295
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		4		3	8					6	6	
Permitted Phases												6
Minimum Split (s)		22.0		10.0	22.0					22.0	22.0	22.0
Total Split (s)		48.0		18.0	66.0					26.0	26.0	26.0
Total Split (%)		52.2%		19.6%	71.7%					28.3%	28.3%	28.3%
Maximum Green (s)		42.0		12.0	60.0					20.0	20.0	20.0
Yellow Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	6.0
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0			5.0					5.0	5.0	5.0
Flash Dont Walk (s)		11.0			11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0					0	0	0
Act Effct Green (s)		42.0		12.0	60.0					20.0	20.0	20.0
Actuated g/C Ratio		0.46		0.13	0.65					0.22	0.22	0.22
v/c Ratio		1.02		0.76	0.30					0.92	0.77	0.66
Control Delay		48.1		60.9	7.2					67.5	36.1	23.2
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		48.1		60.9	7.2					67.5	36.1	23.2
LOS		D		E	A					E	D	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		48.1			15.3						43.0	
Approach LOS		D			B						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 92			
Actuated Cycle Length: 92			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 38.5		Intersection LOS: D	
Intersection Capacity Utilization 82.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 SB Off-ramp & El Segundo Blvd- Exsiting PM

Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	2299	171	960	328	313	295
v/c Ratio	1.02	0.76	0.30	0.92	0.77	0.66
Control Delay	48.1	60.9	7.2	67.5	36.1	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.1	60.9	7.2	67.5	36.1	23.2
Queue Length 50th (ft)	~576	117	94	236	150	88
Queue Length 95th (ft)	#724	#237	118	#437	#320	206
Internal Link Dist (ft)	722		703		240	
Turn Bay Length (ft)						
Base Capacity (vph)	2257	226	3253	358	408	444
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.76	0.30	0.92	0.77	0.66

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

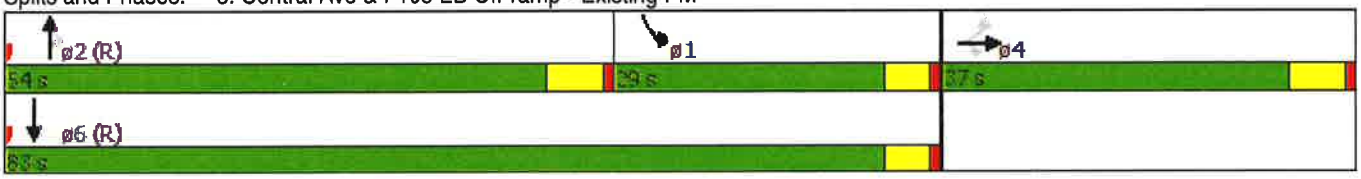
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	477	240	378	0	0	0	0	825	385	463	793	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.91	0.95	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.00
Frt		0.984	0.850						0.850			
Flt Protected	0.950	0.987								0.950		
Satd. Flow (prot)	1633	1599	1461	0	0	0	0	4940	1538	3335	3438	0
Flt Permitted	0.950	0.987								0.950		
Satd. Flow (perm)	1633	1599	1461	0	0	0	0	4940	1538	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5	192						181			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	518	261	411	0	0	0	0	897	418	503	862	0
Shared Lane Traffic (%)	21%		11%									
Lane Group Flow (vph)	409	415	366	0	0	0	0	897	418	503	862	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Minimum Split (s)	22.0	22.0	22.0					22.0	22.0	9.0	22.0	
Total Split (s)	37.0	37.0	37.0					54.0	54.0	29.0	83.0	
Total Split (%)	30.8%	30.8%	30.8%					45.0%	45.0%	24.2%	69.2%	
Maximum Green (s)	31.0	31.0	31.0					48.0	48.0	24.0	78.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0					6.0	6.0	5.0	5.0	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0	5.0					5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0	11.0					11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0		0	
Act Effct Green (s)	31.0	31.0	31.0					48.0	48.0	24.0	78.0	
Actuated g/C Ratio	0.26	0.26	0.26					0.40	0.40	0.20	0.65	
v/c Ratio	0.97	1.00	0.71					0.45	0.58	0.75	0.39	
Control Delay	81.9	88.0	26.9					27.3	18.8	53.4	10.4	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay	81.9	88.0	26.9					27.3	18.8	53.4	10.4	
LOS	F	F	C					C	B	D	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		67.1						24.6			26.2	
Approach LOS		E						C			C	

Intersection Summary

Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 28 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 38.3		Intersection LOS: D	
Intersection Capacity Utilization 74.6%		ICU Level of Service D	
Analysis Period (min) 15			

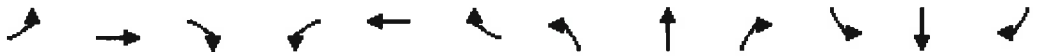
Splits and Phases: 3: Central Ave & I-105 EB Off-ramp - Existing PM



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	409	415	366	897	418	503	862
v/c Ratio	0.97	1.00	0.71	0.45	0.58	0.75	0.39
Control Delay	81.9	88.0	26.9	27.3	18.8	53.4	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.9	88.0	26.9	27.3	18.8	53.4	10.4
Queue Length 50th (ft)	396	420	155	220	167	229	181
Queue Length 95th (ft)	#653	#703	303	268	293	303	226
Internal Link Dist (ft)		575		502			478
Turn Bay Length (ft)							
Base Capacity (vph)	421	416	519	1976	723	667	2234
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	1.00	0.71	0.45	0.58	0.75	0.39

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



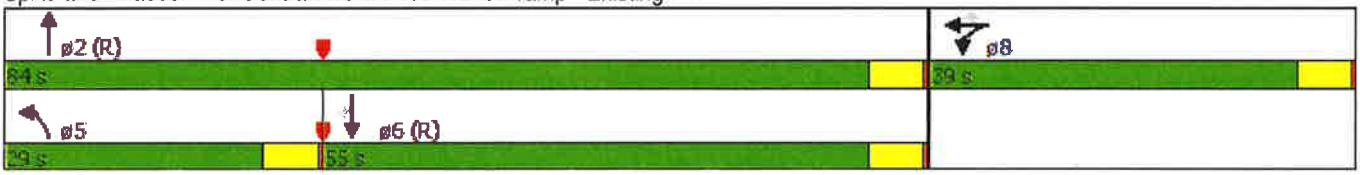
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	265	0	536	329	944	0	0	1000	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950	0.950		0.950					
Satd. Flow (prot)	0	0	0	1633	1633	1538	3335	3438	0	0	3438	1538
Flt Permitted				0.950	0.950		0.950					
Satd. Flow (perm)	0	0	0	1633	1633	1538	3335	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						131						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	288	0	583	358	1026	0	0	1087	604
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	144	144	583	358	1026	0	0	1087	604
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Minimum Split (s)				21.5	21.5	21.5	9.5	21.5			21.5	21.5
Total Split (s)				39.0	39.0	39.0	29.0	84.0			55.0	55.0
Total Split (%)				31.7%	31.7%	31.7%	23.6%	68.3%			44.7%	44.7%
Maximum Green (s)				33.5	33.5	33.5	23.5	78.5			49.5	49.5
Yellow Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)				0.5	0.5	0.5	0.5	0.5			0.5	0.5
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.5	5.5	5.5	5.5	5.5			5.5	5.5
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Walk Time (s)				5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)				11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)				33.5	33.5	33.5	23.5	78.5			49.5	49.5
Actuated g/C Ratio				0.27	0.27	0.27	0.19	0.64			0.40	0.40
v/c Ratio				0.32	0.32	1.13	0.56	0.47			0.79	0.98
Control Delay				38.2	38.2	114.4	49.0	12.3			37.1	67.8
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				38.2	38.2	114.4	49.0	12.3			37.1	67.8
LOS				D	D	F	D	B			D	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					89.2			21.8			48.1	
Approach LOS					F			C			D	

Intersection Summary

Area Type:	Other		
Cycle Length: 123			
Actuated Cycle Length: 123			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 48.0		Intersection LOS: D	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 WB Off-ramp - Existing PM



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	144	144	583	358	1026	1087	604
v/c Ratio	0.32	0.32	1.13	0.56	0.47	0.79	0.98
Control Delay	38.2	38.2	114.4	49.0	12.3	37.1	67.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	38.2	114.4	49.0	12.3	37.1	67.8
Queue Length 50th (ft)	115	115	~551	161	247	471	560
Queue Length 95th (ft)	192	192	#824	221	303	575	#856
Internal Link Dist (ft)		665			502	478	
Turn Bay Length (ft)							
Base Capacity (vph)	444	444	514	637	2194	1383	618
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.32	1.13	0.56	0.47	0.79	0.98

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

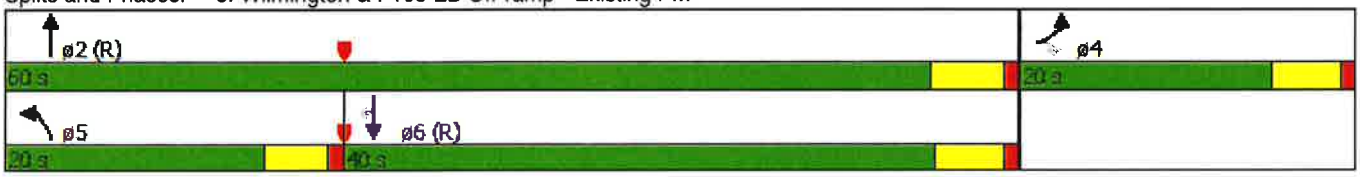
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	331	181	329	911	534	425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	120			0
Storage Lanes	1	1	1			2
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.88
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	4940	3438	2707
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	4940	3438	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		197				462
Link Speed (mph)	30			30	30	
Link Distance (ft)	1070			942	903	
Travel Time (s)	24.3			21.4	20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	360	197	358	990	580	462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	360	197	358	990	580	462
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Minimum Split (s)	21.1	21.1	8.7	21.4	21.1	21.1
Total Split (s)	20.0	20.0	20.0	60.0	40.0	40.0
Total Split (%)	25.0%	25.0%	25.0%	75.0%	50.0%	50.0%
Maximum Green (s)	14.9	14.9	15.3	54.6	34.9	34.9
Yellow Time (s)	4.1	4.1	3.7	4.4	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.7	5.4	5.1	5.1
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?						
Walk Time (s)	5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	14.9	14.9	15.3	54.6	34.9	34.9
Actuated g/C Ratio	0.19	0.19	0.19	0.68	0.44	0.44
v/c Ratio	1.12	0.44	1.09	0.29	0.39	0.32
Control Delay	121.8	8.1	110.2	5.3	16.3	2.1

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	121.8	8.1	110.2	5.3	16.3	2.1
LOS	F	A	F	A	B	A
Approach Delay	81.6			33.2	10.0	
Approach LOS	F			C	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 34.1		Intersection LOS: C	
Intersection Capacity Utilization 63.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington & I-105 EB Off-ramp - Existing PM

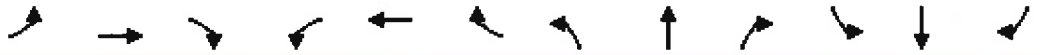


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	360	197	358	990	580	462
v/c Ratio	1.12	0.44	1.09	0.29	0.39	0.32
Control Delay	121.8	8.1	110.2	5.3	16.3	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	121.8	8.1	110.2	5.3	16.3	2.1
Queue Length 50th (ft)	~253	0	~245	73	119	0
Queue Length 95th (ft)	#446	64	#438	94	167	32
Internal Link Dist (ft)	990			862	823	
Turn Bay Length (ft)			120			
Base Capacity (vph)	320	446	328	3371	1499	1441
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.13	0.44	1.09	0.29	0.39	0.32

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

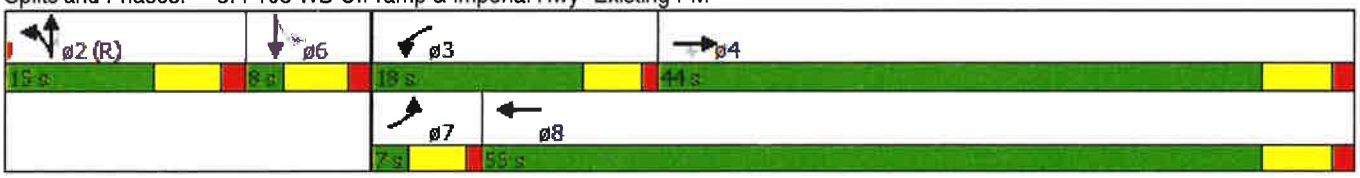


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1628	342	602	820	1	549	8	274	9	22	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	340		0	0		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	0.81	0.97	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.997	0.850						0.850		0.940	
Flt Protected	0.950			0.950			0.950	0.954			0.992	
Satd. Flow (prot)	1719	5845	1246	3335	4940	0	1633	1640	1538	0	1687	0
Flt Permitted	0.950			0.950			0.950	0.954			0.970	
Satd. Flow (perm)	1719	5845	1246	3335	4940	0	1633	1640	1538	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5	335						230		27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1132			1053			585			490	
Travel Time (s)		25.7			23.9			13.3			11.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	1770	372	654	891	1	597	9	298	10	24	27
Shared Lane Traffic (%)			10%				49%					
Lane Group Flow (vph)	51	1807	335	654	892	0	304	302	298	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		2	2			6	
Permitted Phases			4						2	6		
Minimum Split (s)	8.7	21.9	21.9	8.7	21.9		21.6	21.6	21.6	21.6	21.6	
Total Split (s)	7.0	44.0	44.0	18.0	55.0		15.0	15.0	15.0	8.0	8.0	
Total Split (%)	8.2%	51.8%	51.8%	21.2%	64.7%		17.6%	17.6%	17.6%	9.4%	9.4%	
Maximum Green (s)	2.3	38.1	38.1	13.3	49.1		9.4	9.4	9.4	2.4	2.4	
Yellow Time (s)	3.7	4.4	4.4	3.7	4.4		4.1	4.1	4.1	4.1	4.1	
All-Red Time (s)	1.0	1.5	1.5	1.0	1.5		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.7	5.9	5.9	4.7	5.9		5.6	5.6	5.6		5.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	2.3	38.1	38.1	13.3	49.1		9.4	9.4	9.4		2.4	
Actuated g/C Ratio	0.03	0.45	0.45	0.16	0.58		0.11	0.11	0.11		0.03	
v/c Ratio	1.11	0.69	0.45	1.26	0.31		1.69	1.67	0.80		0.85	
Control Delay	209.9	20.4	3.9	162.7	9.6		360.7	352.0	27.4		100.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	209.9	20.4	3.9	162.7	9.6		360.7	352.0	27.4		100.2	
LOS	F	C	A	F	A		F	F	C		F	
Approach Delay		22.3			74.4			247.9			100.2	
Approach LOS		C			E			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.69			
Intersection Signal Delay: 83.8		Intersection LOS: F	
Intersection Capacity Utilization 78.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: I-105 WB Off-ramp & Imperial Hwy- Existing PM

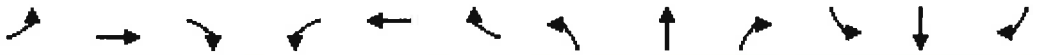


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	51	1807	335	654	892	304	302	298	61
v/c Ratio	1.11	0.69	0.45	1.26	0.31	1.69	1.67	0.80	0.85
Control Delay	209.9	20.4	3.9	162.7	9.6	360.7	352.0	27.4	100.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	209.9	20.4	3.9	162.7	9.6	360.7	352.0	27.4	100.2
Queue Length 50th (ft)	~38	274	0	~273	99	~304	~301	41	22
Queue Length 95th (ft)	#123	328	67	#400	127	#500	#495	#192	#111
Internal Link Dist (ft)		1052			973		505		410
Turn Bay Length (ft)	100			340					
Base Capacity (vph)	46	2622	743	521	2853	180	181	374	72
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.69	0.45	1.26	0.31	1.69	1.67	0.80	0.85

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

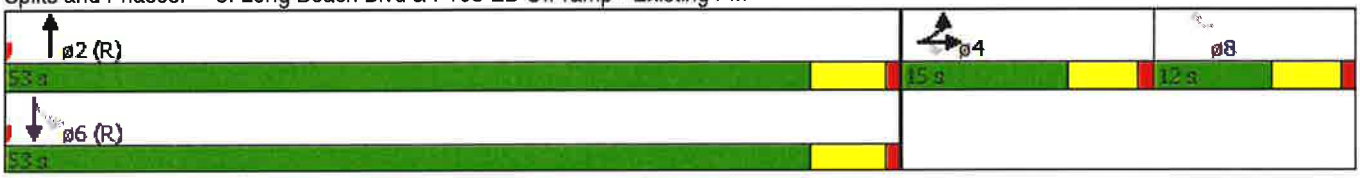


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	328	1	215	0	0	14	0	991	4	14	920	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		110	0		0	0		0	180		0
Storage Lanes	1		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850			0.865		0.999				
Flt Protected	0.950	0.953								0.950		
Satd. Flow (prot)	1633	1638	1538	0	0	1565	0	4935	0	1719	3438	0
Flt Permitted	0.950	0.953								0.232		
Satd. Flow (perm)	1633	1638	1538	0	0	1565	0	4935	0	420	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			234			102		1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		817			156			598			555	
Travel Time (s)		18.6			3.5			13.6			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	357	1	234	0	0	15	0	1077	4	15	1000	0
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	178	180	234	0	0	15	0	1081	0	15	1000	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	Perm			Perm		NA		Perm	NA	
Protected Phases	4	4						2			6	
Permitted Phases			4			8				6		
Minimum Split (s)	21.1	21.1	21.1			21.1		21.4		21.4	21.4	
Total Split (s)	15.0	15.0	15.0			12.0		53.0		53.0	53.0	
Total Split (%)	18.8%	18.8%	18.8%			15.0%		66.3%		66.3%	66.3%	
Maximum Green (s)	9.9	9.9	9.9			6.9		47.6		47.6	47.6	
Yellow Time (s)	4.1	4.1	4.1			4.1		4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0			1.0		1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.1			5.1		5.4		5.4	5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0			5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0			0		0		0	0	
Act Effct Green (s)	9.9	9.9	9.9			6.9		47.6		47.6	47.6	
Actuated g/C Ratio	0.12	0.12	0.12			0.09		0.60		0.60	0.60	
v/c Ratio	0.88	0.89	0.59			0.07		0.37		0.06	0.49	
Control Delay	76.1	77.8	11.7			0.6		8.8		7.6	10.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Delay	76.1	77.8	11.7			0.6		8.8		7.6	10.3	
LOS	E	E	B			A		A		A	B	
Approach Delay		51.2						8.8			10.2	
Approach LOS		D						A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 EB Off-ramp - Existing PM



Lane Group	EBL	EBT	EBR	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	178	180	234	15	1081	15	1000
v/c Ratio	0.88	0.89	0.59	0.07	0.37	0.06	0.49
Control Delay	76.1	77.8	11.7	0.6	8.8	7.6	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.1	77.8	11.7	0.6	8.8	7.6	10.3
Queue Length 50th (ft)	112	113	0	0	111	3	163
Queue Length 95th (ft)	#255	#258	75	0	142	13	217
Internal Link Dist (ft)		737			518		475
Turn Bay Length (ft)			110			180	
Base Capacity (vph)	202	202	395	228	2936	249	2045
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.89	0.59	0.07	0.37	0.06	0.49

Intersection Summary

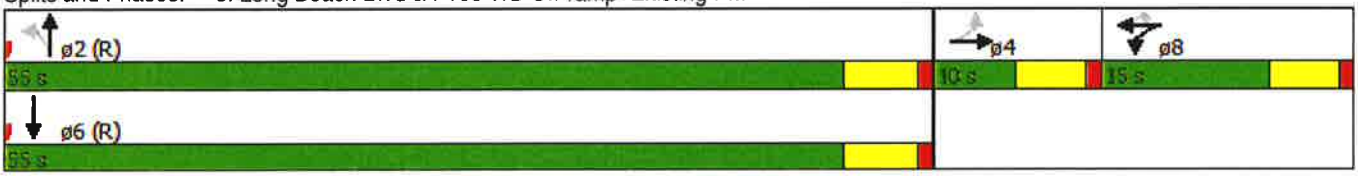
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	0	9	285	9	987	15	1064	0	0	1221	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.964			0.853	0.850					0.998	
Flt Protected		0.964		0.950			0.950					
Satd. Flow (prot)	0	1682	0	1719	1466	1461	1719	4940	0	0	4930	0
Flt Permitted		0.709		0.950			0.167					
Satd. Flow (perm)	0	1237	0	1719	1466	1461	302	4940	0	0	4930	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			138	138					6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	0	10	310	10	1073	16	1157	0	0	1327	22
Shared Lane Traffic (%)						50%						
Lane Group Flow (vph)	0	38	0	310	547	536	16	1157	0	0	1349	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Split	NA	Perm	Perm	NA			NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4					8	2					
Minimum Split (s)	21.1	21.1		21.1	21.1	21.1	31.4	31.4			21.4	
Total Split (s)	10.0	10.0		15.0	15.0	15.0	55.0	55.0			55.0	
Total Split (%)	12.5%	12.5%		18.8%	18.8%	18.8%	68.8%	68.8%			68.8%	
Maximum Green (s)	4.9	4.9		9.9	9.9	9.9	49.6	49.6			49.6	
Yellow Time (s)	4.1	4.1		4.1	4.1	4.1	4.4	4.4			4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0			1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)		5.1		5.1	5.1	5.1	5.4	5.4			5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		4.9		9.9	9.9	9.9	49.6	49.6			49.6	
Actuated g/C Ratio		0.06		0.12	0.12	0.12	0.62	0.62			0.62	
v/c Ratio		0.22		1.46	1.81	1.78	0.09	0.38			0.44	
Control Delay		3.0		261.9	398.6	385.2	7.5	8.0			8.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		3.0		261.9	398.6	385.2	7.5	8.0			8.5	
LOS		A		F	F	F	A	A			A	
Approach Delay		3.0			363.0			8.0			8.5	
Approach LOS		A			F			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.81			
Intersection Signal Delay: 133.2		Intersection LOS: F	
Intersection Capacity Utilization 77.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 WB Off-ramp- Existing PM

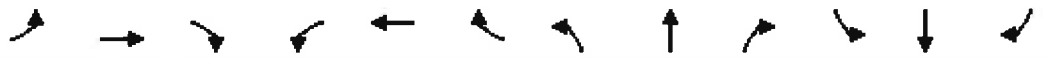


Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	38	310	547	536	16	1157	1349
v/c Ratio	0.22	1.46	1.81	1.78	0.09	0.38	0.44
Control Delay	3.0	261.9	398.6	385.2	7.5	8.0	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.0	261.9	398.6	385.2	7.5	8.0	8.5
Queue Length 50th (ft)	0	~258	~451	~436	4	112	138
Queue Length 95th (ft)	0	#441	#695	#677	13	142	172
Internal Link Dist (ft)	135		493			413	470
Turn Bay Length (ft)				140	150		
Base Capacity (vph)	171	212	302	301	187	3062	3058
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	1.46	1.81	1.78	0.09	0.38	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



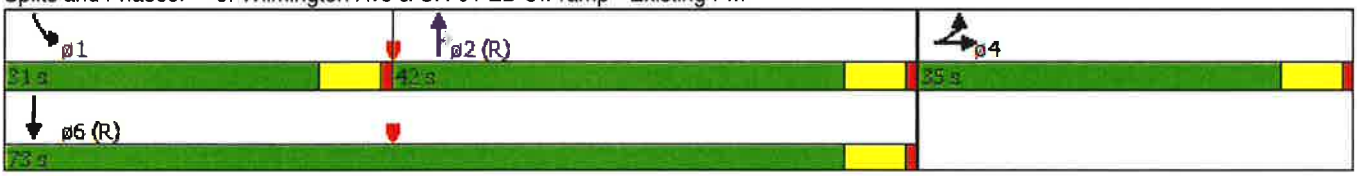
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	433	182	502	0	0	0	0	569	240	256	814	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt		0.896							0.850			
Flt Protected	0.950	0.997								0.950		
Satd. Flow (prot)	1564	2942	0	0	0	0	0	3438	2707	3335	3438	0
Flt Permitted	0.950	0.997								0.950		
Satd. Flow (perm)	1564	2942	0	0	0	0	0	3438	2707	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		167							261			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	471	198	546	0	0	0	0	618	261	278	885	0
Shared Lane Traffic (%)	10%											
Lane Group Flow (vph)	424	791	0	0	0	0	0	618	261	278	885	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Minimum Split (s)	22.0	22.0						22.0	22.0	10.0	22.0	
Total Split (s)	35.0	35.0						42.0	42.0	31.0	73.0	
Total Split (%)	32.4%	32.4%						38.9%	38.9%	28.7%	67.6%	
Maximum Green (s)	29.0	29.0						36.0	36.0	25.0	67.0	
Yellow Time (s)	5.0	5.0						5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0						1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0						6.0	6.0	6.0	6.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0						5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0						11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0						0	0		0	
Act Effct Green (s)	29.0	29.0						36.0	36.0	25.0	67.0	
Actuated g/C Ratio	0.27	0.27						0.33	0.33	0.23	0.62	
v/c Ratio	1.01	1.06dr						0.54	0.24	0.36	0.42	
Control Delay	87.3	41.0						31.4	3.8	36.4	11.2	
Queue Delay	0.0	0.0						0.0	0.0	0.0	0.0	
Total Delay	87.3	41.0						31.4	3.8	36.4	11.2	
LOS	F	D						C	A	D	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		57.1						23.2			17.2	
Approach LOS		E						C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 108			
Actuated Cycle Length: 108			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 33.7		Intersection LOS: C	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilmington Ave & SR-91 EB Off-ramp - Existing PM



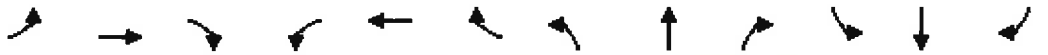
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	424	791	618	261	278	885
v/c Ratio	1.01	1.06dr	0.54	0.24	0.36	0.42
Control Delay	87.3	41.0	31.4	3.8	36.4	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.3	41.0	31.4	3.8	36.4	11.2
Queue Length 50th (ft)	~394	279	217	0	100	183
Queue Length 95th (ft)	#663	#412	286	36	146	232
Internal Link Dist (ft)		510	324			339
Turn Bay Length (ft)						
Base Capacity (vph)	419	912	1146	1076	771	2132
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.87	0.54	0.24	0.36	0.42

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.



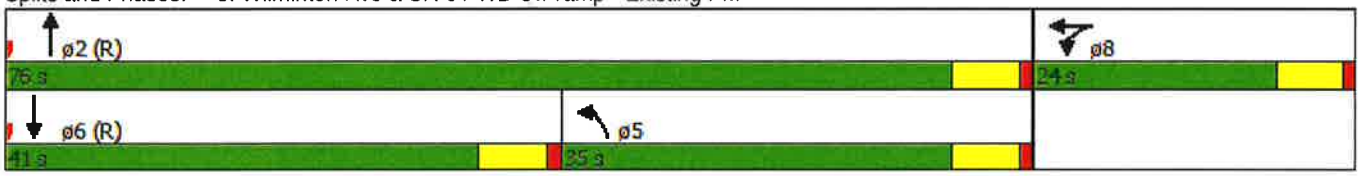
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	197	834	177	325	691	0	0	837	644
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.91	0.91
Frt					0.974						0.935	
Flt Protected				0.950	0.999		0.950					
Satd. Flow (prot)	0	0	0	1564	3204	0	1719	3438	0	0	4619	0
Flt Permitted				0.950	0.999		0.950					
Satd. Flow (perm)	0	0	0	1564	3204	0	1719	3438	0	0	4619	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					20						137	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	214	907	192	353	751	0	0	910	700
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	193	1120	0	353	751	0	0	1610	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases												
Minimum Split (s)				22.0	22.0		10.0	22.0			22.0	
Total Split (s)				24.0	24.0		35.0	76.0			41.0	
Total Split (%)				24.0%	24.0%		35.0%	76.0%			41.0%	
Maximum Green (s)				18.0	18.0		29.0	70.0			35.0	
Yellow Time (s)				5.0	5.0		5.0	5.0			5.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				5.0	5.0			5.0			5.0	
Flash Dont Walk (s)				11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				18.0	18.0		29.0	70.0			35.0	
Actuated g/C Ratio				0.18	0.18		0.29	0.70			0.35	
v/c Ratio				0.69	1.89		0.71	0.31			1.10dr	
Control Delay				52.3	432.3		40.8	6.2			41.5	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				52.3	432.3		40.8	6.2			41.5	
LOS				D	F		D	A			D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					376.4			17.2			41.5	
Approach LOS					F			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.89			
Intersection Signal Delay: 144.1		Intersection LOS: F	
Intersection Capacity Utilization 87.3%		ICU Level of Service E	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilminton Ave & SR-91 WB Off-ramp - Existing PM



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	193	1120	353	751	1610
v/c Ratio	0.69	1.89	0.71	0.31	1.10dr
Control Delay	52.3	432.3	40.8	6.2	41.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.3	432.3	40.8	6.2	41.5
Queue Length 50th (ft)	153	~726	241	101	403
Queue Length 95th (ft)	#274	#892	365	132	#532
Internal Link Dist (ft)		500		324	339
Turn Bay Length (ft)					
Base Capacity (vph)	281	593	498	2406	1705
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	1.89	0.71	0.31	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Freeway Off-Ramp Analysis

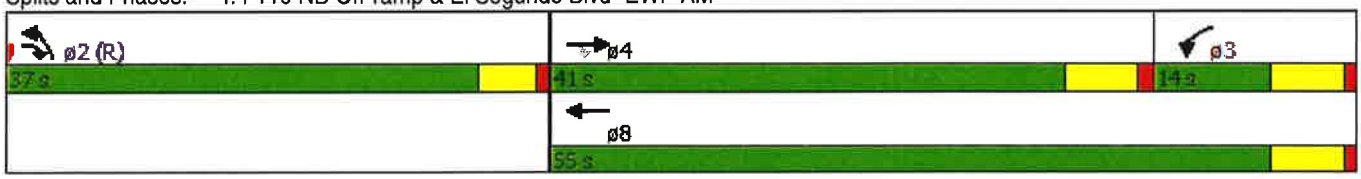
Existing + Project Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1002	241	99	1180	702	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.968	
Flt Protected			0.950		0.962	
Satd. Flow (prot)	3471	1553	1736	4988	3300	0
Flt Permitted			0.950		0.962	
Satd. Flow (perm)	3471	1553	1736	4988	3300	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		213			43	
Link Speed (mph)	30			30	30	
Link Distance (ft)	568			630	393	
Travel Time (s)	12.9			14.3	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1089	262	108	1283	763	209
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1089	262	108	1283	972	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	4	2	3	8	2	
Permitted Phases		4				
Minimum Split (s)	22.0	22.0	10.0	22.0	22.0	
Total Split (s)	41.0	37.0	14.0	55.0	37.0	
Total Split (%)	44.6%	40.2%	15.2%	59.8%	40.2%	
Maximum Green (s)	35.0	32.0	8.0	49.0	32.0	
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	5.0	6.0	6.0	5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	35.0	73.0	8.0	49.0	32.0	
Actuated g/C Ratio	0.38	0.79	0.09	0.53	0.35	
v/c Ratio	0.82	0.21	0.72	0.48	0.83	
Control Delay	32.3	0.9	68.3	14.3	33.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	32.3	0.9	68.3	14.3	33.5	
LOS	C	A	E	B	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	26.2			18.5	33.5	
Approach LOS	C			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 92			
Actuated Cycle Length: 92			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 25.2		Intersection LOS: C	
Intersection Capacity Utilization 73.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 NB Off-ramp & El Segundo Blvd- EWP AM



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1089	262	108	1283	972
v/c Ratio	0.82	0.21	0.72	0.48	0.83
Control Delay	32.3	0.9	68.3	14.3	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	32.3	0.9	68.3	14.3	33.5
Queue Length 50th (ft)	355	6	75	195	304
Queue Length 95th (ft)	457	21	#174	239	400
Internal Link Dist (ft)	488			550	313
Turn Bay Length (ft)					
Base Capacity (vph)	1320	1276	150	2656	1175
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.82	0.21	0.72	0.48	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	754	541	313	1689	0	0	0	0	517	0	839
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Frt		0.937									0.867	0.850
Flt Protected				0.950						0.950	0.994	
Satd. Flow (prot)	0	4673	0	1736	4988	0	0	0	0	1649	1433	1475
Flt Permitted				0.950						0.950	0.994	
Satd. Flow (perm)	0	4673	0	1736	4988	0	0	0	0	1649	1433	1475
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		226									112	112
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		802			783			340			320	
Travel Time (s)		18.2			17.8			7.7			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	820	588	340	1836	0	0	0	0	562	0	912
Shared Lane Traffic (%)										10%		47%
Lane Group Flow (vph)	0	1408	0	340	1836	0	0	0	0	506	485	483
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		4		3	8					6	6	
Permitted Phases												6
Minimum Split (s)		22.0		10.0	22.0					22.0	22.0	22.0
Total Split (s)		37.0		14.0	51.0					37.0	37.0	37.0
Total Split (%)		42.0%		15.9%	58.0%					42.0%	42.0%	42.0%
Maximum Green (s)		31.0		8.0	45.0					31.0	31.0	31.0
Yellow Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	6.0
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0			5.0					5.0	5.0	5.0
Flash Dont Walk (s)		11.0			11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0					0	0	0
Act Effct Green (s)		31.0		8.0	45.0					31.0	31.0	31.0
Actuated g/C Ratio		0.35		0.09	0.51					0.35	0.35	0.35
v/c Ratio		0.79		2.17	0.72					0.87	0.84	0.82
Control Delay		25.0		568.5	18.7					44.7	35.2	32.8
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		25.0		568.5	18.7					44.7	35.2	32.8
LOS		C		F	B					D	D	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		25.0			104.6						37.7	
Approach LOS		C			F						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 88			
Actuated Cycle Length: 88			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 2.17			
Intersection Signal Delay: 62.9		Intersection LOS: E	
Intersection Capacity Utilization 81.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 SB Off-ramp & El Segundo Blvd- EWP AM

Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1408	340	1836	506	485	483
v/c Ratio	0.79	2.17	0.72	0.87	0.84	0.82
Control Delay	25.0	568.5	18.7	44.7	35.2	32.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.0	568.5	18.7	44.7	35.2	32.8
Queue Length 50th (ft)	257	~366	328	327	254	237
Queue Length 95th (ft)	327	#563	395	#557	#492	#457
Internal Link Dist (ft)	722		703		240	
Turn Bay Length (ft)						
Base Capacity (vph)	1792	157	2550	580	577	592
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.79	2.17	0.72	0.87	0.84	0.82

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

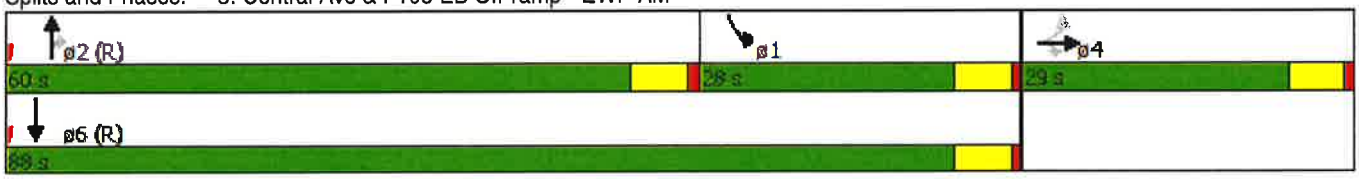
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	720	13	615	0	0	0	0	823	335	567	699	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.91	0.95	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.00
Frt		0.937	0.850						0.850			
Flt Protected	0.950	0.973								0.950		
Satd. Flow (prot)	1633	1501	1461	0	0	0	0	4940	1538	3335	3438	0
Flt Permitted	0.950	0.973								0.950		
Satd. Flow (perm)	1633	1501	1461	0	0	0	0	4940	1538	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28	266						364			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	783	14	668	0	0	0	0	895	364	616	760	0
Shared Lane Traffic (%)	35%		31%									
Lane Group Flow (vph)	509	495	461	0	0	0	0	895	364	616	760	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Minimum Split (s)	22.0	22.0	22.0					22.0	22.0	10.0	22.0	
Total Split (s)	29.0	29.0	29.0					60.0	60.0	28.0	88.0	
Total Split (%)	24.8%	24.8%	24.8%					51.3%	51.3%	23.9%	75.2%	
Maximum Green (s)	23.0	23.0	23.0					54.0	54.0	22.0	82.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0					6.0	6.0	6.0	6.0	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0	5.0					5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0	11.0					11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0		0	
Act Effct Green (s)	23.0	23.0	23.0					54.0	54.0	22.0	82.0	
Actuated g/C Ratio	0.20	0.20	0.20					0.46	0.46	0.19	0.70	
v/c Ratio	1.59	1.56	0.92					0.39	0.40	0.98	0.32	
Control Delay	310.6	299.0	45.0					21.4	3.3	79.6	7.1	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay	310.6	299.0	45.0					21.4	3.3	79.6	7.1	
LOS	F	F	D					C	A	E	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		223.1						16.1			39.6	
Approach LOS		F						B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 117			
Actuated Cycle Length: 117			
Offset: 68 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.59			
Intersection Signal Delay: 97.9		Intersection LOS: F	
Intersection Capacity Utilization 78.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 EB Off-ramp - EWP AM



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	509	495	461	895	364	616	760
v/c Ratio	1.59	1.56	0.92	0.39	0.40	0.98	0.32
Control Delay	310.6	299.0	45.0	21.4	3.3	79.6	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	310.6	299.0	45.0	21.4	3.3	79.6	7.1
Queue Length 50th (ft)	~691	~678	200	190	0	289	124
Queue Length 95th (ft)	#958	#958	#458	232	62	#431	157
Internal Link Dist (ft)		575		502			478
Turn Bay Length (ft)							
Base Capacity (vph)	321	317	500	2280	905	627	2409
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.59	1.56	0.92	0.39	0.40	0.98	0.32

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

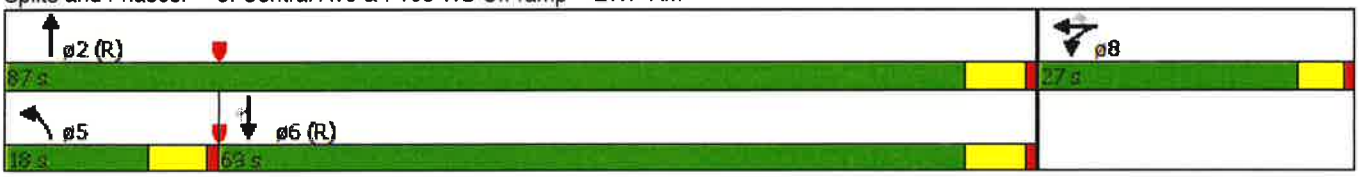
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	116	4	372	330	1202	0	0	1116	760
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950	0.955		0.950					
Satd. Flow (prot)	0	0	0	1633	1642	1538	3335	3438	0	0	3438	1538
Flt Permitted				0.950	0.955		0.950					
Satd. Flow (perm)	0	0	0	1633	1642	1538	3335	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						95						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	126	4	404	359	1307	0	0	1213	826
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	66	64	404	359	1307	0	0	1213	826
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Minimum Split (s)				21.1	21.1	21.1	10.0	22.0			22.0	22.0
Total Split (s)				27.0	27.0	27.0	18.0	87.0			69.0	69.0
Total Split (%)				23.7%	23.7%	23.7%	15.8%	76.3%			60.5%	60.5%
Maximum Green (s)				22.0	22.0	22.0	12.0	81.0			63.0	63.0
Yellow Time (s)				4.0	4.0	4.0	5.0	5.0			5.0	5.0
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	6.0	6.0			6.0	6.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Walk Time (s)				5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)				11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)				22.0	22.0	22.0	12.0	81.0			63.0	63.0
Actuated g/C Ratio				0.19	0.19	0.19	0.11	0.71			0.55	0.55
v/c Ratio				0.21	0.20	1.08	1.02	0.54			0.64	0.97
Control Delay				40.8	40.7	104.6	104.5	8.7			19.6	50.7
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				40.8	40.7	104.6	104.5	8.7			19.6	50.7
LOS				D	D	F	F	A			B	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					89.1			29.3			32.2	
Approach LOS					F			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 38.2		Intersection LOS: D	
Intersection Capacity Utilization 74.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 WB Off-ramp - EWP AM



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	66	64	404	359	1307	1213	826
v/c Ratio	0.21	0.20	1.08	1.02	0.54	0.64	0.97
Control Delay	40.8	40.7	104.6	104.5	8.7	19.6	50.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	40.7	104.6	104.5	8.7	19.6	50.7
Queue Length 50th (ft)	51	50	~327	~173	249	370	669
Queue Length 95th (ft)	104	101	#564	#288	306	456	#1024
Internal Link Dist (ft)		665			502	478	
Turn Bay Length (ft)							
Base Capacity (vph)	315	316	373	351	2442	1899	849
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.20	1.08	1.02	0.54	0.64	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

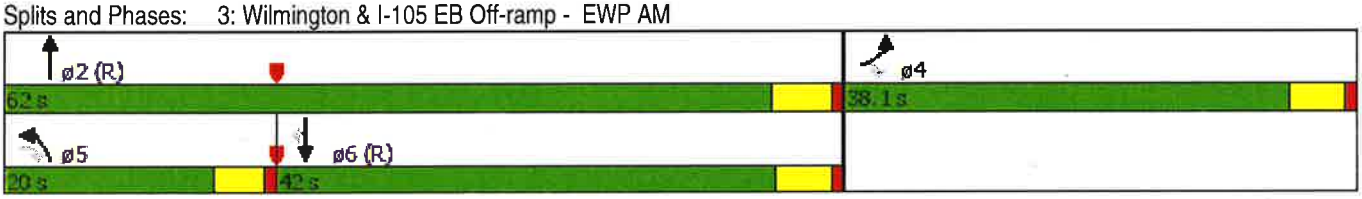
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

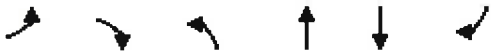
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	415	741	479	903	1066	513
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	120			0
Storage Lanes	1	1	1			2
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.88
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	4940	3438	2707
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	4940	3438	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		15				558
Link Speed (mph)	30			30	30	
Link Distance (ft)	1070			942	903	
Travel Time (s)	24.3			21.4	20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	451	805	521	982	1159	558
Shared Lane Traffic (%)						
Lane Group Flow (vph)	451	805	521	982	1159	558
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4 5				6
Minimum Split (s)	38.1		8.7	21.4	21.1	21.1
Total Split (s)	38.1		20.0	62.0	42.0	42.0
Total Split (%)	38.1%		20.0%	61.9%	42.0%	42.0%
Maximum Green (s)	33.0		15.3	56.6	36.9	36.9
Yellow Time (s)	4.1		3.7	4.4	4.1	4.1
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1		4.7	5.4	5.1	5.1
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?						
Walk Time (s)	7.0			5.0	5.0	5.0
Flash Dont Walk (s)	26.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	33.0	53.0	15.3	56.6	36.9	36.9
Actuated g/C Ratio	0.33	0.53	0.15	0.57	0.37	0.37
v/c Ratio	0.80	0.98	1.99	0.35	0.91	0.41
Control Delay	42.7	51.2	484.0	12.2	42.5	2.9

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.7	51.2	484.0	12.2	42.5	2.9
LOS	D	D	F	B	D	A
Approach Delay	48.1			175.8	29.6	
Approach LOS	D			F	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100.1			
Actuated Cycle Length: 100.1			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.99			
Intersection Signal Delay: 83.9		Intersection LOS: F	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington & I-105 EB Off-ramp - EWP AM



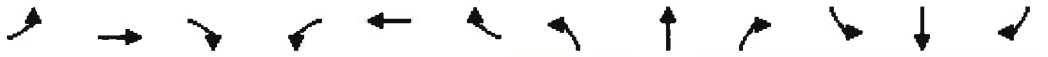


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	451	805	521	982	1159	558
v/c Ratio	0.80	0.98	1.99	0.35	0.91	0.41
Control Delay	42.7	51.2	484.0	12.2	42.5	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.7	51.2	484.0	12.2	42.5	2.9
Queue Length 50th (ft)	311	567	~624	140	438	0
Queue Length 95th (ft)	#499	#907	#865	173	#601	44
Internal Link Dist (ft)	990			862	823	
Turn Bay Length (ft)			120			
Base Capacity (vph)	566	821	262	2793	1267	1350
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.98	1.99	0.35	0.91	0.41

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

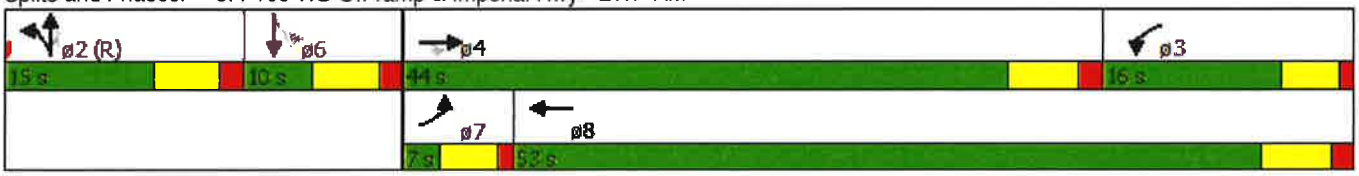


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	1101	363	744	1488	17	833	20	149	7	34	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	340		0	0		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	0.81	0.97	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.987	0.850		0.998				0.850		0.916	
Flt Protected	0.950			0.950			0.950	0.955			0.997	
Satd. Flow (prot)	1719	5787	1246	3335	4930	0	1633	1642	1538	0	1653	0
Flt Permitted	0.950			0.950			0.950	0.955			0.921	
Satd. Flow (perm)	1719	5787	1246	3335	4930	0	1633	1642	1538	0	1527	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29	284		3				245		63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1132			1053			585			490	
Travel Time (s)		25.7			23.9			13.3			11.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	63	1197	395	809	1617	18	905	22	162	8	37	74
Shared Lane Traffic (%)			28%				49%					
Lane Group Flow (vph)	63	1308	284	809	1635	0	462	465	162	0	119	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		2	2			6	
Permitted Phases			4						2	6		
Minimum Split (s)	8.7	21.9	21.9	8.7	21.9		21.6	21.6	21.6	21.6	21.6	
Total Split (s)	7.0	44.0	44.0	16.0	53.0		15.0	15.0	15.0	10.0	10.0	
Total Split (%)	8.2%	51.8%	51.8%	18.8%	62.4%		17.6%	17.6%	17.6%	11.8%	11.8%	
Maximum Green (s)	2.3	38.1	38.1	11.3	47.1		9.4	9.4	9.4	4.4	4.4	
Yellow Time (s)	3.7	4.4	4.4	3.7	4.4		4.1	4.1	4.1	4.1	4.1	
All-Red Time (s)	1.0	1.5	1.5	1.0	1.5		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.7	5.9	5.9	4.7	5.9		5.6	5.6	5.6		5.6	
Lead/Lag	Lead	Lead	Lead	Lag	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	2.3	38.1	38.1	11.3	47.1		9.4	9.4	9.4		4.4	
Actuated g/C Ratio	0.03	0.45	0.45	0.13	0.55		0.11	0.11	0.11		0.05	
v/c Ratio	1.37	0.50	0.40	1.83	0.60		2.57	2.57	0.42		0.86	
Control Delay	295.6	17.1	3.7	406.5	13.8		741.0	742.0	4.3		70.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	295.6	17.1	3.7	406.5	13.8		741.0	742.0	4.3		70.8	
LOS	F	B	A	F	B		F	F	A		E	
Approach Delay		25.4			143.8			631.8			70.8	
Approach LOS		C			F			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.57			
Intersection Signal Delay: 205.4		Intersection LOS: F	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: I-105 WB Off-ramp & Imperial Hwy- EWP AM



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	63	1308	284	809	1635	462	465	162	119
v/c Ratio	1.37	0.50	0.40	1.83	0.60	2.57	2.57	0.42	0.86
Control Delay	295.6	17.1	3.7	406.5	13.8	741.0	742.0	4.3	70.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	295.6	17.1	3.7	406.5	13.8	741.0	742.0	4.3	70.8
Queue Length 50th (ft)	~54	173	0	~408	237	~528	~532	0	36
Queue Length 95th (ft)	#148	213	62	#543	290	#757	#761	14	#153
Internal Link Dist (ft)		1052			973		505		410
Turn Bay Length (ft)	100			340					
Base Capacity (vph)	46	2609	715	443	2733	180	181	387	138
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.37	0.50	0.40	1.83	0.60	2.57	2.57	0.42	0.86

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

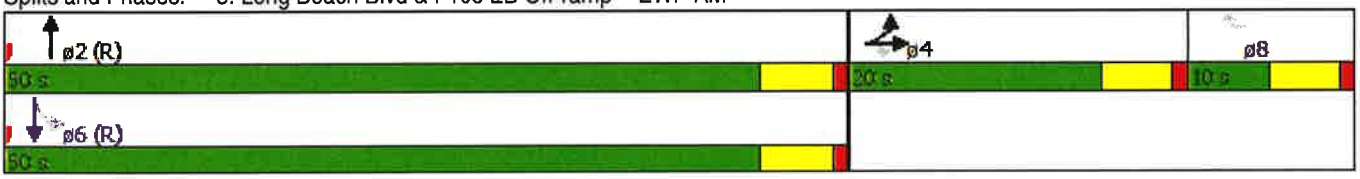
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	614	3	346	0	0	11	0	907	14	30	602	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		110	0		0	0		0	180		0
Storage Lanes	1		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850			0.865		0.998				
Flt Protected	0.950	0.953								0.950		
Satd. Flow (prot)	1633	1638	1538	0	0	1565	0	4930	0	1719	3438	0
Flt Permitted	0.950	0.953								0.252		
Satd. Flow (perm)	1633	1638	1538	0	0	1565	0	4930	0	456	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			288			102		4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		817			156			598			555	
Travel Time (s)		18.6			3.5			13.6			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	667	3	376	0	0	12	0	986	15	33	654	0
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	333	337	376	0	0	12	0	1001	0	33	654	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	Perm			Perm		NA		Perm	NA	
Protected Phases	4	4						2			6	
Permitted Phases			4			8				6		
Minimum Split (s)	21.1	21.1	21.1			21.1		21.4		21.4	21.4	
Total Split (s)	20.0	20.0	20.0			10.0		50.0		50.0	50.0	
Total Split (%)	25.0%	25.0%	25.0%			12.5%		62.5%		62.5%	62.5%	
Maximum Green (s)	14.9	14.9	14.9			4.9		44.6		44.6	44.6	
Yellow Time (s)	4.1	4.1	4.1			4.1		4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0			1.0		1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.1			5.1		5.4		5.4	5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0			5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0			0		0		0	0	
Act Effct Green (s)	14.9	14.9	14.9			4.9		44.6		44.6	44.6	
Actuated g/C Ratio	0.19	0.19	0.19			0.06		0.56		0.56	0.56	
v/c Ratio	1.10	1.10	0.72			0.06		0.36		0.13	0.34	
Control Delay	113.5	116.4	17.3			0.6		10.2		10.1	10.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Delay	113.5	116.4	17.3			0.6		10.2		10.1	10.3	
LOS	F	F	B			A		B		B	B	
Approach Delay		79.9						10.2			10.3	
Approach LOS		E						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 36.7		Intersection LOS: D	
Intersection Capacity Utilization 51.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 EB Off-ramp - EWP AM



Lane Group	EBL	EBT	EBR	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	333	337	376	12	1001	33	654
v/c Ratio	1.10	1.10	0.72	0.06	0.36	0.13	0.34
Control Delay	113.5	116.4	17.3	0.6	10.2	10.1	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.5	116.4	17.3	0.6	10.2	10.1	10.3
Queue Length 50th (ft)	~241	~246	46	0	112	9	104
Queue Length 95th (ft)	#438	#445	#172	0	144	26	143
Internal Link Dist (ft)		737			518		475
Turn Bay Length (ft)			110			180	
Base Capacity (vph)	304	305	520	191	2750	254	1916
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.10	1.10	0.72	0.06	0.36	0.13	0.34

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

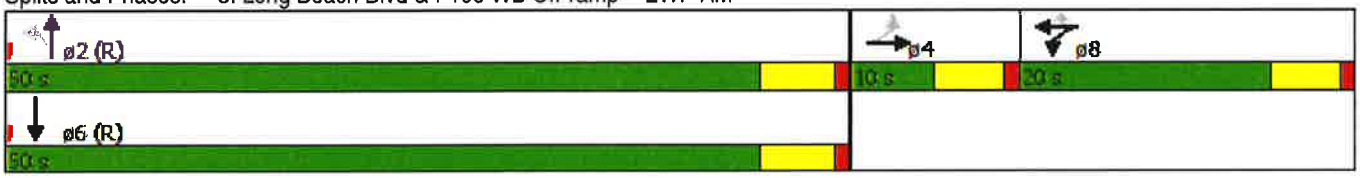
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	0	5	165	27	797	11	1123	0	0	1218	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.964			0.860	0.850					0.995	
Flt Protected		0.964		0.950			0.950					
Satd. Flow (prot)	0	1682	0	1719	1478	1461	1719	4940	0	0	4915	0
Flt Permitted		0.709		0.950			0.151					
Satd. Flow (perm)	0	1237	0	1719	1478	1461	273	4940	0	0	4915	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			133	133					11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	0	5	179	29	866	12	1221	0	0	1324	48
Shared Lane Traffic (%)						49%						
Lane Group Flow (vph)	0	19	0	179	453	442	12	1221	0	0	1372	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Split	NA	Perm	Perm	NA			NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4					8	2					
Minimum Split (s)	21.1	21.1		21.1	21.1	21.1	31.4	31.4			21.4	
Total Split (s)	10.0	10.0		20.0	20.0	20.0	50.0	50.0			50.0	
Total Split (%)	12.5%	12.5%		25.0%	25.0%	25.0%	62.5%	62.5%			62.5%	
Maximum Green (s)	4.9	4.9		14.9	14.9	14.9	44.6	44.6			44.6	
Yellow Time (s)	4.1	4.1		4.1	4.1	4.1	4.4	4.4			4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0			1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)		5.1		5.1	5.1	5.1	5.4	5.4			5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		4.9		14.9	14.9	14.9	44.6	44.6			44.6	
Actuated g/C Ratio		0.06		0.19	0.19	0.19	0.56	0.56			0.56	
v/c Ratio		0.11		0.56	1.18	1.16	0.08	0.44			0.50	
Control Delay		1.3		37.2	129.9	122.6	9.9	11.0			11.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		1.3		37.2	129.9	122.6	9.9	11.0			11.5	
LOS		A		D	F	F	A	B			B	
Approach Delay		1.3			111.5			11.0			11.5	
Approach LOS		A			F			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 1.18
Intersection Signal Delay: 40.3 Intersection LOS: D
Intersection Capacity Utilization 70.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 3: Long Beach Blvd & I-105 WB Off-ramp - EWP AM



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	19	179	453	442	12	1221	1372
v/c Ratio	0.11	0.56	1.18	1.16	0.08	0.44	0.50
Control Delay	1.3	37.2	129.9	122.6	9.9	11.0	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.3	37.2	129.9	122.6	9.9	11.0	11.5
Queue Length 50th (ft)	0	98	~274	~262	3	145	169
Queue Length 95th (ft)	0	175	#502	#488	13	183	212
Internal Link Dist (ft)	135		493			413	470
Turn Bay Length (ft)				140	150		
Base Capacity (vph)	171	320	383	380	152	2754	2744
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.56	1.18	1.16	0.08	0.44	0.50

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

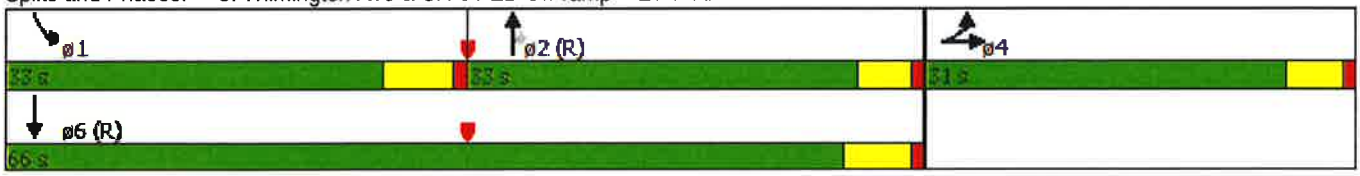
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	793	445	225	0	0	0	0	1077	217	185	564	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt		0.965							0.850			
Flt Protected	0.950	0.985								0.950		
Satd. Flow (prot)	1564	3130	0	0	0	0	0	3438	2707	3335	3438	0
Flt Permitted	0.950	0.985								0.950		
Satd. Flow (perm)	1564	3130	0	0	0	0	0	3438	2707	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		37							220			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	862	484	245	0	0	0	0	1171	236	201	613	0
Shared Lane Traffic (%)	38%											
Lane Group Flow (vph)	534	1057	0	0	0	0	0	1171	236	201	613	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Minimum Split (s)	21.1	21.1						21.4	21.4	10.0	26.5	
Total Split (s)	31.0	31.0						33.0	33.0	33.0	66.0	
Total Split (%)	32.0%	32.0%						34.0%	34.0%	34.0%	68.0%	
Maximum Green (s)	26.0	26.0						28.0	28.0	27.0	60.0	
Yellow Time (s)	4.0	4.0						4.0	4.0	5.0	5.0	
All-Red Time (s)	1.0	1.0						1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0						5.0	5.0	6.0	6.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0						5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0						11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0						0	0		0	
Act Effct Green (s)	26.0	26.0						28.0	28.0	27.0	60.0	
Actuated g/C Ratio	0.27	0.27						0.29	0.29	0.28	0.62	
v/c Ratio	1.27	1.22						1.18	0.25	0.22	0.29	
Control Delay	173.2	141.5						124.4	5.4	27.7	9.0	
Queue Delay	0.0	0.0						0.0	0.0	0.0	0.0	
Total Delay	173.2	141.5						124.4	5.4	27.7	9.0	
LOS	F	F						F	A	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		152.1						104.4			13.6	
Approach LOS		F						F			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 97			
Actuated Cycle Length: 97			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.27			
Intersection Signal Delay: 104.9		Intersection LOS: F	
Intersection Capacity Utilization 76.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington Ave & SR-91 EB Off-ramp - EWP AM



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	534	1057	1171	236	201	613
v/c Ratio	1.27	1.22	1.18	0.25	0.22	0.29
Control Delay	173.2	141.5	124.4	5.4	27.7	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	173.2	141.5	124.4	5.4	27.7	9.0
Queue Length 50th (ft)	~552	~523	~550	4	58	101
Queue Length 95th (ft)	#817	#686	#707	40	93	136
Internal Link Dist (ft)		510	324			339
Turn Bay Length (ft)						
Base Capacity (vph)	419	866	992	937	928	2126
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.27	1.22	1.18	0.25	0.22	0.29

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	175	90	623	536	1359	0	0	547	494
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.91	0.91
Frt					0.872						0.929	
Flt Protected				0.950	0.999		0.950					
Satd. Flow (prot)	0	0	0	1564	2869	0	1719	3438	0	0	4589	0
Flt Permitted				0.950	0.999		0.950					
Satd. Flow (perm)	0	0	0	1564	2869	0	1719	3438	0	0	4589	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					64						246	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	190	98	677	583	1477	0	0	595	537
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	171	794	0	583	1477	0	0	1132	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases												
Minimum Split (s)				22.0	22.0		10.0	22.0			22.0	
Total Split (s)				23.0	23.0		37.0	72.0			35.0	
Total Split (%)				24.2%	24.2%		38.9%	75.8%			36.8%	
Maximum Green (s)				17.0	17.0		31.0	66.0			29.0	
Yellow Time (s)				5.0	5.0		5.0	5.0			5.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				5.0	5.0			5.0			5.0	
Flash Dont Walk (s)				11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				17.0	17.0		31.0	66.0			29.0	
Actuated g/C Ratio				0.18	0.18		0.33	0.69			0.31	
v/c Ratio				0.61	2.16dr		1.04	0.62			0.72	
Control Delay				46.4	222.6		82.2	9.2			25.7	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				46.4	222.6		82.2	9.2			25.7	
LOS				D	F		F	A			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					191.4			29.8			25.7	
Approach LOS					F			C			C	

Intersection Summary

Area Type: Other
Cycle Length: 95
Actuated Cycle Length: 95
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.41
Intersection Signal Delay: 66.2 Intersection LOS: E
Intersection Capacity Utilization 84.8% ICU Level of Service E
Analysis Period (min) 15
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilminton Ave & SR-91 WB Off-ramp - EWP AM

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	171	794	583	1477	1132
v/c Ratio	0.61	2.16dr	1.04	0.62	0.72
Control Delay	46.4	222.6	82.2	9.2	25.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	46.4	222.6	82.2	9.2	25.7
Queue Length 50th (ft)	126	~407	~459	261	209
Queue Length 95th (ft)	218	#558	#705	331	272
Internal Link Dist (ft)		500		324	339
Turn Bay Length (ft)					
Base Capacity (vph)	279	565	560	2388	1571
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	1.41	1.04	0.62	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

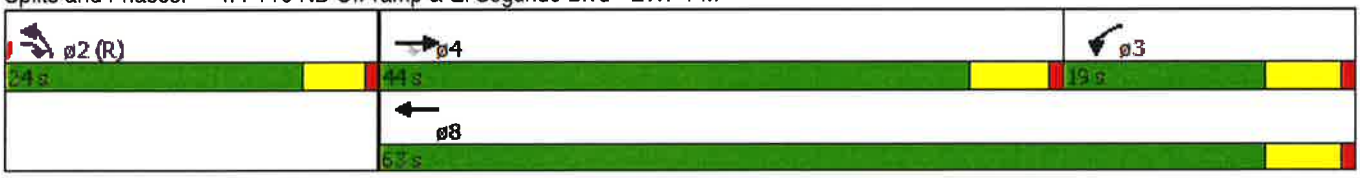
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1518	443	274	787	318	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.930	
Flt Protected			0.950		0.974	
Satd. Flow (prot)	3471	1553	1736	4988	3210	0
Flt Permitted			0.950		0.974	
Satd. Flow (perm)	3471	1553	1736	4988	3210	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		76			230	
Link Speed (mph)	30			30	30	
Link Distance (ft)	568			630	393	
Travel Time (s)	12.9			14.3	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1650	482	298	855	346	300
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1650	482	298	855	646	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	4	2	3	8	2	
Permitted Phases		4				
Minimum Split (s)	22.0	21.1	10.0	22.0	21.1	
Total Split (s)	44.0	24.0	19.0	63.0	24.0	
Total Split (%)	50.6%	27.6%	21.8%	72.4%	27.6%	
Maximum Green (s)	38.0	19.0	13.0	57.0	19.0	
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	5.0	6.0	6.0	5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	38.0	63.0	13.0	57.0	19.0	
Actuated g/C Ratio	0.44	0.72	0.15	0.66	0.22	
v/c Ratio	1.09	0.42	1.15	0.26	0.73	
Control Delay	76.7	5.2	138.9	6.5	25.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	76.7	5.2	138.9	6.5	25.7	
LOS	E	A	F	A	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	60.6			40.7	25.7	
Approach LOS	E			D	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 87			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 49.0		Intersection LOS: D	
Intersection Capacity Utilization 89.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 NB Off-ramp & El Segundo Blvd- EWP PM



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1650	482	298	855	646
v/c Ratio	1.09	0.42	1.15	0.26	0.73
Control Delay	76.7	5.2	138.9	6.5	25.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	76.7	5.2	138.9	6.5	25.7
Queue Length 50th (ft)	~650	83	~233	75	131
Queue Length 95th (ft)	#811	139	#420	97	204
Internal Link Dist (ft)	488			550	313
Turn Bay Length (ft)					
Base Capacity (vph)	1516	1145	259	3268	880
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.09	0.42	1.15	0.26	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1549	607	176	943	0	0	0	0	441	0	424
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Frt		0.958									0.923	0.850
Flt Protected				0.950						0.950	0.976	
Satd. Flow (prot)	0	4778	0	1736	4988	0	0	0	0	1649	1498	1475
Flt Permitted				0.950						0.950	0.976	
Satd. Flow (perm)	0	4778	0	1736	4988	0	0	0	0	1649	1498	1475
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		141									107	137
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		802			783			340			320	
Travel Time (s)		18.2			17.8			7.7			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1684	660	191	1025	0	0	0	0	479	0	461
Shared Lane Traffic (%)										32%		35%
Lane Group Flow (vph)	0	2344	0	191	1025	0	0	0	0	326	314	300
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		4		3	8					6	6	
Permitted Phases												6
Minimum Split (s)		22.0		10.0	22.0					22.0	22.0	22.0
Total Split (s)		48.0		18.0	66.0					26.0	26.0	26.0
Total Split (%)		52.2%		19.6%	71.7%					28.3%	28.3%	28.3%
Maximum Green (s)		42.0		12.0	60.0					20.0	20.0	20.0
Yellow Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	6.0
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0			5.0					5.0	5.0	5.0
Flash Dont Walk (s)		11.0			11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0					0	0	0
Act Effct Green (s)		42.0		12.0	60.0					20.0	20.0	20.0
Actuated g/C Ratio		0.46		0.13	0.65					0.22	0.22	0.22
v/c Ratio		1.04		0.85	0.32					0.91	0.77	0.70
Control Delay		54.3		71.3	7.3					66.5	36.1	27.8
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		54.3		71.3	7.3					66.5	36.1	27.8
LOS		D		E	A					E	D	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		54.3			17.4						44.0	
Approach LOS		D			B						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 92			
Actuated Cycle Length: 92			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 42.1		Intersection LOS: D	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 SB Off-ramp & El Segundo Blvd- EWP PM

Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	2344	191	1025	326	314	300
v/c Ratio	1.04	0.85	0.32	0.91	0.77	0.70
Control Delay	54.3	71.3	7.3	66.5	36.1	27.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.3	71.3	7.3	66.5	36.1	27.8
Queue Length 50th (ft)	~632	132	102	235	150	109
Queue Length 95th (ft)	#750	#274	128	#435	#319	#231
Internal Link Dist (ft)	722		703		240	
Turn Bay Length (ft)						
Base Capacity (vph)	2257	226	3253	358	409	427
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.85	0.32	0.91	0.77	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

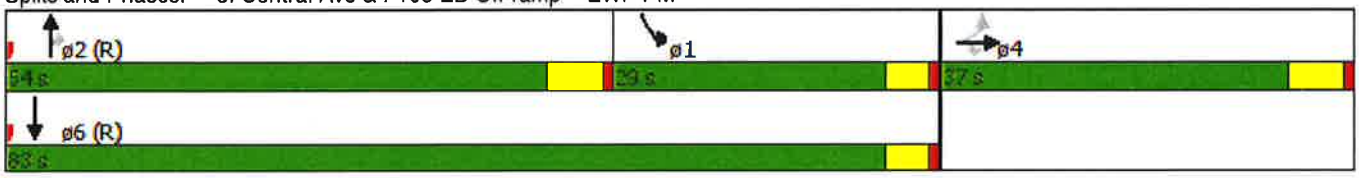
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	513	240	422	0	0	0	0	955	385	463	825	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.91	0.95	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.00
Frt		0.979	0.850						0.850			
Flt Protected	0.950	0.986								0.950		
Satd. Flow (prot)	1633	1590	1461	0	0	0	0	4940	1538	3335	3438	0
Flt Permitted	0.950	0.986								0.950		
Satd. Flow (perm)	1633	1590	1461	0	0	0	0	4940	1538	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7	179						181			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	558	261	459	0	0	0	0	1038	418	503	897	0
Shared Lane Traffic (%)	22%		14%									
Lane Group Flow (vph)	435	448	395	0	0	0	0	1038	418	503	897	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Minimum Split (s)	22.0	22.0	22.0					22.0	22.0	9.0	22.0	
Total Split (s)	37.0	37.0	37.0					54.0	54.0	29.0	83.0	
Total Split (%)	30.8%	30.8%	30.8%					45.0%	45.0%	24.2%	69.2%	
Maximum Green (s)	31.0	31.0	31.0					48.0	48.0	24.0	78.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0					6.0	6.0	5.0	5.0	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0	5.0					5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0	11.0					11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0		0	
Act Effct Green (s)	31.0	31.0	31.0					48.0	48.0	24.0	78.0	
Actuated g/C Ratio	0.26	0.26	0.26					0.40	0.40	0.20	0.65	
v/c Ratio	1.03	1.08	0.77					0.53	0.58	0.75	0.40	
Control Delay	96.6	109.0	33.7					28.5	18.8	53.4	10.6	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay	96.6	109.0	33.7					28.5	18.8	53.4	10.6	
LOS	F	F	C					C	B	D	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		81.5						25.8			26.0	
Approach LOS		F						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 28 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 43.1		Intersection LOS: D	
Intersection Capacity Utilization 76.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 EB Off-ramp - EWP PM



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	435	448	395	1038	418	503	897
v/c Ratio	1.03	1.08	0.77	0.53	0.58	0.75	0.40
Control Delay	96.6	109.0	33.7	28.5	18.8	53.4	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.6	109.0	33.7	28.5	18.8	53.4	10.6
Queue Length 50th (ft)	~455	~505	203	264	167	229	191
Queue Length 95th (ft)	#712	#780	#377	317	293	303	238
Internal Link Dist (ft)		575		502			478
Turn Bay Length (ft)							
Base Capacity (vph)	421	415	510	1976	723	667	2234
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	1.08	0.77	0.53	0.58	0.75	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	265	0	536	417	1022	0	0	1032	611
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950	0.950		0.950					
Satd. Flow (prot)	0	0	0	1633	1633	1538	3335	3438	0	0	3438	1538
Flt Permitted				0.950	0.950		0.950					
Satd. Flow (perm)	0	0	0	1633	1633	1538	3335	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						109						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	288	0	583	453	1111	0	0	1122	664
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	144	144	583	453	1111	0	0	1122	664
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Minimum Split (s)				21.5	21.5	21.5	9.5	21.5			21.5	21.5
Total Split (s)				39.0	39.0	39.0	29.0	84.0			55.0	55.0
Total Split (%)				31.7%	31.7%	31.7%	23.6%	68.3%			44.7%	44.7%
Maximum Green (s)				33.5	33.5	33.5	23.5	78.5			49.5	49.5
Yellow Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)				0.5	0.5	0.5	0.5	0.5			0.5	0.5
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.5	5.5	5.5	5.5	5.5			5.5	5.5
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Walk Time (s)				5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)				11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)				33.5	33.5	33.5	23.5	78.5			49.5	49.5
Actuated g/C Ratio				0.27	0.27	0.27	0.19	0.64			0.40	0.40
v/c Ratio				0.32	0.32	1.17	0.71	0.51			0.81	1.07
Control Delay				38.2	38.2	129.6	53.6	12.9			38.3	93.7
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				38.2	38.2	129.6	53.6	12.9			38.3	93.7
LOS				D	D	F	D	B			D	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					99.4			24.7			58.9	
Approach LOS					F			C			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 123			
Actuated Cycle Length: 123			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay: 54.6		Intersection LOS: D	
Intersection Capacity Utilization 70.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 WB Off-ramp - EWP PM

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	144	144	583	453	1111	1122	664
v/c Ratio	0.32	0.32	1.17	0.71	0.51	0.81	1.07
Control Delay	38.2	38.2	129.6	53.6	12.9	38.3	93.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	38.2	129.6	53.6	12.9	38.3	93.7
Queue Length 50th (ft)	115	115	~584	210	277	493	~703
Queue Length 95th (ft)	192	192	#856	280	339	602	#981
Internal Link Dist (ft)		665			502	478	
Turn Bay Length (ft)							
Base Capacity (vph)	444	444	498	637	2194	1383	618
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.32	1.17	0.71	0.51	0.81	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

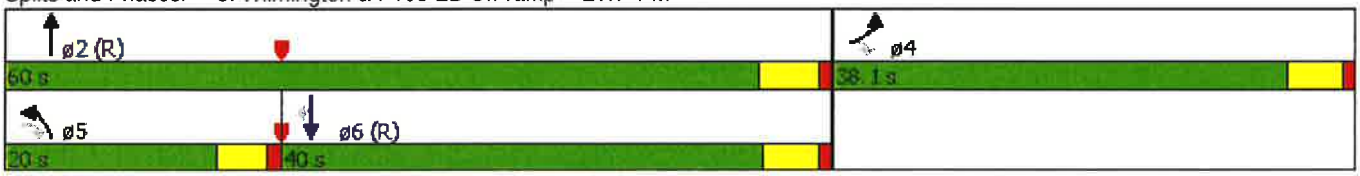
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

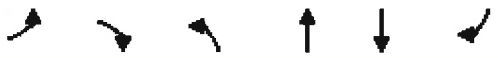
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	334	354	639	1377	856	485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	120			0
Storage Lanes	1	1	1			2
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.88
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	4940	3438	2707
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	4940	3438	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		32				527
Link Speed (mph)	30			30	30	
Link Distance (ft)	1070			942	903	
Travel Time (s)	24.3			21.4	20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	363	385	695	1497	930	527
Shared Lane Traffic (%)						
Lane Group Flow (vph)	363	385	695	1497	930	527
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4 5				6
Minimum Split (s)	38.1		8.7	21.4	21.1	21.1
Total Split (s)	38.1		20.0	60.0	40.0	40.0
Total Split (%)	38.8%		20.4%	61.2%	40.8%	40.8%
Maximum Green (s)	33.0		15.3	54.6	34.9	34.9
Yellow Time (s)	4.1		3.7	4.4	4.1	4.1
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1		4.7	5.4	5.1	5.1
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?						
Walk Time (s)	7.0			5.0	5.0	5.0
Flash Dont Walk (s)	26.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	33.0	53.0	15.3	54.6	34.9	34.9
Actuated g/C Ratio	0.34	0.54	0.16	0.56	0.36	0.36
v/c Ratio	0.63	0.46	2.59	0.54	0.76	0.40
Control Delay	33.2	14.6	748.1	14.8	32.8	3.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.2	14.6	748.1	14.8	32.8	3.0
LOS	C	B	F	B	C	A
Approach Delay	23.6			247.3	22.0	
Approach LOS	C			F	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 98.1			
Actuated Cycle Length: 98.1			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.59			
Intersection Signal Delay: 134.6		Intersection LOS: F	
Intersection Capacity Utilization 90.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington & I-105 EB Off-ramp - EWP PM



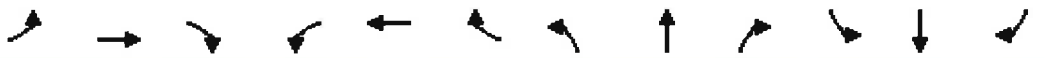


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	363	385	695	1497	930	527
v/c Ratio	0.63	0.46	2.59	0.54	0.76	0.40
Control Delay	33.2	14.6	748.1	14.8	32.8	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.2	14.6	748.1	14.8	32.8	3.0
Queue Length 50th (ft)	227	151	~880	246	320	0
Queue Length 95th (ft)	346	240	#1142	295	412	43
Internal Link Dist (ft)	990			862	823	
Turn Bay Length (ft)			120			
Base Capacity (vph)	578	845	268	2749	1223	1302
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.46	2.59	0.54	0.76	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

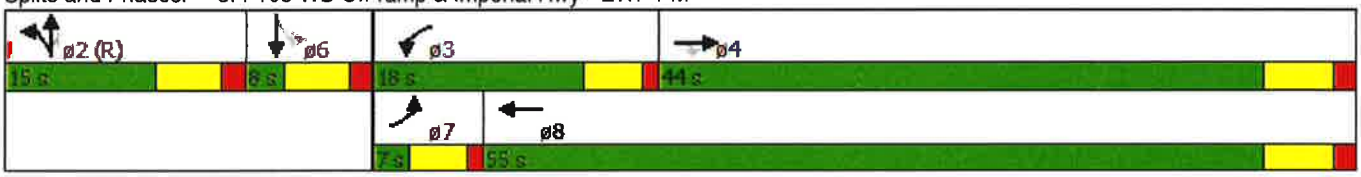


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	1814	595	604	923	4	766	15	284	9	22	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	340		0	0		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	0.81	0.97	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.987	0.850		0.999				0.850		0.940	
Flt Protected	0.950			0.950			0.950	0.954			0.992	
Satd. Flow (prot)	1719	5787	1246	3335	4935	0	1633	1640	1538	0	1687	0
Flt Permitted	0.950			0.950			0.950	0.954			0.970	
Satd. Flow (perm)	1719	5787	1246	3335	4935	0	1633	1640	1538	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29	466		1				230		27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1132			1053			585			490	
Travel Time (s)		25.7			23.9			13.3			11.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	1972	647	657	1003	4	833	16	309	10	24	27
Shared Lane Traffic (%)			28%				49%					
Lane Group Flow (vph)	71	2153	466	657	1007	0	425	424	309	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		2	2			6	
Permitted Phases			4						2	6		
Minimum Split (s)	8.7	21.9	21.9	8.7	21.9		21.6	21.6	21.6	21.6	21.6	
Total Split (s)	7.0	44.0	44.0	18.0	55.0		15.0	15.0	15.0	8.0	8.0	
Total Split (%)	8.2%	51.8%	51.8%	21.2%	64.7%		17.6%	17.6%	17.6%	9.4%	9.4%	
Maximum Green (s)	2.3	38.1	38.1	13.3	49.1		9.4	9.4	9.4	2.4	2.4	
Yellow Time (s)	3.7	4.4	4.4	3.7	4.4		4.1	4.1	4.1	4.1	4.1	
All-Red Time (s)	1.0	1.5	1.5	1.0	1.5		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.7	5.9	5.9	4.7	5.9		5.6	5.6	5.6		5.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	2.3	38.1	38.1	13.3	49.1		9.4	9.4	9.4		2.4	
Actuated g/C Ratio	0.03	0.45	0.45	0.16	0.58		0.11	0.11	0.11		0.03	
v/c Ratio	1.54	0.83	0.57	1.26	0.35		2.36	2.34	0.83		0.85	
Control Delay	360.2	23.6	4.7	165.0	9.9		650.8	642.6	30.8		100.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	360.2	23.6	4.7	165.0	9.9		650.8	642.6	30.8		100.2	
LOS	F	C	A	F	A		F	F	C		F	
Approach Delay		29.2			71.2			482.4			100.2	
Approach LOS		C			E			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.36			
Intersection Signal Delay: 136.7		Intersection LOS: F	
Intersection Capacity Utilization 88.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: I-105 WB Off-ramp & Imperial Hwy- EWP PM



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	71	2153	466	657	1007	425	424	309	61
v/c Ratio	1.54	0.83	0.57	1.26	0.35	2.36	2.34	0.83	0.85
Control Delay	360.2	23.6	4.7	165.0	9.9	650.8	642.6	30.8	100.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	360.2	23.6	4.7	165.0	9.9	650.8	642.6	30.8	100.2
Queue Length 50th (ft)	~65	355	0	~275	115	~475	~473	48	22
Queue Length 95th (ft)	#164	421	79	#402	146	#697	#695	#208	#111
Internal Link Dist (ft)		1052			973		505		410
Turn Bay Length (ft)	100			340					
Base Capacity (vph)	46	2609	815	521	2851	180	181	374	72
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.54	0.83	0.57	1.26	0.35	2.36	2.34	0.83	0.85

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

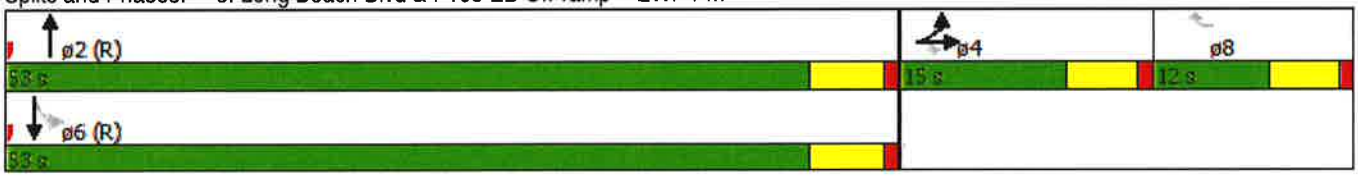
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	328	1	215	0	0	14	0	991	4	14	920	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		110	0		0	0		0	180		0
Storage Lanes	1		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850			0.865		0.999				
Flt Protected	0.950	0.953								0.950		
Satd. Flow (prot)	1633	1638	1538	0	0	1565	0	4935	0	1719	3438	0
Flt Permitted	0.950	0.953								0.232		
Satd. Flow (perm)	1633	1638	1538	0	0	1565	0	4935	0	420	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			234			102		1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		817			156			598			555	
Travel Time (s)		18.6			3.5			13.6			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	357	1	234	0	0	15	0	1077	4	15	1000	0
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	178	180	234	0	0	15	0	1081	0	15	1000	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	Perm			Perm		NA		Perm	NA	
Protected Phases	4	4						2			6	
Permitted Phases			4			8				6		
Minimum Split (s)	21.1	21.1	21.1			21.1		21.4		21.4	21.4	
Total Split (s)	15.0	15.0	15.0			12.0		53.0		53.0	53.0	
Total Split (%)	18.8%	18.8%	18.8%			15.0%		66.3%		66.3%	66.3%	
Maximum Green (s)	9.9	9.9	9.9			6.9		47.6		47.6	47.6	
Yellow Time (s)	4.1	4.1	4.1			4.1		4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0			1.0		1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.1			5.1		5.4		5.4	5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0			5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0			0		0		0	0	
Act Effct Green (s)	9.9	9.9	9.9			6.9		47.6		47.6	47.6	
Actuated g/C Ratio	0.12	0.12	0.12			0.09		0.60		0.60	0.60	
v/c Ratio	0.88	0.89	0.59			0.07		0.37		0.06	0.49	
Control Delay	76.1	77.8	11.7			0.6		8.8		7.6	10.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Delay	76.1	77.8	11.7			0.6		8.8		7.6	10.3	
LOS	E	E	B			A		A		A	B	
Approach Delay		51.2						8.8			10.2	
Approach LOS		D						A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 EB Off-ramp - EWP PM



Lane Group	EBL	EBT	EBR	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	178	180	234	15	1081	15	1000
v/c Ratio	0.88	0.89	0.59	0.07	0.37	0.06	0.49
Control Delay	76.1	77.8	11.7	0.6	8.8	7.6	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.1	77.8	11.7	0.6	8.8	7.6	10.3
Queue Length 50th (ft)	112	113	0	0	111	3	163
Queue Length 95th (ft)	#255	#258	75	0	142	13	217
Internal Link Dist (ft)		737			518		475
Turn Bay Length (ft)			110			180	
Base Capacity (vph)	202	202	395	228	2936	249	2045
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.89	0.59	0.07	0.37	0.06	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

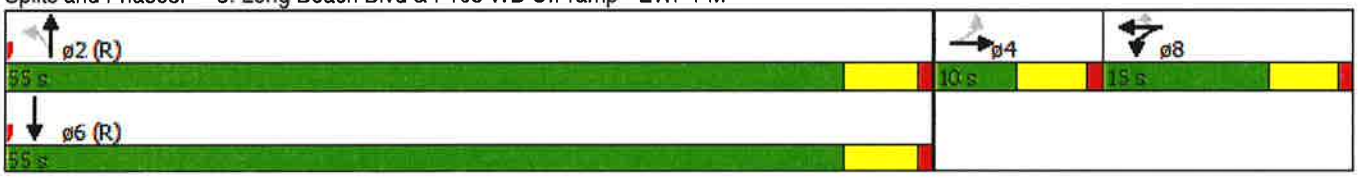
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	0	9	285	9	990	15	1064	0	0	1221	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.964			0.853	0.850					0.998	
Flt Protected		0.964		0.950			0.950					
Satd. Flow (prot)	0	1682	0	1719	1466	1461	1719	4940	0	0	4930	0
Flt Permitted		0.709		0.950			0.167					
Satd. Flow (perm)	0	1237	0	1719	1466	1461	302	4940	0	0	4930	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			138	138					6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	0	10	310	10	1076	16	1157	0	0	1327	22
Shared Lane Traffic (%)						50%						
Lane Group Flow (vph)	0	38	0	310	548	538	16	1157	0	0	1349	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Split	NA	Perm	Perm	NA			NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4					8	2					
Minimum Split (s)	21.1	21.1		21.1	21.1	21.1	31.4	31.4			21.4	
Total Split (s)	10.0	10.0		15.0	15.0	15.0	55.0	55.0			55.0	
Total Split (%)	12.5%	12.5%		18.8%	18.8%	18.8%	68.8%	68.8%			68.8%	
Maximum Green (s)	4.9	4.9		9.9	9.9	9.9	49.6	49.6			49.6	
Yellow Time (s)	4.1	4.1		4.1	4.1	4.1	4.4	4.4			4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0			1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)		5.1		5.1	5.1	5.1	5.4	5.4			5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		4.9		9.9	9.9	9.9	49.6	49.6			49.6	
Actuated g/C Ratio		0.06		0.12	0.12	0.12	0.62	0.62			0.62	
v/c Ratio		0.22		1.46	1.81	1.79	0.09	0.38			0.44	
Control Delay		3.0		261.9	400.0	388.1	7.5	8.0			8.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		3.0		261.9	400.0	388.1	7.5	8.0			8.5	
LOS		A		F	F	F	A	A			A	
Approach Delay		3.0			364.8			8.0			8.5	
Approach LOS		A			F			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 1.81
Intersection Signal Delay: 134.0 Intersection LOS: F
Intersection Capacity Utilization 77.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: Long Beach Blvd & I-105 WB Off-ramp- EWP PM



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	38	310	548	538	16	1157	1349
v/c Ratio	0.22	1.46	1.81	1.79	0.09	0.38	0.44
Control Delay	3.0	261.9	400.0	388.1	7.5	8.0	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.0	261.9	400.0	388.1	7.5	8.0	8.5
Queue Length 50th (ft)	0	~258	~452	~440	4	112	138
Queue Length 95th (ft)	0	#441	#695	#682	13	142	172
Internal Link Dist (ft)	135		493			413	470
Turn Bay Length (ft)				140	150		
Base Capacity (vph)	171	212	302	301	187	3062	3058
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	1.46	1.81	1.79	0.09	0.38	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

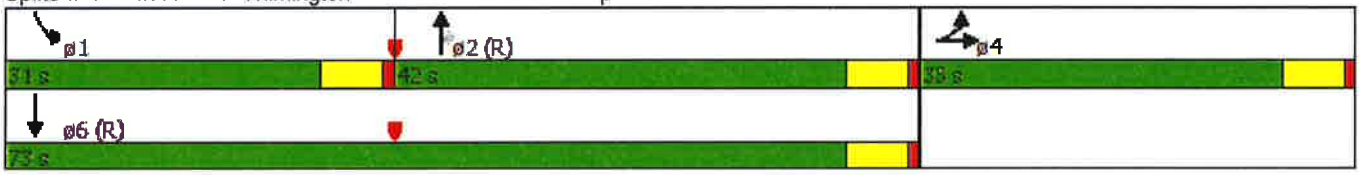
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	448	182	502	0	0	0	0	654	240	307	929	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt		0.898							0.850			
Flt Protected	0.950	0.996								0.950		
Satd. Flow (prot)	1564	2946	0	0	0	0	0	3438	2707	3335	3438	0
Flt Permitted	0.950	0.996								0.950		
Satd. Flow (perm)	1564	2946	0	0	0	0	0	3438	2707	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		127							261			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	487	198	546	0	0	0	0	711	261	334	1010	0
Shared Lane Traffic (%)	12%											
Lane Group Flow (vph)	429	802	0	0	0	0	0	711	261	334	1010	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Minimum Split (s)	22.0	22.0						22.0	22.0	10.0	22.0	
Total Split (s)	35.0	35.0						42.0	42.0	31.0	73.0	
Total Split (%)	32.4%	32.4%						38.9%	38.9%	28.7%	67.6%	
Maximum Green (s)	29.0	29.0						36.0	36.0	25.0	67.0	
Yellow Time (s)	5.0	5.0						5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0						1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0						6.0	6.0	6.0	6.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0						5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0						11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0						0	0		0	
Act Effct Green (s)	29.0	29.0						36.0	36.0	25.0	67.0	
Actuated g/C Ratio	0.27	0.27						0.33	0.33	0.23	0.62	
v/c Ratio	1.02	1.13dr						0.62	0.24	0.43	0.47	
Control Delay	90.2	47.5						33.1	3.8	37.5	11.9	
Queue Delay	0.0	0.0						0.0	0.0	0.0	0.0	
Total Delay	90.2	47.5						33.1	3.8	37.5	11.9	
LOS	F	D						C	A	D	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		62.4						25.2			18.3	
Approach LOS		E						C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 108			
Actuated Cycle Length: 108			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 35.5		Intersection LOS: D	
Intersection Capacity Utilization 64.6%		ICU Level of Service C	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilmington Ave & SR-91 EB Off-ramp - EWP PM



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	429	802	711	261	334	1010
v/c Ratio	1.02	1.13dr	0.62	0.24	0.43	0.47
Control Delay	90.2	47.5	33.1	3.8	37.5	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.2	47.5	33.1	3.8	37.5	11.9
Queue Length 50th (ft)	~417	305	259	0	122	219
Queue Length 95th (ft)	#672	#452	336	36	175	276
Internal Link Dist (ft)		510	324			339
Turn Bay Length (ft)						
Base Capacity (vph)	419	883	1146	1076	771	2132
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.91	0.62	0.24	0.43	0.47

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

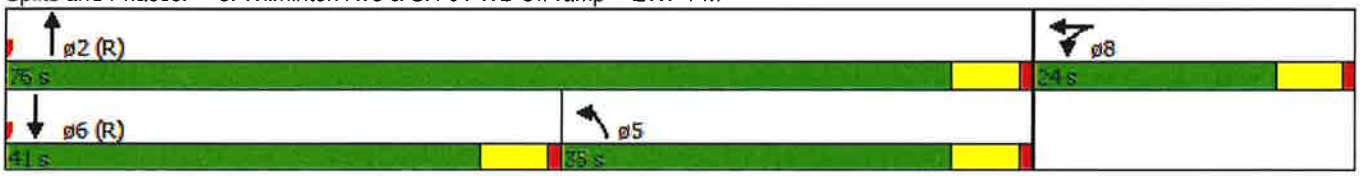
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	197	834	207	325	791	0	0	1005	669
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.91	0.91
Frt					0.971						0.940	
Flt Protected				0.950	0.999		0.950					
Satd. Flow (prot)	0	0	0	1564	3195	0	1719	3438	0	0	4644	0
Flt Permitted				0.950	0.999		0.950					
Satd. Flow (perm)	0	0	0	1564	3195	0	1719	3438	0	0	4644	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					24						137	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	214	907	225	353	860	0	0	1092	727
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	193	1153	0	353	860	0	0	1819	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases												
Minimum Split (s)				22.0	22.0		10.0	22.0			22.0	
Total Split (s)				24.0	24.0		35.0	76.0			41.0	
Total Split (%)				24.0%	24.0%		35.0%	76.0%			41.0%	
Maximum Green (s)				18.0	18.0		29.0	70.0			35.0	
Yellow Time (s)				5.0	5.0		5.0	5.0			5.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				5.0	5.0			5.0			5.0	
Flash Dont Walk (s)				11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				18.0	18.0		29.0	70.0			35.0	
Actuated g/C Ratio				0.18	0.18		0.29	0.70			0.35	
v/c Ratio				0.69	1.94		0.71	0.36			1.14dr	
Control Delay				52.3	455.1		40.8	6.5			70.2	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				52.3	455.1		40.8	6.5			70.2	
LOS				D	F		D	A			E	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					397.3			16.5			70.2	
Approach LOS					F			B			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.94			
Intersection Signal Delay: 155.9		Intersection LOS: F	
Intersection Capacity Utilization 91.2%		ICU Level of Service F	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilminton Ave & SR-91 WB Off-ramp - EWP PM



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	193	1153	353	860	1819
v/c Ratio	0.69	1.94	0.71	0.36	1.14dr
Control Delay	52.3	455.1	40.8	6.5	70.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.3	455.1	40.8	6.5	70.2
Queue Length 50th (ft)	153	~753	241	121	~538
Queue Length 95th (ft)	#274	#920	365	155	#656
Internal Link Dist (ft)		500		324	339
Turn Bay Length (ft)					
Base Capacity (vph)	281	594	498	2406	1714
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	1.94	0.71	0.36	1.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Freeway Off-Ramp Analysis

Future Without Project Conditions

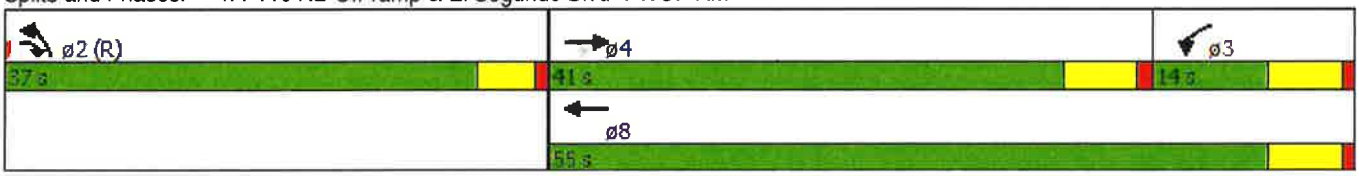
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1064	263	126	1375	766	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.968	
Flt Protected			0.950		0.962	
Satd. Flow (prot)	3471	1553	1736	4988	3300	0
Flt Permitted			0.950		0.962	
Satd. Flow (perm)	3471	1553	1736	4988	3300	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		135			41	
Link Speed (mph)	30			30	30	
Link Distance (ft)	568			630	393	
Travel Time (s)	12.9			14.3	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1157	286	137	1495	833	222
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1157	286	137	1495	1055	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	4	2	3	8	2	
Permitted Phases		4				
Minimum Split (s)	22.0	22.0	10.0	22.0	22.0	
Total Split (s)	41.0	37.0	14.0	55.0	37.0	
Total Split (%)	44.6%	40.2%	15.2%	59.8%	40.2%	
Maximum Green (s)	35.0	32.0	8.0	49.0	32.0	
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	5.0	6.0	6.0	5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	35.0	73.0	8.0	49.0	32.0	
Actuated g/C Ratio	0.38	0.79	0.09	0.53	0.35	
v/c Ratio	0.88	0.23	0.91	0.56	0.90	
Control Delay	35.6	1.6	97.7	15.4	39.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	35.6	1.6	97.7	15.4	39.1	
LOS	D	A	F	B	D	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	28.9			22.3	39.1	
Approach LOS	C			C	D	

Intersection Summary

Area Type: Other
Cycle Length: 92
Actuated Cycle Length: 92
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 28.9 Intersection LOS: C
Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 4: I-110 NB Off-ramp & El Segundo Blvd- FWOP AM



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1157	286	137	1495	1055
v/c Ratio	0.88	0.23	0.91	0.56	0.90
Control Delay	35.6	1.6	97.7	15.4	39.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	35.6	1.6	97.7	15.4	39.1
Queue Length 50th (ft)	388	18	97	241	344
Queue Length 95th (ft)	#537	37	#228	292	#492
Internal Link Dist (ft)	488			550	313
Turn Bay Length (ft)					
Base Capacity (vph)	1320	1260	150	2656	1174
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.88	0.23	0.91	0.56	0.90

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

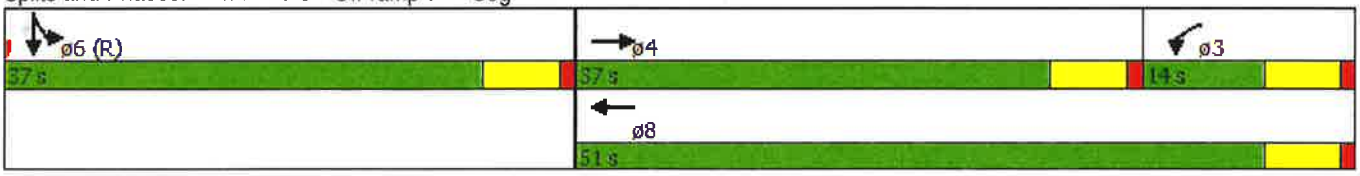
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	784	591	342	1819	0	0	0	0	574	0	916
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Frt		0.936									0.868	0.850
Flt Protected				0.950						0.950	0.994	
Satd. Flow (prot)	0	4668	0	1736	4988	0	0	0	0	1649	1434	1475
Flt Permitted				0.950						0.950	0.994	
Satd. Flow (perm)	0	4668	0	1736	4988	0	0	0	0	1649	1434	1475
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		239									112	112
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		802			783			340			320	
Travel Time (s)		18.2			17.8			7.7			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	852	642	372	1977	0	0	0	0	624	0	996
Shared Lane Traffic (%)										10%		47%
Lane Group Flow (vph)	0	1494	0	372	1977	0	0	0	0	562	530	528
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		4		3	8					6	6	
Permitted Phases												6
Minimum Split (s)		22.0		10.0	22.0					22.0	22.0	22.0
Total Split (s)		37.0		14.0	51.0					37.0	37.0	37.0
Total Split (%)		42.0%		15.9%	58.0%					42.0%	42.0%	42.0%
Maximum Green (s)		31.0		8.0	45.0					31.0	31.0	31.0
Yellow Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	6.0
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0			5.0					5.0	5.0	5.0
Flash Dont Walk (s)		11.0			11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0					0	0	0
Act Effct Green (s)		31.0		8.0	45.0					31.0	31.0	31.0
Actuated g/C Ratio		0.35		0.09	0.51					0.35	0.35	0.35
v/c Ratio		0.90dr		2.37	0.78					0.97	0.92	0.89
Control Delay		26.6		657.2	20.1					60.5	45.3	41.0
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		26.6		657.2	20.1					60.5	45.3	41.0
LOS		C		F	C					E	D	D

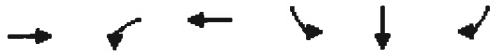
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		26.6			121.0						49.1	
Approach LOS		C			F						D	

Intersection Summary

Area Type: Other
Cycle Length: 88
Actuated Cycle Length: 88
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 2.37
Intersection Signal Delay: 73.9 Intersection LOS: E
Intersection Capacity Utilization 87.6% ICU Level of Service E
Analysis Period (min) 15
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: I-110 SB Off-ramp & El Segundo Blvd- FWOP AM





Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1494	372	1977	562	530	528
v/c Ratio	0.90dr	2.37	0.78	0.97	0.92	0.89
Control Delay	26.6	657.2	20.1	60.5	45.3	41.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.6	657.2	20.1	60.5	45.3	41.0
Queue Length 50th (ft)	280	~411	370	381	300	281
Queue Length 95th (ft)	354	#615	445	#648	#571	#532
Internal Link Dist (ft)	722		703		240	
Turn Bay Length (ft)						
Base Capacity (vph)	1799	157	2550	580	577	592
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.83	2.37	0.78	0.97	0.92	0.89

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

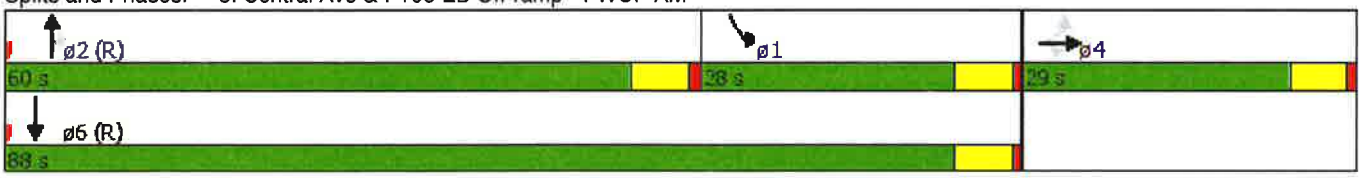
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	727	14	599	0	0	0	0	856	381	618	776	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.91	0.95	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.00
Frt		0.941	0.850						0.850			
Flt Protected	0.950	0.972								0.950		
Satd. Flow (prot)	1633	1506	1461	0	0	0	0	4940	1538	3335	3438	0
Flt Permitted	0.950	0.972								0.950		
Satd. Flow (perm)	1633	1506	1461	0	0	0	0	4940	1538	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25	227						414			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	790	15	651	0	0	0	0	930	414	672	843	0
Shared Lane Traffic (%)	36%		30%									
Lane Group Flow (vph)	506	494	456	0	0	0	0	930	414	672	843	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Minimum Split (s)	22.0	22.0	22.0					22.0	22.0	10.0	22.0	
Total Split (s)	29.0	29.0	29.0					60.0	60.0	28.0	88.0	
Total Split (%)	24.8%	24.8%	24.8%					51.3%	51.3%	23.9%	75.2%	
Maximum Green (s)	23.0	23.0	23.0					54.0	54.0	22.0	82.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0					6.0	6.0	6.0	6.0	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0	5.0					5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0	11.0					11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0		0	
Act Effct Green (s)	23.0	23.0	23.0					54.0	54.0	22.0	82.0	
Actuated g/C Ratio	0.20	0.20	0.20					0.46	0.46	0.19	0.70	
v/c Ratio	1.58	1.56	0.97					0.41	0.44	1.07	0.35	
Control Delay	306.7	299.9	59.3					21.6	3.4	102.0	7.4	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay	306.7	299.9	59.3					21.6	3.4	102.0	7.4	
LOS	F	F	E					C	A	F	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		226.9						16.0			49.4	
Approach LOS		F						B			D	

Intersection Summary

Area Type: Other
Cycle Length: 117
Actuated Cycle Length: 117
Offset: 68 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 1.58
Intersection Signal Delay: 98.9 Intersection LOS: F
Intersection Capacity Utilization 82.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 3: Central Ave & I-105 EB Off-ramp - FWOP AM



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	506	494	456	930	414	672	843
v/c Ratio	1.58	1.56	0.97	0.41	0.44	1.07	0.35
Control Delay	306.7	299.9	59.3	21.6	3.4	102.0	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	306.7	299.9	59.3	21.6	3.4	102.0	7.4
Queue Length 50th (ft)	~685	~680	240	199	0	~347	142
Queue Length 95th (ft)	#951	#960	#513	242	65	#490	178
Internal Link Dist (ft)		575		502			478
Turn Bay Length (ft)							
Base Capacity (vph)	321	316	469	2280	932	627	2409
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.58	1.56	0.97	0.41	0.44	1.07	0.35

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

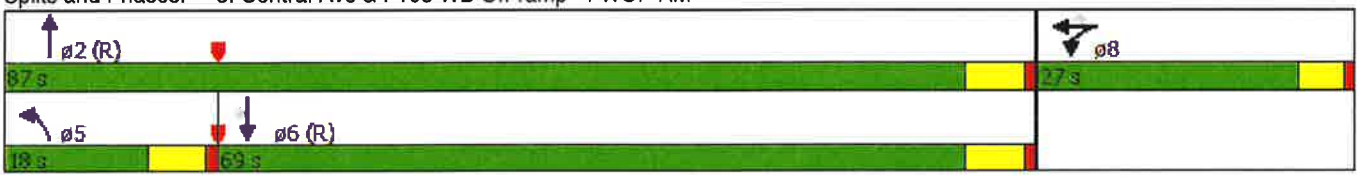
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	151	4	406	333	1237	0	0	1207	802
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950	0.955		0.950					
Satd. Flow (prot)	0	0	0	1633	1642	1538	3335	3438	0	0	3438	1538
Flt Permitted				0.950	0.955		0.950					
Satd. Flow (perm)	0	0	0	1633	1642	1538	3335	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						88						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	164	4	441	362	1345	0	0	1312	872
Shared Lane Traffic (%)				49%								
Lane Group Flow (vph)	0	0	0	84	84	441	362	1345	0	0	1312	872
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Minimum Split (s)				21.1	21.1	21.1	10.0	22.0			22.0	22.0
Total Split (s)				27.0	27.0	27.0	18.0	87.0			69.0	69.0
Total Split (%)				23.7%	23.7%	23.7%	15.8%	76.3%			60.5%	60.5%
Maximum Green (s)				22.0	22.0	22.0	12.0	81.0			63.0	63.0
Yellow Time (s)				4.0	4.0	4.0	5.0	5.0			5.0	5.0
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	6.0	6.0			6.0	6.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Walk Time (s)				5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)				11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)				22.0	22.0	22.0	12.0	81.0			63.0	63.0
Actuated g/C Ratio				0.19	0.19	0.19	0.11	0.71			0.55	0.55
v/c Ratio				0.27	0.27	1.20	1.03	0.55			0.69	1.03
Control Delay				41.8	41.8	146.8	106.5	8.9			20.9	64.4
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				41.8	41.8	146.8	106.5	8.9			20.9	64.4
LOS				D	D	F	F	A			C	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					117.8			29.6			38.3	
Approach LOS					F			C			D	

Intersection Summary

Area Type: Other
Cycle Length: 114
Actuated Cycle Length: 114
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Pretimed
Maximum v/c Ratio: 1.20
Intersection Signal Delay: 45.7 Intersection LOS: D
Intersection Capacity Utilization 77.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: Central Ave & I-105 WB Off-ramp - FWOP AM



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	84	84	441	362	1345	1312	872
v/c Ratio	0.27	0.27	1.20	1.03	0.55	0.69	1.03
Control Delay	41.8	41.8	146.8	106.5	8.9	20.9	64.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.8	41.8	146.8	106.5	8.9	20.9	64.4
Queue Length 50th (ft)	66	66	~406	~176	262	418	~820
Queue Length 95th (ft)	126	126	#651	#291	321	514	#1112
Internal Link Dist (ft)		665			502	478	
Turn Bay Length (ft)							
Base Capacity (vph)	315	316	367	351	2442	1899	849
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.27	1.20	1.03	0.55	0.69	1.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

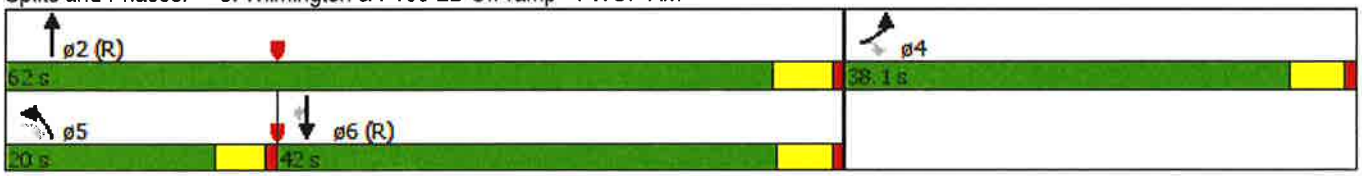
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	449	604	358	731	756	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	120			0
Storage Lanes	1	1	1			2
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.88
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	4940	3438	2707
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	4940	3438	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		55				577
Link Speed (mph)	30			30	30	
Link Distance (ft)	1070			942	903	
Travel Time (s)	24.3			21.4	20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	488	657	389	795	822	577
Shared Lane Traffic (%)						
Lane Group Flow (vph)	488	657	389	795	822	577
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4 5				6
Minimum Split (s)	38.1		8.7	21.4	21.1	21.1
Total Split (s)	38.1		20.0	62.0	42.0	42.0
Total Split (%)	38.1%		20.0%	61.9%	42.0%	42.0%
Maximum Green (s)	33.0		15.3	56.6	36.9	36.9
Yellow Time (s)	4.1		3.7	4.4	4.1	4.1
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1		4.7	5.4	5.1	5.1
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?						
Walk Time (s)	7.0			5.0	5.0	5.0
Flash Dont Walk (s)	26.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	33.0	53.0	15.3	56.6	36.9	36.9
Actuated g/C Ratio	0.33	0.53	0.15	0.57	0.37	0.37
v/c Ratio	0.86	0.78	1.48	0.28	0.65	0.42
Control Delay	48.5	25.3	270.0	11.6	29.1	2.9

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.5	25.3	270.0	11.6	29.1	2.9
LOS	D	C	F	B	C	A
Approach Delay	35.2			96.5	18.3	
Approach LOS	D			F	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100.1			
Actuated Cycle Length: 100.1			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.48			
Intersection Signal Delay: 48.3		Intersection LOS: D	
Intersection Capacity Utilization 78.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington & I-105 EB Off-ramp - FWOP AM



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	488	657	389	795	822	577
v/c Ratio	0.86	0.78	1.48	0.28	0.65	0.42
Control Delay	48.5	25.3	270.0	11.6	29.1	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.5	25.3	270.0	11.6	29.1	2.9
Queue Length 50th (ft)	347	355	~413	108	271	0
Queue Length 95th (ft)	#564	554	#632	137	351	44
Internal Link Dist (ft)	990			862	823	
Turn Bay Length (ft)			120			
Base Capacity (vph)	566	840	262	2793	1267	1362
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.78	1.48	0.28	0.65	0.42

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	1123	250	810	1499	14	591	12	150	8	37	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	340		0	0		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	0.81	0.97	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.997	0.850		0.999				0.850		0.916	
Flt Protected	0.950			0.950			0.950	0.954			0.997	
Satd. Flow (prot)	1719	5845	1246	3335	4935	0	1633	1640	1538	0	1653	0
Flt Permitted	0.950			0.950			0.950	0.954			0.937	
Satd. Flow (perm)	1719	5845	1246	3335	4935	0	1633	1640	1538	0	1553	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6	245		2				245		63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1132			1053			585			490	
Travel Time (s)		25.7			23.9			13.3			11.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	1221	272	880	1629	15	642	13	163	9	40	80
Shared Lane Traffic (%)			10%				49%					
Lane Group Flow (vph)	60	1248	245	880	1644	0	327	328	163	0	129	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		2	2			6	
Permitted Phases			4						2	6		
Minimum Split (s)	8.7	21.9	21.9	8.7	21.9		21.6	21.6	21.6	21.6	21.6	
Total Split (s)	7.0	44.0	44.0	16.0	53.0		15.0	15.0	15.0	10.0	10.0	
Total Split (%)	8.2%	51.8%	51.8%	18.8%	62.4%		17.6%	17.6%	17.6%	11.8%	11.8%	
Maximum Green (s)	2.3	38.1	38.1	11.3	47.1		9.4	9.4	9.4	4.4	4.4	
Yellow Time (s)	3.7	4.4	4.4	3.7	4.4		4.1	4.1	4.1	4.1	4.1	
All-Red Time (s)	1.0	1.5	1.5	1.0	1.5		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.7	5.9	5.9	4.7	5.9		5.6	5.6	5.6		5.6	
Lead/Lag	Lead	Lead	Lead	Lag	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	2.3	38.1	38.1	11.3	47.1		9.4	9.4	9.4		4.4	
Actuated g/C Ratio	0.03	0.45	0.45	0.13	0.55		0.11	0.11	0.11		0.05	
v/c Ratio	1.30	0.48	0.35	1.99	0.60		1.82	1.81	0.42		0.92	
Control Delay	272.7	17.1	3.6	476.3	13.8		414.9	412.8	4.4		83.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	272.7	17.1	3.6	476.3	13.8		414.9	412.8	4.4		83.2	
LOS	F	B	A	F	B		F	F	A		F	
Approach Delay		24.8			175.1			332.2			83.2	
Approach LOS		C			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.99			
Intersection Signal Delay: 151.9		Intersection LOS: F	
Intersection Capacity Utilization 77.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: I-105 Off-ramp & Imperial Hwy- FWOP AM

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	60	1248	245	880	1644	327	328	163	129
v/c Ratio	1.30	0.48	0.35	1.99	0.60	1.82	1.81	0.42	0.92
Control Delay	272.7	17.1	3.6	476.3	13.8	414.9	412.8	4.4	83.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	272.7	17.1	3.6	476.3	13.8	414.9	412.8	4.4	83.2
Queue Length 50th (ft)	~50	166	0	~458	239	~336	~337	0	43
Queue Length 95th (ft)	#143	204	59	#596	293	#538	#538	15	#171
Internal Link Dist (ft)		1052			973		505		410
Turn Bay Length (ft)	100			340					
Base Capacity (vph)	46	2623	693	443	2735	180	181	387	140
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.30	0.48	0.35	1.99	0.60	1.82	1.81	0.42	0.92

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	670	3	378	0	0	12	0	990	15	33	658	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		110	0		0	0		0	180		0
Storage Lanes	1		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850			0.865		0.998				
Flt Protected	0.950	0.953								0.950		
Satd. Flow (prot)	1633	1638	1538	0	0	1565	0	4930	0	1719	3438	0
Flt Permitted	0.950	0.953								0.223		
Satd. Flow (perm)	1633	1638	1538	0	0	1565	0	4930	0	404	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			289			102		4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		817			156			598			555	
Travel Time (s)		18.6			3.5			13.6			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	728	3	411	0	0	13	0	1076	16	36	715	0
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	364	367	411	0	0	13	0	1092	0	36	715	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	Perm			Perm		NA		Perm	NA	
Protected Phases	4	4						2			6	
Permitted Phases			4			8				6		
Minimum Split (s)	21.1	21.1	21.1			21.1		21.4		21.4	21.4	
Total Split (s)	20.0	20.0	20.0			10.0		50.0		50.0	50.0	
Total Split (%)	25.0%	25.0%	25.0%			12.5%		62.5%		62.5%	62.5%	
Maximum Green (s)	14.9	14.9	14.9			4.9		44.6		44.6	44.6	
Yellow Time (s)	4.1	4.1	4.1			4.1		4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0			1.0		1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.1			5.1		5.4		5.4	5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0			5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0			0		0		0	0	
Act Effct Green (s)	14.9	14.9	14.9			4.9		44.6		44.6	44.6	
Actuated g/C Ratio	0.19	0.19	0.19			0.06		0.56		0.56	0.56	
v/c Ratio	1.20	1.20	0.79			0.07		0.40		0.16	0.37	
Control Delay	148.4	150.4	22.4			0.7		10.6		10.8	10.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Delay	148.4	150.4	22.4			0.7		10.6		10.8	10.6	
LOS	F	F	C			A		B		B	B	
Approach Delay		103.7						10.6			10.6	
Approach LOS		F						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 46.0		Intersection LOS: D	
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			

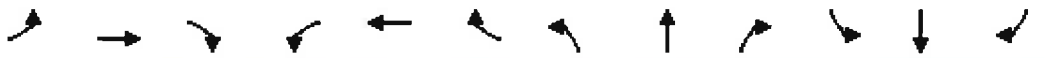
Splits and Phases: 3: Long Beach Blvd & I-105 EB Off-ramp - FWOP AM

Lane Group	EBL	EBT	EBR	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	364	367	411	13	1092	36	715
v/c Ratio	1.20	1.20	0.79	0.07	0.40	0.16	0.37
Control Delay	148.4	150.4	22.4	0.7	10.6	10.8	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	148.4	150.4	22.4	0.7	10.6	10.8	10.6
Queue Length 50th (ft)	~283	~286	65	0	125	10	116
Queue Length 95th (ft)	#488	#490	#239	0	159	29	159
Internal Link Dist (ft)		737			518		475
Turn Bay Length (ft)			110			180	
Base Capacity (vph)	304	305	521	191	2750	225	1916
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.20	1.20	0.79	0.07	0.40	0.16	0.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

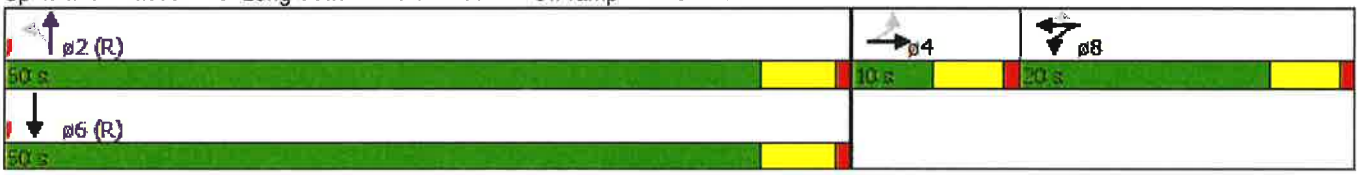


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	0	6	180	30	864	12	1225	0	0	1329	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.957			0.860	0.850					0.995	
Flt Protected		0.967		0.950			0.950					
Satd. Flow (prot)	0	1675	0	1719	1478	1461	1719	4940	0	0	4915	0
Flt Permitted		0.686		0.950			0.126					
Satd. Flow (perm)	0	1188	0	1719	1478	1461	228	4940	0	0	4915	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			118	118					11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	0	7	196	33	939	13	1332	0	0	1445	52
Shared Lane Traffic (%)						49%						
Lane Group Flow (vph)	0	22	0	196	493	479	13	1332	0	0	1497	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Split	NA	Perm	Perm	NA			NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4					8	2					
Minimum Split (s)	21.1	21.1		21.1	21.1	21.1	31.4	31.4			21.4	
Total Split (s)	10.0	10.0		20.0	20.0	20.0	50.0	50.0			50.0	
Total Split (%)	12.5%	12.5%		25.0%	25.0%	25.0%	62.5%	62.5%			62.5%	
Maximum Green (s)	4.9	4.9		14.9	14.9	14.9	44.6	44.6			44.6	
Yellow Time (s)	4.1	4.1		4.1	4.1	4.1	4.4	4.4			4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0			1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)		5.1		5.1	5.1	5.1	5.4	5.4			5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		4.9		14.9	14.9	14.9	44.6	44.6			44.6	
Actuated g/C Ratio		0.06		0.19	0.19	0.19	0.56	0.56			0.56	
v/c Ratio		0.13		0.61	1.33	1.30	0.10	0.48			0.55	
Control Delay		1.6		39.1	189.7	178.6	10.8	11.5			12.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		1.6		39.1	189.7	178.6	10.8	11.5			12.1	
LOS		A		D	F	F	B	B			B	
Approach Delay		1.6			159.9			11.5			12.1	
Approach LOS		A			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay: 54.6		Intersection LOS: D	
Intersection Capacity Utilization 75.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 WB Off-ramp - FWOP AM



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	22	196	493	479	13	1332	1497
v/c Ratio	0.13	0.61	1.33	1.30	0.10	0.48	0.55
Control Delay	1.6	39.1	189.7	178.6	10.8	11.5	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.6	39.1	189.7	178.6	10.8	11.5	12.1
Queue Length 50th (ft)	0	109	~347	~329	3	163	191
Queue Length 95th (ft)	0	190	#581	#563	15	205	238
Internal Link Dist (ft)	135		493			413	470
Turn Bay Length (ft)				140	150		
Base Capacity (vph)	168	320	371	368	127	2754	2744
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.61	1.33	1.30	0.10	0.48	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

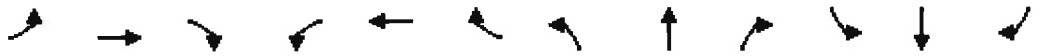
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	576	1133	1165	258	191	591
v/c Ratio	1.37	1.31	1.17	0.27	0.21	0.28
Control Delay	213.9	177.7	122.0	5.2	27.5	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	213.9	177.7	122.0	5.2	27.5	8.9
Queue Length 50th (ft)	~624	~588	~545	4	55	96
Queue Length 95th (ft)	#895	#753	#701	42	89	130
Internal Link Dist (ft)		510	324			339
Turn Bay Length (ft)						
Base Capacity (vph)	419	866	992	953	928	2126
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.37	1.31	1.17	0.27	0.21	0.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



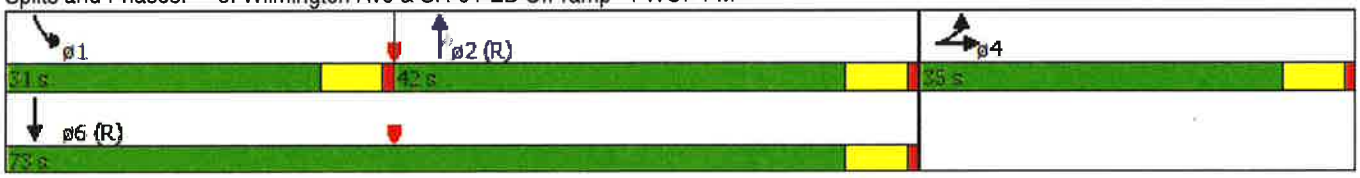
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	198	548	0	0	0	0	631	262	279	906	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt		0.896							0.850			
Flt Protected	0.950	0.997								0.950		
Satd. Flow (prot)	1564	2942	0	0	0	0	0	3438	2707	3335	3438	0
Flt Permitted	0.950	0.997								0.950		
Satd. Flow (perm)	1564	2942	0	0	0	0	0	3438	2707	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		134							285			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	514	215	596	0	0	0	0	686	285	303	985	0
Shared Lane Traffic (%)	10%											
Lane Group Flow (vph)	463	862	0	0	0	0	0	686	285	303	985	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Minimum Split (s)	22.0	22.0						22.0	22.0	10.0	22.0	
Total Split (s)	35.0	35.0						42.0	42.0	31.0	73.0	
Total Split (%)	32.4%	32.4%						38.9%	38.9%	28.7%	67.6%	
Maximum Green (s)	29.0	29.0						36.0	36.0	25.0	67.0	
Yellow Time (s)	5.0	5.0						5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0						1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0						6.0	6.0	6.0	6.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0						5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0						11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0						0	0		0	
Act Effct Green (s)	29.0	29.0						36.0	36.0	25.0	67.0	
Actuated g/C Ratio	0.27	0.27						0.33	0.33	0.23	0.62	
v/c Ratio	1.11	1.22dr						0.60	0.26	0.39	0.46	
Control Delay	113.6	57.6						32.6	3.7	36.9	11.8	
Queue Delay	0.0	0.0						0.0	0.0	0.0	0.0	
Total Delay	113.6	57.6						32.6	3.7	36.9	11.8	
LOS	F	E						C	A	D	B	

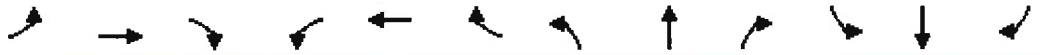
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		77.1						24.1			17.7	
Approach LOS		E						C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 108			
Actuated Cycle Length: 108			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 41.4		Intersection LOS: D	
Intersection Capacity Utilization 65.0%		ICU Level of Service C	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilmington Ave & SR-91 EB Off-ramp - FWOP PM





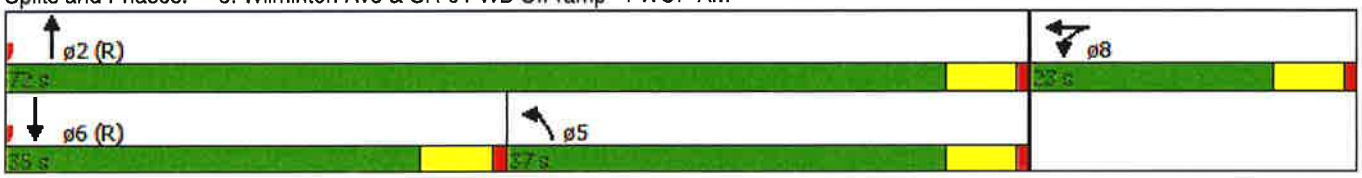
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	191	98	628	585	1358	0	0	500	526
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.91	0.91
Frt					0.874						0.923	
Flt Protected				0.950	0.999		0.950					
Satd. Flow (prot)	0	0	0	1564	2875	0	1719	3438	0	0	4560	0
Flt Permitted				0.950	0.999		0.950					
Satd. Flow (perm)	0	0	0	1564	2875	0	1719	3438	0	0	4560	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					64						232	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	208	107	683	636	1476	0	0	543	572
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	187	811	0	636	1476	0	0	1115	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases												
Minimum Split (s)				22.0	22.0		10.0	22.0			22.0	
Total Split (s)				23.0	23.0		37.0	72.0			35.0	
Total Split (%)				24.2%	24.2%		38.9%	75.8%			36.8%	
Maximum Green (s)				17.0	17.0		31.0	66.0			29.0	
Yellow Time (s)				5.0	5.0		5.0	5.0			5.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				5.0	5.0			5.0			5.0	
Flash Dont Walk (s)				11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				17.0	17.0		31.0	66.0			29.0	
Actuated g/C Ratio				0.18	0.18		0.33	0.69			0.31	
v/c Ratio				0.67	2.18dr		1.14	0.62			0.90dr	
Control Delay				49.6	233.2		113.0	9.2			26.0	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				49.6	233.2		113.0	9.2			26.0	
LOS				D	F		F	A			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					198.8			40.4			26.0	
Approach LOS					F			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.43			
Intersection Signal Delay: 74.0		Intersection LOS: E	
Intersection Capacity Utilization 87.9%		ICU Level of Service E	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilminton Ave & SR-91 WB Off-ramp - FWOP AM



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	187	811	636	1476	1115
v/c Ratio	0.67	2.18dr	1.14	0.62	0.90dr
Control Delay	49.6	233.2	113.0	9.2	26.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	233.2	113.0	9.2	26.0
Queue Length 50th (ft)	139	~421	~540	261	208
Queue Length 95th (ft)	#254	#573	#791	331	270
Internal Link Dist (ft)		500		324	339
Turn Bay Length (ft)					
Base Capacity (vph)	279	567	560	2388	1553
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.67	1.43	1.14	0.62	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

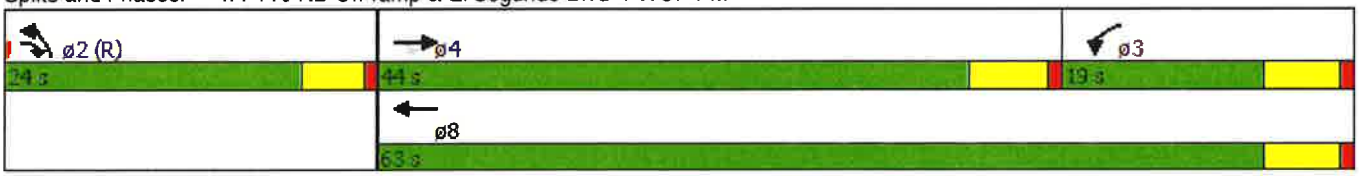
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1683	484	326	826	347	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.928	
Flt Protected			0.950		0.975	
Satd. Flow (prot)	3471	1553	1736	4988	3207	0
Flt Permitted			0.950		0.975	
Satd. Flow (perm)	3471	1553	1736	4988	3207	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		45			246	
Link Speed (mph)	30			30	30	
Link Distance (ft)	568			630	393	
Travel Time (s)	12.9			14.3	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1829	526	354	898	377	348
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1829	526	354	898	725	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	4	2	3	8	2	
Permitted Phases		4				
Minimum Split (s)	22.0	21.1	10.0	22.0	21.1	
Total Split (s)	44.0	24.0	19.0	63.0	24.0	
Total Split (%)	50.6%	27.6%	21.8%	72.4%	27.6%	
Maximum Green (s)	38.0	19.0	13.0	57.0	19.0	
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	5.0	6.0	6.0	5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	38.0	63.0	13.0	57.0	19.0	
Actuated g/C Ratio	0.44	0.72	0.15	0.66	0.22	
v/c Ratio	1.21	0.46	1.37	0.27	0.81	
Control Delay	124.8	6.0	219.8	6.6	29.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	124.8	6.0	219.8	6.6	29.7	
LOS	F	A	F	A	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	98.3			66.9	29.7	
Approach LOS	F			E	C	

Intersection Summary

Area Type: Other
Cycle Length: 87
Actuated Cycle Length: 87
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green
Natural Cycle: 140
Control Type: Pretimed
Maximum v/c Ratio: 1.37
Intersection Signal Delay: 77.7 Intersection LOS: E
Intersection Capacity Utilization 98.7% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 4: I-110 NB Off-ramp & El Segundo Blvd- FWOP PM



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1829	526	354	898	725
v/c Ratio	1.21	0.46	1.37	0.27	0.81
Control Delay	124.8	6.0	219.8	6.6	29.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	124.8	6.0	219.8	6.6	29.7
Queue Length 50th (ft)	~780	106	~310	80	156
Queue Length 95th (ft)	#944	171	#510	102	#246
Internal Link Dist (ft)	488			550	313
Turn Bay Length (ft)					
Base Capacity (vph)	1516	1137	259	3268	892
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.21	0.46	1.37	0.27	0.81

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

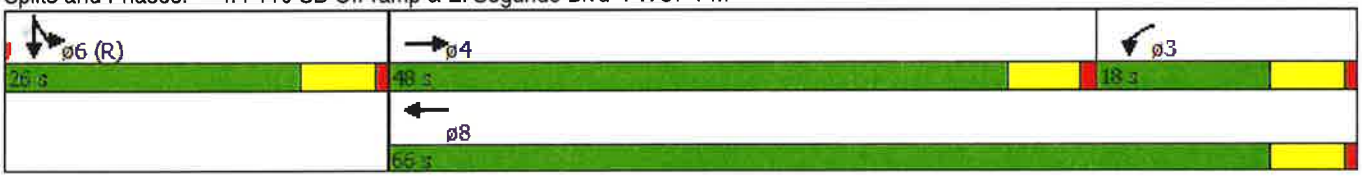
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1678	662	193	995	0	0	0	0	520	0	463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Frt		0.958									0.933	0.850
Flt Protected				0.950						0.950	0.973	
Satd. Flow (prot)	0	4778	0	1736	4988	0	0	0	0	1649	1509	1475
Flt Permitted				0.950						0.950	0.973	
Satd. Flow (perm)	0	4778	0	1736	4988	0	0	0	0	1649	1509	1475
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		142									107	122
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		802			783			340			320	
Travel Time (s)		18.2			17.8			7.7			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1824	720	210	1082	0	0	0	0	565	0	503
Shared Lane Traffic (%)										35%		32%
Lane Group Flow (vph)	0	2544	0	210	1082	0	0	0	0	367	359	342
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		4		3	8					6	6	
Permitted Phases												6
Minimum Split (s)		22.0		10.0	22.0					22.0	22.0	22.0
Total Split (s)		48.0		18.0	66.0					26.0	26.0	26.0
Total Split (%)		52.2%		19.6%	71.7%					28.3%	28.3%	28.3%
Maximum Green (s)		42.0		12.0	60.0					20.0	20.0	20.0
Yellow Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	6.0
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0			5.0					5.0	5.0	5.0
Flash Dont Walk (s)		11.0			11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0					0	0	0
Act Effct Green (s)		42.0		12.0	60.0					20.0	20.0	20.0
Actuated g/C Ratio		0.46		0.13	0.65					0.22	0.22	0.22
v/c Ratio		1.13		0.93	0.33					1.03	0.87	0.82
Control Delay		87.9		85.8	7.4					91.7	47.7	39.7
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		87.9		85.8	7.4					91.7	47.7	39.7
LOS		F		F	A					F	D	D

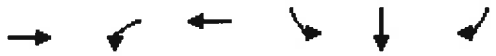
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		87.9			20.2						60.3	
Approach LOS		F			C						E	

Intersection Summary

Area Type: Other
Cycle Length: 92
Actuated Cycle Length: 92
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 64.1 Intersection LOS: E
Intersection Capacity Utilization 92.0% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 4: I-110 SB Off-ramp & El Segundo Blvd- FWOP PM





Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	2544	210	1082	367	359	342
v/c Ratio	1.13	0.93	0.33	1.03	0.87	0.82
Control Delay	87.9	85.8	7.4	91.7	47.7	39.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.9	85.8	7.4	91.7	47.7	39.7
Queue Length 50th (ft)	~742	148	109	~282	192	157
Queue Length 95th (ft)	#859	#308	136	#508	#405	#343
Internal Link Dist (ft)	722		703		240	
Turn Bay Length (ft)						
Base Capacity (vph)	2258	226	3253	358	411	416
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.13	0.93	0.33	1.03	0.87	0.82

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

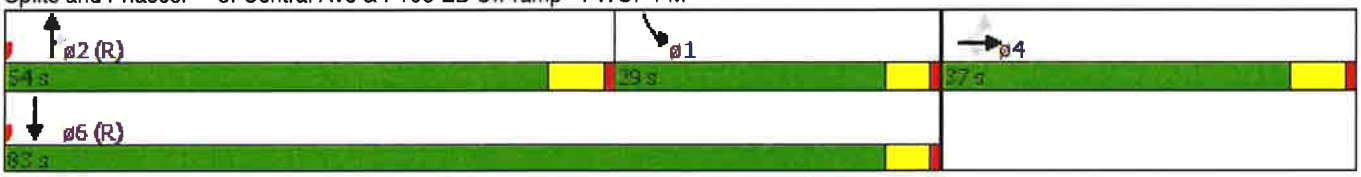
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	524	262	441	0	0	0	0	968	471	505	952	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.91	0.95	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.00
Frt		0.978	0.850						0.850			
Flt Protected	0.950	0.988								0.950		
Satd. Flow (prot)	1633	1591	1461	0	0	0	0	4940	1538	3335	3438	0
Flt Permitted	0.950	0.988								0.950		
Satd. Flow (perm)	1633	1591	1461	0	0	0	0	4940	1538	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7	133						158			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	570	285	479	0	0	0	0	1052	512	549	1035	0
Shared Lane Traffic (%)	20%		14%									
Lane Group Flow (vph)	456	466	412	0	0	0	0	1052	512	549	1035	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Minimum Split (s)	22.0	22.0	22.0					22.0	22.0	9.0	22.0	
Total Split (s)	37.0	37.0	37.0					54.0	54.0	29.0	83.0	
Total Split (%)	30.8%	30.8%	30.8%					45.0%	45.0%	24.2%	69.2%	
Maximum Green (s)	31.0	31.0	31.0					48.0	48.0	24.0	78.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0					6.0	6.0	5.0	5.0	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0	5.0					5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0	11.0					11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0		0	
Act Effct Green (s)	31.0	31.0	31.0					48.0	48.0	24.0	78.0	
Actuated g/C Ratio	0.26	0.26	0.26					0.40	0.40	0.20	0.65	
v/c Ratio	1.08	1.12	0.87					0.53	0.72	0.82	0.46	
Control Delay	110.4	121.8	47.9					28.7	27.2	57.4	11.3	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay	110.4	121.8	47.9					28.7	27.2	57.4	11.3	
LOS	F	F	D					C	C	E	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		95.1						28.2			27.3	
Approach LOS		F						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 28 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 47.8		Intersection LOS: D	
Intersection Capacity Utilization 83.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 EB Off-ramp - FWOP PM



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	456	466	412	1052	512	549	1035
v/c Ratio	1.08	1.12	0.87	0.53	0.72	0.82	0.46
Control Delay	110.4	121.8	47.9	28.7	27.2	57.4	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	110.4	121.8	47.9	28.7	27.2	57.4	11.3
Queue Length 50th (ft)	~498	~543	273	269	280	254	233
Queue Length 95th (ft)	#757	#820	#505	323	446	#349	288
Internal Link Dist (ft)		575		502			478
Turn Bay Length (ft)							
Base Capacity (vph)	421	416	476	1976	710	667	2234
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.08	1.12	0.87	0.53	0.72	0.82	0.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

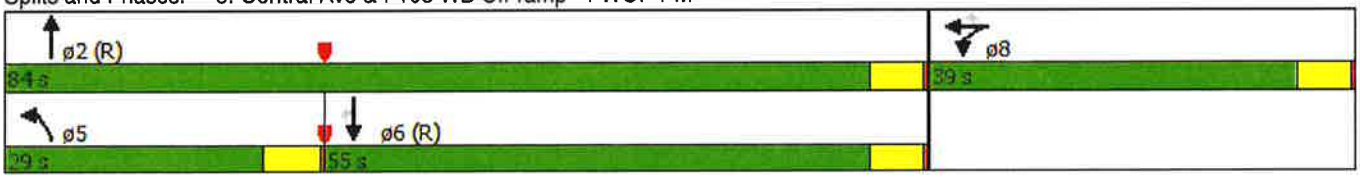
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	330	0	585	386	1075	0	0	1137	611
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950	0.950		0.950					
Satd. Flow (prot)	0	0	0	1633	1633	1538	3335	3438	0	0	3438	1538
Flt Permitted				0.950	0.950		0.950					
Satd. Flow (perm)	0	0	0	1633	1633	1538	3335	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						96						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	359	0	636	420	1168	0	0	1236	664
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	179	180	636	420	1168	0	0	1236	664
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Minimum Split (s)				21.5	21.5	21.5	9.5	21.5			21.5	21.5
Total Split (s)				39.0	39.0	39.0	29.0	84.0			55.0	55.0
Total Split (%)				31.7%	31.7%	31.7%	23.6%	68.3%			44.7%	44.7%
Maximum Green (s)				33.5	33.5	33.5	23.5	78.5			49.5	49.5
Yellow Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)				0.5	0.5	0.5	0.5	0.5			0.5	0.5
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.5	5.5	5.5	5.5	5.5			5.5	5.5
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Walk Time (s)				5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)				11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)				33.5	33.5	33.5	23.5	78.5			49.5	49.5
Actuated g/C Ratio				0.27	0.27	0.27	0.19	0.64			0.40	0.40
v/c Ratio				0.40	0.41	1.30	0.66	0.53			0.89	1.07
Control Delay				39.9	39.9	182.7	51.7	13.3			43.9	93.7
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				39.9	39.9	182.7	51.7	13.3			43.9	93.7
LOS				D	D	F	D	B			D	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					131.2			23.5			61.3	
Approach LOS					F			C			E	

Intersection Summary

Area Type: Other
Cycle Length: 123
Actuated Cycle Length: 123
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 1.30
Intersection Signal Delay: 63.4 Intersection LOS: E
Intersection Capacity Utilization 75.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: Central Ave & I-105 WB Off-ramp - FWOP PM



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	179	180	636	420	1168	1236	664
v/c Ratio	0.40	0.41	1.30	0.66	0.53	0.89	1.07
Control Delay	39.9	39.9	182.7	51.7	13.3	43.9	93.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	39.9	182.7	51.7	13.3	43.9	93.7
Queue Length 50th (ft)	147	148	~710	192	298	571	~703
Queue Length 95th (ft)	234	235	#989	259	364	#703	#981
Internal Link Dist (ft)		665			502	478	
Turn Bay Length (ft)							
Base Capacity (vph)	444	444	488	637	2194	1383	618
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.41	1.30	0.66	0.53	0.89	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

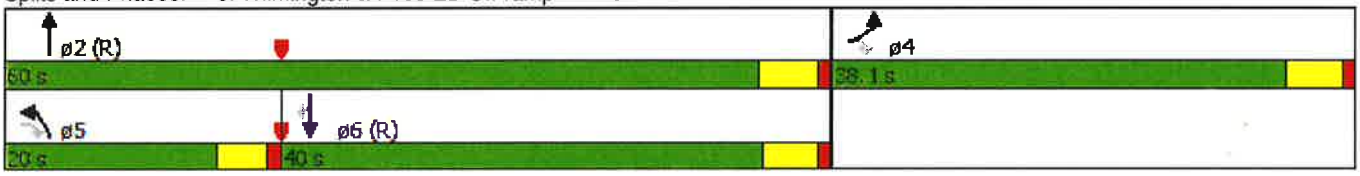
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	361	207	359	1081	633	469
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	120			0
Storage Lanes	1	1	1			2
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.88
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	4940	3438	2707
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	4940	3438	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		83				510
Link Speed (mph)	30			30	30	
Link Distance (ft)	1070			942	903	
Travel Time (s)	24.3			21.4	20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	392	225	390	1175	688	510
Shared Lane Traffic (%)						
Lane Group Flow (vph)	392	225	390	1175	688	510
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4 5				6
Minimum Split (s)	38.1		8.7	21.4	21.1	21.1
Total Split (s)	38.1		20.0	60.0	40.0	40.0
Total Split (%)	38.8%		20.4%	61.2%	40.8%	40.8%
Maximum Green (s)	33.0		15.3	54.6	34.9	34.9
Yellow Time (s)	4.1		3.7	4.4	4.1	4.1
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1		4.7	5.4	5.1	5.1
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?						
Walk Time (s)	7.0			5.0	5.0	5.0
Flash Dont Walk (s)	26.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	33.0	53.0	15.3	54.6	34.9	34.9
Actuated g/C Ratio	0.34	0.54	0.16	0.56	0.36	0.36
v/c Ratio	0.68	0.26	1.46	0.43	0.56	0.40
Control Delay	35.0	8.2	257.0	13.3	27.6	3.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	8.2	257.0	13.3	27.6	3.0
LOS	D	A	F	B	C	A
Approach Delay	25.3			74.0	17.2	
Approach LOS	C			E	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 98.1			
Actuated Cycle Length: 98.1			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.46			
Intersection Signal Delay: 45.0		Intersection LOS: D	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington & I-105 EB Off-ramp - FWOP PM



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	392	225	390	1175	688	510
v/c Ratio	0.68	0.26	1.46	0.43	0.56	0.40
Control Delay	35.0	8.2	257.0	13.3	27.6	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	8.2	257.0	13.3	27.6	3.0
Queue Length 50th (ft)	250	51	~402	176	215	0
Queue Length 95th (ft)	378	101	#618	216	284	43
Internal Link Dist (ft)	990			862	823	
Turn Bay Length (ft)			120			
Base Capacity (vph)	578	869	268	2749	1223	1291
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.26	1.46	0.43	0.56	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

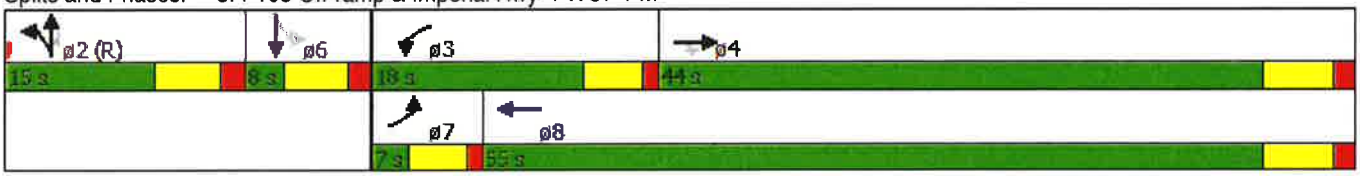
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	1824	399	657	941	1	603	9	299	10	24	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	340		0	0		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	0.81	0.97	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.997	0.850						0.850		0.940	
Flt Protected	0.950			0.950			0.950	0.954			0.992	
Satd. Flow (prot)	1719	5845	1246	3335	4940	0	1633	1640	1538	0	1687	0
Flt Permitted	0.950			0.950			0.950	0.954			0.970	
Satd. Flow (perm)	1719	5845	1246	3335	4940	0	1633	1640	1538	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6	391						230		30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1132			1053			585			490	
Travel Time (s)		25.7			23.9			13.3			11.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	57	1983	434	714	1023	1	655	10	325	11	26	30
Shared Lane Traffic (%)			10%				49%					
Lane Group Flow (vph)	57	2026	391	714	1024	0	334	331	325	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		2	2			6	
Permitted Phases			4						2	6		
Minimum Split (s)	8.7	21.9	21.9	8.7	21.9		21.6	21.6	21.6	21.6	21.6	
Total Split (s)	7.0	44.0	44.0	18.0	55.0		15.0	15.0	15.0	8.0	8.0	
Total Split (%)	8.2%	51.8%	51.8%	21.2%	64.7%		17.6%	17.6%	17.6%	9.4%	9.4%	
Maximum Green (s)	2.3	38.1	38.1	13.3	49.1		9.4	9.4	9.4	2.4	2.4	
Yellow Time (s)	3.7	4.4	4.4	3.7	4.4		4.1	4.1	4.1	4.1	4.1	
All-Red Time (s)	1.0	1.5	1.5	1.0	1.5		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.7	5.9	5.9	4.7	5.9		5.6	5.6	5.6		5.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	2.3	38.1	38.1	13.3	49.1		9.4	9.4	9.4		2.4	
Actuated g/C Ratio	0.03	0.45	0.45	0.16	0.58		0.11	0.11	0.11		0.03	
v/c Ratio	1.24	0.77	0.51	1.37	0.36		1.86	1.83	0.87		0.89	
Control Delay	250.6	22.3	4.2	209.6	10.0		431.5	419.9	36.7		108.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	250.6	22.3	4.2	209.6	10.0		431.5	419.9	36.7		108.0	
LOS	F	C	A	F	B		F	F	D		F	
Approach Delay		24.7			92.0			298.0			108.0	
Approach LOS		C			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.86			
Intersection Signal Delay: 99.3		Intersection LOS: F	
Intersection Capacity Utilization 84.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: I-105 Off-ramp & Imperial Hwy- FWOP PM

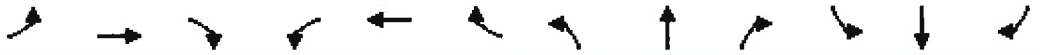


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	57	2026	391	714	1024	334	331	325	67
v/c Ratio	1.24	0.77	0.51	1.37	0.36	1.86	1.83	0.87	0.89
Control Delay	250.6	22.3	4.2	209.6	10.0	431.5	419.9	36.7	108.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	250.6	22.3	4.2	209.6	10.0	431.5	419.9	36.7	108.0
Queue Length 50th (ft)	~46	325	0	~315	117	~346	~342	59	24
Queue Length 95th (ft)	#136	386	72	#444	149	#549	#543	#235	#119
Internal Link Dist (ft)		1052			973		505		410
Turn Bay Length (ft)	100			340					
Base Capacity (vph)	46	2623	774	521	2853	180	181	374	75
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.77	0.51	1.37	0.36	1.86	1.83	0.87	0.89

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

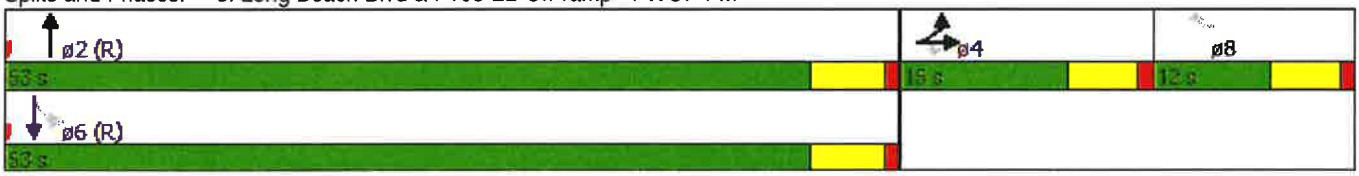


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	358	1	235	0	0	15	0	1081	4	15	1004	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		110	0		0	0		0	180		0
Storage Lanes	1		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850			0.865		0.999				
Flt Protected	0.950	0.953								0.950		
Satd. Flow (prot)	1633	1638	1538	0	0	1565	0	4935	0	1719	3438	0
Flt Permitted	0.950	0.953								0.204		
Satd. Flow (perm)	1633	1638	1538	0	0	1565	0	4935	0	369	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			222			102		1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		817			156			598			555	
Travel Time (s)		18.6			3.5			13.6			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	389	1	255	0	0	16	0	1175	4	16	1091	0
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	194	196	255	0	0	16	0	1179	0	16	1091	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	Perm			Perm		NA		Perm	NA	
Protected Phases	4	4						2			6	
Permitted Phases			4			8				6		
Minimum Split (s)	21.1	21.1	21.1			21.1		21.4		21.4	21.4	
Total Split (s)	15.0	15.0	15.0			12.0		53.0		53.0	53.0	
Total Split (%)	18.8%	18.8%	18.8%			15.0%		66.3%		66.3%	66.3%	
Maximum Green (s)	9.9	9.9	9.9			6.9		47.6		47.6	47.6	
Yellow Time (s)	4.1	4.1	4.1			4.1		4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0			1.0		1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.1			5.1		5.4		5.4	5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0			5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0			0		0		0	0	
Act Effct Green (s)	9.9	9.9	9.9			6.9		47.6		47.6	47.6	
Actuated g/C Ratio	0.12	0.12	0.12			0.09		0.60		0.60	0.60	
v/c Ratio	0.96	0.97	0.66			0.07		0.40		0.07	0.53	
Control Delay	92.3	94.6	16.7			0.6		9.1		7.9	10.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Delay	92.3	94.6	16.7			0.6		9.1		7.9	10.8	
LOS	F	F	B			A		A		A	B	
Approach Delay		63.1						9.1			10.8	
Approach LOS		E						A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 21.5		Intersection LOS: C	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 EB Off-ramp - FWOP PM



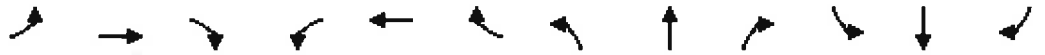
Lane Group	EBL	EBT	EBR	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	194	196	255	16	1179	16	1091
v/c Ratio	0.96	0.97	0.66	0.07	0.40	0.07	0.53
Control Delay	92.3	94.6	16.7	0.6	9.1	7.9	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	92.3	94.6	16.7	0.6	9.1	7.9	10.8
Queue Length 50th (ft)	124	125	18	0	124	4	185
Queue Length 95th (ft)	#283	#285	#107	0	157	14	245
Internal Link Dist (ft)		737			518		475
Turn Bay Length (ft)			110			180	
Base Capacity (vph)	202	202	384	228	2936	219	2045
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.97	0.66	0.07	0.40	0.07	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor												
Frt		0.965			0.853	0.850					0.998	
Flt Protected		0.964		0.950			0.950					
Satd. Flow (prot)	0	1683	0	1719	1466	1461	1719	4940	0	0	4930	0
Flt Permitted		0.712		0.950			0.141					
Satd. Flow (perm)	0	1243	0	1719	1466	1461	255	4940	0	0	4930	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			116	116					6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	

Intersection Summary	
Area Type:	Other

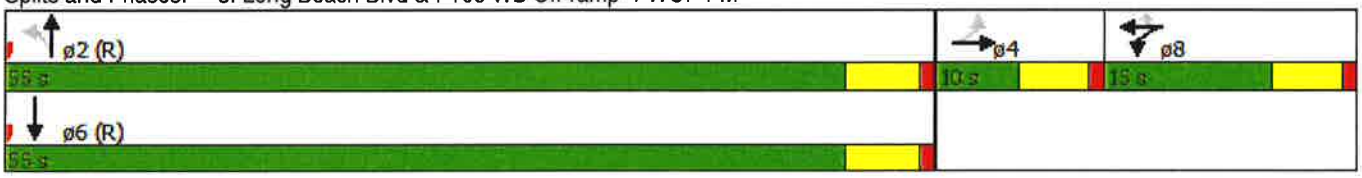


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	0	10	311	10	1077	17	1160	0	0	1332	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.965			0.853	0.850					0.998	
Flt Protected		0.964		0.950			0.950					
Satd. Flow (prot)	0	1683	0	1719	1466	1461	1719	4940	0	0	4930	0
Flt Permitted		0.712		0.950			0.141					
Satd. Flow (perm)	0	1243	0	1719	1466	1461	255	4940	0	0	4930	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			116	116					6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	0	11	338	11	1171	18	1261	0	0	1448	24
Shared Lane Traffic (%)						50%						
Lane Group Flow (vph)	0	43	0	338	597	585	18	1261	0	0	1472	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Split	NA	Perm	Perm	NA			NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4					8	2					
Minimum Split (s)	21.1	21.1		21.1	21.1	21.1	31.4	31.4			21.4	
Total Split (s)	10.0	10.0		15.0	15.0	15.0	55.0	55.0			55.0	
Total Split (%)	12.5%	12.5%		18.8%	18.8%	18.8%	68.8%	68.8%			68.8%	
Maximum Green (s)	4.9	4.9		9.9	9.9	9.9	49.6	49.6			49.6	
Yellow Time (s)	4.1	4.1		4.1	4.1	4.1	4.4	4.4			4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0			1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)		5.1		5.1	5.1	5.1	5.4	5.4			5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		4.9		9.9	9.9	9.9	49.6	49.6			49.6	
Actuated g/C Ratio		0.06		0.12	0.12	0.12	0.62	0.62			0.62	
v/c Ratio		0.25		1.59	2.11	2.07	0.11	0.41			0.48	
Control Delay		3.5		316.6	530.7	515.3	8.4	8.3			8.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		3.5		316.6	530.7	515.3	8.4	8.3			8.8	
LOS		A		F	F	F	A	A			A	
Approach Delay		3.5			477.2			8.3			8.8	
Approach LOS		A			F			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 2.11			
Intersection Signal Delay: 173.6		Intersection LOS: F	
Intersection Capacity Utilization 83.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 WB Off-ramp- FWOP PM



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	43	338	597	585	18	1261	1472
v/c Ratio	0.25	1.59	2.11	2.07	0.11	0.41	0.48
Control Delay	3.5	316.6	530.7	515.3	8.4	8.3	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.5	316.6	530.7	515.3	8.4	8.3	8.8
Queue Length 50th (ft)	0	~294	~547	~531	4	126	155
Queue Length 95th (ft)	1	#483	#797	#780	16	158	193
Internal Link Dist (ft)	135		493			413	470
Turn Bay Length (ft)				140	150		
Base Capacity (vph)	171	212	283	282	158	3062	3058
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	1.59	2.11	2.07	0.11	0.41	0.48

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	841	486	246	0	0	0	0	1072	237	176	544	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt		0.965							0.850			
Flt Protected	0.950	0.985								0.950		
Satd. Flow (prot)	1564	3130	0	0	0	0	0	3438	2707	3335	3438	0
Flt Permitted	0.950	0.985								0.950		
Satd. Flow (perm)	1564	3130	0	0	0	0	0	3438	2707	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		38							242			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	914	528	267	0	0	0	0	1165	258	191	591	0
Shared Lane Traffic (%)	37%											
Lane Group Flow (vph)	576	1133	0	0	0	0	0	1165	258	191	591	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Minimum Split (s)	21.1	21.1						21.4	21.4	10.0	26.5	
Total Split (s)	31.0	31.0						33.0	33.0	33.0	66.0	
Total Split (%)	32.0%	32.0%						34.0%	34.0%	34.0%	68.0%	
Maximum Green (s)	26.0	26.0						28.0	28.0	27.0	60.0	
Yellow Time (s)	4.0	4.0						4.0	4.0	5.0	5.0	
All-Red Time (s)	1.0	1.0						1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0						5.0	5.0	6.0	6.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0						5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0						11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0						0	0		0	
Act Effct Green (s)	26.0	26.0						28.0	28.0	27.0	60.0	
Actuated g/C Ratio	0.27	0.27						0.29	0.29	0.28	0.62	
v/c Ratio	1.37	1.31						1.17	0.27	0.21	0.28	
Control Delay	213.9	177.7						122.0	5.2	27.5	8.9	
Queue Delay	0.0	0.0						0.0	0.0	0.0	0.0	
Total Delay	213.9	177.7						122.0	5.2	27.5	8.9	
LOS	F	F						F	A	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		189.9						100.8			13.5	
Approach LOS		F						F			B	

Intersection Summary

Area Type:	Other		
Cycle Length: 97			
Actuated Cycle Length: 97			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.37			
Intersection Signal Delay: 122.3		Intersection LOS: F	
Intersection Capacity Utilization 78.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington Ave & SR-91 EB Off-ramp - FWOP AM

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	463	862	686	285	303	985
v/c Ratio	1.11	1.22dr	0.60	0.26	0.39	0.46
Control Delay	113.6	57.6	32.6	3.7	36.9	11.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	113.6	57.6	32.6	3.7	36.9	11.8
Queue Length 50th (ft)	~482	339	247	0	110	212
Queue Length 95th (ft)	#742	#509	323	38	159	267
Internal Link Dist (ft)		510	324			339
Turn Bay Length (ft)						
Base Capacity (vph)	419	888	1146	1092	771	2132
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.97	0.60	0.26	0.39	0.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

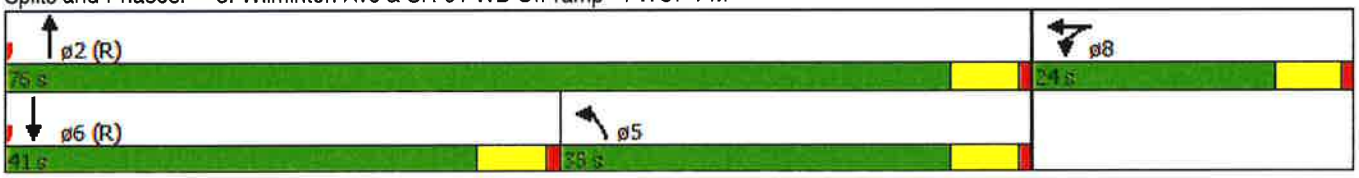
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	215	910	193	355	765	0	0	932	703
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.91	0.91
Frt					0.974						0.936	
Flt Protected				0.950	0.999		0.950					
Satd. Flow (prot)	0	0	0	1564	3204	0	1719	3438	0	0	4624	0
Flt Permitted				0.950	0.999		0.950					
Satd. Flow (perm)	0	0	0	1564	3204	0	1719	3438	0	0	4624	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					20						118	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	234	989	210	386	832	0	0	1013	764
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	211	1222	0	386	832	0	0	1777	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases												
Minimum Split (s)				22.0	22.0		10.0	22.0			22.0	
Total Split (s)				24.0	24.0		35.0	76.0			41.0	
Total Split (%)				24.0%	24.0%		35.0%	76.0%			41.0%	
Maximum Green (s)				18.0	18.0		29.0	70.0			35.0	
Yellow Time (s)				5.0	5.0		5.0	5.0			5.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				5.0	5.0			5.0			5.0	
Flash Dont Walk (s)				11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				18.0	18.0		29.0	70.0			35.0	
Actuated g/C Ratio				0.18	0.18		0.29	0.70			0.35	
v/c Ratio				0.75	2.06		0.78	0.35			1.22dr	
Control Delay				56.9	507.5		44.7	6.4			66.3	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				56.9	507.5		44.7	6.4			66.3	
LOS				E	F		D	A			E	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					441.1			18.6			66.3	
Approach LOS					F			B			E	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 2.06
Intersection Signal Delay: 174.5 Intersection LOS: F
Intersection Capacity Utilization 94.3% ICU Level of Service F
Analysis Period (min) 15
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilminton Ave & SR-91 WB Off-ramp - FWOP PM



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	211	1222	386	832	1777
v/c Ratio	0.75	2.06	0.78	0.35	1.22dr
Control Delay	56.9	507.5	44.7	6.4	66.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	56.9	507.5	44.7	6.4	66.3
Queue Length 50th (ft)	170	~818	270	115	~522
Queue Length 95th (ft)	#313	#986	#437	149	#640
Internal Link Dist (ft)		500		324	339
Turn Bay Length (ft)					
Base Capacity (vph)	281	593	498	2406	1695
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.75	2.06	0.78	0.35	1.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Freeway Off-Ramp Analysis

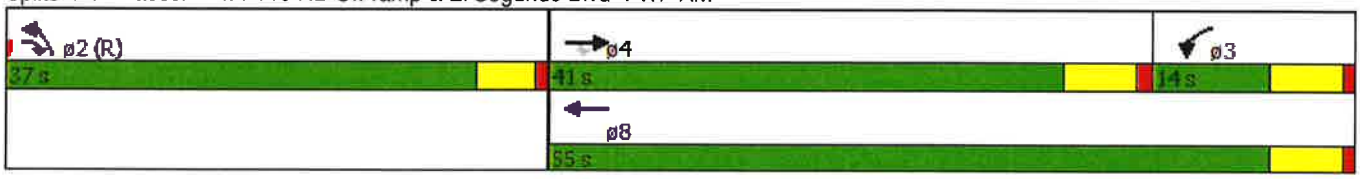
Future With Project Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1122	263	128	1410	766	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.967	
Flt Protected			0.950		0.963	
Satd. Flow (prot)	3471	1553	1736	4988	3300	0
Flt Permitted			0.950		0.963	
Satd. Flow (perm)	3471	1553	1736	4988	3300	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		131			45	
Link Speed (mph)	30			30	30	
Link Distance (ft)	568			630	393	
Travel Time (s)	12.9			14.3	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1220	286	139	1533	833	238
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1220	286	139	1533	1071	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	4	2	3	8	2	
Permitted Phases		4				
Minimum Split (s)	22.0	22.0	10.0	22.0	22.0	
Total Split (s)	41.0	37.0	14.0	55.0	37.0	
Total Split (%)	44.6%	40.2%	15.2%	59.8%	40.2%	
Maximum Green (s)	35.0	32.0	8.0	49.0	32.0	
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	5.0	6.0	6.0	5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	35.0	73.0	8.0	49.0	32.0	
Actuated g/C Ratio	0.38	0.79	0.09	0.53	0.35	
v/c Ratio	0.92	0.23	0.93	0.58	0.91	
Control Delay	40.3	1.7	100.6	15.6	40.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	40.3	1.7	100.6	15.6	40.2	
LOS	D	A	F	B	D	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	33.0			22.7	40.2	
Approach LOS	C			C	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 92			
Actuated Cycle Length: 92			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 30.7		Intersection LOS: C	
Intersection Capacity Utilization 81.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 NB Off-ramp & El Segundo Blvd- FWP AM



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1220	286	139	1533	1071
v/c Ratio	0.92	0.23	0.93	0.58	0.91
Control Delay	40.3	1.7	100.6	15.6	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	40.3	1.7	100.6	15.6	40.2
Queue Length 50th (ft)	421	19	98	250	351
Queue Length 95th (ft)	#587	38	#233	302	#503
Internal Link Dist (ft)	488			550	313
Turn Bay Length (ft)					
Base Capacity (vph)	1320	1259	150	2656	1177
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.92	0.23	0.93	0.58	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

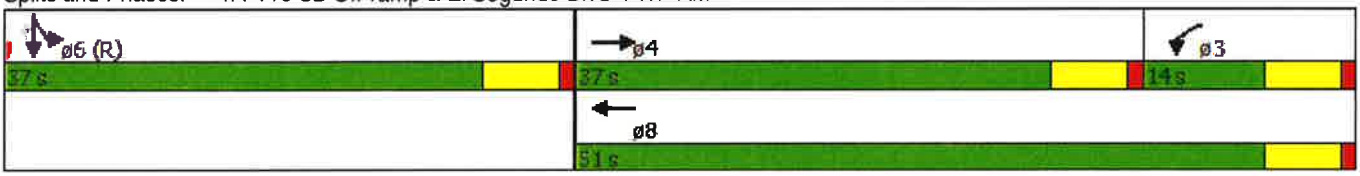
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	836	591	351	1852	0	0	0	0	580	0	916
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Frt		0.938									0.868	0.850
Flt Protected				0.950						0.950	0.994	
Satd. Flow (prot)	0	4678	0	1736	4988	0	0	0	0	1649	1434	1475
Flt Permitted				0.950						0.950	0.994	
Satd. Flow (perm)	0	4678	0	1736	4988	0	0	0	0	1649	1434	1475
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		224									112	112
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		802			783			340			320	
Travel Time (s)		18.2			17.8			7.7			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	909	642	382	2013	0	0	0	0	630	0	996
Shared Lane Traffic (%)										10%		47%
Lane Group Flow (vph)	0	1551	0	382	2013	0	0	0	0	567	531	528
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		4		3	8					6	6	
Permitted Phases												6
Minimum Split (s)		22.0		10.0	22.0					22.0	22.0	22.0
Total Split (s)		37.0		14.0	51.0					37.0	37.0	37.0
Total Split (%)		42.0%		15.9%	58.0%					42.0%	42.0%	42.0%
Maximum Green (s)		31.0		8.0	45.0					31.0	31.0	31.0
Yellow Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	6.0
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0			5.0					5.0	5.0	5.0
Flash Dont Walk (s)		11.0			11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0					0	0	0
Act Effct Green (s)		31.0		8.0	45.0					31.0	31.0	31.0
Actuated g/C Ratio		0.35		0.09	0.51					0.35	0.35	0.35
v/c Ratio		0.92dr		2.43	0.79					0.98	0.92	0.89
Control Delay		28.9		685.1	20.5					62.4	45.5	41.0
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		28.9		685.1	20.5					62.4	45.5	41.0
LOS		C		F	C					E	D	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		28.9			126.5						49.9	
Approach LOS		C			F						D	

Intersection Summary

Area Type: Other
Cycle Length: 88
Actuated Cycle Length: 88
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Pretimed
Maximum v/c Ratio: 2.43
Intersection Signal Delay: 77.0 Intersection LOS: E
Intersection Capacity Utilization 89.2% ICU Level of Service E
Analysis Period (min) 15
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: I-110 SB Off-ramp & El Segundo Blvd- FWP AM



Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1551	382	2013	567	531	528
v/c Ratio	0.92dr	2.43	0.79	0.98	0.92	0.89
Control Delay	28.9	685.1	20.5	62.4	45.5	41.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	685.1	20.5	62.4	45.5	41.0
Queue Length 50th (ft)	302	~425	381	386	301	281
Queue Length 95th (ft)	380	#631	458	#656	#572	#532
Internal Link Dist (ft)	722		703		240	
Turn Bay Length (ft)						
Base Capacity (vph)	1793	157	2550	580	577	592
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.87	2.43	0.79	0.98	0.92	0.89

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

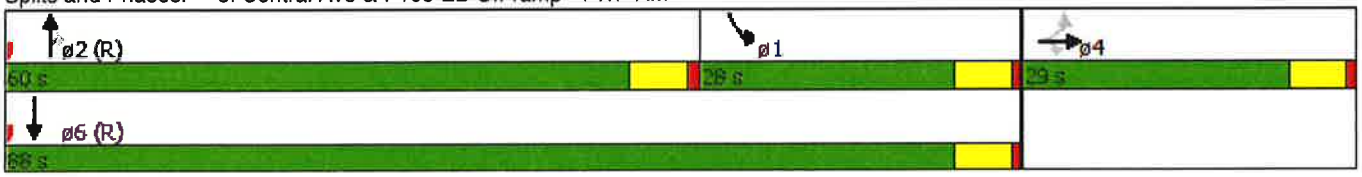
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	783	14	676	0	0	0	0	911	381	618	806	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.91	0.95	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.00
Frt		0.937	0.850						0.850			
Flt Protected	0.950	0.973								0.950		
Satd. Flow (prot)	1633	1501	1461	0	0	0	0	4940	1538	3335	3438	0
Flt Permitted	0.950	0.973								0.950		
Satd. Flow (perm)	1633	1501	1461	0	0	0	0	4940	1538	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28	213						414			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	851	15	735	0	0	0	0	990	414	672	876	0
Shared Lane Traffic (%)	35%		31%									
Lane Group Flow (vph)	553	541	507	0	0	0	0	990	414	672	876	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Minimum Split (s)	22.0	22.0	22.0					22.0	22.0	10.0	22.0	
Total Split (s)	29.0	29.0	29.0					60.0	60.0	28.0	88.0	
Total Split (%)	24.8%	24.8%	24.8%					51.3%	51.3%	23.9%	75.2%	
Maximum Green (s)	23.0	23.0	23.0					54.0	54.0	22.0	82.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0					6.0	6.0	6.0	6.0	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0	5.0					5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0	11.0					11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0		0	
Act Effct Green (s)	23.0	23.0	23.0					54.0	54.0	22.0	82.0	
Actuated g/C Ratio	0.20	0.20	0.20					0.46	0.46	0.19	0.70	
v/c Ratio	1.72	1.71	1.11					0.43	0.44	1.07	0.36	
Control Delay	368.5	360.4	100.5					22.0	3.4	102.0	7.5	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay	368.5	360.4	100.5					22.0	3.4	102.0	7.5	
LOS	F	F	F					C	A	F	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		280.9						16.5			48.5	
Approach LOS		F						B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 117			
Actuated Cycle Length: 117			
Offset: 68 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.72			
Intersection Signal Delay: 120.4		Intersection LOS: F	
Intersection Capacity Utilization 85.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 EB Off-ramp - FWP AM



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	553	541	507	990	414	672	876
v/c Ratio	1.72	1.71	1.11	0.43	0.44	1.07	0.36
Control Delay	368.5	360.4	100.5	22.0	3.4	102.0	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	368.5	360.4	100.5	22.0	3.4	102.0	7.5
Queue Length 50th (ft)	~778	~775	~376	215	0	~347	149
Queue Length 95th (ft)	#1052	#1063	#647	260	65	#490	187
Internal Link Dist (ft)		575		502			478
Turn Bay Length (ft)							
Base Capacity (vph)	321	317	458	2280	932	627	2409
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.72	1.71	1.11	0.43	0.44	1.07	0.36

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

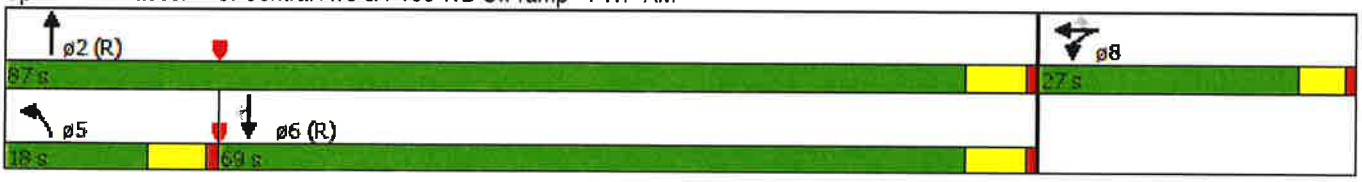
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	151	5	406	363	1320	0	0	1237	828
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950	0.955		0.950					
Satd. Flow (prot)	0	0	0	1633	1642	1538	3335	3438	0	0	3438	1538
Flt Permitted				0.950	0.955		0.950					
Satd. Flow (perm)	0	0	0	1633	1642	1538	3335	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						86						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	164	5	441	395	1435	0	0	1345	900
Shared Lane Traffic (%)				49%								
Lane Group Flow (vph)	0	0	0	84	85	441	395	1435	0	0	1345	900
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Minimum Split (s)				21.1	21.1	21.1	10.0	22.0			22.0	22.0
Total Split (s)				27.0	27.0	27.0	18.0	87.0			69.0	69.0
Total Split (%)				23.7%	23.7%	23.7%	15.8%	76.3%			60.5%	60.5%
Maximum Green (s)				22.0	22.0	22.0	12.0	81.0			63.0	63.0
Yellow Time (s)				4.0	4.0	4.0	5.0	5.0			5.0	5.0
All-Red Time (s)				1.0	1.0	1.0	1.0	1.0			1.0	1.0
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.0	5.0	5.0	6.0	6.0			6.0	6.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Walk Time (s)				5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)				11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)				22.0	22.0	22.0	12.0	81.0			63.0	63.0
Actuated g/C Ratio				0.19	0.19	0.19	0.11	0.71			0.55	0.55
v/c Ratio				0.27	0.27	1.20	1.13	0.59			0.71	1.06
Control Delay				41.8	41.9	148.2	132.9	9.4			21.3	74.5
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				41.8	41.9	148.2	132.9	9.4			21.3	74.5
LOS				D	D	F	F	A			C	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					118.7			36.1			42.6	
Approach LOS					F			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 114			
Actuated Cycle Length: 114			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 50.0		Intersection LOS: D	
Intersection Capacity Utilization 80.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 WB Off-ramp - FWP AM



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	84	85	441	395	1435	1345	900
v/c Ratio	0.27	0.27	1.20	1.13	0.59	0.71	1.06
Control Delay	41.8	41.9	148.2	132.9	9.4	21.3	74.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.8	41.9	148.2	132.9	9.4	21.3	74.5
Queue Length 50th (ft)	66	67	~410	~207	292	436	~871
Queue Length 95th (ft)	126	127	#654	#326	357	535	#1163
Internal Link Dist (ft)		665			502	478	
Turn Bay Length (ft)							
Base Capacity (vph)	315	316	366	351	2442	1899	849
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.27	1.20	1.13	0.59	0.71	1.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

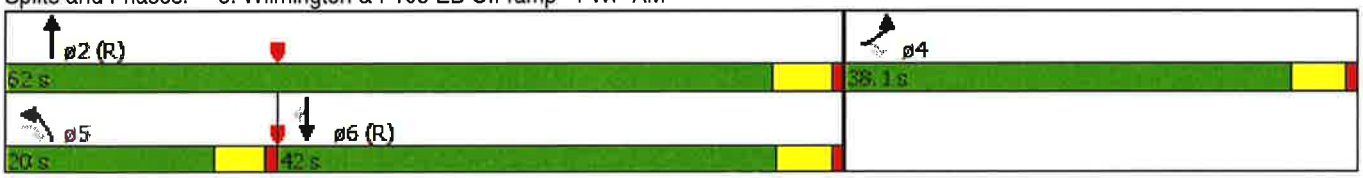
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	453	808	509	984	1160	558
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	120			0
Storage Lanes	1	1	1			2
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.88
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	4940	3438	2707
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	4940	3438	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		10				573
Link Speed (mph)	30			30	30	
Link Distance (ft)	1070			942	903	
Travel Time (s)	24.3			21.4	20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	492	878	553	1070	1261	607
Shared Lane Traffic (%)						
Lane Group Flow (vph)	492	878	553	1070	1261	607
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4 5				6
Minimum Split (s)	38.1		8.7	21.4	21.1	21.1
Total Split (s)	38.1		20.0	62.0	42.0	42.0
Total Split (%)	38.1%		20.0%	61.9%	42.0%	42.0%
Maximum Green (s)	33.0		15.3	56.6	36.9	36.9
Yellow Time (s)	4.1		3.7	4.4	4.1	4.1
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1		4.7	5.4	5.1	5.1
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?						
Walk Time (s)	7.0			5.0	5.0	5.0
Flash Dont Walk (s)	26.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	33.0	53.0	15.3	56.6	36.9	36.9
Actuated g/C Ratio	0.33	0.53	0.15	0.57	0.37	0.37
v/c Ratio	0.87	1.07	2.11	0.38	1.00	0.45
Control Delay	49.2	77.4	537.0	12.6	56.6	3.7

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.2	77.4	537.0	12.6	56.6	3.7
LOS	D	E	F	B	E	A
Approach Delay	67.3			191.3	39.4	
Approach LOS	E			F	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100.1			
Actuated Cycle Length: 100.1			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 2.11			
Intersection Signal Delay: 97.9		Intersection LOS: F	
Intersection Capacity Utilization 97.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington & I-105 EB Off-ramp - FWP AM

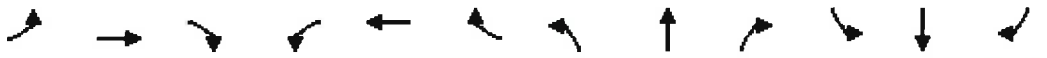


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	492	878	553	1070	1261	607
v/c Ratio	0.87	1.07	2.11	0.38	1.00	0.45
Control Delay	49.2	77.4	537.0	12.6	56.6	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.2	77.4	537.0	12.6	56.6	3.7
Queue Length 50th (ft)	351	~749	~676	156	500	9
Queue Length 95th (ft)	#572	#1035	#922	192	#688	56
Internal Link Dist (ft)	990			862	823	
Turn Bay Length (ft)			120			
Base Capacity (vph)	566	819	262	2793	1267	1359
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.87	1.07	2.11	0.38	1.00	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

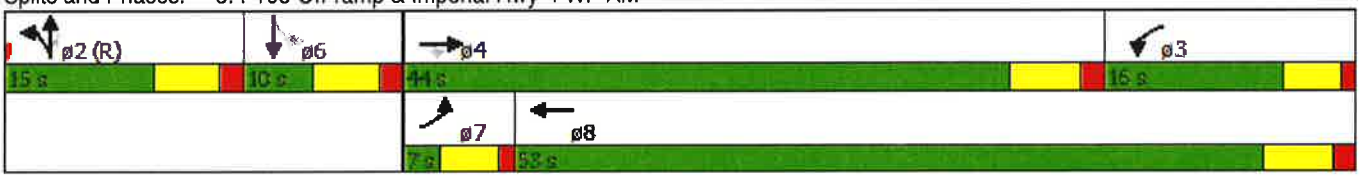


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	1212	389	812	1641	18	885	21	162	8	37	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	340		0	0		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	0.81	0.97	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.988	0.850		0.998				0.850		0.916	
Flt Protected	0.950			0.950			0.950	0.954			0.997	
Satd. Flow (prot)	1719	5793	1246	3335	4930	0	1633	1640	1538	0	1653	0
Flt Permitted	0.950			0.950			0.950	0.954			0.914	
Satd. Flow (perm)	1719	5793	1246	3335	4930	0	1633	1640	1538	0	1515	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27	309		3				245		58	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1132			1053			585			490	
Travel Time (s)		25.7			23.9			13.3			11.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	1317	423	883	1784	20	962	23	176	9	40	80
Shared Lane Traffic (%)			27%				49%					
Lane Group Flow (vph)	67	1431	309	883	1804	0	491	494	176	0	129	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		2	2			6	
Permitted Phases			4						2	6		
Minimum Split (s)	8.7	21.9	21.9	8.7	21.9		21.6	21.6	21.6	21.6	21.6	
Total Split (s)	7.0	44.0	44.0	16.0	53.0		15.0	15.0	15.0	10.0	10.0	
Total Split (%)	8.2%	51.8%	51.8%	18.8%	62.4%		17.6%	17.6%	17.6%	11.8%	11.8%	
Maximum Green (s)	2.3	38.1	38.1	11.3	47.1		9.4	9.4	9.4	4.4	4.4	
Yellow Time (s)	3.7	4.4	4.4	3.7	4.4		4.1	4.1	4.1	4.1	4.1	
All-Red Time (s)	1.0	1.5	1.5	1.0	1.5		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.7	5.9	5.9	4.7	5.9		5.6	5.6	5.6		5.6	
Lead/Lag	Lead	Lead	Lead	Lag	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	2.3	38.1	38.1	11.3	47.1		9.4	9.4	9.4		4.4	
Actuated g/C Ratio	0.03	0.45	0.45	0.13	0.55		0.11	0.11	0.11		0.05	
v/c Ratio	1.46	0.55	0.42	1.99	0.66		2.73	2.73	0.45		0.97	
Control Delay	327.4	17.8	3.8	479.2	14.8		812.0	812.6	5.5		97.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	327.4	17.8	3.8	479.2	14.8		812.0	812.6	5.5		97.8	
LOS	F	B	A	F	B		F	F	A		F	
Approach Delay		26.9			167.4			690.0			97.8	
Approach LOS		C			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.73			
Intersection Signal Delay: 226.8		Intersection LOS: F	
Intersection Capacity Utilization 88.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: I-105 Off-ramp & Imperial Hwy- FWP AM

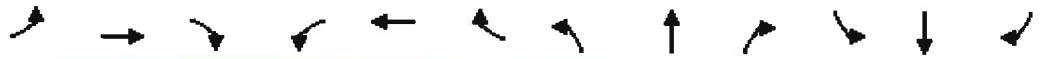


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	67	1431	309	883	1804	491	494	176	129
v/c Ratio	1.46	0.55	0.42	1.99	0.66	2.73	2.73	0.45	0.97
Control Delay	327.4	17.8	3.8	479.2	14.8	812.0	812.6	5.5	97.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	327.4	17.8	3.8	479.2	14.8	812.0	812.6	5.5	97.8
Queue Length 50th (ft)	~59	195	0	~460	276	~569	~573	0	46
Queue Length 95th (ft)	#158	238	65	#598	336	#803	#808	24	#179
Internal Link Dist (ft)		1052			973		505		410
Turn Bay Length (ft)	100			340					
Base Capacity (vph)	46	2611	728	443	2733	180	181	387	133
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.46	0.55	0.42	1.99	0.66	2.73	2.73	0.45	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

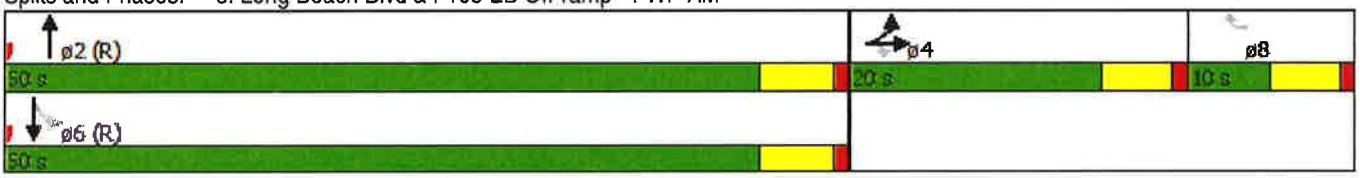


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	670	3	378	0	0	12	0	990	15	33	658	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		110	0		0	0		0	180		0
Storage Lanes	1		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850			0.865		0.998				
Flt Protected	0.950	0.953								0.950		
Satd. Flow (prot)	1633	1638	1538	0	0	1565	0	4930	0	1719	3438	0
Flt Permitted	0.950	0.953								0.223		
Satd. Flow (perm)	1633	1638	1538	0	0	1565	0	4930	0	404	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			289			102		4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		817			156			598			555	
Travel Time (s)		18.6			3.5			13.6			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	728	3	411	0	0	13	0	1076	16	36	715	0
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	364	367	411	0	0	13	0	1092	0	36	715	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	Perm			Perm		NA		Perm	NA	
Protected Phases	4	4						2			6	
Permitted Phases			4			8				6		
Minimum Split (s)	21.1	21.1	21.1			21.1		21.4		21.4	21.4	
Total Split (s)	20.0	20.0	20.0			10.0		50.0		50.0	50.0	
Total Split (%)	25.0%	25.0%	25.0%			12.5%		62.5%		62.5%	62.5%	
Maximum Green (s)	14.9	14.9	14.9			4.9		44.6		44.6	44.6	
Yellow Time (s)	4.1	4.1	4.1			4.1		4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0			1.0		1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.1			5.1		5.4		5.4	5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0			5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0			0		0		0	0	
Act Effct Green (s)	14.9	14.9	14.9			4.9		44.6		44.6	44.6	
Actuated g/C Ratio	0.19	0.19	0.19			0.06		0.56		0.56	0.56	
v/c Ratio	1.20	1.20	0.79			0.07		0.40		0.16	0.37	
Control Delay	148.4	150.4	22.4			0.7		10.6		10.8	10.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Delay	148.4	150.4	22.4			0.7		10.6		10.8	10.6	
LOS	F	F	C			A		B		B	B	
Approach Delay		103.7						10.6			10.6	
Approach LOS		F						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 46.0		Intersection LOS: D	
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 EB Off-ramp - FWP AM



Lane Group	EBL	EBT	EBR	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	364	367	411	13	1092	36	715
v/c Ratio	1.20	1.20	0.79	0.07	0.40	0.16	0.37
Control Delay	148.4	150.4	22.4	0.7	10.6	10.8	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	148.4	150.4	22.4	0.7	10.6	10.8	10.6
Queue Length 50th (ft)	~283	~286	65	0	125	10	116
Queue Length 95th (ft)	#488	#490	#239	0	159	29	159
Internal Link Dist (ft)		737			518		475
Turn Bay Length (ft)			110			180	
Base Capacity (vph)	304	305	521	191	2750	225	1916
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.20	1.20	0.79	0.07	0.40	0.16	0.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

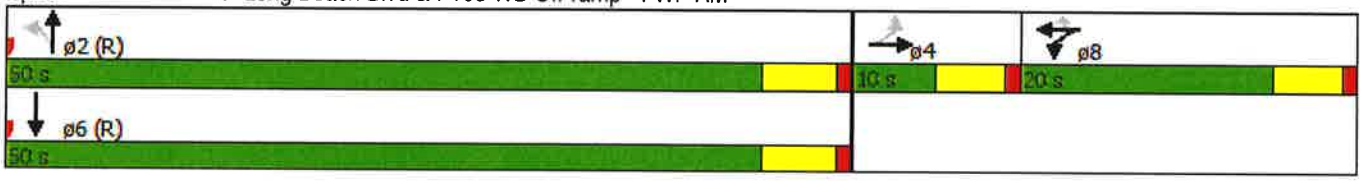
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	0	6	180	30	869	12	1225	0	0	1329	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.957			0.860	0.850					0.995	
Flt Protected		0.967		0.950			0.950					
Satd. Flow (prot)	0	1675	0	1719	1478	1461	1719	4940	0	0	4915	0
Flt Permitted		0.686		0.950			0.126					
Satd. Flow (perm)	0	1188	0	1719	1478	1461	228	4940	0	0	4915	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			118	118					11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	0	7	196	33	945	13	1332	0	0	1445	52
Shared Lane Traffic (%)						49%						
Lane Group Flow (vph)	0	22	0	196	496	482	13	1332	0	0	1497	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Split	NA	Perm	Perm	NA			NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4					8	2					
Minimum Split (s)	21.1	21.1		21.1	21.1	21.1	31.4	31.4			21.4	
Total Split (s)	10.0	10.0		20.0	20.0	20.0	50.0	50.0			50.0	
Total Split (%)	12.5%	12.5%		25.0%	25.0%	25.0%	62.5%	62.5%			62.5%	
Maximum Green (s)	4.9	4.9		14.9	14.9	14.9	44.6	44.6			44.6	
Yellow Time (s)	4.1	4.1		4.1	4.1	4.1	4.4	4.4			4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0			1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)		5.1		5.1	5.1	5.1	5.4	5.4			5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		4.9		14.9	14.9	14.9	44.6	44.6			44.6	
Actuated g/C Ratio		0.06		0.19	0.19	0.19	0.56	0.56			0.56	
v/c Ratio		0.13		0.61	1.34	1.31	0.10	0.48			0.55	
Control Delay		1.6		39.1	193.1	181.9	10.8	11.5			12.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		1.6		39.1	193.1	181.9	10.8	11.5			12.1	
LOS		A		D	F	F	B	B			B	
Approach Delay		1.6			162.8			11.5			12.1	
Approach LOS		A			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay: 55.6		Intersection LOS: E	
Intersection Capacity Utilization 75.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 WB Off-ramp - FWP AM



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	22	196	496	482	13	1332	1497
v/c Ratio	0.13	0.61	1.34	1.31	0.10	0.48	0.55
Control Delay	1.6	39.1	193.1	181.9	10.8	11.5	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.6	39.1	193.1	181.9	10.8	11.5	12.1
Queue Length 50th (ft)	0	109	~351	~333	3	163	191
Queue Length 95th (ft)	0	190	#586	#566	15	205	238
Internal Link Dist (ft)	135		493			413	470
Turn Bay Length (ft)				140	150		
Base Capacity (vph)	168	320	371	368	127	2754	2744
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.61	1.34	1.31	0.10	0.48	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

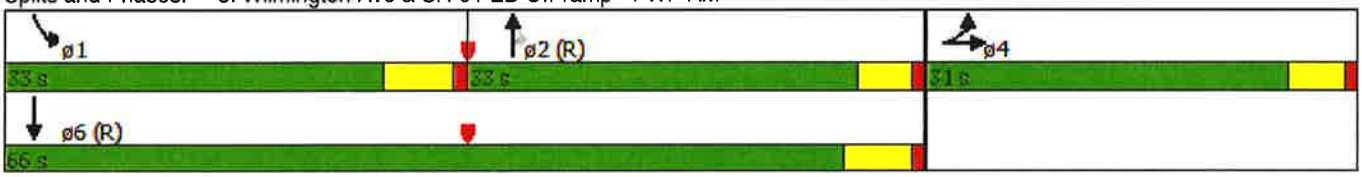
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	863	486	246	0	0	0	0	1176	237	199	613	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt		0.965							0.850			
Flt Protected	0.950	0.985								0.950		
Satd. Flow (prot)	1564	3130	0	0	0	0	0	3438	2707	3335	3438	0
Flt Permitted	0.950	0.985								0.950		
Satd. Flow (perm)	1564	3130	0	0	0	0	0	3438	2707	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		37							220			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	938	528	267	0	0	0	0	1278	258	216	666	0
Shared Lane Traffic (%)	38%											
Lane Group Flow (vph)	582	1151	0	0	0	0	0	1278	258	216	666	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Minimum Split (s)	21.1	21.1						21.4	21.4	10.0	26.5	
Total Split (s)	31.0	31.0						33.0	33.0	33.0	66.0	
Total Split (%)	32.0%	32.0%						34.0%	34.0%	34.0%	68.0%	
Maximum Green (s)	26.0	26.0						28.0	28.0	27.0	60.0	
Yellow Time (s)	4.0	4.0						4.0	4.0	5.0	5.0	
All-Red Time (s)	1.0	1.0						1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0						5.0	5.0	6.0	6.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0						5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0						11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0						0	0		0	
Act Effct Green (s)	26.0	26.0						28.0	28.0	27.0	60.0	
Actuated g/C Ratio	0.27	0.27						0.29	0.29	0.28	0.62	
v/c Ratio	1.39	1.33						1.29	0.28	0.23	0.31	
Control Delay	219.8	186.5						168.6	6.5	27.8	9.2	
Queue Delay	0.0	0.0						0.0	0.0	0.0	0.0	
Total Delay	219.8	186.5						168.6	6.5	27.8	9.2	
LOS	F	F						F	A	C	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		197.7						141.4			13.8	
Approach LOS		F						F			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 97			
Actuated Cycle Length: 97			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.39			
Intersection Signal Delay: 137.8		Intersection LOS: F	
Intersection Capacity Utilization 82.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington Ave & SR-91 EB Off-ramp - FWP AM



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	582	1151	1278	258	216	666
v/c Ratio	1.39	1.33	1.29	0.28	0.23	0.31
Control Delay	219.8	186.5	168.6	6.5	27.8	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	219.8	186.5	168.6	6.5	27.8	9.2
Queue Length 50th (ft)	~635	~604	~637	11	63	112
Queue Length 95th (ft)	#907	#770	#796	49	100	149
Internal Link Dist (ft)		510	324			339
Turn Bay Length (ft)						
Base Capacity (vph)	419	866	992	937	928	2126
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.39	1.33	1.29	0.28	0.23	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

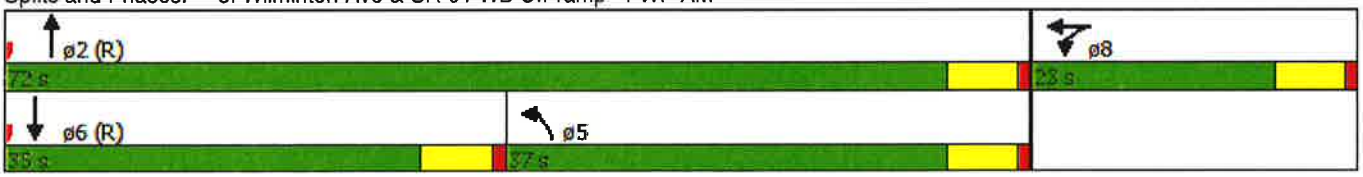
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	191	98	675	585	1483	0	0	592	538
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.91	0.91
Frt					0.872						0.929	
Flt Protected				0.950	0.999		0.950					
Satd. Flow (prot)	0	0	0	1564	2869	0	1719	3438	0	0	4589	0
Flt Permitted				0.950	0.999		0.950					
Satd. Flow (perm)	0	0	0	1564	2869	0	1719	3438	0	0	4589	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					48						232	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	208	107	734	636	1612	0	0	643	585
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	187	862	0	636	1612	0	0	1228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases												
Minimum Split (s)				22.0	22.0		10.0	22.0			22.0	
Total Split (s)				23.0	23.0		37.0	72.0			35.0	
Total Split (%)				24.2%	24.2%		38.9%	75.8%			36.8%	
Maximum Green (s)				17.0	17.0		31.0	66.0			29.0	
Yellow Time (s)				5.0	5.0		5.0	5.0			5.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				5.0	5.0			5.0			5.0	
Flash Dont Walk (s)				11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				17.0	17.0		31.0	66.0			29.0	
Actuated g/C Ratio				0.18	0.18		0.33	0.69			0.31	
v/c Ratio				0.67	2.45dr		1.14	0.68			0.92dr	
Control Delay				49.6	289.9		113.0	10.1			28.5	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				49.6	289.9		113.0	10.1			28.5	
LOS				D	F		F	B			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					247.0			39.2			28.5	
Approach LOS					F			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 1.56			
Intersection Signal Delay: 84.5		Intersection LOS: F	
Intersection Capacity Utilization 91.0%		ICU Level of Service E	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilminton Ave & SR-91 WB Off-ramp - FWP AM



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	187	862	636	1612	1228
v/c Ratio	0.67	2.45dr	1.14	0.68	0.92dr
Control Delay	49.6	289.9	113.0	10.1	28.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	289.9	113.0	10.1	28.5
Queue Length 50th (ft)	139	~476	~540	307	243
Queue Length 95th (ft)	#254	#630	#791	390	310
Internal Link Dist (ft)		500		324	339
Turn Bay Length (ft)					
Base Capacity (vph)	279	552	560	2388	1562
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.67	1.56	1.14	0.68	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

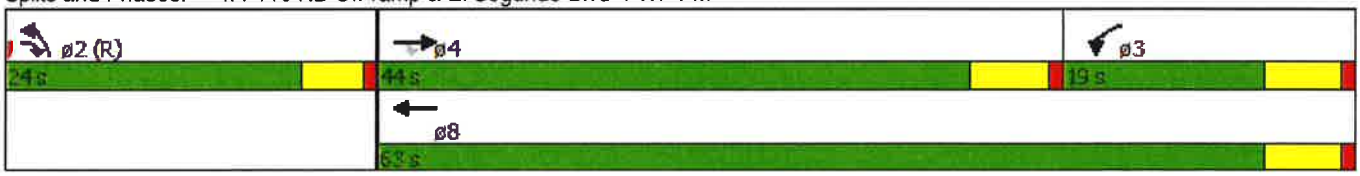
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1728	484	332	906	347	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.927	
Flt Protected			0.950		0.975	
Satd. Flow (prot)	3471	1553	1736	4988	3203	0
Flt Permitted			0.950		0.975	
Satd. Flow (perm)	3471	1553	1736	4988	3203	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		42			254	
Link Speed (mph)	30			30	30	
Link Distance (ft)	568			630	393	
Travel Time (s)	12.9			14.3	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1878	526	361	985	377	360
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1878	526	361	985	737	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	4	2	3	8	2	
Permitted Phases		4				
Minimum Split (s)	22.0	21.1	10.0	22.0	21.1	
Total Split (s)	44.0	24.0	19.0	63.0	24.0	
Total Split (%)	50.6%	27.6%	21.8%	72.4%	27.6%	
Maximum Green (s)	38.0	19.0	13.0	57.0	19.0	
Yellow Time (s)	5.0	4.0	5.0	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	5.0	6.0	6.0	5.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	38.0	63.0	13.0	57.0	19.0	
Actuated g/C Ratio	0.44	0.72	0.15	0.66	0.22	
v/c Ratio	1.24	0.46	1.39	0.30	0.82	
Control Delay	138.6	6.1	230.7	6.7	29.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	138.6	6.1	230.7	6.7	29.9	
LOS	F	A	F	A	C	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Approach Delay	109.6			66.8	29.9	
Approach LOS	F			E	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 87			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.39			
Intersection Signal Delay: 83.7		Intersection LOS: F	
Intersection Capacity Utilization 100.7%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 NB Off-ramp & El Segundo Blvd- FWP PM



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1878	526	361	985	737
v/c Ratio	1.24	0.46	1.39	0.30	0.82
Control Delay	138.6	6.1	230.7	6.7	29.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	138.6	6.1	230.7	6.7	29.9
Queue Length 50th (ft)	~815	107	~320	90	158
Queue Length 95th (ft)	#980	172	#521	114	#263
Internal Link Dist (ft)	488			550	313
Turn Bay Length (ft)					
Base Capacity (vph)	1516	1136	259	3268	898
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.24	0.46	1.39	0.30	0.82

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

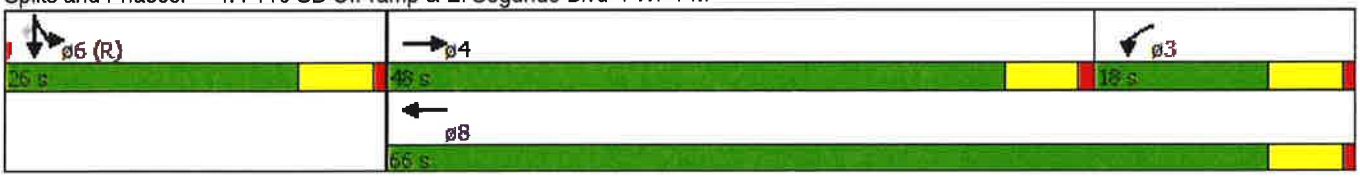
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1719	662	212	1055	0	0	0	0	524	0	463
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Frt		0.958									0.933	0.850
Flt Protected				0.950						0.950	0.973	
Satd. Flow (prot)	0	4778	0	1736	4988	0	0	0	0	1649	1509	1475
Flt Permitted				0.950						0.950	0.973	
Satd. Flow (perm)	0	4778	0	1736	4988	0	0	0	0	1649	1509	1475
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		139									107	107
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		802			783			340			320	
Travel Time (s)		18.2			17.8			7.7			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1868	720	230	1147	0	0	0	0	570	0	503
Shared Lane Traffic (%)										35%		32%
Lane Group Flow (vph)	0	2588	0	230	1147	0	0	0	0	370	361	342
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		4		3	8					6	6	
Permitted Phases												6
Minimum Split (s)		22.0		10.0	22.0					22.0	22.0	22.0
Total Split (s)		48.0		18.0	66.0					26.0	26.0	26.0
Total Split (%)		52.2%		19.6%	71.7%					28.3%	28.3%	28.3%
Maximum Green (s)		42.0		12.0	60.0					20.0	20.0	20.0
Yellow Time (s)		5.0		5.0	5.0					5.0	5.0	5.0
All-Red Time (s)		1.0		1.0	1.0					1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	6.0
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Walk Time (s)		5.0			5.0					5.0	5.0	5.0
Flash Dont Walk (s)		11.0			11.0					11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0					0	0	0
Act Effct Green (s)		42.0		12.0	60.0					20.0	20.0	20.0
Actuated g/C Ratio		0.46		0.13	0.65					0.22	0.22	0.22
v/c Ratio		1.15		1.02	0.35					1.03	0.88	0.85
Control Delay		96.5		106.5	7.6					93.8	48.4	44.2
Queue Delay		0.0		0.0	0.0					0.0	0.0	0.0
Total Delay		96.5		106.5	7.6					93.8	48.4	44.2
LOS		F		F	A					F	D	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		96.5			24.1						62.7	
Approach LOS		F			C						E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 92			
Actuated Cycle Length: 92			
Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 69.5		Intersection LOS: E	
Intersection Capacity Utilization 94.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: I-110 SB Off-ramp & El Segundo Blvd- FWP PM

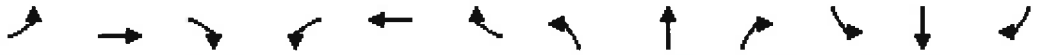


Lane Group	EBT	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	2588	230	1147	370	361	342
v/c Ratio	1.15	1.02	0.35	1.03	0.88	0.85
Control Delay	96.5	106.5	7.6	93.8	48.4	44.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.5	106.5	7.6	93.8	48.4	44.2
Queue Length 50th (ft)	~767	~167	118	~294	194	169
Queue Length 95th (ft)	#883	#343	146	#512	#408	#362
Internal Link Dist (ft)	722		703		240	
Turn Bay Length (ft)						
Base Capacity (vph)	2256	226	3253	358	411	404
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.15	1.02	0.35	1.03	0.88	0.85

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

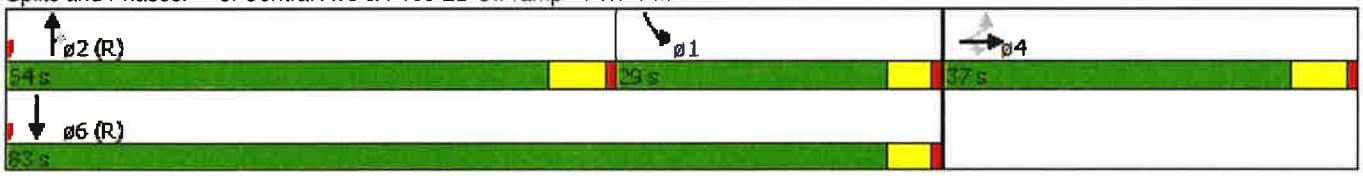


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	560	262	485	0	0	0	0	1098	471	505	984	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.91	0.95	1.00	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.00
Frt		0.973	0.850						0.850			
Flt Protected	0.950	0.988								0.950		
Satd. Flow (prot)	1633	1583	1461	0	0	0	0	4940	1538	3335	3438	0
Flt Permitted	0.950	0.988								0.950		
Satd. Flow (perm)	1633	1583	1461	0	0	0	0	4940	1538	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9	124						157			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	609	285	527	0	0	0	0	1193	512	549	1070	0
Shared Lane Traffic (%)	20%		17%									
Lane Group Flow (vph)	487	497	437	0	0	0	0	1193	512	549	1070	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Minimum Split (s)	22.0	22.0	22.0					22.0	22.0	9.0	22.0	
Total Split (s)	37.0	37.0	37.0					54.0	54.0	29.0	83.0	
Total Split (%)	30.8%	30.8%	30.8%					45.0%	45.0%	24.2%	69.2%	
Maximum Green (s)	31.0	31.0	31.0					48.0	48.0	24.0	78.0	
Yellow Time (s)	5.0	5.0	5.0					5.0	5.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0					1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0					6.0	6.0	5.0	5.0	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0	5.0					5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0	11.0					11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0					0	0		0	
Act Effct Green (s)	31.0	31.0	31.0					48.0	48.0	24.0	78.0	
Actuated g/C Ratio	0.26	0.26	0.26					0.40	0.40	0.20	0.65	
v/c Ratio	1.16	1.20	0.93					0.60	0.72	0.82	0.48	
Control Delay	134.6	148.8	59.3					30.1	27.3	57.4	11.5	
Queue Delay	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay	134.6	148.8	59.3					30.1	27.3	57.4	11.5	
LOS	F	F	E					C	C	E	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		116.4						29.3			27.1	
Approach LOS		F						C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 28 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay: 54.6		Intersection LOS: D	
Intersection Capacity Utilization 85.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 EB Off-ramp - FWP PM



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	487	497	437	1193	512	549	1070
v/c Ratio	1.16	1.20	0.93	0.60	0.72	0.82	0.48
Control Delay	134.6	148.8	59.3	30.1	27.3	57.4	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	134.6	148.8	59.3	30.1	27.3	57.4	11.5
Queue Length 50th (ft)	~562	~609	315	316	281	254	245
Queue Length 95th (ft)	#826	#893	#574	375	448	#349	302
Internal Link Dist (ft)		575		502			478
Turn Bay Length (ft)							
Base Capacity (vph)	421	415	469	1976	709	667	2234
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	1.20	0.93	0.60	0.72	0.82	0.48

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

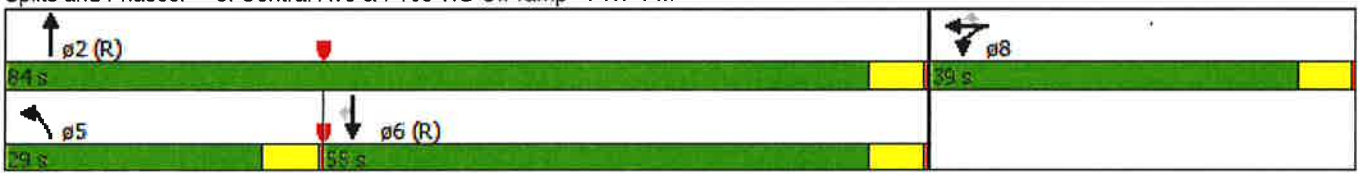
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	330	0	585	474	1153	0	0	1169	666
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950	0.950		0.950					
Satd. Flow (prot)	0	0	0	1633	1633	1538	3335	3438	0	0	3438	1538
Flt Permitted				0.950	0.950		0.950					
Satd. Flow (perm)	0	0	0	1633	1633	1538	3335	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)						80						
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		655			745			582			558	
Travel Time (s)		14.9			16.9			13.2			12.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	359	0	636	515	1253	0	0	1271	724
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	179	180	636	515	1253	0	0	1271	724
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA	Perm	Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases						8						6
Minimum Split (s)				21.5	21.5	21.5	9.5	21.5			21.5	21.5
Total Split (s)				39.0	39.0	39.0	29.0	84.0			55.0	55.0
Total Split (%)				31.7%	31.7%	31.7%	23.6%	68.3%			44.7%	44.7%
Maximum Green (s)				33.5	33.5	33.5	23.5	78.5			49.5	49.5
Yellow Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)				0.5	0.5	0.5	0.5	0.5			0.5	0.5
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				5.5	5.5	5.5	5.5	5.5			5.5	5.5
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Walk Time (s)				5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)				11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)				33.5	33.5	33.5	23.5	78.5			49.5	49.5
Actuated g/C Ratio				0.27	0.27	0.27	0.19	0.64			0.40	0.40
v/c Ratio				0.40	0.41	1.33	0.81	0.57			0.92	1.17
Control Delay				39.9	39.9	196.0	58.6	14.0			46.6	127.9
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay				39.9	39.9	196.0	58.6	14.0			46.6	127.9
LOS				D	D	F	E	B			D	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					139.7			27.0			76.1	
Approach LOS					F			C			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 123			
Actuated Cycle Length: 123			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay: 71.1		Intersection LOS: E	
Intersection Capacity Utilization 77.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Central Ave & I-105 WB Off-ramp - FWP PM



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	179	180	636	515	1253	1271	724
v/c Ratio	0.40	0.41	1.33	0.81	0.57	0.92	1.17
Control Delay	39.9	39.9	196.0	58.6	14.0	46.6	127.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	39.9	196.0	58.6	14.0	46.6	127.9
Queue Length 50th (ft)	147	148	~734	244	333	597	~823
Queue Length 95th (ft)	234	235	#1013	#326	404	#770	#1106
Internal Link Dist (ft)		665			502	478	
Turn Bay Length (ft)							
Base Capacity (vph)	444	444	477	637	2194	1383	618
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.41	1.33	0.81	0.57	0.92	1.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

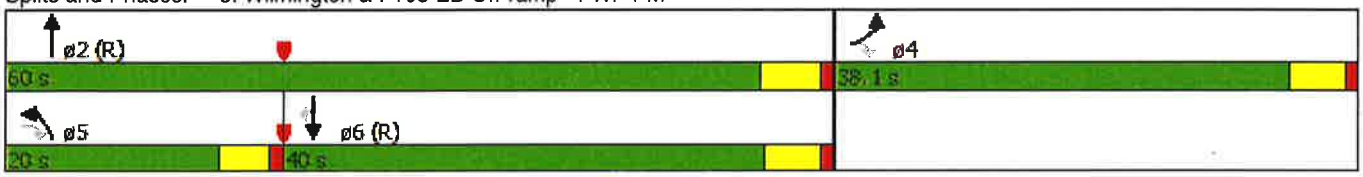
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	364	380	669	1547	955	529
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	120			0
Storage Lanes	1	1	1			2
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.95	0.88
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1719	1538	1719	4940	3438	2707
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1719	1538	1719	4940	3438	2707
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		21				575
Link Speed (mph)	30			30	30	
Link Distance (ft)	1070			942	903	
Travel Time (s)	24.3			21.4	20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	396	413	727	1682	1038	575
Shared Lane Traffic (%)						
Lane Group Flow (vph)	396	413	727	1682	1038	575
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4 5				6
Minimum Split (s)	38.1		8.7	21.4	21.1	21.1
Total Split (s)	38.1		20.0	60.0	40.0	40.0
Total Split (%)	38.8%		20.4%	61.2%	40.8%	40.8%
Maximum Green (s)	33.0		15.3	54.6	34.9	34.9
Yellow Time (s)	4.1		3.7	4.4	4.1	4.1
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1		4.7	5.4	5.1	5.1
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?						
Walk Time (s)	7.0			5.0	5.0	5.0
Flash Dont Walk (s)	26.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	33.0	53.0	15.3	54.6	34.9	34.9
Actuated g/C Ratio	0.34	0.54	0.16	0.56	0.36	0.36
v/c Ratio	0.69	0.49	2.71	0.61	0.85	0.43
Control Delay	35.3	15.8	800.8	15.8	37.2	3.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.3	15.8	800.8	15.8	37.2	3.0
LOS	D	B	F	B	D	A
Approach Delay	25.4			252.7	25.0	
Approach LOS	C			F	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 98.1			
Actuated Cycle Length: 98.1			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.71			
Intersection Signal Delay: 138.6		Intersection LOS: F	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Wilmington & I-105 EB Off-ramp - FWP PM



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	396	413	727	1682	1038	575
v/c Ratio	0.69	0.49	2.71	0.61	0.85	0.43
Control Delay	35.3	15.8	800.8	15.8	37.2	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.3	15.8	800.8	15.8	37.2	3.0
Queue Length 50th (ft)	253	173	~930	291	373	0
Queue Length 95th (ft)	383	270	#1196	348	476	45
Internal Link Dist (ft)	990			862	823	
Turn Bay Length (ft)			120			
Base Capacity (vph)	578	840	268	2749	1223	1333
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.49	2.71	0.61	0.85	0.43

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

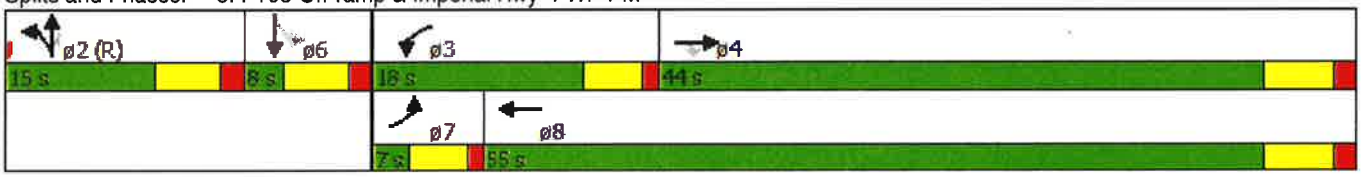
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	2010	652	659	1044	4	820	16	309	10	24	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	340		0	0		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	0.81	0.97	0.91	0.91	0.95	0.95	1.00	1.00	1.00	1.00
Frt		0.987	0.850		0.999				0.850		0.940	
Flt Protected	0.950			0.950			0.950	0.954			0.992	
Satd. Flow (prot)	1719	5787	1246	3335	4935	0	1633	1640	1538	0	1687	0
Flt Permitted	0.950			0.950			0.950	0.954			0.970	
Satd. Flow (perm)	1719	5787	1246	3335	4935	0	1633	1640	1538	0	1650	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28	510		1				230		30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1132			1053			585			490	
Travel Time (s)		25.7			23.9			13.3			11.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	2185	709	716	1135	4	891	17	336	11	26	30
Shared Lane Traffic (%)			28%				49%					
Lane Group Flow (vph)	76	2384	510	716	1139	0	454	454	336	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		2	2			6	
Permitted Phases			4						2	6		
Minimum Split (s)	8.7	21.9	21.9	8.7	21.9		21.6	21.6	21.6	21.6	21.6	
Total Split (s)	7.0	44.0	44.0	18.0	55.0		15.0	15.0	15.0	8.0	8.0	
Total Split (%)	8.2%	51.8%	51.8%	21.2%	64.7%		17.6%	17.6%	17.6%	9.4%	9.4%	
Maximum Green (s)	2.3	38.1	38.1	13.3	49.1		9.4	9.4	9.4	2.4	2.4	
Yellow Time (s)	3.7	4.4	4.4	3.7	4.4		4.1	4.1	4.1	4.1	4.1	
All-Red Time (s)	1.0	1.5	1.5	1.0	1.5		1.5	1.5	1.5	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.7	5.9	5.9	4.7	5.9		5.6	5.6	5.6		5.6	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Walk Time (s)		5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0		11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	
Act Effct Green (s)	2.3	38.1	38.1	13.3	49.1		9.4	9.4	9.4		2.4	
Actuated g/C Ratio	0.03	0.45	0.45	0.16	0.58		0.11	0.11	0.11		0.03	
v/c Ratio	1.65	0.91	0.61	1.37	0.40		2.52	2.51	0.90		0.89	
Control Delay	402.5	28.5	5.0	211.2	10.4		721.5	715.3	41.5		108.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	402.5	28.5	5.0	211.2	10.4		721.5	715.3	41.5		108.0	
LOS	F	C	A	F	B		F	F	D		F	
Approach Delay		34.0			87.9			535.5			108.0	
Approach LOS		C			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.52			
Intersection Signal Delay: 152.8		Intersection LOS: F	
Intersection Capacity Utilization 94.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: I-105 Off-ramp & Imperial Hwy- FWP PM



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	76	2384	510	716	1139	454	454	336	67
v/c Ratio	1.65	0.91	0.61	1.37	0.40	2.52	2.51	0.90	0.89
Control Delay	402.5	28.5	5.0	211.2	10.4	721.5	715.3	41.5	108.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	402.5	28.5	5.0	211.2	10.4	721.5	715.3	41.5	108.0
Queue Length 50th (ft)	~71	421	0	~317	135	~516	~516	66	24
Queue Length 95th (ft)	#174	#499	86	#446	169	#744	#744	#253	#119
Internal Link Dist (ft)		1052			973		505		410
Turn Bay Length (ft)	100			340					
Base Capacity (vph)	46	2609	839	521	2851	180	181	374	75
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.65	0.91	0.61	1.37	0.40	2.52	2.51	0.90	0.89

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

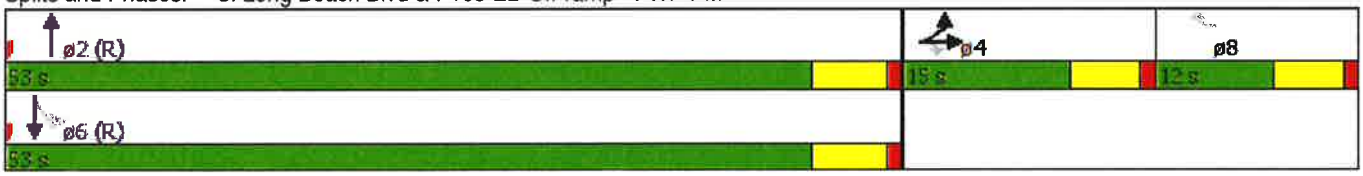
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	358	1	235	0	0	15	0	1081	4	15	1004	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		110	0		0	0		0	180		0
Storage Lanes	1		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850			0.865		0.999				
Flt Protected	0.950	0.953								0.950		
Satd. Flow (prot)	1633	1638	1538	0	0	1565	0	4935	0	1719	3438	0
Flt Permitted	0.950	0.953								0.204		
Satd. Flow (perm)	1633	1638	1538	0	0	1565	0	4935	0	369	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			222			102		1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		817			156			598			555	
Travel Time (s)		18.6			3.5			13.6			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	389	1	255	0	0	16	0	1175	4	16	1091	0
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	194	196	255	0	0	16	0	1179	0	16	1091	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	Perm			Perm		NA		Perm	NA	
Protected Phases	4	4						2			6	
Permitted Phases			4			8				6		
Minimum Split (s)	21.1	21.1	21.1			21.1		21.4		21.4	21.4	
Total Split (s)	15.0	15.0	15.0			12.0		53.0		53.0	53.0	
Total Split (%)	18.8%	18.8%	18.8%			15.0%		66.3%		66.3%	66.3%	
Maximum Green (s)	9.9	9.9	9.9			6.9		47.6		47.6	47.6	
Yellow Time (s)	4.1	4.1	4.1			4.1		4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0			1.0		1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.1			5.1		5.4		5.4	5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0	5.0			5.0		5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0			11.0		11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0			0		0		0	0	
Act Effct Green (s)	9.9	9.9	9.9			6.9		47.6		47.6	47.6	
Actuated g/C Ratio	0.12	0.12	0.12			0.09		0.60		0.60	0.60	
v/c Ratio	0.96	0.97	0.66			0.07		0.40		0.07	0.53	
Control Delay	92.3	94.6	16.7			0.6		9.1		7.9	10.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0			0.0		0.0		0.0	0.0	
Total Delay	92.3	94.6	16.7			0.6		9.1		7.9	10.8	
LOS	F	F	B			A		A		A	B	
Approach Delay		63.1						9.1			10.8	
Approach LOS		E						A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 21.5		Intersection LOS: C	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

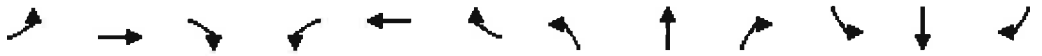
Splits and Phases: 3: Long Beach Blvd & I-105 EB Off-ramp - FWP PM



Lane Group	EBL	EBT	EBR	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	194	196	255	16	1179	16	1091
v/c Ratio	0.96	0.97	0.66	0.07	0.40	0.07	0.53
Control Delay	92.3	94.6	16.7	0.6	9.1	7.9	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	92.3	94.6	16.7	0.6	9.1	7.9	10.8
Queue Length 50th (ft)	124	125	18	0	124	4	185
Queue Length 95th (ft)	#283	#285	#107	0	157	14	245
Internal Link Dist (ft)		737			518		475
Turn Bay Length (ft)			110			180	
Base Capacity (vph)	202	202	384	228	2936	219	2045
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.97	0.66	0.07	0.40	0.07	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

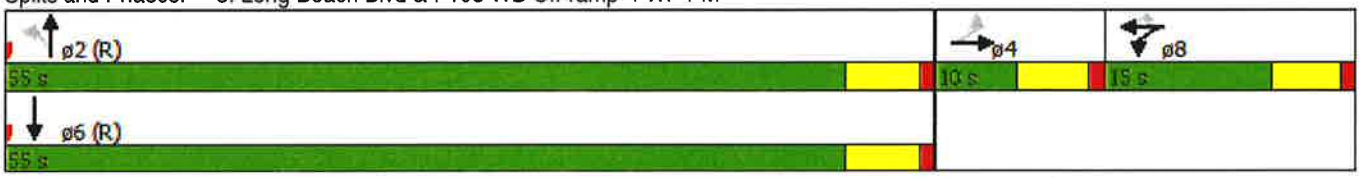


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	0	10	311	10	1080	17	1160	0	0	1332	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		140	150		0	0		0
Storage Lanes	0		0	1		1	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.91
Frt		0.965			0.853	0.850					0.998	
Flt Protected		0.964		0.950			0.950					
Satd. Flow (prot)	0	1683	0	1719	1466	1461	1719	4940	0	0	4930	0
Flt Permitted		0.712		0.950			0.141					
Satd. Flow (perm)	0	1243	0	1719	1466	1461	255	4940	0	0	4930	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102			116	116					6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		215			573			493			550	
Travel Time (s)		4.9			13.0			11.2			12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	0	11	338	11	1174	18	1261	0	0	1448	24
Shared Lane Traffic (%)						50%						
Lane Group Flow (vph)	0	43	0	338	598	587	18	1261	0	0	1472	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Split	NA	Perm	Perm	NA			NA	
Protected Phases		4		8	8			2			6	
Permitted Phases	4					8	2					
Minimum Split (s)	21.1	21.1		21.1	21.1	21.1	31.4	31.4			21.4	
Total Split (s)	10.0	10.0		15.0	15.0	15.0	55.0	55.0			55.0	
Total Split (%)	12.5%	12.5%		18.8%	18.8%	18.8%	68.8%	68.8%			68.8%	
Maximum Green (s)	4.9	4.9		9.9	9.9	9.9	49.6	49.6			49.6	
Yellow Time (s)	4.1	4.1		4.1	4.1	4.1	4.4	4.4			4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0			1.0	
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)		5.1		5.1	5.1	5.1	5.4	5.4			5.4	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	
Act Effct Green (s)		4.9		9.9	9.9	9.9	49.6	49.6			49.6	
Actuated g/C Ratio		0.06		0.12	0.12	0.12	0.62	0.62			0.62	
v/c Ratio		0.25		1.59	2.11	2.08	0.11	0.41			0.48	
Control Delay		3.5		316.6	532.3	518.4	8.4	8.3			8.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Delay		3.5		316.6	532.3	518.4	8.4	8.3			8.8	
LOS		A		F	F	F	A	A			A	
Approach Delay		3.5			479.1			8.3			8.8	
Approach LOS		A			F			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 2.11			
Intersection Signal Delay: 174.5		Intersection LOS: F	
Intersection Capacity Utilization 83.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Long Beach Blvd & I-105 WB Off-ramp- FWP PM



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	43	338	598	587	18	1261	1472
v/c Ratio	0.25	1.59	2.11	2.08	0.11	0.41	0.48
Control Delay	3.5	316.6	532.3	518.4	8.4	8.3	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.5	316.6	532.3	518.4	8.4	8.3	8.8
Queue Length 50th (ft)	0	~294	~548	~533	4	126	155
Queue Length 95th (ft)	1	#483	#798	#783	16	158	193
Internal Link Dist (ft)	135		493			413	470
Turn Bay Length (ft)				140	150		
Base Capacity (vph)	171	212	283	282	158	3062	3058
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	1.59	2.11	2.08	0.11	0.41	0.48

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

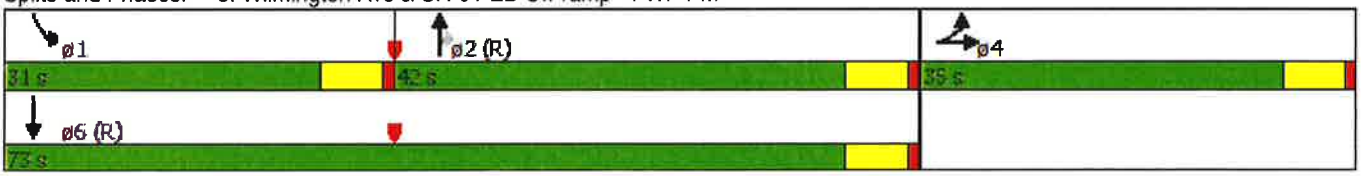
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	488	198	548	0	0	0	0	716	262	330	1021	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Frt		0.898							0.850			
Flt Protected	0.950	0.996								0.950		
Satd. Flow (prot)	1564	2946	0	0	0	0	0	3438	2707	3335	3438	0
Flt Permitted	0.950	0.996								0.950		
Satd. Flow (perm)	1564	2946	0	0	0	0	0	3438	2707	3335	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		102							285			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	530	215	596	0	0	0	0	778	285	359	1110	0
Shared Lane Traffic (%)	12%											
Lane Group Flow (vph)	466	875	0	0	0	0	0	778	285	359	1110	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Minimum Split (s)	22.0	22.0						22.0	22.0	10.0	22.0	
Total Split (s)	35.0	35.0						42.0	42.0	31.0	73.0	
Total Split (%)	32.4%	32.4%						38.9%	38.9%	28.7%	67.6%	
Maximum Green (s)	29.0	29.0						36.0	36.0	25.0	67.0	
Yellow Time (s)	5.0	5.0						5.0	5.0	5.0	5.0	
All-Red Time (s)	1.0	1.0						1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0						6.0	6.0	6.0	6.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Walk Time (s)	5.0	5.0						5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0						11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0						0	0		0	
Act Effct Green (s)	29.0	29.0						36.0	36.0	25.0	67.0	
Actuated g/C Ratio	0.27	0.27						0.33	0.33	0.23	0.62	
v/c Ratio	1.11	1.28dr						0.68	0.26	0.47	0.52	
Control Delay	115.9	68.9						34.6	3.7	38.1	12.6	
Queue Delay	0.0	0.0						0.0	0.0	0.0	0.0	
Total Delay	115.9	68.9						34.6	3.7	38.1	12.6	
LOS	F	E						C	A	D	B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		85.2						26.3			18.8	
Approach LOS		F						C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 108			
Actuated Cycle Length: 108			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 43.9		Intersection LOS: D	
Intersection Capacity Utilization 69.1%		ICU Level of Service C	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilmington Ave & SR-91 EB Off-ramp - FWP PM



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	466	875	778	285	359	1110
v/c Ratio	1.11	1.28dr	0.68	0.26	0.47	0.52
Control Delay	115.9	68.9	34.6	3.7	38.1	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.9	68.9	34.6	3.7	38.1	12.6
Queue Length 50th (ft)	~487	~370	291	0	132	252
Queue Length 95th (ft)	#750	#545	374	38	187	314
Internal Link Dist (ft)		510	324			339
Turn Bay Length (ft)						
Base Capacity (vph)	419	865	1146	1092	771	2132
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.11	1.01	0.68	0.26	0.47	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

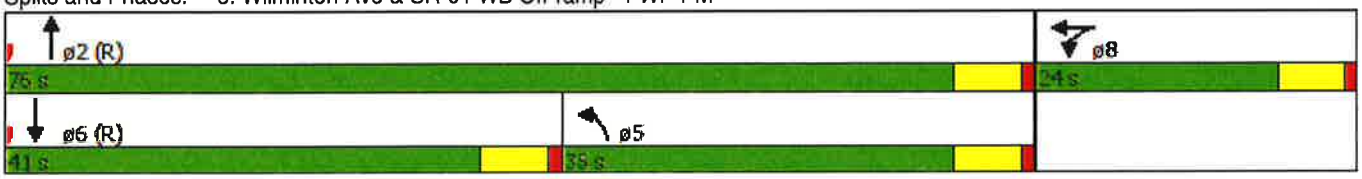
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	215	910	223	355	865	0	0	1100	728
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.95	1.00	1.00	0.91	0.91
Frt					0.971						0.940	
Flt Protected				0.950	0.999		0.950					
Satd. Flow (prot)	0	0	0	1564	3195	0	1719	3438	0	0	4644	0
Flt Permitted				0.950	0.999		0.950					
Satd. Flow (perm)	0	0	0	1564	3195	0	1719	3438	0	0	4644	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					24						118	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		590			580			404			419	
Travel Time (s)		13.4			13.2			9.2			9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	234	989	242	386	940	0	0	1196	791
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	211	1254	0	386	940	0	0	1987	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Split	NA		Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases												
Minimum Split (s)				22.0	22.0		10.0	22.0			22.0	
Total Split (s)				24.0	24.0		35.0	76.0			41.0	
Total Split (%)				24.0%	24.0%		35.0%	76.0%			41.0%	
Maximum Green (s)				18.0	18.0		29.0	70.0			35.0	
Yellow Time (s)				5.0	5.0		5.0	5.0			5.0	
All-Red Time (s)				1.0	1.0		1.0	1.0			1.0	
Lost Time Adjust (s)				0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)				6.0	6.0		6.0	6.0			6.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Walk Time (s)				5.0	5.0			5.0			5.0	
Flash Dont Walk (s)				11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				18.0	18.0		29.0	70.0			35.0	
Actuated g/C Ratio				0.18	0.18		0.29	0.70			0.35	
v/c Ratio				0.75	2.11		0.78	0.39			1.27dr	
Control Delay				56.9	529.5		44.7	6.8			111.7	
Queue Delay				0.0	0.0		0.0	0.0			0.0	
Total Delay				56.9	529.5		44.7	6.8			111.7	
LOS				E	F		D	A			F	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay					461.4			17.8			111.7	
Approach LOS					F			B			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.11			
Intersection Signal Delay: 192.9		Intersection LOS: F	
Intersection Capacity Utilization 98.2%		ICU Level of Service F	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Wilminton Ave & SR-91 WB Off-ramp - FWP PM



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	211	1254	386	940	1987
v/c Ratio	0.75	2.11	0.78	0.39	1.27dr
Control Delay	56.9	529.5	44.7	6.8	111.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	56.9	529.5	44.7	6.8	111.7
Queue Length 50th (ft)	170	~844	270	136	~646
Queue Length 95th (ft)	#313	#1014	#437	174	#764
Internal Link Dist (ft)		500		324	339
Turn Bay Length (ft)					
Base Capacity (vph)	281	594	498	2406	1702
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.75	2.11	0.78	0.39	1.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.