WILLOWBROOK TRANSIT ORIENTED DISTRICT SPECIFIC PLAN

Draft Environmental Impact Report
State Clearinghouse Number 2015101106

Prepared for
County of Los Angeles
Department of Regional Planning

May 2017

ESA

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626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300
www.esassoc.com

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EXECUTIVE SUMMARY

ES.1 Introduction

This Executive Summary provides a brief summary of the Willowbrook Transit Oriented District (TOD) Specific Plan Project Draft Environmental Impact Report (EIR). This summary outlines the project description, the potential impacts of the proposed Specific Plan, and proposed alternatives to the proposed Specific Plan. This summary also provides a summary table of all potential impacts and mitigation measures identified in this EIR.

ES.2 Project Location

The Specific Plan area is approximately 312 acres and is located within the northwestern portion of the Willowbrook community. 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. Some of the key land uses that are located within the Specific Plan area include: MLK Medical Center, Charles R. Drew University of Medicine and Science (CDU), Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King, Jr. (MLK) Center for Public Health. The Specific Plan area also includes the Willowbrook/Rosa Parks Station, which is located at the intersection of the I-105 and South Wilmington Avenue.

ES.3 Project Description

The Los Angeles County General Plan was updated in 2015 with a major focus on TOD as a priority throughout the County. The General Plan Land Use Element specifically calls for implementation of a TOD plan for the Willowbrook/Rosa Parks Station. The proposed Willowbrook TOD Specific Plan has been prepared pursuant to General Plan Implementation Program LU-2 Transit Oriented District Program, in order to 1) increase walking, bicycling, and transit ridership and reduce vehicle miles traveled (VMTs); 2) facilitate compact, mixed use development; 3) increase economic activity; 4) facilitate the public investment of infrastructure improvements; and 5) streamline the environmental review process for future infill development projects.

In addition to the General Plan Land Use Element, the Los Angeles County Housing Element Program 6: Transit Oriented Districts Program provides for transit oriented districts within 0.5 mile radius from Metro stations, and specifically requires creation of a transit-oriented district for

Willowbrook that would encourage urban infill development on vacant or underutilized sites; promote and encourage transit-oriented development along major transportation corridors; encourage mixed use development to facilitate the linkage between housing and employment opportunities; and promote increased residential density in appropriately designated areas.

Consistent with these General Plan policies and programs, the County of Los Angeles prepared the Draft Willowbrook TOD Specific Plan to implement TOD development and rezone some of the land within the Specific Plan area to include mixed uses, increase housing densities, provide for additional neighborhood-serving retail uses, improve access to transit, and improve bicycle and pedestrian facilities and other public realm facilities, such as street furniture and signage.

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. In addition, the proposed Specific Plan is intended to streamline the approval process for future development projects that are consistent with the Specific Plan.

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. In addition, as discussed in more detail below under Proposed Circulation System Improvements, 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 Martin Luther King. Jr. (MLK) Medical Center, CDU, Kenneth Hahn Plaza, Willowbrook Library, MLK Center for Public Health, and the Willowbrook/Rosa Parks Station. Key access corridors to the Specific Plan area would continue to be Willowbrook Avenue, Compton Avenue, South Mona Avenue, Wilmington Avenue, East 117th Street, East 118th Street, East 119th Street, and East 120th Street. Streetscape improvements, such as landscaping and street furniture are also provided for in the proposed Specific Plan, all of which is described in Section 2, Project Description.

The proposed Specific Plan would also establish sustainable design guidelines and performance standards for features, such as scale and mass, building orientation, building articulation and detailing, circulation, parking, and exterior lighting. The new zoning designations would allow for infill and redevelopment TOD opportunities that can serve as catalyst to revitalizing the area.

ES.4 Project Objectives

Section 15124(b) of the CEQA Guidelines states that the project description shall contain “a statement of the objectives sought by the proposed project.” Section 15124(b) further states that “the statement of objectives should include the underlying purpose of the project.”

The project objectives are to:

- Provide a transit-oriented development near the Willowbrook/Rosa Parks Station.
- Improve bicycle and pedestrian mobility and safety as well as access to the Willowbrook/Rosa Parks Station.
- Preserve and enhance Willowbrook's economic base and character.
- Provide additional housing for Willowbrook's varied income groups.
- Revitalize the health care services at Martin Luther King, Jr. (MLK) Medical Center.
- Revitalize the services at Charles R. Drew University of Medicine and Science (CDU).
- Preserve the character of the existing residential neighborhoods.
- Create an attractive environment for pedestrians, bicyclists, Metro riders, and local transit users through streetscape improvements.

ES.5 Alternatives

In accordance with CEQA Guidelines Section 15126.6, this Draft EIR contains a comparative impact assessment of alternatives to the project. The primary purpose of Chapter 4, Alternatives is to provide decision makers and the public with a reasonable range of feasible project alternatives that could attain most of the basic project objectives, but would avoid or substantially lessen any of the significant effects of the project.

CEQA Guidelines Section 15126.6 states:

> *Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project.*

Analysis of four alternatives to the project is guided by the following considerations set forth under CEQA Guidelines Section 15126.6:

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant effects.

Alternatives to a project must be considered even if they would impede, to some degree, the attainment of project objectives or be more costly (CEQA Guidelines Section 15126.6(b)). However, the range of alternatives addressed in an EIR need not be exhaustive, and is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only

those that the lead agency determines could feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project.

A brief description of the alternatives evaluated in this EIR is provided below. These alternatives include a no project alternative which is required by CEQA Guidelines Section 15126.6(e). This no project alternative is Alternative 1, No Project/Development in Accordance with Existing Zoning. Three additional alternatives, Alternative 2, Modified Land Use along 119th Street; Alternative 3, Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR; and, Alternative 4, Construct All Physical Traffic Measures Set Forth in MLK Medical Center Campus EIR are also evaluated and compared to the proposed project.

Alternative 1: No Project/ Development in Accordance with Existing Zoning:

The No Project/Development in Accordance with Existing Zoning would result in the development of the project area up to 80 percent of the development allowed under existing zoning. The recent updates as part of the General Plan Update/Zoning Consistency Program rezoned portions of Specific Plan Area to the Mixed Use Zone which allows for a significantly higher residential density and a commercial mixed-use component. This rezoning was applied to County-owned properties with the understanding that implementation would be refined through a TOD Specific Plan. As new development on the rezoned parcels is subject to County authorization and contingent on the full complement of TOD Specific Plan components, it is unlikely that the potential 1,106 residential units and 2,174,344 square feet of non-residential uses afforded solely through the rezoning along would be realized in the foreseeable future. However, for the purpose of this alternatives analysis, development in accordance with existing zoning is compared to the potential effects of implementing the proposed Specific Plan.

Alternative 2: Modified Land Use along 119th Street

Development under this alternative would result in the implementation of Mixed Use 1 zoning on the south side of E. 119th Street between S. Wilmington Avenue to W. Willowbrook Avenue. The proposed Specific Plan includes 19 single-family residential units along the south side of E. 119th Street. Under this alternative, the parcels with 19 single-family residential units would be rezoned to permit 66 multiple family residential units and 49,555 square feet of non-residential uses. This alternative would include all other land uses under the proposed Specific Plan. Therefore, development under this alternative would result in net increases of 1,999 residential units and 2,715,591 square feet of non-residential uses within the Specific Plan area. In comparison to the proposed Specific Plan, this alternative would result in 47 more residential units and 49,555 square feet of more non-residential uses.

Alternative 3: Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR

This reduced development alternative includes the same land uses as the proposed project, except for the MLK Hospital Center. This alternative includes a 50 percent reduction in non-residential square footage compared to the uses approved as part of the Tier 2 development set forth in the

MLK Medical Center Campus EIR. This alternative includes the development of 832,348 square feet of MLK Hospital uses compared to the 1,248,522 square feet of MLK Hospital uses currently proposed as part of the Specific Plan. Therefore, development under this alternative would result in net increases of 1,952 residential units and 2,249,862 square feet of non-residential uses. In comparison to the proposed Specific Plan, this alternative would result in the same number of residential units and 416,174 square feet of fewer non-residential uses.

Alternative 4: Construct All Physical Traffic Measures Set Forth in MLK Medical Center Campus EIR

This alternative includes the implementation of all the physical traffic improvements proposed as mitigation measures as set forth on the MLK Medical Center Campus EIR. Not all of these improvements were included in the proposed Specific Plan improvements because roadway widenings were considered 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; and signal/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. The improvements that are part of this alternative that are not included in the proposed Specific Plan include the following:

- **I-105 / Imperial Highway:** Provide a third northbound, left-turn lane by widening off-ramp by 10 feet for approximately 150 to 200 feet.
- **Wilmington Avenue / I-105 Eastbound Ramps, County of Los Angeles / California Department of Transportation:** Provide an additional eastbound lane by widening (reducing the raised median on the ramp) the off-ramp. The eastbound approach shall have a left-turn lane, shared left-right turn lane, and a separate right-turn lane. The sidewalks on both sides of Wilmington Avenue (as noted above) shall be reduced by 2 feet and the Wilmington Avenue roadway shall be widened by 2 feet on both sides (a total of 4 feet) from the south leg of this intersection. Provide an additional northbound left-turn lane by widening (reducing the medians).
- **Wilmington Avenue / 118th Street, County of Los Angeles:** Widen Wilmington Avenue roadway by 2 feet on both sides and re-stripe to provide two through lanes, a shared through right-turn lane and dual left-turn lanes along the southbound approach. Restripe the westbound approach to provide a separate right-turn lane and a shared left through lane. Northbound approach shall have the same lane geometry as existing conditions.
- **Wilmington Avenue / 120th Street–119th Street, County of Los Angeles:** Widen Wilmington Avenue roadway by 2 feet on both sides and restripe the southbound approach to provide a separate right-turn lane, three through lanes, and a left-turn lane.

  Re-stripe northbound approach to provide a shared through-right turn lane, two through lanes, and a left-turn lane. Remove median adjacent to northbound approach to facilitate three southbound receiving lanes. Restrict parking along Wilmington Avenue roadway during

morning and evening peak periods along the eastside of Wilmington between 120th Street and Martin Luther King, Jr. (MLK) Community Hospital Driveway entrance.

Widen 120th Street west of Wilmington Avenue for 250 feet, on the south side by 2 feet, and re-stripe the eastbound approach to provide a separate right-turn lane, dual left-turn lanes, and a through lane. The westbound approach of 119th Street would have the same lane geometry as existing conditions.

- **Wilmington Avenue / Martin Luther King, Jr. Community Hospital Entrance–120th Street, County of Los Angeles:** Re-stripe southbound approach to provide a separate right-turn lane, two through lanes, and a left-turn lane. Provide three northbound receiving lanes an restrict on-street curb parking along the eastside of Wilmington Avenue between MLK Community Hospital Driveway and 120th Street and 120th Street and 119th Street during morning and evening peak hours. Remove the median within the hospital entrance and re-stripe the driveway to provide dual left-turn lanes, a through lane, and a separate right-turn lane along the eastbound approach. Re-stripe to provide one receiving lane.

ES.6 Environmental Impacts and Mitigation Measures

The potential environmental impacts of the project are summarized in **Table ES-1** below. This table lists impacts and mitigation measures in three major categories: significant impacts that would remain significant even with mitigation, significant impacts that could be mitigated to a level of less than significant, and impacts that would not be significant. For each significant impact, the table includes a summary of the mitigation measure(s) and an indication of whether the impact would be mitigated to less than significant.

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE WILLOWBROOK TOD SPECIFIC PLAN

Impact	Mitigation Measure	Significance after Mitigation
Aesthetics		
Scenic Vista		
Project-specific Impact 3.1-1: The project would not have a substantial adverse effect on a scenic vista.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.1-1: The project would result in less than cumulatively considerable impacts on scenic vistas or scenic resources.	No mitigation measures are required.	Less than Significant Impact
Light and Glare		
Project-specific Impact 3.1-2: The proposed project would not create a new source of substantial light or glare that could adversely affect day or nighttime views of the area.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.1-2: The proposed project would result in less than cumulatively considerable impacts resulting from light and glare.	No mitigation measures are required.	Less than Significant Impact
Air Quality		
Air Quality Plan		
Project-specific Impact 3.2-1: The proposed project would conflict with and obstruct implementation of the applicable air quality plan.	**AIR-1:** The County shall ensure that project approvals within the Specific Plan area require that all onsite construction vehicles and equipment with horsepower greater than 50 shall meet, at a minimum, USEPA Tier IV interim engine certification requirements. If Tier IV interim equipment is not available, the contractor may apply other available technologies available for construction equipment such that it would achieve a comparable reduction in NOx and PM emissions comparable to that of Tier IV construction equipment. Where alternatives to USEPA Tier IV are utilized, the contractor shall be required to show evidence to the County that these alternative technologies would achieve comparable emissions reductions. Certifications or alternative reduction strategies shall be required prior to receiving a construction permit. In addition, contractors shall limit construction equipment idling time to 5 minutes, maintain construction equipment	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	in good operating condition, use construction equipment that uses low-polluting fuels to the extent available and feasible (i.e. compressed natural gas, liquid petroleum gas, and unleaded gasoline). **AIR-2**: The County shall ensure that project approvals within the Specific Plan area require that all active construction areas shall be watered at least four times daily to reduce fugitive dust emissions from grading, excavation, and other ground preparation. Watering shall be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water shall be used whenever possible. **AIR-3:** Reduction or elimination of fireplaces within residential development such that there are no fireplaces within 95 percent of all new/redeveloped single family residential development or 100 percent of all multifamily residential development (new and redeveloped) within the Specific Plan area. Compliance would be ensured through County review prior to the issuance of a building permit. **AIR-4:** All commercial development will use low-VOC architectural coating such that interior coatings do not exceed 10 grams per liter (g/l) of VOC content and exterior coatings do not exceed 100 g/l. This measure is to be made a condition of approval for continued upkeep of the property. **AIR-5:** All commercial developments will use low-VOC cleaning supplies. This measure is to be made a condition of approval for continued upkeep of the property. **AIR-6:** All new development shall have electrical outlets associated with the outside of the buildings such that all landscaping equipment could be electrically operated. **AIR-7:** All new development shall comply with the Title 24 requirements in effect at the time of construction and shall, at a minimum, exceed 2013 Title 24 energy efficiency standards by 15 percent.	
Cumulative Impact 3.2-1: The proposed project would conflict with and obstruct implementation of the applicable air quality plan. Therefore, the project would be cumulatively considerable.	Implementation of Mitigation Measures AIR-1 through AIR-7 is required.	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
Air Quality Standards/Violations		
Project-specific Impact 3.2-2: The proposed project would violate regional air quality standards during construction activities and contribute substantially to an existing or projected air quality violation.	Implementation of Mitigation Measures AIR-1 through AIR-7 is required.	Significant and Unavoidable Impact
Cumulative Impact 3.2-2: The proposed project would result in cumulatively considerable impacts related to regional air quality standards.	Implementation of Mitigation Measures AIR-1 through AIR-7 is required.	Significant and Unavoidable Impact
Criteria Pollutant		
Project-specific Impact 3.2-3: The project would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	Implementation of Mitigation Measures AIR-1 through AIR-7 is required.	Significant and Unavoidable Impact
Cumulative Impact 3.2-3: The project would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	Implementation of Mitigation Measures AIR-1 through AIR-7 is required.	Significant and Unavoidable Impact
Sensitive Receptors		
Project-specific Impact 3.2-4: The project would expose sensitive receptors to substantial pollutant concentrations, including increased levels of TACs.	**AIR-8:** The County shall ensure that project approvals within the Specific Plan area require that any sensitive uses proposed to be located within 300 feet of the Metro tracks and within 500 feet of freeways shall be equipped with a filtered air supply system to maintain units under positive pressure when windows are closed. The ventilation system, whether a central HVAC (heating, ventilation and air conditioning) or a unit-by-unit filtration system, shall include high-efficiency filters meeting minimum efficiency reporting value (MERV) 13, per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 52.2 (equivalent to approximately ASHRAE Standard 52.1 Dust Spot 85%). The efficiency rating of the filtration system shall be determined based on a health risk assessment conducted for the proposed development, such that cancer and non-cancer risks are reduced to a 10 in one million	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
	increase in cancer risk, and less than 1 for non-cancer risk, unless thresholds are superseded by more current SCAQMD threshold. Air intake systems for HVAC shall be placed based on exposure modeling to minimize roadway air pollution sources. The ventilation system shall be designed by an engineer certified by ASHRAE, who shall provide a written report documenting that the system offers the best available technology to minimize outdoor to indoor transmission of air pollution. Disclosure to the occupants (buyers and renters) shall be required regarding the proximity of Metro tracks (within a 300-foot radius) and freeways (within a 500-foot radius), the occurrence of diesel emissions form Metro trains and freeways heavy truck traffic), and the potential increased cancer and non-cancer risks associated with the development location.	
Cumulative Impact 3.2-4: The project would contribute to potential significant cumulative impacts to sensitive receptors that would be cumulatively considerable.	Implementation of Mitigation Measure AIR-8 is required.	Less than Significant Impact
Cultural Resources		
Historical Resources		
Project-specific Impact 3.3-1: The proposed project could cause a substantial adverse change in the significance of a historical resource as defined in Sec tion15064.5.	**CUL-1:** Impacts to four significant historical resources that are eligible for listing and located within the MLK Subarea (Multi-Service Ambulatory Care Center (MACC), Augustus F. Hawkins Comprehensive Medical Health Center, Interns and Physicians Building, and Dr. H. Claude Hudson Auditorium) and the integrity of the Martin Luther King, Jr. Medical Center Campus Historic District (a fifth historic resource that is eligible for listing) shall be reduced to below the level of significance through utilization of the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines of Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings for any proposed alterations, including all site work, structural upgrades, architectural, and mechanical systems improvements and repairs. The work shall conform to the standards and guidelines for "rehabilitation." Conformance with the Secretary of the Interior's Standards shall be monitored by an architectural historian or historic architect who meets the Secretary of the Interior's Professional Qualification Standards. Completion of this	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	mitigation measure shall be monitored and enforced by the County of Los Angeles. **CUL-2:** Impacts resulting from demolition or substantial alteration of significant historical resources not in conformance with the Secretary of the Interior's Standards shall be reduced to the maximum extent feasible through archival documentation of as-found condition. Prior to the initiation of construction activities, the County of Los Angeles shall ensure that documentation of the Martin Luther King, Jr. Medical Center Campus Historic District, Multi-Service Ambulatory Care Center (MACC), Augustus F. Hawkins Comprehensive Medical Health Center, Interns and Physicians Building, and/or Dr. H. Claude Hudson Auditorium is completed in accordance with Historic American Buildings Survey (HABS) requirements for donated material. The documentation shall be in the form of a Historic American Building Survey and shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The documentation shall include large-format photographic recordation, detailed historic narrative report, measured architectural drawings, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to Historic American Building Survey for inclusion in the Library of Congress. Archival copies of the documentation also would be available at the Martin Luther King, Jr. Medical Center campus and maintained by the County of Los Angeles. **CUL-3:** Impacts resulting from the loss of integrity of the Martin Luther King, Jr. Medical Center Campus Historic District such that its significance is materially impaired will be reduced to the maximum extent feasible through the development of a retrospective exhibit detailing the history of the Martin Luther King, Jr. Medical Center Campus Historic District, its significance, and its important details and features. The retrospective exhibit shall be in the form of a physical exhibit installed on the Martin Luther King, Jr. Medical Center Campus, which is located either within a building or on a freestanding kiosk or comparable structure	

Impact	Mitigation Measure	Significance after Mitigation
	or installation on the property. The exhibit shall commemorate the historic appearance of the district and provide the public with sufficient information to understand its historic significance. The exhibit shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The exhibit shall be completed within a period of no more than two years from the date of completion of the portion of the project that would result in the loss of integrity of the historical resources eligible for listing. **CUL 4:** Demolition of structures that meet the eligibility requirements for the CRHR and/or the County of Los Angeles Register shall be avoided. If demolition of a portion of an eligible structure cannot be feasibly aoudad as determined by the County of Los Angeles, the alterations of a structure eligible as a historical resource shall be accomplished in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*. To ensure compliance with this measure, the County shall determine the need for a historic resources evaluation of a structure if a structures is proposed for demolition or alteration and is or will be 50 years or older prior to project construction, or if a structure is proposed for demolition or alteration that affect the eligibility of a historic resource in the immediate surroundings of a structure proposed for demolition or alteration.	
Cumulative Impact 3.3-1: The project would have the potential to result in a cumulatively considerable contribution to adverse changes in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5.	Implementation of Mitigation Measures CUL-1 through CUL-4 is required.	Significant and Unavoidable Impact
Archaeological Resource		
Project-specific Impact 3.3-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource	**CUL-5:** Avoidance, preservation or data recovery shall occur for archaeological resources that could be affected by ground disturbing activities and are found to be	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
	significant resources. To ensure that developments in accordance with the Specific Plan do not result in significant impacts to pre-historic or historic archaeological resources, the following shall be implemented. Individual development projects or other ground disturbing activities such as installation of utilities, shall be subject to a Phase I cultural resources inventory on a project-specific basis prior to the County's approval of project plans. The study shall be carried out by a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. The cultural resources inventory would consist of: a cultural resources records search to be conducted at the South Central Coastal Information Center; a Sacred Lands File Search by the Native American Heritage Commission (NAHC) and with interested Native Americans identified by the NAHC; a pedestrian archaeological survey where deemed appropriate by the archaeologist; and recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms. If potentially significant cultural resources are encountered during the survey, the County shall require that the resources are evaluated for their eligibility for listing in the California Register of Historical Resources and for significance as a historical resource or unique archaeological resource per CEQA Guidelines Section 15064.5. Recommendations shall be made for treatment of these resources if found to be significant. Per CEQA Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means of mitigation to avoid impacts to significant cultural resources, including prehistoric and historic archaeological sites, locations of importance to Native Americans, human remains, historical buildings, structures and landscapes. 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, which may include data recovery or other appropriate measures, in	

Impact	Mitigation Measure	Significance after Mitigation
	consultation with the County, and local Native American representatives expressing interest. 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.	
Cumulative Impact 3.3-2: The project would have the potential to result in a cumulatively considerable contribution to adverse changes in the significance of an archaeological resource, as defined in CEQA Guidelines Section 15064.5.	Implementation of Mitigation Measure CUL-5 is required.	Less than Significant Impact
Paleontological Resources		
Project-specific Impact 3.3-3: Implementation of the project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**CUL-6:** The project applicant shall retain a qualified paleontologist (in accordance with the Society of Vertebrate Paleontologists) to monitor all ground-disturbing activities in native soils or sediments beginning at five feet below ground surface and deeper. If the paleontologist, upon observing initial earthwork, determines there is low potential for discovery, no further action shall be required	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
	and the paleontologist shall submit a memo to the County confirming findings of low potential. If the qualified paleontologist, upon observing initial earthwork, determines there is a moderate to high potential for discovery, a qualified paleontologist or paleontological monitor (retained by the County) shall monitor all mass grading and excavation activities. Monitoring will be conducted in areas of grading or excavation in undisturbed formation sediments, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined on exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. Should any paleontological resources (i.e., fossils) be uncovered during project construction activities, all work within a 100-foot radius of the discovery site shall be halted or diverted to other areas on the site and the County shall be immediately notified. The qualified paleontologist shall evaluate the finds and recommend appropriate next steps to ensure that the resource is not substantially adversely impacted, including but not limited to avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Further, ground disturbance shall not resume within a 100-foot radius of the discovery site until an agreement has been reached between the project applicant, the qualified paleontologist, and the County as to the appropriate preservation or mitigation measures to ensure that the resource is not substantially adversely impacted. Any recovered paleontological specimens shall be identified to the lowest taxonomic level possible and prepared for permanent preservation. Screen-washing of	

Impact	Mitigation Measure	Significance after Mitigation
	sediments to recover small invertebrates and vertebrates shall occur if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur at an institutional repository approved by the County. The paleontological program shall include a written repository agreement prior to the initiation of mitigation activities. A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location. The report, when submitted to an accepted by the County, shall signify satisfactory completion of the project program to mitigation impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.	
Cumulative Impact 3.3-3: The project would have the potential to result in a cumulatively considerable contribution to adverse changes in the significance of a unique paleontological resource or site or unique geologic feature.	Implementation of Mitigation Measure CUL-6 is required.	Less than Significant
Human Remains		
Project-specific Impact 3.3-4: Implementation of the project could disturb human remains, including those interred outside of formal cemeteries.	**CUL-7:** If human remains are encountered, the County or its contractor shall halt work in the vicinity (within 100 feet) of the find and contact the Los Angeles County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98. The NAHC will designate an MLD for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, County shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.	Less than Significant

Impact	Mitigation Measure	Significance after Mitigation
Cumulative Impact 3.3-4: The project could result in a cumulatively considerable contribution to disturbance of human remains, including those interred outside of formal cemeteries.	Implementation of Mitigation Measure CUL-7 is required.	Less than Significant impact
Tribal Cultural Resources		
Project Specific Impact 3.3.5: Implementation of the project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.	Implementation of Mitigation Measures CUL-5 and CUL-7 is required.	Less than Significant Impact
Cumulative Impact 3.3.5: Implementation of the project could result in a cumulatively considerable contribution to substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.	Implementation of Mitigation Measures CUL-5 and CUL-7 is required.	Less than Significant Impact
Geology and Soils		
Strong Seismic Ground Shaking		
Project-specific Impact 3.4-1: The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	No mitigation measures are required.	Less than Significant impact
Cumulative Impact 3.4-1: The project would not result in a cumulatively considerable contribution to the exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	No mitigation measures are required.	Less than Significant impact
Liquefaction and Lateral Spreading		
Project-specific Impact 3.4-3: The proposed project would not result in substantial soil erosion or the loss of topsoil.	No mitigation measures are required	Less than Significant impact
Cumulative Impact 3.4-3: The project would not result in a cumulatively considerable contribution to substantial soil erosion or the loss of topsoil.	No mitigation measures are required.	Less than Significant impact
Soil Erosion or Topsoil Loss		
Project-specific Impact 3.4-4: The proposed project could be located on a geologic unit or soil that is currently	No mitigation measures are required.	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
unstable, or that would become unstable as a result of the project, and would not potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.		
Cumulative Impact 3.4-4: The project would not result in a cumulatively considerable contribution to exposure of people or structures to unstable geologic units or soils.	No mitigation measures are required.	Less than Significant Impact
Greenhouse Gas Emissions		
Greenhouse Gas Emissions		
Project-specific Impact 3.5-1: The proposed project would generate GHG emissions, either directly or indirectly, and would have a significant impact on the environment.	Implementation of Mitigation Measures AIR-1 through AIR-6 is required.	Significant and Unavoidable Impact
Cumulative Impact 3.5-1: The project would result in a cumulatively considerable contribution to the generation of GHG emissions that would have a significant impact on the environment.	Implementation of Mitigation Measures AIR-1 through AIR-6 is required.	Significant and Unavoidable Impact
Conflict with Plan, Policy, or Regulation that Reduces Greenhouse Gas Emissions		
Project-specific Impact 3.5-2: The proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.5-1: The project would not result in a cumulatively considerable contribution to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.	No mitigation measures are required.	Less than Significant Impact
Hazards and Hazardous Materials		
Accident Conditions		
Project-specific Impact 3.6-1: Implementation of the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	No mitigation measures are required.	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
Cumulative Impact 3.6-1: The project would not result in a cumulatively considerable contribution by creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	No mitigation measures are required.	Less than Significant Impact
Schools		
Project-specific Impact 3.6-2: Implementation of the project could not result in the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.6-2: The project would not result in a cumulatively considerable contribution related to the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No mitigation measures are required.	Less than Significant Impact
Hazardous Materials Site Listing		
Project-specific Impact 3.6-3: The project area includes individual sites that are included on a list of hazardous materials sites compile pursuant to Government Code Section 65962.5; however, the project would not create a significant hazard to the public or the environment.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.6-3: The project would not result in a cumulatively considerable contribution related to hazardous materials impacts to the public or the environment.	No mitigation measures are required.	Less than Significant Impact
Hydrology and Water Quality		
Water Quality Standards/Waste Discharge Requirements		
Project-specific Impact 3.7-1: The proposed project would not violate water quality standards or waste discharge requirements.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.7-1: The proposed Specific Plan's contribution to cumulative impacts associated with a violation of water quality standards or waste discharge requirements would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
Groundwater Supply and Recharge		
Project-specific Impact 3.7-2: The proposed project would not 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).	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.7-2: The proposed project would result in less than significant impacts on the Central Groundwater Basin and the recharge capabilities of the basin, and the project's contribution to impacts on the Central Groundwater Basin is less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact
Erosion/Siltation		
Project-specific Impact 3.7-3: The proposed project would not 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 that would result in substantial erosion or siltation on- or off-site.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.7-3: The proposed project would result in a less than cumulatively considerable impact related to erosion and siltation.	No mitigation measures are required.	Less than Significant Impact
Stormwater Drainage Capacity		
Project-specific Impact 3.7-4: The proposed project would create or contribute runoff water which would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.7-4: The project's contribution to cumulative impacts on the capacities of existing and planned storm drains and on stormwater related to polluted runoff would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
Surface Water and Groundwater Quality		
Project-specific Impact 3.7-5: The proposed project would generate construction and post-construction runoff but would not violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.7-5: The proposed project's contribution to cumulative impacts associated with compliance with NPDES permits and surface and groundwater quality would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact
Degrade Water Quality		
Project-specific Impact 3.7-6: The proposed project would not degrade water quality.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.7-6: The proposed project's contribution to cumulative water quality impacts would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact
Land Use and Planning		
Divide an Established Community		
Project-specific Impact 3.8-1: The project would not physically divide an established community.	No mitigation measures are required.	No Impact
Cumulative Impact 3.8-1: The implementation of the proposed project would not contribute to cumulative impacts associated with physically dividing an established community.	No mitigation measures are required.	No Impact
Conflict with Applicable Plans, Policies, or Regulations		
Project-specific Impact 3.8-2: The proposed project would be consistent 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.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.8-2: The implementation of the proposed project would not contribute to cumulative impacts associated with consistency to existing general plans and policies.	No mitigation measures are required.	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
Conflict with County Zoning Ordinance		
Project-specific Impact 3.8-3: The proposed project would be consistent with the County zoning ordinance as applicable to the subject property.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.8-3: The implementation of the proposed project would not contribute to cumulative impacts associated with consistency to the County zoning ordinance.	No mitigation measures are required.	Less than Significant Impact
Visual Character		
Project-specific Impact 3.8-4: The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character or other features.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.8-4: The project's contribution to the cumulative impact related to the visual character or quality of the area would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact
Noise and Vibration		
Exceedance of Established Noise Standards		
Project-specific Impact 3.9-1: Implementation of the project could expose persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**Mitigation Measure NOI-1:** Prior to the issuance of building permits, exterior areas of proposed single family and multiple family residential uses that are projected to be exposed to existing with project roadway noise levels and cumulative with project roadway noise levels exceeding the County's exterior noise standards (i.e., 60 dBA CNEL for single family residential and 65 dBA CNEL for multiple family residential) shall include noise attenuation features including, but not limited to, setbacks, soundwalls, glass noise barriers, and landscaping so that exterior areas meet the County's exterior noise standards. To ensure that the County's exterior noise standards are met, the project applicant shall demonstrate compliance through the preparation of an acoustical evaluation. **Mitigation Measure NOI-2**: Prior to the issuance of building permits, proposed residential developments adjacent to the Blue line and Union Pacific rail line that are exposed to rail noise of greater than 60 dBA CNEL for	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
	single family residential uses and 65 dBA CNEL for exterior areas of multiple family residential uses shall include noise attenuation features including, but not limited to, setbacks, soundwalls, glass noise barriers, and landscaping so that exterior areas meet the County's exterior noise standards. To ensure that the County's exterior noise standards are met, the project applicant shall demonstrate compliance through the preparation of an acoustical evaluation.	
Cumulative Impact 3.9-1: The project would have cumulatively considerable impacts on the exposure of persons to or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Implementation of Mitigation Measures NOI-1 and NOI-2 is required.	Less than Significant Impact
Exposure to Vibration Levels		
Project-specific Impact 3.9-2: Implementation of the project could expose persons to, or generate, excessive ground-borne vibration or ground-borne noise levels.	**Mitigation Measure NOI-3:** Prior to approval of a grading permit or building permit, construction equipment shall be prohibited within 50 feet of occupied residential structures. If construction equipment is required to be within 50 feet of occupied residential structures, the project applicant shall demonstrate that the human annoyance threshold of 78 VdB (0.032 in/sec PPV) and structural damage thresholds of 0.2 in/sec PPV for non-engineered timber and masonry buildings and 0.12 in/sec PPV for historic-age buildings that are extremely susceptible to vibration damage is achieved. Demonstration of compliance shall be provided through the preparation of a vibration analysis. **Mitigation Measure NOI-4:** Prior to the issuance of a building permit for a residential development within 100 feet of the rail tracks, the project applicant shall demonstrate that nighttime vibration level at the proposed residential uses shall not exceed the 72 VdB (0.016 in/sec PPV) threshold for human annoyance.	Less than Significant Impact
Cumulative Impact 3.9-2: The proposed project could have cumulatively considerable impacts on persons and structures from ground-borne vibration or ground-borne noise levels.	Implementation of Mitigation Measure NOI-3 is required.	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
Permanent Increase in Ambient Noise Levels		
Project-specific Impact 3.9-3: Implementation of the project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.9-3: The project would result in a less than cumulatively considerable contribution to a permanent increase in ambient noise levels in the project vicinity above existing levels.	No mitigation measures are required.	Less than Significant Impact
Temporary Increase in Ambient Noise Levels		
Project-specific Impact 3.9-4: Implementation of the project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.9-4: The project would not have a cumulatively considerable temporary or periodic increase in ambient noise levels in the project vicinity above existing levels.	No mitigation measures are required.	Less than Significant Impact
Population and Housing		
Induce Population Growth		
Project-specific Impact 3.10-1: The proposed project would not 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 infrastructure).	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.10-1: The proposed project would result in a less than cumulatively considerable contribution to cumulative impacts regarding population.	No mitigation measures are required.	Less than Significant Impact
Public Services and Recreation		
Fire Protection Services		
Project-specific Impact 3.11-1: The proposed project would not result in substantial adverse physical impacts associated with the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts.	No mitigation measures are required.	No Impact

Impact	Mitigation Measure	Significance after Mitigation
Cumulative Impact 3.11-1: The proposed project would have no impact and no contribution to cumulative physical impacts associated with the provision of, or the need for, fire protection facilities, the construction of which could cause environmental impacts.	No mitigation measures are required.	No Impact
Police Protection Services		
Project-specific Impact 3.11-2: The proposed project would not result in substantial adverse physical impacts associated with the need for new or physically altered sheriff facilities, the construction of which could cause significant environmental impacts.	No mitigation measures are required.	No Impact
Cumulative Impact 3.11-2: The proposed project would have no impact and no contribution to cumulative physical impacts associated with the provision of, or the need for, sheriff facilities, the construction of which could cause environmental impacts.	No mitigation measures are required.	No Impact
Schools		
Project-specific Impact 3.11-3: The proposed project would not result in substantial adverse physical impacts associated with the need for new or expanded school facilities, the construction of which could cause significant environmental impacts.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.11-3: The proposed project would have less than significant impacts and less that cumulatively considerable contribution to cumulative physical impacts associated with the provision of, or the need for public schools, the construction of which could cause environmental impacts.	No mitigation measures are required.	Less than Significant Impact
Parks		
Project-specific Impact 3.11-4: The proposed project would not result in substantial adverse physical impacts associated with the need for new or physically altered parks and recreation facilities, the construction of which could cause significant environmental impacts.	No mitigation measures are required.	No Impact
Cumulative Impact 3.11-4: The proposed project would not contribute to cumulative environmental impacts to parks and recreational facilities.	No mitigation measures are required.	No Impact

Impact	Mitigation Measure	Significance after Mitigation
Library Facilities		
Project-specific Impact 3.11-5: The proposed project would not result in the need for new or physically altered library facilities, the construction of which could result in significant environmental impacts.	No mitigation measures are required.	No Impact
Cumulative Impact 3.11-5: The proposed project would have no impact and no contribution to cumulative physical impacts associated with the provision of, or the need for, new or physically altered library facilities, the construction of which could cause environmental impacts.	No mitigation measures are required.	No Impact
Other Public Facilities		
Project-specific Impact 3.11-6: The proposed project would not result in the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts.	No mitigation measures are required.	No Impact
Cumulative Impact 3.11-6: The proposed project would have no impact and no contribution to cumulative physical impacts associated with the provision of, or the need for, new or physically altered other public facilities, the construction of which could cause environmental impacts.	No mitigation measures are required.	No Impact
Increase Use of Recreational Facilities		
Project-specific Impact 3.11-7: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that a substantial physical deterioration of the facility would occur or be accelerated.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.11-7: The proposed project would result in less than significant impacts related to physical deterioration of existing parks and recreational facilities, the proposed project's contribution to cumulative impacts would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact
Recreational Facilities Physical Effect on the Environment		
Project-specific Impact 3.11-8: The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No mitigation measures are required.	No Impact

Impact	Mitigation Measure	Significance after Mitigation
Cumulative Impact 3.11-8: The proposed project would have no impact and no contribution to cumulative physical impacts associated with the provision of, or the need for, construction or expansion of recreational facilities, the construction of which could cause environmental impacts.	No mitigation measures are required.	No Impact
Transportation and Traffic		
Traffic Increase		
Project-specific Impact 3.12-1: The proposed project could 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. The project would have an effect on intersections, freeway segments and off-ramps within jurisdictions of the County of Los Angeles, City of Compton, City of Lynwood, City of Los Angeles and Caltrans.		Please see *Section 3.12, Transportation and Traffic* of this EIR for a detailed discussion of the following significance determinations.
Intersections		
County of Los Angeles		
Avalon Blvd & El Segundo Blvd (#3): There is a significant impact in the PM peak hour at this location.	**TRAF-1:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the northbound approach to add a right turn lane prior to an individual project exceeding the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 feet. This would need to occur all the way to an alley located approximately 100 feet south of the intersection. The bus stop at this approach would continue to be located at the same location; however,	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
	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, the County of Los Angeles shall ensure the restriping of the southbound approach to provide a separate right turn lane by narrowing the median to 2 feet prior to an individual project exceeding the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	
Central Ave & El Segundo Blvd (#10): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-2:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the southbound approach to provide a separate right-turn lane and restriping the northbound approach by reducing the median to 2 feet before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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. Buses would be allowed 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, the County of Los Angeles shall ensure the restriping of the westbound approach to provide a separate right turn lane by narrowing the median to 2 feet prior to an individual project exceeding the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	Less than Significant Impact
Central Ave & Rosecrans Ave (#11): There is a significant impact in the AM Peak hour at this location.	**TRAF-3:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the westbound approach to provide a separate right-turn lane by narrowing the median to 2 feet before an individual	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
	project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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. Buses would be allowed to go through the intersection from the right-turn lane. This was a mitigation measure in the Martin Luther King Jr. Medical Campus EIR.	
Compton Ave & Imperial Hwy (#17): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-4:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the westbound approach to provide a separate right-turn lane before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	Significant and Unavoidable Impact
Wilmington Ave & I-105 e/b Ramps (#27): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-5:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure that an additional eastbound lane will be installed by widening (reducing the raised median on the ramp) the off-ramp before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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, the County of Los Angeles shall ensure that an additional northbound left-turn lane is provided by reducing the median width. This improvement 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.	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
Wilmington Ave & 118th St (#28): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-6:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the eastbound approach of 118th Street to provide a separate right-turn lane before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	Significant and Unavoidable Impact
Wilmington Ave & 120th St (East) (#30): There is a significant impact in the PM peak hour at this location.	**TRAF-7:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure that 120th Street west of Wilmington Avenue (the driveway to the Martin Luther King Jr. Medical Campus) is widened for 250 feet, on the south side by 2 feet and the eastbound approach is restriped to provide dual left-turn lanes before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	Less than Significant Impact
Wilmington Ave & El Segundo Blvd (#32): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-8:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the eastbound and westbound approaches to add separate right-turn lanes before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement would allow buses to go through the intersection from the right-turn lanes. This improvement 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.	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
Imperial Hwy & I-105 w/b Ramps (#36): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-9:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure that a third northbound left-turn lane is provided by widening the off-ramp by 10 feet for approximately 150 feet to 200 feet before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	Significant and Unavoidable Impact
Alameda St & 103rd St (#43): There is a significant impact in the PM peak hour at this location.	**TRAF-10:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the eastbound approach for a separate left-turn lane before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	Less than Significant Impact
Alameda St & Imperial Hwy (#45): There is a significant impact in the AM peak hour at this location.	**TRAF-11:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the southbound approach for dual right-turn lanes before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	Less than Significant Impact
Alameda St & El Segundo Blvd (#46): There is a significant impact in the AM peak hour at this location.	**TRAF-12:** Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the northbound and southbound approaches to provide separate right-turn lanes before an individual project	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
	exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.	
City of Compton		
Wilmington Ave & Greenleaf Blvd (#62): There is a significant impact in both the AM and PM peak hours at this location. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection, additional right-of-way is necessary to improve the intersection so that the project does not exceed the City of Compton's significant impact criteria.	**TRAF-13:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
Compton Ave & El Segundo Blvd (#21): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-14:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the eastbound and westbound approaches to provide separate right-turn lanes by narrowing the medians to 2 feet. This proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism. Prior to the issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to further improve the AM	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	peak hour level of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.	
Wilmington Ave & Rosecrans Ave (#33): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-15:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound approach to provide a separate right-turn lane by narrowing the median to 2 feet. This improvement 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 proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection. Prior to the issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to further improve the AM and PM peak hours level of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
Wilmington Ave & W Compton Blvd (#58): There is no significant impact in the AM peak hours, but there is a significant impact in the PM peak hours at this location.	**TRAF-16:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if the City of Compton has established a proportionate share	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	funding mechanism for the improvement at this intersection.	
Wilmington Ave & Alondra Blvd (#61): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-17:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the westbound approach to provide a separate right-turn lane by narrowing the median to 3 feet. This improvement 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 proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection. Prior to the issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to further improve the PM peak hour level of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
Wilmington Ave & Walnut St (#63): There is no significant impact in the AM peak hours, but a significant impact in the PM peak hours at this location.	**TRAF-18:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping and modifying the eastbound approach from a left-turn lane, a through lane, and a right-turn lane to 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-foot lane and a 12-foot curb lane prior to merging back to one lane, and prohibiting on-street parking for the same distance. The proportionate share funding shall be determined through	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection	
City of Lynwood		
Imperial Hwy & State St (#54): There is no significant impact in the AM peak hours, but a significant impact in the PM peak hours at this location.	**TRAF-19:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound and southbound approaches to provide separate right-turn lanes. This improvement 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 improvements require removal of two on-street parking spaces on each approach. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Lynwood. The proportionate share funding shall be provided by the project applicant if the City of Lynwood has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
City of Los Angeles		
Avalon Blvd & Imperial Hwy (#1): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-20:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
Avalon Blvd & 120th Street (#2): There is a significant impact in the PM peak hour at this location.	**TRAF-21:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	County of Los Angeles and City of Los Angeles. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.	
Central Ave & Imperial Hwy (#6): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-22:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
Central Ave & I-105 WB Ramps (#7): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-23:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping 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. This proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism.	Significant and Unavoidable Impact
Central Ave & 120th St (#9): There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-24:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound approach to provide a separate right-turn lane. This improvement 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. The proportionate share funding of the restriping improvement	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection. Prior to the issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding of the additional right-of-way acquisition and improvement to further improve the AM and PM peak hours' level of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.	
Wilmington Ave & 112th St (#25): 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.	**TRAF-25:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of installation of a new traffic signal at this location because the signal warrant analysis indicated that a traffic signal would be warranted. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
Freeway Segment		
I-110 southbound between 135th St & Rosecrans Ave: There is a significant impact in both the AM and PM peak hours at this location.	**TRAF-26:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements along this freeway segment through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	established a proportionate share funding mechanism for the improvement at this intersection.	
Cumulative-specific Impact 3.12-1: The project would have a cumulatively considerable impact on 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.		Please see *Section 3.12, Transportation and Traffic* of this EIR for a detailed discussion of the following significance determinations.
Intersections		
County of Los Angeles		
The project would result in significant impacts at 16 intersections within the County of Los Angeles.	Implementation of Mitigation Measures TRAF-1 through TRAF-12 is required.	Significant and Unavoidable Impact
City of Compton		
The project would result in significant impacts at 9 intersections within the City of Compton.	Implementation of Mitigation Measures TRAF-13 through TRAF-18 is required.	Significant and Unavoidable Impact
Willowbrook Ave & Rosecrans Ave (#42): There is no significant impact in the AM peak hour, but a significant impact in the PM peak hour at this location.	**TRAF-27:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
Central Ave & Compton Blvd (#57): There is no significant impact in the AM peak hour, but a significant impact in the PM peak hour at this location.	**TRAF-28:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound approach to provide a separate right-turn lane by narrowing the median to 2 feet. This would modify the approach from a left-turn lane, a through lane, and a through-right lane to a left-turn lane, two	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	through lanes, and a right-turn lane. This improvement requires removal of five on-street parking spots on the northbound approach. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.	
Central Ave & Alondra Blvd (#60): There is no significant impact in the AM peak hour, but a significant impact in the PM peak hour at this location.	**TRAF-29:** Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound and southbound approaches to provide a separate right-turn lane by narrowing the median to 2 feet. 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. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
<u>Lynwood</u>		
The project would result in a significant impact at one intersection (Imperial Highway & State Street) within the City of Lynwood.	Implementation of Mitigation Measure TRAF-19 is required.	Significant and Unavoidable Impact
<u>City of Los Angeles</u>		
The project would result in a significant impact at 6 intersections within the City of Los Angeles.	Implementation of Mitigation Measures TRAF-20 through TRAF-25 is required.	Significant and Unavoidable Impact
Freeway Segments		
I-105 westbound between Avalon Blvd and Central Ave: There is a significant impact in the PM peak hour at this location.	**TRAF-30:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements along this freeway segment through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	improve the PM peak hour level of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.	
I-105 westbound between Compton Ave and Wilmington Ave: There is a significant impact in the PM peak hour at this location.	**TRAF-31:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements along this freeway segment through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
I-105 westbound between State St & Long Beach Blvd: There is a significant impact in the AM and PM peak hours at this location.	**TRAF-32:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements along this freeway segment through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
Off-ramps		
I-105 WB off-ramp at Imperial Highway: The proposed project would result in a significant impact at for the PM Peak hour.	Implementation of Mitigation Measure TRAF-9 is required.	Significant and Unavoidable Impact
110 SB off-ramp at El Segundo Blvd: There is a significant impact in the AM and PM peak hours at this location.	**TRAF-33:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this off-ramp through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.	
Congestion Management Plan		
Project and Cumulative Impact 3.12-2: The proposed project could 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 county congestion management agency for designated roads or highways.		
CMP Arterial Monitoring Locations		
The project would result in less than significant traffic impacts at the four Arterial CMP monitoring intersections.	No mitigation measures are required.	Less than Significant Impact
CMP Mainline Freeway Monitoring Stations		
I-105 eastbound (West of I-710, East of Harris Ave): There is a significant impact in the PM peak hour at this location.	**TRAF-34:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this freeway location through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
I-105 westbound (West of I-710, East of Harris Ave): There is a significant impact in the AM and PM peak hours at this location.	**TRAF-35:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this freeway location through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall	Significant and Unavoidable Impact

Impact	Mitigation Measure	Significance after Mitigation
	be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.	
I-105 eastbound (East of Bellflower Blvd. West of I-605): There is a significant impact in the PM peak hour at this location.	**TRAF-36:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this freeway location through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
I-105 westbound (East of Bellflower Blvd. West of I-605): There is a significant impact in the AM and PM peak hours at this location.	**TRAF-37:** Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this freeway location through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.	Significant and Unavoidable Impact
CMP Transit		
The project would result in a less than significant impact on transit services.	No mitigation measures are required.	Less than Significant Impact
Utilities		
Wastewater Treatment Requirements		
Project-specific Impact 3.13-1: The proposed project would not exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.13-2: The Specific Plan would result in a less than cumulatively considerable impact to wastewater treatment requirements of the LARWQCB.	No mitigation measures are required.	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
Water or Wastewater Treatment Facilities		
Project-specific Impact 3.13-2: The proposed project would not create water system or wastewater treatment capacity problems or result in the construction of new water or wastewater treatment facilities that would cause significant environmental effects; however, the proposed project would create wastewater system capacity problems that would result in the need for new or expanded wastewater facilities, the construction of which could cause significant environmental effects.	**USS-1:** Prior to the issuance of a building permit, the individual project applicants shall submit a sewer study that confirms that the existing trunk sewers have adequate capacity to accommodate the projected wastewater flow from the proposed individual project as well as cumulative projects. If the projected wastewater flow exceeds the existing sewer capacity, the sewer trunk(s) shall be upgraded to accommodate the projected wastewater. Construction activities shall use best management practices to reduce (1) noise levels and limit construction in accordance with the County Code, (2) air quality and greenhouse gas emissions in accordance with the thresholds identified by the South Coast Air Quality Management District (see Section 3.2, Air Quality and Section 3.5, Greenhouse Gas Emissions in this EIR) and (3) traffic safety issues through the implementation of a traffic control plan that includes features such as signage, land closures, flaggers, detours and notifications to surrounding property owners.	Less than Significant Impact
Cumulative Impact 3.13-2: The proposed project's contribution to the less than significant cumulative impacts associated with water system and wastewater treatment facilities would be less than cumulatively considerable; however, the proposed project could result in a cumulatively considerable contribution to construction effects associated with wastewater facilities.	Implementation of Mitigation Measure USS-1 is required.	Less than Significant Impact
Stormwater Drainage Facilities		
Project-specific Impact 3.13-3: The proposed project would not create drainage 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.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.13-3: The project's contribution to cumulative impacts related to stormwater drainage capacity would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact
Water Supplies		
Project-specific Impact 3.13-4: The proposed project would have sufficient water supplies available to serve the	No mitigation measures are required.	Less than Significant Impact

Impact	Mitigation Measure	Significance after Mitigation
project demands from existing entitlements and resources, and would not require new or expanded entitlements.		
Cumulative Impact 3.13-4: The proposed project would result in less than cumulatively considerable impacts to water supply	No mitigation measures are required.	Less than Significant Impact
Energy Facilities		
Project-specific Impact 3.13-5: The proposed project would not create energy utility system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, or would it require or result in the new or expanded entitlements.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.13-5: The project's contribution to cumulative impacts related to the energy infrastructure system and entitlements would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact
Landfill Capacity		
Project-specific Impact 3.13-6: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.13-6: The project's contribution to cumulative impacts on the capacities of the landfill facilities would be less than cumulatively considerable.	No mitigation measures are required.	Less than Significant Impact
Compliance with Solid Waste Regulations and Statutes		
Project-specific Impact 3.13-7: The proposed project would comply with federal, state, and local statutes and regulations related to solid waste.	No mitigation measures are required.	Less than Significant Impact
Cumulative Impact 3.13-7: The project would not contribute to cumulative impacts associate with compliance with solid waste statutes and regulations.	No mitigation measures are required.	Less than Significant Impact

CHAPTER 1
Introduction

This Draft Environmental Impact Report (EIR) has been prepared by the County of Los Angeles, California (County), pursuant to the applicable provisions of the California Environmental Quality Act (CEQA) and its implementing guidelines, known as the *CEQA Guidelines* (California Code of Regulations, Title 14, Chapter 3, Sections 15000-15387). The County of Los Angeles is the Lead Agency for this EIR (State Clearinghouse Number 2015101106), which examines the potential physical impacts to the environment as a result of the proposed Willowbrook Transit Oriented District (TOD) Specific Plan (the proposed project) of an approximately 312-acre area that encompasses a portion of the unincorporated community of Willowbrook in proximity to the Willowbrook/Rosa Parks Station (the Specific Plan area). Please refer to Chapter 2, *Project Description* for a more detailed discussion of the Specific Plan area and its location.

This Draft EIR evaluates impacts that could result from implementation of the proposed Specific Plan as compared to existing conditions. CEQA requires that before a decision can be made to approve a project with potentially significant environmental impacts, an EIR must be prepared that fully describes the environmental impacts of the project and identifies feasible mitigation for significant impacts. The EIR is a public information document for use by governmental agencies and the public to identify and evaluate potential environmental consequences of a proposed project, to recommend mitigation measures to lessen or eliminate adverse impacts, and to examine feasible alternatives to the project. The information contained in this EIR is to be reviewed and considered by the governing agency prior to the ultimate decision to approve, disapprove, or modify the proposed project.

This EIR is a Program EIR prepared in accordance with *CEQA Guidelines* Section 15168. It is a Program EIR because this EIR evaluates a series of future actions that could occur with the implementation of the proposed Specific Plan. A Program EIR is appropriate because these future actions are characterized as one large project related by geography and the future actions are logical parts in the chain of contemplated actions.

1.1 Purpose of an EIR

In accordance with *CEQA Guidelines* Section 15121(a), the purpose of an EIR is to serve as an informational document that will generally inform public agency decision makers and the public of the significant environmental effects of a project, and possible ways to minimize those significant effects. *CEQA Guidelines* Section 15151 contains the following standards for EIR adequacy:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.*

The purpose of this EIR is to provide an objective, full-disclosure document to inform agency decision makers and the general public of the direct and indirect environmental impacts of the proposed Specific Plan project, and related actions. This EIR is prepared in conformance with Section 15161 of the *CEQA Guidelines*, and the primary purpose of this EIR is to:

- Identify and evaluate potential environmental consequences of the proposed project.
- Assess cumulative impacts of the project in conjunction with related past, present, and reasonably foreseeable future projects within the area.
- Indicate the manner in which those environmental consequences can be mitigated or avoided.
- Define and analyze alternatives that have the potential to reduce or eliminate potentially significant impacts associated with the proposed project or non-clustered scenario.
- Identify impacts, if any, which even with the implementation of mitigation measures would be unavoidable and adverse.
- Provide documentation supporting these determinations.

In addition, an EIR must also identify and evaluate a reasonable range of alternatives to the project that have the potential to mitigate or avoid the project's potential significant environmental effects while feasibly accomplishing most of the project's basic objectives. Therefore, the purpose of an EIR (or any environmental document required under CEQA) is to focus the discussion on the project's potential effects on the environment.

The purpose of this EIR for the proposed Specific Plan is also to provide for streamlining of later environmental review of subsequent site-specific development projects undertaken pursuant to the Specific Plan. As described in Section 15175 of the *CEQA Guidelines,* plan level EIRs may form the basis for later decision making and may streamline the later environmental review of projects or approvals included within the project, plan or program. EIRs can be prepared for: (1) a project that consists of smaller individual projects that will be carried out in phases; (2) a general plan, general plan update, general plan element, general plan amendment, or specific plan; and/or (3) projects that will be carried out or approved pursuant to a development agreement. The proposed project includes, among other things, plans for infill development, a general plan amendment, a specific plan, and anticipates future infill development projects that may require a development agreement. Thus, CEQA requires, and this EIR includes an evaluation of cumulative impacts, growth inducing impacts, and irreversible significant effects on the environment of subsequent projects to the greatest extent feasible.

1.2 Project Overview

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. In addition, the proposed Specific Plan is intended to streamline the approval process for future development projects that are consistent with the Specific Plan.

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. In addition, as discussed in more detail below under Proposed Circulation System Improvements, 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 Martin Luther King, Jr. (MLK) Medical Center, Charles R. Drew University of Medicine and Science (CDU), Kenneth Hahn Plaza, Willowbrook Library, Martin Luther King, Jr. (MLK) Center for Public Health, and the Willowbrook/Rosa Parks Station. Key access corridors to the Specific Plan area would continue to be Willowbrook Avenue, Compton Avenue, South Mona Avenue, Wilmington Avenue, East 117th Street, East 118th Street, East 119th Street, and East 120th Street. Streetscape improvements, such as landscaping and street furniture are also provided for in the proposed Specific Plan, all of which is described below.

The proposed Specific Plan would also establish sustainable design guidelines and performance standards for features, such as scale and mass, building orientation, building articulation and detailing, circulation, parking, and exterior lighting. The new zoning designations would allow for infill and redevelopment TOD opportunities that can serve as catalyst to revitalizing the area.

1.3 The CEQA EIR Process

In accordance with *CEQA Guidelines* Section15082, on October 30, 2015, the County of Los Angeles issued a Notice of Preparation (NOP) and Initial Study, which was sent to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties. The NOP and Initial Study circulated for approximately thirty days, until November 30, 2015. The NOP requested those agencies with regulatory authority over any aspect of the proposed project to review the issues that would be addressed within the EIR and to identify any additional relevant environmental issues that should be addressed.

Comment letters were received by the County from five agencies in response to the NOP. The NOP and responses to the NOP are included in this Draft EIR as Appendix A. A general summary of the areas of concern raised in these letters is provided in **Table 1-1.**

TABLE 1-1
TOPICS RAISED IN RESPONSE TO THE NOP

Comment/Date	Summary of Comment	Location of Discussion
State Agencies		
Department of Transportation (Caltrans) District 7 November 30, 2015	The comment letter states that a formal scoping meeting is necessary to discuss the preparation of the traffic analysis, potential traffic impacts, and proposed mitigation on the state facilities. The comment also expresses concern that the traffic generated by the project, along with cumulative traffic may exceed the capacity of off-ramps and backups onto the mainline freeway could occur, and states that an off-ramp queuing analysis should be conducted for the proposed project. The comment 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, including potential impacts to freeway I-105, I-110, and I-710 and on/off ramps. The comment also provides contact information for further review of the DEIR.	EIR Section 3.13, Transportation and Traffic
Regional Agencies		
South Coast Air Quality Management District (SCAQMD) November 6, 2015	The comment requests the DEIR, including all DEIR appendices and technical documents regarding air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files be sent to SCAQMD for review. The comment recommends the Lead Agency use the CEQA Air Quality Handbook (1993) and CalEEMod land use emissions software to complete the air quality analysis for the proposed project. The comment also states that 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. The comment requests the Lead Agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds in the CEQA Air Quality Handbook. A health risk assessment is required in the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles. The comment also includes several resources to assist the Lead Agency develop mitigation measures in the even the proposed project generates significant adverse air impacts.	EIR Section 3.2, *Air Quality*
Los Angeles County Metropolitan Transportation Authority December 1, 2015	The comment states there are several Metro bus and light rail lines that operate within the Specific Plan area. Metro has standard language that relates to construction activity adjacent to bus transit facilities and recommends the Specific Plan include language that informs future development activity within the Specific Plan area of Metro's notification procedures of considerations for projects located in close proximity to a Metro facility. Similarly, the comment recommends the Specific Plan include policy language or guidance in that clearly denotes development within 100 feet of a Metro facility would require Metro review and approval and compliance with Metro's Development Guidelines. The comment also includes a list of comments regarding improvements planned for the Willowbrook/Rosa Parks Station.	EIR Section 3.13, Transportation and Traffic

Comment/Date	Summary of Comment	Location of Discussion
Southern California Association of Governments (SCAG) December 1, 2015	The comment states that SCAG is the designated Regional Transportation Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) and the Sustainable Communities Strategy (SCS). The comment reviews regionally significant projects for their consistency with the adopted RTP/SCS. The comment lists goals included in the 2012 RTP/SCS that are pertinent to the proposed project and encourages the use of a side-by-side comparison of SCAG goals with discussion of the consistency, non-consistency, and non-applicability of the policy and supportive analysis in a table in the Specific Plan. The comment recommends review of the SCAG 2012 RTP/SCS Final Program EIR Mitigation Measures for guidance as appropriate.	EIR Section 3.8, Land Use and Planning
Local Agencies		
City of Lynwood (Public Works Department) November 30, 2015	The comment states the City would like to continue operating this City's Feeder bus line to the Willowbrook/Rosa Parks Station without interruption or amending its current route. The comment also expresses concern about the increased traffic volume on several local streets, including Imperial Highway, Mona Boulevard, Industry Way and Lynwood Road, and the potential impacts on vehicular and pedestrian operations. The comment also expresses concern regarding an increase of air quality emissions to the City and the increased demand for public services within the City as a result of the increase in visitors, residents, and employees.	EIR Section 3.2, *Air Quality* EIR Section 3.11, *Public Services* EIR Section 3.13, *Transportation and Traffic*

In addition, a public scoping meeting was held on November 21, 2015, from 10:00 am to 12:00 pm at the MLK H. Claude Hudson Auditorium, MLK Medical Center, 12021 S. Wilmington Avenue, Los Angeles, CA, 90059. The intent of the scoping meeting was to solicit written comments regarding which environmental issues should be evaluated in the EIR. A summary of the scoping meeting and comments received at the scoping meeting are included in **Appendix A** and **Table 1-2**.

TABLE 1-2
COMMENTS RAISED AT THE SCOPING MEETING

Summary of Comment	Location of Discussion
The commenter stated concern regarding the visual impact of moving bus stops.	EIR Section 3.1, Aesthetics
Commenters state their concern regarding whether the new housing developments will be affordable for existing residents.	EIR Section 3.10, Population and Housing
Commenters state there is a need in the community for a homeless shelter or housing locally.	EIR Section 3.10, Population and Housing
The commenter stated there needs to be a new stop/traffic light implemented at 19th Street and Mona Boulevard for pedestrian safety.	EIR Section 3.13, Transportation and Traffic
Commenters state they would like to see short-term community improvements including fixing streets and potholes.	EIR Section 3.13, Transportation and Traffic

1.4 Public Review of the Draft EIR

The EIR will be circulated for review and comment by the public and other interested parties, agencies and organizations for 45 days in accordance with Section 15087 and Section 15105 of

the *CEQA Guidelines*. During the 45-day review period, the Draft EIR will be available for public review at the project's website: http://planning.lacounty.gov/willowbrook/TOD or the following locations:

Willowbrook Library
11838 Wilmington Ave
Los Angeles, CA 90059

Interested parties may provide written comments on the Draft EIR. Written comments should be addressed to:

Anita Gutierrez, AICP
Supervising Regional Planner
Department of Regional Planning
County of Los Angeles
320 W. Temple Street
Los Angeles, California 90012
Email: Willowbrook@planning.lacounty.gov

Upon completion of the 45-day review period, written responses to all comments on the environmental issues discussed in the Draft EIR will be prepared and incorporated into a Final EIR. Furthermore, written responses to comments received from any state agencies will be made available to those agencies at least ten (10) days prior to the public hearing at which the Certification of the Final EIR will be considered. These comments, and their responses, will be included in the Final EIR for consideration by the County, as well as other Responsible Agencies under CEQA. The Final EIR may also contain corrections and additions to the Draft EIR and other information relevant to the environmental issues associated with the project. The Final EIR will be available for public review prior to its certification by the County.

1.5 Organization of this Draft EIR

The Draft EIR is organized into the following chapters. To help the reader locate information of particular interest, a brief summary of the contents of each chapter of the Draft EIR is provided below.

- **Executive Summary:** This chapter provides a brief summary of the Specific Plan area, the proposed project, and alternatives. The Summary culminates with Table ES-1, *Summary of Environmental Impacts and Mitigation Measures*. This table lists each identified environmental impact, proposed mitigation measure (if any), and the level of significance after implementation of each mitigation measure. The level of significance after implementation of the proposed mitigation measure(s) will be less than significant, or significant and unavoidable.
- **Chapter 1 – Introduction:** This chapter provides an overview of the Project, the purpose and use of the Draft EIR, the scope of this Draft EIR, a summary of the legal authority for this Draft EIR, a summary of the environmental review process for the EIR, and the general format of the document.

- **Chapter 2 – Project Description:** This chapter provides a detailed description of the Project. The description also includes the project goals and objectives.
- **Chapter 3 – Environmental Setting, Impacts, and Mitigation Measures:** This chapter provides a discussion of the setting (existing conditions) including existing regulations, the environmental impacts including potential cumulative impacts that could result from the proposed project, and the mitigation measures that would reduce or eliminate the adverse impacts identified. Impacts that cannot be mitigated to less than significant are identified as significant and unavoidable. Adopted regulations with which the project would be required to comply that serve to reduce potential adverse effects are discussed where appropriate.
- **Chapter 4 – Alternatives:** This chapter describes and analyzes a reasonable range of alternatives to the project. The CEQA-mandated No Project Alternative is included along with alternatives that would reduce one or more significant effects of the proposed Project.
- **Chapter 5 – CEQA Statutory Sections:** This chapter provides a discussion of various CEQA-mandated considerations including a summary of significant and unavoidable impacts, growth-inducing impacts, and significant irreversible changes.
- **Chapter 6 – Report Preparation:** This chapter lists authors of the Draft EIR and County staff that assisted with the preparation and review of this document.

CHAPTER 2
Project Description

2.1 Introduction

The Los Angeles County General Plan was updated in 2015 with a major focus on Transit Oriented Districts (TOD) as a priority throughout the County. The General Plan Land Use Element specifically calls for implementation of a TOD plan for the Willowbrook/Rosa Parks Station (County of Los Angeles). The proposed Willowbrook Transit Oriented District (TOD) Specific Plan has been prepared pursuant to General Plan Implementation Program LU-2 Transit Oriented District Program, in order to 1) increase walking, bicycling, and transit ridership and reduce vehicle miles traveled (VMTs); 2) facilitate compact, mixed use development; 3) increase economic activity; 4) facilitate the public investment of infrastructure improvements; and 5) streamline the environmental review process for future infill development projects (County of Los Angeles, 2015).

In addition to the General Plan Land Use Element, the Los Angeles County Housing Element Program 6: Transit Oriented Districts Program provides for transit oriented districts within 0.5 mile radius from Metro stations, and specifically requires creation of a transit-oriented district for Willowbrook that would encourage urban infill development on vacant or underutilized sites; promote and encourage transit-oriented development along major transportation corridors; encourage mixed use development to facilitate the linkage between housing and employment opportunities; and promote increased residential density in appropriately designated areas.

Consistent with these General Plan policies and programs, the County of Los Angeles has prepared the Willowbrook TOD Specific Plan to implement TOD development and rezone some of the land within the Specific Plan area to include commercial and residential mixed uses, increase housing densities, provide for additional neighborhood-serving retail uses, improve access to transit, and improve bicycle and pedestrian facilities and other public realm facilities, such as street furniture and signage.

This chapter provides a detailed description of the proposed project, including the project location, the existing characteristics of the Specific Plan area, the objectives of the Specific Plan, the actions proposed by the Specific Plan, and the required discretionary approvals.

2.2 Project Location and Existing Characteristics

Willowbrook Community

The unincorporated community of Willowbrook encompasses approximately 3.8 square miles (2,410 acres) and is located approximately 10 miles south of downtown Los Angeles. The community is bounded by the cities of Los Angeles to the north, Hawthorne to the west, Lynwood to the east, Gardena to the southwest, and Compton to the southeast. Interstate 110 (I-110) defines the community's western boundary and the Interstate 105 (I-105) is the northern boundary. **Figure 2-1**, Regional Location, shows the Willowbrook Community and the Proposed Specific Plan project's regional location. Existing land uses within the Willowbrook Specific Plan area include: commercial, low and medium density residential, open space, Kenneth Hahn Plaza, Martin Luther King, Jr. (MLK) Medical Center, and Charles R. Drew University of Medicine and Science (CDU).

Specific Plan Area

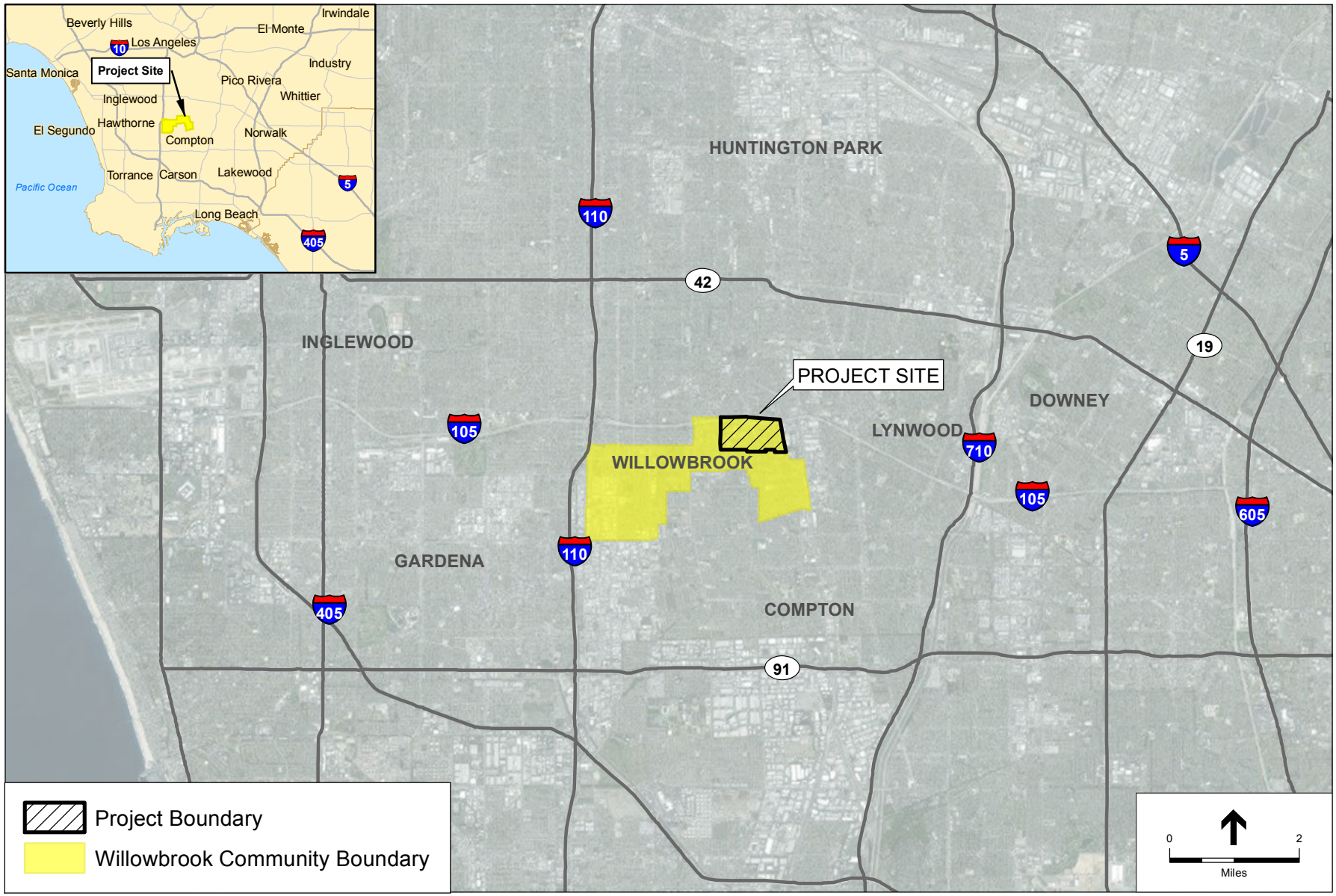
The Specific Plan area is approximately 312 acres and is located within the northwestern portion of the Willowbrook community. As shown in **Figure 2-2**, Project Location, the Specific Plan area generally encompasses parcels located south of Imperial Highway, north of East 122nd Street, east of Compton 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. Some of the key non-residential land uses that are located within the Specific Plan area include: MLK Medical Center, CDU, Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King, Jr. (MLK) Center for Public Health.

The Specific Plan area also includes the Willowbrook/Rosa Parks Station, which is located at the intersection of the I-105 and South Willowbrook Avenue West. The station is a multimodal transit facility that serves both the Metro Blue and Green light rail lines, along with six Metro bus routes, and local buses and shuttles that connect with the wider Metro rail and bus network throughout the region. Currently, the station has the fourth highest volume of ridership in the Metro rail system with approximately 30,000 daily transit riders (Metro, 2015).

Existing Characteristics of Specific Plan Area

For planning purposes, the Specific Plan divided the project area into seven subareas as shown in **Figure 2-3**, Specific Plan Subareas. A general description of the existing characteristics of each subarea is provided below.

Martin Luther King Jr. (MLK) Medical Center and Associated Facilities Subarea. The MLK Medical Subarea is bounded by Wilmington Avenue to the east, East 120th Street to the north, Compton Avenue to the west, and 127th Street to the south. The Martin Luther King, Jr. (MLK) Community Hospital, MLK Center for Public Health, and the Multi-Service Ambulatory Care Center are located within the campus.



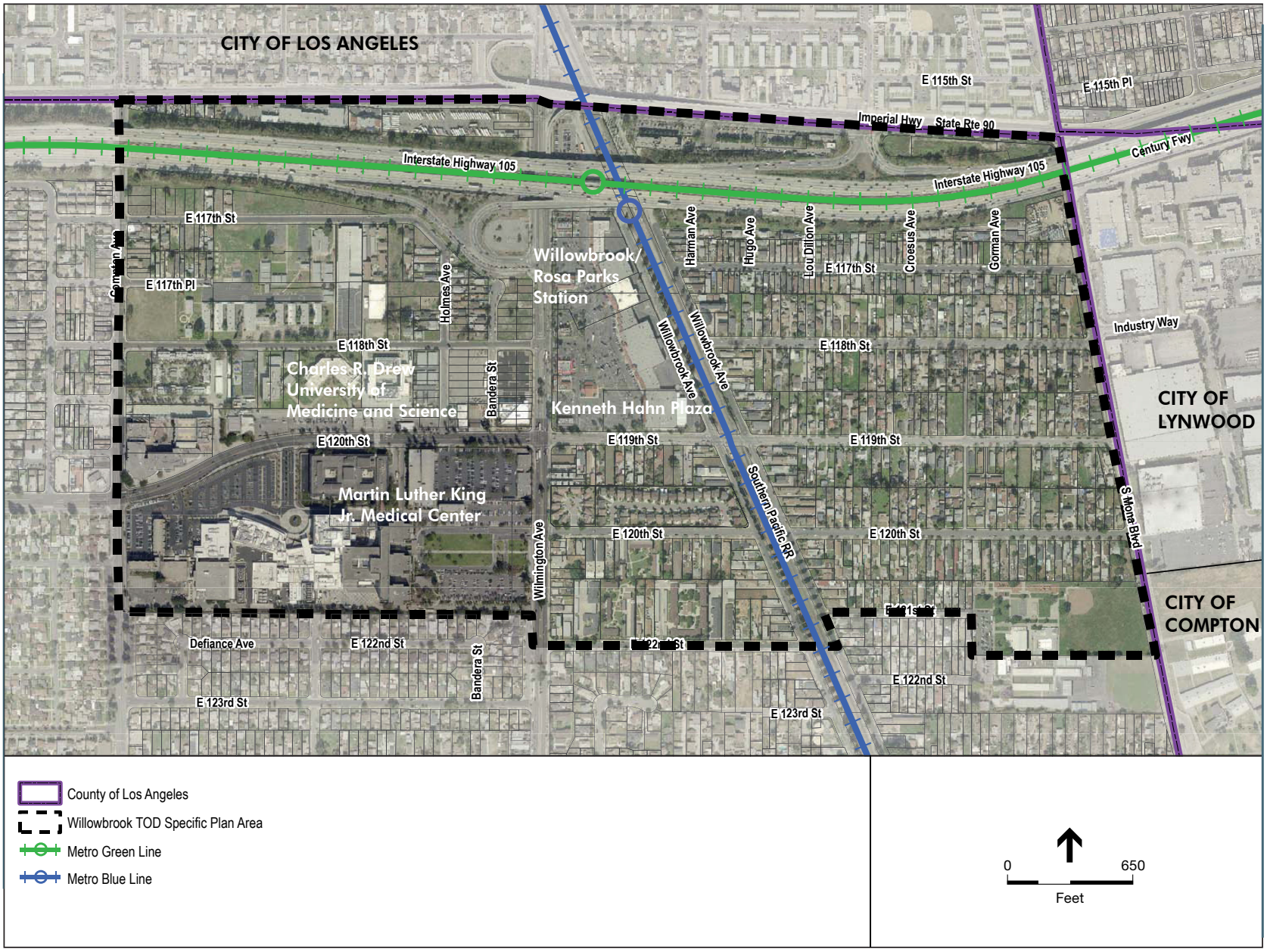
Path: U:\GIS\GIS\Projects\13xxxx\ID130631_Willowbrook\taskFig1_Proj Loc.mxd, jyl 2/15/2017

SOURCE: ESRI

Willowbrook TOD Specific Plan. 130631

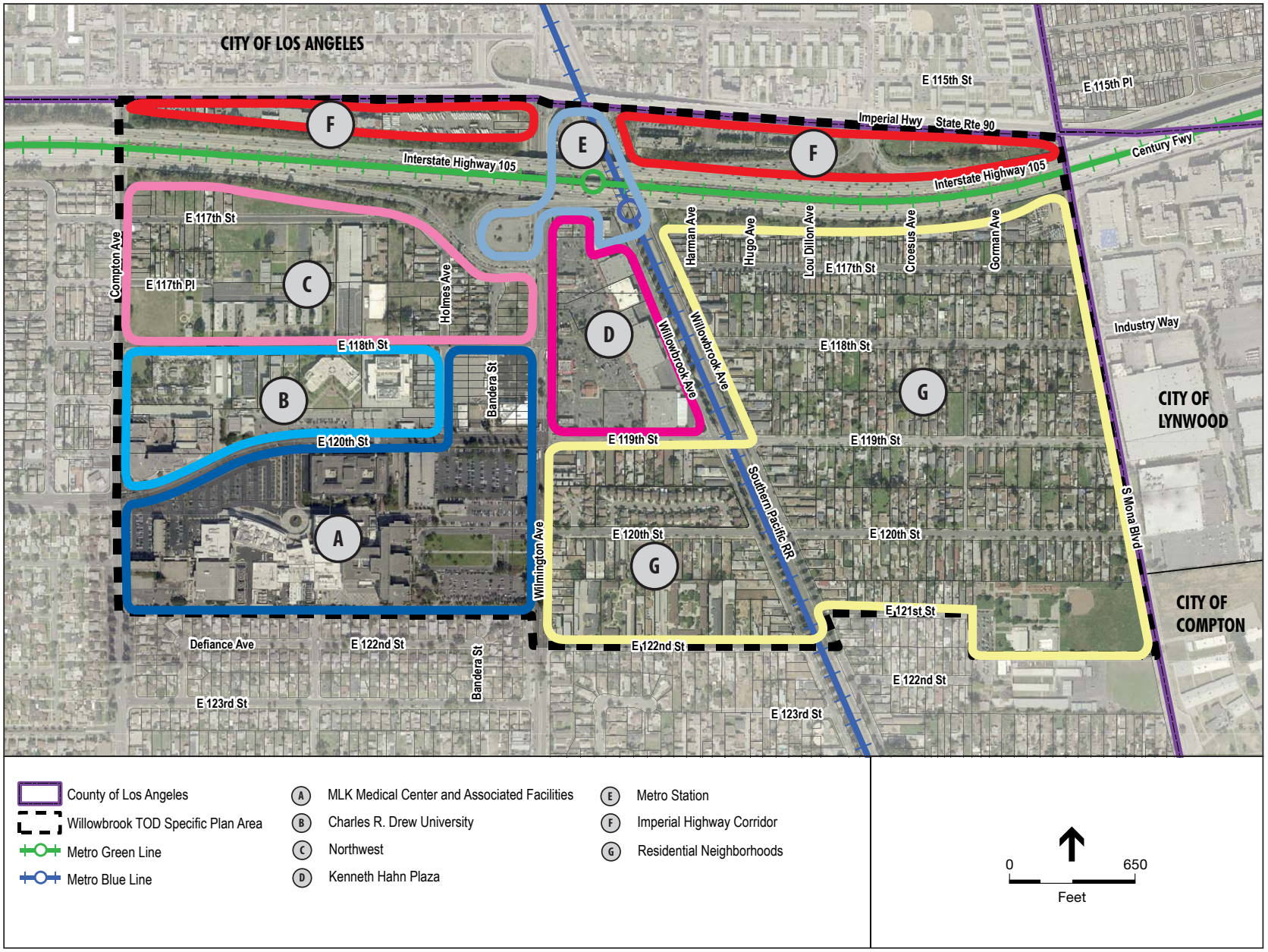
Figure 2-1

Regional Location



SOURCE: Willowbrook TOD Specific Plan

Figure 2-2
Project Location



SOURCE: Willowbrook TOD Specific Plan

Willowbrook TOD Specific Plan . 130631

Figure 2-3

Specific Plan Subareas

Charles R. Drew University of Medicine and Science Subarea. Immediately north of the MLK Medical Center, is CDU and the King Drew Magnet High School, which are bounded by Holmes Avenue to the east, Compton Avenue to the west, 120th Street to the south and 118th Street to the north. Other land uses located within this area include multi-family residences on East 118th Street, and several surface parking lots that serve CDU and the County facilities are located along East 120th Street.

Northwest Subarea. The Northwest Subarea encompasses a variety of uses, including educational, retail, residential and institutional. Several vacant lots, owned by the Los Angeles Community Development Corporation, are located along East 117th Street. A large vacant site on the northeast corner of East 118th Street and Compton Avenue is owned by the Compton Unified School District. The educational uses include Lincoln-Drew Elementary School and the Barack Obama Charter Elementary School, which are both located north of East 118th Street and part of the Compton Unified School District. Other uses in this subarea include parking facilities, retail, and residential units that include single family dwellings, duplexes, and multifamily structures.

Kenneth Hahn Plaza Subarea. This subarea consists of the Kenneth Hahn Plaza, which is a retail shopping center. The Plaza also includes the Willowbrook Library (soon to be relocated to a site on Wilmington Avenue and Bandera Street, north of E. 118th Street) and a Los Angeles County Sheriff substation. This subarea is located 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.

Metro Station Subarea. This subarea consists of the Willowbrook/Rosa Parks Station, and the immediately adjacent areas that are used for the Metro facility. The Willowbrook/ Rosa Parks Station is a multimodal transit facility that serves both the Metro Blue and Green light rail lines, along with six Metro bus routes, and local buses and shuttles that connect with the wider Metro rail and bus network throughout the region. The Green Line is located in the median of the I-105 and the Blue Line is at grade, one level below. The station is located adjacent to Kenneth Hahn Plaza, but access from the plaza is blocked by a fence and access from the station to the residential neighborhoods to the east of the rail line is limited.

Imperial Highway Corridor Subarea. The parcels within the Imperial Highway Corridor Subarea are in between Imperial Highway and the I-105, and include uses such as, auto repair, retail, residential, Metro facilities, and underutilized or vacant lots.

Residential Neighborhoods Subarea. The Residential Neighborhoods Subarea includes a mix of single-family and multi-family units. The residential parcel configurations vary widely; in a majority of the residential blocks, parcels are 90 feet wide and over 200 feet deep. However, some of the parcels are as narrow as 30 feet wide and 100 feet deep. In addition, many of the larger parcels have two (or more) units constructed on them.

2.3 Project Characteristics

Overview

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. In addition, the proposed Specific Plan is intended to streamline the approval process for future development projects that are consistent with the Plan.

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. In addition, as discussed in more detail below under Proposed Circulation System Improvements, 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, MLK Center for Public Health, and the Willowbrook/Rosa Parks Station. Key access corridors to the Specific Plan area would continue to be Willowbrook Avenue, Compton Avenue, South Mona Avenue, Wilmington Avenue, East 117th Street, East 118th Street, East 119th Street, and East 120th Street. Streetscape improvements, such as landscaping and street furniture are also provided for in the proposed Specific Plan, all of which is described below.

The proposed Specific Plan would also establish sustainable design guidelines and performance standards for features, such as scale and mass, building orientation, building articulation and detailing, circulation, parking, and exterior lighting. The new zoning designations would allow for infill and redevelopment TOD opportunities that can serve as catalyst to revitalizing the area.

Proposed General Plan Land Use Amendments

The proposed project includes General Plan Land Use amendments to approximately 40.3 acres of land within the Specific Plan area to provide consistency with the General Plan policy direction. **Table 2-1** summarizes the proposed changes to General Plan Land Uses, which are shown in **Figure 2-4**, Proposed General Plan Amendments.

TABLE 2-1
SUMMARY OF PROPOSED GENERAL PLAN LAND USE AMENDMENTS

Acres	Location on Figure 2-3	Existing General Plan Land Use	Proposed General Plan Land Use
17.93	P to MU	Public and Semi-Public	Mixed Use
3.62	H9 to H18	H9 - Residential (9 dwelling units per acre)	H18 - Residential (18 dwelling units per acre)
8.32	H18 to MU	H18 - Residential (18 dwelling units per acre)	Mixed Use
3.49	H18 to P	H18 - Residential (18 dwelling units per acre)	Public and Semi-Public
1.44	H30 to MU	H30 - Residential (30 dwelling units per acre)	Mixed Use
1.59	H30 to P	H30 - Residential (30 dwelling units per acre)	Public and Semi-Public
1.07	LI to H18	IL - Light Industrial	H18 - Residential (18 dwelling units per acre)
37.46	**TOTAL**		

SOURCE: Arroyo Group, 2016

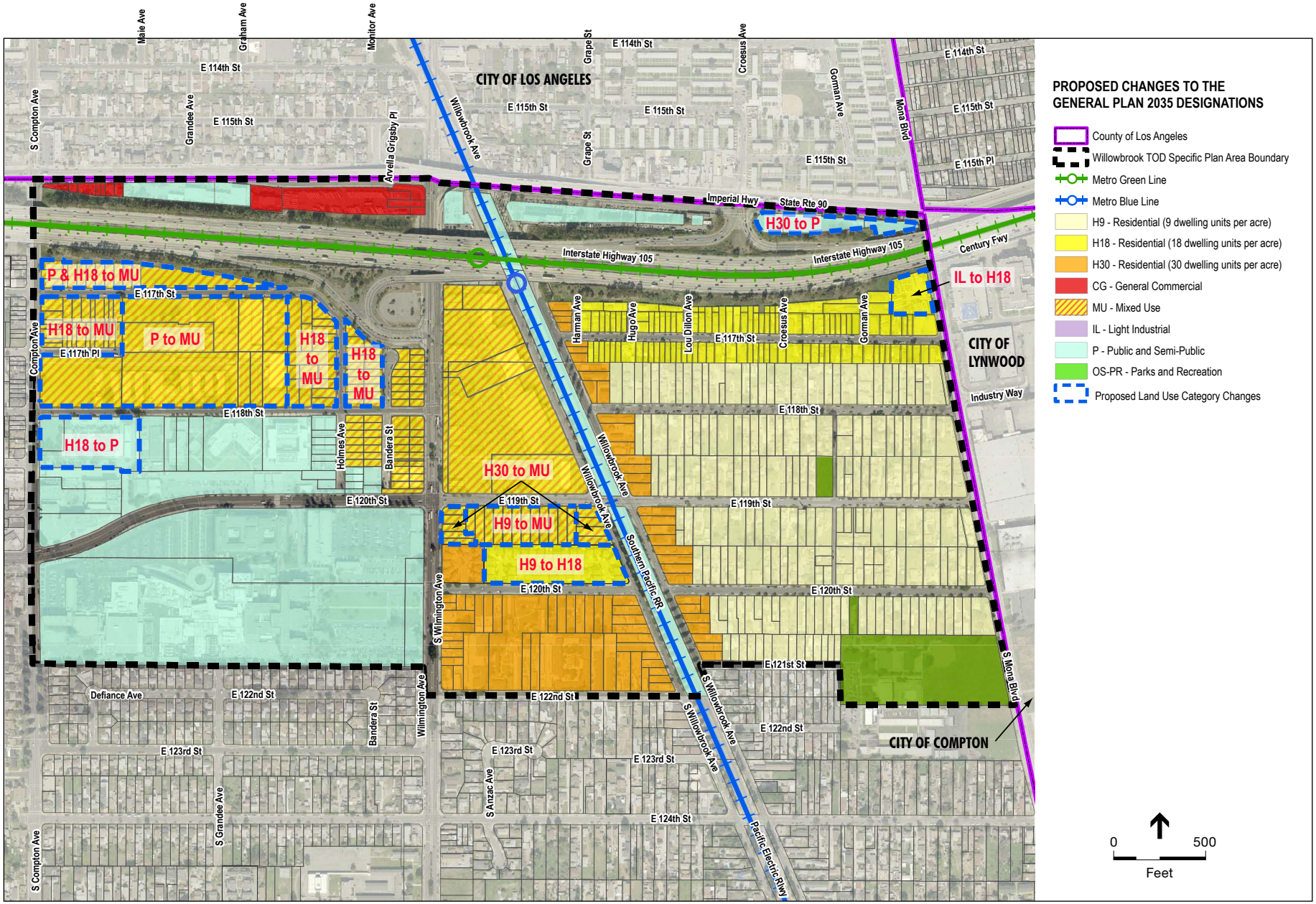
Proposed Specific Plan Zoning

The Specific Plan proposes to rezone land uses of specific parcels within the project area with the intent of introducing a transit-oriented development pattern to the area. This would provide development that is located within walking distance of Metro station and would be a mix of residential, employment, retail, educational, medical, and complementing public uses, which are shown in **Figure 2-5**, Proposed Specific Plan Zoning.

The Specific Plan would allow existing development and uses within the Specific Plan area to continue until such time that new development is proposed. The Specific Plan would require all new land use and development within the Specific Plan area to conform to the Specific Plan zoning designations, which include:

Mixed-Use 1 (MU-1): The MU-1 zone is intended to provide commercial and residential development, with an emphasis on neighborhood serving retail, restaurant and service uses. The area is appropriate for a retail and residential mixed use center, with a neighborhood plaza or community gathering space and pedestrian connection to the Willowbrook/Rosa Parks Station.

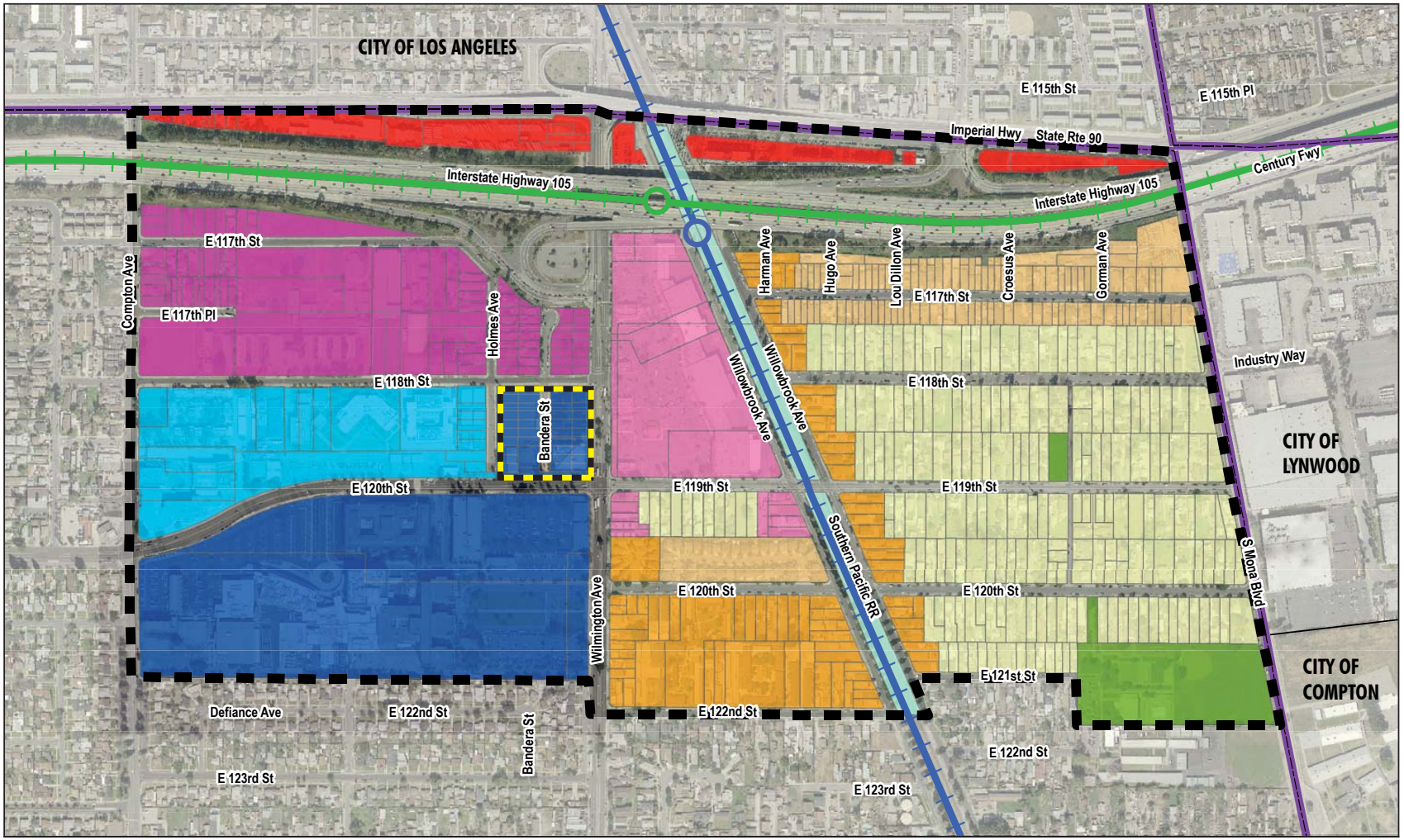
Mixed-Use 2 (MU-2): The MU-2 zone is intended to provide commercial and residential development, with an emphasis on employment generating uses and residential infill development, such as an office or business park and residential mixed use developments, with an open space components and pedestrian connection to the Willowbrook/Rosa Parks Station, MLK Medical Campus, and CDU.



SOURCE: County of Los Angeles, Dept. of Regional Planning General Plan Update, The Arroyo Group, 2014

Figure 2-4

Proposed General Plan Amendments



SOURCE: Willowbrook TOD Specific Plan

Figure 2-5
Proposed Specific Plan Zoning

MLK Medical: The MLK Medical zone is intended to meet the needs of the MLK Medical Center by providing for medical, clinic, medical office, and associated supportive uses such as retail, residential, and parking and expand pedestrian linkages between nearby uses and the Willowbrook/Rosa Parks Station. The TOD Plan within this area would provide development standards (such as setbacks, heights, open space, landscaping, circulation, fencing, etc.) for new uses within the MLK Medical area.

MLK Medical Overlay: The MLK Medical Overlay applies to the two blocks bounded by Wilmington Avenue, East 120th Street, Holmes Street and East 118th Street. The properties within this Overlay are suitable for more intensive uses than the base zone because of the proximity to the Willowbrook/Rosa Parks Station. This Overlay retains the existing medical and public service uses while permitting additional medical and new residential development on the under-utilized surface parking lots that are located within these two blocks.

Drew Educational: The Drew Educational zone within the Specific Plan is planned to meet the needs of the CDU and King Drew Magnet High School. The intent is to create a medical university campus for CDU by maintaining and promoting educational and associated support uses, while maintaining sensitivity to surrounding development and other uses in the area.

Imperial Commercial: The Imperial Commercial zone is intended to meet the commerce and service needs of the residents and businesses, by providing for infill commercial, retail, office, and light manufacturing uses on the parcels between Imperial Highway and the I-105 Freeway.

Willowbrook Residential 1: The Willowbrook Residential 1 zone provides for detached single-family dwelling units at a development density of up to nine units per acre.

Willowbrook Residential 2: The Willowbrook Residential 2 zone provides for medium density residential uses provided in single-family and two-family residences. This zone would allow up to 18 units per acre and living suites as an accessory use.

Willowbrook Residential 3: The Willowbrook Residential 3 zone provides for high density multi-family residences, such as apartments or condominiums at a density of up to 30 units per acre.

Proposed Specific Plan Zone Changes

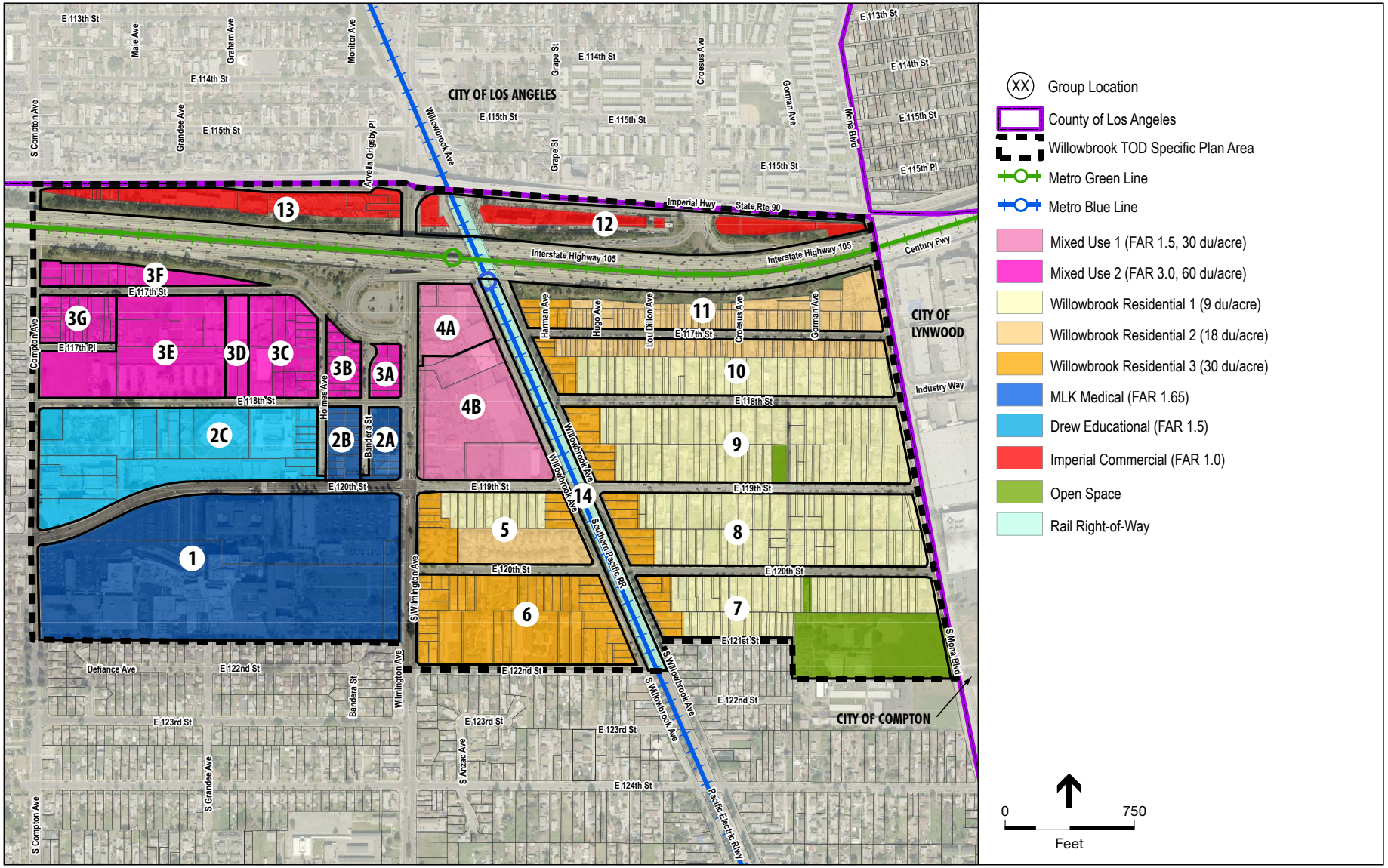
Table 2-2 provides a summary of the proposed zone changes with the implementation of the proposed Specific Plan. The Group Locations are provided in **Figure 2-6**, Proposed Specific Plan Group Locations. As shown in Table 2-2, the total area requiring zone changes is 221.12 acres.

TABLE 2-2
WILLOWBROOK TOD SPECIFIC PLAN AREA PROPOSED ZONE CHANGES

Subarea and Group Location	Acres	Existing Zoning	Proposed Specific Plan Zoning
A	38.28	C-2	MLK Medical
(1,2A,2B)	0.67	C-2	MLK Medical Overlay
	3.05	MXD	MLK Medical Overlay
B	12.43	C-2	Drew Educational
(2C)	6.07	R-2	Drew Educational
C	0.41	C-2	Mixed Use 2
(3A,3B,3C,3D,3E,3F)	1.22	MXD	Mixed Use 2
	25.85	R-2	Mixed Use 2
D	14.57	MXD	Mixed Use 1
(4A,4B)			
E	----	----	---
F	3.8	NO ZONING	Imperial Commercial
(12,13)	3.11	C-2	Imperial Commercial
	2.05	C-2/C-3	Imperial Commercial
	0.51	C-3	Imperial Commercial
	1.04	C-3/R-3	Imperial Commercial
	1.59	R-3	Imperial Commercial
G	8.18	R-1	Open Space
(5,6,7,8,9,10,11)	54	R-1	Willowbrook Residential 1
	14.73	R-2	Willowbrook Residential 2
	21.13	R-3	Willowbrook Residential 3
	1.44	R-3	Willowbrook Residential 1
	0.37	R-3	Willowbrook Residential 2
	1.07	M-1	
Rail ROW	5.56	R-3	Rail ROW
Total	**221.12**		

NOTES:
R-1 - Single Family Residence
R-2 - Two-Family Residence
R-3 - Limited Multiple Residence
C-2 - Neighborhood Business
C-3 - Unlimited Commercial
MXD - Mixed Use Development
M-1 - Light Manufacturing

SOURCE: Arroyo Group, 2016.



SOURCE: Willowbrook TOD Specific Plan

Figure 2-6
Proposed Specific Plan Group Locations

Buildout of the Proposed Specific Plan

There are a number of underutilized properties within the Specific Plan area. Additionally, MLK and CDU have planned expansions of their facilities. The proposed Specific Plan provides for implementation of transit-oriented opportunities for infill and redevelopment to serve as catalyst to revitalize the area. **Table 2-3** provides a summary of existing development, proposed demolition, proposed new development and proposed development buildout by residential and non-residential uses. The non-residential uses are separated into Institutional, Public and Commercial/Office uses. Table 2-3 references Group Locations which are provided in Figure 2-6. As shown in Table 2-3, the proposed new development includes 2,104 residential uses, 378,288 square feet of institutional uses, 1,485,693 square feet of public uses, and 1,180,818 square feet of commercial/office uses. Of the 968 existing residential units, 152 residential units are proposed to be demolished. With a total of 2,104 residential units proposed to be constructed, the buildout of the Specific Plan area would include 2,920 residential units. Table 2-3 also identifies that there are 1,910,523 square feet of existing non-residential uses of which 378,764 square feet of non-residential uses is proposed to be demolished. With a total of 3,044,799 square feet of non-residential uses proposed to be constructed, the buildout of the proposed Specific Plan area would include 4,576,558 square feet of non-residential uses.

TABLE 2-3
EXISTING DEVELOPMENT, PROPOSED DEMOLITION, PROPOSED NEW DEVELOPMENT AND PROPOSED DEVELOPMENT BUILDOUT

Group Location	Existing Development				Proposed Demolition				Proposed New Development				Proposed Development Buildout			
	Residential[a] (units)	Institutional[b] (sf)	Public[c] (sf)	Commercial/ Office[d] (sf)	Residential[a] (units)	Institutional[b] (sf)	Public[c] (sf)	Commercial/ Office[d] (sf)	Residential[a] (units)	Institutional[b] (sf)	Public[c] (sf)	Commercial/ Office[d] (sf)	Residential[a] (units)	Institutional[b] (sf)	Public[c] (sf)	Commercial/ Office[d] (sf)
1	0	0	890,891	0	0	0	0	0	100	0	1,248,522	0	100	0	2,139,413	0
2A	0	0	33,000	0	0	0	0	0	105	0	381	0	105	0	33,381	0
2B	0	0	5,960	0	0	0	0	0	117	0	31,003	0	117	0	36,963	0
2C	49	180,603	297,239	0	49	62,747	24,570	0	119	382,465	0	0	119	500,321	272,669	0
3A	0	0	0	0	0	0	0	0	105	0	0	8,939	105	0	0	8,939
3B	19	0	0	0	19	0	0	0	83	0	0	56,865	83	0	0	56,865
3C	30	0	16,816	0	30	0	16,816	0	255	0	0	173,065	255	0	0	173,065
3D	0	150,000	0	0	0	0	0	0	0	201,610	0	0	0	351,610	0	0
3E	0	0	86,684	0	0	0	86,684	0	553	0	86,684	288,749	553	0	86,684	288,749
3F	4	0	0	0	4	0	0	0	145	0	0	98,494	145	0	0	98,494
3G	24	0	0	3,359	24	0	0	3,359	134	0	0	91,373	134	0	0	91,373
4A	0	0	0	49,447	0	0	0	44,749	48	0	0	36,063	48	0	0	40,761
4B	0	0	0	139,839	0	0	0	139,839	264	0	0	179,355	264	0	0	179,355
5	83	0	0	1,900	26	0	0	0	36	0	0	26,428	93	0	0	28,328
6	272	0	0	0	0	0	0	0	6	0	0	0	278	0	0	0
7	70	0	16,728	0	0	0	0	0	0	0	0	0	70	0	16,728	0
8	99	0	0	0	0	0	0	0	3	0	0	0	102	0	0	0
9	116	0	0	0	0	0	0	0	4	0	0	0	120	0	0	0
10	129	0	0	2,112	0	0	0	0	3	0	0	0	132	0	0	2,112
11	67	0	0	0	0	0	0	0	24	0	0	0	91	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	55,281		0	0	55,281
13	6	0	35,945	0	0	0	0	0	0	0	0	79,522	6	0	35,945	79,522
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	968	**330,603**	**1,383,263**	**196,657**	**152**	**62,747**	**128,070**	**187,947**	**2,104**	**584,075**	**1,366,590**	**1,094,134**	**2,920**	**851,931**	**2,621,783**	**1,102,844**
Total	**1,910,523**				**378,764**				**3,044,799**				**4,576,558**			

NOTES:
Units - Dwelling Units
sf - Square Feet

[a] Includes all single family and multiple family residences
[b] Includes CDU uses
[c] Includes hospital, school, well/reservoir, open space
[d] Includes retail, commercial, office, church

SOURCE: Arroyo Group 2016

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A comparison of the existing development with buildout development is provided in **Table 2-4** below. As shown in Table 2-4, the net new development proposed within the Specific Plan area is 1,952 residential units and 2,666,035 square feet of non-residential units.

TABLE 2-4
PROPOSED NET NEW DEVELOPMENT GENERATED FROM BUILDOUT OF THE PROPOSED WILLOWBROOK TOD SPECIFIC PLAN

	Residential			Non-Residential Uses			
	Single-Family (Units)	Multiple-Family (Units)	Total (Units)	Institutional (sf)	Public (sf)	Commercial/ Office (sf)	Total (sf)
Buildout of Proposed Specific Plan	587	2,333	2,920	655,523	2,731,507	1,189,528	4,576,558
Existing Development	364	604	968	339,982	1,373,884	196,657	1,910,523
Net New Development	**223**	**1729**	**1952**	**315,541**	**1,357,623**	**992,871**	**2,666,035**

SOURCE: The Arroyo Group, 2016.

Proposed Circulation System Improvements

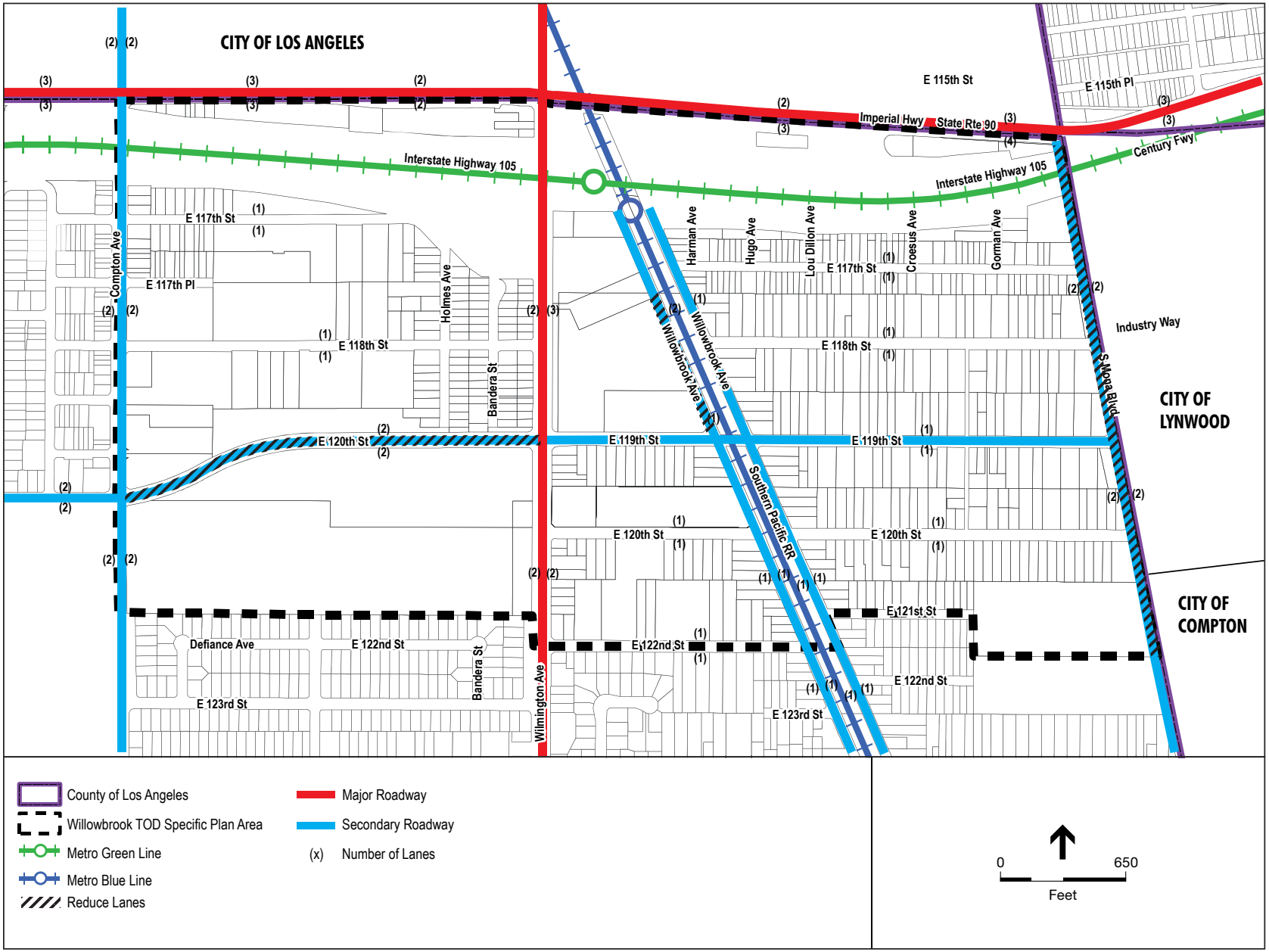
As described above, the Los Angeles County General Plan was updated in 2015 with a major focus on transit oriented development and encouragement of non-vehicular transportation. The proposed Specific Plan was developed to implement the County's General Plan and General Plan Implementation Program LU-2 Transit Oriented District Program, which states that implementation of the TOD Program should support active transportation and discourage automobile use.

The proposed Specific Plan would provide bicycle and pedestrian facilities within the Specific Plan area, as well as implement minor changes/improvements to the existing street system to enhance access to transit, multi-modal mobility, and walkability between the area's major land uses.

Roadways

The proposed Specific Plan includes a circulation system for all modes of transportation. Although the existing street systems have been previously oriented to serving the automobile, the proposed roadway system is proposed to provide a network of complete streets that are for the safe and efficient circulation of transit, bicycles, and pedestrians as well as automobiles.

The proposed Specific Plan includes retaining the majority of the roadway network's current configuration. There are some changes/improvements that are proposed to improve access, circulation and walkability. The street enhancements shown in **Figure 2-7**, Existing Street Network and Proposed Roadway Improvements, are intended to improve circulation for bicycles and pedestrians in the Specific Plan area.



SOURCE: Willowbrook TOD Specific Plan

Figure 2-7
Existing Street Network and
Proposed Roadway Improvements

120th Street: The portion of 120th Street between Compton Avenue and Wilmington Avenue is proposed to be reduced from four lanes to three lanes, with a bicycle lane in each direction. This improvement is part of the Willowbrook Area Access Improvement project.

The portion of 120th Street west of Wilmington Avenue to Compton Avenue (fronting MLK Medical Center) is proposed to be renamed because its current alignment aligns with 119th Street and cause confusion.

Mona Boulevard: Mona Boulevard from the I-105 Freeway to 122nd Street is proposed to be converted from a four lane street to a three lane street with a continuous two-way left turn lane in the center, and a Class I bicycle path is proposed to be installed on the west side of the street.

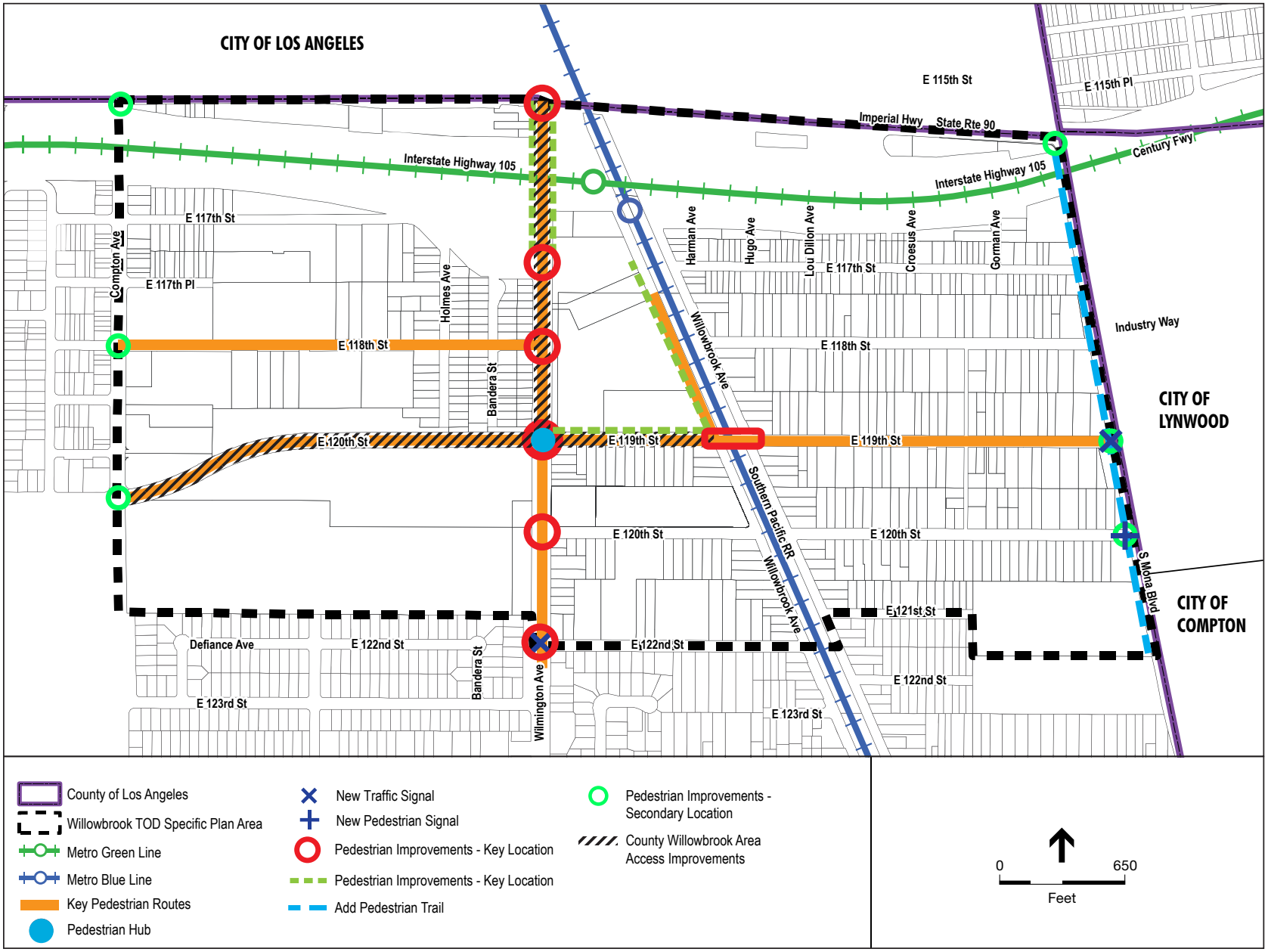
Willowbrook Avenue: The portion of Willowbrook Avenue West between the Willowbrook/ Rosa Parks Station and 119th Street is proposed to be reduced from two lanes southbound to one lane southbound, and a Class I bicycle path is proposed to be installed on the west side of the street.

Pedestrian Circulation

The proposed Specific Plan includes improvements to the existing pedestrian circulation as shown in **Figure 2-8**, Proposed Pedestrian Improvements. The key routes within the Specific Plan are located along Wilmington Avenue and 120th/119th Street. Additional key elements of the pedestrian system are 118th Street between Compton Avenue and Wilmington Avenue, Willowbrook Avenue West between 119th Street and Willowbrook/Rosa Parks Station, and Mona Street.

Sidewalks. Sidewalks exist on most streets within the Specific Plan area; however, some are narrow or substandard in quality. The Specific Plan includes improvements to sidewalks as new development occurs. Specific sidewalk improvements that are part of the Specific Plan include: (1) add a sidewalk to the currently unpaved west side of Willowbrook Avenue West between the Willowbrook/Rosa Parks Station and 119th Street, (2) widen sidewalks and improve existing street lighting on Wilmington Avenue between I-105 Freeway off-ramps and Imperial Highway, and (3) provide pedestrian improvements on the north side of 119th Street between Wilmington Avenue and Willowbrook Avenue.

Pedestrian Trail. The proposed Specific Plan includes the addition of a pedestrian trail along the west side of Mona Boulevard between Imperial Highway and 122nd Street.



SOURCE: Willowbrook TOD Specific Plan

Figure 2-8
Proposed Pedestrian Improvements

Pedestrian Oriented Intersections. The proposed Specific Plan includes the implementation of a number of pedestrian oriented intersection improvements that are shown in Figure 2-8. These include adding the following: high visibility markings at intersections; passive pedestrian detection and pedestrian push buttons for crosswalks at traffic signals at intersections; countdown pedestrian signals and audio signals to crosswalks at intersections; advance stop lines to intersection approaches; sidewalk bulb-outs and extensions, or reducing curb returns on intersection corners; and median nose/crossing islands. These improvements 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 include the following intersections:

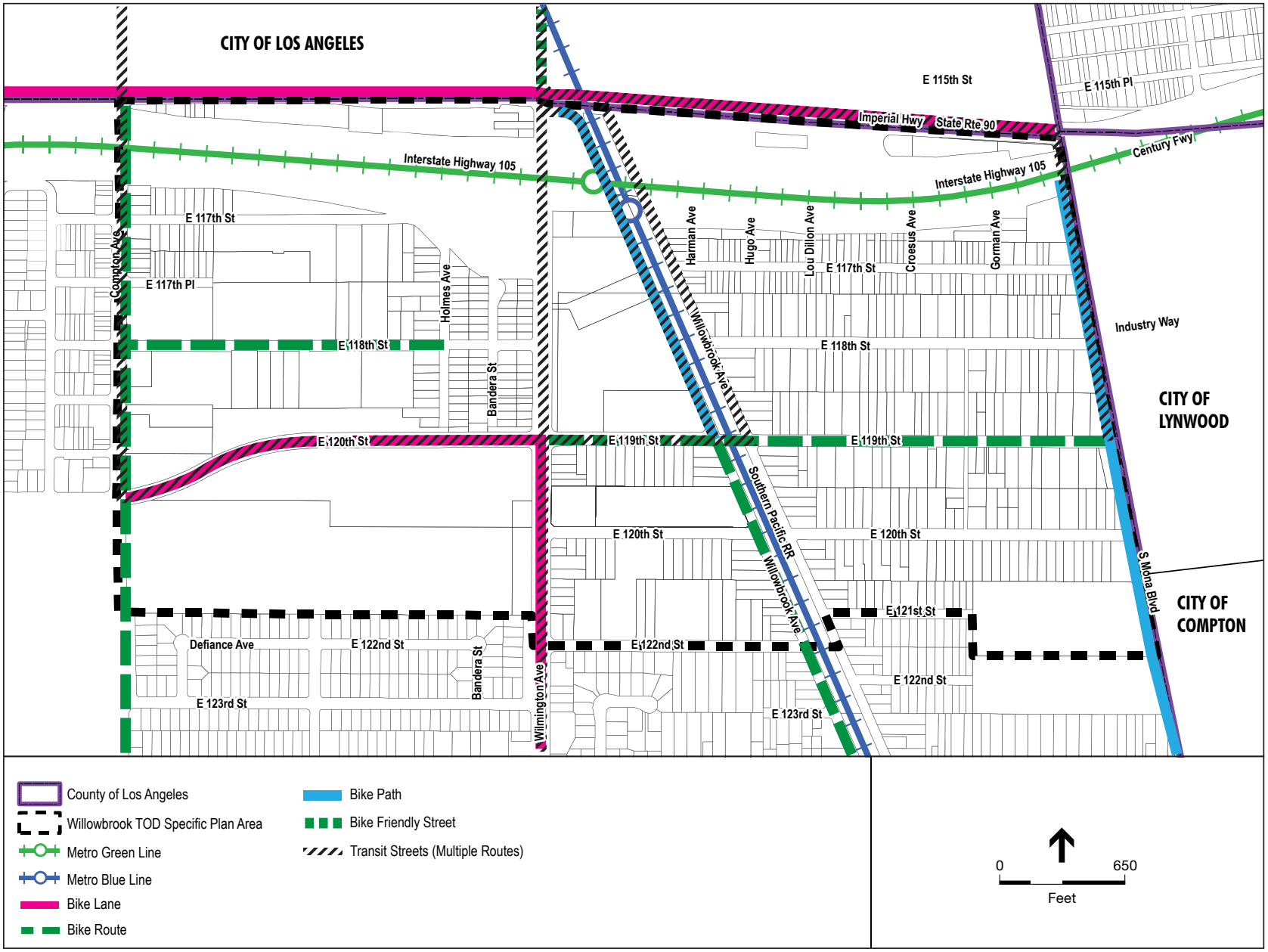
- Wilmington Avenue and Imperial Highway
- Wilmington Avenue and I-105 East Ramps
- Wilmington Avenue and 118th Street
- Wilmington Avenue and 120th/119th Streets
- Wilmington Avenue and 120th Street
- Wilmington Avenue and 122nd Street
- Willowbrook Avenue West and 119th Street
- Willowbrook Avenue 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
- Compton Avenue and 120th Street

Bicycle Circulation

The proposed Specific Plan includes a comprehensive bicycle network, which is shown in **Figure 2-9**, Proposed Bicycle and Transit Network, includes a combination of Class I, Class II, Class III and Class IV facilities to connect the various land uses and neighborhoods to the Willowbrook/Rosa Parks Station safely and efficiently.

Class I bicycle paths, which consists of an exclusive bicycle facility separated from roadways and traffic, are proposed to be provided on Willowbrook Avenue West between 119th Street and Imperial Highway to provide access to the Willowbrook/Rosa Parks Station, and on Mona Avenue (west side) between Imperial Highway and 119th Street. These could also be Class IV Cycle Track facilities.

Class II bicycle lanes, which consist of a designated striped lane that provides for one-way travel and is generally delineated with special striping and signage, 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.



SOURCE: Willowbrook TOD Specific Plan

Figure 2-9
Proposed Bicycle and Transit Network

Class III bicycle routes are roadways that are shared by bicycles and automobiles. Signs are posted which indicate the road also serves as a bike route, but no special lane for bicycles is striped. There may however be painted bicycle symbols on the roadways surface (known as sharrows) to indicate to motorists that bicycles also use the street. The proposed Specific Plan would implement Class III bicycle routes on Compton Avenue, Willowbrook Avenue West south of 119th Street, 119th Street between Wilmington Avenue and Mona Avenue, and on 118th between Compton Avenue and Holmes Avenue within the Specific Plan area.

The proposed Specific Plan would provide opportunity for Metro and individual land uses to develop bicycle parking and a bicycle stations at the Kenneth Hahn Plaza, MLK Medical Center, CDU Campus, and in the Northwest Subarea. Bicycle stations include repair facilities and small bicycle shops, bicycle share program facilities and, secure bicycle parking.

Transit Circulation

The key transit streets within the Specific Plan area include Compton Avenue, Wilmington Avenue, Mona Boulevard, Imperial Highway and east/west Willowbrook Avenue as depicted on Figure 2-9. Shuttle routes are currently provided within the Specific Plan area. The proposed Specific Plan includes a potential for additional shuttle routes to serve new development in the Northwest Quadrant and connect the land uses to the Willowbrook/Rosa Parks Station.

Status of Mitigation Measures from the MLK Medical Center Campus EIR

As described above, in 2011, the County of Los Angeles certified the MLK EIR that evaluated redevelopment of the MLK Medical Center through implementation of a campus-wide Master Plan that includes two Tiers. Development within Tier I was completed in 2015/16 and is a part of the existing setting. Analysis of the impacts that would result from development of Tier II improvements at the MLK Medical Center, which includes development of medical and other offices, commercial, retail, recreation, and multi-family residential, along with updated mitigation measures for these impacts is included in this document (County of Los Angeles, 2010). Thus, the environmental analyses and mitigation measures contained in this Willowbrook TOD Specific Plan EIR will replace those of the earlier MLK EIR.

Since certification of the MLK EIR, the Los Angeles County General Plan has been adopted, which includes policies to encourage use of transit, pedestrian, and bicycle circulation to accommodate growth in a sustainable manner by reduction of VMTs. Additionally, General Plan Implementation Program LU-2 Transit Oriented District Program states that the TOD Program should support active transportation and discourage automobile use. Thus, following the directives of the County General Plan, several traffic-related mitigation measures included in the MLK EIR that call for additional roadway capacity and would facilitate vehicular use at the expense of pedestrian and bicycle use, are inconsistent with the recently adopted General Plan, and are not carried forward in this EIR. Instead, the transit, pedestrian, and bicycle oriented facilities described above would be developed to provide for balanced multi-modal circulation consistent with the County's current General Plan. The roadway expansion mitigation measures contained in the previous MLK EIR that would not be implemented include:

MLK EIR Measure Traffic-2: In order to address the Tier II project impacts, the County of Los Angeles shall complete the following improvements:

- **Compton Avenue / Imperial Highway, County of Los Angeles / City of Los Angeles**: Restripe westbound approach to provide a separate right-turn lane.
- **I-105 / Imperial Highway:** Provide a third northbound, left-turn lane by widening off-ramp by 10 feet for approximately 150 to 200 feet.
- **Central Avenue / 120th Street:** Re-stripe northbound approach to provide a separate right-turn lane. Also, widen the east leg by 3 feet on each curbside (i.e., reduce sidewalk along 120th Street east of Central Avenue by 3 feet for approximately 120 feet and re-stripe westbound 120th Street approach to provide a left-turn, two through lanes and a separate right-turn lane.
- **Wilmington Avenue / I-105 Eastbound Ramps, County of Los Angeles / California Department of Transportation:** Provide an additional eastbound lane by widening (reducing the raised median on the ramp) the off-ramp. The eastbound approach shall have a left-turn lane, shared left-right turn lane, and a separate right-turn lane. The sidewalks on both sides of Wilmington Avenue (as noted above) shall be reduced by 2 feet and the Wilmington Avenue roadway shall be widened by 2 feet on both sides (a total of 4 feet) from the south leg of this intersection. Provide an additional northbound left-turn lane by widening (reducing the medians).
- **Wilmington Avenue / 118th Street, County of Los Angeles:** Widen Wilmington Avenue roadway by 2 feet on both sides and re-stripe to provide two through lanes, a shared through right-turn lane and dual left-turn lanes along the southbound approach. Restripe the westbound approach to provide a separate right-turn lane and a shared left through lane. Northbound approach shall have the same lane geometry as existing conditions. Under cumulative conditions, widen 118th Street roadway by 4 feet and re- stripe to provide a separate right-turn lane and shared left-through lane along the eastbound approach.
- **Wilmington Avenue / 120th Street–119th Street, County of Los Angeles:** Widen Wilmington Avenue roadway by 2 feet on both sides and restripe the southbound approach to provide a separate right-turn lane, three through lanes, and a left-turn lane.

  Re-stripe northbound approach to provide a shared through-right turn lane, two through lanes, and a left-turn lane. Remove median adjacent to northbound approach to facilitate three southbound receiving lanes. Restrict parking along Wilmington Avenue roadway during morning and evening peak periods along the eastside of Wilmington between 120th Street and Martin Luther King, Jr. Hospital Driveway entrance.

  Widen 120th Street west of Wilmington Avenue for 250 feet, on the south side by 2 feet, and re-stripe the eastbound approach to provide a separate right-turn lane, dual left-turn lanes, and a through lane. The westbound approach of 119th Street would have the same lane geometry as existing conditions.

- **Wilmington Avenue / Martin Luther King, Jr. Hospital Entrance–120th Street, County of Los Angeles:** Re-stripe southbound approach to provide a separate right-turn lane, two through lanes, and a left-turn lane. Provide three northbound receiving lanes and restrict on-street curb parking along the eastside of Wilmington Avenue between Martin Luther King, Jr. Hospital Driveway and 120th Street and 120th Street and 119th Street during morning and evening peak hours. Remove the median within the hospital entrance and re-stripe the driveway to provide dual left-turn lanes, a through lane, and a separate right-turn lane along the eastbound approach. Re-stripe to provide one receiving lane.

The appropriate conceptual signing and striping plans shall be submitted to the County of Los Angeles Department of Public Works, Traffic and Lighting Division for review and approval during the planning phase.

MLK EIR Measure Traffic-3: In order to address the Tier II cumulative projects impacts, using County of Los Angeles traffic study guidelines, the following mitigation measures shall be implemented to alleviate the cumulative significant impacts:

- **Avalon Boulevard / El Segundo Boulevard, County of Los Angeles:** Widen northbound approach by 2 feet and re-stripe the approach to provide a left turn lane, two through lanes, and a separate right-turn lane (10 feet, 10 feet, 10 feet, 12 feet). The approach could be widened by narrowing the 5-foot-wide median to a 3-foot-wide median, or by reducing the 12-foot-wide sidewalk to a 10-foot-wide sidewalk. This widening would need to occur all the way to an alley located approximately 100 feet 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.
- **Alameda Street / El Segundo Boulevard, County of Los Angeles / Compton:** Re-stripe northbound/southbound approaches and provide a southbound right-turn lane. The lanes along the north leg shall be re-striped to provide 13-foot and 11-foot receiving lanes; 10-foot, 11-foot, 10-foot, and 12-foot approach lanes for southbound left-turn lane, southbound through lanes, and southbound right-turn lanes, respectively. The lanes along the south leg would have a 13-foot shared right through-way, 11-foot through lane, 10-foot left-turn lane, 12-foot receiving lane, and a 20-foot receiving lane. Remove two on-street parking spaces along the southbound approach during peak hours.
- **Alameda Street / 103rd Street, County of Los Angeles / Lynwood:** Re-stripe eastbound approach to provide a 10-foot, left-turn lane and a 12-foot, left-right shared lane. The receiving lane would be re-striped for 18.5 feet.
- **Central Avenue / Rosecrans Avenue, County of Los Angeles / Compton:** Re-stripe westbound approach to provide a separate right-turn lane. Allow buses to go through the intersection from the right-turn lane.
- **Central Avenue / El Segundo Boulevard, County of Los Angeles / Compton:** Re-stripe southbound approach to provide a separate right-turn lane. Widen

northbound approach by reducing median by 1 foot to 2 foot. Provide re-striping to show a separate northbound right-turn lane. Allow buses to go through the intersection from the right turn lane.

- **Alameda Street / Imperial Highway, County of Los Angeles / City of Lynwood:** Re-stripe southbound approach to provide the following roadway geometry: two left-turn lanes, two through lanes, and one right-turn lane.

The appropriate conceptual signing and striping plans shall be submitted to the County of Los Angeles Department of Public Works, Traffic and Lighting Division for review and approval during the planning phase.

MLK EIR Measure Traffic-4: Along the southbound approach of Alameda Street, the County of Los Angeles shall provide two left-turn lanes, two through lanes and one right-turn lane instead of one left-turn lane, two through lanes and a separate right-turn lane (i.e., add a second left turn lane). In addition, the County of Los Angeles shall provide the required signal hardware and supporting software to facilitate a right-turn arrow signal indication for southbound right-turn overlap with eastbound-westbound left-turns at the intersection.

Proposed Streetscape Improvements

The Specific Plan includes streetscape improvements that provide for street trees, street lights, street furniture, wayfinding, and landscaped open space. Public art and water features would be installed in areas to interpret and draw attention to the history or culture of the area.

Street Furniture. The proposed Specific Plan would provide a consistent palette of street furniture, trash receptacles, and bicycle racks along pedestrian circulation routes and in setback areas, paseos, plazas, and courtyards to provide amenities and help to unify the character of the Specific Plan area.

Wayfinding. The Specific Plan would provide a cohesive wayfinding signage system throughout the Specific Plan area to guide people to locations that include: the Willowbrook/Rosa Parks Station, MLK Medical Center, CDU, Kenneth Hahn Plaza, and public parking facilities. The wayfinding signs would have a consistent design with a coordinated color palette that creates a unique theme that is easily recognizable.

Street Lighting. The Specific Plan would provide for street lighting in the Specific Plan area. The selected light fixtures would adhere to guidelines set forth by the Dark Sky Association and the County of Los Angeles to protect the area's view of stars.

Proposed Water System Improvements

The Specific Plan proposes improvements to the existing water system to accommodate build out of the proposed Specific Plan. Most of the existing water pipelines in the Specific Plan area are eight-inches in diameter and above, and have the capacity to accommodate the increase in water demand/load at build out of the proposed Specific Plan (JMC^2, 2015). However, several lines that

are smaller than eight-inches would need to be improved to accommodate build out of the proposed Specific Plan. Proposed water system improvements include:

- Replace existing four-inch water line on 118th Street with an eight-inch line.
- Replace existing six-inch water line in the alley between Holmes Avenue and Bandera Street with an eight-inch line.
- Upgrade existing four-inch water line on 117th Street from Compton Avenue to Holmes Avenue and the existing four-inch water line in 117th Place with eight-inch lines.
- Upgrade existing six and four-inch water lines in 119th Street to eight-inch lines from Willowbrook Avenue to Mona Boulevard.
- Replace existing six and four-inch water lines in 118th Street with eight-inch lines from Willowbrook Avenue to Mona Boulevard.

Proposed Sustainable Design Guidelines

The proposed Specific Plan includes the Sustainable Design Guidelines identified below.

Site Design and Passive Solar Design

- Buildings should be sited and designed to maximize the use of sunlight and shade for energy savings, and respect the solar access of adjacent buildings.
- Buildings should 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 buildings should be shaded with evergreen trees to reduce summer heat gain. South walls should be shaded with deciduous trees.
- Walkways and plazas should be designed to collect stormwater, where feasible.

Water Efficiency

- To reduce water use and maintenance costs, the majority of plant materials should be drought tolerant and require relatively low maintenance.

Building Design

- The provision of a green roof should strongly be considered to reduce solar gain and to reduce the quantity of water entering the storm drain system.
- Solar panels on roofs should be considered to capture solar energy for internal use of the project.
- Arcades, covered walkways, trellises and passages should be incorporated to provide sheltered areas for pedestrian circulation, as well as to shade the buildings to reduce energy usage.

Environmental Performance Standards for Mixed-Use Zones

To ensure that residential uses are not adversely impacted by adjacent commercial uses, including but not limited to traffic, noise, light, and safety impacts, the proposed Specific Plan includes the following environmental performance standards for new development within the Specific Plan area, which are intended to reduce potential impacts of increased development.

1. **Hours of operation.** The hours of operation for commercial uses shall be no earlier than 6:00 am and no later than 11:00 pm daily, unless modified by a conditional use permit.
2. **Loading.** Loading, unloading and all maintenance activities shall be conducted within the hours of operation noted above, and in such a fashion so as to prevent annoyance to adjacent residents and tenants.
3. **Noise.** Noise generated by activities on the premises shall be controlled in such a manner so as not to create a nuisance or hazard on any adjacent property, in accordance with the Noise Ordinance in Title 12 (Environmental Protection) of the County Code. Residential units shall be constructed and designed to reduce the noise, particularly when located proximate to the rail lines. Proper design may include, but shall not be limited to, building orientation, double windows, wall and ceiling insulation and orientation of vents. Common walls between residential and non-residential uses shall be constructed to minimize the transmission of noise and vibration.
4. **Light and Glare.** All outdoor lighting associated with non-residential uses adjacent to or within the immediate vicinity of residential uses shall be designated with fixtures and poles that illuminate commercial uses, while minimizing light trespass into residential areas. An unacceptable level of light trespass shall be 0.8 foot-candles or greater when the light trespass falls onto an adjoining residentially-zoned lot, or open space zoned lot.
5. **Operating Activities Prohibited.** The following operating activities shall be prohibited in commercial uses located within mixed use developments:
   - Storage or shipping of flammable liquids or hazardous materials beyond that normally associated with a residential use; and
   - Welding, machining, or open flame work.
6. **Graffiti.** To encourage the maintenance of exterior walls free from graffiti that would impact pedestrian views, all structures, walls, and fences open to public view shall remain free of graffiti. In the event of such graffiti occurring, the property owner, tenant, or their agent shall remove or cover said graffiti within 72 hours, weather permitting. Paint utilized in covering such graffiti shall be a color that matches, as closely as possible, the color of the adjacent surfaces.
7. **Security.** The residential units shall be designed to ensure the security of residents through the provision of separate and secured entrances and exits that are directly accessible to secured parking areas. Where residential units are in the same structure as a commercial use, access to residential units shall be from a secured area located on the first floor at the ground level. Non-residential and residential uses located on the same floor shall not have common entrance hallways or common balconies.

2.4 Project Objectives

The project objectives are to:

- Provide a transit-oriented development near the Willowbrook/Rosa Parks Station.
- Improve bicycle and pedestrian mobility and safety as well as access to the Willowbrook/Rosa Parks Station.
- Preserve and enhance Willowbrook's economic base and character.
- Provide additional housing for Willowbrook's varied income groups.
- Revitalize the health care services at Martin Luther King, Jr. (MLK) Medical Center.
- Revitalize the services at Charles R. Drew University of Medicine and Science (CDU).
- Preserve the character of the existing residential neighborhoods.
- Create an attractive environment for pedestrians, bicyclists, Metro riders, and local transit users through streetscape improvements.

2.5 Specific Plan Goals and Policies

The Specific Plan includes Goals and Policies that serve as guidelines for decision making, which include the following:

Goal 1: Preserve and enhance the character of the Willowbrook community.

Policy 1.1: Where appropriate, preserve the character of the residential neighborhoods.

Policy 1.2: Provide a mix of land uses in the Mixed Use Zones to accommodate employment, retail, and residential uses, as well as local-serving amenities.

Policy 1.3: Preserve existing neighborhood-serving retail at Kenneth Hahn Plaza.

Policy 1.4: Improve compliance with County zoning and building codes on private property by expanding code enforcement by various County Departments.

Policy 1.5: Facilitate the expansion of the MLK Medical Center and Charles R. Drew University of Medicine and Science (CDU) campus that is compatible and sensitive to the surrounding neighborhoods.

Policy 1.6: Coordinate with CDU to integrate the planned growth of the University's campus with the surrounding community, including creating pedestrian linkages and open space connections with other area institutions and the Willowbrook/Rosa Parks Station.

Policy 1.7: Implement the concepts and ideas contained in the MLK Medical Center Campus Master Plan & the Willowbrook MLK Wellness Community Vision by encouraging well-designed and continuous pedestrian paths and

connections between the Willowbrook/Rosa Parks Station and the employment, campus, retailing, and residential areas.

Goal 2: Improve the Willowbrook/Rosa Parks Station and its environs.

Policy 2.1: Coordinate with Metro to enhance pedestrian and bicycle connections from the Willowbrook/Rosa Parks Station to the surrounding community.

Policy 2.2: Coordinate with Metro to enhance safety and circulation between the various transit modes at the Willowbrook/Rosa Parks Station to encourage transit use.

Policy 2.3: Work with Metro and Kenneth Hahn Plaza to create better connections and access to the surrounding employment, campus, retail, and residential areas.

Goal 3: Encourage transit oriented development.

Policy 3.1: Provide a variety of housing choices within walking distance of the Willowbrook/Rosa Parks Station.

Policy 3.2: Implement mixed use zoning in targeted areas to promote employment-generating uses proximate to housing and the Willowbrook/Rosa Parks Station.

Policy 3.3: Incentivize lot consolidation where appropriate to facilitate the development of cohesive projects in Mixed Use Zones.

Goal 4: Provide affordable housing opportunities.

Policy 4.1: Preserve existing stock of affordable housing.

Policy 4.2: Promote housing affordability through diversification of housing choices (ownership, rental, single-family, multi-family) for varied income groups.

Goal 5: Promote active transportation and reduce vehicle miles traveled.

Policy 5.1: Provide a multi -modal transportation system of complete streets.

Policy 5.2: Enhance access to transit and the Willowbrook/Rosa Parks Station.

Policy 5.3: Provide a connected pedestrian and bicycle network that links together Willowbrook/Rosa Parks Station, Kenneth Hahn Plaza, new mixed use areas, CDU campus, MLK Medical Center campus and residential neighborhoods,

Policy 5.4: Facilitate mixed use development that maximizes pedestrian connectivity and minimizes the need for vehicle travel.

Goal 6: Improve quality of life for existing residents with improvements to the public realm.

Policy 6.1: Enhance the public realm with street trees, street furniture, bicycle lanes, sidewalks and pedestrian paths.

Policy 6.2: Provide a consistent canopy of shade trees throughout the Specific Plan area to enhance pedestrian comfort.

Policy 6.3: Provide pedestrian-scaled lighting to improve safety and enhance pedestrian environment.

Policy 6.4: Encourage outdoor dining and seating areas and other pedestrian-friendly uses in mixed-use areas.

Policy 6.5: Explore joint use agreements with schools to better utilize existing and future open space resources.

Policy 6.6: Encourage new development to provide public open space as a community benefit. Consider providing incentives to developers for such provisions.

Policy 6.7: Consider building pocket parks and community gardens on County-owned vacant lots.

Goal 7: Improve economic vitality and employment opportunities.

Policy 7.1: Create economic opportunities for the Willowbrook community by fostering a complementary variety of employment, retail, residential, and institutional uses.

Policy 7.2: Build on the Willowbrook community's economic base as a "healthcare cluster" by working with appropriate partners to provide workforce development opportunities for local residents.

Policy 7.3: Facilitate public-private partnerships to share responsibility for implementing this Specific Plan and achieving its goals.

Policy 7.4: Encourage a mix of national brand and local merchant businesses.

Policy 7.5: Efficiently manage the supply and demand of parking to accommodate customer, commuter, and resident parking, and encourage the use of shared parking where possible.

2.6 Reviews and Approvals

To be approved and implemented, the Specific Plan project requires approval of the following actions by the County of Los Angeles:

- Adoption of the proposed Willowbrook TOD Specific Plan;
- Change of Zone for the Specific Plan area to "Specific Plan;"
- Amendments to the County of Los Angeles General Plan to change land use of parcels for General Plan Policy consistency;
- Amendment to the Zoning Code to incorporate the zoning provisions of the proposed Specific Plan (Chapter 3, Specific Plan Zones) into Title 22 of the County's Code (Zoning Ordinance) and Zoning Map.

This EIR may be used by various governmental decision-makers for discretionary permits and actions that are necessary or may be requested in connection with implementation of future development projects pursuant to the proposed Specific Plan. The state or local agencies that may rely upon the information contained in this EIR when considering approval of permits may include, but are not limited to, the following:

- South Coast Air Quality Management District (point source emissions permits)
- California Regional Water Quality Control Board (National Pollutant Discharge Elimination System [NPDES] permit)
- State Water Resources Control Board (General Construction Activity Stormwater Permit)
- California Department of Toxic Substance Control (provide clearance for school expansions/developments)
- Caltrans (improvements to intersections within Caltrans rights-of-way)
- Metro (approval of development within Metro's jurisdiction).

2.7 References

JMC^2, 2015. *Infrastructure Study for the Willowbrook TOD Specific Plan*. Prepared by John M. Cruikshank Consultants, Inc. May 18, 2015.

Metro, 2015. *Willowbrook/Rosa Parks Station Improvement Project Initial Study/Documented Categorical Exclusion*. May 8, 2015. Available at: http://media.metro.net/projects_studies/crenshaw/blueline_willowbrookrosapark.pdf, accessed on November 28, 2016.

County of Los Angeles. 2010. *Martin Luther King, Jr. Medical Center Campus Redevelopment Draft Environmental Impact Report*. August 31, 2010. Available at: http://ridley-thomas.lacounty.gov/PDFs/Issues/MLK%20Draft%20EIR%20Appendices.pdf, accessed on November 28, 2016.

County of Los Angeles. 2015. *Los Angeles County General Plan*. October. Available at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf; accessed on July 20, 2016.

County of Los Angeles. 2017. *Willowbrook Transit Oriented District Specific Plan*. May.

The Arroyo Group. 2016. *Calculations of Proposed Land Uses*.

CHAPTER 3
Environmental Setting, Impacts and Mitigation Measures

This Draft Program EIR (PEIR) has been prepared in accordance with CEQA (California Public Resources Code, Section 21000 et seq.), the *CEQA Guidelines* (California Code of Regulations, Title 14, Section 15000 et seq.), and the County of Los Angeles Environmental Document Reporting Procedures and Guidelines. This Draft PEIR evaluates the potential environmental impacts associated with the construction and operation of future development that is in accordance with the Willowbrook Transit Oriented District Specific Plan (Specific Plan). This Draft PEIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the proposed project.

3.0 Scope of the Environmental Impact Analysis

In accordance with Section 15126 of the *CEQA Guidelines*, Chapter 3 provides an analysis of the direct and indirect, project and cumulative, environmental effects of future development that complies with the proposed Specific Plan with respect to existing conditions at the time the Notice of Preparation (NOP) was published (**Appendix A**). The determination of whether an impact is significant has been made based on the physical conditions established at the time the NOP was published (*CEQA Guidelines*, Section 15125(a)). The proposed Specific Plan is evaluated in this PEIR at a programmatic level, in accordance with *CEQA Guidelines*, Section 15168. As previously stated in Chapter 1, the PEIR analysis is not intended to focus on the site-specific construction and operation details of each future development within the Specific Plan area. Rather, this PEIR serves as a first-tier environmental document that focuses on the effects of implementing the overall Specific Plan to provide a comprehensive document that addresses environmental concerns of the overall effects of buildout of the proposed Specific Plan.

The following environmental resources are assessed in this chapter in accordance with Appendix G of the *CEQA Guidelines* and the County of Los Angeles Environmental Checklist Form*:*

- Aesthetics
- Air Quality
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials

- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing
- Public Services and Recreation
- Transportation and Traffic
- Utilities

Approach to Environmental Analysis

Sections 3.1 through 3.13 of this PEIR contain discussions of the environmental setting, regulatory framework, and potential impacts related to construction and operation of future development that is in accordance with the proposed Specific Plan. The environmental evaluation includes a project analysis and a cumulative analysis. If potential significant impacts are identified, feasible mitigation measures are recommended. The analysis also includes a level of impact after the implementation of mitigation measures.

The project analysis evaluates the demolition of 152 residential dwelling units and 378,764 non-residential square feet as well as the construction of 1,952 residential dwelling units and 2,666,035 square feet of non-residential. The analysis also includes takes into account the various design features that are included within the proposed Specific Plan. A detailed discussion of the design features is included in Chapter 2, Project Description.

The cumulative analysis was prepared in accordance with Section 15130 of the State CEQA Guidelines that requires an EIR to discuss cumulative impacts of a project when the incremental effects of a project are cumulatively considerable. Cumulative impacts are defined as an impact that is created as a result of the combination of the project evaluated in this PEIR together with other projects causing related impacts. Cumulatively considerable means that the incremental effects of an individual 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. According to Section 15130(b) of the CEQA Guidelines, elements considered necessary to provide an adequate discussion of cumulative impacts of a project include either:

> *(1) list of past, present, and probable future projects producing related or cumulative impacts; or*
>
> *(2) a summary of projection contained in an adopted General Plan or related planning document which is designed to evaluate regional or area-wide conditions.*

The cumulative analysis discussed in this PEIR is provided within each technical section in Section 3. The geographic context for the cumulative analysis is specified for each environmental issue addressed in each section. Unless otherwise identified in the environmental issue addressed in this Chapter, a summary of projections contained in the Southern California Association of

Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities (RTP/SCS) was used to assess potential environmental effects. These projections provide the anticipated planned population, housing and employment growth in the region. **Table 3-1** includes the projections for the cities in the vicinity of the Willowbrook Community, the unincorporated areas of Los Angeles County and the entire Los Angeles County.

TABLE 3-1
CUMULATIVE NET INCREMENTAL 2035 GROWTH PROJECTIONS FOR THE VICINITY OF THE WILLOWBROOK TOD SPECIFIC PLAN AREA

Jurisdiction	Population (Persons)[1]	Housing (Units)[1]	Employment (Jobs)[1]
Los Angeles County	1,106,612	332,282	387,200
Unincorporated Los Angeles County	324,843	89,686	74,791
City of Compton	2,957	739	2,300
City of Lynwood	4,764	1,232	1,396
City of Los Angeles	627,489	299,657	388,289
City of Gardena	7,639	2,957	3,779
City of Carson	13,061	4,518	9,200

[1] Derived from the 2016-2040 SCAG RTP/SCS based on a linear growth projection between 2012 and 2040.

SOURCE: SCAG, 2016, 2016-2040 SCAG RTP/SCS, Available at: http://scagrtpscs.net/Documents/2016/draft/d2016RTPSCS_DemographicsGrowthForecast.pdf.

The cumulative analysis included an evaluation of the combined effect of the proposed project along with future growth in accordance with the projections provided in Table 3-1. In addition, if the combined cumulative effect is significant then a discussion of the project's contribution to the significant cumulative effect is provided. If the project's contribution is determined to be less than cumulatively considerable then the project would have a less than significant cumulative impact. Although not required, the cumulative analysis also evaluated the project's contribution to a less than significant cumulative effect. This determination consistently found that the project's contribution to a less than significant cumulative effect would be less than cumulatively considerable.

The analysis in this Chapter also includes the recommendation of mitigation measures to be implemented by the proposed project if potential environmental effects were identified as significant under the project-specific analysis or if the project's contribution to significant cumulative effects were determined to be cumulatively considerable under the cumulative analysis.

A discussion of the level of impact after the implementation of mitigation measures is provided in the Significance Determination. If a project-specific impact or a project's contribution to a cumulative impact did not require mitigation measures, then a statement of the level of impact (i.e., No impact or Less than significant impact) is provided.

Organization of Environmental Issue Area

Implementation of the proposed Specific Plan will result in demolition, construction and operational activities. The potential environmental issues associated with each environmental analysis that is addressed in Chapter 3 contain the following components.

Environmental Setting

This section identifies and describes the existing physical environmental conditions of the Specific Plan area and vicinity associated with each of the impact sections. According to Section 15125(a) of the *CEQA Guidelines*, an EIR must include a description of the existing physical environmental conditions in the vicinity of the proposed project to provide the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for the proposed program was published in October 2015, which is considered the baseline for the analysis contained in this PEIR.

Regulatory Framework

The Regulatory Framework provides an understanding of the regulatory environment that exists prior to the implementation of the project. The regulatory framework that was used in this PEIR included federal, state, regional, and local regulations and policies applicable to the Specific Plan area.

Impacts and Mitigation Measures

This section describes environmental changes to the existing physical conditions that may occur if the proposed project is implemented, and evaluates these changes with respect to the significance criteria. This section also includes a project impact analysis and a cumulative impact analysis. Mitigation measures are identified, if determined feasible, for significant project impacts and cumulative impacts where the project's contribution was determined to be cumulatively considerable. The mitigation measures are those measures that could avoid, minimize, or reduce an environmental impact. This section also includes a significance determination after mitigation that describes the level of impact significance remaining after mitigation measures are implemented.

Significance Criteria

Significance criteria have been developed for each environmental resource in accordance with Appendix G of the *CEQA Guidelines* and the County of Los Angeles Environmental Document Reporting Procedures and Guidelines. The criteria are defined at the beginning of each impact analysis section. Impacts are categorized as follows:

- **Significant:** mitigation measures, if feasible, shall be recommended to reduce potential impacts;
- **Less than Significant:** mitigation measures are not required under CEQA but may be recommended; or

- **No Impact**. mitigation measures are not required

References

Sources relied upon for each environmental topic analyzed in this document are provided at the end of each section.

3.1 Aesthetics

Introduction

This section is focused on aesthetic and visual resources related to scenic vistas, scenic resources within a state scenic highway corridor, and light and glare that are within or visible from the Specific Plan area and the potential of the proposed project to impact those resources. Resources related to character or quality of the site and its surroundings are discussed in Section 3.8, Land Use and Planning.

This EIR recognizes that the assessment of whether aesthetic changes from existing conditions that would result from implementation of the proposed Specific Plan would be comparatively better (substantially improved) or worse (substantially degraded) is largely subjective. Therefore, the following analysis is focused on the factual manner in which the proposed Specific Plan could change existing visual elements, rather than analyzing aesthetic values.

3.1.1 Environmental Setting

Regional Aesthetic Elements

The unincorporated community of Willowbrook is located in the Gateway Cities region of southeast Los Angeles County, and approximately 10 miles south of downtown Los Angeles. The community is within an urban and developed area and bounded by the Cities of Hawthorne to the west, Lynwood to the east, Gardena to the southwest, and Compton southeast. Interstate 110 (I-110) generally defines the community's western boundary and Imperial Highway generally defines the northern boundary. The regional urban environment is developed with commercial, industrial, residential uses at various densities, and public facilities, including transportation. The region is generally flat with major topographic features in the far distance.

Community Aesthetic Elements and Views

A viewshed is a geographic area composed of landforms, water surfaces, coastlines, open spaces, hiking trails, vegetation, cultural elements, and/or manmade structures that are seen from one or more viewpoints and that has inherent scenic qualities and/or aesthetic value as determined by those who view it. The Specific Plan area is relatively flat, urban, and developed. The area is developed with institutional uses and public facilities, highway and rail transit corridors, commercial, industrial, and a variety of residential uses.

The community is generally laid out in a grid system of streets, and has a relatively flat topography with elevations that range from approximately 86 to 88 feet above mean sea level. The streets provide the only long-range views, which are of other urban developed areas. In addition, street views include parked and moving vehicles, which are consistent with the urban land uses and character of the community. Overall, views within and surrounding the Specific Plan area consist of urban development, both residential and commercial, streets, and associated parking areas, views of I-105 freeway and the Metro lines that can also be seen from the northern portion of the Specific Plan area. There are no designated or otherwise identified scenic

views or vistas within, from, or of the Willowbrook community (County of Los Angeles, 2015). In addition, there are no designated or eligible state scenic highway within or adjacent to the Specific Plan area (Caltrans, 2016).

Light and Glare

Nighttime lighting associated with the existing urban development is present within the Specific Plan area and in the surrounding area and includes street lights, building façade lighting, interior illumination from windows, parking lot lighting and illumination from vehicle headlights. Sensitive receptors relative to lighting and glare include residents living in the Specific Plan area, and motorists and pedestrians passing through the Specific Plan area on the streets. Because of the urban nature of the Specific Plan area and associated nighttime lighting that currently exists in the Los Angeles area, the views of stars and the nighttime sky are limited.

Glare is defined as the sensation produced by any brightness within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss of vision, and can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare in the Specific Plan area is generated by building and vehicle windows reflecting light. However, there are no buildings, structures, or facilities in the Specific Plan area that presently generate substantial glare since most of the buildings are constructed of non-reflective materials and are not surfaced with substantial number of adjacent windows. In addition, surface parking lots in the area are not substantially large and are separated by buildings, walkways, landscaping and other non-reflective surfaces, such that, the source of glare from sunlight or exterior light reflecting from car windshields is limited.

3.1.2 Regulatory Setting

State

Scenic Highway Program

Established in 1963, California's Scenic Highway Program is administered by Caltrans and is designed to preserve and protect scenic highway corridors from changes that would diminish their aesthetic value. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. The city or county in which the highway is located must adopt a Corridor Protection Program that consists of ordinances, zoning and/or planning policies that would preserve the scenic quality of the corridor, or they must document such regulations that already exist in various portions of local codes. A highway may also be listed as "eligible" for designation as a scenic highway before.

Local

General Plan Conservation and Natural Resources Element

The Conservation and Natural Resources Element of the County's 2035 General Plan guides the long-term conservation of scenic resources. The following policy is relevant to the proposed project.

Policy 13.3: Reduce light trespass, light pollution and other threats to scenic resources.

Los Angeles County Code Section 22.44.1270 Exterior Lighting

Section 22.44.1270 establishes light performance standards for development within the County, including standards related to acceptable power of lighting, types of lighting, height of lighting support structures, lighting shielding, sign lighting, and hours of operation (County of Los Angeles, 2015a).

3.1.3 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, the project could have a significant impact related to aesthetics if it would:

- Have a substantial adverse effect on a scenic vista (see Impact 3.1-1, below).
- Be visible from or obstruct views from a regional riding or hiking trail (see Section 5.1.1 in Chapter 5.0, Other CEQA Considerations).
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (see Section 5.1.1 in Chapter 5.0, Other CEQA Considerations).
- Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character or other features (see Impact 3.8-4 in Section 3.8, Land Use and Planning).
- Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area (see Impact 3.1-2, below).

3.1.4 Methodology

The significance determination for the aesthetics analysis related to scenic vistas is based on consideration of whether any scenic vistas exist within or near the Specific Plan area; and if a scenic vista exists, whether it can be viewed from public areas within or near by the Specific Plan area; and the potential for implementation of the Specific Plan to hinder views of a scenic vista or result in degradation to a scenic vista.

In regard to lighting, this analysis evaluates the change in illumination level as a result of implementation of the proposed Specific Plan and the extent to which project lighting would increase nighttime lighting on sensitive uses. Lighting impacts would be considered significant if

they increase lighting on sensitive uses (i.e., residences or public open spaces) for a substantial portion of the nighttime.

Glare is evaluated by the extent to which implementation of the proposed Specific Plan would increase glare on sensitive uses. Glare impacts would be considered significant if substantial glare from the project affects daily operations of surrounding uses as well as motorists on roadways for a substantial portion of the day.

3.1.5 Impact Analysis

Scenic Vista

Impact 3.1-1: The proposed project would not have a substantial adverse effect on a scenic vista.

Project-Specific

A scenic vista is usually a view of a valued visual resource, such as waterways, the ocean, hills, valleys, or mountains. Willowbrook is a completely urbanized community with a relatively flat topography and, as a result, views are generally of adjacent urban development and associated landscaping. Views include Mona Park, the Willowbrook/Rosa Parks Station, landscaping, multi-family housing, and other elements of urban life. The *Los Angeles County 2035 General Plan* and the Caltrans Scenic Highway Mapping System does not identify or designate scenic vistas or viewsheds in Willowbrook (Caltrans, 2016).

The proposed project would result in redevelopment and infill development within the existing developed urban environment. The views along roadway corridors would continue to be of a developed and urban landscape. Due to the relatively flat terrain and the existing structural development throughout the project site, no identified or designated scenic views or vistas exist; thus none would be impacted by redevelopment and infill development within the Specific Plan area. As a result, implementation of the proposed Specific Plan would not result in impacts to a scenic vista.

Cumulative

The cumulative aesthetics study area for the proposed Specific Plan is the viewshed (locations that can view the Specific Plan areas and locations that can be viewed from within the Specific Plan area) that the Specific Plan lies within. As described above, there are no existing scenic vistas within or nearby the Specific Plan area. Thus, a scenic vista resource does not exist, and cumulative development in the project vicinity would result in no impact on a scenic vista. Because the project would not result in an impact to a scenic vista, the proposed project would not have a cumulatively considerable impact related to a scenic vista.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

Light and Glare

Impact 3.1-2: The proposed project would not create a new source of substantial light or glare that could adversely affect day or nighttime views of the area.

Project-Specific

Implementation of the proposed Specific Plan would increase overall nighttime lighting because it would result in additional development and a greater intensity and density of land uses that currently exist. New lighting would accompany all new development, and involve exterior lighting for streetlights, parking lots, signs, walkways, and interior lighting, which could be visible through windows to the outside, and could potentially increase ambient or "spillover" light. In addition, residential uses, considered light-sensitive receptors, are located throughout the Specific Plan area, and would be increased with implementation of the project.

Likewise, because the project includes increased density, the project has the potential to create substantially more daytime glare than currently exists within the Specific Plan area. If not properly designed, sunlight reflecting from windows and large vehicular parking areas could create a substantial increase in glare, and increased exterior lighting would have the potential to increase glare, as well.

Due to the urbanized nature of the Specific Plan area, a substantial amount of ambient nighttime light currently exists that limits views of stars and the nighttime sky. Streetlights, headlights, and exterior lighting within the Specific Plan area provide a significant amount of existing ambient light. Thus, the increase in light that would occur from implementation of the Specific Plan would not significantly impact nighttime views of the sky (ability to see the stars) because such views are already limited in an urban setting.

In addition, light emanating from new uses would be required to be either low scaled lighting or shielded to focus lighting and prevent lighting from spilling onto adjacent sensitive uses, such as residential. The requirements of Section 22.44.1270, Exterior Lighting, of the County Code related to lighting and shielding would limit the potential of increased lighting on sensitive uses. These regulations state that lighting shall be the minimum necessary in order to achieve the purpose of the light and that all lights shall be directed, oriented and shielded to prevent light

from shining onto adjacent properties, onto public rights-of-way, and into driveway areas in a manner that would obstruct motorists' vision.

Furthermore, the proposed Specific Plan includes Performance Standards to ensure that sensitive uses are not adversely impacted by adjacent development. The Light and Glare Performance Standard states that all outdoor lighting shall be designated to minimize light trespass; that existing residential uses should be buffered from light and glare effects from new development; and that site, parking lot and building security lighting shall not impact surrounding properties.

In regard to glare, implementation of the Specific Plan would also not result in a substantial increase in daytime glare. The land uses that would be developed within the Specific Plan would be typical institutional, commercial, residential, and mixed use structures. Typically, these structures would be designed with non-reflective textured surfaces on building exteriors (such as stucco, brick, stone, wood). Windows that are included as part of the design of the building exteriors would be required to be in compliance with Section 22.44.1320 (Construction Colors, Materials, and Design) of the County Code that requires windows to be comprised of non-glare/non-reflective glass (County of Los Angeles, 2015b). In addition, the Performance Standards included in the proposed Specific Plan require that new development preclude generation of direct glare by ensuring that no surfaces reflect direct glare onto adjoining property, streets, or skyward.

Because compliance with the County Code and the Specific Plan Performance Standards would be checked by the County through the development plan check process, impacts related to increased sources of light and glare would be less than significant.

Cumulative

The cumulative study area for light and glare for the proposed Specific Plan is the lighting viewshed (locations that can receive light or glare from the Specific Plan area and locations that generate light and glare that can be viewed from within the Specific Plan area) that the Specific Plan lies within. The Specific Plan area is urban and developed, and currently produces light from various urban sources, such as roadways, lighted parking lots, commercial and residential exterior lighting, within the Specific Plan area and its vicinity.

Future growth in the project vicinity is anticipated to be similar in character and intensity as existing development and proposed land uses under the Specific Plan. As growth occurs, lighting throughout the project vicinity would gradually increase. In addition, cumulative development could incrementally contribute to cumulative daytime glare and reflective impacts. However, the County's regulations (County Code Section 22.44.1270 Exterior Lighting and Section 22.44.1320 Construction Colors, Materials, and Design) provide light and glare performance standards for development within the County of Los Angeles. As described previously, these regulations state that lighting shall be the minimum necessary in order to achieve the purpose of the light and that all lights shall be directed, oriented and shielded to prevent light from shining onto adjacent properties, onto public rights-of-way, and into driveway areas in a manner that would obstruct motorists' vision. In addition, windows that are included as part of the design of

the building exteriors are required to be in compliance with Section 22.44.1320 (Construction Colors, Materials, and Design) of the County Code that requires windows to be comprised of non-glare/non-reflective glass. With implementation of this existing County Code regulation, future cumulative development within the areas adjacent to the project site and within the County's jurisdiction would result in a less than significant cumulative light and glare impacts.

The project site is also directly adjacent to existing developments that are located within the City of Lynwood (i.e., east of Mona Boulevard) and the City of Los Angeles (north of Imperial Highway). Both of these cities have lighting standards to reduce substantial light illuminating adjacent properties or streets. Therefore, cumulative lighting impacts would be less than significant and the project's contribution to cumulative lighting impacts would be less than cumulatively considerable.

Based on a review of the City of Los Angeles and City of Lynwood municipal codes, neither of these cities contains glare standards to reduce substantial glare emanating from structures. Therefore, it is possible that significant cumulative glare impacts could occur adjacent to the project site from future development. However, since the project would be required to comply with existing County of Los Angeles regulations, the project would result in less than cumulatively considerable glare impacts.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

3.1.6 References

California Department of Transportation (Caltrans). 2016. *California Scenic Highway Mapping System*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_Highways, accessed on September 21, 2016.

County of Los Angeles. 2015. *Los Angeles County General Plan Conservation and Natural Resources Element*. County. October 2015. Available at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf, accessed on October 4, 2016.

County of Los Angeles. 2016a. *Los Angeles County Code Section 22.44.1270, Exterior Lighting*. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances, accessed on September 21, 2016.

County of Los Angeles. 2016b. *Los Angeles County Code Section 22.44.1320, Construction Colors, Materials, and Design*, Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances, accessed on September 21, 2016.

3.2 Air Quality

Introduction

This section evaluates the potential for air quality impacts to result from the implementation of proposed Specific Plan. This includes the potential for developments occurring in the Specific Plan area to result in impacts associated with ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. Specifically, this section analyzes pollutant emissions that would be generated by the construction and operation of the proposed Specific Plan. Mitigation measures intended to reduce impacts to air quality are proposed, where appropriate, to avoid or reduce the potential for significant air quality impacts of the proposed Specific Plan.

The Specific Plan area is located within the unincorporated community of Willowbrook in the County of Los Angeles. Therefore, data used to prepare this analysis were obtained from the Air Quality Element of the County's General Plan, and the South Coast Air Quality Management District (SCAQMD), and by modeling existing and future air pollutant emissions from the construction and operation of the potential development with the implementation of the Specific Plan. Traffic information contained in the *Willowbrook TOD Specific Plan, EIR Traffic Study (The Mobility Group 2017)* (**Appendix D**) was used to prepare the vehicle traffic air emissions modeling of the proposed Specific Plan.

3.2.1 Environmental Setting

Climate and Meteorology

Air quality is affected by both the rate and location of pollutant emissions and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality. The Specific Plan area is located within the South Coast Air Basin (SCAB), an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, in addition to the San Gorgonio Pass area in Riverside County. The SCAB is a coastal plain with connecting broad valleys and low hills, and its terrain and geographical location determine its distinctive climate. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild Mediterranean climate tempered by cool sea breezes with light average wind speeds. The usually mild pattern of the climate is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds.

Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of pollutants throughout the SCAB, making it an area of high pollution potential. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. Vertical dispersion of air

pollutants in the SCAB is hampered by the presence of persistent temperature inversions. High-pressure systems, such as the semi-permanent high-pressure zone in which the SCAB is located, are characterized by an upper layer of dry air that warms as it descends, restricting mobility in the formation of subsidence inversions. Such inversions restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of smog.

Most of the annual rainfall in the SCAB occurs from November through April. The dominant daily wind pattern is a daytime sea breeze and a nighttime land breeze, except when winter storms or northeasterly Santa Ana winds flow from the mountains and deserts north of the SCAB to the ocean. The transport of ocean air across the SCAB in an easterly direction over the mountains moves air quality pollutants out of the SCAB. However, when westerly winds are stagnant or inversions occur, pollutants become trapped within the SCAB, resulting in higher levels of pollutants.

Sources of air emissions can be categorized as either stationary or mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at an identified fixed location, and are usually associated with construction, manufacturing, and industry.

The Willowbrook community contains single-family residential neighborhoods, which contains a mix of commercial and nearby industrial development strategically located near the I-105 freeway. The primary source of air pollutants in the vicinity of the Specific Plan area are from mobile sources (e.g., motor vehicles and trucks that traverse the local roadway network and diesel operated freight and Metro trains). Additional emission sources stem from residential, commercial, and industrial land uses and include landscaping and lawn care equipment, water heaters, painting activities, and landfills. Residential land uses also produce emissions from consumer products, such as lighter fluid and hair spray. Additional indirect emissions result from electricity generation to provide electricity to the existing uses.

Ambient Air Quality Standards

Regulation of air pollution is achieved through both federal and state ambient air quality standards and emission limits for individual sources of air pollutants. As required by the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (USEPA) has identified criteria pollutants and has established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb). These pollutants are called “criteria” air pollutants because standards have been established for each of them to meet specific public health and welfare criteria.

To protect human health and the environment, the USEPA has set “primary” and “secondary” maximum ambient limits for each of the criteria pollutants. Primary standards were set to protect human health, particularly sensitive receptors such as children, the elderly, and individuals suffering from chronic lung conditions such as asthma and emphysema. Secondary standards

were set to protect the natural environment and prevent damage to animals, crops, vegetation, and buildings.

The NAAQS establish the level for an air pollutant above which detrimental effects to public health or welfare may result. The NAAQS are defined as the maximum acceptable concentrations that, depending on the pollutant, may not be equaled or exceeded more than once per year or in some cases as a percentile of observations. California has generally adopted more stringent ambient air quality standards for the criteria air pollutants, i.e., California Ambient Air Quality Standards (CAAQS) and has adopted air quality standards for some pollutants for which there is no corresponding national standard, such as sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The NAAQS and CAAQS for the criteria pollutants along with a summary of each of their physical properties, associated health effects, and sources are presented in **Table 3.2-1**.

TABLE 3.2-1
AMBIENT AIR QUALITY STANDARDS FOR CRITERIA POLLUTANTS

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	No National Standard	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when ROG and NO_X react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/industrial mobile equipment.
	8 hours	0.07 ppm	0.070 ppm		
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm		
Nitrogen Dioxide (NO_2)	1 hour	0.18 ppm	0.100 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Arithmetic Mean	0.030 ppm	0.053 ppm		
Sulfur Dioxide (SO_2)	1 hour	0.25 ppm	75 ppb	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hours	No State Standard	0.50 ppm		
	24 hours	0.04 ppm	0.14 ppm		
	Annual Arithmetic Mean	No State Standard	0.03 ppm		
Respirable Particulate Matter (PM10)	24 hours	50 µg/m^3	150 µg/m^3	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Arithmetic Mean	20 µg/m^3	No National Standard		
Fine Particulate Matter (PM2.5)	24 hours	No State Standard	35 µg/m^3	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO_X, sulfur oxides, and organics.
	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3		

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Lead (Pb)	30 Day Average	1.5 µg/m^3	No National Standard	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases).	Present source: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	No State Standard	1.5 µg/m^3		
	Rolling 3-Month Average	No State Standard	0.15 µg/m^3		
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations)	Geothermal power plants, petroleum production and refining
Sulfates (SO_4)	24 hour	25 µg/m^3	No National Standard	Decrease in ventilatory functions; aggravation of asthmatic symptoms; aggravation of cardio-pulmonary disease; vegetation damage; degradation of visibility; property damage.	Industrial processes.
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	Reduces visibility, reduced airport safety, lower real estate value, and discourages tourism.	See $PM_{2.5}$.

NOTE: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter.

SOURCE: CARB, 2016

Criteria Air Pollutants

Ozone

Ozone, the main component of photochemical smog, is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air, but is formed through a complex series of chemical reactions involving other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include reactive organic gases (ROGs) or volatile organic compounds (VOCs), and oxides of nitrogen (NOx). While both ROGs and VOCs refer to compounds of carbon, ROG is a term used by CARB and is identified based on a list of carbon compounds that exempts carbon compounds determined by CARB to be nonreactive. VOC is a term used by the USEPA and is identified based on USEPA's separate list of exempted compounds it identifies as having negligible photochemical reactivity. The time period required for ozone formation allows the reacting compounds to spread over a large area, producing regional pollution problems. Ozone concentrations are the cumulative result of regional development patterns rather than the result of a few significant emission sources.

Once ozone is formed it remains in the atmosphere for one or two days. Ozone is then eliminated through reaction with chemicals on the leaves of plants, attachment to water droplets as they fall to earth ("rainout"), or absorption by water molecules in clouds that later fall to earth with rain ("washout").

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. In addition to causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

CO, a colorless and odorless gas, is a relatively non-reactive pollutant that is a product of incomplete combustion and is mostly associated with motor vehicles. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia. CO measurements and modeling were important in the early 1980s when CO levels were regularly exceeded throughout California. In more recent years, CO measurements and modeling have not been a priority in most California air districts due to the retirement of older polluting vehicles, lower emissions from new vehicles, and improvements in fuels.

Nitrogen Dioxide

NO_2 is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2. The combined emissions of NO and NO_2 are referred to as NOx, which are reported as equivalent NO_2. Aside from its contribution to ozone formation, NO_2 can increase the risk of acute and chronic respiratory disease and reduce visibility. NO_2 may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

Sulfur Dioxide

SO_2 is a colorless, extremely irritating gas or liquid that enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfur trioxide (SO_3). Collectively, these pollutants are referred to as sulfur oxides (SOx).

Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of SO_2 aggravate lung diseases, especially bronchitis. This compound also constricts the breathing passages, especially in people with asthma and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. Long-term SO_2 exposure has been associated with increased risk of mortality from respiratory or cardiovascular disease.

Particulate Matter

PM_{10} and $PM_{2.5}$ consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively (a micron is one-millionth of a meter). PM_{10} and $PM_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis and respiratory illnesses in children. Recent mortality studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air. Particulate matter can also damage materials and reduce visibility. One common source of $PM_{2.5}$ is diesel exhaust emissions.

PM_{10} consists of particulate matter emitted directly into the air (e.g., fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires, and natural windblown dust) and particulate matter formed in the atmosphere by condensation and/or transformation of SO_2 and ROG. Traffic generates particulate matter that settles onto roadways and parking lots. PM_{10} and $PM_{2.5}$ are also emitted by burning wood in residential wood stoves and fireplaces and open agricultural burning. $PM_{2.5}$ can also be formed through secondary processes such as airborne reactions with certain pollutant precursors, including ROGs, ammonia (NH_3), NOx, and SOx.

Lead

Lead is a metal found naturally in the environment and present in some manufactured products. There are a variety of activities that can contribute to lead emissions, which are grouped into two general categories, stationary and mobile sources. On-road mobile sources include light-duty automobiles; light-, medium-, and heavy-duty trucks; and motorcycles.
Emissions of lead have dropped substantially over the past 40 years. The reduction before 1990 is largely due to the phase-out of lead as an anti-knock agent in gasoline for on-road automobiles. Substantial emission reductions have also been achieved due to enhanced controls in the metals processing industry. In the SCAB, atmospheric lead is generated almost entirely by the combustion of leaded gasoline and contributes less than one percent of the material collected as total suspended particulates. However, lead has been well below regulatory thresholds for decades.

Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soils around buildings and structures painted with lead-based paint. Because of its toxic properties, lead is regulated as a hazardous material. Inspection, testing, and removal (abatement) of lead-containing building materials must be performed by state-certified contractors who are required to comply with applicable health and safety and hazardous materials regulations. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities for the proposed project. Lead and asbestos impacts are addressed in Section 3.6 Hazards and Hazardous Materials.

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs), also known as hazardous air pollutants (HAPs), are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.
According to *The California Almanac of Emissions and Air Quality* (CARB, 2009), the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a particulate matter exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

In addition to diesel PM emissions, demolition of buildings and structures may potentially generate asbestos and lead emissions. Typically, if buildings or structures to be demolished were constructed before 1980, there is a potential that insulation materials may contain asbestos, and painted surfaces may contain lead. Disturbance of asbestos materials during demolition creates the potential that asbestos fibers would become airborne and create a health hazard for inhalation and ingestion. Appropriate asbestos and lead abatement measures are performed on identified asbestos materials before demolition of buildings.

Odorous Emissions

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Offensive odors are unpleasant and can lead to public distress generating citizen complaints to local governments. Although unpleasant, offensive odors rarely cause physical harm. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source, wind speed, direction, and the sensitivity of receptors.

Air Quality of the Specific Plan Area

SCAQMD maintains a network of air quality monitoring stations located throughout the SCAB and has divided the SCAB into air quality monitoring areas. The Specific Plan area is located in Source Receptor Area (SRA) 12 (South Central Los Angeles County) with the Compton Station as closest air quality monitoring station to the Specific Plan area, located at 700 North Bullis Road in the City of Compton (approximately 1.9 miles southeast of the Specific Plan area boundary). The Compton monitoring station monitors ozone (O_3), CO, NO_2, PM_{10} and $PM_{2.5}$. The most recent data available from the Compton monitoring station is provided in **Table 3.2-2** and encompasses the years 2011 through 2015. PM_{10} data is not monitored at the Compton Station; the next nearest monitoring station, North Long Beach, monitors PM_{10}, provided in Table 3.2-2. In addition, Table 3.2-2 also compares the pollutant monitoring data to the state and national standards (i.e., NAAQS and CAAQS).

TABLE 3.2-2
RECENT ANNUAL AIR QUALITY MONITORING DATA NEAREST THE PROJECT SITE

Pollutant	Standard[a]	Monitoring Data by Year				
		2011	2012	2013	2014	2015
O_3						
Highest 1 Hour Average (ppm)[b]		0.082	0.086	0.090	0.094	0.091
Days over State Standard	0.070	0	0	0	0	0
Days over National Standard	None	-	-	-	-	-
Highest 8 Hour Average (ppm)[b]		0.065	0.070	0.080	0.081	0.072
Days over State Standard	0.070	0	1	1	0	0
Days over National Standard	0.070	0	0	1	4	1
CO						
Highest 1 Hour Average (ppm)[b]		4.67	3.96	-	-	-
Days over State Standard	20	0	0	0	0	0
Days over National Standard	35	0	0	0	0	0
NO_2						
Highest 1 Hour Average (ppm)[b]		75.4	79.3	69.8	68.2	73.6
Days over State Standard		0	0	0	0	0
Annual Average		18	17	17	-	16
PM_{10}						
Highest 24 Hour Average – State/National ($\mu g/m^3$)[b,d]		43	45	37	-	-
Estimated days over State Standard[c]	50	0	0	-	-	-
Estimated days over National Standard[c]	150	0	0	-	-	-
State Annual Average[d]	20	24.1	23.2	-	-	-
National Annual Average[d]	--	24.2	23.2	23.2	-	-
$PM_{2.5}$						
Highest 24 Hour Average – National ($\mu g/m^3$) [b]		35.3	51.2	52.1	35.8	41.3
Estimated days over National Standard [c]	65/35 [e]	0.0	3.3	3.1	-	9.0
State Annual Average [d]	12	12.9	11.6	11.9	-	11.7
National Annual Average [d]	15					

[a] Generally, state standards are not to be exceeded and federal standards are not to be exceeded more than once per year.

[b] ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.

[c] PM-10 and PM-2.5 are not measured every day of the year. "Number of samples" refers to the number of days in a given year during which PM-10 and PM-2.5 were measured at the Azusa station.

[d] State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.

[e] USEPA lowered the 24 hour PM-2.5 standard from 65 $\mu g/m^3$to 35 $\mu g/m^3$. Though the current standard is 35$\mu g/m^3$, the estimated days over the national standard refers to days above the 65 $\mu g/m^3$standard.

NA = Not Available.

SOURCE: CARB 2011 - 2015.

Regional Attainment Status

Both CARB and USEPA use area air quality monitoring data to designate areas (e.g., air basins) according to their respective federal and California attainment status of NAAQS and CAAQS for criteria air pollutants. The purpose of these attainment designations is to identify the areas with air quality problems, and thereby, initiate planning efforts for improvement and attainment. The three basic attainment designations are nonattainment, attainment, and unclassified. Unclassified is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. Degrees of nonattainment (e.g., extreme, moderate, marginal, and basic) are also provided for some criteria pollutants (e.g., ozone –extreme nonattainment). In addition, the California designations include a subcategory of nonattainment-transitional, which is given to nonattainment areas that are progressing towards and nearing attainment. Attainment areas, that had previously been designated nonattainment, are designated as maintenance areas, in order to ensure continued attainment of the NAAQS or CAAQS. The current federal and California attainment status for the SCAB is provided in **Table 3.2-3**.

TABLE 3.2-3
SOUTH COAST AIR BASIN ATTAINMENT STATUS

Pollutant	CAAQS	NAAQS
Ozone (1-hour standard)	Extreme Nonattainment	(None – No NAAQS)
Ozone (8-hour standard)	Nonattainment	Extreme Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Lead	Attainment	Nonattainment

SOURCE: CARB, 2015; USEPA, 2017.

Existing Health Risk in the Surrounding Area

Both SCAQMD and CARB have monitoring networks in the SCAB that measure ambient concentrations of certain TACs that are associated with important health-related effects and are present in appreciable concentrations in the SCAB. SCAQMD uses this information to determine risks for a particular area. Stationary source TACs tend to be approximately the same level year-round. However, TACs from mobile sources tend to be higher during the fall and winter months (SCAQMD, 2000a). According to the SCAQMD's *MATES II Study* (SCAQMD, 2000a), the Specific Plan area is within four cancer risk zones, where risks range from 871 in one million to 961 in one million, which is largely due to diesel PM emissions.

Sensitive Receptors

Some people are especially sensitive to air pollution emissions than others, and are given special consideration when evaluating potential air quality impacts from projects. SCAQMD defines

typical air quality sensitive land uses as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD, 1993). Land uses such as schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people are often at home for extended periods. The heightened sensitivity may also be due to individual's health problems, proximity to the emissions source, pollutant concentrations, and duration of exposure to pollutant concentrations. The air quality sensitive receptors located within and adjacent to the Specific Plan area include single-family and multi-family residences, as well as the schools, parks, and playgrounds.

3.2.2 Regulatory Setting

Air pollutants are regulated at the national, state, and air basin level; each respective regulatory agency has a different degree of control. USEPA regulates air pollutants at the national level, CARB regulates at the state level, and SCAQMD regulates at the regional level (i.e., air basin).

Federal and State

Federal Clean Air Act

The federal Clean Air Act (CAA) is a comprehensive federal law that regulates air emissions from area, stationary, and mobile sources. This law authorizes USEPA to establish NAAQS to protect public health and the environment. The federal CAA was passed in 1963, and has since undergone five major amendment cycles, with the latest in 1990, and prior major amendments in 1965, 1967, 1970, and 1977. USEPA utilizes the established NAAQS for six "criteria pollutants" as indicators of air quality, and has established a threshold maximum concentration level for which an adverse effect on human health may occur. Current NAAQS for these criteria pollutants are shown in Table 3.2-2.

Ambient air quality standards are intended to protect the public health and welfare, and they incorporate an adequate margin of safety. NAAQS were set to protect public health, including that of sensitive individuals; thus, NAAQS are subject to change as more medical research is available regarding the health effects of the criteria pollutants.

California Clean Air Act

In 1988, the state legislature passed the California Clean Air Act (CCAA), which established California's air quality goals, planning mechanisms, regulatory strategies, and ambient air quality standards for the first time. The CCAA provides the state with a comprehensive framework for air quality planning regulation, and sets state air quality standards (i.e., CAAQS). CAAQS, shown in Table 3.2-2, incorporate more stringent standards than NAAQS for most of the criteria pollutants, and has also set CAAQS for other pollutants not federally recognized (i.e., no NAAQS), such as, sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

State Implementation Plan

The 1977 federal CAA Amendments require that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of air pollutants can be controlled in order to achieve all standards specified in the federal CAA. For areas that are designated "nonattainment" with respect to an air pollutant's NAAQS, the federal CAA specifies future dates for achieving compliance with the NAAQS, and mandates that states submit and implement a State Implementation Plan (SIP) for areas not meeting the NAAQS. SIPs must include pollution control measures that demonstrate how the NAAQS will be met. Similarly, the CCAA also requires development of air quality plans and strategies to meet CAAQS in areas designated as nonattainment (with the exception of areas designated as nonattainment for the PM CAAQS). Maintenance plans are required for attainment areas that had previously been designated nonattainment, in order to ensure continued attainment of the NAAQS or CAAQS.

Toxic Air Contaminants

TACs have been regulated under federal air quality law since the 1977 federal CAA Amendments, the most recent, in 1990, reflecting a technology-based approach for reducing TACs. The first phase of control involves requiring facilities to install Maximum Achievable Control Technology (MACT). The MACT standards vary depending on the type of emitting source. USEPA has established MACT standards for over 20 facilities or activities, such as perchloroethylene dry cleaning and petroleum refineries. The second phase of control involves determining the residual health risk represented by air toxics emissions sources after implementation of MACT standards. Two principal laws provide the foundation for California regulation of TACs from stationary sources. In 1983, the California State Legislature adopted Assembly Bill (AB) 1807, which established a process for identifying TACs and provided the authority for developing retrofit air toxics control measures on a statewide basis. Air toxics from stationary sources in California are also regulated under AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Regulation of TACs from mobile sources has traditionally been implemented through emissions standards for on-road motor vehicles (imposed on vehicle manufacturers) and through specifications for gasoline and diesel fuel sold in California (imposed on fuel refineries and retailers), rather than through land use decisions, air quality permits, or regulations addressing how motor vehicles are used by the general public.

In August 1998, CARB identified diesel PM as a TAC. CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (CARB, 2000), which provides a plan to reduce diesel PM emissions, with the goal of reducing diesel PM emissions and the associated health risks by 75 percent in 2010, and by 85 percent in 2020. The plan aims to require the use of state-of-the-art catalyzed diesel particulate filters and ultra-low sulfur diesel fuel on diesel-fueled engines.

Regional

Regional Comprehensive Plan and Guide

The Southern California Association of Governments (SCAG) is the regional planning agency for the counties of Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial. SCAG addresses regional issues relating to transportation, the economy, community development, and the environment. SCAG is the federally-designated MPO for the majority of the southern California region and is the largest MPO in the nation. As the designated MPO, SCAG is mandated by the federal government to develop and implement regional plans that address transportation, growth management, hazardous waste management, and air quality issues. With respect to air quality planning, SCAG has prepared the Regional Comprehensive Plan and Guide for the Los Angeles County region, which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation components of the Air Quality Management Plan (AQMP), and are utilized in the preparation of air quality forecasts and the consistency analysis that is included in the AQMP.

South Coast Air Quality Management District

Criteria Air Pollutants

SCAQMD attains and maintains air quality conditions in the SCAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of SCAQMD includes preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. SCAQMD also inspects stationary sources of air pollution and responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the federal CAA.

Air Quality Management Plan

SCAQMD and SCAG are responsible for preparing the AQMP, which addresses federal CAA and CCAA requirements. The AQMP details goals, policies, and programs for improving air quality in the SCAB.

The 2012 AQMP was adopted by the SCAQMD Governing Board on December 7, 2012. The purpose of the 2012 AQMP for the SCAB is to set forth a comprehensive and integrated program that will lead the region into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update to the SCAB's commitment towards meeting the federal 8-hour ozone standards (SCAQMD, 2013). The AQMP would also serve to satisfy recent USEPA requirements for a new attainment demonstration of the revoked 1-hour ozone standard, as well as a vehicle miles travelled (VMT) emissions offset demonstration.[1] Specifically, the AQMP would serve as the official SIP submittal for the federal 2006 24-hour $PM_{2.5}$ standard, for which USEPA has

[1] Although the federal 1-hour ozone standard was revoked in 2005, the USEPA has proposed to require a new 1-hour ozone attainment demonstration in the South Coast extreme ozone nonattainment area as a result of a recent court decision. Although USEPA has replaced the 1-hour ozone standard with a more health protective 8-hour standard, the Clean Air Act anti-backsliding provisions require that California have approved plans for attaining the 1-hour standard.

established a due date of December 14, 2012.[2] In addition, the AQMP updates specific new control measures and commitments for emissions reductions to implement the attainment strategy for the 8-hour ozone SIP. The 2012 AQMP sets forth programs which require integrated planning efforts and the cooperation of all levels of government: local, regional, state, and federal.

The proposed 2016 Air Quality Management Plan (2016 AQMP) is a regional blueprint for achieving air quality standards and healthful air. The 2016 AQMP represents a new approach, focusing on available, proven, and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts on the health of our nearly 17 million residents, including those in disproportionally impacted and environmental justice communities that are concentrated along our transportation corridors and goods movement facilities, is to reduce emissions from mobile sources, the principal contributor to our air quality challenges. For that reason, the SCAQMD has been and will continue to be closely engaged with CARB) and the USEPA who have primary responsibility for these sources. The 2016 AQMP recognizes the critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy. These "win-win" scenarios are key to implementation of the 2016 AQMP with broad support from a wide range of stakeholders. The proposed 2016 AQMP includes integrated strategies and measures to meet the NAAQS. Currently, public hearings are being held on the adoption of the 2016 AQMP (SCAQMD 2016).

SCAQMD Rules and Regulations

All projects are subject to SCAQMD Rules and Regulations in effect at the time of project construction. Specific rules applicable to the construction anticipated for the proposed project would include the following:

Rule 401 – Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.

Rule 402 – Nuisance. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of Rule 402 do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

[2] Although the 2012 AQMP was approved by the SCAQMD Board on December 7, 2012, the plan did not get submitted to the USEPA by December 14, 2012 as it first required approval from CARB. The 2012 AQMP was subsequently approved by CARB on January 25, 2013, and as of February 13, 2013 the plan has been submitted by CARB to the USEPA.

Rule 403 – Fugitive Dust. Rule 403 is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust.

Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the Rule 1113.

Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities. Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, asbestos containing materials handling and clean-up procedures, and storage, disposal, and land filling requirements for asbestos containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

California Environmental Quality Act Air Quality Handbook.

SCAQMD published the *CEQA Air Quality Handbook* (the Handbook) in November 1993 to provide local governments with guidance for analyzing and mitigating Project-specific air quality impacts. The Handbook provides standards, methodologies, and procedures for conducting air quality analyses in CEQA documents and was used extensively in the preparation of this analysis.

In June 2003, the SCAQMD published the *Localized Significance Threshold Methodology* that is intended to provide voluntary guidance for lead agencies in analyzing localized air quality impacts from projects (SCAQMD, 2003). The document was revised in July 2008 to incorporate additional guidance regarding PM2.5 emissions (SCAQMD, 2006). The *Localized Significance Threshold Methodology* was also used in the preparation of this air quality impact analysis.

Toxic Air Contaminants

At the local level, air pollution control or management districts may adopt and enforce CARB control measures. Under SCAQMD Regulation XIV (Toxics and Other Non-Criteria Pollutants), and in particular Rule 1401 (New Source Review), all sources that possess the potential to emit TACs are required to obtain permits from SCAQMD. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations, including new source review standards and air toxics control measures. SCAQMD limits emissions and public exposure to TACs through a number of programs. SCAQMD prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors.

The Air Toxics Control Plan (SCAQMD, 2000b) is a planning document designed to examine the overall direction of SCAQMD's air toxics control program, and includes development and implementation of strategic initiatives to monitor and control air toxics emissions. Control

strategies that are deemed viable and are within SCAQMD's jurisdiction will each be brought to the SCAQMD Board for further consideration through the normal public review process. Strategies that are to be implemented by other agencies will be developed in a cooperative effort, and the progress will be reported back to the Board periodically.

Local

Los Angeles County General Plan: Air Quality Element

Local jurisdictions, such as the County of Los Angeles, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the County is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The County is also responsible for the implementation of transportation control measures as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the County assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits and monitors and enforces implementation of such mitigation measures.

The Los Angeles County General Plan (County of Los Angeles, 2015) provides the fundamental basis for the County's land use and development policy, and represents the basic community values, ideals, and aspirations to govern a shared environment through 2035. The County General Plan addresses all aspects of development including public health, land use, community character, transportation, economics, housing, air quality, and other topics. The County General Plan sets forth objectives, policies, standards, and programs for land use and new development, Circulation and Public access, and Service Systems for the Community as a whole.

The goals and policies of the Air Quality Element of the County General Plan applicable to the project are specified below, which will be implemented in connection with development of the Project (County of Los Angeles, 2015).

Goal AQ 1: Protection from exposure to harmful air pollutants.

Policy AQ 1.1: Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.

Policy AQ 1.2: Encourage the use of low or no volatile organic compound (VOC) emitting materials.

Policy AQ 1.3: Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.

Policy AQ 1.4: Work with local air quality management districts to publicize air quality warnings, and to track potential sources of airborne toxics from identified mobile and stationary sources.

Goal AQ 2: The reduction of air pollution and mobile source emissions through coordinated land use, transportation and air quality planning.

Policy AQ 2.1: Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.

Policy AQ 2.2: Participate in, and effectively coordinate the development and implementation of community and regional air quality programs.

3.2.3 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the project could have a significant impact on air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan; (see Impact 3.2-1 below)
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation; (see Impact 3.2-2 below)
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); (see Impact 3.2-3 below)
- Expose sensitive receptors to substantial pollutant concentrations; (see Impact 3.2-4 below)
- Create objectionable odors affecting a substantial number of people. (see Section 5.1.3 in this EIR)

The significance thresholds in SCAQMD's CEQA Air Quality Handbook are used in evaluating project impacts. SCAQMD has established daily mass thresholds for regional pollutant emissions, which are shown in **Table 3.2-4**.

TABLE 3.2-4
SCAQMD SIGNIFICANCE THRESHOLDS

Air Contaminant	Construction (pounds per day)	Operations (pounds per day)
CO	550	550
NO_x	100	55
SO_x	150	150
VOC (or ROG)	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55

SOURCE: SCAQMD, 2015.

Projects in the SCAB are also required to analyze localized air quality impacts. As discussed previously under Section 3.2.2 Regulatory Setting, SCAQMD has developed localized significance thresholds (LST)s that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and thus would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of that pollutant for each of the SRAs in the SCAB, and distance to the nearest sensitive receptor. The LSTs, which are found in the mass rate look-up tables in SCAQMD's Final Localized Significance Threshold Methodology document (SCAQMD 2003), were developed for use on projects that disturb less than five acres per day and are only applicable to the following criteria pollutants: NOx, CO, PM_{10}, and $PM_{2.5}$. The construction and operational LSTs for a one-acre, two-acre, and five-acre sites in SRA 12 (South Los Angeles), which is where the Specific Plan area is located, are shown in **Table 3.2-5**.

TABLE 3.2-5
SCAQMD LOCALIZED SIGNIFICANCE THRESHOLDS IN SRA 12 (SOUTH LOS ANGELES)

Pollutant Monitored Within SRA 12 – South Los Angeles Area	Allowable emissions (pounds/day) as a function of receptor distance (feet) from site boundary				
	82 (ft)	164 (ft)	328 (ft)	656 (ft)	1,640 (ft)
One-Acre Site					
Construction Thresholds					
Nitrogen Oxides (NO_x)[a]	46	46	54	70	109
Carbon Monoxide (CO)	231	342	632	1,545	5,452
Respirable Particulate Matter (PM_{10})	4	12	26	54	139
Fine Particulate Matter ($PM_{2.5}$)	3	4	7	17	70
Operational Thresholds					
Nitrogen Oxides (NO_x)[a]	46	46	54	70	109
Carbon Monoxide (CO)	231	342	632	1,545	5,452
Respirable Particulate Matter (PM_{10})	1	3	7	13	34
Fine Particulate Matter ($PM_{2.5}$)	1	1	2	4	17
Two-Acre Site					
Construction Thresholds					
Nitrogen Oxides (NO_x)[a]	65	64	69	82	117
Carbon Monoxide (CO)	346	515	841	1,817	5,962
Respirable Particulate Matter (PM_{10})	7	20	34	62	146
Fine Particulate Matter ($PM_{2.5}$)	4	6	9	19	74
Operational Thresholds					
Nitrogen Oxides (NO_x)[a]	65	64	69	82	117
Carbon Monoxide (CO)	346	515	841	1,817	5,962
Respirable Particulate Matter (PM_{10})	2	5	9	15	36
Fine Particulate Matter ($PM_{2.5}$)	1	2	3	5	18

Pollutant Monitored Within SRA 12 – South Los Angeles Area	Allowable emissions (pounds/day) as a function of receptor distance (feet) from site boundary				
	82 (ft)	164 (ft)	328 (ft)	656 (ft)	1,640 (ft)
Five-Acre Site					
Construction Thresholds					
Nitrogen Oxides (NO_x)[a]	98	94	101	111	139
Carbon Monoxide (CO)	630	879	1,368	2,514	7,389
Respirable Particulate Matter (PM_{10})	13	41	55	83	166
Fine Particulate Matter ($PM_{2.5}$)	7	10	19	34	104
Operational Thresholds					
Nitrogen Oxides (NO_x)[a]	98	94	101	111	139
Carbon Monoxide (CO)	630	879	1,368	2,514	7,389
Respirable Particulate Matter (PM_{10})	4	10	14	20	40
Fine Particulate Matter ($PM_{2.5}$)	2	3	4	7	21

[a] The localized thresholds listed for NOx in this table take into consideration the gradual conversion of NO to NO_2.The analysis of localized air quality impacts associated with NOx emissions focuses on NO_2 levels as they are associated with adverse health effects.

Source: SCAQMD, 2003.

With regards to NOx emissions, the two principal species of NOx are NO and NO_2, with the vast majority (95 percent) of the NOx emissions being comprised of NO. However, because adverse health effects are associated with NO_2, not NO, the analysis of localized air quality impacts associated with NOx emissions is focused on NO_2 levels. For combustion sources, SCAQMD assumes that the conversion of NO to NO_2 is complete at a distance of 5,000 meters from the source.

CO Hotspot Analysis

Historically, the qualitative CO screening procedure provided in the *Transportation Project-Level Carbon Monoxide Protocol* (the Protocol) were used to determine whether a project poses the potential for a CO hotspot (UCD ITS, 1997). According to the Protocol, projects may worsen air quality if they increase the percentage of vehicles in cold start modes by two percent or more; significantly increase traffic volumes (by five percent or more) over existing volumes; or worsen traffic flow, defined for signalized intersections as increasing average delay at intersections operating at level of service (LOS) E or F or causing an intersection that would operate at LOS D or better without the project, to operate at LOS E or F.

However, CO concentrations have declined dramatically in California due to existing controls and programs, and most areas of the state, including the region in which the Specific Plan area is located, meet the state and federal CO standards. Additionally, CO hotspots have not been seen in the most congested intersections in the region in well over a decade. CO measurements and modeling were important in the early 1980s when CO levels were regularly exceeded throughout California. In more recent years, CO measurements and modeling have not been a priority in most California air districts due to the retirement of older polluting vehicles, fewer emissions

from new vehicles and improvements in fuels (CARB, 2004). The reduction in older polluting vehicles and emissions controls on newer vehicles have increased the number of vehicles that can idle, and the length of time that a number of vehicles can idle, before emissions would trigger a CO impact. This increase in vehicle idling has made the use of the LOS as an indicator obsolete for determining CO impacts. For this reason, several air districts, including the Bay Area Air Quality Management District (BAAQMD) (BAAQMD, 2009), have adopted guidelines that focus on criteria other than LOS and percentage traffic increase, and instead focus on total volumes and consistency with construction management plans.

SCAQMD has not created CO screening criteria. Because CEQA allows the Lead Agency to identify thresholds, and SCAQMD does not have CO screening criteria, BAAQMD CO screening criteria was used to determine if modeling is required, as follows:

1. Consistency with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. Traffic volumes at affected intersections would not be increased to more than 44,000 vehicles per hour.
3. Traffic volumes at affected intersections would not be increased to more than 24,000 vehicles per hour, where vertical and/or horizontal mixing is substantially limited (e.g., tunnels, parking garages, bridge underpass, natural or urban street canyon, below-grade roadway).

For the purposes of this analysis, intersections that exceed the BAAQMD CO screening criteria should conduct dispersion modeling to determine the potential impact from the impacted intersections. Where the screening values are not exceeded, the project would be determined to be less than significant with respect to localized CO impacts.

Toxic Air Contaminant Analysis

Currently, SCAQMD has only developed significance thresholds that apply to single stationary and mobile sources of TAC emissions, such as projects involving truck stops or warehouses (SCAQMD 2003). However, in absence of a threshold specific to assessing health impacts from a freeway, SCAQMD's stationary source TAC thresholds of 10 in one million for cancer risk and 1 for hazard index would serve as the most appropriate thresholds for use in a TAC analysis. Thus, for the purpose of this TAC analysis, the aforementioned SCAQMD significance criteria would be used as a benchmark to assess when project design features to reduce exposure to new sensitive receptors from existing mobile or stationary sources would need to be implemented. If this benchmark is exceeded, SCAQMD suggests that the proposed project should reduce health risks associated with exposure to TAC emissions to the greatest extent possible. These criteria are not applied as impact significance thresholds under CEQA. New sources of emissions should be compared to the SCAQMD's stationary source thresholds of 10 in one million.

3.2.4 Methodology

This analysis focuses on the nature and magnitude of the change in the air quality environment due to implementation of the proposed Specific Plan. Air pollutant emissions associated with the

proposed Specific Plan would result from operations of the future residential, commercial, and mixed use development within the Specific Plan area and from traffic volumes generated by these new uses. Construction activities would also generate air pollutant emissions on individual project sites within the Specific Plan area and on roadways resulting from construction-related traffic. The net increase in emissions generated by these activities and other secondary sources have been estimated and compared to the applicable thresholds of significance recommended by SCAQMD.

AQMP Impacts

The proposed Specific Plan area is under the jurisdiction of the SCAQMD, and the SCAQMD 2012 AQMP is currently the applicable air quality plan for the region. Projects that are consistent with the regional population, housing, and employment forecasts identified by SCAG are considered to be consistent with the AQMP growth projections, since the forecast assumptions by SCAG forms the basis of the land use and transportation control portions of the AQMP. Additionally, because SCAG's regional growth forecasts are based upon, among other things, land uses designated in general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the SCAG's regional forecast projections, and thus also with the AQMP growth projections. However, in the case of the County of Los Angeles unincorporated areas such as Willowbrook, the County's growth differs from SCAG's estimated growth and therefore, use of SCAG's estimated growth is appropriate.

SCAQMD's *CEQA Handbook* suggests an evaluation of the following two consistency criterion to determine whether a project involving a legislative land use action (such as the proposed Specific Plan) would be consistent or in conflict with the AQMP:

1. The project would not generate population and employment growth that would be inconsistent with SCAG's growth forecasts, and
2. The project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion 1 refers to the SCAG's growth forecasts and associated assumptions included in the 2012 AQMP. The future air quality levels projected in the 2012 AQMP are based on SCAG's growth projections, which are based, in part, on the general plans of cities located within the SCAG region. Therefore, projects, uses, and growth that is consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds.

Consistency Criterion 2 refers to the CAAQS. SCAQMD has identified CO as the best indicator pollutant for determining whether air quality violations would occur since it is most directly related to automobile traffic, the emissions of which have been modeled by the SCAQMD to determine future air quality conditions.

Construction Impacts

Short-term construction-generated emissions of criteria air pollutants and ozone precursors associated with the proposed Specific Plan were modeled using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2, as recommended by SCAQMD. CalEEMod was used to determine whether short-term construction-related emissions of criteria air pollutants associated with the proposed Specific Plan would exceed SCAQMD's applicable regional thresholds and whether mitigation would be required. Modeling was based on Plan-specific data, where available. Where Plan-specific information was not available, reasonable assumptions based on other similar Specific Plan projects and default model settings were used to estimate criteria air pollutant and ozone precursor emissions. The timing of construction under the proposed Specific Plan would be dependent on market conditions. It was conservatively assumed that a maximum of 10 percent of the Specific Plan could be under construction in any given year (the project build out is over 20 years). It was also assumed that there could be multiple projects occurring at any given time during any given year, and therefore, construction phases may overlap. Modeling input and output files are provided in Appendix B of this EIR.

In addition, to determine whether or not construction activities associated with the proposed Specific Plan would create significant adverse localized air quality impacts on nearby sensitive receptors, the worst-case daily emissions contribution from the potential development were compared to SCAQMD's localized significance thresholds (LSTs). The LSTs developed by SCAQMD are based on the pounds of emissions per day that can be generated by a project without causing or contributing to adverse localized air quality impacts, and only applies to the following criteria pollutants: CO, NOx, PM_{10}, and $PM_{2.5}$. The analysis of localized air quality impacts focuses only on the on-site activities of a project, and does not include emissions that are generated offsite such as from on-road haul or delivery truck trips (SCAQMD, 2003).

For the purpose of analyzing localized air quality impacts, SCAQMD has developed LSTs for three distinct project site sizes: one-acre, two-acre, and five-acres. The LSTs established for each of the aforementioned site acreages represent the amount of pollutant emissions that would not exceed the most stringent applicable federal or State ambient air quality standards. As the acreage of individual project sites are unknown, the LSTs for construction activities encompassing five acres are to determine whether localized air quality impacts on nearby sensitive receptors would result from the on-site construction emissions.

In conducting the localized air quality analysis, which focuses only on on-site emissions, construction emissions generated from combustion sources (e.g., off-road construction equipment) under a worst-case construction scenario were extracted from the CalEEMod model run outputs. Additionally, to account for the combustion emissions associated with vehicles traveling on-site within active construction sites, vehicles are anticipated to travel approximately 0.2 miles while onsite. Overall, the daily total onsite combustion, mobile, and fugitive dust emissions associated with construction (as well as construction phase overlaps) were combined and evaluated against SCAQMD's LSTs for construction activities encompassing five acres.

Operational Impacts

Long-term (i.e., operational) regional emissions of criteria air pollutants and precursors associated with the proposed Specific Plan, including mobile- and area-source emissions, were also quantified using the CalEEMod computer model. Area-source emissions, which are widely distributed and made of many small emissions sources (e.g., building heating and cooling units, landscaping equipment, consumer products, painting operations, etc.), were modeled according to the size and type of land use proposed. Mass mobile-source emissions were modeled based on the daily vehicle trips that would result from the proposed Specific Plan. Project trip generation rates were available from the Traffic Study prepared for the project by The Mobility Group (Mobility Group, 2016). In addition, as the Specific Plan area is currently occupied by various residential, commercial, and industrial land uses, some of which would remain, some of which would be removed and reconstructed as the same land use, and others that would be removed and constructed as a new or expanded land use as proposed in the Specific Plan.

To determine net emissions increases, changes in land uses that would occur by the proposed Specific Plan were identified. The emissions from existing land uses that would be reduced or removed (either by number of units, square footage or by change in land use) were subtracted from the emissions from the anticipated growth (increase in existing land use types or change in land use). New and renovated structures that are developed with the implementation of the Specific Plan would have a decreased emissions envelope due to new regulatory requirements that was not in place when buildings were originally constructed. The net increase in long-term operational emissions that would be generated by build out of the proposed Specific Plan was then compared with the applicable SCAQMD thresholds for determination of significance.

Aside from regional air quality impacts, localized air quality impacts during operation of the proposed Specific Plan is also analyzed by extracting the onsite operational emissions from the CalEEMod model run for build out of the Specific Plan and evaluating those emissions against SCAQMD's applicable operational LSTs. As with the construction LST analysis, only onsite emissions are used in determining a project's potential to impact local air quality for NOx, CO, PM_{10}, and $PM_{2.5}$. To account for onsite mobile emissions (vehicles traveling through parking lots or parking garages), it was conservatively assumed that a vehicle would travel onsite for 0.2 miles.

3.2.5 Impact Analysis

Air Quality Plan

Impact 3.2-1: The proposed project would conflict with and obstruct implementation of the applicable air quality plan.

Project-Specific

The 2012 AQMP was prepared to reduce high levels of pollutants within the areas under the jurisdiction of SCAQMD, but also to accommodate growth. Projects that are considered to be consistent with the AQMP would not interfere with attainment of air quality standards, because this growth is included in the projections used to formulate the AQMP. Therefore, projects, uses,

and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds.

Projects that are consistent with the projections of employment and population forecasts identified in RTP/SCS are considered consistent with the AQMP growth projections. Therefore, projects that are consistent with the County's General Plan's land use designations are normally considered to be consistent with the RTP/SCS, as the General Plan is normally the basis of the population and employment forecasts in the RTP/SCS, which forms the basis of the land use and transportation control portions of the AQMP. However, in the case of the County of Los Angeles unincorporated areas such as Willowbrook, the County's growth estimated from the General Plan differs from SCAG's estimated growth.

The Specific Plan implements infill development, located in an urbanized area with existing infrastructure, near a transit line. Thus, the Specific Plan would support AQMP objectives to reduce trips, and would aid in the implementation of the AQMP. In addition, the employment generating uses that would be implemented with the Specific Plan would provide new employment opportunities for residents that could reduce regional commute trips.

The Specific Plan would utilize, and make better use of, existing infrastructure, as roadways, drainage, sewer and other infrastructure would accommodate build out of the Specific Plan as described in Section, 3.12, *Utilities and Service Systems*, and would be consistent with the SCAG objective to "*Encourage patterns of urban development and land use that reduce costs in infrastructure construction and make better use of existing facilities.*" The Specific Plan would be consistent with SCAG's objective to reduce vehicle use and promote infill development.

However, as described in Section 3.10, *Population and Housing*, the additional of the residential units and square-footage of non-residential uses at build out of the Specific Plan would generate additional population and employees at build out and full occupancy, which would exceed SCAG's growth projections, and thus would not be consistent with the 2012 AQMP. As a result, the Specific Plan would not comply with Consistency Criterion 1 listed above in the Section 3.2.4, *Methodology*. Therefore, the implementation of the Specific Plan would result in significant impact related to the implementation of the AQMP.

In regards to Consistency Criterion 2, which evaluates the potential of a project to increase the frequency or severity of existing air quality violations, the localized CO hotspot analysis (described below) indicates that the Specific Plan would not result in a localized CO hotspot, and therefore, no significant adverse impacts are anticipated. Therefore, the Specific Plan is consistent with Consistency Criterion 2.

Although the Specific Plan would comply with all rules and regulations as implemented by SCAQMD and CARB, and would conform to the standards and guidelines of the County General Plan, implementation of the Specific Plan would exceed SCAG's growth projections, and thus would not be consistent with the 2012 AQMP, and therefore, the Specific Plan would not comply

with Consistency Criterion 1. Therefore, the implementation of the Specific Plan would result in significant impact related to conflict with or obstruction with an applicable air quality plan.

Cumulative

The geographic area of this cumulative evaluation is the SCAB. Cumulative development consisting of the proposed Specific Plan along with other reasonably foreseeable future projects in the SCAB includes projects that would require amendments to general plans because the proposed growth of a site would exceed the growth allowed in the respective general plan. Because cumulative development would exceed growth in the general plans, the combination of cumulative development would exceed the projections identified in the SCAG RTP/SCS and, therefore, would be in conflict with the AQMP. As a result, cumulative development would result in a significant cumulative impact related to the implementation of the AQMP.

Because the proposed project includes the addition of residential units and non-residential uses that would result in an exceedance of the SCAG growth projections for the project site, the development of the proposed project would not be consistent with the AQMP. Therefore, the project's impact related to the implementation of the AQMP would be cumulatively considerable.

Mitigation

Project-Specific

Implementation of Mitigation Measures AIR-1 through AIR-7 identified below under Impact 3.2-2 is required.

Cumulative

Implementation of Mitigation Measures AIR-1 through AIR-7 identified below under Impact 3.2-2 is required.

Significance Determination

Project-Specific

Significant and Unavoidable Impact. The implementation of Mitigation Measures AIR-1 through AIR-7 would reduce emissions generated during construction and operational activities. However, the reduction of emissions would still result in significant emissions that would conflict with and obstruct the 2012 AQMP.

Cumulative

Significant and Unavoidable Impact. The implementation of Mitigation Measures AIR-1 through AIR-7 would reduce the project's contribution of emissions generated during construction and operational activities; however, the reduction of emissions would still result in significant and the project's contribution to the cumulative conflict and obstruction of the 2012 AQMP would remain cumulatively considerable.

Air Quality Standards/Violations

Impact 3.2-2: The proposed project would violate regional air quality standards during construction activities and contribute substantially to an existing or projected air quality violation.

Project-Specific

Construction

Construction activities would occur intermittently at different sites in the Specific Plan area throughout project buildout. Although the related impacts at any one location would be temporary, construction of individual projects under the proposed Specific Plan could cause adverse effects on local air quality. Construction activities could generate substantial amounts of dust (including PM_{10} and $PM_{2.5}$) primarily from "fugitive" sources (i.e., emissions released through means other than through a stack or tailpipe) and other criteria air pollutants primarily from the operation of heavy equipment construction machinery (primarily diesel-operated) and construction worker automobile trips (primarily gasoline-operated). In addition, secondary impacts from upgrading or constructing new infrastructure upgrade would occur as a result of the implementation of the Specific Plan.

Fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the prevailing weather. Sources of fugitive dust during construction could include vehicle movement over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces. In addition, buildings constructed prior to 1980 often contain asbestos used in insulation, fire retardants, or building materials (floor tile, roofing, etc.) and lead-based paint. As such, demolition activities of such buildings could involve removal and disposal of asbestos and lead-based paint. Airborne asbestos fibers and lead dust pose a serious health threat. The demolition, renovation and removal of asbestos-containing building materials would be subject to the requirements of SCAQMD Rule 1403, which are described in Section 3.2.2 Regulatory Setting.

Construction activities would also result in the emissions of other criteria pollutants from equipment exhaust, construction-related vehicular activity and construction worker automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers. Criteria pollutant emissions of ROG and NO_x from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during project construction.

Mobile source exhaust emissions, primarily NO_X, would result from the use of construction equipment such as graders, backhoes, and cranes. During the finishing phase, paving operations and the application of architectural coatings (i.e., paints) and other building materials would release ROG emissions. The assessment of construction air quality impacts considers each of these potential sources.

It is mandatory for all construction projects in the SCAB to comply with SCAQMD Rule 403 for fugitive dust. Specific Rule 403 control requirements include, but are not limited to, applying

water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas.

Because of the uncertainty of timing and methods of construction activities that would occur under the proposed Specific Plan, a worst-case construction scenario is analyzed here-in. Build out of the Specific Plan is anticipated to occur over 20 years with the location, type, and timing of construction determined by market demand. Construction was assumed to involve the demolition of existing buildings, site grading, building construction, paving and architectural coating. In the absence of detailed construction scheduling information, worst-case assumptions were applied for the analysis of construction emissions. These worst-case daily assumptions for construction activities occurring within the Specific Plan area include the grading of approximately 10 acres, demolition of 20,000 square feet and construction of 105 dwelling units and 172,000 square feet of non-residential use. SCAQMD Rule 402 identifies standards to reduce quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause or have natural tendency to cause injury or damage to business or property. SCAQMD Rule 403 regulates operations, which periodically may cause fugitive dust emissions into the atmosphere. Unmitigated emissions take into account the requirements under SCAQMD Rule 403.

Construction scheduling was based on CalEEMod defaults and typical construction scheduling, and CalEEMod default equipment was used. The emissions estimates are based on the construction development estimated to start in 2018. Due to the changeover in construction fleets as old equipment is replaced with new, it is anticipated that maximum daily emissions would decrease as development occurs in future years.

Maximum daily construction-related emissions are provided in **Table 3.2-6**, which shows the highest daily emission estimate for each construction phase during 2018. As shown, mitigated maximum daily emissions would exceed the SCAQMD daily significance thresholds of ROG, NO_X, and CO. Calculations and modeling input and output is included in Appendix B of this EIR. Therefore, construction impacts related to regional air pollutants of ROG, NO_X, and CO would be significant.

TABLE 3.2-6
REGIONAL CONSTRUCTION EMISSIONS

	Estimated Maximum Daily Emissions (lbs/day)					
Construction Phase	**ROG**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Demolition	13.60	150.49	84.04	0.19	17.27	8.61
Grading	11.05	121.66	54.17	0.10	18.29	11.99
Residential Construction	80.47	372.00	306.82	0.48	25.38	22.15
Commercial Construction	71.38	163.42	132.31	0.21	11.12	9.66
Maximum Daily Emissions	**176.50**	**807.58**	**577.35**	**1.01**	**72.06**	**54.43**
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	**Yes**	**Yes**	**Yes**	No	No	No

NOTE: Construction emissions would be slightly different during the summer and winter seasons. Maximum daily emissions of ROG and NO_X would generally be higher during the winter while emissions of CO and SO_2 would generally be higher in the summer. The maximum emissions for each pollutant over the course of the summer and winter seasons are shown in this table.

SOURCE: See Appendix B of this EIR.

Localized Construction Air Quality Impacts – Criteria Air Pollutants

The maximum daily on-site construction emissions generated by the proposed Specific Plan were evaluated against SCAQMD's LSTs for a five-acre site (i.e., multiple construction activities within close proximity of a sensitive receptor and encompassing a total of five acres) to determine whether the emissions would cause or contribute to adverse localized air quality impacts. The Specific Plan would implement infill mixed use development. Therefore, it is assumed that the nearest sensitive receptor would be adjacent to the project site under construction. Since the mass rate look-up tables provided by SCAQMD only provides LSTs at receptor distances of 82, 164, 328, 656, and 1,640 feet, the LSTs for a receptor distance of 82 feet are used to evaluate the potential localized air quality impacts associated with the Specific Plan's peak day construction emissions. Although the nearest off-site sensitive receptors are located closer than 82 feet of a project construction site within the Specific Plan area, SCAQMD's LST methodology states that projects with boundaries located closer than 82 feet (25 meters) to the nearest receptor should use the LSTs for receptors located at 82 feet.

Table 3.2-7 identifies the maximum daily localized on-site construction emissions that are estimated to occur during the Specific Plan's worst-case construction scenario. As shown in Table 3.2-7, the daily emissions would exceed the applicable SCAQMD LSTs in SRA 12 for NOx, PM_{10}, and $PM_{2.5}$ for five acres of disturbance, when within 82 feet of the same receptor. The emissions would not exceed the applicable SCAQMD LST for CO. As distances between project construction and receptors increase, the allowable daily emissions would increase. However, because it is unknown how many projects would be under construction at the same time and what the distances would be between projects and the nearest receptors, a worst-case construction assessment was assumed with respect to LST impacts which is the same level of construction activities assumed in the regional construction emissions evaluation above. These worst-case assumptions for daily LST construction impacts include the following activities occurring within

82 feet of a sensitive receptor: grading of approximately 10 acres, demolition of 20,000 square feet and construction of 105 dwelling units and 172,000 square feet of non-residential use. As the Specific Plan's worst-case construction emissions would exceed SCAQMD's applicable LST for NOx, PM_{10}, and $PM_{2.5}$, the localized air quality impacts associated with NOx, PM_{10} and $PM_{2.5}$ would be significant.

TABLE 3.2-7
LOCALIZED CONSTRUCTION EMISSIONS

	Estimated Maximum Daily Emissions (lbs/day)			
Construction Year / Phase	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
2018				
Demolition	121.82	75.55	14.86	7.88
Grading	121.45	51.90	17.72	11.84
Building Construction	369.65	295.51	22.58	21.39
Commercial Construction	159.66	127.47	9.95	9.33
Maximum Daily Emissions	**772.58**	**550.43**	**65.11**	**50.44**
Localized Significance Threshold [a]	*98*	*630*	*13*	*7*
Significant Impact?	**Yes**	No	**Yes**	**Yes**

[a] LSTs in SRA 12 for construction disturbance of five acres at a receptor distance of 82 feet (25 meters) from the site boundary.

Source: See Appendix B of this EIR.

Operation

The addition of residential units and square-footage of non-residential uses at build out of the Specific Plan would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, in addition to operational mobile emissions. According to the traffic study prepared for the proposed Specific Plan, and as shown the Table 3.12-6 of Section 3.12 *Transportation and Traffic*, the Project would add 3,139 new AM peak hour trips and 3,832 new PM peak hour trips to the Specific Plan area.

Operational emissions associated with the build out of the proposed Specific Plan were modeled and the estimated regional operations emissions are provided in **Table 3.2-8**. As shown, the proposed Specific Plan would result in long-term regional emissions of criteria air pollutants and ozone precursors that exceed the SCAQMD's applicable thresholds for ROG, NO_X, CO, PM_{10} and $PM_{2.5}$. Therefore, operational impacts related to regional air pollutants of ROG, NO_X, CO, PM_{10} and $PM_{2.5}$ would be significant.

TABLE 3.2-8
REGIONAL OPERATIONAL EMISSIONS

	Estimated Emissions (lbs/day)					
Emissions Source	**ROG**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	1,036.06	77.42	2,013.27	4.73	279.09	279.10
Energy Sources	1.54	13.55	8.26	0.08	1.07	1.07
Mobile Sources	40.26	197.54	509.41	2.16	151.78	42.84
Total Emissions	**1,077.86**	**288.51**	**2,530.95**	**6.98**	**431.95**	**323.01**
Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Significant Impact?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**

NOTE: Operational emissions would be slightly different during the summer and winter seasons. Maximum daily emissions of ROG and NO_X would generally be higher during the winter while emissions of CO and SO_2 would generally be higher in the summer. The maximum emissions for each pollutant over the course of the summer and winter seasons are shown in this table.

SOURCE: See Appendix B of this EIR.

Localized Operational Air Quality Impacts – Criteria Air Pollutants

The maximum daily localized operational emissions generated by the proposed Specific Plan were evaluated against SCAQMD's LSTs for the operation of five acres of development to determine whether the emissions would cause or contribute to adverse localized air quality impacts. A worst-case maximum daily localized on-site emission level within 82 feet of the same sensitive receptor was evaluated. This worst-case assumption at the same sensitive receptor assumed maximum emissions to occur from the operation of 312,000 square feet of development located within Group Location One, MLKMedical (see Figure 2-6 in Section 2, Project Description) and within 82 feet of the same sensitive receptor.

The proposed Specific Plan's worst-case localized operational emissions are shown in **Table 3.2-9**. As shown in Table 3.2-9, the total operational emissions generated locally would not exceed SCAQMD's applicable operational LSTs in SRA 12 for the operation of five acres of development for NOx, CO, PM_{10}, and $PM_{2.5}$, when operational activities are within 82 feet of the same sensitive receptor. Because the Specific Plan's worst-case operational emissions would not exceed SCAQMD's applicable operational LST for NOx, CO, PM_{10}, and $PM_{2.5}$, the localized air quality impacts associated with NOx, CO, PM_{10} and $PM_{2.5}$ would be less than significant.

Localized Operational Air Quality Impacts – CO Hotspots

As discussed in Section 3.12 *Transportation and Traffic*, a total of 65 local intersections were analyzed as part of the traffic study that was prepared for the proposed Specific Plan (The Mobility Group, 2016). As determined in Section 3.2.3 *Thresholds of Significance,* the more conservative localized CO screen threshold for the project is that traffic volumes at affected intersections would not be increased to more than 24,000 vehicles per hour. As shown in Section 3.12, the existing plus project and future with peak hour project conditions for each of the study area intersections would not increase by more than the threshold of 24,000 vehicles per hour. Therefore, the project would not result in localized CO impacts, and the impact would be less than significant.

TABLE 3.2-9
LOCALIZED OPERATIONAL EMISSIONS

	Estimated Emissions (lbs/day)			
Localized Emissions	**NO_X**	**CO**	**PM_{10} [a]**	**$PM_{2.5}$ [a]**
Area	0.01	0.03	0.01	0.01
Energy	5.45	4.57	0.41	0.41
Maximum Localized (On-Site) Emissions	**5.46**	**4.60**	**0.42**	**0.42**
Localized Significance Threshold [b]	*98*	*630*	*4*	*2*
Significant Impact?	No	No	No	No

[a] Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.
[b] LSTs in SRA for five-acres of development operations in SRA 12 at a receptor distance of 82 feet.

SOURCE: See Appendix B of this EIR.

Cumulative

Regional Emissions

The geographic area of the cumulative evaluations of regional emissions is the SCAB.

Construction

Cumulative development, consisting of the proposed Specific Plan along with other reasonably foreseeable future projects in the SCAB as a whole, would generate daily construction emissions. The SCAQMD neither recommends quantified analyses of cumulative construction emissions nor provides methodologies or thresholds of significance to be used to assess cumulative construction impacts. Individual cumulative construction projects that exceed the SCAQMD recommended daily thresholds for an individual project would cause a cumulatively considerable impact. It is reasonable to assume that there are individual projects with the SCAB that exceed the SCAQMD regional construction thresholds. Therefore, cumulative development would result in significant regional construction criteria pollutant emissions.

Because the proposed Specific Plan would exceed the SCAQMD's regional construction thresholds for ROG, NO_X, and CO, the proposed project's contribution to cumulative impacts related to regional ROG, NOx and CO would be cumulatively significant. Because the project would not exceed the SCAQMD's regional construction threshold for SO_2, PM_{10} and $PM_{2.5}$, the project's contribution to cumulative impacts to these criteria pollutants would be less than cumulatively considerable.

Operational

Cumulative development, consisting of the proposed Specific Plan, along with other reasonably foreseeable future projects in the SCAB as a whole, would generate daily operational emissions. The SCAQMD neither recommends quantified analyses of cumulative operational emissions nor provides methodologies or thresholds of significance to be used to assess cumulative operational impacts. Individual projects that exceed the SCAQMD recommended daily thresholds for project-

specific impacts would cause a cumulatively considerable impact. It is reasonable to assume that there are individual projects within the SCAB that exceed the SCAQMD regional operational thresholds. Therefore, cumulative development would result in significant regional operational criteria pollutant emissions.

Because the proposed Specific Plan would exceed the SCAQMD's regional operational thresholds for ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$ the proposed project's contribution to cumulative impacts related to regional operational ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions would be cumulatively considerable. Because the project would not exceed the SCAQMD's regional operational thresholds for SO_2, the project's contribution to cumulative impacts related to regional operational SO_2 emissions would be less than cumulatively considerable.

Localized Emissions

The geographic area of this cumulative evaluation of localized emissions is the South Los Angeles area which is defined as Sensitive Receptor Area 12 by SCAQMD.

Construction

Cumulative development, consisting of the proposed Specific Plan along with other reasonably foreseeable past, present and future projects in the South Los Angeles area, would generate daily localized construction emissions. SCAQMD neither recommends quantified analyses of cumulative localized construction emissions nor provides methodologies or thresholds of significance to be used to assess cumulative localized impacts. Individual projects that exceed the SCAQMD recommended daily LSTs for NOx, CO, PM_{10}, and $PM_{2.5}$ would cause a cumulatively significant impact. It is reasonable to assume that there are individual projects within the South Los Angeles area that exceed the SCAQMD localized construction thresholds. Therefore, cumulative development would result in significant localized operational criteria pollutant emissions.

Because the proposed Specific Plan would exceed the SCAQMD's localized construction thresholds for NO_X, PM_{10} and $PM_{2.5}$, the proposed project's contribution to cumulative impacts related to localized NO_X, PM_{10} and $PM_{2.5}$ emissions would be cumulatively considerable. Because the project would not exceed the SCAQMD's localized construction threshold for CO, the project's contribution to cumulative CO impacts would be less than cumulatively considerable.

Operational

Cumulative development, consisting of the proposed Specific Plan along with other reasonably foreseeable future projects in the South Los Angeles area, would generate daily localized operational emissions. SCAQMD neither recommends quantified analyses of cumulative operational emissions nor provides methodologies or thresholds of significance to be used to assess cumulative localized operational impacts. Individual projects that exceed the SCAQMD recommended daily LSTs for NOx, CO, PM_{10}, and $PM_{2.5}$ would cause a cumulatively significant impact. It is reasonable to assume that there are individual projects within the South Los Angeles area that exceed the SCAQMD localized operational thresholds. Therefore, cumulative

development would result in cumulatively significant localized operational impacts related to criteria pollutants.

Because the proposed Specific Plan would not exceed the SCAQMD's localized operational thresholds for NO_X, CO, PM_{10} and $PM_{2.5}$, the proposed project's contribution to cumulative operational impacts related to localized NO_X, CO, PM_{10} and $PM_{2.5}$ emissions would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

Mitigation Measure AIR-1: The County shall ensure that project approvals within the Specific Plan area require that all onsite construction vehicles and equipment with horsepower greater than 50 shall meet, at a minimum, USEPA Tier IV interim engine certification requirements. If Tier IV interim equipment is not available, the contractor may apply other available technologies available for construction equipment such that it would achieve a comparable reduction in NOx and PM emissions comparable to that of Tier IV construction equipment. Where alternatives to USEPA Tier IV are utilized, the contractor shall be required to show evidence to the County that these alternative technologies would achieve comparable emissions reductions. Certifications or alternative reduction strategies shall be required prior to receiving a construction permit. In addition, contractors shall limit construction equipment idling time to 5 minutes, maintain construction equipment in good operating condition, use construction equipment that uses low-polluting fuels to the extent available and feasible (i.e. compressed natural gas, liquid petroleum gas, and unleaded gasoline).

Mitigation Measure AIR-2: The County shall ensure that project approvals within the Specific Plan area require that all active construction areas shall be watered at least four times daily to reduce fugitive dust emissions from grading, excavation, and other ground preparation. Watering shall be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water shall be used whenever possible.

Mitigation Measure AIR-3 Reduction or elimination of fireplaces within residential development such that there are no fireplaces within 95 percent of all new/redeveloped single family residential development or 100 percent of all multifamily residential development (new and redeveloped) within the Specific Plan area. Compliance would be ensured through County review prior to the issuance of a building permit.

Mitigation Measure AIR-4 All commercial development will use low-VOC architectural coating such that interior coatings do not exceed 10 grams per liter (g/l) of VOC content and exterior coatings do not exceed 100 g/l. This measure is to be made a condition of approval for continued upkeep of the property.

Mitigation Measure AIR-5 All commercial developments will use low-VOC cleaning supplies. This measure is to be made a condition of approval for continued upkeep of the property.

Mitigation Measure AIR-6 All new development shall have electrical outlets associated with the outside of the buildings such that all landscaping equipment could be electrically operated.

Mitigation Measure AIR-7 All new development shall comply with the Title 24 requirements in effect at the time of construction and shall, at a minimum, exceed 2013 Title 24 energy efficiency standards by 15 percent.

Cumulative

Implementation of Mitigation Measure AIR-1 through **AIR-7** is required to reduce cumulative regional and localized emissions during construction and operational activities.

Significance Determination

Project-Specific

Significant and Unavoidable Impact. With the implementation of Mitigation Measures AIR-1 and AIR-2, construction emission impacts from implementation of the Specific Plan would remain significant. The implementation of Mitigation Measures AIR-3 through AIR-7 would reduce air quality operational emissions; however, operational emissions would still exceed daily thresholds. Therefore, project construction and operational impacts related to violation of a regional air quality standard or contribution to an existing or projected air quality violation would be significant and unavoidable.

Cumulative

Significant and Unavoidable Impact. Implementation of Mitigation Measures AIR-1 and AIR-2 would reduce regional and localized construction emissions from development projects that would occur from implementation of the proposed Specific Plan; however, impacts after mitigation would remain significant, and therefore the project would remain cumulatively considerable.

Implementation of Mitigation Measures AIR-2 through AIR-7 would reduce regional and localized operation emissions from development projects that would occur from implementation of the proposed Specific Plan; however, impacts after mitigation would remain significant for regional operational emissions, and therefore, the project would remain cumulatively considerable.

Criteria Pollutant

Impact 3.2-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Project-Specific

This impact evaluation relates to the potential cumulative effect of increasing criteria pollutants. This evaluation is provided below.

Cumulative

The geographic area of the cumulative evaluation of criteria pollutants is the SCAB. A cumulative impact arises when two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant impacts, meaning that the project's incremental effects must be viewed in connection with the effects of past, current, and probable future projects.

As the SCAB is currently in non-attainment for ozone, PM_{10}, and $PM_{2.5}$, cumulative development consisting of the proposed Specific Plan along with other reasonably foreseeable future projects in the Basin as a whole could violate an air quality standard or contribute to an existing or projected air quality violation. This is considered to be a significant cumulative impact.

With respect to determining the significance of the proposed Specific Plan's contribution to regional emissions, the SCAQMD neither recommends quantified analyses of cumulative emissions nor provides methodologies or thresholds of significance to be used to assess cumulative impacts. According to the SCAQMD, individual projects that exceed the SCAQMD recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the SCAB is in non-attainment under an applicable federal or state ambient air quality standard. As discussed previously, the worst-case daily emissions associated with the proposed Specific Plan would exceed the SCAQMD's thresholds for ROG, NO_X, and CO. Therefore, because project pollutants that are currently in federal non-attainment of NAAQS (i.e., ozone, PM_{10}, and $PM_{2.5}$), would increase the amount of non-attainment pollutants, the project's contribution to cumulative impacts on non-attainment criteria pollutants would be significant.

Because the proposed Specific Plan would exceed the quantitative thresholds of ozone precursors (ROG and NOx), the proposed project's contribution to cumulative impacts to nonattainment criteria pollutants (ROG and NOx) would be cumulatively considerable. Because the project would not exceed the quantitative thresholds of the CO nonattainment criteria pollutant, the project's contribution to cumulative impacts to the CO criteria pollutant would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

The analysis above related to the cumulative evaluation, and therefore, the mitigation measures are discussed below under cumulative.

Cumulative

Implementation of Mitigation Measures AIR-1 through AIR-7 is required.

Significance Determination

Project-Specific

This determination relates to the cumulative determination as discussed below under cumulative.

Cumulative

Significant and Unavoidable Impact. Implementation of Mitigation Measures AIR-1 and AIR-2 would reduce construction emissions from development projects that would occur from implementation of the proposed Specific Plan; however, impacts after mitigation would remain significant, and therefore would be cumulatively considerable. As the Specific Plan would result in a significant impact with respect to SCAQMD thresholds during operation, impacts would also be cumulatively considerable.

Sensitive Receptors

Impact 3.2-4: The project would expose sensitive receptors to substantial pollutant concentrations, including increased levels of TACs.

Project-Specific

In an urbanized environment, air pollutant concentrations are usually most prominent along busy streets and at busy intersections, where automotive exhausts can build up while vehicles stop and idle or slow down to approach and proceed through or make turning movements. The primary source of potential air toxics associated with operation of the proposed Specific Plan include diesel particulates from construction equipment during construction, and upon completion of construction, diesel particulates from delivery trucks (e.g., truck traffic on local streets and onsite truck idling) to the non-residential uses proposed in the Specific Plan.

Construction activities would take place intermittently as various development projects occur within the Specific Plan area throughout the 20-year build out period. Because development projects would be short-term and scattered throughout the Specific Plan area, sensitive receptors would be exposed for short-term limited time during nearby construction activities, but would not be exposed to construction emissions over the entire construction period. Health risk is evaluated assuming a constant exposure to emissions over a 70-year lifetime, 24 hours a day, seven days a week. As the exposure to receptors would be short-term and limited during infill development activities, diesel particular matter (DPM) impacts from construction activities would be considered less than significant.

Implementation of the proposed Specific Plan would result in new land uses in the Specific Plan area consisting of residential and non-residential employment generating uses that may utilize solvents and cleaners, and generate motor vehicle emissions, which are not anticipated to emit TAC emissions in appreciable quantities. In addition, any non-residential use that would be a stationary source of TAC emissions would be subject to the rules and regulations of SCAQMD. As discussed previously, TACs are regulated at the federal, state, and local levels. At the local level, SCAQMD Regulation XIV (Toxics and Other Non-Criteria Pollutants), and in particular

Rule 1401 (New Source Review), would require that all sources that possess the potential to emit TACs be required to obtain permits from SCAQMD. Permits are granted to these operations if they are constructed and operated in accordance with applicable regulations, including new source review standards and air toxics control measures. This impact would be less than significant.

ARB's Handbook includes the recommendation to avoid the siting of new sensitive land uses (e.g., residences, schools) within 500 feet of freeways, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day. In addition, the County of Los Angeles Department of Public Health includes a recommendation within the *Air Quality Recommendations for Local Jurisdictions* to include a buffer of at least 500 feet between freeways and sensitive land uses such as residences. The implementation of the proposed Specific Plan would allow the development of residential uses to be located within 500 feet of a freeway. Therefore, the location of the proposed residential uses would not be in concurrence with ARB or County of Los Angeles Department of Health recommendations. Based on the criteria in the ARB guidance document, it can be ascertained that the proposed Specific Plan would have the potential to expose sensitive receptors to TACs from mobile sources to an extent that health risks could result. This impact would be a significant impact.

New sensitive receptors would be exposed to TAC emissions from Metro trains. Sensitive receptors introduced by the proposed Specific Plan would primarily include residential uses. The Willowbrook/Rosa Parks Station is located at the intersection of the I-105 and South Wilmington Avenue within the Specific Plan area. The station is a multimodal transit facility that serves both the Metro Blue and Green light rail lines, along with six Metro bus routes, and local buses and shuttles that connect with the wider Metro rail and bus network throughout the region.

Based on Metro train timetables, Metro currently operates passenger trains daily along the Metro Blue Line. Northbound trains pass the Willowbrook/Rosa Parks Station from 4:14 AM to 12:15 AM and southbound trains pass the Willowbrook/Rosa Parks Station from 4:59 AM to 1:55 AM approximately every 15 minutes (approximately 260 daily events). Additionally, Union Pacific uses an adjacent rail line that has an average of two to six freight trains traversing the project area daily. The approximate daily train trips are only present intermittently and for a brief time. As such, the train trips are not a constant local source of emissions.

ARB's Air Quality and Land Use Handbook provides general guidance that can be applied to projects proposed in the vicinity of line source emissions, such as freeways, train tracks, etc. The report, based on traffic-related studies, states that the additional non-cancer health risk attributable to proximity, was strongest within 300 feet. Therefore, impacts from Metro trains would be greatest within 300 feet of the tracks, and sensitive receptors within 300 feet from the tracks could potentially be exposed to levels of DPM emissions that would be a significant impact. The proposed project would include the development of new housing units within 300 feet from the existing tracks. Therefore, implementation of the proposed project could expose new sensitive receptors to significant TAC impacts.

Cumulative

Implementation of the proposed Specific Plan would result in new sensitive land uses in the Specific Plan area, which would potentially result in siting sensitive receptors within 300 feet from the Metro rail tracks, and potentially would be exposed to DPM emission levels from diesel-fueled Metro trains that would result in a significant impact.

Cumulative development, consisting of the proposed Specific Plan along with other reasonably foreseeable future projects in the Specific Plan area, would site new sensitive land uses within 500 feet of a freeway and within 300 feet from the Metro rail tracks. Exposure of these new sensitive receptors to DPM emission levels from diesel-fueled trucks on freeways and along Metro train routes would result in a cumulative significant impact.

Because the proposed project includes the placement of residential uses within 500 feet of a freeway and within 300 feet from the Metro rail tracks, the proposed project would contribute to potential significant cumulative impacts that would be cumulatively considerable.

Mitigation Measures

Project-Specific

Mitigation Measure AIR-8: The County shall ensure that project approvals within the Specific Plan area require that any sensitive uses proposed to be located within 300 feet of the Metro tracks and within 500 feet of freeways shall be equipped with a filtered air supply system to maintain units under positive pressure when windows are closed. The ventilation system, whether a central HVAC (heating, ventilation and air conditioning) or a unit-by-unit filtration system, shall include high-efficiency filters meeting minimum efficiency reporting value (MERV) 13, per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 52.2 (equivalent to approximately ASHRAE Standard 52.1 Dust Spot 85%). The efficiency rating of the filtration system shall be determined based on a health risk assessment conducted for the proposed development, such that cancer and non-cancer risks are reduced to a 10 in one million increase in cancer risk, and less than 1 for non-cancer risk, unless thresholds are superseded by more current SCAQMD threshold. Air intake systems for HVAC shall be placed based on exposure modeling to minimize roadway air pollution sources. The ventilation system shall be designed by an engineer certified by ASHRAE, who shall provide a written report documenting that the system offers the best available technology to minimize outdoor to indoor transmission of air pollution. Disclosure to the occupants (buyers and renters) shall be required regarding the proximity of Metro tracks (within a 300-foot radius) and freeways (within a 500-foot radius), the occurrence of diesel emissions form Metro trains and freeways heavy truck traffic), and the potential increased cancer and non-cancer risks associated with the development location.

Cumulative

Implementation of Mitigation Measure AIR-8 is required.

Significance Determination

Project-Specific

Less than significant impact. After the implementation of Mitigation Measure AIR-8, TAC emissions that would be exposed to sensitive uses would be reduced to less than significant.

Cumulative

Less than significant impact. After the implementation of Mitigation Measure AIR-8, the proposed project's contribution to cumulatively exposing sensitive uses to TAC emissions would be reduce to less than cumulatively considerable.

3.2.6 References

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3.3 Cultural Resources

Introduction

This section addresses the impacts of the project on cultural and paleontological resources. This section describes the environmental setting for cultural and paleontological resources, the applicable regulatory framework, impacts of the proposed project, and mitigation measures to reduce significant impacts.

Cultural resources are defined as prehistoric and historic sites, structures, districts, and landscapes, or any other physical evidence associated with human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason. Under the California Environmental Quality Act (CEQA), paleontological resources, although not associated with past human activity, are grouped within cultural resources. For analysis purposes, cultural resources may be categorized into four groups: archaeological resources, historic resources (including architectural/engineering resources), Native American resources (although these may also be considered subsets of archaeological or historic resources), and paleontological resources.

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric-era (before European contact) or historic-era (after European contact). The majority of such places in California are associated with either Native American or Euro-American occupation of the area. The most frequently encountered prehistoric or historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and rock art sites. Historic-era archeological sites may include foundations or features such as privies, corrals, and trash dumps.

Historic resources include standing structures, infrastructure, and landscapes of historic or aesthetic significance that are generally 50 years of age or older. In California, historic resources considered for protection tend to focus on architectural sites dating from the Spanish Period (1529-1822) through World War II (WWII) and Post War era facilities. Some resources, however, may have achieved significance within the past 50 years if they meet the criteria for exceptional significance. Historic resources are often associated with archaeological deposits of the same age.

Tribal cultural resources can include archaeological resources, rock art, and the prominent topographical areas, features, habitats, plants, animals, and minerals that contemporary Native Americans value and consider essential for the preservation of their traditional values. These locations are sometimes difficult to define and traditional culture often prohibits Native Americans from sharing these locations with the public.

Paleontology is a branch of geology that studies the life forms of the past, especially prehistoric life forms, through the study of plant and animal fossils. Paleontological resources represent a

limited, non-renewable, and impact-sensitive scientific and educational resource. As defined in this section, paleontological resources are the fossilized remains or traces of multi-cellular invertebrate and vertebrate animals and multi-cellular plants, including their imprints from a previous geologic period. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) where they were originally buried. Paleontological resources include not only the actual fossil remains, but also the collecting localities, and the geologic formations containing those localities.

3.3.1 Environmental Setting

Geologic Setting

The Specific Plan area is located in the southern part of the Transverse Ranges Geomorphic Province in the Los Angeles Basin (Basin), which is about 50 miles long and 20 miles wide. The Basin is bounded on the north by the Santa Monica Mountains and the Elysian, Repetto, and Puente Hills and on the east and southeast by the Santa Ana Mountains and San Joaquin Hills. The Basin's low land surface slopes gently south or seaward towards the Pacific Ocean. The Specific Plan area is underlain more than 1,000 feet of alluvial sediments eroded from the Santa Monica Mountains, and deposited since the Pliocene (Yerkes et al., 1971). Near surface underlying the Specific Plan area date to the Pleistocene to Holocene (Saucedo et al., 2016). Beneath the alluvial deposits are marine sediments deposited during a time when a shallow sea covered much of southern California (County of Los Angeles, 2010). The ground surface of the Specific Plan area is generally flat portion of alluvial fan, sloping from 95 feet above mean sea level (amsl) in the northwest to 82 feet amsl in southeast.

A review of six borehole logs within or near the Specific Plan area (CGS, 2017) reveals the area is underlain by a series of fine-grained (i.e., silt, clay, fine sand) deposits to depth of more than 60 feet below ground surface. These sediments are the result of sheet wash and overbank flooding from current and former channels of the Los Angeles River to the east, Compton Creek to the west, and other streams. Early topographic maps depict a meandering, intermittent stream bisecting the Specific Plan area from north to south, and just east of Willowbook Avenue. Historically, portions of Willowbrook consisted of marshy ground, particularly in areas along Compton Creek and former courses of the Los Angeles River (CDOC, 1998). Soils within the Specific Plan area consist of soil complexes (Urban land-Hueneme, drained-San Emigdo, and Urban land-Biscailuz-Hueneme, drained) characterized by multiple parent soil horizons (C-horizons) with loamy textures (NRCS, 2017), consistent with a long history of repeated alluvial deposition.

Today, the Specific Plan area is urban and developed, with 80 to 90 percent of the ground surface classified as impervious.

Paleontological Setting

Surface deposits within the project site consist of younger Quaternary Alluvium, primarily derived from fluvial deposits from the floodplain of the Los Angeles River that currently flows in a concrete channel about 3 miles east of the project site. Alluvium in the project site is also

derived from fluvial deposits from Compton Creek that currently flows about 0.35-mile west of the project site. Typically, the younger Quaternary deposits do not contain significant vertebrate fossils, at least in the upper most layers. However, Quaternary deposits found at varying deeper depths, as shallow as 5 feet in depth, could contain significant fossil vertebrate remains (McLeod, 2017).

3.3.2 Cultural Setting

Prehistoric Setting

The chronology of southern California is typically divided into three general time periods: the Early Holocene (11,000 to 7,600 Before Present [B.P.]), the Middle Holocene (7,600 to 3,600 B.P.), and the Late Holocene (3,600 B.P. to A.D. 1769). Within this timeframe, the archaeology of southern California is generally described in terms of cultural "complexes." A complex is a specific archaeological manifestation of a general mode of life, characterized archaeologically by technology, particular artifacts, economic systems, trade, burial practices, and other aspects of culture.

While it is not certain when humans first came to California, their presence in southern California by about 11,000 B.P. has been well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 11,100 and 10,950 B.P. (Byrd and Raab 2007). On the mainland, radiocarbon evidence confirms occupation of the Orange County and San Diego County coast by about 9,000 B.P. During the Early Holocene (11,000 to 7,600 B.P.), the climate of southern California became warmer and more arid and the human population, residing mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources (Byrd and Raab 2007).

The primary Early Holocene cultural complex in southern California was the San Dieguito Complex, which occurred between approximately 10,000 and 8,000 B.P. The people of the San Dieguito Complex inhabited the chaparral zones of southwestern California, exploiting the plant and animal resources of these ecological zones (Warren 1984). Leaf-shaped and large-stemmed projectile points, scraping tools, and crescentics are typical of San Dieguito Complex material culture.

During the Middle Holocene (7,600 to 3,600 B.P.), there is evidence for the processing of acorns for food and a shift toward a more generalized economy. Around 7,000 B.P., Millingstone cultures appeared, characterized by the collection and processing of plant foods, particularly acorns, and the hunting of a wider variety of game animals (Byrd and Raab 2007; Wallace 1955).

During the Late Holocene (3,600 B.P. to A.D. 1769), native populations of southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps. Evidence indicates that the overexploitation of larger, high-ranked food resources may have led to a shift in subsistence, towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants (Byrd and Raab 2007). Around 1,000 B.P. there was an episode of sustained drought, known as the Medieval Climactic

Anomaly. While this climatic event did not appear to reduce the human population, it did lead to a change in subsistence strategies in order to deal with the substantial stress on resources. Although the intensity of trade had already been increasing, it now reached its zenith, with asphaltum (tar), seashells, and steatite being traded from southern California to the Great Basin. Major technological changes appeared as well, particularly with the advent of the bow and arrow, which largely replaced the use of the dart and atlatl. Small projectile points, ceramics, including Tizon brownware pottery, and obsidian from Obsidian Butte (Imperial County), are all representative artifacts of the Late Holocene.

Ethnographic Background

The project site is located within the territory of the native population known as the Gabrielino Prior to European colonization, 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 the islands of San Clemente, San Nicolas, and Santa Catalina (Bean and Smith 1978). The Gabrielino 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. The Gabrielino are estimated to have had a population numbering around 5,000 in the pre-contact period (Kroeber 1925). Houses were made of tule mats on a framework of poles (Bean and Smith 1978). 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 Gabrielino held some practices in common with other groups in southern California, such as the use of jimsonweed in ceremonies as did the Luiseño and Juaneño, but details of the practices and the nature of cultural interaction between the Gabrielino and other groups in southern California are unknown. Maps produced by early explorers indicate the existence of at least 40 Gabrielino villages in the region, but as many as 100 may have existed prior to contact with Europeans (Bean and Smith 1978; McCawley 1996).

Historic-Period Setting

Spanish Period (A.D. 1542–1821)

Although Spanish explorers made brief visits the region in 1542 and 1602, sustained contact with Europeans did not commence until the onset of the Spanish Period. In 1769 Gaspar de Portolá led an expedition from San Diego, passing through the Los Angeles Basin and the San Fernando Valley, on its way to the San Francisco Bay (McCawley, 1996). Father Juan Crespi, who accompanied the 1769 expedition, noted the suitability of the Los Angeles area for supporting a large settlement. This was followed in 1776 by the expedition of Father Francisco Garcés (Johnson and Earle, 1990).

In the late 18th century, the Spanish began establishing missions in California and forcibly relocating and converting native peoples. Mission San Gabriel Arcángel was founded on September 8, 1771 and Mission San Fernando Rey de España on September 8, 1797. By the early 1800s, the majority of the surviving Gabrielino-Tongva population had entered the mission system, either at San Gabriel or San Fernando. Mission life offered some degree of security in a

time when traditional trade and political alliances were failing and epidemics and subsistence instabilities were increasing (Jackson 1999). This lifestyle change also brought with it significant negative consequences for Gabrielino-Tongva health and cultural integrity.

On September 4, 1781, El Pueblo de la Reina de los Angeles was established not far from the site where Portolá and his men camped during their 1769 excursion, with a land grant of 28 acres issued to California Governor Felipe de Neve in 1781 (Gumprecht 2001). The pueblo was first established in response to the increasing agricultural needs of Spanish missions and presidios in Alta California. The original pueblo consisted of a central square surrounded by twelve houses and a series of agricultural fields. Thirty-six fields occupied 250 acres between the town and the river to the east (Gumprecht 2001).

By 1786, the flourishing pueblo attained self-sufficiency and funding by the Spanish government ceased. Fed by a steady supply of water and an expanding irrigation system, agriculture and ranching grew, and by the early 1800s the pueblo produced surplus wheat, corn, barley, and beans for export. A large number of livestock, including cattle and sheep, grazed in the surrounding lands (Gumprecht 2001).

Mexican Period (A.D. 1821–1848)

After Mexico gained its independence from Spain in 1821, Los Angeles became the capital of the California territory in 1835 (Gumprecht 2001). Mexico continued to promote settlement of California with the issuance of land grants. In 1833, Mexico began the process of secularizing the missions, reclaiming the majority of mission lands and redistributing them as land grants. According to the terms of the Secularization Law of 1833 and Regulations of 1834, at least a portion of the lands would be returned to the Native populations, but this did not always occur (Milliken et al. 2009).

Many ranchos continued to be used for cattle grazing by settlers during the Mexican Period. Hides and tallow from cattle became a major export for Californios (native Hispanic Californians), many of whom became wealthy and prominent members of society. The Californios led generally easy lives, leaving the hard work to vaqueros (Hispanic cowhands) and Indian laborers (Pitt 1994; Starr 2007).

American Period (A.D. 1848–Present)

Mexico ceded California to the United States as part of the Treaty of Guadalupe Hildalgo in 1848. California officially became one of the United States in 1850. While the treaty recognized right of Mexican citizens to retain ownership of land granted to them by Spanish or Mexican authorities, the claimant was required to prove their right to the land before a patent was given. The process was lengthy and generally resulted in the claimant losing at least a portion of their land to attorney's fees and other costs associated with proving ownership (Starr, 2007).

When the discovery of gold in Northern California was announced in 1848, a huge influx of people from other parts of North America flooded into California and the population of Los Angeles tripled between 1850 and 1860. The increased population provided an additional outlet

for the Californios' cattle. As demand increased, the price of beef skyrocketed and Californios reaped the benefits. However, a devastating flood in 1861, followed by droughts in 1862 and 1864, led to a rapid decline of the cattle industry; over 70 percent of cattle perished during these droughts (McWilliams, 1946; Dinkelspiel, 2008). These natural disasters, coupled with the burden of proving ownership, caused many Californios to lose their lands during this period. Former ranchos were subsequently subdivided and sold for agriculture and residential settlement (Gumprecht, 2001; McWilliams, 1946).

Los Angeles was connected to the transcontinental railroad via San Francisco on September 5, 1876, and the population again exploded. The city would experience its greatest growth in the 1880s when two more direct rail connections to the East Coast were constructed. The Southern Pacific completed its second transcontinental railway, the Sunset Route from Los Angeles to New Orleans, in 1883 (Orsi, 2005). In 1885, the Santa Fe Railroad completed a competing transcontinental railway to San Diego, with connecting service to Los Angeles (Mullaly and Petty, 2002). The resulting fare wars led to an unprecedented real estate boom. Despite a subsequent collapse of the real estate market, the population of Los Angeles increased 350 percent from 1880 to 1890 (Dinkelspiel, 2008). Los Angeles continued on its upward trajectory in the first few decades of the 20th century with the rise of tourism, automobile travel, and the movie industry (McWilliams 1946).

Willowbrook History

The project site was a part of the Rancho Tajauta land grant grated to Anastacio Abila in 1843. The Rancho Tajauta covered approximately 4,500 acres. In the late 1800s, Willowbrook was an agricultural site where residents grew fruits and vegetables, ran hogs, and raised chickens. Prior to agricultural and suburban development, the natural setting consisted of natural springs that watered the area. Willowbrook transitioned from being a rural town to suburban community due to increased commercial and residential development in the early 1900s up until the 1980s (County of Los Angeles Public Library, 2016).

The development of the Martin Luther King, Jr. Medical Center Campus between 1966 and 1971 was a direct result of the County of Los Angeles Board of Supervisor's approval of recommendations of the McCone Commission to respond to the civil unrest that had occurred in the Watts-Willowbrook area in 1965. In July 1971, Martin Luther King Jr. General Hospital and Charles R. Drew Postgraduate Medical School entered into a contract to provide health care and education services. In addition to the promise of increased employment and educational opportunities, it was hoped that the project would positively impact the wider community and generate local investment. Approximately one year later, on March 27, 1972, the new hospital accepted its first patient. Over the next five months, the hospital treated 42,618 outpatients, prompting County Supervisor Kenneth Hahn to note, "Building the hospital fulfilled the No. 1 health recommendation of the McCone Commission which investigated the Watts riot of 1965." In 2005, the hospital's Level 1 trauma center was closed with other hospital facilities and departments following suit. Since 2007, the hospital has functioned as a Multi-Service Ambulatory Care Center with clinics for urgent care and outpatient visits. In 2009, the County of Los Angeles Board of Supervisors approved the rehabilitation of the Inpatient Tower (constructed

in 1993) to house a 120-bed inpatient facility, and state and county officials announced a new agreement that would reopen the hospital (County of Los Angeles, 2010). The hospital reopened in the summer of 2015.

In 1990, the Willowbrook/Rosa Parks Los Angeles County Metro Rail station was opened. The station is along the Blue Line and the Green Line. The Blue Line is located on the lower platform, and the Green Line is located on the upper platform. The two levels are connected by stairs/escalators/elevators via a mezzanine. The Green Line provides westbound access towards Redondo Beach and eastbound access toward Norwalk. The Blue Line provides southbound access toward Downtown Long Beach and northbound access toward 7th Street/Metro Center.

Existing Cultural Resources

Cultural Resources Technical Report: Martin Luther King, Jr. Medical Center Campus Redevelopment Project

A Cultural Resources Technical Report (Sapphos Environmental, Inc., 2010) was prepared as part of the Martin Luther King, Jr. Medical Center Campus Redevelopment Project. An intensive level historic resources survey of the Martin Luther King, Jr. Medical Center Campus was completed in support of the Martin Luther King, Jr. Medical Center Campus Redevelopment Project. A total of 21 buildings that occupy the proposed project site were evaluated as potential historical resources as defined by CEQA. Four buildings, of the total of 21 buildings, appear to meet the criteria for listing in the NRHP and CRHR as contributors to a potential Martin Luther King, Jr. Medical Center Campus Historic District (California Historical Resources Code [CHR] 3D): (Building 5) Augustus F. Hawkins Comprehensive Medical Health Center; (Building 7) Multi-Service Ambulatory Care Center (MACC); (Building 14) Interns and Physicians Building; and (Building 18) Dr. H. Claude Hudson Auditorium. Contributing features to the potential historic district would also include seven appurtenant elements. The remaining 17 buildings and structures do not contribute to the historic district and are not considered to be historical resources.

SCCIC Records Search

A records search for the project site was conducted on July 16, 2015, at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton. The records search included a review of all recorded resources, including archaeological sites and built environment resources, within a half-mile radius of the project site, as well as a review of cultural resource reports on file.

The records search indicated that 35 cultural resources studies have been conducted within a half-mile radius of the project site. Of these 35 studies, 10 studies included a pedestrian survey of portions of the project area, and one included archival research of a portion of the project area (**Table 3.3-1**). A complete list of the 35 studies located within 1/2-mile of the project area is located in Appendix C.

TABLE 3.3-1
PREVIOUS CULTURAL RESOURCES INVESTIGATIONS INCLUDING THE SPECIFIC PLAN AREA

Author	SCCIC # (LA-)	Title	Year
Rosen, Martin D.	00078	*Evaluation of the Archaeological Resources and Potential Impact of the Proposed Construction of Route 105 Freeway From El Segundo to Norwalk*	1975
Maki, Mary K.	03202	*A Phase I Cultural Resources Survey[1] of 1 Acre at 11742-58 Bandera Ave., 11743 Wilmington Ave., and 1865 E. 118th Street, Los Angeles County, California*	1995
Maki, Mary K.	03738	*Negative Phase 1 Archaeological Survey Willowbrook Crp Los Angeles County*	1997
Maki, Mary K.	04145	*Negative Phase I Archeological Survey and Impact Assessment of 0.75 Acre for the Willowbrook Infill Housing Project/No. G89203-98, Willowbrook, Los Angeles County, California*	1998
Compass Rose Archaeological, Inc.	05570	*Negative Archaeological Survey Report: at 2115 E. Imperial Highway, Los Angeles*	2000
Maki, Mary K.	05573	*Negative Phase I Archaeological Survey and Impact Assessment of Approximately 0.6 Acre for the Willowbrook Community Redevelopment Project 1631, 1635, 1641, 1651 East 17th Street Willowbrook, Los Angeles County, California*	2000
Maki, Mary K.	05944	*Los Angeles Eye Institute, Cdc Project No. 62be17c-01*	2002
McKenna et al.	05958	*Nextel Site CA-7504*	2002
Maki, Mary K.	06226	*CDC-Oasis Eye Clinic in Willowbrook, Los Angeles County, California*	2002
EarthTouch, Inc.	07044	*MLK Medical/CA-7504a Communications Facility 11730 Holmes Ave., Los Angeles, CA.*	2004
CRM Tech	12763	*Historic Property Survey Report; undertaking to improve pedestrian and vehicular traffic access near the intersection of Wilmington Avenue and 119th /120th Streets*	2014

1. A Phase I Cultural Resources Survey/Study/Impact Assessment assesses the potential for archaeological, historical, and paleontological resources in the project site. It includes archival records search and literature reviews, search of Sacred Lands File, review of historic maps and aerials, review of geologic maps, field survey, and preparation of a technical report summarizing the methods and results of the study. A Negative Phase I Cultural Resources Survey/Study concludes no resources were observed during the project study.

The records search indicated that a total of nine cultural resources have been previously recorded within the ½-mile record search study area surrounding the Specific Plan area (**Table 3.3-2**). Of the nine resources, two (19-187085 and LAN-19-187545) are located within the project area. Outside the project area are three prehistoric archaeological sites (19-000385, 19-002757, and 19-002792), five historic resources (19-002848, 19-174983, 19-174984, 19-186641, 19-187545) and one resource (19-187085) that is a multi-component site.

TABLE 3.3-2
CULTURAL RESOURCES WITHIN ½-MILE OF THE SPECIFIC PLAN AREA

P-Number (P-19-)	Other Designation	Description	Date Recorded
000385	-	Two prehistoric-age burials	1969
002757	AE-AC-2	One prehistoric-age burial	1999
002792	AE-AC-2002	One prehistoric-age burial	2000
002848	AE-AC-2018H	Historic-age refuse deposit	2000
174983	Ritter Elementary School	Ritter Elementary School constructed in 1924. Determined eligible for the National Register of Historic Places. Listed on the California register of historic places.	1994
174984	House for Cora Springer	Single-family property constructed in 1910. Not eligible for listing on the National Register of Historic Places	1994
186641	Lynwood Water Tower	Elevated water tank constructed in 1955. Not eligible for listing on the National Register of Historic Places	2001
The Mojave Road	The Mojave Road	Mohave Indian trail (prehistoric-age) that was used by the federal government as a supply and mail route, a freight and emigrant wagon route, and a recreational trail. California Registered Historical Landmark # 963. This road was generally along the alignment of the existing railroad.	1985
187545	-	A single-story building originally constructed as a church in 1913. A second one-story building constructed in 1947 for ancillary use for the 1913 building.	2004

There are, however, numerous residential and commercial buildings that are older than 50 years located within the Specific Plan area that have not been comprehensively surveyed and evaluated. Therefore, it is possible that other potentially eligible historic resources exist within the Specific Plan area that could have significant associations with important events, people, or have high architectural merit.

Historic Research for the Specific Plan Area

Historic maps and aerial photographs were examined in order to provide historical information about the Specific Plan area. Historic topographic quadrangles from 1896, 1899, 1906, 1911, 1916, 1923, 1929, 1934, 1942, 1957, 1960, 1966, 1975, 1982, 1988, and 1981 were examined (NETR, 2017). Historic aerial photographs of the Specific Plan area from 1952, 1963, 1972, 1980, 1994, 2003, 2009, 2012, and 2017 were also examined (NETR, 2017).

Plat Map and Topographic Maps

The 1868 U.S. Surveyor General's plat map shows the project site as being located within Rancho Tajauta. The 1896, 1899, 1906, 1911, 1916, 1923, 1929, and 1934 topographic maps show the Specific Plan area as developed with few structures, an east-west road along the northern boundary, and a north-south road, probably Wilmington Avenue. A stream is shown running north-south through the eastern side of the Specific Plan area. The San Pedro Branch railroad line is shown to the east. The community of Lynwood is shown to the east and the unchannelized Los Angeles River is shown further to the east. The 1942 topographic map shows

the community of Willowbrook and a road grid. The surrounding areas are developed and the railroad to the east is now shown as the Southern Pacific Railroad. A spur of the Southern Pacific railroad runs northwest-southeast through the Specific Plan area. The Los Angeles River to the east appears channelized. The Lincoln School is shown along the western portion of the Specific Plan area. By 1963, the Mona Park School (currently the Martin Luther King Elementary School) buildings are shown at the southeast corner of the Specific Plan area. The MLK Community Hospital structures are shown on the 1982 historic topographic map.

Historic Aerial Photographs

The 1952 aerial photograph shows a majority of the Specific Plan area developed with paved roads, railroad, residential, educational institutions, religious buildings, and commercial buildings. The 1963 aerial photograph shows additional development on previously undeveloped parcels. By 1972, the MLK Community Hospital campus is clearly shown. No significant changes are shown until 1994 where the Interstate-105 is shown as constructed and operational. The Los Angeles County Metro Rail Blue Line and Green Line are shown in the 1994 aerial photograph. From 1994-2016 minor changes are shown such as the redevelopment of sites with larger structures.

Native American Outreach

The California Native American Heritage Commission (NAHC) maintains a confidential Sacred Lands File (SLF) that contains sites of traditional, cultural, or religious value to the Native American community. ESA contacted the NAHC on January 27, 2017, to request a search of the SLF. The NAHC responded in a letter dated January 30, 2017. The letter stated that the SLF search returned negative results. The letter also included a list of Native American contacts.

Native American Consultation

The County initiated Native American consultation pursuant to California PRC Section 21080.3.1, as amended by Assembly Bill 52 (AB 52). Consultation is required with Native American groups who are traditionally and culturally affiliated with the geographic area of the proposed project, and who have requested such consultation in writing. The County mailed letters to the groups on February 2, 2017 inviting them to consult regarding potential impacts to tribal cultural resources.

The County also sent consultation letters to the tribes in October 2015 and February 2, 2017 in fulfillment of SB 18 requirements (Appendix C).

The County Department of Regional Planning received letters from the Gabrieleno Band of Mission Indians – Kizh Nation (Tribe) on February 9. 2017 requesting consultation under Senate Bill (SB) 18 and AB 52. The County and Tribal representatives from the Gabrieleno Band of Mission Indians – Kizh Nation engaged in consultation via telephone on March 12, 2017, and in-person on April 4, 2017. The Tribe did not identify known cultural places located on land within the County's project area boundaries that would be affected by the proposed General Plan Amendment; however, the Tribe indicated that the project area is sensitive for prehistoric and ethnohistoric Native American archaeological resources.

Geoarchaeological Review

Chris Lockwood, Ph.D., R.P.A., conducted a desktop geoarchaeological review of the project site and vicinity in order to evaluate the potential for buried archaeological resources within the project site. The following section presents the results of Dr. Lockwood's analysis.

No archaeological resources are recorded within the Specific Plan area, but several Native American burials have been previously discovered east of the Specific Plan area (King, 1969; Williams, 1999; Horne, 2000), the closest within approximately 1800 feet (550 meters). The human remains, discovered during archaeological monitoring of construction, were found as shallow as 20 inches (50 cm) and as deep as 7.5 to 9.0 feet (2.3 to 2.7 meters) below ground surface. The additional discovery of historic archaeological materials at a depth of 3.5 feet (1.1 m) (Paniagua and Brewer 2000) near one set of human remains underscores the inconsistent subsurface layers in the vicinity of the Specific Plan area, as well as the potential effect that urbanization likely played in preserving or destroying cultural resources in different portions of the Specific Plan area.

Based upon the documented presence of prehistoric and historic cultural resources, including human burials, near the Specific Plan area, as well as a Holocene geomorphic history of alluvial deposition, the Specific Plan area is considered to have a high sensitivity for archaeological sites, which may be deeply buried.

LACM Paleontological Records Search

A paleontological records search request was sent to the LACM on January 3, 2017, and the results were received on January 17, 2017. The LACM reported no vertebrate paleontological localities within the project site boundaries (McLeod, 2017). The LACM records search results reported that a total of seven vertebrate localities have been documented in the vicinity of the project site from older Quaternary deposits similar to those underlying the project site, including: a fossil of undetermined elephantoid, Proboscidea, from an unstated depth approximately 1.4 miles southwest of the Specific Plan area; three localities with fossil specimens of mammoth *Mammuthus*, squirrel, Sciuridae, horse, *Equus*, and proghorne antelope, *Breameryx* at depths between 15 and 20 feet below ground surface all located approximately 2.0 miles southwest; two localities with late Pleistocene fauna including fossil specimens of pond turle, *Clemmys*, puffin, *Mancalla,* turkey, *Parapavo*, ground sloth, *Paramylodon*, mammoth, *Mammuthus*, dire wolf, *Canis dirus*, rabbit, *Slyvilagus*, squirrel, *Sciuridae*, deer mouse, *Microtus*, pocket gopher, *Thomomys*, horse, *Equus*, deer, *Cervus*, pronghorn antelope, *Capromeryx*, and bison, *Bison* at unstated but relatively shallow depths located approximately 1.6 miles west from the Specific Plan area; and one locality with a fossil specimen of mammoth, *Mammuthus*, at five feet below ground surface located approximately three miles south of the Specific Plan area.

Based on the LACM localities near the Specific Plan area, McLeod (2017) recommends monitoring of all excavation five feet below ground surface, collection of sediment samples to determine the potential or microvertebrate recovery, and curation of any collected fossils in an accredited, permanent repository.

3.3.2 Regulatory Setting

Federal, state, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Historic Preservation Act (NHPA) and CEQA are the primary federal and state laws governing preservation of historic and archaeological resources of national, regional, state and local significance.

Federal

National Historic Preservation Act of 1966

Cultural resources are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (54 United States Code [U.S.C.] 300101 et seq.), and the implementing regulations, Protection of Historic Properties (36 Code of Federal Regulations [CFR] Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979. Prior to implementing an "undertaking" (e.g., issuing a federal permit), the NHPA (54 U.S.C. 306108) requires federal agencies to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the NRHP. Under the NHPA, properties of traditional religious and cultural importance to a Tribe are eligible for inclusion in the NRHP (54 U.S.C. 302706). Also under the NHPA, a resource is considered significant if it meets the NRHP listing criteria at 36 CFR 60.4.

National Register of Historic Places

The NRHP was established by the NHPA of 1966, as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the Nation's historic resources and to indicate what properties should be considered for protection from destruction or impairment" (Code of Federal Regulations [CFR] 36 Section 60.2). The NRHP recognizes both historical-period and prehistoric archaeological properties that are significant at the national, state, and local levels.

To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria (U.S. Department of the Interior, 1995):

A. Are associated with events that have made a significant contribution to the broad patterns of our history;

B. Are associated with the lives of persons significant in our past;

C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for NRHP listing (U.S. Department of the Interior, 1995).

In addition to meeting the criteria of significance, a property must have integrity. Integrity is defined as "the ability of a property to convey its significance" (U.S. Department of the Interior, 1995). The NRHP recognizes seven qualities that, in various combinations, define integrity: location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.

State

California implements the NHPA through comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation (OHP) implements the policies of the NHPA and maintains the California Historical Resources Inventory.

California Environmental Quality Act

Under CEQA (Public Resources Code [PRC] Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. *State CEQA Guidelines* Section 15064.5 defines a historical resource as: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR; (2) a resource included in a local register of historical resources, as defined in Public Resources Code (PRC) Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

As described by PRC Section 21084.1 and Section 15064.5 of the *State CEQA Guidelines*, should a project cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired) in the significance of an historical resource, the lead agency must identify potentially feasible measures to mitigate these effects (*State CEQA Guidelines* Sections 15064.5(b)(1) and 15064.5(b)(4)).

Archaeological resources are defined in CEQA Section 21083.2, which states that a "unique" archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.

- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Unique archaeological resources as defined in Section 21083.2 may require reasonable efforts to preserve resources in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. Additionally, the *State CEQA Guidelines* state that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (*State CEQA Guidelines* Section 15064.5(c)(4)).

California Register of Historical Resources

Under the California Public Resources Code, Section 5024.19(a), the California Register of Historical Resources (CRHR) was created in 1992 and implemented in 1998 as "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

Criterion 1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Criterion 2. It is associated with the lives of persons important in our past.

Criterion 3. It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.

Criterion 4. It has yielded, or may be likely to yield, information important in history or prehistory.

Furthermore, under PRC 5024.1, Title 14 CCR, Section 4852(c), a cultural resource must retain integrity to be considered eligible for the CRHR. Specifically, it must retain sufficient character or appearance to be recognizable as a historical resource and convey reasons of significance. Integrity is evaluated with regard to retention of such factors as location, design, setting, materials, workmanship, feeling, and association.

California Historical Landmarks

California Historical Landmarks (CHLs) are buildings, structures, sites, or places that have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value and that have been determined to have statewide historical significance by meeting at least one of the criteria listed below. The resource also must be approved for designation by the County Board of Supervisors (or the city or town council in whose jurisdiction it is located); be recommended by the State Historical Resources Commission; and be officially designated by the Director of California State Parks. The specific standards now in use were first applied in the designation of CHL #770. CHLs #770 and above are automatically listed in the CRHR.

To be eligible for designation as a landmark, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type in the state or within a large geographic region (northern, central, or southern California);
- It is associated with an individual or group having a profound influence on the history of California; or
- It is a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

California Points of Historical Interest

California Points of Historical Interest (PHI) are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. PHI designated after December 1997 and recommended by the SHRC are also listed in the CRHR. No historic resource may be designated as both a landmark and a point. If a point is later granted status as a landmark, the point designation will be retired. In practice, the point designation program is most often used in localities that do not have a locally enacted cultural heritage or preservation ordinance. To be eligible for designation as a PHI, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type within the local geographic region (city or county);
- It is associated with an individual or group having a profound influence on the history of the local area; or

It is a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

California Public Resources Code Section 21080.3.1

California PRC Section 21080.3.1, as amended by Assembly Bill (AB) 52, requires lead agencies to consider the effects of projects on tribal cultural resources and to conduct consultation with federally and non-federally recognized Native American Tribes early in the environmental planning process and applies specifically to projects for which a Notice of Preparation (NOP) or a notice of Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The goal is to include California Tribes in determining whether a project may result in a significant impact to tribal cultural resources that may be undocumented or known only to the Tribe and its members and specifies that a project that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. Tribal cultural resources are defined as known "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources (PRC Section 21074 (a)(1)).

Prior to determining whether a Negative Declaration, MND, or Environmental Impact Report (EIR) is prepared for a project, the lead agency must consult with California Native American Tribes, defined as those identified on the contact list maintained by the California Native American Heritage Commission (NAHC), who are traditionally and culturally affiliated with the geographic area of the proposed project, and who have requested such consultation in writing. Consultation may include:

- The type of environmental review necessary
- The significance of tribal cultural resources
- The significance of the project's impacts on the tribal cultural resources
- Project alternatives or the appropriate measures for preservation
- Recommended mitigation measures

Consultation should be initiated by a lead agency within 14 days of determining that an application for a project is complete or that a decision by a public agency to undertake a project (PRC Section 21080.3.1(d) and (e)). The lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American Tribes that have requested notice. At minimum, notice should consist of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American Tribe has 30 days to request consultation pursuant to this section. The lead agency shall begin the consultation process within 30 days of receiving a California Native American Tribe's request for consultation. According to PRC Section 21080.3.2(b), consultation is considered concluded when either the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

Local

County of Los Angeles General Plan

The Los Angeles County General Plan was adopted in October 2015. The following goals and policies pertain to protection of cultural resources in Los Angeles County.

Land Use Element

Policy LU 3.2: Discourage development in areas with high environmental resources and/or severe safety hazards.

Policy LU 4.2: Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods.

Policy LU 7.1: Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.

Policy LU 10.4: Promote environmentally-sensitive and sustainable design.

Policy LU 10.8: Promote public art and cultural amenities that support community values and enhance community context.

Conservation and Natural Resources Element

Goal C/NR 14: Protected historic, cultural, and paleontological resources.

Policy C/NR 14.1: Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.

Policy C/NR 14.3: Support the preservation and rehabilitation of historic buildings.

Policy C/NR 14.4: Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).

Policy C/NR 14.6: Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

Parks and Recreation Element

Policy P/R 5.1: Preserve historic resources on County park properties, including buildings, collections, landscapes, bridges, and other physical features.

Policy P/R 5.2: Expand the collection of historical resources under the jurisdiction of the County, where appropriate.

Policy P/R 5.3: Protect and conserve natural resources on County park properties, including natural areas, sanctuaries, and open space preserves.

Policy P/R 5.4: Insure maintenance, repair, rehabilitation, restoration, or reconstruction of historical resources in County parks and recreational facilities are carried out in a manner consistent with the most current Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

County of Los Angeles Municipal Code

Section 22.44.1570 of the County of Los Angeles Municipal Code comprise the Archaeological/Paleontological/Historic Cultural Resources provision, which was established for the purpose of:

- Protect and preserve archaeological, historical and paleontological resources from destruction;
- Avoid impacts to such resources where feasible;
- Where avoidance is not feasible, impacts to resources shall be minimized to the maximum extent feasible.

Paleontological Resources

State

Paleontological resources are also afforded protection by CEQA. Appendix G (Part V) of the *CEQA Guidelines* provides guidance relative to significant impacts on paleontological resources, stating that a project will normally result in a significant impact on the environment if it will "…disrupt or adversely affect a paleontologic resource or site or unique geologic feature, except as part of a scientific study." Section 5097.5 of the Public Resources Code specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, the California Penal Code Section 622.5 sets the penalties for the damage or removal of paleontological resources.

Professional Standards

The Society of Vertebrate Paleontology (SVP) has established standard guidelines for acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional paleontologists in the nation adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most state regulatory agencies accept the SVP standard guidelines as a measure of professional practice.

3.3.3 Thresholds of Significance

For the purposes of this EIR and consistency with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, the project would have a significant impact on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5 (See Impact 3.3-1 below);

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 (See Impact 3.3-2 below);
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature or contain rock formations indicating potential paleontological resources (See Impact 3.3-3 below);
- Disturb any human remains, including those interred outside of formal cemeteries (See Impact 3.3-4 below);
- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 (See Impact 3.3-5 below).

CEQA provides that a project may cause a significant environmental effect where the project could result in a substantial adverse change in the significance of a historical resource (Public Resources Code, Section 21084.1). *CEQA Guidelines* Section 15064.5 defines a "substantial adverse change" in the significance of a historical resource to mean physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be "materially impaired" (*CEQA Guidelines*, Section 15064.5[b][1]).

CEQA Guidelines, Section 15064.5(b)(2), defines "materially impaired" for purposes of the definition of "substantial adverse change" as follows:

The significance of a historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

In accordance with *CEQA Guidelines* Section 15064.5(b)(3), generally a project that follows the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* is considered to have mitigated impacts to historic resources to less than significant.

Historic resources are usually 50 years old or older and must meet at least one of the criteria for listing in the California Register (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity (*CEQA Guidelines* Section 15064.5[a][3]).

3.3.4 Methodology

According to the State CEQA Guidelines (Section 15064.5(b)), a project that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment. The Guidelines further state that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired. Actions that would materially impair the significance of a historical resource are any actions that would demolish or adversely alter those physical characteristics of a historical resource that convey its historical significance and qualify it for inclusion in the California Register or in a local register or survey that meet the requirements of PRC Sections 5020.1(k) and 5024.1(g). A lead agency must also take into account impacts to unique archaeological resources (State CEQA Guidelines Section 15064.5(c)(1)-(4)). A project that may disrupt or adversely affects paleontological resources is a project that may have a significant effect on the environment.

3.3.5 Impact Analysis

Historical Resources

Impact 3.3-1: The proposed project could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

Project-Specific

As described above, two historic resources have been identified within the Specific Plan area. These resources include the Mojave Road, which is a California Registered Historical Landmark # 963; and, the Martin Luther King Jr. Medical Center Historic District comprised of four contributing features and seven appurtenant elements.

No characteristics of Mojave Road (19-187085) CHL No. 963, were identified within the Specific Plan area. No characteristics of the historic road are visible on the surface or anticipated subsurface. The entire segment of road within the Specific Plan area has been impacted by previous construction associated with the existing paved Willowbrook Avenue and/or the former Southern Pacific Railroad now Metro Blue Line and Union Pacific Railroad tracks.

The proposed project involves modifications, rehabilitation, and demolition that could impact the Martin Luther King, Jr. Medical Center Campus Historic District and its four contributing buildings (Augustus F. Hawkins Comprehensive Medical Health Center; Multi-Service Ambulatory Care Center (MACC); ; Interns and Physicians Building; and Dr. H. Claude Hudson Auditorium). Since the proposed project is at the programmatic level, specific project locations and design elements have yet to be finalized. Thus, future development occurring under the

proposed Specific Plan could adversely affect historic resources that could result in substantial adverse changes in the significance of historical resources such that the historic district or its contributors would no longer be eligible for inclusion in the CRHR. If project implementation improvements include the demolition and replacement of contributing buildings, a significant adverse change in the significance of the Martin Luther King, Jr. Medical Center Campus Historic District and the contributing building would occur and neither resource would continue to be eligible for inclusion in the CRHR resulting in a significant impact. Project implementation could result in alterations to the character-defining features of the Martin Luther King, Jr. Medical Center Campus Historic District. Therefore, impacts to historical resources are potentially significant.

In addition to the historic resources identified in this Section, numerous residential and commercial buildings that are older than 50 years are located within the Specific Plan area. As these structures have not been comprehensively surveyed and evaluated, it is possible that they may be eligible as historic resources if other criteria apply, such as significant associations with important events, people, or have high architectural merit. Since the proposed project is at the programmatic level, specific project locations and design elements have yet to be finalized. Thus, future development occurring under the proposed Specific Plan could adversely affect historic resources within the Specific Plan area. The impact to a historical resource is considered significant.

Cumulative

The geographical area of the cumulative impact to historical resources encompasses approximately 1/2 mile surrounding the Specific Plan area. As development occurs within the cumulative area, impacts to historical resources could occur due to the substantial historical-age resources known to occur in the area. These impacts by cumulative development could represent significant cumulative impacts on historical resources. Because the project could result in significant impacts to historical resources, the project's contribution to cumulative impacts to historical resources is cumulatively considerable.

Mitigation Measures

Project-Specific

CUL-1: Impacts to four significant historical resources that are eligible for listing and located within the MLK Subarea (Multi-Service Ambulatory Care Center (MACC), Augustus F. Hawkins Comprehensive Medical Health Center, Interns and Physicians Building, and Dr. H. Claude Hudson Auditorium) and the integrity of the Martin Luther King, Jr. Medical Center Campus Historic District (a fifth historic resource that is eligible for listing) shall be reduced to below the level of significance through utilization of the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines of Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings for any proposed alterations, including all site work, structural upgrades, architectural, and mechanical systems improvements and repairs. The work shall conform to the standards and guidelines for "rehabilitation." Conformance with the Secretary of the Interior's Standards shall be monitored by an architectural historian or historic architect who

meets the Secretary of the Interior's Professional Qualification Standards. Completion of this mitigation measure shall be monitored and enforced by the County of Los Angeles.

CUL-2: Impacts resulting from demolition or substantial alteration of significant historical resources not in conformance with the Secretary of the Interior's Standards shall be reduced to the maximum extent feasible through archival documentation of as-found condition. Prior to the initiation of construction activities, the County of Los Angeles shall ensure that documentation of the Martin Luther King, Jr. Medical Center Campus Historic District, Multi-Service Ambulatory Care Center (MACC), Augustus F. Hawkins Comprehensive Medical Health Center, Interns and Physicians Building, and/or Dr. H. Claude Hudson Auditorium is completed in accordance with Historic American Buildings Survey (HABS) requirements for donated material. The documentation shall be in the form of a Historic American Building Survey and shall comply with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The documentation shall include large-format photographic recordation, detailed historic narrative report, measured architectural drawings, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to Historic American Building Survey for inclusion in the Library of Congress. Archival copies of the documentation also would be available at the Martin Luther King, Jr. Medical Center campus and maintained by the County of Los Angeles.

CUL-3: Impacts resulting from the loss of integrity of the Martin Luther King, Jr. Medical Center Campus Historic District such that its significance is materially impaired will be reduced to the maximum extent feasible through the development of a retrospective exhibit detailing the history of the Martin Luther King, Jr. Medical Center Campus Historic District, its significance, and its important details and features. The retrospective exhibit shall be in the form of a physical exhibit installed on the Martin Luther King, Jr. Medical Center Campus, which is located either within a building or on a freestanding kiosk or comparable structure or installation on the property. The exhibit shall commemorate the historic appearance of the district and provide the public with sufficient information to understand its historic significance.

The exhibit shall be prepared by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The exhibit shall be completed within a period of no more than two years from the date of completion of the portion of the project that would result in the loss of integrity of the historical resources eligible for listing.

CUL-4: Demolition of structures that meet the eligibility requirements for the CRHR and/or the County of Los Angeles Register shall be avoided. If demolition of a portion of an eligible structure cannot be feasibly avoided as determined by the County of Los Angeles, the alterations of a structure eligible as a historical resource shall be accomplished in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or Standards for*

Rehabilitation and Guidelines for Rehabilitating Historic Buildings. To ensure compliance with this measure, the County shall determine the need for a historic resources evaluation of a structure if a structures is proposed for demolition or alteration and is or will be 50 years or older prior to project construction, or if a structure is proposed for demolition or alteration that affect the eligibility of a historic resource in the immediate surroundings of a structure proposed for demolition or alteration.

Cumulative

Implementation of Mitigation Measures CUL-1 through CUL-4 is required.

Significance Determination

Project-Specific

Significant and Unavoidable. After implementation of the above measures CUL-1 through CUL-4, it is possible that the mitigation measures would not reduce the project's potential to adversely change the significance of a historic resource and result in a significant impact. Because the mitigation measures described above would reduce impacts to historical resources to the maximum extent practicable, and not guarantee full mitigation, impacts to the eligible historical resources could remain significant and unavoidable after implementation of Mitigation Measures CUL-1 through CUL-4.

Cumulative

Significant and Unavoidable. The project could still contribute to significant cumulative impacts to historic resources. Therefore, the project's contribution would still be significant.

Archaeological Resources

Impact 3.3-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource.

Project-Specific

Impacts on cultural resources could result from ground-disturbing activities and/or damage, destruction, or alteration of historic structures. Ground-disturbing activities include project-related excavation, grading, trenching, vegetation clearance, the operation of heavy equipment, or other surface and sub-surface disturbance that could damage or destroy surficial or buried archaeological resources, including prehistoric and historic remains or human burials.

The County of Los Angeles Municipal Code Section 22.44.1570 calls for the County to work to protect and preserve archaeological, historical and paleontological resources from destruction; avoid impacts to such resources where feasible; where avoidance is not feasible, impacts to resources shall be minimized to the maximum extent feasible through preliminary review, Phase I Inventory, Phase II Evaluation, and Phase III Mitigation Programs.

Given the high archaeological sensitivity of the Specific Plan area, previously unknown and unrecorded archaeological resources may be unearthed during excavation and grading activities for individual projects. This can occur in already developed areas, as older buildings are known to have been built on top of or within archaeological deposits. Although much of the project area is already heavily developed, potentially significant buried archaeological resources could still exist within the project area, beneath and between structures and roads. If previously undiscovered artifacts or remains are uncovered during excavation or construction, significant impacts could occur.

Cumulative

The geographical area of the cumulative impact to archaeological resources encompasses approximately 1/2 mile surrounding the Specific Plan area. As development occurs within the cumulative area, potential impacts to archaeological resources could occur due to the substantial archaeological resources known to occur in the area. These potential impacts by cumulative development could represent significant cumulative impacts on archaeological resources. Because the project could result in significant impacts to archaeological resources, the project's contribution to cumulative impacts to archaeological resources is cumulatively considerable.

Mitigation Measures

Project-Specific

CUL-5: Avoidance, preservation or data recovery shall occur for archaeological resources that could be affected by ground disturbing activities and are found to be significant resources. To ensure that developments in accordance with the Specific Plan do not result in significant impacts to pre-historic or historic archaeological resources, the following shall be implemented.

Individual development projects or other ground disturbing activities such as installation of utilities, shall be subject to a Phase I cultural resources inventory on a project-specific basis prior to the County's approval of project plans. The study shall be carried out by a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. The cultural resources inventory would consist of: a cultural resources records search to be conducted at the South Central Coastal Information Center; a Sacred Lands File Search by the Native American Heritage Commission (NAHC) and with interested Native Americans identified by the NAHC; a pedestrian archaeological survey where deemed appropriate by the archaeologist; and recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms. If potentially significant cultural resources are encountered during the survey, the County shall require that the resources are evaluated for their eligibility for listing in the California Register of Historical Resources and for significance as a historical resource or unique archaeological resource per CEQA Guidelines Section 15064.5. Recommendations shall be made for treatment of these resources if found to be significant. Per CEQA Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means of mitigation to avoid impacts to significant cultural resources, including prehistoric and historic archaeological sites, locations of importance to Native Americans, human remains, historical buildings, structures and landscapes. 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, which may include data recovery or other appropriate measures, in consultation with the County, and local Native American representatives expressing interest.

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.

Cumulative

Implementation of Mitigation Measure CUL-5 is required.

Significance Determination

Project-Specific

Less than Significant. The implementation of Mitigation Measure CUL-5 would result in less than significant impact involving an adverse change in the significance of an archaeological resource.

Cumulative

Less than Significant. The implementation of Mitigation Measure CUL-5 would ensure that the proposed project's contribution to cumulative impacts on archaeological resources would be reduced to less than cumulatively considerable by avoiding an adverse change in the significance of an archaeological resource.

Paleontological Resources

Impact 3.3-3: Implementation of the Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Project-Specific

Fossil remains are found in the geologic deposits (sedimentary rock formations) within which they were originally buried. A paleontologically important deposit is one that has a high probability of producing unique, scientifically important fossils. This is determined by the abundance and densities of fossil specimens and/or previously recorded fossil sites exposed in the deposit. Therefore, the potential paleontological sensitivity of the project site can be assessed by identifying the paleontological importance of geologic deposits within the Specific Plan area.

The Specific Plan area is underlain by younger Quaternary Alluvium, which is unlikely to contain vertebrate fossils. However, the younger Alluvium may be underlain by older Quaternary deposits that are known to contain vertebrate fossils. Fossils have been found within 1.5 miles of areas in similar deposits. Thus, the Natural History Museum of Los Angeles County considers the Specific Plan area to have a moderate paleontological sensitivity. While shallow excavation or surface grading is unlikely to uncover paleontological resources, deeper excavation into older sediments may uncover significant fossils. Thus, any deep excavations (five feet below ground surface and deeper) in the Specific Plan area could result in impacts to paleontological resources. Therefore, implementation of the proposed project could result in significant impacts to paleontological resources.

Cumulative

The geographical area of the cumulative impact to paleontological resources encompasses approximately 1/2 mile surrounding the Specific Plan area. As development occurs within the cumulative area, potential impacts to paleontological resources could occur due to the presence of older Quaternary deposits that are known to contain vertebrate fossils in the area. These potential impacts by cumulative development could represent significant cumulative impacts on paleontological resources. Because the project could result in significant impacts to paleontological resources, the project's contribution to cumulative impacts to paleontological resources is cumulatively considerable.

Mitigation Measures

Project-Specific

CUL-6: The project applicant shall retain a qualified paleontologist (in accordance with the Society of Vertebrate Paleontologists) to monitor all ground-disturbing activities in native soils or sediments beginning at five feet below ground surface and deeper. If the paleontologist, upon observing initial earthwork, determines there is low potential for discovery, no further action shall be required and the paleontologist shall submit a memo to the County confirming findings of low potential.

If the qualified paleontologist, upon observing initial earthwork, determines there is a moderate to high potential for discovery, a qualified paleontologist or paleontological monitor (retained by the

County) shall monitor all mass grading and excavation activities. Monitoring will be conducted in areas of grading or excavation in undisturbed formation sediments, as well as where over-excavation of surficial alluvial sediments will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined on exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

Should any paleontological resources (i.e., fossils) be uncovered during project construction activities, all work within a 100-foot radius of the discovery site shall be halted or diverted to other areas on the site and the County shall be immediately notified. The qualified paleontologist shall evaluate the finds and recommend appropriate next steps to ensure that the resource is not substantially adversely impacted, including but not limited to avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Further, ground disturbance shall not resume within a 100-foot radius of the discovery site until an agreement has been reached between the project applicant, the qualified paleontologist, and the County as to the appropriate preservation or mitigation measures to ensure that the resource is not substantially adversely impacted.

Any recovered paleontological specimens shall be identified to the lowest taxonomic level possible and prepared for permanent preservation. Screen-washing of sediments to recover small invertebrates and vertebrates shall occur if necessary.

Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur at an institutional repository approved by the County. The paleontological program shall include a written repository agreement prior to the initiation of mitigation activities.

A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location. The report, when submitted to an accepted by the County, shall signify satisfactory completion of the project program to mitigation impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.

Cumulative

Implementation of Mitigation Measure CUL-6 is required.

Significance Determination

Project-Specific

Less than Significant. The implementation of Mitigation Measure CUL-6 would require paleontological monitoring at depths with high paleontological sensitivity. The implementation of Mitigation Measure CUL-6 would ensure paleontological resources would not be significantly impacted.

Cumulative

Less than Significant. The implementation of Mitigation Measure CUL-6 would require paleontological monitoring at depths with high paleontological sensitivity. The implementation of Mitigation Measure CUL-6 would ensure that the proposed project's contribution to cumulative impacts on paleontological resources would be reduced to less than cumulatively considerable by avoiding an adverse change in the significance of a paleontological resource.

Human Remains

Impact 3.3-4: Implementation of the project could disturb human remains, including those interred outside of formal cemeteries.

Project-Specific

The archaeological site record for site 19-000385, 19-002757, and 19-2792 has indicated that human remains near the Specific Plan area had been identified during construction of buildings and pipeline trenching. In the event that human remains are discovered, including those interred outside of formal cemeteries, the human remains could be inadvertently damaged, which could be a significant impact.

Cumulative

The geographical area of the cumulative impact to human remains encompasses approximately 1/2 mile surrounding the Specific Plan area. As development occurs within the cumulative area, potential impacts to human remains could occur due to human remains/burials known to occur in the area. These potential impacts by cumulative development could represent significant cumulative impacts on human remains. Because the project could result in significant impacts to human remains, the project's contribution to cumulative impacts to human remains is cumulatively considerable.

Mitigation Measures

Project-Specific

CUL-7: If human remains are encountered, the County or its contractor shall halt work in the vicinity (within 100 feet) of the find and contact the Los Angeles County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98. The NAHC

will designate an MLD for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, County shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.

Cumulative

Implementation of Mitigation Measure CUL-7 is required.

Significance Determination

Project-Specific

Less than significant. The implementation of Mitigation Measure CUL-7 would ensure human remains would not be significantly impacted.

Cumulative

Less than significant. The implementation of Mitigation Measure CUL-7 would ensure that the proposed project's contribution to cumulative impacts on human remains would be reduced to less than cumulatively considerable by avoiding an adverse impact on human remains.

Tribal Cultural Resources

Impact 3.3.5: Implementation of the project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.

The SLF search prepared by the NAHC indicated that no known Native American cultural resources are located in the project site or vicinity.

The County initiated Native American consultation pursuant to California PRC Section 21080.3.1, as amended by Assembly Bill 52 (AB 52). Consultation is required with Native American groups who are traditionally and culturally affiliated with the geographic area of the proposed project, and who have requested such consultation in writing. The County mailed letters to the groups on February 2, 2017 inviting them to consult regarding potential impacts to tribal cultural resources.

The County also sent consultation letters to the tribes in October 2015 and February 2, 2017 in fulfillment of SB 18 requirements (Appendix C).

The County Department of Regional Planning received letters from the Gabrieleno Band of Mission Indians – Kizh Nation (Tribe) on February 9. 2017 requesting consultation under Senate Bill (SB) 18 and AB 52. The County and Tribal representatives from the Gabrieleno Band of Mission Indians – Kizh Nation engaged in consultation via telephone on March 12, 2017, and in-person on April 4, 2017. The Tribe did not identify known cultural places located on land within the County's project area boundaries that would be affected by the proposed General Plan

Amendment; however, the Tribe indicated that the project area is sensitive for prehistoric and ethnohistoric Native American archaeological resources.

Project-Specific

The Tribe did not identify known tribal cultural resources; however, the Tribe indicated that the project area is sensitive for prehistoric and ethnohistoric Native American archaeological resources. Although no tribal cultural resources have been identified within the proposed project site, there is a potential for buried unknown archaeological resources that may be eligible for the California Register of Historical Resources or a local register of historical resources and could meet the definition of historical resource, unique archaeological resource, and/or tribal cultural resources. If previously undiscovered artifacts or remains are uncovered during excavation or construction, significant impacts could occur.

Cumulative

As development occurs within the cumulative area, potential impacts to archaeological resources could occur due to the substantial tribal cultural resources known to occur in the area. These potential impacts by cumulative development could represent significant cumulative impacts on archaeological resources. Because the project could result in significant impacts to tribal cultural resources, the project's contribution to cumulative impacts to tribal cultural resources is cumulatively considerable.

Mitigation Measures

Project-Specific

Implementation of Mitigation Measures CUL-5 and CUL-7 are required.

Cumulative

Implementation of Mitigation Measures CUL-5 and CUL-7 are required.

Significance Determination

Project-Specific

Less than Significant. Implementation of Mitigation Measures CUL-5 and CUL-7 as drafted in consultation with the Gabrieleno Band of Mission Indians – Kizh Nation during consultation, would reduce impacts to archaeological resources that also qualify as tribal cultural resources to less than significant.

Cumulative

Less than Significant. The implementation of Mitigation Measures CUL-5 and CUL-7 would ensure that the proposed project's contribution to cumulative impacts on tribal cultural resources would be reduced to less than cumulatively considerable by avoiding an adverse change in the significance of a tribal cultural resource.

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3.4 Geology and Soils

Introduction

This section addresses the potential impacts to geology and soils associated with the proposed Specific Plan development. A description of regional and local geology, a summary of applicable regulations related to geologic and seismic hazards, an evaluation of the potential impacts that may result from implementing the proposed program and identification of mitigation measures to minimize potential effects is provided.

3.4.1 Environmental Setting

Regional Geologic Setting

The Specific Plan area is located in the Transverse Ranges Geomorphic Province. The Province extends offshore to the west to include San Miguel, Santa Rosa, and Santa Cruz islands, and its eastern extension is comprised of the San Bernardino Mountains. The Province is one of the most rapidly rising regions on earth and is seismically active (CGS, 2002).

The Transverse Ranges are an anomaly when compared to the general structural grain of the North American Continent. Recent tectonic activity (i.e., middle Miocene and younger) accounts for much of the present rock distribution. The distributions of different crystalline basement rocks demonstrate older tectonic episodes. The distinctive physiography and structural geology of the Transverse Ranges province are overlain on an older pattern of Precambrian through early Cretaceous igneous and metamorphic basement rocks, which generally occur as fault-bounded blocks. Major basement rock boundaries are not only found along the edges of the Transverse Ranges, but they are also encountered within the province (County of Los Angeles, 2015a).

Specifically, the Specific Plan area is located in the southern part of the Transverse Range Geomorphic Province in the Los Angeles Basin (Basin), which is about 50 miles long and 20 miles wide. The Basin is bounded on the north by the Santa Monica Mountains and the Elysian, Repetto, and Puente Hills and on the east and southeast by the Santa Ana Mountains and San Joaquin Hills. The Basin's low land surface slopes gently south or seaward towards the Pacific Ocean, but it is interrupted by the Coyote Hills near the northeast margin, by a line of elongated low hills and mesas to the south and west that extends from Newport Bay northwest to Beverly Hills, and by the Palos Verdes peninsula at the southwest extremity. The Basin sediment consists of alluvium deposited over millions of years (Yerkes et al., 1971). The Specific Plan area lies within the central portion of the Los Angeles Basin, which is underlain by over 1,000 feet of sediments that have been deposited since Pliocene time. Underlying these alluvial deposits is Pliocene age marine sediments deposited during a time when a shallow sea covered much of southern California (County of Los Angeles, 2010).

The hills bordering the central portion of the Los Angeles Basin are characterized by a complex sequence of Cretaceous to Pleistocene age marine and non-marine sedimentary rocks. Localized igneous intrusive rocks attest to the complex geologic history of the area. Erosion of the hills

within the Santa Monica Mountains, located to the north of the site, is the source for the broad alluvial deposits forming much of the Los Angeles Basin to the south (County of Los Angeles, 2010).

Regional Faulting and Seismicity

The Los Angeles Basin, as well as most of Southern California, is located within a complex zone of faults and folds resulting from forces occurring along a bend within the boundary between the Pacific and North American tectonic plates. Numerous generally east-west to northwest trending faults have formed as a result of these north-south forces acting within this area. The major faults within the vicinity of the Los Angeles Basin are characterized by a combination blind thrusting, which is a rupture that is located below the uppermost layers of rock and would not be present on the surface; right-lateral strike-slip, a displacement in a trend or bearing where the right block moves toward you and the back block moves away; and reverse faulting, where the rock layer above the fault moves up (County of Los Angeles, 2010).

Surface fault rupture can occur during significant seismic events. The process generally involves the sudden failure and displacement of the earth's surface along a fault trace or fault zone. The magnitude and geometry of such ground displacement is highly variable. In general, strike-slip faults such as the active San Andreas Fault and Newport-Inglewood Fault are more likely to produce lateral offsets in the ground surface, with one side of the fault plane or zone "sliding" past the opposing side. Similarly, faults that generally fail under compressional stress, such as thrust or reverse faults, are more prone to vertical offsets in the ground surface. In either case, buildings or other man-made structures that lie atop the fault can experience serious damage or catastrophic failure during a strong earthquake (County of Los Angeles, 2015a).

The active faults are defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 11,000 years). Most of the larger earthquakes in the region have been associated with larger faults that have been mapped at the ground surface. A number of moderate to large earthquakes in the region have also occurred on deep-seated buried thrust faults in this geological complex region of Southern California. The Alquist-Priolo Earthquake Zoning Act of 1972 provided for the delineation of Earthquake Fault Zones along known active faults.

Local

The Specific Plan area is urban and developed, with 80 to 90 percent of the ground surface classified as impervious. The ground surface of the Specific Plan area is generally flat, sloping gently from 95 feet above mean sea level (amsl) in the northwest to 82 feet amsl in southeast. Stormwater run-off from the Specific Plan area sheet flows across the ground surface and is collected by curbs and gutters and conveyed through drop inlets to subterranean storm drains (County of Los Angeles, 2015b). There are no notable topographic features (e.g. rivers, hills, etc.) within the Specific Plan area. The following sections describe the potential geologic hazards within the Specific Plan area that are in addition to faulting and seismicity.

Faults and Seismicity

As shown on **Figure 3.4-1**, Geologic Hazards, the closest active fault to the Specific Plan area is the Newport-Inglewood fault, located approximately 1.8 miles to the southwest. The historically active San Andreas Fault is located approximately 42 miles to the north. Because there are no active faults that extend through the Specific Plan area, the potential for a surface fault rupture on the site is low. Although the active faults are not located within the Specific Plan, the structures within the Specific Plan area can be subject to ground movement during an earthquake. The ground movement can vary depending on the overall magnitude, distance to the fault, focus of the earthquake energy, and type of geologic material.

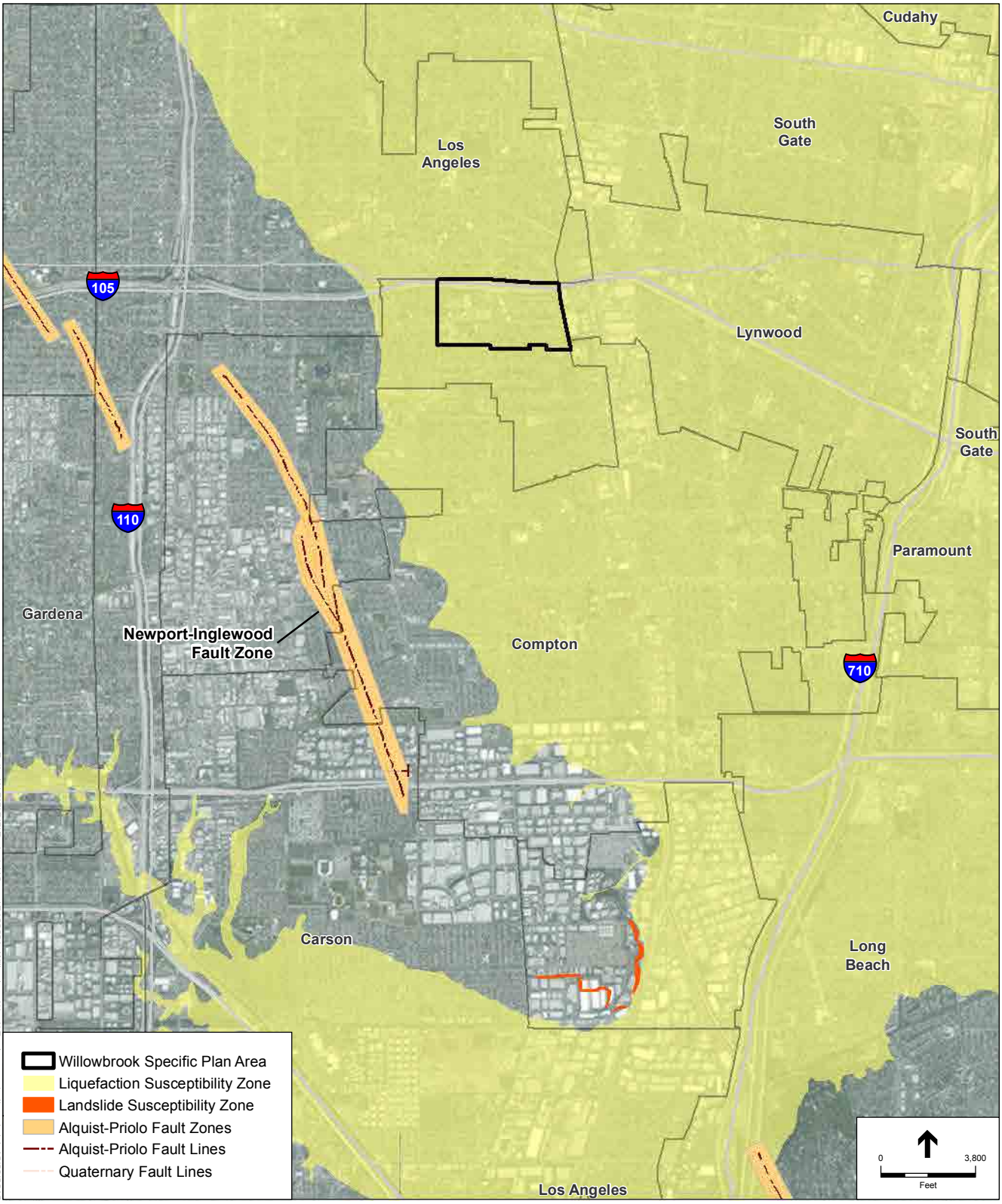
Liquefaction and Lateral Spreading Risk

Liquefaction is a loss of soil strength due to a buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine- to medium-grained, cohesionless soils. As shown on Figure 3.4-1, the Specific Plan area is located in a potential Liquefaction Susceptibility Zone. Based on a review of groundwater levels within and in the vicinity of the Specific Plan area, groundwater levels range generally from 30 to 50 feet below ground surface (LARWQCB, 2005 and DWR, 2016); however, groundwater levels can fluxuate depending on underlying aquifers. 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)

Lateral spreading is a phenomenon in which large blocks of intact, non-liquefied soil move downslope on a liquefied soil layer. Lateral spreading is often a regional event. For lateral spreading to occur, a liquefiable soil zone must be laterally continuous, unconstrained laterally in at least one direction and free to move along sloping ground. Due to the relatively flat topography and groundwater at 30 to 40 feet below ground surface, the potential for lateral spreading is considered to be very low.

Landslide Potential

As identified above, the Specific Plan area is generally flat, sloping gently from 95 feet above mean sea level (amsl) in the northwest to 82 feet amsl in southeast. As shown in Figure 3.4-1, there are no landslide susceptibility zones within the Specific Plan area; therefore, the potential for landslides is low.



Path: U:\GIS\GIS\Projects\3xxxx\D130631_Willowbrook\task\Geology_portrait.mxd, jyl 12/30/2015

SOURCE: ESRI; County of Los Angeles GIS; USGS

Figure 3.4-1
Geologic Hazards

Erosion

Erosion is defined as the wearing away of soil and rock by processes such as mechanical or chemical weathering, mass wasting, and the action of waves, wind, and underground water (NRCS, 2001a, 2001b). Soil erosion can be accelerated beyond natural rates in areas with depleted plant cover and degraded soil structure resulting from excessive disturbance or reduced organic matter input. As stated previously, the majority of the Specific Plan area is developed and there is very little existing exposed soil with the exception of landscaping; therefore, there are currently minimal areas susceptible to erosion. Within the Specific Plan area, the surface soils consist of sandy silt and clay (County of Los Angeles, 2010). Surface soils with sandy silt are susceptible to wind and water erosion, if exposed.

Settlement, Subsidence and Collapsible Soils

Settlement of the ground surface can occur under static forces (e.g., due to gravity or groundwater removal) but can also be accelerated and accentuated by earthquakes. When liquefied ground re-consolidates following an earthquake, the ground surface may settle or subside as shaking decreases and the underlying liquefied soil becomes more dense (USGS, 2006). The potential for settlement would be higher in unconsolidated sediments and lower in consolidated sediments or sediments reworked during development. The actual potential for settlement is difficult to predict because conditions under which this hazard can occur are site specific.

Subsidence is a form of settlement defined as the gradual settling or sudden sinking of the earth's surface due to subsurface movement of earth materials (USGS, 2013). The Los Angeles County General Plan does not list subsidence as a safety issue within the County (County of Los Angeles, 2015c). Some subsidence has occurred in the past in the Los Angeles area, mainly as a result of oil production and groundwater pumping. However, subsidence has not been documented as occurring specifically in the Specific Plan area (USGS, 2014).

Dry soils that are susceptible to large and sudden reductions in volume when they become wet are known as collapsible soils. Collapse can be caused by water percolating from newly created ponds, irrigation, leakage from soil-lined canals, and storm runoff from roadways and roofs of buildings (Holzer, 2006). Collapsible soils are not identified as hazards in the Los Angeles County General Plan; collapse is not likely an issue in the Specific Plan area.

3.4.2 Regulatory Framework

State

Alquist-Priolo Earthquake Fault Zoning Act

Alquist-Priolo Earthquake Fault Zoning Act (formerly the Alquist-Priolo Special Studies Zone Act) of 1972 (revised in 1994) is the State law that addresses hazards from earthquake fault zones. The purpose of this law is to mitigate the hazard of surface fault rupture by regulating development near active faults. As required by the Act, the State has delineated Earthquake Fault Zones (formerly Special Studies Zones) along known active faults in California (CGS, 2015). The nearest Alquist-Priolo Earthquake Fault to the Specific Plan area is the Newport-Inglewood Fault.

Seismic Hazard Mapping Act

The Seismic Hazards Mapping Act was passed in 1990 following the Loma Prieta earthquake to reduce threats to public health and safety and to minimize property damage caused by strong ground shaking, liquefaction, landslides, or other hazards caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones, and cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a seismic hazard zone, a geotechnical investigation must be conducted and appropriate mitigation measures incorporated into the project's design. For projects that would locate structures for human occupancy within designated Zones of Required Investigation, the Seismic Hazards Mapping Act requires project applicants to perform a site-specific geotechnical investigation to identify the potential site-specific seismic hazards and corrective measures, as appropriate, prior to receiving building permits. The California Geological Survey (CGS) Guidelines for Evaluating and Mitigating Seismic Hazards (CGS, 2008) provides guidance for evaluating and mitigating seismic hazards.

California Building Code

The California Building Code (CBC) has been codified in the California Code of Regulations (CCR) as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within its jurisdiction. The 2013 CBC is based on the 2012 International Building Code published by the International Code Conference. In addition, the CBC contains necessary California amendments which are based on reference standards obtained from various technical committees and organizations such as the American Society of Civil Engineers (ASCE), the American Institute of Steel Construction, and the American Concrete Institute. ASCE Minimum Design Standards 7-05 provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (flood, snow, wind, etc.) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California. The building department of every city, county, or city and county is required to enforce all the provisions of the CBC, and is authorized to issue a construction permit for the erection, construction, reconstruction, installation, moving or alteration of any building or structure.

Chapter 18 of the CBC covers the requirements of geotechnical investigations (Section 1803), including excavation, grading, and fills (Section 1804). The CBC requires geotechnical investigations be conducted prior to construction unless waived by the designated building official (which could occur when satisfactory data from adjacent areas demonstrates an investigation is not necessary). Chapter 18 also describes analysis of expansive soils and the determination of the depth to groundwater table. Previously, the Thresholds of Significance in

Appendix G of the CEQA Guidelines stated that expansive soil would be characterized as defined in Table 18-1-B of the 1994 Uniform Building Code. However, that table is no longer used and the current CBC definition is as follows:

> **1803.5.3 Expansive Soil**. In areas likely to have expansive soil, the building official shall require soil tests to determine where such soils do exist. Soils meeting all four of the following provisions shall be considered expansive, except that tests to show compliance with Items 1, 2 and 3 shall not be required if the test prescribed in Item 4 is conducted:
>
> 1. Plasticity index (PI) of 15 or greater, determined in accordance with ASTM D 4318
> 2. More than 10 percent of the soil particles pass a No. 200 sieve (75 micrometers), determined in accordance with ASTM D 422
> 3. More than 10 percent of the soil particles are less than 5 micrometers in size, determined in accordance with ASTM D 422
> 4. Expansion index greater than 20, determined in accordance with ASTM D 4829

The CBC also includes earthquake design requirements that take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small seismic vulnerability) to SDC E (very high seismic vulnerability and near a major fault). Design specifications for individual projects are then determined according to the SDC.

NPDES Construction General Permit

The State of California adopted a Statewide NPDES Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ), which has since been amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ. The Construction General Permit regulates construction site storm water. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger development plan that in total disturbs one or more acres, are required to obtain coverage under the Construction General Permit for discharges of storm water associated with construction activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of an SWPPP that includes specific BMPs designed to prevent pollutants from contacting stormwater and being transported off-site into receiving waters. Types of BMPs include erosion control (e.g., preservation of vegetation), sediment control (e.g., fiber rolls), non-stormwater management (e.g., water conservation), and waste management. The SWPPP also includes descriptions of BMPs to reduce pollutants in storm water discharges after all construction phases have been completed at the site (post-construction BMPs). Routine inspection of all BMPs is required under the provisions of the Construction General Permit. In addition, the SWPPP is required to include a

visual monitoring program, a chemical monitoring program for nonvisible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

In the project area, the Construction General Permit is implemented and enforced by the Los Angeles Regional Water Quality Control Board (LARWQCB), which administers the stormwater permitting program. Dischargers are required to electronically submit a Notice of Intent (NOI) and permit registration documents (PRDs) to obtain coverage under this Construction General Permit. Dischargers are responsible for notifying the LARWQCB of violations or incidents of noncompliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected.

Local

County of Los Angeles Subdivisions Code and Building Code

Many civil engineering projects within the County are required to include geotechnical investigations with input from: 1) an engineering geologist licensed in the State of California (engineering geologist) and 2) either a civil engineer licensed in the State of California, experienced in the field of soil mechanics, or a geotechnical engineer licensed in the State of California (soils engineer). These requirements are in accordance with the County of Los Angeles Subdivisions Code (Code of Ordinances Title 21) (LACSC) Section 21.48.050.8 and the 2011 County of Los Angeles Building Code (Code of Ordinances Title 26) (CLABC) Section 111 (LADPW, 2013).

County of Los Angeles Municipal Separate Storm Sewer System Permit

The current Municipal Separate Storm Sewer System (MS4) Permit for County of Los Angeles (Order No. R4-2012-0175) was adopted on November 8, 2012, became effective December 28, 2012, and will expire on December 28, 2017. Order No. R4-2012-0175 is the fourth iteration of the storm water permit for the MS4s in the Los Angeles region, which includes: Los Angeles County Flood Control District, County of Los Angeles, and 84 incorporated cities within the County watersheds excluding the City of Long Beach. The permit contains requirements that are necessary to improve efforts to reduce the discharge of pollutants in storm water runoff to the maximum extent practicable (MEP) and achieve water quality standards. This permit requires that runoff is addressed during the major phases of urban development (planning, construction, and operation) in order to reduce the discharge of pollutants from storm water to the MEP, effectively prohibit non-storm water discharges and protect receiving waters.

The MS4 Permit also includes construction requirements for implementation of minimum construction site BMPs for erosion, sediment, non-storm water management and waste management on construction sites. Section 3.7.2 in this EIR provides a detailed listing of the minimum construction BMPs.

County of Los Angeles General Plan

The Los Angeles County General Plan was recently adopted in October 2015. The following goals and policies pertain to geology and soils.

Conservation and Natural Resources Element

Goal – C/NR-5: Protected and useable local surface water resources.

Policy C/NR 5.1: Support the LID philosophy, which seeks to plan and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at regional, neighborhood, and parcel-level scales.

Policy C/NR 5.2: Require compliance by all County departments with adopted Municipal Separate Storm Sewer System (MS4), General Construction, and point source NPDES permits.

Policy C/NR 5.4: Actively engage in implementing all approved Enhanced Watershed Management Programs/Watershed Management Programs and Coordinated Integrated Monitoring Programs/Integrated Monitoring Programs or other County-involved TMDL implementation and monitoring plans.

Safety Element

Goal S 1: An effective regulatory system that prevents or minimizes personal injury, loss of life and property damage due to seismic and geotechnical hazards.

Policy S 1.1: Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.

Policy S 1.2: Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.

Policy S 1.3: Require developments to mitigate geotechnical hazards, such as soil instability and landsliding, in Hillside Management Areas through siting and development standards.

Policy S 1.4: Support the retrofitting of unreinforced masonry structures to help reduce the risk of structural and human loss due to seismic hazards.

County of Los Angeles Low Impact Development Manual

The County of Los Angeles (County) prepared the 2014 Low Impact Development Standards Manual (LID Standards) to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175), referred to as the 2012 MS4 Permit

(County of Los Angeles, 2014). The LID Standards provide guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The November 2013 LID Ordinance became effective December 5, 2013.

The LID Manual specifies requirements for development as mandated by the Ordinance. According to the Manual, liquefaction-induced settlement of structures and lateral spreading will need to be evaluated if analyses indicate the potential for liquefaction may increase due to stormwater runoff infiltration. Further, soil amendments must be implemented to avoid potential geotechnical hazards such as liquefaction if the hydraulic conductivity in the soil is not sufficient for the necessary water application rate.

3.4.3 Thresholds of Significance

For the purposes of this EIR and consistency with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, the project would have a significant impact on geologic resources if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - 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 (See Section 5.1.6 in this EIR);
  - Strong seismic groundshaking (See Impact 3.4-1 below);
  - Seismic-related ground failure, including liquefaction and lateral spreading, (See Impact 3.4-2 below) or
  - Landslides (See Section 5.1.6 in the EIR);
- Result in substantial soil erosion or the loss of topsoil (See Impact 3.4-3 below);
- 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 (See Impact 3.4-4 below);
- Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property (See Section 5.1.6 in this EIR);
- Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater (See Section 5.1.6 in this EIR); or
- 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 (See Section 5.1.6 in this EIR).

3.4.4 Methodology

The following analysis considers the existing environmental setting and regulatory environment applicable to the proposed Specific Plan area. The Los Angeles County General Plan was consulted to determine what, if any, identified geologic hazards are located in the project area. If there is a potential for geologic hazards and if existing regulatory requirements reduces the potential hazard to less than significant, no mitigation measures are required.

3.4.5 Impact Analysis

Strong Seismic Ground Shaking

Impact 3.4-1: The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

Project Specific

The project site is located in a seismically active region and is located in the near vicinity of the active Newport-Inglewood fault. People and structures within the Specific Plan area could be subject to strong seismic ground shaking. However, conforming to the CBC and UBC would reduce impacts from strong seismic ground shaking to the maximum extent possible under currently accepted engineering practices. Therefore, the implementation of the proposed Specific Plan would result in less than significant impacts related to exposing people or structures to strong seismic ground shaking.

Cumulative

The study area for potential cumulative geology and soils impacts involving strong seismic ground shaking includes the proposed Specific Plan area and areas immediately adjacent to the Specific Plan area because the direct geology and soil impacts are site specific and people and structures within the Specific Plan could be exposed to indirect hazards from unstable structures immediately adjacent to the Specific Plan area. Future cumulative development could be located in areas susceptible to strong seismic ground shaking similar to the proposed project. Because future development could be exposed to these impacts, people and structures could be exposed to a high potential for seismic ground shaking. However, as required for all new developments, conforming to the CBC and UBC would reduce impacts from strong seismic ground shaking for future cumulative development to the maximum extent possible under currently accepted engineering practices. Therefore, cumulative development would result in less than significant impacts related to exposing people or structures to strong seismic ground shaking

Because both the proposed project and cumulative development would result in less than significant impacts related to exposing people or structures to strong seismic ground shaking, the project's contribution to cumulative strong seismic ground shaking would be less than cumulatively considerable, and therefore, less than cumulatively significant.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Liquefaction and Lateral Spreading

Impact 3.4-2: The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving liquefaction and lateral spreading.

Project-Specific

The proposed project would involve new development and redevelopment of several structures in an area classified as having high potential for liquefaction and liquefaction-induced lateral spreading. 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 a moderate to high acceleration of seismic shaking in the project area because the depth of groundwater is approximately 30 to 40 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 (LARWQCB, 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 groundwater 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). Because Southern California is a seismically active area that can produce a high acceleration of seismic shaking, the potential for exposure of people or structures to liquefaction and liquefaction-induced lateral spreading within the proposed Specific Plan area is considered high. However, conforming to the CBC would reduce impacts from liquefaction and liquefaction-induced lateral spreading within the proposed Specific Plan area to the maximum extent possible under currently accepted engineering practices. These engineering practices could include densification of soils, soil reinforcement, and drainage/dewatering to reduce pore water pressure within the soil (Tong, 2014). Therefore, the implementation of the proposed Specific Plan would result in less than significant impacts related to exposing people or structures to liquefaction and liquefaction-induced lateral spreading.

Cumulative

The study area for potential cumulative geology and soils impacts involving liquefaction and lateral spreading includes the proposed Specific Plan area and areas immediately adjacent to the Specific Plan area because the direct geology and soil impacts are site specific and people and structures within the Specific Plan could be exposed to indirect hazards from unstable structures immediately adjacent to the Specific Plan area. Future cumulative development could be located in areas susceptible to liquefaction and lateral spreading similar to the proposed project. Because future development could be exposed to these impacts, people and structures could be exposed to a high potential for liquefaction and lateral spreading. However, as required for all new developments, conforming to the CBC and County ordinances would reduce potential impacts from liquefaction and liquefaction-induced lateral spreading for future cumulative development to the maximum extent possible under currently accepted engineering practices. Therefore, cumulative development would result in less than significant impacts related to exposing people or structures to liquefaction and liquefaction-induced lateral spreading.

Because both the proposed project and cumulative development would result in less than significant impacts related to exposing people or structures to liquefaction and liquefaction-induced lateral spreading, the project's contribution to cumulative liquefaction and liquefaction-induced lateral spreading would be less than cumulatively considerable, and therefore, less than cumulatively significant.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Soil Erosion or Topsoil Loss

Impact 3.4-3: The proposed project would not result in substantial soil erosion or the loss of topsoil.

Project-Specific

Although the project is located within a developed urban area, construction activities may include excavation, grading, and other soil-disturbing activities that could result in soil erosion or loss of topsoil during rain or high-wind events. However, for projects disturbing more than an acre of ground surface, the Construction General Permit requires the preparation and implementation of a SWPPP that would include erosion control and sediment control BMPs such as sandbags and covering soil stockpiles, which would ensure that soil erosion and loss of topsoil on the construction site would be minimized. Specific developments as part of the proposed project that disturb less than an acre of ground surface would be required to implement at a minimum the BMPs identified in the Los Angeles County MS4 Permit (RWQCB Order No. R4-2010-0175), which include erosion control and sediment control strategies for small construction sites (see Chapter 3.7, *Hydrology and Water Quality*, for a more detailed explanation of the MS4 Permit requirements). Compliance with Construction General Permit and MS4 Permit requirements would ensure less than significant impacts related to erosion and topsoil during construction of specific developments in the Specific Plan area.

The Specific Plan area is developed and estimated to be between 80 to 90 percent impervious; new development and redevelopment projects proposed by the Specific Plan would not substantially alter the ratio of pervious to impervious surfaces in the Specific Plan area. Therefore, the chance of soil erosion and topsoil loss occurring during operation of the new development is low. Depending on the Specific Plan Zoning designation, a minimum of between 10 and 20 percent of each lot must be landscaped with trees, ground cover, shrubbery and flowers as required by the Specific Plan; these landscaped areas could erode and lose topsoil if not properly designed. However, as part of compliance with the Los Angeles County Low Impact Development (LID) Standards, any specific project under the Specific Plan qualifying as a new development or a redevelopment project would be designed to reduce offsite runoff, promote rainwater harvesting, and reduce erosion and hydrologic impacts downstream. By reducing the velocity and quantity of stormwater onsite, the potential for erosion and topsoil loss in landscaped areas caused by runoff is also reduced. The presence of vegetation on landscaped areas would reduce the ability of soil to be eroded and lost by wind erosion. Impacts related to erosion and topsoil loss during operation of proposed development would be less than significant.

Cumulative

Topsoil and erosion impacts are typically site-specific. All cumulative projects adjacent to the Specific Plan area disturbing more than an acre of ground surface would be required to

implement erosion control and sediment control BMPs as required by their site-specific SWPPPs per Construction General Permit requirements. Cumulative projects not falling into this disturbance category would be required at a minimum to implement erosion and sediment control BMPs listed in the MS4 Permit (see Chapter 3.7, *Hydrology and Water Quality*, for a more detailed explanation of the MS4 Permit). Therefore, cumulative developments would result in less than significant erosion and topsoil loss impacts because these projects would be required to comply with existing regulations. Because the projects that would be part of the Specific Plan would result in less than significant soil erosion and loss of topsoil impacts as discussed above, the project's contribution to cumulative soil impacts would be less than cumulatively considerable, and thus less than cumulatively significant.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Geologic Instability

Impact 3.4-4: The proposed project could be located on a geologic unit or soil that is currently unstable, or that would become unstable as a result of the project, and would not potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Project-Specific

As stated in the IS/NOP for the project, the Specific Plan area would have no impact on the project area related to landslides given that the area is relatively flat. The potential for liquefaction and lateral spreading is addressed in Impact 3.4-1. As stated in Impact 3.4-1, development in accordance with the Specific Plan requires conformance with the CBC and the County ordinances that would reduce impacts from liquefaction and liquefaction-induced lateral spreading within the proposed Specific Plan area to the maximum extent possible under currently accepted engineering practices. These engineering practices could include densification of soils, soil reinforcement, and drainage/dewatering to reduce pore water pressure within the soil Therefore, the implementation of the proposed Specific Plan would result in less than significant impacts related to liquefaction and liquefaction-induced lateral spreading.

Because historical groundwater levels are within 40 feet of the surface in the project area, settlement of the ground surface can occur when liquefied ground reconsolidates following an earthquake. However, development under the Specific Plan would be required to adhere to County building code requirements, which include the preparation of a geotechnical investigation by a state licensed geotechnical engineer. The required geotechnical report for any new development or redevelopment would determine the susceptibility of the subject site to settlement, subsidence or collapse and prescribe appropriate engineering techniques for reducing its effects. Site preparation measures such as use of engineered fill, surcharging, wick drains, compaction requirements, structural slabs could be used. These measures would be evaluated and the most effective, feasible, and economical measures recommended in a geotechnical report would be incorporated into the site design in accordance with the building requirements. Therefore, with adherence to building code requirements, the potential for unstable soils resulting in settlement, subsidence, or collapse to adversely affect proposed structures and improvements would be reduced to less than significant.

Cumulative

The study area for potential cumulative geology and soils impacts involving landslides, liquefaction, lateral spreading, settlement, subsidence and collapsible soils includes the proposed Specific Plan area and areas immediately adjacent to the Specific Plan area because the direct geology and soil impacts are site specific and people and structures within the Specific Plan could be exposed to indirect hazards from unstable structures immediately adjacent to the Specific Plan area. As stated above the Specific Plan area and vicinity have relatively flat terrain and therefore, no cumulative impacts from landslides would occur. Future cumulative development could be located in areas susceptible to liquefaction, lateral spreading, settlement, subsidence and collapsible soils similar to the proposed project. Because future development could be exposed to these impacts, people and structures could be exposed to hazards from these impacts. However, as required for all new developments, conforming to the CBC and local ordinances would reduce potential impacts from liquefaction, lateral spreading, settlement, subsidence and collapsible soils for future cumulative development to the maximum extent possible under currently accepted engineering practices such as the site preparation and design measures identified above. Therefore, cumulative development would result in less than significant impacts related to exposing people or structures to liquefaction, lateral spreading, settlement, subsidence and collapsible soils

Because both the proposed project and cumulative development would result in less than significant impacts related to exposing people or structures to liquefaction, lateral spreading, settlement, subsidence and collapsible soils with adherence to the CBC and local ordinances, the project's contribution to cumulative liquefaction, lateral spreading, settlement, subsidence and collapsible soils would be less than cumulatively considerable, and therefore, less than cumulatively significant.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

3.4.6 References

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3.5 Greenhouse Gas Emissions

Introduction

This section provides a discussion of existing regulations related to greenhouse gas (GHG) emissions, and addresses GHG impacts related to implementation of the proposed Specific Plan. Specifically, this section analyzes the GHG emissions that would be generated by the construction and operation of the proposed Specific Plan. Mitigation measures intended to reduce GHG impacts are proposed, where appropriate, to avoid or reduce the potential for significant GHG impacts of the proposed Specific Plan.

The Specific Plan area is located within the unincorporated community of Willowbrook in the County of Los Angeles. Therefore, data used to prepare this analysis were obtained from the South Coast Air Quality Management District (SCAQMD), and by modeling existing and future GHG emissions from the construction and operation of the potential development with the implementation of the Specific Plan. The methods of analyzing emissions described in this section are consistent with the recommendations of the SCAQMD, as described below.

3.5.1 Environmental Setting

Climate

As discussed in Section 3.2 Air Quality, the proposed Specific Plan is located in the County of Los Angeles within the SCAB, which has a distinctive climate determined by its terrain and geographic location. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climate is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds.

Climate Change Overview

Gases that trap heat in the atmosphere are called GHGs. The major climate concern with GHGs is that increases in their concentrations are contributing to global climate change, which is a change in the average climate on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases (i.e., global warming).

The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potential and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, SF_6 is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. SF_6, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG with 22,800 times the global

warming potential as CO_2. Therefore, an emission of one metric ton (MT) of SF_6 could be reported as an emission of 22,800 MT of CO_2e. Large emission sources are reported in million metric tons (MMT) of CO_2e. A metric ton is 1,000 kilograms, and it is equal to approximately 1.1 U.S. tons and approximately 2,204.6 pounds.

Some of the potential effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years (CARB, 2009). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

California produced 459 gross $MMTCO_2e$ in 2012 (CARB, 2014a). Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2012, accounting for 36 percent of total GHG emissions in the state (CARB, 2014a). This sector was followed by the electric power sector (including both in-state and out-of-state sources) (21 percent) and the industrial sector (19 percent) (CARB, 2014a).

Greenhouse Gas Emission Sources

According to much of the scientific literature on this topic, emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors (CARB, 2015). Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N_2O is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution, respectively, and are two of the most common processes of CO_2 sequestration.

3.5.2 Regulatory Setting

Federal

As discussed in Section 3.2 Air Quality, the federal CAA requires USEPA to established NAAQS to protect public health and welfare. The federal CAA does not specifically regulate GHG emissions; however, on April 2, 2007, the U.S. Supreme Court in *Massachusetts v. U.S. Environmental Protection Agency*, determined that GHGs are pollutants that can be regulated under the federal CAA. Currently, there are no federal regulations that establish ambient air quality standards for GHGs.

The USEPA Administrator determined that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in "high atmospheric levels" of GHG emissions, which are likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, and higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations. USEPA recently released a proposed rule which would regulate GHG emissions from existing power plants across the nation and establishes state-by-state 2030 GHG emission goals. There are currently no federal regulations that set ambient air quality standards for GHGs. However, in August 2012, the USEPA adopted vehicle emissions standards for GHGs for model year 2017 through 2025 passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO_2 per mile.

State

As discussed in Section 3.2 Air Quality, CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California. Various statewide and local initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Because every nation emits GHGs and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale will be required to reduce the rate of GHG emissions to a level that can help to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

There are currently no state regulations in California that establish ambient air quality standards for GHGs. However, California has passed laws directing CARB to develop actions to reduce GHG emissions, and several state legislative actions related to climate change and GHG emissions have been adopted in the past decade, as discussed in the following paragraphs.

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32 – California Global Warming Solutions Act

In 2006, California Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, requires CARB to establish a statewide GHG emissions cap for 2020 based on 1990 emission levels. AB 32 required CARB to adopt and enforce programs and regulations that identify and require selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions. In December 2007, CARB adopted 427 MT CO_2e as the statewide GHG emissions limit equivalent to the statewide levels for 1990. This is approximately 28 percent below forecasted 2020 "business-as-usual" emissions of 596 MMT of CO_2e, and approximately 10 percent below average annual GHG emissions during the period of 2002 through 2004 (CARB, 2009).

CARB published the *Expanded List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration* in September 2007 (CARB, 2007). CARB adopted nine Early Action Measures for implementation, including Ship Electrification at Ports, Reduction of High Global-Warming-Potential Gases in Consumer Products, Heavy-Duty Vehicle Greenhouse Gas Emission Reduction (Aerodynamic Efficiency), Reduction of Perfluorocarbons from Semiconductor Manufacturing, Improved Landfill Gas Capture, Reduction of Hydrofluorocarbon-134a from Do-It-Yourself Motor Vehicle Servicing, Sulfur Hexaflouride Reductions from the Non-Electric Sector, a Tire Inflation Program, and a Low Carbon Fuel Standard.

As of January 1, 2012, the GHG emissions limits and reduction measures adopted in 2011 by CARB became enforceable. In designing emission reduction measures, CARB must aim to minimize costs, maximize benefits, improve and modernize California's energy infrastructure, maintain electric system reliability, maximize additional environmental and economic co-benefits for California, and complement the state's efforts to improve air quality.

Climate Change Scoping Plan

In December 2008, CARB approved the AB 32 Scoping Plan outlining the state's strategy to achieve the 2020 GHG emissions limit (CARB, 2009). This Scoping Plan, developed by CARB in coordination with the Climate Action Team (CAT), proposes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify California's energy sources, save energy, create new jobs, and enhance public health.

As required by AB 32, the Scoping Plan must be updated at least every five years to evaluate the mix of AB 32 policies to ensure that California is on track to meet the targets set out in the legislation. In October 2013, a draft Update to the initial Scoping Plan was developed by CARB in collaboration with the California Climate Action Team (CCAT). The draft Update built upon the initial Scoping Plan with new strategies and expanded measures, and identified opportunities to leverage existing and new funds to drive GHG emission reductions through strategic planning and targeted program investments. The draft Update to the initial Scoping Plan was presented to CARB's Board for discussion at its February 20, 2014 meeting. Subsequently, the first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB.

As part of the proposed update to the Scoping Plan, the emissions reductions required to meet the 2020 statewide GHG emissions limit were further adjusted. The primary reason for adjusting the 2020 statewide emissions limit was based on the fact that the original Scoping Plan relied on the Intergovernmental Panel on Climate Change's (IPCC) 1996 Second Assessment Report (SAR) to assign the global warming potentials (GWPs) of greenhouse gases. Recently, in accordance the United Nations Framework Convention on Climate Change (UNFCCC), international climate agencies have agreed to begin using the scientifically updated GWP values in the IPCC's Fourth Assessment Report (AR4) that was released in 2007. Because CARB has begun to transition to the use of the AR4 100-year GWPs in its climate change programs, CARB recalculated the Scoping Plan's 1990 GHG emissions level with the AR4 GWPs. As the recalculation resulted in 431 $MMTCO_2e$, the 2020 GHG emissions limit established in response to AB 32 is now slightly higher than the 427 $MMTCO_2e$ in the initial Scoping Plan. Considering that the proposed update also adjusted the 2020 BAU forecast of GHG emissions to 509 $MMTCO_2e$, a 15 percent reduction below the estimated BAU levels was determined to be necessary to return to 1990 levels by 2020 (CARB, 2014b).

Executive Order S-1-07

In 2007, Executive Order S-1-07was signed by Governor Schwarzenegger, proclaims that the transportation sector is the main source of GHG emissions in California. Executive Order S-1-07 establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020. As a result, CARB approved a proposed regulation to implement the low carbon fuel standard (LCFS) on April 23, 2009, which would reduce GHG emissions from the California transportation sector by approximately 16 MMT in 2020. The LCFS is designed to reduce California's dependence on petroleum, create a lasting market for clean transportation technology, and stimulate the production and use of alternative, low-carbon fuels in California. The LCFS is designed to provide a durable framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel producers and importers must meet each year beginning in 2011.

Senate Bill 375

In September 2008, Senate Bill (SB) 375 was adopted, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. As a result, on September 23, 2010, CARB adopted the vehicular GHG emission reduction targets that had been developed in consultation with the metropolitan planning organizations (MPOs); the targets

require a 7 to 8 percent reduction by 2020 and a 13 to 16 percent reduction by 2035, for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs, such as SCAG would work with local jurisdictions in the development of sustainable communities strategies (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions, while meeting housing needs and other regional planning objectives. SCAG's reduction target for per capita vehicular emissions is 8 percent by 2020 and 13 percent by 2035 (CARB, 2010). The MPOs prepared their first SCS, according to their respective regional transportation plan (RTP) update schedule, with the SCAG RTP/SCS adopted on April 4, 2012.

Senate Bill 97

In August 2007, Senate Bill (SB) 97 was adopted, which required the California Office of Planning and Research (OPR) to develop guidelines for the mitigation of GHG emissions, or the effects related to releases of GHG emissions. On April 13, 2009, the OPR submitted proposed amendments to the California Natural Resources Agency, in accordance with SB 97 regarding analysis and mitigation of GHG emissions. As directed by SB 97, the Natural Resources Agency adopted Amendments to the CEQA Guidelines for GHG emissions on December 30, 2009. On February 16, 2010, the California Office of Administrative Law approved the Amendments, and filed them with the California Secretary of State for inclusion in the California Code of Regulations, w which became effective on March 18, 2010.

Title 24, Building Standards Code

The California Energy Commission first adopted the Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

California Green Building Standard Code

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices". When the CALGreen Code went into effect in 2009, compliance through 2010 was voluntary. As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings, which include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality. The CALGreen

Code was most recently updated in 2016 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2017.

Executive Order B-30-15

California Governor Edmund G. Brown issued on April 29, 2015, through Executive Order B-30-15, the following GHG emission reduction target:

- By 2030, California shall reduce GHG emissions to 40 percent below 1990 levels.

Renewables Portfolio Standard

On April 12, 2011, Governor Jerry Brown signed SB X1-2 to increase California's Renewables Portfolio Standard to 33 percent by 2020. SB 350 (Chapter 547, Statues of 2015) further increased the Renewables Portfolio Standard to 50 percent by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. SB 350 was signed into law on October 7, 2015.

Local

SCAQMD

After AB 32 was passed, SCAQMD formed a Climate Change Committee along with a Greenhouse Gases CEQA Significance Thresholds Working Group and the SoCal Climate Solutions Exchange Technical Advisory Group. On September 5, 2008, the SCAQMD Board approved the SCAQMD Climate Change Policy, which outlines actions the SCAQMD will take to assist businesses and local governments in implementing climate change measures, decrease the agency's carbon emissions, and provide information to the public regarding climate change.

As a method for determining significance under CEQA, SCAQMD developed a draft tiered flowchart in 2008 for determining significance thresholds for GHGs for industrial projects where SCAQMD is acting as the lead agency. In December 2008, SCAQMD adopted a 10,000 $MTCO_2e$/year for industrial facilities, but only with respect to projects where SCAQMD is the lead agency. SCAQMD has not adopted a threshold for residential or commercial projects at the time of this writing.

In order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents, the GHG CEQA Significance Threshold Working Group drafted thresholds with the intent of capturing 90 percent of development projects (SCAQMD, 2010). Under Tiers 1 and 2, projects that are exempt from CEQA or consistent with an approved local GHG reduction plan can be found to be less than significant. Under Tier 3, a project's GHG emissions are compared to the draft screening thresholds. At present, the SCAQMD has not formally adopted thresholds for use by other lead agencies, but recommends that industrial projects utilize the 10,000 $MTCO_2e$ screening level that has been adopted for SCAQMD projects. The GHG CEQA Significance Threshold Working Group has drafted a significance indicator of 3,000 $MTCO_2e$ for mixed-use or all land use projects, but it has not been formally adopted. Under Tier 4, a project's GHG emissions are compared to a performance standard, such as achieving a percentage reduction in GHG emissions from a base case scenario or achieving a project-level efficiency target of 6.6 MTCO2e per service population (SP) annually for 2020 and 4.1 MT CO2e

per SP annually for 2035. Service population equals the total number of residents and employees within a development.

The SCAQMD flowchart uses a tiered approach in which a proposed project is deemed to have a less than significant impact related to GHG emissions when any of the following conditions are met:

- GHG emissions are within GHG budgets in an approved regional plan;
- Incremental increases in GHG emissions due to the project are below the defined Significance Screening Levels, or Mitigated to Less than the Significance Screening Level;
- Performance standards are met by incorporating project design features and/or implementing emission reduction measures; and
- Carbon offsets are made to achieve target significance screening level.

Los Angeles County General Plan

The Los Angeles County General Plan provides the fundamental basis for the County's land use and development policy, and addresses all aspects of development including public health, land use, community character, transportation, economics, housing, air quality, and other topics. The County General Plan sets forth objectives, policies, standards, and programs for land use and new development, Circulation and Public access, and Service Systems for the Community as a whole. Measures related to GHG emissions that would be applicable to the Project are contained in the County General Plan Elements of Land Use (LU), Mobility (M), Air Quality (AQ), and Public Services and Facilities (PS/F), which are specified below (County of Los Angeles, 2015). These measures will be implemented in connection with development of the Project.

Goal LU 10: Development that utilize sustainable design techniques.

Policy LU 10.1: Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.

Policy LU 10.2: Support the design of developments that provide substantial tree canopy cover, and utilize light colored paving materials and reflective roofing materials to reduce the urban heat island effect.

Policy LU 10.3: Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.

Goal M 2: Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.

Policy M 2.8: Connect pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.

Policy M 2.10: Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.

Goal M 4: An efficient multimodal transportation system that serves the needs of all residents.

Policy M 4.1: Expand transportation options that reduce automobile dependence.

Policy M 4.2: Expand shuttle services to connect major transit centers to community points of interest.

Policy M 4.4: Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.

Policy M 4.15: Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements, employer/institution based transit passes, regional carpooling programs, and telecommuting.

Policy M 4.16: Promote mobility management practices, including incentives to change transit behavior and using technologies, to reduce VMTs.

Goal M 5: Land use planning and transportation management that facilitates the use of transit.

Policy M 5.1: Facilitate transit-oriented land uses and pedestrian oriented design to encourage transit ridership.

Policy M 5.2: Implement parking strategies that facilitate transit use and reduce automobile dependence.

Goal M 7: Transportation networks that minimizes negative impacts to the environment and communities.

Policy M 7.3: Encourage the use of sustainable transportation facilities and infrastructure technologies, such as liquid and compressed natural gas, and hydrogen gas stations, ITS, and electric car plug-in ports.

Goal AQ 3: Implementation of plans and programs to address the impacts of climate change.

Policy AQ 3.1: Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals.

Policy AQ 3.4: Participate in local, regional, and state programs to reduce greenhouse gas emissions.

Policy AQ 3.5: Encourage maximum amounts of energy conservation in new development and municipal operations.

Policy AQ 3.6: Support and expand urban forest programs within the unincorporated areas.

Goal PS/F 2: Increased water conservation measures.

Policy PS/F 2.1: Implement water conservation measures, such as drought tolerant landscaping and restrictions on water used for landscaping.

Goal PS/F 5: Adequate disposal capacity and minimal waste and pollution.

Policy PS/F 5.5: Reduce the County's waste stream by minimizing waste generation and enhancing diversion.

Policy PS/F 5.6: Encourage the use and procurement of recyclable and biodegradable materials.

Policy PS/F 5.7: Encourage the recycling of construction and demolition debris generated by public and private projects.

Policy PS/F 5.9: Encourage the availability of trash and recyclables containers in new developments, public streets, and large venues.

3.5.3 Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, a project could have a significant effect related to GHG emissions if it would:

- Generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment (See Impact 3.5-1, below); or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs (See Impact 3.5-2, below).

The increased concentration of GHGs in the atmosphere has been linked to global warming, which can lead to climate change. Therefore, construction and operation of the development projects under the proposed Specific Plan would incrementally contribute to GHG emissions along with past, present, and future activities, and the CEQA Guidelines acknowledge this as a cumulative impact. As such, impacts of GHG emissions are analyzed here on a cumulative basis.

Adopted in December 2010, the CEQA Guideline Amendments, state that each local lead agency must develop its own significance criteria based on local conditions, data, and guidance from public agencies and other sources. However, neither the SCAQMD, CEQA Guidelines, nor the County of Los Angeles has provided adopted numeric thresholds of significance for greenhouse gas emissions. In the case where no adopted numeric guidelines are available, the Office of Planning and Research (OPR), the agency that develops the CEQA Guidelines, encourages the lead agency to use programmatic mitigation plans and programs to tier individual project analysis. While the County of Los Angeles is in the process of adopting a Climate Action Plan, the Plan has not yet been adopted and therefore does not meet the requirements set forth in the CEQA Guidelines to enable tiering.

Under CEQA, it is up to the Lead Agency to determine which thresholds of significance and methodology to use in evaluating a project. Typically, the Lead Agency adopts the thresholds of

the air district which has jurisdiction over a project. While SCAQMD has issued proposed standards and guidelines, there is no adopted state or local standard for determining the cumulative significance of the proposed Specific Plan's GHG emissions. Additionally, SCAQMD has proposed, but not adopted, a 3,000 MT/year CO_2e threshold for mixed-use developments, a 3,500 MT/year CO_2e threshold for residential developments, and a 1,400 MT/year CO_2e threshold for commercial developments. As an alternative to the aforementioned proposed thresholds for residential, commercial, and mixed-use developments, SCAQMD has also recommended the use of a single numerical threshold of 3,000 MTCO_2e/year for all non-industrial projects. These thresholds were developed for individual land use projects and are not effective for larger projects such as specific plans.

As stated above, for larger projects that do not meet any of the above screening thresholds, the SCAQMD has proposed efficiency thresholds for planning level documents of 6.6 MT CO2e per service population (SP) annually for 2020, and 4.1 MT CO2e per SP annually for 2035. Service population equals the total number of residents and employees within a development. The screening threshold represents the level of GHG emissions under which a project would be considered to have a less-than-significant impact on the environment without the need for further mitigation. These draft threshold options are being evaluated through the GHG Thresholds Working Group, and have not been adopted as of this writing (SCAQMD, 2010).

In addition, the thresholds demonstrate that a project supports the efforts for the region to meet the GHG reduction requirements of AB 32. Compliance with AB 32 is used in evaluating the significance of the proposed project's incremental contribution to global warming impacts.

For the purposes of this analysis, SCAQMD's proposed performance standards for planning level documents are used. The performance standards are 6.6 MT CO_2e per service population annually for 2020 and 4.1 MT CO2e per service population annually for 2035. The service population is the total of all residents and employees within the project area. The screening threshold represents the level of GHG emissions under which a project would be considered to have a less than significant impact on the environment without further need of mitigation. Compliance with these performance standards demonstrates that a project supports the efforts for the region to meet the GHG reduction requirements of AB 32.

3.5.4 Methodology

SCAQMD recommends the use of CalEEMod for estimating construction and operational emissions associated with land use projects. CalEEMod incorporates the most recent (2011) versions of the Emission Factors (EMFAC) and Off-Road Emissions (OFF-ROAD) models developed by CARB. CalEEMod estimates the emissions of CO_2, CH_4, and N_2O as well as the resulting total CO_2e emissions associated with construction-related GHG sources such as off-road construction equipment, material delivery trucks, soil haul trucks, and construction worker vehicles. As CalEEMod currently uses IPCC's 1996 SAR to assign the GWPs for CH_4 and N_2O, the emissions for these two GHGs were taken from the CalEEMod outputs and converted to CO_2e emissions outside of CalEEMod using the updated GWPs from IPCC's AR4. The GHG analysis incorporates similar assumptions as the air quality analysis for consistency. Based on

SCAQMD's 2008 *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* document, SCAQMD recommends that for construction GHG emissions the total emissions for a project be amortized over a 30-year period and added to its operational emission estimates (SCAQMD, 2008).

Short-term construction-generated emissions of GHG's associated with the proposed Specific Plan were modeled in CalEEMod using the California default values (where specific information was not available), and reasonable assumptions based on the anticipated build out of the Specific Plan to estimate criteria air pollutant and ozone precursor emissions. GHG emissions from construction activities are associated with the exhaust emissions from the construction vehicles. Modeling input and output files are provided in Appendix B of this EIR.

Operational emissions of GHGs, including GHGs generated by direct and indirect sources, are estimated according to the recommended methodologies from SCAQMD described above. Direct sources include emissions such as vehicle trips, natural gas consumption, and landscape maintenance. Indirect sources include off-site emissions occurring as a result of the Specific Plan's operations such as electricity and water consumption and solid waste disposal. The direct and indirect emissions generated during the proposed Specific Plan's operations were estimated using CalEEMod. Similar to the calculation of the Specific Plan's construction-related GHG emissions, the operational emissions of CH_4 and N_2O were extracted from the CalEEMod output file and converted to CO_2e emissions using the GWPs from IPCC's AR4. Modeling was based on Specific Plan data (e.g., size and type of proposed uses) and vehicle trip information from the Traffic Study prepared for the Project by The Mobility Group (Mobility Group, 2017). Annual operational GHG emissions associated with the existing uses within the Specific Plan area were calculated using CalEEMod, and subtracted from the Specific Plan's estimated annual operational emissions to properly assess the net increase in operational emissions that would occur from implementation of the Specific Plan at build out.

3.5.5 Impact Analysis

Greenhouse Gas Emissions

Impact 3.5-1: The proposed project would generate GHG emissions, either directly or indirectly, and would have a significant impact on the environment.

Project-Specific

Construction Emissions

Demolition and construction activities would occur intermittently at different sites within the Specific Plan area until buildout. Although the related impacts at any one location would be temporary, demolition and construction of individual projects under the proposed Specific Plan could contribute to global climate change impacts. Demolition and construction activities would result in the emission of GHGs from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. Emission levels for demolition and construction activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers. The CalEEMod model was used to input the

maximum square footage that would be demolished and constructed within the Specific Plan area in one year, and the total annual GHG emissions were determined for demolition and construction activities. As shown in **Table 3.5-1**, the maximum annual GHG emissions from demolition and construction activities associated with the Specific Plan are 10,226 $MTCO_2e$ per year. Table 3.5-1 also identifies the total GHG emissions from demolition and construction activities over the 20-year buildout of the Specific Plan as 68,373 $MTCO_2e$. In accordance with SCAQMD methodology, demolition and construction GHG emissions are amortized over 30 years. This would result in an annual demolition and construction GHG emissions (amortized over 30-years) of 2,279 $MTCO_2e$ per year.

TABLE 3.5-1
ESTIMATED TOTAL CONSTRUCTION-RELATED GHG EMISSIONS

Emission Source	Estimated CO_2e Emissions
Total Demolition and Construction GHG Emissions	
Total Maximum Annual Demolition and Construction Emissions	
Demolition	1,001 MT/yr[1]
Construction	9,225 MT/yr[2]
Total Maximum Annual	10,226 MT/yr
Total Net Demolition and Construction Emissions from Buildout of Specific Plan	
Demolition	2,335 MT[3]
Construction	66,038 MT[4]
Total Net Demolition and Construction GHG Emissions	*68,373 MT*
Annual Demolition and Construction (Amortized over 30 years)	**2,279 MT/yr**

Notes: CO_2e= carbon dioxide equivalent; MT =metric tons; MT/yr = metric tons per year.

1 See Appendix B. Based on demolition of 227,000 square feet of structures. Total GHG demolition emissions is approximately 0.0044 MT/square foot.

2 See Appendix B. Maximum annual construction of 420 dwelling units and 227,000 square feet of non-residential structures is assumed. Total square footage of construction is assumed to be 420 units x 1,000 square feet/unit+ 227,000 square feet of non-residential = 647,000 square feet of structures. Total GHG construction emissions is approximately 0.0143 MT/square foot.

3 Based on a total net demolition of 152 units x 1,000 square feet/unit + 378,764 square feet of non-residential = 530,764 square feet of structures. Based on 0.0044 MT/square foot, 530,764 square feet of structures would generate 2,335 MT of net demolition GHG.

4 Based on a total net construction of 1,952 units x 1,000 square feet/unit + 2,666,035 square feet of non-residential = 4,618,035 square feet of structures. Based on 0.0143 MT/square foot, 4,618,035 square feet of structure would generate 66,038 MT of net construction GHG.

Source: Appendix B of this EIR, CalEEMod Modeling, January 2017

Operational Emissions

Area and indirect sources associated with the proposed Specific Plan would primarily result from electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation from new land uses that would be implemented by the Specific Plan. GHG emissions from electricity consumed within the Specific Plan area would be generated off-site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source. In addition, the

growth under the proposed Specific Plan would generate GHG emissions from motor vehicle trips.

The estimated net operational GHG emissions that would be generated from implementation of the Specific Plan are shown in **Table 3.5-2**. The annual operational GHG emissions associated with the net change in land uses in the Specific Plan area were calculated using CalEEMod to properly assess the net annual increase in GHG emissions that would occur from Specific Plan implementation (see Appendix B for specific land use inputs to derive net annual GHG emissions).

TABLE 3.5-2
ESTIMATED NET INCREASE IN CONSTRUCTION AND OPERATIONS-RELATED GHG EMISSIONS WITHIN THE SPECIFIC PLAN AREA

Emission Source	Estimated Emissions CO_2e (MT/yr)
Construction	
Annual Mitigated Construction (Amortized over 30 years)	2,279
Project Operations	
Area Sources	1,201
Energy Consumption[a]	18,005
Mobile Sources	37,069
Solid Waste	1,331
Water Consumption[b]	4,014
Total Net Increase in emissions (Construction and Operational Emissions)	63,899
Service Population (SP)	11,410
CO_2e/ SP	5.6
Greater than 6.6 $MTCO_2e$/SP annual threshold for 2020	No
Greater than 4.1 $MTCO_2e$/SP annual threshold for 2035?	Yes

NOTES: CO_2e= carbon dioxide equivalent; MT/yr = metric tons per year; SP=service population.

[a] The energy-related GHG emissions, as estimated by CalEEMod, use 2008 Title 24 energy usage rates. However, according to the CEC, nonresidential buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards would be 15 percent more energy efficient than the 2008 Standards. As such, this additional reduction in energy consumption was accounted for in the Project's estimated GHG emissions associated with energy consumption.

[b] GHG emissions reductions associated with water use resulting from compliance with CALGreen requirements, which requires a minimum 20 percent reduction in indoor water use and the provision of irrigation controllers for outdoor water use, were accounted for in CalEEMod model run.

Source: Appendix B of this EIR, CalEEMod Modeling, January 2017

Additionally, in accordance with SCAQMD's recommendation, the Specific Plan's amortized annual construction-related GHG emissions from Table 3.5-1 are added to the annual net operational emissions estimate in order to determine the Specific Plan's total annual GHG emissions. As shown in Table 3.5-2, the proposed Specific Plan's total net annual GHG emissions would be approximately 63,899 $MTCO_2e$ per year (detailed calculations are included in Appendix B of this EIR). Given a service population (SP)(total net increase of residents and jobs

[employees] at buildout) increase of 11,410, annual GHG emissions per SP population for the proposed Specific Plan would be 5.6 $MTCO_2e$/SP. This would not exceed the SCAQMD's proposed efficiency level of 6.6 $MTCO_2e$/SP for 2020, but would exceed SCAQMD's proposed efficiency level of 4.1 $MTCO_2e$/SP for 2035, as shown in Table 3.5-2. Therefore, the net increase in GHG emissions resulting from implementation of the Specific Plan would be significant for 2035.

The above net GHG emissions evaluation includes mobile sources which include vehicles traveling within, to and from the Specific Plan area. To determine the GHG emissions, a total increase in the vehicle miles traveled was determined. Based on the net change in land uses within the Specific Plan, CalEEMod was used to determine the total vehicle miles traveled. The estimated total annual vehicle miles traveled for the proposed 1,952 residential uses are 32,120,271 miles. The estimated total annual vehicle miles traveled for the proposed 2,666,035 square feet of non-residential uses are 34,191,333 miles. Together, the proposed residential and non-residential uses would result in an estimated annual vehicle miles traveled of 66,311,604 miles.

The net GHG emissions identified above for the proposed Specific Plan has included various Specific Plan design features. These features include the establishment of a transit-oriented development (TOD) that includes mixed uses on the project site. The proposed Specific Plan includes sustainable design guidelines that include site designs for buildings to be sited and maximize the use of sunlight and shade for energy savings, clustering of buildings for shade, use of green roofs and providing drought tolerant plants to reduce water use. The TOD Specific Plan area is largely within walking distance of a Metro station serving the Green and Blue lines, has local bus routes and will provide bicycle and pedestrian facilities within the Specific Plan area. The average vehicle trips (ADTs) have been reduced based on these features and the vehicle miles traveled identified above have been reduced based on the ADTs. Although the Specific Plan includes design features to reduce GHG emissions, the Specific Plan would still result in a significant GHG emissions impact.

Cumulative

In accordance with SCAQMD methodology, the analysis of GHG impacts is by its nature a cumulative assessment. The analysis presented under the project-specific analysis of this section (above) is also representative of the project. Therefore, the project's contribution to cumulative impacts would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

Implementation of Mitigation Measures AIR-1 through AIR-6 is required.

Cumulative

Implementation of Mitigation Measures AIR-1 through AIR-6 is required.

Significance Determination

Project-Specific

Significant and unavoidable impact. Implementation of Mitigation Measures AIR-1 through AIR-7 would reduce potential GHG emissions; however, emissions would remain significant. Mitigation Measures AIR-1 and AIR-2 in Section 3.2 Air Quality would reduce GHG emissions within the Specific Plan area, and include the use of more efficient construction equipment, which would reduce the combustion of fuels associated with construction. These mitigation measures reduce the amount of GHG's that would be generated and emitted through the construction and day to day operation of the project. Mitigation Measures AIR-3 through AIR-6 would reduce the burning of wood or fossil fuels, use low-VOC coatings and cleaning supplies, and potentially use electrical landscaping equipment, all of which reduce operational GHGs. Mitigation Measure AIR-7 would reduce energy consumption through making the development operation more energy efficient. All of these mitigation measures reduce the amount of GHG's that would be generated and emitted through the construction and day-to-day operation of a project.

Cumulative

Significant and unavoidable impact. As discussed under Project-Specific above, implementation of Mitigation Measures AIR-1 through AIR-7 would reduce potential GHG emissions; however, emissions would remain cumulatively considerable.

Conflict with Plan, Policy, or Regulation that Reduces Greenhouse Gas Emissions

Impact 3.5-2: The proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Project-Specific

Consistency with AB 32

As previously discussed in Section 3.5-2 Regulatory Setting, AB 32, the California Global Warming Solutions Act of 2006, requires CARB to establish a statewide GHG emissions cap for 2020 based on 1990 emission levels. AB 32 details policies and programs for California to reach the 2020 target of a return to 1990 emissions levels; however, the State has not developed a plan to reduce emissions beyond the 2020 target. SCAQMD developed efficiency levels to demonstrate a project's compliance with the AB 32 reduction goals for 2020. As indicated under Impact 3.5-1, project GHG emissions would not exceed the SCAQMD's proposed efficiency level of 6.6 $MTCO_2e$/SP for 2020, as shown in Table 3.5-2, and therefore, would be in compliance with AB 32, and impacts would be less than significant.

The proposed project extends beyond the year 2020. Although the SCAQMD has established an efficiency threshold for 2035, there is no adopted greenhouse reduction goals as part of AB 32. Therefore, even though the project would exceed the SCAQMD threshold, the project would be consistent with the current approved reduction goals identified in AB 32. ,.

Consistency with CARB Scoping Plan

Out of the Recommended Actions contained in CARB's Scoping Plan, the actions that are most applicable to the Specific Plan are Actions:

- E-1 (increased Utility Energy efficiency programs including more stringent building and appliance standards),
- GB-1 (Green building),
- T-3 (Regional Transportation-Related Greenhouse Gas Targets), and
- W-1 (Increased water use efficiency).

CARB Scoping Plan Action E-1, together with Action GB-1 (Green Building), aims to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards. Action T-3 aims to reduce GHG reductions by increasing access to a variety of mobility options such as transit, biking, and walking, while Action W-1 aims to promote water use efficiency. All new developments within the proposed Specific Plan area would be required to provide all mandatory green building measures for new developments under the CALGreen Code. Therefore, the proposed Specific Plan would be consistent with the Scoping Plan measures through incorporation of green building measures, and impacts would be less than significant.

Consistency with SCAG Sustainable Communities Strategy Related to Greenhouse Gas Emissions Reduction Policies

SB 375 requires SCAG to provide a Sustainable Communities Strategy (SCS) that will reduce GHG emissions from passenger vehicles and achieve the Regional Reduction Targets for GHG emissions from light-duty autos and trucks in the SCAG area. The SCS achieves the Regional Reduction Targets by providing changes in land use patterns that promote reductions in VMT and vehicle trips including transit oriented development with a mix of residential and commercial land uses that promote the use of transit rather than individual vehicles.

The proposed Specific Plan would implement many of the SCAG policies related to high-density, infill development that are focus on public transit opportunities. The Specific Plan would involve the revitalization of an already developed urban area with infill development that would make use of the existing circulation and utility infrastructure. The Specific Plan would also introduce high-density residential uses, thus creating a mixed-use environment in which residents would benefit from nearby shopping and employment opportunities. The new development would be within walking distance of the Willowbrook/Rosa Parks Station, which would encourage users of the Specific Plan area to use public transportation, and thereby would reduce GHG emissions. Additional detail of the proposed Specific Plan's consistency with SCAG policies are provided in Section 3.8, *Land Use*. Therefore, the proposed Specific Plan would be consistent with the greenhouse gas emission reduction policies in the SCAG SCS, and impacts would be less than significant.

Consistency with Los Angeles County General Plan Related to Greenhouse Gas Emissions Reduction Policies

The Specific Plan proposes to amend some General Plan land uses and zoning designations of parcels to implement the Specific Plan, and, as a result, the County would coordinate with SCAG to adjust the County's population, households, and employment forecast in future updates to the RTP/SCS. Overall, the Specific Plan would not result in a conflict with the General Plan because the proposed Specific Plan is generally consistent with the goals and policies of the General Plan by implementing a transit-oriented development through the introduction of mixed uses, provision of non-vehicular modes of transportation and creating a pedestrian-friendly environment. Because the proposed Specific Plan implements the transit-oriented development policies established by the County, the proposed Specific Plan is considered consistent with the County's land use policies.

The Los Angeles County General Plan policies related to the reduction of greenhouse gas emissions are detailed in Section 3.5.2 Regulatory Setting. The policies that are identified and are proposed to be implemented as part of the Specific Plan include sustainable design techniques such as the use of solar panels, building orientations, and use of trees to provide shading of structures to conserve energy; interconnected and safe bicycle- and pedestrian-friendly access through the provision of bicycle and pedestrian paths to activity centers and neighborhoods; an efficient multimodal transportation network through the improvement of roadway rights-of-way by providing safe bicycle and pedestrian paths throughout the Specific Plan area including to the onsite Willowbrook/Rosa Parks Station, and implementing plans to reduce climate change impacts through the implementation of a transit-oriented development with the introduction of mixed uses. Based on the proposed design features, the Specific Plan would be consistent with the greenhouse gas reduction policies within the Los Angeles County General Plan. Therefore, the project's impact on the County's greenhouse gas reduction policies would be less than significant.

Cumulative

The analysis of plans, policies and regulations that reduces greenhouse gas emissions is by its nature a cumulative assessment. The analysis presented under the project-specific analysis of this section (above) is also representative of the project, and therefore, the project would have a less than cumulatively considerable contribution to cumulative significant impacts.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

3.5.6 References

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3.6 Hazards and Hazardous Materials

Introduction

This section provides an evaluation of the anticipated hazards and hazardous materials impacts from implementation of the proposed Specific Plan. This analysis identifies existing and hazards and hazardous materials within the Specific Plan area and surrounding vicinity, as well as hazards and hazardous materials resulting from construction and operation of the proposed project. Health hazards associated with air pollution concentrations are described in Section 3.2, Air Quality in Impact 3.2-4.

Hazardous Materials Definition

As used in this EIR, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. Under federal and state laws, materials, including wastes, may be considered hazardous if they are specifically listed by statute as such or if they exhibit one of the four characteristics: are poisonous (toxicity), can be ignited by open flame (ignitability), can corrode other materials (corrosivity), or can react violently, explode or generate vapors when mixed with water (reactivity). The term "hazardous material" is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment (California Health and Safety Code, Section 25501(o)). In some cases, past industrial or commercial activities could have resulted in spills or leaks of hazardous materials, resulting in soil and/or groundwater contamination. The presence of certain hazardous materials can also lead to the buildup of methane gas which, if trapped under structures, can become an explosive hazard. Hazardous materials may also be present in building materials and released during building demolition activities.

Federal and state laws require that hazardous materials be specially managed. Excavated soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be managed, treated, transported, and/or disposed of as a hazardous waste. The California Code of Regulations (CCR), Title 22, Sections 66261.20 through 66261.24, contains technical descriptions of characteristics that would cause a soil to be designated a hazardous waste. California regulations are compliant with federal regulations and in most cases, are more stringent. Regulations also govern the management of potentially hazardous building materials such as asbestos, lead-based paint, and polychlorinated biphenyls (PCBs) during demolition activities that could potentially disturb existing building materials.

3.6.1 Environmental Setting

This section summarizes known or possible contamination of soil and groundwater (including contamination of regional groundwater resources as well as known local soil and groundwater resources), and identifies hazardous materials that may be present in existing buildings and building components that could be removed with implementation of the proposed Specific Plan (such as underground storage tanks, septic tanks, asbestos, lead-based paint, and PCB-containing components).

Existing Land Uses

The Specific Plan area is developed, urban and includes a variety of land uses, the majority of which are residential, retail, office, educational, institutional facilities, and service facilities. There is one location within the Specific Plan area that includes an industrial use which is at the southwest corner of Mona Boulevard and I-105. This current industrial use is a truck repair and parking area. Some of the key non-residential land uses that are located within the Specific Plan area include: Martin Luther King, Jr. (MLK) Medical Center, CDU, Kenneth Hahn Plaza, Willowbrook Library, and MLK Center for Public Health.

One of the land uses that are normally sensitive to hazardous materials is schools. The Specific Plan area and vicinity include numerous institutional facilities such as preschools and primary and secondary schools. Table 3.6-1 lists the schools located within the Specific Plan Area and within ¼-mile of the Specific Plan boundary.

TABLE 3.6-1
SCHOOLS WITHIN SPECIFIC PLAN AND WITHIN ¼ MILE RADIUS

School Name	Location	Distance from Specific Plan Site
CDI Head Start Preschool	1700 E Imperial Hwy.	Within Specific Plan Boundaries
Barack Obama Charter Elementary School	1726 E 117th St.	Within Specific Plan Boundaries
Lincoln-Drew Elementary School	1667 E 118th St.	Within Specific Plan Boundaries
Martin Luther King Elementary School	2270 E 122nd St.	Adjacent to the south
King Drew Magnet High School	1601 East 120th St.	Within Specific Plan Boundaries
Nickerson Gardens Sage Center Day Care	1450 E 114th St.	0.17-mile northwest
Carver Elementary School	1425 E 120th St.	0.20-mile west
Bunche Middle School	12338 S Mona Blvd.	Adjacent to the east
Watts Christian School	2003 E Imperial Hwy.	Adjacent to the north

Operational activities associated with specific uses in the project area routinely use, store, and transport hazardous materials within the Specific Plan area. These specific existing uses include auto repair, dry cleaners, and restaurants and utilize or store cleaning substances, solvents, adhesives, chemicals or other hazardous materials.

The existing MLK Medical Center generates hazardous waste such as 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 (Sapphos, 2010). The medical center as well as Charles R. Drew University of Medicine and Science (CDU) generates biomedical and radiological wastes.

Soil and Groundwater

Past and current land uses can be important indicators of whether hazardous materials were likely used at a site and whether they may be present in the subsurface soil and groundwater. Portions of the Specific Plan area were historically used for agricultural purposes. Development in the area

began in the late 1800s with a variety of public, commercial, and residential uses that may have included the generation, use, storage, or disposal of hazardous materials. These past and current operations in the Specific Plan area that may involve hazardous materials include: schools and university, hospital; pest control; and agriculture. Constituents of environmental concern common to these uses include biological waste, petroleum hydrocarbons, volatile organic compounds (VOCs), PCBs, and pesticides.

The results of the environmental database search identified two sites within the Specific Plan area that are on regulatory agency lists of known or possible soil or groundwater contamination sites (see Appendix D). These sites include the following: one leaking underground storage tank (UST) and one active cleanup site. These sites are described below.

Known Local Soil or Groundwater Contamination Sources

The MLK Community Hospital at 1680 E 120th Street is listed as a Leaking Underground Storage Tank (LUST) cleanup site. The Underground Storage Tank (UST) contained gasoline and was reported as leaking in 1989. The gasoline affected soils beneath the UST. Remediation activities were initiated to close the tank and remove affected soils, and the site maintains a case closed status as of January 17, 1996, which means that no significant hazardous threat remains.

The Kenneth Hahn Plaza at 11700 South Wilmington Avenue is a commercial shopping center. Sky High Cleaners is a dry cleaning operation located within the shopping center. Tetrachloroethene (PCE) was released into the subsurface resulting in hazardous soil, soil gas, and groundwater contamination. The site is currently undergoing site investigation and monitoring activities to determine the lateral and vertical extent of contamination.

Potential Hazardous Materials in Structural and Building Components

Hazardous materials, such as asbestos, lead, and PCBs, may also be contained in building materials and components. Procedures for dealing with these materials, and for safely removing and disposing of them in accordance with applicable regulations, have been developed by oversight agencies and are described below.

Asbestos Potential

Asbestos is a naturally-occurring fibrous material that was used as a fireproofing and insulating agent in building construction before such uses were banned by USEPA in the 1970s, although some nonfriable[1] use of asbestos in roofing materials still exists. The presence of asbestos can be found in materials such as ducting insulation, wallboard, shingles, ceiling tiles, floor tiles, insulation, plaster, floor backing, and many other building materials. Asbestos and asbestos-containing materials (ACMs) are considered both a hazardous air pollutant and a human health hazard. The risk to human health is from inhalation of airborne asbestos, which commonly occurs when ACMs are disturbed during such activities as demolition and renovation. Due to the age of the buildings within the Specific Plan area, it is likely that ACMs are present.

[1] Nonfriable asbestos refers to ACMs that contain asbestos fibers in a solid matrix that does not allow for them to be easily released.

Lead Potential

In 1978, the Consumer Product Safety Commission set the allowable lead levels in paint at 0.06 percent by weight in a dry film of newly applied paint. In the 1970s, the chief concern for lead-based paint was its cumulative effect on body systems, primarily when paint chips containing lead were ingested by children. Research in the early 1980s showed that lead dust is of special concern because the smaller particles are more easily absorbed by the body. Common methods of paint removal, such as sanding, scraping, and burning, create excessive amounts of dust. Lead dust is especially hazardous to young children because they play on the floor and engage in a great deal of hand-to-mouth activity, increasing their potential for exposure. Lead-based paints were commonly used in buildings built prior to 1970s. Since many of the structures located within the Specific Plan area were built prior to the federal regulations banning its use, lead-based paints are likely to exist in the existing structures.

Polychlorinated Biphenyls Potential

PCBs are organic oils that were formerly placed in many types of electrical equipment, including transformers and capacitors, primarily as electrical insulators. They may also be contained in hydraulic fluid used for hoists, elevators, etc. Years after widespread and commonplace installation, it was discovered that exposure to PCBs may cause various deleterious health effects and that PCBs are highly persistent in the environment. These substances have been listed as carcinogens by USEPA. PCBs were banned from use in electrical capacitors, electrical transformers, vacuum pumps, and gas turbines in 1979. Because of the age of many of the properties, there is a potential for PCBs within the Specific Plan area.

3.6.2 Regulatory Setting

Federal, state, and local regulations govern the range of hazardous materials issues that may be encountered during demolition, construction, and ongoing operation in the project area. Various state and local regulatory agencies implement these regulations to minimize the risk to human health and the environment from hazardous materials. In addition, the policies of the County's General Plan related to hazards and hazardous materials are also listed.

Federal

The Comprehensive Environmental Response, Compensation, and Liability Act. Superfund Amendments and Reauthorization Act of 1986 (42 USC Section 9601 et seq.)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted by Congress in 1980. This law is also known as Superfund. CERCLA created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified (USEPA, 2017a).

There are four classes of Superfund liable parties: current owners and operators of a facility, past owners and operators of a facility at the time hazardous wastes were disposed, generators and parties that arranged for the disposal or transport of the hazardous substances, and transporters of hazardous wastes that selected the site where the hazardous substances were brought.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response.
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's NPL.

CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fun to $8.5 billion. SARA also required EPA to revise the Hazard Ranking System (HRS) to ensure the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the NPL is accurately assessed (USEPA, 2017b).

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was passed by Congress in 1976 as the primary law governing the disposal of solid and hazardous waste. RCRA set national goals for: protecting human health and the environment from the potential hazards of waste disposal; conserving energy and natural resources; reducing the amount of waste generated; and ensuring that wastes are managed in an environmentally-sound manner. There are three programs under RCRA to assist in achieving the goals listed above:

- The solid waste program which encourages states to develop comprehensive plans to manage non-hazardous industrial solid waste and municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.
- The hazardous waste program establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal — in effect, from "cradle to grave."
- The UST program regulates USTs containing hazardous substances and petroleum products.

RCRA banned all open dumping of waste, encouraged source reduction and recycling, and promoted safe disposal of municipal waste. RCRA also mandated strict controls over the treatment, storage, and disposal of hazardous waste.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. TSCA addresses the production, importation, use and disposal of specific chemicals including PCBs, asbestos, radon and lead-based paint (USEPA, 2017c).

U.S. Department of Transportation. Hazardous Materials Transport Act (49 USC 5101)

The U.S. Department of Transportation, in conjunction with the USEPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to transportation of hazardous materials. The Hazardous Materials Transportation Act of 1974 directs the U.S. Department of Transportation to establish criteria and regulations regarding the safe storage and transportation of hazardous materials. Code of Federal Regulations (CFR) 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

State

Health and Safety Code, Section 25249.5 et seq. Safe Drinking Water and Toxics Enforcement Act, Proposition 65

This law identifies chemicals that cause cancer and reproductive toxicity, provides information for the public, and prevents discharge of the chemicals into sources of drinking water. Lists of the chemicals of concern are published and updated periodically. Businesses are required to notify Californians about the chemicals in products they purchase, in the workplace, or that are released to the environment. By providing this information, individuals are able to make informed decisions about protecting themselves from exposure to these chemicals.

Health and Safety Code, Section 25270, Aboveground Petroleum Storage Act

Health and Safety Code Sections 25270 to 25270.13 ensure compliance with the federal Clean Water Act. The law applies to facilities that operate a petroleum aboveground storage tank with a capacity greater than 660 gallons or combined aboveground storage tanks capacity greater than 1,320 gallons or oil-filled equipment where there is a reasonable possibility that the tank(s) or equipment may discharge oil in "harmful quantities" into navigable waters or adjoining shore lands. If a facility falls under these criteria, it must prepare a Spill Prevention Control and Countermeasure Plan.

Health and Safety Code, Sections 117600 – 118360, Medical Waste Management Act

The provisions within these sections of the Health and Safety Code govern medical waste management at the facility where waste is generated as well as at transfer stations and at treatment facilities. These sections define medical waste, identify the powers and duties of agencies overseeing the waste, stipulate the requirements of small and large quantity generators, and identify containment and storage requirements.

Government Code Section 65962.5, Cortese List

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List" (after the Legislator who authored and enacted the legislation). The list, or a site's presence on the list, has bearing on the local permitting process as well on compliance with CEQA. The Department of Toxic Substances Control shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection a list of the following:

1. All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
2. All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
3. All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
4. All sites listed pursuant to Section 25356 of the Health and Safety Code
5. All sites included in the Abandoned Site Assessment Program.

The State Department of Health Services shall compile and update as appropriate but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code.

The State Water Resources Control Board shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all of the following:

1. All underground storage tanks for which an unauthorized release report is filed pursuant to Section 25295 of the Health and Safety Code.
2. All solid waste disposal facilities from which there is a migration of hazardous waste and for which a California regional water quality control board has notified the Department of Toxic Substances Control pursuant to subdivision (e) of Section 13273 of the Water Code.
3. All cease and desist orders issued after January 1, 1986, pursuant to Section 13301 of the Water Code, and all cleanup or abatement orders issued after January 1, 1986, pursuant to Section 13304 of the Water Code, that concern the discharge of wastes that are hazardous materials.

The local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations, shall compile as appropriate, but at least annually, and shall submit to the California Integrated Waste Management Board, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste. The California Integrated Waste Management Board shall compile the local lists into a statewide list, which shall be submitted to the Secretary for Environmental Protection and shall be available to any person who requests the information.

The Secretary for Environmental Protection shall consolidate the information submitted pursuant to this section and distribute it in a timely fashion to each city and county in which sites on the lists are located. The secretary shall distribute the information to any other person upon request. The secretary may charge a reasonable fee to persons requesting the information, other than cities, counties, or cities and counties, to cover the cost of developing, maintaining, and reproducing and distributing the information.

Hazardous Materials and Waste Handling

Excavated soil containing hazardous substances and hazardous building materials would be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title 22, Division 4.5, Chapter 11, Article 3). State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws and regulations are overseen by a variety of state and local agencies. The California Integrated Waste Management Board and the RWQCB specifically address management of hazardous materials and waste handling in their adopted regulations (CCR, Title 14 and CCR, Title 27).

In the Specific Plan area, LACDPW Environmental Programs Division is responsible for implementing the UST Program, and the Los Angeles County Fire Department Health Hazardous Materials Division (LACFD-HHMD) is the Certified Unified Program Agency (CUPA) responsible for implementing the program elements shown below (CUPA, 2017).

- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs (Tiered Permitting);
- Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC);
- Hazardous Materials Release Response Plans and Inventory Program (Hazardous Materials Disclosure or “Community-Right-to Know”);
- California Accidental Release Prevention Program (Cal ARP); and
- Uniform Fire Code Plans and Inventory Requirements.

The laws and regulations that established these programs require that businesses that use or store certain quantities of hazardous materials submit a Hazardous Materials Business Plan (HMBP) that describes the hazardous materials usage, storage, and disposal to the local oversight agency (CUPA). Aboveground and underground storage tanks must be properly permitted. The County may perform inspections and issue citations to businesses not in compliance with these regulations.

Health and Safety Code, Section 25500 et seq.

This code and the related regulations in 19 California Code of Regulations (CCR) 2620, et seq., require local governments to regulate local business storage of hazardous materials in excess of certain quantities. The law also requires that entities storing hazardous materials be prepared to respond to releases. Those using and storing hazardous materials are required to submit a HMBP

to their local CUPA and to report releases to their CUPA and the State Office of Emergency Services.

Health and Safety Code, Section 25531 et seq.

This code and the California Accidental Release Program regulate the registration and handling of regulated substances. Regulated substances are any chemicals designated as an extremely hazardous substance by USEPA as part of its implementation of SARA Title III. Health and Safety Code Section 25531 overlaps or duplicates some of the requirements of SARA and the Clean Air Act. Facilities handling or storing regulated substances at or above threshold reportable quantities must register with their local CUPA and prepare a risk management plan.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed.

Worker Safety

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) and the federal Occupational Safety and Health Administration (OSHA) are the agencies responsible for assuring worker safety in the workplace.

Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. At sites known or possible to be contaminated, a Site Safety Plan must be prepared. The Site Safety Plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at a contaminated site.

Asbestos

Prior to renovation or demolition of buildings containing asbestos, contractors licensed to conduct asbestos abatement work must be retained. Asbestos abatement contractors must follow state regulations contained in 8 CCR 1529, and 8 CCR 341.6 through 341.14 where there is asbestos-related work involving 100 square feet or more of asbestos containing material. The South Coast Air Quality Management District (SCAQMD) and the California Occupational Safety and Health Administration (Cal/OSHA) must be notified ten days prior to initiating construction and demolition activities. Asbestos encountered during demolition of an existing building must be transported and disposed of at an appropriate facility. The contractor and hauler of the material are required to file a Hazardous Waste Manifest which details the hauling of the material from the site and the disposal of it. Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.

Polychlorinated Biphenyls

In 1979, the USEPA banned the use of PCBs in most new electrical equipment and began a program to phase out certain existing PCB-containing equipment. The use and management of PCBs in electrical equipment is regulated pursuant to the Toxic Substances Control Act, 15 USC Section 2601 *et seq*. The Toxic Substances Control Act and its implementing regulations generally require labeling and periodic inspection of certain types of PCB equipment and set forth detailed safeguards to be followed for disposal of such items.

Lead and Lead-Based Paint

Regulations to manage and control exposure to lead-based paint are described in CFR Title 29, Section 1926.62 and CCR Title 8 Section 1532.1. These regulations cover the demolition, removal, cleanup, transportation, storage and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring and compliance to ensure the safety of construction workers exposed to lead-based materials. Cal/OSHA's Lead in Construction Standard requires project proponents to develop and implement a lead compliance plan when lead-based paint would be disturbed during construction. The plan must describe activities that could emit lead, methods for complying with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities. Cal/OSHA requires 24-hour notification if more than 100 square feet of lead-based paint would be disturbed.

Emergency Response

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government, and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies, including the California Environmental Protection Agency (Cal/EPA), CHP, the California Department of Fish and Wildlife, the RWQCB, and the local fire department. The Los Angeles County Fire Department provides first response capabilities, if needed, for hazardous materials emergencies within the Specific Plan area.

Utility Notification Requirements

Title 8, Section 1541 of the CCR requires excavators to determine the approximate locations of subsurface installations such as sewer, telephone, fuel, electric, and water lines (or any other subsurface installations that may reasonably be encountered during excavation work) prior to opening an excavation. The California Government Code (Section 4216 et seq.) requires owners and operators of underground utilities to become members of and participate in a regional notification center. According to Section 4216.1, operators of subsurface installations who are members of, participate in, and share in the costs of a regional notification center are in compliance with this section of the code. Underground Services Alert of Southern California (known as DigAlert) receives planned excavation reports from public and private excavators and transmits those reports to all participating members of DigAlert that may have underground facilities at the location of excavation. Members will mark or stake their facilities, provide information, or give clearance to dig.

Local

Following are the relevant policies from the Los Angeles County General Plan (County of Los Angeles, 2015)

General Plan—Land Use Element

Policy LU 2.9: Utilize the General Plan Land Use Legend and the Hazard, Environmental and Resource Constraints Model to inform the development of land use policy maps.

Policy LU 4.1: Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.

Policy LU 7.3: Protect public and semi-public facilities, including, but not limited to, major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.

General Plan—Safety Element

Policy S 4.1: Ensure that residents are protected from the public health consequences of natural or manmade disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.

3.6.3 Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines and the County of Los Angeles Environmental Checklist Form*, a project could have a significant hazard or hazardous materials impact if it would result in any of the following:

- Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials (See Section 5.1.7 in this EIR);
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (See Impact 3.6-1 below)
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses (See Impact 3.6-2 below);
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment (See Impact 3.6-3 below);
- For a project located within an airport land use plan or, where such a plan has not yet 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 (See Section 5.1.7 in this EIR);
- 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 (See Section 5.1.7 in this EIR);

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (See Section 5.1.7 in this EIR);
- Expose people or structures to a significant risk of loss, injury, or death involving fires, because the project is located (See Section 5.1.7 in this EIR):
  - within a Very High Fire Hazard Severity Zones (Zone 4)
  - within a high fire hazard area with inadequate access
  - within an area with inadequate water and pressure to meet fire flow standards
  - within proximity to land uses that have the potential for dangerous fire hazard; or
- Does the proposed use constitute a potentially dangerous fire hazard (See Section 5.1.7 in this EIR)?

3.6.4 Methodology

To identify previous land uses that may have generated hazardous materials in the Specific Plan area, historical aerial photographs were reviewed. In addition, to determine if hazardous waste sites exist in the Specific Plan area, a search of available environmental records was conducted. The Regional Water Quality Control Board's (RWQCB) database and the Department of Toxic Substances Control (DTSC) EnviroStor Data Management System were reviewed for the Specific Plan area. The GeoTracker database operated by the RWQCB is the Water Boards' data management system for managing sites that impact groundwater, especially those that require groundwater cleanup as well as permitted facilities such as operating Underground Storage Tanks (USTs) and land disposal sites (California State Water Resources Control Board, 2017). DTSC's EnviroStor Data Management System provides all existing information on permits and corrective action at hazardous waste facilities, as well as cleanup projects. In addition, the lists meeting the "Cortese List" requirements were also reviewed. These lists include:

- List of Hazardous Waste and Substances sites from DTSC EnviroStor database
- List of LUST Sites by County and Fiscal Year from Water Board GeoTracker
- List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit
- List of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from Water Board

Based on the above review, the presence of land uses that generate hazardous materials or the presence of hazardous materials within soils and/or groundwater could affect existing residents, students and/or employees within and directly adjacent to the Specific Plan area. If corrective action are currently underway, it is unlikely for potential significant impacts to occur because a federal, state or local agency is involved is resolving the issue.

3.6.5 Impact Analysis

Accident Conditions

Impact 3.6-1: Implementation of the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Project-Specific

Construction

Accidental spills of small quantities of hazardous materials during construction activities (i.e., motor fuels, oils, solvents, lubricants) related to implementation of the Specific Plan could expose the public or the environment to such substances in the event of an accidental release. Development activities that occur within Specific Plan area would be required to adhere to all applicable regulations regarding hazardous materials storage and handling, as well as to implement construction best management practices (BMPs) as described in Section 3.7, Hydrology and Water Quality to prevent such a release and to promptly contain and clean up any spills. Similarly, the storage, handling and disposal of diesel fuel, lubricants, and gas for project operations would be subject to regulations that would minimize the potential for harmful exposures. With compliance to existing laws and regulations, the project's construction related impacts would be less than significant.

As implementation of the proposed Specific Plan would primarily result in urban infill and redevelopment with mixed-uses, existing structures would need to be demolished prior to the construction of some new buildings. Due to the age of the buildings within the Specific Plan area, demolition of existing structures could result in exposure of construction personnel and the public to hazardous substances such as asbestos, PCBs, or lead-based paints. In addition, the disturbance of soils could result in the exposure of construction workers or nearby employees to health or safety risks if contaminated soils are encountered during construction.

Asbestos and Lead-Based Paint

Based on the age of some of the buildings within the Specific Plan area, it is likely that some materials containing lead and asbestos are present. Affected buildings would need appropriate abatement of identified asbestos prior to demolition or renovation. Federal and state regulations govern the renovation and demolition of structures where materials containing lead and asbestos are present. ACMs are regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of Cal OSHA. These requirements include SCAQMD Rules and Regulations pertaining to asbestos abatement (including Rule 1403); Construction Safety Orders 1529 (pertaining to asbestos) and 1532.1 (pertaining to lead) from CCR Title 8; CFR Title 40, Part 61, Subpart M (pertaining to asbestos); and lead exposure guidelines provided by the U.S. Department of Housing and Urban Development (HUD). Asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services. In addition, Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program

regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Adherence to existing regulations would ensure that potential impacts related to ACMs would be less than significant.

PCB-containing Materials

The presence of PCB-containing materials may be present within the existing structures in the Specific Plan area. Demolition of these structures could disturb these materials and expose workers or the public to adverse effects. Similar to the concerns of asbestos containing materials, an initial survey to determine the presence of PCBs would need to be conducted for a construction/demolition site followed by implementation of appropriate measures to handle any materials with PCBs. Where PCBs occur, appropriate identification and removal work will be required according to federal, state and local standards. PCBs are managed under the federal and state regulations listed previously. Local agencies are required to comply with these existing regulations. Adherence to the regulatory requirements will reduce potential impacts related to PCBs to less than significant.

Soil and Groundwater Contamination

Unknown Contaminated Sites

The Specific Plan area currently contains properties that store, generate, and/or dispose of hazardous materials. While each known soil and/or groundwater contamination site has been remediated or is in the process of remediation, it is possible that implementation of infill projects within the Specific Plan area could expose unknown soil contamination during construction activities. If any unidentified sources of contamination are encountered during grading or excavation, identification and removal work will be required according to federal, state, and local standards. Adherence to the regulatory requirements will reduce potential impacts related to unknown contaminated sites to less than significant.

It is also possible that old USTs that were in use prior to permitting and record keeping requirements may be present in the Specific Plan area. If an unidentified UST was uncovered or disturbed during construction activities, it would be closed in place or removed. Removal activities could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing the tank according to existing state and local regulations.

Because of the age of buildings within the Specific Plan area and because the area has land uses that could generate a variety of potential sources of contamination, a variety of potential sources of contamination exists. These uses include cleaners, auto-repair facilities, and gas stations that are typically associated with hazardous materials. However, any new development activities that identify undocumented hazardous materials would be required to remediate and cleanup under the regulations and supervision of the DTSC and/or the RWQCB.

Known Soil and/or Groundwater Contamination

As listed above, two sites within the Specific Plan area have been identified as being hazardous and a source of contamination. Any new developments that identify undocumented contamination

would be required to be remediated and cleaned up under the regulations and supervision of the DTSC and/or the RWQCB, which would reduce potential impacts to a less than significant.

Operation

Development under the proposed Specific Plan would involve various uses that use, store and dispose of hazardous materials. Residential and commercial uses, and would include the use of and storage of common hazardous materials such as paints, solvents, and cleaning products. Additionally, building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers, and pesticides/herbicides. The Medical Center generates hazardous waste such as 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 (Sapphos, 2010). The medical center as well as CDU generates biomedical and radiological wastes.

The properties and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. The extent and exposure of individuals to hazardous materials would be limited by the relatively small quantities of these materials that would be stored and used on individual project sites throughout the Specific Plan area. In addition to being a small quantity generator of some hazardous waste, the Medical Center is also a large generator of hazardous waste.

Any business or facility which uses, generates, processes, produces, packages, treats, stores, emits, discharges, or disposes a hazardous material (or waste) is a handler and may require a hazardous materials handler permit if the amount of material is above threshold amounts. Any business that handles a hazardous material and/or hazardous waste of quantities at any one time during a year equal to, or greater than a total volume of 55 gallons, a total weight of 500 pounds, or 200 cubic feet of a compressed gas is a hazardous materials handler and must report Owner/Operator, Business Activities, Inventory, Site Map, and Emergency Response and Contingency Plan and Employee Training Plan information in the California Environmental Reporting System (CERS). Because the hazardous materials associated with residential and commercial uses are generally in the form of routinely used common chemicals, potential hazard impacts from reasonable foreseeable upset and accident conditions is less than significant. As for the Medical Center and Drew University, specific governmental regulations exist to reduce potential upset and accident conditions to less than significant.

Development associated with the Specific Plan could also include the new and expanded medical uses at the Medical Center and Drew University that could result in an increase in hazardous waste in the form of medical waste. Medical waste is also known as biohazard waste. Biohazards waste could include, but not limited to laboratory waste, waste containing microbial specimens, human surgery specimens or tissues, discarded materials contaminated with excretion, exudates or secretions from humans, and prescription drugs and containers. Medical waste is regulated under the Medical Waste Management Act that includes various regulations stipulated in California Health and Safety Code Sections 117600 – 118360). These regulations identify requirements for use, storage, disposal and transport. Because the hazardous materials associated

with medical uses are required to comply with state regulations, potential hazard impacts from reasonable upset and accident conditions is less than significant.

Cumulative

The geographical area of the cumulative evaluation of hazardous materials is the Specific Plan area as well as the area adjacent to the Specific Plan area that could contribute to surface, soil or groundwater contamination within the Specific Plan area. Future construction activities within the Specific Plan area could occur at the same time as construction activities associated with future growth in the vicinity of the Specific Plan. Cumulative construction activities could result in accidental spills of small quantities of hazardous materials such as motor fuels, oils, solvents, and lubricants. Construction BMPs are required for each development project to prevent releases of spills and containment and cleanup of spills. Compliance with existing regulations would reduce potential cumulative hazard impacts from upset and accident conditions to less than significant. Because development within the Specific Plan area would also include construction BMPs to prevent releases of spills and containment and cleanup of spills, the project's contribution to cumulative hazard impacts would be less than cumulatively considerable.

Cumulative growth in the vicinity of the Specific Plan area could include commercial and residential projects due to vacant or underutilized parcels near the Specific Plan area. There is an existing area to the east (adjacent to Mona Boulevard in the City of Lynwood) that is zoned and developed with manufacturing uses; however, this area does not contain vacant lots. If cumulative development involving commercial and residential uses occur adjacent to the Specific Plan area, the potential for reasonable upset and accident conditions would be less than significant because of the typical small quantities of common hazardous materials such as paints, solvents, and cleaning products that are kept on individual residential and commercial sites. In addition, small quantities of fuels, cleaners, lubricants, adhesives, sealers and pesticides/herbicides could be used.

Because the proposed project would result in a less than significant hazardous waste impact related to reasonable upset and accident conditions, the project's contribution to cumulative hazardous waste impacts would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Schools

Impact 3.6-2: Implementation of the project would not emit or handle substantial hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Project-Specific

There are three schools and one preschool located within the Specific Plan area, and there are five schools located within one-quarter mile of the Specific Plan area listed in Table 3.6-1 above.

As described previously, common hazardous materials could be used in the construction and operation of new development in the Specific Plan area and within one-quarter mile of an existing school, including use of standard construction materials (e.g., paints, solvents, and fuels), cleaning and other maintenance products, diesel and other fuels (used in construction and maintenance equipment and vehicles), and pesticides associated with landscaping around new developments. The project would not include industrial uses. None of these materials would result in substantial hazardous emissions or are considered acutely hazardous.

As stated in Impact 3.6-1, the proposed residential and commercial uses are likely to use hazardous waste within one-quarter mile of existing schools; however, these wastes are expected to be common waste such as paints, solvents and cleaning products and in small quantities. The proposed project would include expanded medical uses at the Medical Center and CDU that would generate small and large quantities of hazardous materials. Existing regulations are in place to minimize potential health risks associated with their use or the accidental release. Compliance with existing regulations would minimize the risks associated with the exposure of sensitive receptors, including schools, to hazardous materials. Therefore, future development under the proposed project would result in a less than significant impact related to the emissions or handling of hazardous materials within the vicinity of schools.

Cumulative

The geographical area of the cumulative evaluation of hazardous materials is the Specific Plan area as well as one-quarter mile from the Specific Plan area. Cumulative growth in the vicinity of the Specific Plan area could include commercial and residential projects due to vacant or underutilized parcels near the Specific Plan area. There is an existing area to the east (adjacent to Mona Boulevard in the City of Lynwood) that is zoned and developed with manufacturing uses; however, this area appears fully built out. Future residential and commercial cumulative development could generate hazardous waste; however, the potential for hazardous materials to impact a school use would be less than significant because of the typical small quantities of common hazardous materials used by residential and commercial uses.

Although the proposed project would generate hazardous materials, the existing regulations would minimize potential impacts off of the sites that generate the hazardous materials. Because the proposed project would result in less than significant impacts on school uses related to hazardous materials, the projects contribution to cumulative hazardous materials impacts on schools would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact**.**

Hazardous Materials Site Listing

Impact 3.6-3: The project area includes individual sites that are included on a list of hazardous materials sites compile pursuant to Government Code Section 65962.5; however, the project would not create a significant hazard to the public or the environment.

Project-Specific

One hazardous materials site (the Sky High Cleaners on the Kenneth Hahn Plaza site at 11700 South Wilmington Avenue) is listed on SWRCB's GeoTracker database as a Cleanup Program Site with a cleanup status of Open-Assessment and Interim Remedial Action as of December 1, 2015. This site is located in the Cortese List. The Open-Assessment and Interim Remedial Action status is defined as regulatory oversight activities being conducted by the Lead Agency.

One previous LUST cleanup site (MLK Community Hospital at 1680 E 120th Street) that maintains a closed case status is located within the Specific Plan area. The closed status represent that the site was remediated, and no significant hazardous threat remains.

Since the existing hazardous materials site located within the Specific Plan area and listed on the Cortese List is being remediated per federal and state regulations and oversight, impact to public safety and the environment from implementation of the proposed Specific Plan would be less than significant.

Cumulative

The geographical area of the cumulative evaluation of hazardous materials is the Specific Plan area as well as the area adjacent to the Specific Plan area that contains a hazardous materials site that is listed on the Cortese List that could contribute to surface, soil or groundwater contamination within the Specific Plan area. Currently, there are two hazardous materials sites listed on the Cortese List and located adjacent to the project site. They include the Willow Apartments and the Hooper Texaco Service Station.

The Willow Apartments are located at 12612 South Wilmington Street and is a LUST Cleanup Site. This site maintains an Open-Remediation status. The potential contaminants of concern are petroleum/fuels/oils. The site was historically used as a gas station. Four underground storage tanks were removed and soil vapor extraction was implemented. The Regional Board letter dated October 24, 2005 issued a soil-only closure which identifies that the site's soils were remediated, and no significant hazardous threat remains associated with soil contamination. Gasoline-related contaminants are present in groundwater beneath the site at elevated concentrations. The lateral and vertical extent of the groundwater contamination has not been determined. However, this site is generally down gradient from the Specific Plan area, and therefore would not affect groundwater beneath the Specific Plan area.

The Hooper Texaco Service Station is located at 11913 S Compton Avenue and is immediately west of the western boundary of the Specific Plan area. This is a LUST site that has an Open – Assessment and Interim Remediation Action as of October 2010. The soil and groundwater is currently being monitored and remediation action is ongoing.

The two Cortese sites located adjacent to the Specific Plan area as well as the onsite Cortese site that have an open status currently have regulatory oversight and contamination at these sites is currently being remediated. Therefore, due to existing regulatory oversite as well as remediation, future development at or in the vicinity of these sites would result in a less than significant hazard to the public or environment. Because the proposed project would result in a less than significant hazard to the public or environment due to existing regulatory oversite and remediation at the existing open onsite Cortese-listed site, the project's contribution to cumulative hazards to the public or environment would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact**.**

3.6.6 References

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3.7 Hydrology and Water Quality

Introduction

This section addresses the potential impacts to hydrology and water quality associated with implementation of the proposed Specific Plan development. This section provides a description of the regional hydrology and water quality, a summary of applicable regulations related to hydrology and water quality, an evaluation of the potential impacts that may result from implementing the proposed project and identification of mitigation measures to minimize potential effects.

3.7.1 Environmental Setting

Surface Water Hydrology

Regional Drainage

The Specific Plan area is located within the Los Angeles River Watershed, which covers a land area of 834 square miles and spans from its headwaters which originate in the Santa Monica, Santa Susana, and San Gabriel mountains in the west and north to San Pedro Bay. The watershed encompasses and is shaped by the path of the Los Angeles River, which flows from its headwaters in the mountains eastward to the northern corner of Griffith Park. The channel then turns southward and passes through the Glendale Narrows before flowing across the coastal plain and into San Pedro Bay near Long Beach. As a result of intense urban development, the Los Angeles River has been transformed from what was once an uncontrolled, meandering river providing a valuable source of water for early inhabitants to a mostly channelized flood protection waterway (LACDPW, 2015).

Local Drainage

The Specific Plan area is a developed and urbanized area, occupied by residential, commercial, retail, and industrial land uses. Approximately 80-90% of the existing Specific Plan area ground surface is impervious, and it is relatively level, sloping gently from 95 feet above mean sea level (amsl) in the northwest to 82 feet amsl in southeast. Stormwater run-off from the Specific Plan area sheet flows across impervious surfaces, is collected by curbs and gutters, and then conveyed through drop inlets to subterranean storm drains consisting of reinforced concrete piping (RCP) and culverts, which are maintained by the Los Angeles County Flood Control District (County of Los Angeles, 2017). All storm drains receiving runoff from the Specific Plan area eventually outlet to Compton Creek, which is located 0.3 miles west of the Specific Plan area's western boundary. Compton Creek flows southeast and discharges into Reach 2 of the Los Angeles River approximately 6 miles southeast of the Specific Plan area. **Figure 3.7-1**, Drainage Map, shows the drainage path from the Specific Plan area to its direct receiving water. Reach 2 of the Los Angeles River drains to Reach 1 of the Los Angeles River, which then discharges into the Los Angeles River Estuary located at the River-Pacific Ocean interface. According to the Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan, the receiving waters of the project site have several beneficial uses (the resources, services, and qualities of these aquatic

systems that are the ultimate goals of protecting and achieving high water quality (LARWQCB), 2011]), as detailed in **Table 3.7-1** below.

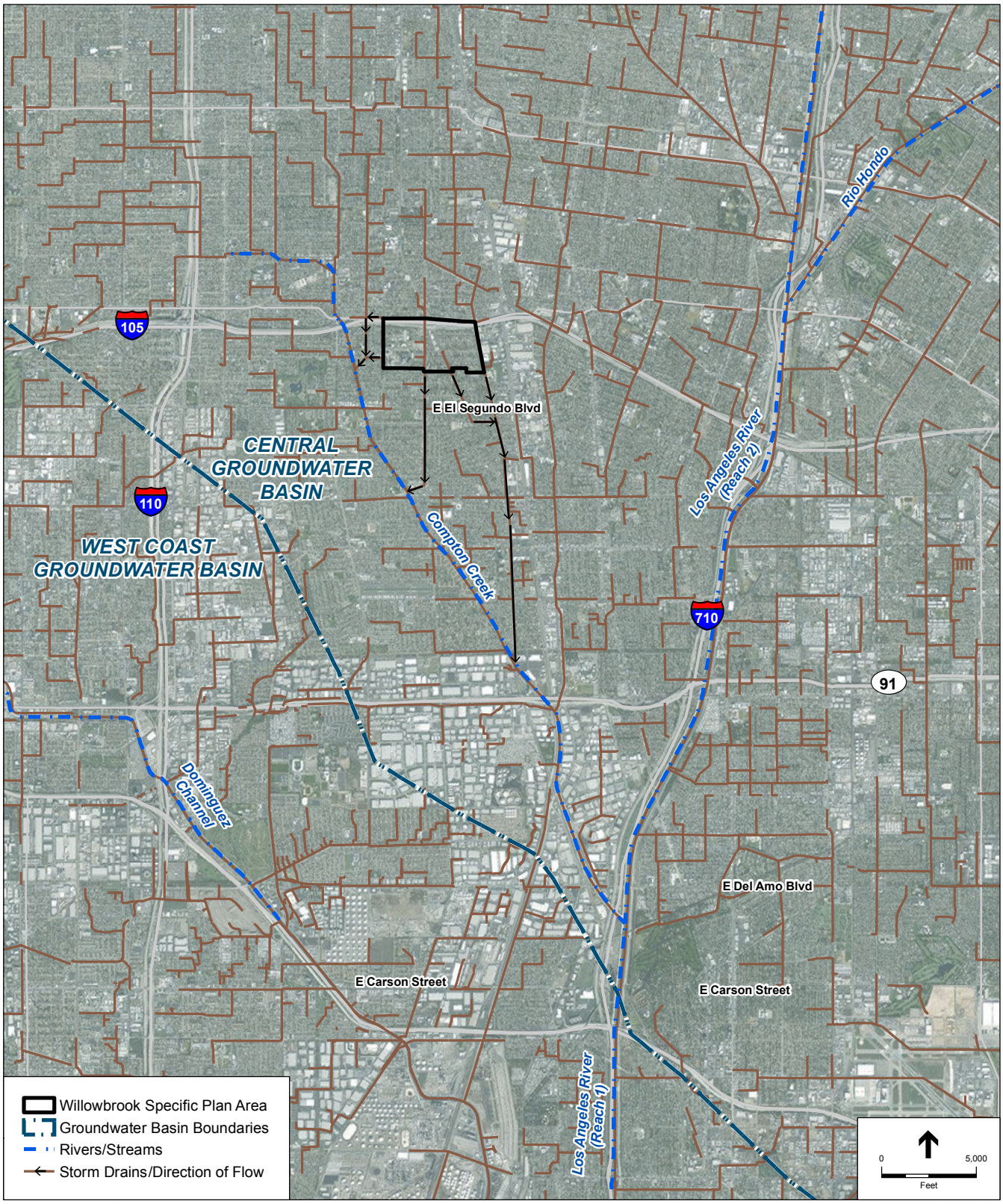
TABLE 3.7-1
BENEFICIAL USES OF WATER BODIES IN THE VICINITY OF THE SPECIFIC PLAN AREA

Water Body	Existing Beneficial Uses	Potential Beneficial Uses
Compton Creek	GWR, WARM, WILD, WET	MUN
Los Angeles River Reach 2	GWR, WARM	MUN, IND, WILD
Los Angeles River Reach 1	GWR, WARM, MAR, WILD, RARE	MUN ,MIGR, SPWN, SHELL
Los Angeles River Estuary	IND, NAV, COMM, EST, MAR, WILD, RARE, MIGR, SPWN, WET	SHELL

Beneficial Use Key:
COMM: Commercial and Sport Fishing
EST: Estuarine Habitat
GWR: Groundwater Recharge
IND: Industrial Service Supply
MAR: Marine Habitat
MIGR: Migration of Aquatic Organisms
NAV: Navigation
RARE: Rare species
SHELL: Shellfish Harvesting
SPWN: Spawning, Reproduction and/or Early Development
WARM: Warm Freshwater Habitat
WILD: Wildlife Habitat
WET: Wetland Habitat

SOURCE: LARWQCB, 2011.

Section 303(d) of the federal Clean Water Act (CWA) requires states to identify water bodies that are "impaired," or those that do not meet water quality standards and are not supporting their beneficial uses. Total Maximum Daily Loads (TMDLs) are then designed to serve as pollution control plans for these specific pollutants. As shown in **Table 3.7-2**, all waterbodies are impaired with various pollutants, and some TMDLs have already been developed for these impairments (LARWQCB, 2011).



SOURCE: ESRI; County of Los Angeles GIS

Figure 3.7-1
Drainage Map

TABLE 3.7-2
TMDLS FOR WATER BODIES IN THE VICINITY OF THE SPECIFIC PLAN AREA

Reach	Impairment(s)	Source(s)	TMDL Completion Date
Compton Creek	Benthic macroinvertebrate bioassessments	Source unknown	2021
	Coliform bacteria	Point and nonpoint	2009
	Copper	Point and nonpoint	2005
	Lead	Point and nonpoint	2005
	Trash	Nonpoint	2008
	pH	Point and nonpoint	2004
Los Angeles River Reach 2 (Carson Street to Figueroa Street)	Ammonia	Point and nonpoint	2004
	Coliform bacteria	Point and nonpoint	2009
	Copper	Unknown	2005
	Lead	Point and nonpoint	2005
	Nutrients	Point and nonpoint	2004
	Oil	Nonpoint	2009
	Trash	Urban runoff/storm sewers, nonpoint, surface runoff	2008
Los Angeles River Reach 1 (Estuary to East Carson Street)	Ammonia	Unspecified point and nonpoint	2004
	Cadmium	Unknown source	2005
	Coliform bacteria	Point and nonpoint	2009
	Copper, dissolved	Point and nonpoint	2005
	Cyanide	Unknown source	2019
	Diazinon	Unknown source	2019
	Lead	Point and nonpoint	2005
	Nutrients (Algae)	Point and nonpoint	2004
	Trash	Urban runoff/storm sewers, surface runoff, nonpoint	2008
	Zinc, dissolved	Point and nonpoint	2005
	pH	Point and nonpoint	2003
Los Angeles Estuary	Chlordane (sediment)	Nonpoint	2019
	DDT (sediment)	Nonpoint	2019
	PCB's	Nonpoint	2019
	Sediment Toxicity	Source unknown	2019
	Trash	Noinpoint, urban runoff/storm sewers, surface runoff	2008

*Although these TMDL dates have passed, no TMDLs have been established.

SOURCE: LARWQCB, 2011.

Groundwater

Los Angeles County is located in the South Coast Hydrologic Region (HR), as described by the Department of Water Resources Groundwater Bulletin 118 (DWR, 2003); the two largest and most critical groundwater basins among them are the Central Basin and the West Coast Basin. The Central and West Coast Groundwater basins are characterized by aquifers that are generally confined by relatively impermeable clay layers over most of the area (DWR, 2003), with the exception of the Montebello and Los Angeles Forebays in the Central Groundwater Basin (Central Basin). The proposed project area is underlain by the Central Basin (see Figure 3.7-1), which is 270 square miles in size and underlies portions of the Los Angeles River, Upper San Gabriel, and San Gabriel River/Rio Hondo Enhanced Watershed Management Program areas. Recharge to the Central Basin occurs primarily by engineered recharge of stormwater, imported water, and reclaimed water along the upper reaches of the San Gabriel River and the Rio Hondo via the San Gabriel River Water Conservation System. This system is a series of dams, spreading grounds and instream recharge systems that facilitate groundwater recharge into the Main San Gabriel Basin and Montebello Forebay of the Central Basin. Recycled water has been also delivered for recharge in the Montebello Forebay since 1962. Finally, the Central Basin includes one seawater intrusion barrier, the Alamitos Gap Seawater Intrusion Barrier (AGB), fed by treated imported water along with advanced water treatment recycled water (ESA, 2015).

Groundwater quality reflects current and historical land uses. As a highly urban area, commercial and industrial activities have resulted in contamination due to leaking aboveground and underground storage tanks, leaking sewer and oil pipelines, spills, and illegal discharges. Many groundwater contamination plumes consist of priority contaminants such as petroleum fuels and additives (e.g., methyl tert-butyl ether), solvents (e.g., trichloroethylene and perchloroethylene), herbicides (e.g., atrazine, simazine, prometon), and other hazardous/toxic substances (e.g., arsenic, perchlorate). Groundwater contamination within the Central Coast Basin and adjacent basins is discussed in depth in the California Groundwater Ambient Monitoring and Assessment Program (USGS and SWRCB, 2012). In general, contaminated plumes are typically found in shallow groundwater. However, as the aquifers and confining layers in these alluvial basins are typically interfingered,[1] the quality of groundwater in the deeper production aquifers is threatened by the migration of pollutants from the upper aquifers (ESA, 2015).

Between the 1900s and 1950s, groundwater was an important factor in urbanization of the Central basins. Excessive overpumping in the basins caused severe overdraft (i.e., lowered groundwater levels) and created a hydraulic gradient that resulted in seawater intrusion, which contaminated the coastal groundwater aquifers. To address this problem and halt the intrusion, three seawater intrusion barriers were constructed. While the water injection activities at the barriers were successful in halting further seawater intrusion, these efforts could not address the seawater that had already intruded into the Central and West Coast Basins before the barriers were constructed. These large plumes of saline water, referred to as “saline plumes,” are trapped inland of the injection wells, thereby degrading significant volumes of groundwater with high concentrations

[1] Interfinger means to grade or pass from one material (typically fine-grained) into another (typically coarse-grained) through a series of interpenetrating wedge-shaped layers. This can result in hydraulic connection between fine and coarse grounded layers.

of chloride and total dissolved solids (TDS) and decreasing the ability of affected aquifers to provide groundwater storage (ESA, 2015).

In general, groundwater in the main producing aquifers of the Central Basins is of good quality. Localized areas of marginal to poor quality water exist, primarily at the basin margins where seawater intrusion occurred in the past and also in mostly shallow groundwater near environmental release sites. Groundwater has also been impacted by industrial activities that have introduced highly mobile man-made organic compounds such as solvents and fuel additives. These contaminated groundwater plumes are well documented. Areas of these contaminant plumes are designated to restrict recharge activities that may create an increased driver for contaminant migration (ESA, 2015).

As of September of 2015, the groundwater level measured by a well adjacent to the Specific Plan area (Well No. 03S13W08J001S located near the intersection of East 119th Street, East 120th Street, and S. Wilmington Avenue) was approximately 155 feet below ground surface (bgs) (DWR, 2015).

3.7.2 Regulatory Setting

Federal

Clean Water Act

The Federal Water Pollution Control Act (33 U.S.C. 1251 et. sec.) as amended by the Federal Water Pollution Control Act Amendments of 1972, also known as the Clean Water Act (CWA), states that the discharge of pollutants to waters of the United States from any point source is unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Amendments to the CWA added a section that established a framework for regulating municipal and industrial (M&I) stormwater discharges under the NPDES program. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations, under the 1987 CWA Amendments, that establish application requirements for stormwater permits.

Clean Water Act Section 402

CWA Section 402 regulates discharges to surface waters of the United States through the NPDES program. In California, the USEPA authorizes the State Water Resources Control Board (SWRCB) to oversee the NPDES program through the Regional Water Quality Control Boards (RWQCBs).

Stormwater discharges are also regulated under CWA Section 402. Construction activities disturbing one acre of land or greater must be covered under the SWRCB General Construction Activity Stormwater Permit. The permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) for construction activities. A SWPPP prepared in compliance with the General Permit describes the site, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect construction sites before and after

storms to identify stormwater discharge from construction activity, and to identify and implement controls where necessary.

Clean Water Act Section 303(d)

Section 303(d) of the CWA requires that each state identify water bodies or segments of water bodies that are "impaired" (i.e., do not meet one or more of the water quality standards established by the state). These waters are identified in the Section 303(d) list as waters that are polluted and need further attention to support their beneficial uses. Once the water body or segment is listed, the state is required to establish TMDL for the pollutant. A TMDL is the maximum amount of a pollutant that a water body can receive and still meet the water quality standards. Typically, TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. On October 11, 2011, the USEPA approved a revised list of water quality limited segments (herein referred to as the 303(d) list) prepared by the RWQCB for California's 2008 through 2010. Table 3.7-1 summarizes the main impaired water bodies within the study area that are included on the RWQCB 2008 CWA Section 303(d) list that was revised on July 7, 2009.

Clean Water Act Section 401

Section 401 of the federal CWA requires that any activity, including the crossing of rivers or streams during road, pipeline, or transmission line construction, that might result in discharges of dredged or fill material into a state water body, be certified by the RWQCB. This certification ensures that the proposed activity does not violate state or federal water quality standards.

Clean Water Act Section 404

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface water or groundwater, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and floodwaters, and water recharge, filtration, and purification functions. Technical standards for delineating wetlands have been developed by the Army Corps of Engineers (ACOE) which generally defines wetlands through consideration of three criteria: hydrology, soils, and vegetation. Under Section 404 of the CWA, the ACOE is responsible for regulating the discharge of dredged or fill material into waters of the United States. The term "waters of the United States" includes wetlands and non-wetland bodies of water that meet specific criteria as defined in the Code of Federal Regulations.

State

Porter-Cologne Water Quality Act

The Porter-Cologne Act (Division 7 of the California Water Code) provides the basis for water quality regulation within California and defines water quality objectives as the limits or levels of water constituents that are established for reasonable protection of beneficial uses. The SWRCB administers water rights, water pollution control, and water quality functions throughout the State, while the RWQCB conducts planning, permitting, and enforcement activities. The Porter-Cologne Act requires the RWQCB to establish water quality objectives, while acknowledging that water quality may be changed to some degree without unreasonably affecting beneficial uses.

Beneficial uses, together with the corresponding water quality objectives, are defined as standards, per Federal regulations. Therefore, the regional plans form the regulatory standards for meeting State and federal requirements for water quality control. Changes in water quality are only allowed if the change is consistent with the maximum beneficial use designated by the State, does not unreasonably affect the present or anticipated beneficial uses, and does not result in water quality less than that prescribed in the water quality control plans.

National Pollutant Discharge Elimination Program

The NPDES permit program is administered in the State of California by the RWQCBs, and was first established under the authority of the CWA to control water pollution by regulating point sources that discharge pollutants into waters of the United States. If discharges from industrial, municipal, and other facilities go directly to surface waters, those project applicants must obtain permits. An individual NPDES permit is specifically tailored to a facility. A general NPDES permit covers multiple facilities within a specific activity category such as construction activities. A general permit applies with same or similar conditions to all dischargers covered under the general permit.

Construction General Permit

The State of California adopted a Statewide NPDES Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The last Construction General Permit amendment became effective on February 16, 2012. The Construction General Permit regulates construction site storm water management. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the general permit for discharges of storm water associated with construction activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit (CGP) requires the development and implementation of an Stormwater Pollution Prevention Plan (SWPPP) that includes specific Best Management Practices (BMPs) designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off-site into receiving waters. Types of BMPs include erosion control (e.g., preservation of vegetation), sediment control (e.g., fiber rolls), non-stormwater management (e.g., water conservation), and waste management. The SWPPP also includes descriptions of BMPs to reduce pollutants in storm water discharges after all construction phases have been completed at the site (post-construction BMPs). The SWPPP BMPs are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Routine inspection of all BMPs is required under the provisions of the CGP. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for nonvisible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

In the project area, the CGP is implemented and enforced by the Los Angeles Regional Water Quality Control Board (LARWQCB), which administers the stormwater permitting program. Dischargers are required to electronically submit a Notice of Intent (NOI) and permit registration documents (PRDs) to obtain coverage under this CGP. Dischargers are responsible for notifying the LARWQCB of violations or incidents of noncompliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected.

Municipal Stormwater Permitting (MS4)

The State's Municipal Stormwater Permitting Program regulates stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s). MS4 Permits were issued in two phases. Phase I was initiated in 1990, under which the RWQCBs adopted NPDES stormwater permits for medium (serving between 100,000 and 250,000 people) and large (serving more than 250,000 people) municipalities. As part of the Phase II, the SWRCB adopted a General Permit for small MS4s (serving less than 100,000 people) and non-traditional small MS4s including governmental facilities such as military bases, public campuses, and hospital complexes.

Regional and Local

Los Angeles Regional Water Quality Control Plan

The preparation and adoption of water quality control plans (Basin Plans) is required by the California Water Code (Section 13240) and supported by the CWA. Section 303 of the CWA requires states to adopt water quality standards which "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." According to Section 13050 of the California Water Code, Basin Plans consist of a designation or establishment for the waters within a specified area of beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives. Because beneficial uses, together with their corresponding water quality objectives, can be defined per Federal regulations as water quality standards, the Basin Plans are regulatory references for meeting the State and Federal requirements for water quality control. The Basin Plan indicates the beneficial uses for Compton Creek, the Los Angeles River Estuary, and Reaches 1 and 2 of the Los Angeles River, shown above in Table 3.7-1.

County of Los Angeles Stormwater Pollution Control Requirements for Construction Activities

To comply with the Phase II General Construction Permit, the County of Los Angeles has established a set of BMPs with which all permitted construction activities on unincorporated county lands must comply. The BMPs, which are based on the state's Stormwater Best Management Practices Handbook (CASQA, 2003), are as follows:

- Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses or wind.
- Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.

- Fuels, oils, solvents and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
- Non-stormwater runoff from equipment and vehicle washing and any other activity shall be contained at the project site.
- Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.
- Trash and construction related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
- Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
- Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.

The Los Angeles County Department of Public Works may identify and require additional BMPs, as appropriate.

Los Angeles County Municipal Separate Storm Sewer System Permit

The current Municipal Separate Storm Sewer System (MS4) Permit for Los Angeles County (Order No. R4-2012-0175) was adopted on November 8, 2012, became effective December 28, 2012, and will expire on December 28, 2017 (LARWQCB, 2012). Order No. R4-2012-0175 is the fourth iteration of the storm water permit for the MS4s in the Los Angeles region, which includes: Los Angeles County Flood Control District, County of Los Angeles, and 84 incorporated cities within the County watersheds excluding the City of Long Beach. The permit contains requirements that are necessary to improve efforts to reduce the discharge of pollutants in storm water runoff to the maximum extent practicable (MEP) and achieve water quality standards. This permit requires that runoff is addressed during the major phases of urban development (planning, construction, and operation) in order to reduce the discharge of pollutants from storm water to the MEP, effectively prohibit non-storm water discharges and protect receiving waters.

The MS4 Permit also includes construction requirements for implementation of minimum construction site BMPs for erosion, sediment, non-storm water management and waste management on construction sites, which are listed in **Table 3.7-3** below.

TABLE 3.7-3
MINIMUM BMPS FOR CONSTRUCTION SITES

Erosion Controls	Scheduling
	Preservation of Existing Vegetation
Sediment Controls	Silt Fence
	Sandbag Barrier
	Stabilized Construction Site Entrance/Exit
Non-Storm Water Management	Water Conservation Practices
	Dewatering Operations
Waste Management	Material Delivery and Storage
	Stockpile Management
	Spill Prevention and Control
	Solid Waste Management
	Concrete Waste Management
	Sanitary/Septic Waste Management

SOURCE: LARWQCB, 2012

County of Los Angeles Low Impact Development Manual

The Los Angeles County Department of Public Works (LACPWD) prepared the Low Impact Development Standards Manual (LACPWD, 2014) to comply with the requirements of the 2012 MS4 Permit and supersede the County Standard Urban Stormwater Mitigation Plan. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. Unlike traditional stormwater management, which collects and conveys stormwater runoff through storm drains, pipes, or other conveyances to a centralized stormwater facility, LID uses site design and stormwater management to maintain the site's pre-development runoff rates and volumes. The goal of LID is to mimic a site's pre-development hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall.

The LID Standards Manual describes stormwater management requirements for Designated Projects, which are identified as meeting one or more of the following:

- All development projects equal to one acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area;
- Industrial parks with 10,000 square feet or more of surface area;
- Commercial malls with 10,000 square feet or more of surface area;
- Retail gasoline outlets with 5,000 square feet or more of surface area;

- Restaurants (Standard Industrial Classification [SIC] Code 5812) with 5,000 square feet or more of surface area;
- Parking lots with 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces;
- Automotive service facilities (SIC Codes: 5013, 5014, 5511, 5541, 7532-7534, or 7536-7539) with 5,000 square feet or more of surface area;
- Projects located in or directly adjacent to, or discharging directly to a Significant Ecological Area (SEA), where the development will:
  - Discharge stormwater runoff that is likely to impact a sensitive biological species or habitat; and
  - Create 2,500 square feet or more of impervious surface area.
- Redevelopment projects, which are developments that result in creation or addition or replacement of either: (1) 5,000 square feet or more of impervious surface on a site that was previously developed as described in the above bullets; or (2) 10,000 square feet or more of impervious surface area on a site that was previously developed as a single family home.

Once a project has been established as a Designated Project, the project operator must: conduct site assessment and identify design considerations, including determining the feasibility of on-site infiltration; apply site-specific source control measures; calculate the Stormwater Quality Design Volume (SWQDv); implement stormwater quality control measures; implement alternative compliance measures; implement hydromodification requirements; and develop a Maintenance Plan. The LID Ordinance requires that all Designated Projects retain the SWQDv on-site using retention-based stormwater quality control measures (infiltration and/or stormwater runoff harvest and use). LID practices or stormwater quality control measures can be categorized into the following types:

- Retention-based stormwater quality control measures (bioretention, infiltration basin, dry well, permeable pavement, etc.)
- Biofiltration (e.g. biofiltration area)
- Vegetation-based stormwater quality control measures (e.g. stormwater planter, vegetated swale, green roof, etc.)
- Treatment-based stormwater quality control measures (e.g. sand filter, constructed wetland, propriety treatment control measures)

In the event that 100 percent retainment of the SWQDv onsite is technically infeasible, at least one of the following alternative compliance measures must be implemented:

- On-site biofiltration of 1.5 times the volume of the SWQDv that is not reliably retained on-site;
- On-site treatment and off-site infiltration/bioretention of the volume of the SWQDv that is not reliably retained on-site;

- Replenishment of groundwater supplies that have a designated beneficial use in the Basin Plan; or
- On-site treatment and off-site infiltration/bioretention or stormwater runoff harvest and use of the volume of SWQDv that is not reliably retained on-site through retrofit an existing development with similar land uses as the project.

The LID Standards Manual also has requirements for Non-Designated Projects. For small-scale Non-Designated Projects (residential development and redevelopment of four units or less), at least two of the following simple BMPs into the site design: porous pavement, downspout routing, disconnection of impervious surfaces, dry wells, landscaping and landscape irrigation interception of runoff, or green roofs. For large-scale Non-Designated Projects (all Non-Designated residential developments of five units or greater and all non-residential, Non-Designated Projects), the change in SWQDv must be retained through infiltration, evapotranspiration, stormwater runoff harvest and use, or a combination thereof unless technically infeasible. To meet these requirements, large-scale Non-Designated Projects must conduct site assessment and identify design considerations, apply site-specific source control measures; calculate the change in SWQDv, implement stormwater quality control measures; implement any necessary hydromodification requirements, and develop a maintenance plan, if necessary.

Los Angeles County General Plan

The most recent version of the Los Angeles County General Plan was adopted in October 2015. The following goals and policies pertain to hydrology and water quality.

Goal C/NR 5: Protected and useable local surface water resources.

Policy C/NR 5.1: Support the LID philosophy, which seeks to plan and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at regional, neighborhood, and parcel-level scales.

Policy C/NR 5.2: Require compliance by all County departments with adopted Municipal Separate Storm Sewer System (MS4), General Construction, and point source NPDES permits.

Policy C/NR 5.3: Actively engage with stakeholders in the formulation and implementation of surface water preservation and restoration plans, including plans to improve impaired surface water bodies by retrofitting tributary watersheds with LID types of BMPs.

Policy C/NR 5.4: Actively engage in implementing all approved Enhanced Watershed Management Programs/Watershed Management Programs and Coordinated Integrated Monitoring Programs/Integrated Monitoring Programs or other County-involved TMDL implementation and monitoring plans.

Policy C/NR 5.6: Minimize point and non-point source water pollution.

Policy C/NR 5.7: Actively support the design of new and retrofit of existing infrastructure to accommodate watershed protection goals, such as roadway, railway, bridge, and other— particularly—tributary street and greenway interface points with channelized waterways.

Goal C/NR 6: Protected and usable local groundwater resources.

Policy C/NR 6.1: Support the LID philosophy, which incorporates distributed, post-construction parcel-level stormwater infiltration as part of new development.

Policy C/NR 6.2: Protect natural groundwater recharge areas and regional spreading grounds.

Policy C/NR 6.3: Actively engage in stakeholder efforts to disperse rainwater and stormwater infiltration BMPs at regional, neighborhood, infrastructure, and parcel-level scales.

Policy C/NR 6.4: Manage the placement and use of septic systems in order to protect high groundwater.

Policy C/NR 6.5: Prevent stormwater infiltration where inappropriate and unsafe, such as in areas with high seasonal groundwater, on hazardous slopes, within 100 feet of drinking water wells, and in contaminated soils.

Goal C/NR 7: Protected and healthy watersheds.

Policy C/NR 7.1: Support the LID philosophy, which mimics the natural hydrologic cycle using undeveloped conditions as a base, in public and private land use planning and development design.

Policy C/NR 7.2: Support the preservation, restoration and strategic acquisition of available land for open space to preserve watershed uplands, natural streams, drainage paths, wetlands, and rivers, which are necessary for the healthy function of watersheds.

Policy C/NR 7.3: Actively engage with stakeholders to incorporate the LID philosophy in the preparation and implementation of watershed and river master plans, ecosystem restoration projects, and other related natural resource conservation aims, and support the implementation of existing efforts, including Watershed Management Programs and Enhanced Watershed Management Programs.

Policy C/NR 7.4: Promote the development of multi-use regional facilities for stormwater quality improvement, groundwater recharge, detention/attenuation, flood management, retaining nonstormwater runoff, and other compatible uses.

3.7.3 Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the project could have a significant impact on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements (See Impact 3.7-1 below);
- 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) (See Impact 3.7-2 below);
- 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 that would result in substantial erosion or siltation on- or off-site (See Impact 3.7-3 below);
- 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 amount of surface run-off in a manner which would result in flooding on- or off-site (See Section 5.1.8 in this EIR);
- Create or contribute run-off water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off (See Impact 3.7-4 below);
- Generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality (See Impact 3.7-5 below);
- Conflict with the Los Angeles County Low Impact Development Ordinance (Los Angeles County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52) (See Section 5.1.8 in this EIR);
- Result in point or nonpoint source pollutant discharges into State Water Resources Control Board-designated Areas of Special Biological Significance (See Section 5.1.8 in this EIR);
- 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) (See Section 5.1.8 in this EIR);
- Otherwise substantially degrade water quality (See Impact 3.7-6 below);
- 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 (See Section 5.1.8 in this EIR);
- Place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain (See Section 5.1.8 in this EIR);

- 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 (See Section 5.1.8 in this EIR); or
- Place structures in areas subject to inundation by seiche, tsunami, or mudflow (See Section 5.1.8 in this EIR).

3.7.4 Methodology

The following analysis considers the existing environmental setting and regulatory environment applicable to the proposed Specific Plan area. The analysis determines if the project implementation could adversely affect the quality of water bodies during construction activities or result in a long-term increase in pollutant levels in storm water originating from the Specific Plan area. The SWRCB 303(d) list was consulted to determine existing impairments in receiving water bodies within the vicinity of the Specific Plan area. (These impairments are listed in Table 3.7-2 above). Considering the project characteristics and existing conditions, the following potential impacts were evaluated and mitigation measures provided, where applicable.

3.7.5 Impact Analysis

Water Quality Standards/Waste Discharge Requirements

Impact 3.7-1: The proposed project would not violate water quality standards or waste discharge requirements.

Project-Specific

Construction

Demolition of existing structures, removal of existing vegetation and trees, pavement and concrete replacement, grading, stockpiling of materials, excavation and the import/export of soil and building materials, construction of new structures, and landscaping activities could expose and loosen sediment and building materials, which have the potential to mix with storm water and urban runoff and degrade surface and receiving water quality. Furthermore, construction generally requires the use of heavy equipment and construction-related chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents and paints. Because each development within the Specific Plan area would be required to comply with NPDES requirements, BMPs would be in place to prevent potentially harmful materials from accidentally spilled or improperly disposed of during construction activities. These BMPs would also substantially reduce the potential for contaminated surface water to wash into and pollute surface waters or groundwater. Although the receiving waters of the Specific Plan area (Compton Creek, Reach 2 of the Los Angeles River, Reach 1 of the Los Angeles River, and the Los Angeles River Estuary) are impaired for several pollutants, compliance with the NPDES would substantially reduce the potential for pollutants from construction sites to exacerbate the current impairment of downstream receiving waters.

Each future project within the Specific Plan area would be assessed individually to ensure compliance with applicable NPDES requirements. Development projects disturbing more than an

acre of ground surface would be required to develop a SWPPP as part of compliance with the Construction General Permit that implements BMPs designed to prevent water quality degradation. Types of BMPs include erosion control, sediment control, waste management, and post-construction, all of which would prevent the introduction of pollutants into runoff, and consequentially, receiving waters. Projects disturbing less than an acre of ground surface during construction would not be required to prepare a SWPPP, but would be required to implement the minimum BMPs required by the Los Angeles County MS4 Permit (listed in Table 3.7-3 above), thereby protecting water quality. Further, all permitted construction activities in the project area would be required to implement the BMPs specified in the County Stormwater Pollution Control Requirements for Construction Activities. As a result, construction impacts related to water quality standards or waste discharge requirements from implementation of the proposed Specific Plan development would be less than significant.

Operation

As described above, the receiving waters of the Specific Plan area are impaired by several pollutants. Future development within the Specific Plan area would include residential, mixed use, medical, educational and commercial uses; pollutants associated with these land uses typically include sediments, trash, petroleum products, metals, and chemicals.

Since the Specific Plan area is substantially developed and approximately 80 to 90 percent impervious, buildout of the proposed Specific Plan development is expected to generate little or no increase in runoff to the existing stormwater drainage system (County of Los Angeles, 2017). New development in accordance with the Specific Plan would be required to meet MS4 Permit requirements through compliance with the County LID Standards Manual. Development satisfying Designated Project characterization as discussed above in Section 3.7-2, Regulatory Setting,would retain the estimated Stormwater Quality Design Volume (SWQDv) through implementation of retention, biofiltration, vegetation-based, and/or treatment-based stormwater quality control measures. If retainment of the SWQDv is not technically feasible, Designated Projects would be required to treat the SWQDv prior to its release or contribute to groundwater recharge. Large-scale Non-Designated Projects as defined above in Section 3.7-2, would implement stormwater quality control measures to retain the change in SWQDv and small-scale Non-designated Projects would be required to implement specific site design BMPs to filter and/or reduce runoff. By retaining and/or treating runoff onsite, the amount of potentially pollutant-laden runoff leaving the site and contaminating receiving waters would be substantially reduced.

As specified by the Sustainable Design Criteria in the proposed Specific Plan, walkways and plazas shall be designed to collect stormwater, when feasible. In addition, the majority of plant materials used for landscaping drought tolerant, indicating irrigation (and associated dry weather flows) would not be excessive. Green roofs would also be encouraged on development to reduce the quantity of water entering the storm drain system. Finally, Green Streets and LID strategies such as the use of vegetated swales and decomposed granite, should be followed to manage stormwater, improve water quality, reduce flows and enhance watershed health. Compliance with regulations and implementation of the Sustainable Design Criteria would minimize pollutants

being transported offsite into downstream receiving waters, and projects implemented in accordance with the Specific Plan would not violate water quality standards or waste discharge requirements.

Cumulative

The geographic scope for cumulative impacts related to water quality standards and waste discharge requirements includes the Los Angeles River watershed. Implementation of cumulative development would be required to comply with all pertinent regulations, such as the Construction General Permit, County Stormwater Pollution Control Requirements for Construction Activities, and the County LID Standards Manual. To comply with these regulations, BMPs would be required to decrease potential pollutant loadings in stormwater runoff and reduce runoff quantities. Compliance with these water quality regulations by cumulative projects would minimize pollutants being transported to downstream receiving waters, and these cumulative projects would not violate water quality standards or waste discharge requirements.

Because development under the Specific Plan would also be required to comply with water quality regulations, and the Specific Plan would implement the Sustainable Design Criteria, pollutants transported offsite into downstream receiving waters would be minimized. The proposed Specific Plan's contribution to cumulative impacts associated with a violation of water quality standards or waste discharge requirements would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Groundwater Supplies and Recharge

Impact 3.7-2: The proposed project would not 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).

Project-Specific

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 1,952 residential dwelling units and 2,666,035 square feet of commercial space to the Specific Plan area. The Specific Plan area receives water from Liberty Utilities (Liberty), Golden State Water Company (GSWC), and Los Angeles Department of Water and Power (LADWP). Liberty obtains its water supply from imported water, groundwater, and recycled water. Water delivered to Willowbrook system customers by the GSWC is a blend of groundwater and imported water. Water provided to the Willowbrook area by LADWP also includes a blend of groundwater and imported water. All three water purveyors have pumping rights to obtain their groundwater from the Central Groundwater Basin. These pumping rights were established as part of the adjudication of the Central Groundwater Basin in 1965 and amended in 1991. Because groundwater withdrawals from the Central Groundwater Basin are limited based on the adjudication, compliance with the judgment that set pumping rights would eliminate the potential for the water agencies, that will serve the proposed Specific Plan, to substantially impact the groundwater aquifer. Therefore, the implementation of the proposed project would result in less than significant impacts on the Central Groundwater Basin from groundwater use.

As described above, the Central Basin underlies the project area; however, the majority (80 to 90 percent) of the project area is developed and impervious, and thus does not have much groundwater recharge potential. The proposed Specific Plan development would not substantially increase the amount of impervious surfaces in the project area. As stated previously, the Central Basin is recharged mainly by stormwater, imported water, and reclaimed water along the upper reaches of the San Gabriel River and the Rio Hondo via the San Gabriel River Water Conservation System, which is located several miles away from the Specific Plan area. Thus, the proposed project would not reduce the groundwater recharge potential of the Specific Plan area. In addition, the depth to groundwater in the vicinity of the Specific Plan area is approximately 155 feet below ground surface. Thus, excavation for development in the Specific Plan area would not come into contact with groundwater or require dewatering during excavation activities such that groundwater levels would be adversely affected. Further, since groundwater is not present close to the ground surface, stormwater infiltration BMPs (as described in the County LID Standards Manual) would be technically feasible onsite, the use of which could increase the amount of groundwater recharge in the project area compared to existing conditions. Therefore, the implementation of the proposed Specific Plan would result in less than significant impacts to the existing recharge capabilities of the area overlying the Central Groundwater Basin.

Cumulative

The geographic scope for cumulative impacts related to groundwater impacts includes the approximately 227 square-mile service area of the Central Groundwater Basin. This service area extends from East Los Angeles to the north to Signal Hill to the south and from Willowbrook to the west to La Habra Heights to the east. As cumulative development growth occurs within the Central Groundwater Basin, the water purveyors that will serve the future development will use groundwater as well as other water supplies to meet the future demand. However, each water purveyor that has rights to groundwater from the Central Groundwater Basin are limited based on the adjudication that established the pumping rights for each purveyor. Because groundwater withdrawals from the Central Groundwater Basin are limited based on the adjudication, compliance with the judgment that set pumping rights would eliminate the potential for the water agencies, that will serve cumulative development growth, to substantially impact the groundwater aquifer. Therefore, the implementation of cumulative development would result in less than significant impacts on the Central Groundwater Basin from groundwater use.

As stated previously, groundwater recharge for the Central Groundwater Basin occurs along the upper reaches of the San Gabriel River and the Rio Hondo via the San Gabriel River Water Conservation System. These areas have been established as groundwater recharge areas. Much of the remaining area overlying the Central Groundwater Basin contains impervious surfaces. Therefore, cumulative development would not substantially impact groundwater recharge capabilities within the Central Groundwater Basin. As a result, the implementation of cumulative development would result in less than significant impacts to recharge capabilities.

Because the proposed project would result in less than significant impacts on the Central Groundwater Basin and the recharge capabilities of the basin, the project's contribution to impacts on the Central Groundwater Basin is less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Erosion/Siltation

Impact 3.7-3: The proposed project would not 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 that would result in substantial erosion or siltation on- or off-site.

Project-Specific

Construction

Project construction would include excavation and the disturbance of the existing ground surface, thereby exposing bare soil and temporarily altering surface drainage patterns with the potential to cause erosion and siltation. However, construction activities would be required to implement erosion and sediment control BMPs required by the Construction General Permit and MS4 Permit regulations. Compliance with these regulations would ensure substantial erosion or siltation does not occur onsite. These requirements would include the implementation of BMPs as required by the County Pollution Control Requirements for Construction Activities. With implementation of erosion and sediment control BMPs, project construction activities would result in less than significant erosion and siltation impacts.

Operation

Development within the Specific Plan area would not involve the alteration of a stream or river. Since the majority of the area is developed and approximately 80 to 90 percent impervious, buildout of the proposed Specific Plan development is expected to generate little or no increase in runoff to the existing stormwater drainage system. The County LID Standards Manual requires the use of stormwater quality control measures to reduce the potential for erosion and siltation. The measures include the use of retention, biofiltration, vegetation-based, and/or treatment-based stormwater quality measures. Because the majority of the Specific Plan is already developed, new development is required to implement the County LID Standards Manual, and the Specific Plan includes Sustainable Design Criteria, the implementation of development within the Specific Plan area would result in a less than significant erosion and siltation impact during project operation.

Cumulative

The geographic scope for cumulative impacts related to erosion and siltation includes areas within the watershed that conveys stormwater to Reach 1 of the Los Angeles River. Cumulative development within the Los Angeles River watershed will increase erosion and sedimentation to the Los Angeles River. However, as cumulative development is constructed and operated, regulations such as NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and County LID Standards Manual requirements are required to be implemented. With the implementation of these regulations, cumulative development would result in less than cumulatively significant erosion and siltation impacts during project construction and operational activities.

Because the proposed project is required to implement NPDES requirements, the County Stormwater Pollution Control Requirements for Construction Activities and the requirements within County LID Standards Manual, potential erosion and siltation impacts would be substantially reduced. In addition, the Specific Plan includes design features within the

Sustainable Design Criteria that would also reduce potential erosion and siltation during operational activities. With the implementation of the above requirements, the proposed project would result in a less than cumulatively considerable impact related to erosion and siltation.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Stormwater Drainage Capacity

Impact 3.7-4: The proposed project would create or contribute runoff water which would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Project-Specific

As shown in Figure 3.7-1, storm drains within the project area currently drain to different portions of Compton Creek. However, as stated previously, project buildout within the Specific Plan area is expected to generate little or no increase in runoff to the existing drainage system because the majority of the area is developed and approximately 80 to 90 percent of the existing Specific Plan area is impervious. Project development is not expected to directly trigger any need for upgrades to the County's existing storm drain major backbone facilities, mainly due to the Low Impact Development (LID) Ordinance requirements for percolation and on-site detention for new development, which will stabilize and/or even reduce runoff in the area. Therefore, the County does not recommend an upgrade of the existing storm drain system within the Specific Plan area (County of Los Angeles, 2017). Impacts related to exceeding the capacity of existing and planned storm drains would be less than significant.

As discussed in Impact 3.7-1, the proposed project would not result in the generation of substantial sources of polluted runoff because the project would be required to comply with NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the requirements of the County LID Standards Manual. Therefore, the implementation of the proposed project would result in less than significant impacts related to the creation of polluted runoff.

Cumulative

The geographic scope for cumulative impacts related stormwater drainage capacity and polluted runoff includes the drain facilities that are located downstream of the project site. As cumulative development is implemented, compliance with the LID Ordinance requirements for percolation and on-site detention will be required. Compliance with these requirements will reduce the need for downstream drainage facility improvements. In addition, cumulative development would be required to comply with NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the requirements of the County LID Standards Manual to reduce polluted runoff from cumulative development sites. Therefore, cumulative development would result in less than significant cumulative impacts on the capacities of existing or planned storm drains and on stormwater related to polluted runoff.

Because the proposed project would be required to implement the NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the LID Ordinance requirements, the project's contribution to cumulative impacts on the capacities of existing and planned storm drains and on stormwater related to polluted runoff would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Surface Water and Groundwater Quality

Impact 3.7-5: The proposed project would generate construction and post-construction runoff but would not violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality.

Project-Specific

During construction, site-specific developments within the Specific Plan area that would disturb more than one acre of ground surface 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 control, sediment

control, good housekeeping, waste management and post-construction BMPs that would be implemented to reduce construction impacts on storm water quality. Development disturbing less than an acre of ground surface would be required to implement minimum BMPs as described by the NPDES MS4 Permit. Construction activities associated with the project would comply with the NPDES MS4 Permit and would not generate runoff that would violate the stormwater NPDES permit.

As discussed in Impact 3.7-1, surface water during construction activities would not be impacted because the activities would be required to comply with NPDES requirements that would include typical BMPs that include erosion control, sediment control and waste management. Also discussed in Impact 3.7-1, operational activities would not be impacted because these activities would be required to meet MS4 requirements through compliance with the County LID Standards Manual. The proposed Specific Plan also includes Sustainable Design Criteria that would minimize pollutants being transported offsite to downstream areas. Therefore, construction activities would result in less than significant impacts on surface water quality.

As discussed in Impact 3.7-2, groundwater levels in the Specific plan area are approximately 155 below ground surface. Due to the depth of groundwater, activities associated with the project would not impact the quality of groundwater.

Cumulative

The geographic scope for cumulative impacts related to compliance with NPDES permits and construction and operational surface water runoff quality and groundwater quality encompasses the Central Groundwater Basin. Implementation of cumulative development would be required to comply with all pertinent regulations, such as the Construction NPDES General Permit, County Stormwater Pollution Control Requirements for Construction Activities, and the County LID Standards Manual. Cumulative development would be required to comply with the NPDES MS4 permit by implementing BMPs. Therefore, construction activities associated with cumulative development would comply with the NPDES Permit and would not generate runoff that would violate the stormwater NPDES permit.

Cumulative development is required to also comply with all pertinent regulations, such as the Construction NPDES General Permit, County Stormwater Pollution Control Requirements for Construction Activities, and the County LID Standards Manual. Compliance with these regulations would require the implementation of BMPs to ensure the quality of surface water and groundwater would not be substantially degraded. Therefore, construction and operational activities would result in less than significant impacts to surface and groundwater quality.

Because the proposed project would be required to implement the NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the LID Ordinance requirements, the project's contribution to cumulative impacts associated with compliance with NPDES permits and surface and groundwater quality would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Degrade Water Quality

Impact 3.7-6: The proposed project would not degrade water quality.

Project-Specific

As discussed in Impact 3.7-1, the construction and operational activities associated with development within the Specific Plan area would not violate water quality standards because these activities would be required to implement the NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the LID Ordinance requirements. Construction activities would be required to comply with the Construction General Permit or the minimum requirements of the MS4 Permit depending on the size of the project. This compliance would require implementation of BMPs to reduce impacts to water quality. Operational activities are required to comply with County LID Standards Manual requirements. These LID requirements would require stormwater runoff retainment onsite through the implementation of site design BMPs that would be maintained throughout development operation. This would prevent surface water runoff leaving the Specific Plan from being degraded; and therefore, downstream water quality would be maintained. The proposed Specific Plan would result in a less than significant impact associated with degrading water quality.

Cumulative

The geographic scope for cumulative impacts related to water quality includes the Los Angeles River watershed. Implementation of cumulative development would be required to comply with all pertinent regulations, such as the Construction NPDES General Permit, County Stormwater Pollution Control Requirements for Construction Activities, and the County LID Standards Manual. Compliance with these regulations would result in the implementation of BMPs to reduce impacts on water quality, and potential cumulative impacts on water quality would be less than cumulatively significant.

Because the proposed project would be required to implement the NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the LID Ordinance requirements, the project would minimize its impact on water quality. Therefore, the project's contribution to cumulative water quality impacts would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

3.7.6 References

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3.8 Land Use and Planning

Introduction

This section evaluates potential impacts to land uses from implementation of the proposed Specific Plan. Land use impacts can be direct or indirect. Direct impacts include land use incompatibilities such as the physical division of neighborhoods or communities and substantial degradation of the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character or other features. Indirect impacts include secondary effects resulting from land use policy implementation. This section examines the potential for the proposed Specific Plan to result in physical division of the community and the potential for conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect, including relevant policies and regulations within the Los Angeles County General Plan, the County zoning code, and the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In addition, this section includes analysis of the potential of the project to result in degradation of the character or quality of the Specific Plan area.

3.8.1 Environmental Setting

Regional

The proposed Specific Plan is located in Los Angeles County which encompasses approximately 4,000 square miles. Approximately 64 percent of Los Angeles County is unincorporated with the majority of this area located in the northern portions of the County that includes the Angeles National Forest, part of the Los Padres National Forest and the Mojave Desert. The unincorporated areas in the southern portion of the County consist of many non-contiguous land areas, including Willowbrook, which are often referred to as the County's unincorporated urban islands.

Local

The unincorporated community of Willowbrook is located approximately 10 miles south of downtown Los Angeles. It is surrounded by the Cities of Hawthorne to the west, Lynwood to the east, Gardena and Compton to the southwest and southeast, and the City of Los Angeles to the north. Willowbrook is proximate to two major freeways—Interstate 110 (I-110) and the Interstate 105 (I-105). I-110 runs north-south parallel to the community's western boundary and I-105, which runs east-west runs parallel to the northern boundary of the community until it intersects the north (eastern side) portion of the community.

Predominant land uses located north of the project site include single-family and multiple family residences. The primary land uses to the west include single-family and multiple-family residences as well as parks. The pre-dominate land uses to the south include single-family residences and industrial and commercial uses along the north-south major corridors such as

Alameda Street and Central Avenue. The primary land uses to the east include industrial uses as well as single-family residential uses.

Specific Plan Area

The Specific Plan area is located within the northeastern portion of the Willowbrook community and generally encompasses an area within a half-mile radius south of the Willowbrook/Rosa Parks Station (Figure 2-2). The Willowbrook community is developed with a variety of highly urban land uses. For planning purposes, the Specific Plan has divided the project area into seven subareas that connect to each other along the existing street grid, and include the following, which are shown in Figure 2-3.

Martin Luther King Jr. Medical Center Campus Subarea

This subarea consists of the MLK medical center campus, which consists of approximately 38 acres of land that is bound by Wilmington Avenue to the east, East 120th Street to the north, Compton Avenue to the west, and the East 122nd Street to the south. The MLK Community Hospital, MLK Center for Public Health, Fire Station, and the Multi-Service Ambulatory Care Center (MACC) are located within the campus.

The subarea is developed with medical and medical support uses including: outpatient and administrative support buildings, ancillary structures, surface parking lots, and multi-level parking structures. The landscaping within the subarea consists of ornamental non-native trees, shrubs, and grass areas that are adjacent to the buildings and located in open space areas throughout the campus.

Charles R. Drew University of Medicine and Science Subarea

The Charles R. Drew University of Medicine and Science (CDU) Subarea is located adjacent to the MLK Medical Center Campus on the north side. The subarea consists of the CDU and the King Drew Magnet High School. 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. Other land uses located within this subarea include multi-family residences on East 118th Street, and several surface parking lots that serve CDU and the County facilities are located along East 120th Street.

The character of this area is similar to the Martin Luther King Jr. Medical Center Campus Subarea as it is mostly developed with institutional uses that are medical and educationally related. The area consists of multi-story buildings that generally consist of brick, stucco, and cement that are surrounded by streets, surface and multi-level parking lots and non-native ornaental landscaping on the school parcels. Overall, the character of the area is typical of educational uses in urban areas.

Northwest Subarea

The Northwest Subarea encompasses a variety of urban uses, including educational, retail, residential and institutional. Several vacant lots, owned by the Los Angeles Community Development Corporation, are located along East 117th Street; additionally, a large, vacant site is

located on the northeast corner of East 118th Street and Compton Avenue that is owned by the Compton Unified School District. The educational uses within this subarea include Lincoln-Drew Elementary School, a part of the Compton Unified School District, and the Barack Obama Charter Elementary School, which are both located north of East 118th Street. Other uses in this subarea include senior housing, CDU parking facilities, retail, and residential units that include single-family, duplexes, and multi-family structures. The character of the area is typical of the urban area, and mostly consists of developed parcels surrounded by ornamental landscaping.

Kenneth Hahn Plaza Subarea

This subarea consists of Kenneth Hahn Plaza, which is a 189,287-square-foot shopping center that is located 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. Other tenants include Rite-Aid, General Discount, and DaVita Dialysis Center, McDonalds, Taco Bell, Pizza Hut, and Denny's restaurants. The Plaza also includes a Los Angeles County Sheriff substation.

The shopping center buildings are generally located at the rear of the site and parking in front; however, the fast-food restaurants are located in smaller structures adjacent to Wilmington Avenue. The shopping center is surrounded by a 6-foot-tall wrought iron security fence that blocks pedestrian connection between the Willowbrook/Rosa Parks Station and the shopping center. In addition, the shopping center has a blank facade facing 119th Street, which is lined with single-family uses along the south side.

Metro is in the process of acquiring approximately 1.5 acres of land on the northern end of the site for the expansion of the Willowbrook/Rosa Parks Station.

Willowbrook/Rosa Parks Station Subarea

The Willowbrook/Rosa Parks Station is a multi-modal transit facility that is located in the median of, and underneath, the I-105 freeway. Thus, the station itself is part of the freeway/transportation infrastructure. In addition, Metro tracks run adjacent to Willowbrook Avenue.

The pedestrian entrance to the Willowbrook/Rosa Parks Station is from the Metro public parking lot located north of I-105 freeway at Wilmington Avenue. The area around the Willowbrook/Rosa Parks Station is poorly lit and difficult to access, navigate, and it is poorly connected to its surrounding environment. For example, the station is located adjacent to Kenneth Hahn Plaza, but access is blocked by a fence and access to the residential neighborhoods to the east of the station is also limited.

The station consists of an open air platform that includes concrete shelters in the I-105 median area and small surface parking lots are located adjacent to the tracks. The Willowbrook/Rosa Parks Station is a concrete structure and contains artistic tiling near the elevators and displays a few artistic, African-American-themed murals on the underside of the I-105 overpass structure beams.

Imperial Highway Corridor Subarea

Imperial Highway is generally three lanes in each direction within the Specific Plan area and is also grade separated (overpass) through the central portion across Wilmington Avenue. The uses within Imperial Highway Corridor Subarea are sandwiched between Imperial Highway and the I-105 Freeway; and therefore the character of the area is highly urban. The land uses in the area consists of a mix of auto repair, retail, residential, Metro facilities, and underutilized or vacant lots. A school bus 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, auto shop, and towing yard are located further west, near Compton Avenue. In addition, a vacant site owned by the Housing Authority for the City of Los Angeles is located within this corridor.

Residential Neighborhoods Subarea

Residential areas within the Specific Plan area include a mix of single-family, duplexes, and multi-family structures. The residential area south of Kenneth Hahn Plaza, east of Wilmington Avenue and west of Willowbrook Avenue is primarily multi-family that includes a mix of two-story multi-family buildings and duplexes.

The residential area bounded by Mona Boulevard, I-105, Willowbrook Avenue, and 121st Street contains mostly single-family residences, with the exception of the Willowbrook Avenue East frontage along the Metro Blue Line tracks, which is primarily multi-family residential. Because parking in this neighborhood is limited, vehicles are typically parked along the streets.

Residential parcel configurations vary dramatically across the Specific Plan area. A large portion of residential areas have parcels that are 90 feet wide and over 200 feet deep; however, some of the parcels are as narrow as 30 feet wide and approximately 100 feet deep. Additionally, many of the larger parcels have two (or more) units constructed on them, some illegally.

Existing General Plan Designations and Zoning

The Specific Plan area is largely designated for residential, approximately 34 percent of the area as listed in **Table 3.8-1**, approximately 8 percent of the Specific Plan area is designated for commercial, mixed use, and light industrial uses, approximately 29 percent is designated for public and parks/recreational uses, and approximately 29 percent is designated for rights-of-way.

The existing zoning of lands within the Specific Plan area is listed in **Table 3.8-2**. As shown approximately, 41 percent of the land use within the Specific Plan area is currently zoned for residential, 29 percent for mixed use, neighborhood business, commercial, and industrial, and 29 percent for rights-of-way.

TABLE 3.8-1
EXISTING GENERAL PLAN LAND USES WITHIN THE SPECIFIC PLAN AREA

Existing General Plan Land Use	Acres	Percentage of Specific Plan Area
H9 - Residential (9 dwelling units per acre)	57.44	18.41%
H18 - Residential (18 dwelling units per acre)	25.23	8.09%
H30 - Residential (30 dwelling units per acre)	24.12	7.73%
CG - General Commercial	3.61	1.16%
MU - Mixed Use	18.86	6.04%
IL - Light Industrial	1.07	0.34%
P - Public and Semi-Public	82.40	26.41%
OS-PR - Parks and Recreation	8.49	2.72%
Total Net Acres	**221.22**	**70.91%**
Right of Way	90.76	29.09%
TOTAL GROSS ACRES	**311.98**	**100.00%**

Source: The Arroyo Group, 2016

TABLE 3.8-2
EXISTING ZONING WITHIN THE SPECIFIC PAN AREA

Existing Zoning Land Use	Acres	Percentage of Specific Plan Area
Neighborhood Business (C-2)	67.80	21.7%
Unlimited Commercial (C-3)	2.76	0.9%
Light Manufacturing (M-1)	1.07	0.3%
Mixed Use Development (MXD)	18.86	6.0%
Single-Family Residence (R-1)	62.26	20.0%
Two-Family Residence (R-2)	36.11	11.6%
Limited Multiple Residence (R-3-()U)	30.70	9.8%
No Zoning	1.66	0.5%
Total Net Acres	**221.22**	**70.9%**
Right of Way	90.76	29.1%
TOTAL GROSS ACRES	**311.98**	**100.0%**

Source: The Arroyo Group, 2016

3.8.2 Regulatory Setting

Regional

Southern California Association of Governments

SCAG is the designated Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated MPO for the region, SCAG is mandated by the federal government to research and create plans for transportation, growth management, hazardous waste management, and air quality. SCAG's major responsibilities include:

- Maintenance of a continuous, comprehensive, and coordinated planning process resulting in a Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program (RTIP).
- Development of demographic projections plus the integrated land use, housing, employment, transportation programs, measures, and strategies portions of the South Coast Air Quality Management Plan (AQMP), as well as serving as co-lead agency for air quality planning for the Central Coast and Southeast Desert air basin districts.
- Responsibility under the federal Clean Air Act (CAA) for determining whether projects, plans, and programs conform to the CAA.
- To function as the authorized regional agency for intergovernmental review of programs proposed for federal financial assistance and direct development activities.
- Review of environmental impact reports for projects having regional significance for consistency with regional plans.
- To function as the authorized area-wide waste treatment management planning agency pursuant to federal water pollution control statutes.
- Responsibility under state law for preparation of the Regional Housing Needs Assessment (RHNA).

Because the proposed Specific Plan is a project with regional significance, per CEQA Guidelines Sections 15125(d) and 15206, SCAG is responsible for ensuring that the project is consistent with regional plans, which, in this case, include the Regional Comprehensive Plan and Guide (RCPG), the RTP, and the Compass Blueprint Growth Vision. In addition, this EIR uses the adopted SCAG population, housing and job forecasts for Los Angeles County information and uses population, housing and job forecast from the County of Los Angeles for smaller geographies such as unincorporated areas of the County of Los Angeles. The forecasts provided by the County of Los Angeles are generally consistent with the SCAG projections. The discussion of forecasts is provided in Section 3.10, Population and Housing).

Regional Transportation Plan 2016–2040/Sustainable Communities Strategy

In April 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS includes a strong commitment to reduce emissions from transportation to comply with Senate Bill 375, improve public health, and meet

the National Ambient Air Quality Standards as set forth by the federal Clean Air Act. The RTP/SCS links its goals of sustaining mobility with its goals for 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. In general, the 2016–2040 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play, and how they will move around.

The 2016–2040 RTP/SCS is guided by and incorporates all projects from Metro's Long-Range Transportation Plan and the subregional Sustainable Communities Strategy developed by the Gateway Cities Council of Governments (COG) (described further below). In addition, several major transportation projects in the Gateway Cities subregion are included in the 2016–2040 RTP/SCS.

The 2016–2040 RTP/SCS policies that are relevant to the proposed TOD Specific Plan, and the project's consistency with the relevant policies are discussed in Table 3.8-3 of Section 3.8.5, Impact Analysis.

Gateway Cities Council of Governments

The Gateway Cities COG is a California joint powers authority made up of 27 cities and the County of Los Angeles (three County supervisory districts which cover the unincorporated communities within the subregion), formed for the purpose of providing a vehicle for members to voluntarily engage in regional and cooperative planning and coordination of government services for the collective benefit of the residents of Southeast Los Angeles County. The goal and intent of the COG are to foster voluntary cooperation among cities and the County in the areas of transportation, air quality, housing, and economic development.

The unincorporated community of Willowbrook is located in the Gateway Cities region of southeast Los Angeles County, which consists of 27 cities and nine unincorporated communities. The Cities include: Artesia, Avalon, Bell, Bellflower, Bell Gardens, Cerritos, Commerce, Compton, Cudahy, Downey, Hawaiian Gardens, Huntington Park, La Habra Heights, Lakewood, La Mirada, Long Beach, Lynwood, Maywood, Montebello, Norwalk, Paramount, Pico Rivera, Santa Fe Springs, Signal Hill, South Gate, Vernon, and Whittier. In addition to Willowbrook, the unincorporated communities in the Gateway Cities region include: East Los Angeles, East Rancho Dominguez, Florence, Los Nietos, Rancho Dominguez, Rosewood, South Whittier, and Walnut Park.

The predominant land use in the Gateway Cities region is low-density residential, which occupies 43.3 percent of the land area. Medium-density residential occupies 8.5 percent. Industrial and commercial uses occupy approximately 15.1 percent and 10.1 percent of the area, respectively (Gateway Cities 2011).

The Gateway Cities Council of Governments (COG), and the County transportation commission (Los Angeles County Metropolitan Transportation Authority (LACMTA)) worked together to

develop a subregional Sustainable Communities Strategy, which is the subregion's plan to improve overall mobility, reduce greenhouse gases (GHG) by 2020 and 2035 using transportation and land use strategies, and enhances the quality of life for the region's residents. These strategies include major transportation improvements as well as transit oriented improvements. As described above, the SCAG 2012-2035 RTP/SCS incorporates the Gateway Cities COG Sustainable Communities Strategy. The Sustainable Communities Strategy does not include a set of goals and policies; instead, it relies on SCAG's goals and policies.

County of Los Angeles

Los Angeles County General Plan

The Los Angeles County General Plan was adopted by the County of Los Angeles Board of Supervisors on October 6, 2015, and provides the policy framework for how and where the unincorporated County will grow through the year 2035 (County of Los Angeles, 2015). The General Plan accommodates new housing and jobs within the unincorporated areas in anticipation of population growth in the County and the region.

The General Plan includes a Transit Oriented District Program (Program LU-2 in Chapter 16 General Plan Implementation Programs) that adds new TODs and expands existing TODs from approximately a 0.25-mile radius to 0.50-mile radius from the transit stations. The General Plan states that TOD is well-suited for higher density housing and mixed uses in urban and suburban areas, with nodes commercial, employment, and civic activities, and identifies the proposed Specific Plan area as a Transit Oriented District. The objective of the Transit Oriented District Program is to prepare a TOD Specific Plan for each TOD in the County, with the goals of: (1) increase walking, bicycling, and transit ridership and reduce vehicle miles traveled (VMTs); (2) facilitate compact, mixed use development; (3) increase economic activity; (4) facilitate the public investment of infrastructure improvements; and 5) streamline the environmental review process for future infill development projects.

The General Plan policies related to the proposed Specific Plan are listed below.

Land Use Element

Policy LU 1.10: Require the intensity, density, and uses allowed in a new specific plan to be determined using the General Plan, including the Land Use Policy Map and Land Use Legend.

Policy LU 1.11: Require a General Plan amendment for any deviation from the intensities, densities, and uses allowed by the General Plan (to apply the appropriate designation from the General Plan Land Use Legend), unless allowances for flexibility are specified in the specific plan.

Policy LU 1.12: Require development regulations and zoning for new specific plans to be consistent with their corresponding General Plan land use designation.

Policy LU 1.13: Allow specific plans to include implementation procedures for flexibility, such as development phasing, and redistribution of intensities and uses, as appropriate.

Policy LU 2.1: Ensure that all community-based plans are consistent with the General Plan.

Policy LU 2.6: Consider the role of arts and culture in community-based planning efforts to celebrate and enhance community character.

Policy LU 2.7: Set priorities for Planning Area-specific issues, including transportation, housing, open space, and public safety as part of community-based planning efforts.

Policy LU 2.8: Coordinate with the Los Angeles County Department of Public Works and other infrastructure providers to analyze and assess infrastructure improvements that are necessary for plan implementation.

Policy LU 2.9: Utilize the General Plan Land Use Legend and the Hazard, Environmental and Resource Constraints Model to inform the development of land use policy maps.

Policy LU 2.10: Ensure consistency between land use policy and zoning by undergoing a comprehensive zoning consistency analysis that includes zoning map changes and Zoning Code amendments, as needed.

Policy LU 4.1: Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.

Policy LU 4.2: Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods.

Policy LU 4.3: Encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas.

Policy LU 4.4: Encourage mixed use development along major commercial corridors in urban and suburban areas.

Policy LU 5.1: Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.

Policy LU 5.2: Encourage a diversity of commercial and retail services, and public facilities at various scales to meet regional and local needs.

Policy LU 5.3: Support a mix of land uses that promote bicycling and walking, and reduce VMTs.

Policy LU 5.4: Encourage community-serving uses, such as early care and education facilities, grocery stores, farmers markets, restaurants, and banks to locate near employment centers.

Policy LU 5.5: Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.

Policy LU 5.10: Encourage employment opportunities and housing to be developed in proximity to one another.

Policy LU 7.1: Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.

Policy LU 9.2: Encourage patterns of development that promote physical activity.

Policy LU 10.3: Consider the built environment of the surrounding area and location in the design and scale of new or remodeled buildings, architectural styles, and reflect appropriate features such as massing, materials, color, detailing or ornament.

Policy LU 10.4: Promote environmentally-sensitive and sustainable design.

Policy LU 10.5: Encourage the use of distinctive landscaping, signage and other features to define the unique character of districts, neighborhoods or communities, and engender community identity, pride and community interaction.

Policy LU 10.6: Encourage pedestrian activity through the following:

- Designing the main entrance of buildings to front the street;
- Incorporating landscaping features;
- Limiting masonry walls and parking lots along commercial corridors and other public spaces;
- Incorporating street furniture, signage, and public events and activities; and
- Using wayfinding strategies to highlight community points of interest.

Policy LU 10.7: Promote public spaces, such as plazas that enhance the pedestrian environment, and, where appropriate, continuity along commercial corridors with active transportation activities.

Policy LU 10.8: Promote public art and cultural amenities that support community values and enhance community context.

Policy LU 10.10: Promote architecturally distinctive buildings and focal points at prominent locations, such as major commercial intersections and near transit stations or open spaces.

Policy LU 11.1: Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.

Policy LU 11.2: Support the design of developments that provide substantial tree canopy cover, and utilize light-colored paving materials and energy-efficient roofing materials to reduce the urban heat island effect.

Policy LU 11.3: Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.

Policy LU 11.4: Promote environmentally-sensitive and sustainable design.

Mobility Element

Policy M 1.1: Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.

Policy M 2.1: Provide transportation corridors/networks that accommodate pedestrians, equestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive

process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.

Policy M 2.2: Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following street designs, whenever appropriate and feasible:

- Lane width reductions to 10 or 11 feet in low speed environments with a low volume of heavy vehicles.
- Wider lanes may still be required for lanes adjacent to the curb, and where buses and trucks are expected.
- Low-speed designs.
- Access management practices developed through a community-driven process.
- Back in angle parking at locations that have available roadway width and bike lanes, where appropriate.

Policy M 2.3: Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following intersection designs, whenever appropriate and feasible:

- Right angle intersections that reduce intersection skew.
- Smaller corner radii to reduce crossing distances and slow turning vehicles.
- Traffic calming measures, such as bulb-outs, sharrows, medians, roundabouts, and narrowing or reducing the number of lanes (road diets) on streets.
- Crossings at all legs of an intersection.
- Shorter crossing distances for pedestrians.
- Right-turn channelization islands. Sharper angles of slip lanes may also be utilized.
- Signal progression at speeds that support the target speed of the corridor.
- Pedestrian push buttons when pedestrian signals are not automatically recalled.
- Walk interval on recall for short crossings.
- Left-turn phasing.
- Prohibit right turn on red.
- Signs to remind drivers to yield to pedestrians.

Policy M 2.4: Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible:

- Designs that limit dead-end streets and dead-end sidewalks.
- Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops.
- Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA).
- Perpendicular curb ramps at locations where it is feasible.

- Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.)
- Approved devices to extend the pedestrian clearance times at signalized intersections.
- Accessible Pedestrian Signals (APS) at signalized intersections.
- Pedestrian crossings at signalized intersections without double or triple left or right turn lanes.
- Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections.
- Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes.
- Advance stop lines at signalized intersections.
- Pedestrian Hybrid Beacons.
- Medians or crossing islands to divide long crossings.
- High visibility crosswalks.
- Pedestrian signage.
- Advanced yield lines for uncontrolled crosswalks.
- Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic.
- Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.

Policy M 2.5: Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible:

- Bicycle signal heads at intersections.
- Bicycle signal detection at all signalized intersections.
- Wayfinding signage.
- Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction.
- Appropriate lighting on all bikeways, including those in rural areas.
- Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.

Policy M 2.6: Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.

Policy M 2.7: Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.

Policy M 2.8: Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.

Policy M 2.9: Encourage the planting of trees along streets and other forms of landscaping to enliven streetscapes by blending natural features with built features.

Policy M 2.10: Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.

Policy M 4.1: Expand transportation options that reduce automobile dependence.

Policy M 4.4: Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.

Policy M 4.7: Maintain a minimum LOS D, where feasible; however, allow LOS below D on a case by case basis in order to further other General Plan goals and policies, such as those related to environmental protection, infill development, and active transportation.

Policy M 4.8: Provide and maintain appropriate signage for streets, roads and transit.

Policy M 4.10:: Support the linkage of regional and community-level transportation systems, including multimodal networks.

Policy M 5.1: Facilitate transit-oriented land uses and pedestrian-oriented design, particularly in the first-last mile connections to transit, to encourage transit ridership.

Policy M 5.2: Implement parking strategies that facilitate transit use and reduce automobile dependence.

Policy M 6.4: Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.

Policy M 7.1: Minimize roadway runoff through the use of permeable surface materials, and other low impact designs, wherever feasible.

Housing Element

The Los Angeles County Housing Element 2014-2021 was adopted by the County Board of Supervisors on February 4, 2014, and received State certification on April 30, 2014.

Policy 1.4: Assist housing developers to identify and consolidate suitable sites for developing housing for low and moderate income households and those with special needs.

Policy 2.1: Support the development of housing for low and moderate income households and those with special needs near employment and transit.

Policy 2.2: Encourage mixed use developments along major commercial and transportation corridors.

Policy 3.1: Promote mixed income neighborhoods and a diversity of housing types throughout the unincorporated areas to increase housing choices for all economic segments of the population.

Air Quality Element

Policy AQ 3.5: Encourage energy conservation in new development and municipal operations.

Policy AQ 3.6: Support rooftop solar facilities on new and existing buildings.

Conservation and Natural Resources Element

Policy C/NR 5.6: Minimize point and non-point source water pollution.

Policy C/NR 6.1: Support the LID philosophy, which incorporates distributed, post-construction parcel-level stormwater infiltration as part of new development.

Policy C/NR 14.1: Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.

Policy C/NR 14.3: Support the preservation and rehabilitation of historic buildings.

Policy C/NR 14.6: Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

Parks and Recreation Element

Policy P/R 1.2: Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.

Noise Element

Policy N 1.1: Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.

Policy N 1.2: Reduce exposure to noise impacts by promoting land use compatibility.

Policy N 1.3: Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).

Policy N 1.5: Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or Ldn) noise exposure contours.

Policy N 1.6: Ensure cumulative impacts related to noise do not exceed health-based safety margins.

Policy N 1.9: Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.

Policy N 1.11: Maximize buffer distances and design and orient sensitive receptor structures (hospitals, residential, etc.) to prevent noise and vibration transfer from commercial/light industrial uses.

Policy N 1.12: Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.

Safety Element

Policy S 1.1: Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.

Policy S 1.2: Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.

Public Services and Facilities Element

Policy PS/F 1.1: Discourage development in areas without adequate public services and facilities.

Policy PS/F 1.2: Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.

Policy PS/F 2.1: Support water conservation measures.

Policy PS/F 8.2: Support library mitigation fees that adequately address the impacts of new development.

Economic Development Element

Policy ED 1.1: Encourage a diverse mix of industries and services in each Planning Area.

Policy ED 2.4: Ensure high standards of development and encourage environmentally sustainable practices in economic development activities.

Policy ED 2.5: Encourage employment opportunities to be located in proximity to housing.

Policy ED 2.6: Encourage community-serving uses, such as child care centers and personal services, to be located in proximity to employment centers.

Policy ED 2.7: Incentivize economic development and growth along existing transportation corridors and in urbanized areas.

Policy ED 4.4: Incentivize infill development in urban and suburban areas that revitalizes underutilized commercial and industrial areas.

Los Angeles County Zoning Code

The Los Angeles County Zoning Code (Title 22 – Planning and Zoning – of the Los Angeles County Code) implements the Land Use Element of the General Plan and provides specific development and land use standards. The purpose of the Zoning Code is to provide compatible use of land within the County, consistent with the needs of residential, commercial and industrial developments, and the public health, safety, welfare and general prosperity of residents.

3.8.3 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, the project could have a significant impact on land use and planning if it would:

- Physically divide an established community (see Impact 3.8-1 below.).
- 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 (see Impact 3.8-2).
- Be inconsistent with the County zoning ordinance as applicable to the subject property (see Impact 3.8-3).
- Conflict with Hillside Management criteria, Significant Ecological Areas conformance criteria, or other applicable land use criteria (see Section 5.1.6).
- Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character or other features (see Impact 3.8-4).

3.8.4 Methodology

The analysis of land use consistency impacts considers whether the proposed Specific Plan would physically divide an established community and whether the proposed Specific Plan would degrade the existing visual character. The physical division of an established community is evaluated based on whether the project would result in the construction of physical barriers or obstacles to circulation that would restrict existing patterns of movement between the project site and the surrounding neighborhood. The analysis related to the potential of the project to result in the degradation of the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character or other features is based upon the extent of visual contrast and compatibility in scale and character between project elements and the existing environment, and project conformance with policies and regulations related to urban design quality.

The analysis of the project's consistency with regional and local plans is based on a review of the relevant goals and policies of the plans that relate to avoiding or mitigating environmental impacts. The applicable plans include the Los Angeles County General Plan, the County zoning ordinance and the SCAG RTP/SCS. The assessment determines whether any inconsistency with these goals and policies create a significant environmental impact.

CEQA Guidelines Section 15125(d) requires that an EIR discuss inconsistencies with applicable plans that the decision-makers should address. A project need not be consistent with each and every policy and objective in a planning document. Rather, a project is considered consistent with the provisions of the identified regional and local plans if it meets the general intent of the plans and would not preclude the attainment of the primary goals of the land use plan or policy.

In addition, the analysis related to the potential of the project to result in degradation of the existing visual character or quality of the site and its surroundings because of height, bulk,

pattern, scale, character or other features is based upon the extent of visual contrast and compatibility in scale and character between project elements and the existing environment, and project conformance with policies and regulations related to urban design quality.

3.8.5 Impact Analysis

Divide an Established Community

Impact 3.8-1: Physically divide an established community.

Project-Specific

Currently, the Specific Plan area is an urban developed area that contains a mix of uses, including commercial, residential, public, and educational uses. As described above, there are various subareas that are focused on different land uses, such as medical, educational, and residential; however, the mixed uses that are in some of the subareas are integrated with one another (e.g. small retail serving the educational and medical uses). In addition, the existing and proposed uses within each subarea are linked by roadways and pedestrian routes that provide an urban community.

The objective of the transit oriented development that would be implemented by the project is to ensure future development within the Specific Plan area would provide for a walkable neighborhood of integrated land uses that provide for housing, employment, educational, and retail uses near regional transit. The proposed project would provide redevelopment and infill development that would result in higher density housing, employment opportunities, and mixed-use development. In addition, the Specific Plan would improve pedestrian and bicycle routes and linkages throughout the Specific Plan area and to/from the Willowbrook/Rosa Parks Station.

Development occurring under the proposed Specific Plan is anticipated to occur over a 20-year period and would involve infill development utilizing the established roadway network, transit network, and urbanized land use pattern. The increase in development capacity that would occur through implementation of the Specific Plan is intended primarily to allow intensified development or a more transit-oriented mix of land uses. The proposed zoning changes do not introduce substantially different land uses, propose new street patterns, or otherwise introduce land uses that would physically divide the Specific Plan area. Rather, the proposed Specific Plan integrates existing uses in the area, enhances mobility, and connectivity of land uses through implementation of mixed uses, resulting in a more physically connected community.

Overall, the proposed Specific Plan would increase the density/intensity of development as well as the presence of pedestrians throughout the Specific Plan area. The existing community would not be divided. The proposed Specific Plan would provide for additional residential and related commercial and employment development and improved connectivity within the existing community and transit network, and would not result in the division of an established community. Conversely, the project would establish a more integrated network of community land uses and mobility. Thus, impacts related to physical division of an established community would not occur.

Cumulative

The cumulative study area for land use and planning includes the areas within the Willowbrook community and the areas that are adjacent to the Specific Plan area (such as those areas within the City of Los Angeles, City of Lynwood, and City of Compton). The cumulative development anticipated within this cumulative study area includes the development projects that are listed in Table 3-1, in Section 3.0. These cumulative projects would not result in physically dividing an established community because the cumulative projects would not result in the construction of physical barriers or obstacles to circulation that would restrict existing patterns of movement in the cumulative study area. Therefore, cumulative projects would result in a less than significant impact related to the physical division of an established community.

The development of the proposed Specific Plan includes the development of a variety of uses including medical, educational, residential, and commercial, which are integrated into the community. The proposed Specific Plan enhances mobility and connectivity of land uses through implementation of mixed uses, resulting in a more physically connected community, and impacts related to physical division of an established community would not occur. Therefore, the implementation of the proposed project would not contribute to the less than significant cumulative impacts associated with physically dividing an established community.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

Conflict with Applicable Plans, Policies, or Regulations

Impact 3.8-2: The proposed project would be consistent 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.

Project-Specific

The County of Los Angeles Environmental Checklist Form requires a discussion of consistency with County plans (as provided in the impact statement above); however, due to the regional

nature of the Specific Plan project and its location within Los Angeles County, SCAG RTP/SCS policies are also listed and evaluated below. Consistent with CEQA, the evaluation of consistency is primarily focused on those goals and policies that relate to avoiding or mitigating environmental impacts, and an assessment of whether any inconsistency with these standards creates a significant physical impact on the environment.

As described above, the Specific Plan area contains established roadway and transit networks and an urbanized land use pattern. The proposed Specific Plan would provide for targeted increases in development capacity that is intended to provide mixed uses within walking distance from the Willowbrook/Rosa Parks Station which is consistent with the County policies. Build-out of the proposed Specific Plan would allow for up to 1,952 residential units and 2,666,035 square feet of non-residential uses.

In regards to environmental quality, the proposed Specific Plan includes Sustainable Design Guidelines, a comprehensive set of Performance Standards, and Goals and Policies that serve as guidelines for decision making, all of which are listed in Section 2.0, *Project Description*. The proposed Zoning within the Specific Plan area (shown in Figure 2-4) along with the proposed Sustainable Design Guidelines, Performance Standards, and Goals and Policies are consistent with County policies as shown below and are provided to ensure land use compatibility and minimization of potential environmental impacts as build-out of the Specific Plan occurs.

As described in detail in the following pages, the proposed Specific Plan would be consistent with the applicable SCAG and General Plan goals and policies that are intended to avoid or mitigate adverse environmental effects. As a result, impacts related to the project's consistency with applicable County and SCAG plans and policies would be less than significant.

SCAG Policies

SCAG policies focus on encouraging development patterns and densities that reduce infrastructure costs and reliance on the automobile and promote public transit use, minimizing environmental impacts through the use of "green" building techniques and landscaping practices, providing affordable housing, and minimizing new development in open space areas and areas with limited emergency access.

The proposed Specific Plan would implement many of the SCAG policies related to high-density, infill development that is centered around public transit opportunities. The proposed Specific Plan proposes infill development in an already developed urban area that would make use of the existing circulation and utility infrastructure. The infill development includes high-density residential uses, educational, employment, and commercial uses to enhance the mixed-use environment in which residents benefit from nearby shopping and employment opportunities, and would be within walking distance of the Willowbrook/Rosa Parks Station. Thus, the proposed Specific Plan would be consistent with SCAG goals to increase transit-oriented development. **Table 3.8-3** lists the policies from SCAG's *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* that are relevant to the proposed Specific Plan, and provides a discussion of the proposed Specific Plan's level of consistency with each policy.

Gateway Cities Council of Governments Sustainable Communities Strategy

As described above, the Gateway Cities Council of Governments has developed its own Sustainable Communities Strategy. Although the Sustainable Communities Strategy identifies travel demand management strategies and other projects aimed at reducing GHG emissions, it does not propose its own set of goals and policies. Instead, it relies on SCAG's goals and policies. The proposed project would implement TOD and infill development strategies which are consistent with the Gateway Cities Sustainable Communities Strategy. Because the SCAG policies have been developed to implement the Gateway Cities Sustainable Communities Strategy and the proposed Specific Plan would be consistent with the SCAG policies as discussed in Table 3.8-3 below, the proposed project would not conflict with the Gateway Cities Council of Governments Sustainable Communities Strategy.

TABLE 3.8-3
CONSISTENCY OF PROPOSED SPECIFIC PLAN WITH SCAG POLICIES

Policy/Goal	Policy Text	Statement of Consistency or Non-Consistency
2016–2040 RTP/SCS		
RTP/SCS G2	Maximize mobility and accessibility for all people and goods in the region.	Consistent. The proposed Specific Plan would provide improvements to the circulation system in order to meet the needs of local and regional transportation and to ensure efficient mobility and accessibility for a variety of users, including motorists, pedestrians, and cyclists. Although the proposed Specific Plan would result in significant unavoidable impacts to levels of service for roadway facilities, the project would improve alternative modes of transportation such as pedestrians and cyclists.
RTP/SCS G3	Ensure travel safety and reliability for all people and goods in the region.	Consistent. See Policy G2 above. In addition, the circulation system improvements would be required to follow safety standards established by state, regional, and local agencies. For example, pedestrian walkways and bicycle routes must follow safety standards established by local (e.g., County of Los Angeles) and regional (e.g. Caltrans) agencies. Additionally, pedestrian circulation system improvements are required to be designed and constructed consistent with the Americans with Disabilities Act (ADA) and state requirements and the County's adopted engineering standards for circulation improvements. These standards would provide for safe and reliable travel.
RTP/SCS G4	Preserve and ensure a sustainable regional transportation system.	Consistent. The proposed Specific Plan would involve the creation of TOD opportunities, such as residential, retail, and other employment uses near the Willowbrook/Rosa Parks Station in order to increase opportunities for transit use and reduce reliance on the automobile.
RTP/SCS G5	Maximize the productivity of our transportation system	Consistent. The proposed Specific Plan would involve improvements to the circulation system to increase the efficiency for a variety of users and to improve the accessibility to the regional transit system. These improvements include wider sidewalks as well as provision of bicycle lanes.
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).	Consistent. The proposed Specific Plan includes an enhancement to the TOD pattern in the Specific Plan area to incentivize transit use and non-motorized transportation modes such as biking and walking. Reduced reliance on the automobiles would reduce the per capita vehicle miles traveled and would help to improve long-term air quality.
RTP/SCS G7	Actively encourage and create incentives for energy efficiency, where possible.	Consistent. The proposed Specific Plan includes Sustainable Design Guidelines related to energy efficient designs and incorporation of features that would increase the energy efficiency of buildings as well as water use efficiency. In addition, the Specific Plan includes the encouragement of transit use and the provision of pedestrian/bicycle facilities.

Policy/Goal	Policy Text	Statement of Consistency or Non-Consistency
RTP/SCS G8	Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	Consistent. The proposed Specific Plan would implement a TOD pattern throughout the Specific Plan area in order to provide higher density housing and employment uses proximate to regional transit and to increase pedestrian activity throughout the area.

Los Angeles County General Plan

The proposed Specific Plan would involve infill development and redevelopment of underutilized parcels within walking distance to the existing Willowbrook/Rosa Parks Station. The Specific Plan includes rezoning land uses to introduce additional mixed uses and enhance the transit-oriented development pattern to the area. This is consistent with related General Plan policies as detailed in **Table 3.8-4**.

TABLE 3.8-4
CONSISTENCY OF PROPOSED SPECIFIC PLAN WITH 2035 GENERAL PLAN POLICIES

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
Land Use Element		
1.11	Require a General Plan amendment for any deviation from the intensities, densities, and uses allowed by the General Plan (to apply the appropriate designation from the General Plan Land Use Legend), unless allowances for flexibility are specified in the specific plan.	Consistent. The proposed Specific Plan would require a General Plan amendment to implement specific land use designations, so that the community is more consistent with the transit oriented policies in the County's General Plan. Thus, the proposed Specific Plan is consistent with this policy.
1.12	Require development regulations and zoning for new specific plans to be consistent with their corresponding General Plan land use designation.	Consistent. As discussed above, the proposed Specific Plan would amend the currently designated uses or increasing the intensity or density of the onsite designated uses. The proposed Specific Plan includes development regulations and proposes new zoning to be consistent with the transit oriented policies and lands uses in the County's General Plan. As described above, a General Plan amendment would be required to implement specific land use designations to provide additional consistency with the transit oriented policies in the County's General Plan. The proposed Specific Plan includes zoning and amended General Plan designations so that both are consistent with each other. Therefore, the project would be consistent with this specific policy.
1.13	Allow specific plans to include implementation procedures for flexibility, such as development phasing, and redistribution of intensities and uses, as appropriate.	Consistent. The proposed Specific Plan provides flexibility in density, land uses, and does not provide a specific phasing timeline. The Specific Plan provides a range of uses, development standards, performance standards, and sustainability guidelines that provide the ability for the Specific Plan to meet its objectives, while providing flexibility to respond to economic changes and a range of potential development proposals. Thus, the proposed Specific Plan is consistent with this policy.
2.6	Consider the role of arts and culture in community-based planning efforts to celebrate and enhance community character.	Consistent. The proposed Specific Plan includes provisions to include public art in architecture and public plaza areas; and thus, is consistent with this policy.
2.7	Set priorities for Planning Area-specific issues, including transportation, housing, open space, and public safety as part of community-based planning efforts.	Consistent. The proposed Specific Plan sets housing, transportation, and open space amenities as priority objectives for the proposed project, as described in Section 2.0, Project Description. Thus, the proposed Specific Plan is consistent with this policy.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
2.8	Coordinate with the Los Angeles County Department of Public Works and other infrastructure providers to analyze and assess infrastructure improvements that are necessary for plan implementation.	Consistent. The Specific Plan project began with preparation of an existing setting study. It included an evaluation of existing infrastructure within the planning area, which was coordinated with the County Department of Public Works and other service providers. It was determined, as described in Section 2.0, Project Description, that infrastructure improvements to the existing water system would be necessary to accommodate build-out of the proposed Specific Plan. There are several existing lines that are smaller than eight-inches in diameter that would need to be improved to accommodate build-out of the proposed Specific Plan. As described in Section 3.13, Utilities and Service Systems, the other existing utility infrastructure has the ability to serve build-out of the proposed Specific Plan in addition to other existing services. As described in Section 3.12, Transportation and Traffic, the project would not incorporate some transportation measures to improve the levels of service at some intersections due to the existing physical limitations of existing rights-of-way and the desire to maintain or improve pedestrian and bicycle infrastructure and not motor vehicle infrastructure. Overall, the County has been in coordination with all of the service providers in the Willowbrook community; therefore, the proposed project has been implemented in compliance with this policy.
2.9	Utilize the General Plan Land Use Legend and the Hazard, Environmental and Resource Constraints Model to inform the development of land use policy maps.	Consistent. As detailed in Sections 3.4 Geology and Soils, 3.6 Hazards and Hazardous Materials, and Section 3.7 Hydrology and Water Quality, the General Plan information related to land use, hazards, constraints, and environmental resources were utilized in preparation of this EIR analysis and were utilized in preparing the proposed Specific Plan zoning maps.
2.10	Ensure consistency between land use policy and zoning by undergoing a comprehensive zoning consistency analysis that includes zoning map changes and Zoning Code amendments, as needed.	Consistent. Preparation of the Specific Plan included a comprehensive consistency analysis of existing land uses, proposing new zoning designations within the area, and general plan amendments to ensure zoning and general plan consistency.
4.1	Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.	Consistent. The purpose of the proposed Specific Plan is to implement infill development and redevelopment of underutilized and vacant parcels within walking distance of the Willowbrook/Rosa Parks Station.
4.2	Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods.	Consistent. The purpose of the proposed Specific Plan is to implement infill development and redevelopment of underutilized parcels within the older economically distressed Willowbrook neighborhood.
4.3	Encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas.	Consistent. The purpose of the proposed Specific Plan is to implement transit-oriented infill development and redevelopment within walking distance of the Willowbrook/Rosa Parks Station.
4.4	Encourage mixed use development along major commercial corridors in urban and suburban areas.	Consistent. Implementation of the proposed Specific Plan would specifically direct mixed use development along the major corridors in the urban Willowbrook community.
5.1	Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.	Consistent. Implementation of the proposed Specific Plan would accommodate a mix of residential land uses that range from single-family development to high density multi-family development throughout existing residential and future mixed-use neighborhoods in Willowbrook.
5.2	Encourage a diversity of commercial and retail services, and public facilities at various scales to meet regional and local needs.	Consistent. Implementation of the proposed Specific Plan would provide zoning for a mix of commercial, retail, and public facilities that would meet both regional needs (such as the medical, educational, and Metro uses) and local needs (such as retail and restaurants) for the residents, students, and employees within the Specific Plan area daily.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
5.3	Support a mix of land uses that promote bicycling and walking, and reduce VMTs.	Consistent. The proposed Specific Plan would implement a transit oriented land use design that includes pedestrian and bicycle facilities that would connect major land uses and transportation within the Specific Plan area. Major areas that would be connected include: MLK, CDU, the high schools, the Willowbrook/Rosa Parks Station, and the high density residential and mixed use neighborhoods.
5.4	Encourage community-serving uses, such as early care and education facilities, grocery stores, farmers markets, restaurants, and banks to locate near employment centers.	Consistent. The proposed Specific Plan provides zoning to encourage community serving uses including several education facilities, several medical facilities, and shopping centers to be maintained and expanded upon within the Willowbrook area that provides substantial employment through these same uses.
5.5	Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.	Consistent. Implementation of the proposed Specific Plan would accommodate a mix of residential land uses that range from single-family development to high density multi-family development throughout existing residential and future mixed-use neighborhoods in Willowbrook.
5.10	Encourage employment opportunities and housing to be developed in proximity to one another.	Consistent. The purpose of the proposed Specific Plan is to implement infill development and redevelopment of the project area to generate a mixed use community, where employment, housing, retail, and educational uses are developed in proximity to one another and to the existing Willowbrook/Rosa Parks Station.
7.1	Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.	Consistent. The Specific Plan includes Performance Standards to implement design techniques to ensure that sensitive land uses such as residential, schools, and hospitals are not adversely impacted by traffic, noise, light, and safety impacts from adjacent uses.
9.2	Encourage patterns of development that promote physical activity.	Consistent. The intent of the Specific Plan is to implement a transit oriented development that promotes walking and bicycling between various community uses. The project would implement additional sidewalk pedestrian routes and on-street bicycle routes. The walking and bicycling are physical activities that would be a result of project implementation.
10.3	Consider the built environment of the surrounding area and location in the design and scale of new or remodeled buildings, architectural styles, and reflect appropriate features such as massing, materials, color, detailing or ornament.	Consistent. The Specific Plan includes Land Use Regulations and Development and Design Standards for each of the land uses that would be implemented by the project. These regulations and standards include massing, height, materials, styles, setbacks, landscaping and other features that are considered specifically for each of the environments within the different subareas.
10.4	Promote environmentally-sensitive and sustainable design.	Consistent. The proposed Specific Plan includes Sustainable Design Guidelines related to site and building design, solar resources, and water efficiency.
10.5	Encourage the use of distinctive landscaping, signage and other features to define the unique character of districts, neighborhoods or communities, and engender community identity, pride and community interaction.	Consistent. The Specific Plan includes Land Use Regulations and Development and Design Standards for each of the different subareas to enhance the definition and unique character of each subarea within the Specific Plan area.
10.6	Encourage pedestrian activity through the following: • Designing the main entrance of buildings to front the street; • Incorporating landscaping features; • Limiting masonry walls and parking lots along commercial corridors and other public spaces; • Incorporating street furniture, signage, and public events and activities; and • Using wayfinding strategies to highlight community points of interest.	Consistent. The intent of the Specific Plan is to implement a transit oriented development that promotes walking and pedestrian activity. Consistent with this policy, the proposed project would incorporate pedestrian oriented circulation infrastructure (such as sidewalks and crossings), landscaping, wayfinding signage, street lighting, and street furniture along pedestrian and bicycle routes.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
10.7	Promote public spaces, such as plazas that enhance the pedestrian environment, and, where appropriate, continuity along commercial corridors with active transportation activities.	Consistent. The Specific Plan includes opportunities to enhance public space by provision of a pedestrian environment along commercial corridors (described in response to Policy 10.6 above) and connections to the Willowbrook/Rosa Parks Station. In addition, the Specific Plan includes an opportunity to develop a public gathering space within Kenneth Hahn Plaza that could include street furniture, landscaping, public art, a water feature, and concessions.
10.8	Promote public art and cultural amenities that support community values and enhance community context.	Consistent. The proposed Specific Plan includes provisions to include public art in architecture and public plaza areas; and thus, is consistent with this policy.
10.10	Promote architecturally distinctive buildings and focal points at prominent locations, such as major commercial intersections and near transit stations or open spaces.	Consistent. The Specific Plan includes Land Use Regulations and Development and Design Standards for each of the different subareas to identify the various distinctive buildings and focal points of each subarea within the Specific Plan area. Thus, the proposed Specific Plan is consistent with this policy.
11.1	Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.	Consistent. The proposed Specific Plan includes Sustainable Design Guidelines related to site and building design, solar resources, and water efficiency. Thus, the proposed Specific Plan is consistent with this policy.
11.2	Support the design of developments that provide substantial tree canopy cover, and utilize light-colored paving materials and energy-efficient roofing materials to reduce the urban heat island effect.	Consistent. See response to Policy 11.1, above.
11.3	Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.	Consistent. See response to Policy 11.1, above.
11.4	Promote environmentally-sensitive and sustainable design.	Consistent. See response to Policy 11.1, above.
Mobility Element		
1.1	Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.	Consistent. The proposed Specific Plan would implement a transit oriented land use design that includes pedestrian and bicycle facilities that would connect major land uses and transportation within the Specific Plan area. Major areas that would be connected include: MLK, CDU, the high schools, the Willowbrook/Rosa Parks Station, and the high density residential and mixed use neighborhoods. The project would implement additional sidewalk pedestrian routes and on street bicycle routes. Development of all new facilities would be ADA accessible as required by federal and state law.
2.1	Provide transportation corridors/networks that accommodate pedestrians, equestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.	Consistent. As described in response to Policy 1.1 above, the proposed Specific Plan would implement a transit oriented land use design that includes pedestrian and bicycle facilities that would connect major land uses, such as: MLK, CDU, the high schools, the Willowbrook/Rosa Parks Station, and the high density residential and mixed use neighborhoods. The project would implement additional sidewalk pedestrian routes and on street bicycle routes. The proposed pedestrian and bicycle facilities have been designed to specifically accommodate each of the unique urban uses within the Specific Plan area, as further detailed within Chapter 4, Mobility of the Proposed Specific Plan.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
2.2	Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following street designs, whenever appropriate and feasible: • Lane width reductions to 10 or 11 feet in low speed environments with a low volume of heavy vehicles. • Wider lanes may still be required for lanes adjacent to the curb, and where buses and trucks are expected. • Low-speed designs. • Access management practices developed through a community-driven process. • Back in angle parking at locations that have available roadway width and bike lanes, where appropriate.	Consistent. The proposed Specific Plan (as detailed in the Specific Plan Chapter 4, Mobility) provides accommodations for pedestrian and bicycle facilities by developing sidewalks and bicycle routes, reducing number of lanes (on portions of 120th Street, Willowbrook Avenue, Mona Boulevard) and implementing low speed streetscape designs. The specific street designs identified in this policy such as lane width reductions and back in angled parking are not provided in the Specific Plan. However, the intent of this policy is to accommodate pedestrian and bicyclists and reduce motor vehicle accidents. The Specific Plan includes various accommodations to improve pedestrian and bicycle facilities and reduces the number of lanes on various street segments. This reduction of the number of lanes would reduce vehicular speeds.
2.3	Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following intersection designs, whenever appropriate and feasible: • Right angle intersections that reduce intersection skew. • Smaller corner radii to reduce crossing distances and slow turning vehicles. • Traffic calming measures, such as bulb-outs, sharrows, medians, roundabouts, and narrowing or reducing the number of lanes (road diets) on streets. • Crossings at all legs of an intersection. • Shorter crossing distances for pedestrians. • Right-turn channelization islands. Sharper angles of slip lanes may also be utilized. • Signal progression at speeds that support the target speed of the corridor. • Pedestrian push buttons when pedestrian signals are not automatically recalled. • Walk interval on recall for short crossings. • Left-turn phasing. • Prohibit right turn on red. • Signs to remind drivers to yield to pedestrians.	Consistent. The proposed Specific Plan (as detailed in the Specific Plan Chapter 4, Mobility) provides accommodations for pedestrian and bicycle facilities by developing sidewalks and bicycle routes and implementing various low speed streetscape and crosswalk designs. These design improvements include bulb-outs, medians, landscaping, installing passive pedestrian detection, and pedestrian push buttons for crosswalks.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
2.4	Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible: • Designs that limit dead-end streets and dead-end sidewalks. • Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops. • Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA). • Perpendicular curb ramps at locations where it is feasible. • Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.) • Approved devices to extend the pedestrian clearance times at signalized intersections. • Accessible Pedestrian Signals (APS) at signalized intersections. • Pedestrian crossings at signalized intersections without double or triple left or right turn lanes. • Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections. • Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes. • Advance stop lines at signalized intersections. • Pedestrian Hybrid Beacons. • Medians or crossing islands to divide long crossings. • High visibility crosswalks. • Pedestrian signage. • Advanced yield lines for uncontrolled crosswalks. • Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic. • Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.	Consistent. The Proposed Specific Plan, as detailed in the Specific Plan Chapter 4, Mobility, and as described above provides accommodations to ensure a comfortable pedestrian environment by developing sidewalks that connect various uses within the area and would be compliant with all County regulations, including lighting, ADA access, and Department of Traffic and Lighting design guidelines. The specific pedestrian design improvements that are proposed include (1) adding high visibility markings at intersections, (2) adding passive pedestrian detection and pedestrian push buttons for crosswalks at traffic signals at intersections, (3) adding pedestrian countdown pedestrian signals and audio signals to crosswalks at intersections, (4) adding advance stop lines to signalize intersections approaches, and (5) adding sidewalk bulb-outs and extensions, or reducing curb returns, on intersection corners, where feasible. The implementation of these proposed pedestrian design improvements would result in the project being consistent with this policy.
2.5	Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible: • Bicycle signal heads at intersections. • Bicycle signal detection at all signalized intersections. • Wayfinding signage. • Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction. • Appropriate lighting on all bikeways, including those in rural areas. • Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.	Consistent. The Proposed Specific Plan (as detailed in the Specific Plan Chapter 4, Mobility) provides accommodations for bicycling by providing bicycle lanes on various roadways, reducing lane widths (on portions of 120th Street, Willowbrook Avenue, and Mona Boulevard), implementing low speed streetscape designs, and providing wayfinding signage.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
2.6	Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.	Consistent. The intent of the Specific Plan is to implement a transit oriented development that promotes walking and bicycling between various community uses. The project would implement additional sidewalk pedestrian routes and on street bicycle routes. Thus, the project would promote active transportation.
2.7	Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.	Consistent. The proposed bikeways and pedestrian paths would be developed to accommodate the projected volume of use. A network of pedestrian and bicycle paths and improvements are proposed within the Specific Plan. The pedestrian improvements such as sidewalks, improvements at intersections, and adding pedestrian paths will accommodate future pedestrian activity. The bicycle improvements include the implementation of Class I bike paths that consist of paths separated from the roadway traffic and Class II bike paths that include adding bicycle lane striping. These proposed improvements would accommodate future increases in pedestrian and bicycle activity within the Specific Plan area.
2.8	Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.	Consistent. The proposed Specific Plan includes pedestrian and bicycle facilities that would connect major land uses and transportation within the Specific Plan area. Major areas that would be connected include: MLK, CDU, the high schools, the Willowbrook/Rosa Parks Station, and the high density residential and mixed use neighborhoods.
2.9	Encourage the planting of trees along streets and other forms of landscaping to enliven streetscapes by blending natural features with built features.	Consistent. The proposed Specific Plan would implement streetscape improvements that consist of street trees, street furniture, street lighting, signage, landscaping, and public art.
2.10	Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.	Consistent. The proposed Specific Plan would include street furniture, street lighting, signage, landscaping, and bicycle lock up facilities.
4.1	Expand transportation options that reduce automobile dependence.	Consistent. The proposed Specific Plan would expand transportation options that reduce automobile dependence by implementing a transit oriented land use design that includes pedestrian and bicycle facilities that would connect major land uses and transportation within the Specific Plan area.
4.4	Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.	Consistent. The proposed Specific Plan would expand mobility and increase transit access for underserved transit users by implementing a transit oriented land use design that would connect major land uses to the Willowbrook/Rosa Parks Station by pedestrian and bicycle facilities. Development of all new facilities would be ADA accessible as required by federal and state law.
4.7	Maintain a minimum LOS D, where feasible; however, allow LOS below D on a case by case basis in order to further other General Plan goals and policies, such as those related to environmental protection, infill development, and active transportation.	Consistent. The proposed Specific Plan would result in LOS below D due to the existing traffic conditions within the Specific Plan area and the anticipated growth that would occur through 2025. Although there are areas within the County and in the vicinity of the project site that will fall below LOS D with the implementation of the project, other General Plan goals such as the facilitation of improving circulation for bicycle and pedestrians will be achieved. Therefore, the proposed Specific Plan would further General Plan goals and policies related to infill development and active transportation
4.8	Provide and maintain appropriate signage for streets, roads and transit.	Consistent. The proposed Specific Plan would implement a wayfinding signage program that would help people orient themselves in the physical space and navigate from destination to destination by use of signage, markers, and/or monuments.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
4.10	Support the linkage of regional and community-level transportation systems, including multimodal networks.	Consistent. The proposed Specific Plan would link the regional and community-level transportation systems by maintaining roadways and parking facilities, and providing pedestrian and bicycle facilities that connect to the regional Metro system.
5.1	Facilitate transit-oriented land uses and pedestrian-oriented design, particularly in the first-last mile connections to transit, to encourage transit ridership.	Consistent. The intent of the Specific Plan is to implement a transit oriented development that promotes walking and bicycling between various community uses and the Willowbrook/Rosa Parks Station.
5.2	Implement parking strategies that facilitate transit use and reduce automobile dependence.	Consistent. The proposed Specific Plan includes reduced parking requirements and reduced maximum parking standards to be more closely tailored to transit-oriented development. The project also includes a Transportation Demand Management Program that will be implemented for new all non-residential uses exceeding 50,000 square feet. The implementation of these design strategies would facilitate transit use and reduce automobile dependence.
6.4	Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.	Consistent. The Specific Plan includes Performance Standards to implement design techniques to ensure that residential uses are not adversely impacted by traffic or noise impacts from adjacent non-residential uses.
7.1	Minimize roadway runoff through the use of permeable surface materials, and other low impact designs, wherever feasible.	Consistent. The proposed Specific Plan includes numerous potential opportunities to minimize roadway stormwater runoff. The Specific Plan includes the design of walkways and plazas to collect stormwater, drought tolerant landscape materials to reduce water runoff, and green roofs to absorbe rainwater to reduce stormwater runoff. The Specific Plan also includes the use of vegetative swales and decomposed granite to reduce stormwater runoff as well as regrading of sidewalks to allow stormwater to be conveyed into adjacent unpaved planters and parkways. Overall, the proposed Specific plan would be consistent with this policy.
Housing Element		
1.4	Assist housing developers to identify and consolidate suitable sites for developing housing for low and moderate income households and those with special needs.	Consistent. The Specific Plan identifies underutilized and vacant parcels within the plan area and provides the planning structure to consolidate and redevelop sites to provide infill development that would consist of various residential dwelling types for low and moderate income households. The location of the development would be within proximate distance to existing bus routes and the Willowbrook/Rosa Parks Station to assist people with special needs.
2.1	Support the development of housing for low and moderate income households and those with special needs near employment and transit.	Consistent. Implementation of the proposed Specific Plan would accommodate a mix of residential land uses that range from single-family development to high density multi-family development near the MLK and CDU related employment uses and the existing Willowbrook/Rosa Parks Station.
2.2	Encourage mixed use developments along major commercial and transportation corridors.	Consistent. Implementation of the proposed Specific Plan would specifically direct mixed use development along the major corridors in the urban Willowbrook community.
3.1	Promote mixed income neighborhoods and a diversity of housing types throughout the unincorporated areas to increase housing choices for all economic segments of the population.	Consistent. Implementation of the proposed Specific Plan would accommodate a mix of residential land uses that range from single-family development to high density multi-family development throughout existing residential and future mixed-use neighborhoods in Willowbrook.
Air Quality Element		
3.5	Encourage energy conservation in new development and municipal operations.	Consistent. The proposed Specific Plan includes Sustainable Design Guidelines related to site and building design, solar resources, and water efficiency.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
3.6	Support rooftop solar facilities on new and existing buildings.	Consistent. The proposed Specific Plan includes Sustainable Design Guidelines that support inclusion of solar facilities in new development.
Conservation and Natural Resources Element		
5.6	Minimize point and non-point source water pollution.	Consistent. As described in Section, 3.7, Hydrology and Water Quality, development projects that would be implemented by the proposed Specific Plan would be required to implement NPDES required SWPPPs during construction and RWQCB WQMP with BMPs during operations to minimize sources of water pollution.
6.1	Support the LID philosophy, which incorporates distributed, post-construction parcel-level stormwater infiltration as part of new development.	Consistent. As described in Section, 3.7, Hydrology and Water Quality, development projects that would be implemented by the proposed Specific Plan would be required to implement LID designs in compliance with RWQCB and County's Low Impact Development Standards (LID Standards)..
14.1	Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.	Consistent. As described in Section, 3.3, Cultural Resources, mitigation measures are recommended to reduce potential impacts to historic, cultural, and paleontological resources to less than significant.
14.3	Support the preservation and rehabilitation of historic buildings.	Consistent. As described in Section, 3.3, Cultural Resources, the Mitigation Measure CR-1 includes the treatment of altered significant historic structures in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*. T
14.6	Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.	Consistent. Mitigation measures described in Section, 3.3, Cultural Resources, require proper notification and recovery processes in areas that could contain historic, cultural, and paleontological resources.
Parks and Recreation Element		
1.2	Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.	Consistent. The Specific Plan area is urban and developed with existing uses that do not provide substantial opportunity for additional recreation. However, the Specific Plan includes an opportunity to develop a public gathering space within Kenneth Hahn Plaza that could include street furniture, landscaping, public art, a water feature, and concessions. The implementation of a public gathering place could provide a passive recreational area, and therefore, the Specific Plan could be consistent with this policy.
Noise Element		
1.1	Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.	Consistent. The Specific Plan includes Performance Standards to implement design techniques to ensure that residential uses are not adversely impacted by noise.
1.2	Reduce exposure to noise impacts by promoting land use compatibility.	Consistent. See response above to Policy 1.1.
1.3	Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).	Consistent. See response above to Policy 1.1.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
1.5	Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or Ldn) noise exposure contours.	Consistent. Implementation of the proposed Specific Plan would be required to implement new development consistent with all regulations including the State Noise Insulation Standards.
1.6	Ensure cumulative impacts related to noise do not exceed health-based safety margins.	Consistent. As described in Section 3.9, Noise, the proposed Specific Plan project would result in less than significant cumulative impacts related to noise after the implementation of mitigation measures.
1.9	Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.	Consistent. As described above, the Specific Plan includes Performance Standards to implement design techniques to ensure that residential uses are not adversely impacted by noise from adjacent non-residential uses.
1.11	Maximize buffer distances and design and orient sensitive receptor structures (hospitals, residential, etc.) to prevent noise and vibration transfer from commercial/light industrial uses.	Consistent. The Specific Plan includes Performance Standards to implement design techniques to ensure that residential uses are not adversely impacted by traffic, noise, light, and safety impacts from adjacent non-residential uses.
1.12	Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.	Consistent. As described above, the Specific Plan includes Performance Standards to implement design techniques to ensure that residential uses are not adversely impacted by noise from adjacent non-residential uses.
Safety Element		
1.1	Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.	Consistent. The Specific Plan area is not located with or adjacent to an Alquist-Priolo Fault Zone. 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 developments in an Alquist-Priolo Fault Zone.
1.2	Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.	Consistent. See response to Policy 1.1 above, the project would not result in construction of structures within a fault zone.
Public Services and Facilities Element		
1.1	Discourage development in areas without adequate public services and facilities.	Consistent. As described in Section 3.11, Public Services, the new land uses that would be implemented by the proposed Specific Plan would be served by adequate public services, including fire services, police services, school services, and library services. Similarly, with implementation of the water pipeline improvements, which are part of the proposed project, the utility infrastructure within the Specific Plan area is able to accommodate build-out of the proposed Specific Plan. Therefore, the project would not result in developments without adequate public services or facilities.
1.2	Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.	Consistent. See response to Policy 1.1.
2.1	Support water conservation measures.	Consistent. The proposed Specific Plan includes Sustainable Design Guidelines related to site and building design for water efficiency. In addition, projects implemented under the proposed Specific Plan would be required to meet all CALGREEN and Title 24 water conservation requirements.

Policy Number	Policy Text	Statement of Consistency or Non-Consistency
8.2	Support library mitigation fees that adequately address the impacts of new development.	Consistent. The development that would occur per the proposed Specific Plan would be required to pay all development impact fees, including library mitigation fees, as described in Section 3.11, Public Services.
Economic Development Element		
1.1	Encourage a diverse mix of industries and services in each Planning Area.	Consistent. The purpose of the proposed Specific Plan is to implement infill development and redevelopment of the project area to generate a mixed use community, providing diverse industries that include medical, educational, office, retail, housing, and related support industries.
2.4	Ensure high standards of development and encourage environmentally sustainable practices in economic development activities.	Consistent. The Specific Plan includes Land Use Regulations and Development and Design Standards for each of the land uses that would be implemented by the project. These regulations and standards include massing, height, materials, styles, setbacks, landscaping and other features that are considered specifically for each of the environments within the different subareas, which would ensure high standards of development. In addition, the Specific Plan includes Sustainable Design Guidelines to ensure environmentally sustainable practices.
2.5	Encourage employment opportunities to be located in proximity to housing.	Consistent. The purpose of the proposed Specific Plan is to implement infill development and redevelopment of the project area to generate a mixed use community, where employment, medical, housing, retail, and educational uses are developed in proximity to one another and to the existing Willowbrook/Rosa Parks Station.
2.6	Encourage community-serving uses, such as child care centers and personal services, to be located in proximity to employment centers.	Consistent. The proposed Specific Plan provides zoning to encourage community serving uses in proximity to employment centers and regional transit.
2.7	Incentivize economic development and growth along existing transportation corridors and in urbanized areas.	Consistent. The purpose of the proposed Specific Plan is to implement infill development and redevelopment along corridors within the economically distressed Willowbrook neighborhood to incentivize economic development.
4.4	Incentivize infill development in urban and suburban areas that revitalizes underutilized commercial and industrial areas.	Consistent. The purpose of the proposed Specific Plan is to implement infill development and redevelopment of underutilized and vacant parcels within walking distance of the Willowbrook/Rosa Parks Station.

Cumulative

The cumulative study area for land use and planning includes all areas within the Willowbrook community and the areas (such as the City of Los Angeles, City of Lynwood, and City of Compton areas) that are adjacent to the Specific Plan area. Future growth in the project vicinity is anticipated to be similar in character and intensity as existing development and proposed land uses under the Specific Plan. It is reasonable to assume that as future developments in the project vicinity are processed through the County as well as the adjacent cities, these projects would be consistent with the policies within the applicable general plan or if policy revisions or general plan amendments are proposed, these potential changes and revisions would be reviewed to ensure potential environmental impacts would be less than significant. Therefore, cumulative developments would result in less than significant environmental impacts associated with consistency to the County's and surrounding cities' general plans and policies.

As stated previously, the proposed Specific Plan would be consistent with the vision and policies of the County General Plan policies as well as with relevant SCAG 2016-2040 RTP/SCS policies. As a result, the project's contribution to the potential cumulative impacts associated with consistency to existing general plans and policies would be less than cumulatively considerable, and therefore, less than cumulatively significant.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Conflict with County Zoning Ordinance

Impact 3.8-3: The proposed project would be consistent with the County zoning ordinance as applicable to the subject property.

Project-Specific

The proposed Specific Plan would establish development regulations that would be largely consistent with current zoning ordinance requirements. Although not specifically permitted under the current zoning, the proposed Specific Plan would include the reclassification of parcels to implement mixed-uses and enhanced pedestrian and bicycle amenities to better connect the residential, employment, medical, and educational land uses within the Specific Plan area to the regional Metro transit services.

The existing zoning regulations do not fully meet the purpose and intent of the General Plan or other regional planning principles, and the proposed zoning that would be implemented by the Specific Plan would be more consistent with the TOD vision for the area that was established by the County General Plan. Because the purpose of zoning regulations is to implement the County's plans and planning concepts, the proposed zoning regulations would result in less than significant environmental impacts related to consistency with plans and policies.

Cumulative

The cumulative study area for determining potential environmental effects associated with the consistency to the County's zoning ordinance includes all areas within the Willowbrook community. Future growth in the Willowbrook community is anticipated to be similar in character and intensity as existing development and proposed land uses under the Specific Plan. It is reasonable to assume that as future developments in the project vicinity and within the unincorporated County area are processed through the County, these projects would be consistent with the regulations within the applicable zoning ordinance or if new regulations are proposed for a specific project (i.e., through a specific plan) that these proposed regulations are reviewed to ensure consistency with the vision and policies of the County General Plan. Therefore, cumulative developments would result in less than significant environmental impacts associated with consistency to the County zoning ordinance.

As stated previously, the proposed Specific Plan would be consistent with the vision and policies of the County General Plan policies as well as with relevant SCAG 2016-2040 RTP/SCS policies. As a result, the project's contribution to the potential cumulative impacts associated with consistency to the County zoning ordinance would be less than cumulatively considerable, and therefore, less than cumulatively significant.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Visual Character

Impact 3.8-4: The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character or other features.

Project-Specific

The proposed Specific Plan would result in redevelopment and infill development of transit oriented land uses within walking distance of the Willowbrook/Rosa Parks Station. This would alter the existing visual character throughout the Specific Plan area by establishing a more

concentrated mixed use development pattern that is consistent with the existing urban character of the area. The new mixed uses would generally involve residential units being located on upper floors and commercial uses located on ground-floors.

The Specific Plan would implement pedestrian-oriented streetscape improvements that include street trees, street lights, street furniture (planters, benches, bicycle parking, trash receptacles, etc.), wayfinding signage, landscaped open space plaza areas, and introduction of more public art, such as at the intersection of Wilmington Avenue and 120th/119th Streets. In addition, large surface parking lots would be discouraged by the proposed Specific Plan and would ultimately be eliminated by moving parking lots to the mid-block areas behind building frontages.

The Specific Plan has identified the new land uses within each of the subareas. As described below, the new uses would be consistent with the existing character of each of the subareas. Additionally, the Specific Plan includes specific design standards for each subarea that provides architectural guidelines, including: setbacks, sidewalk widths, signage standards, landscaping standards, and lighting standards to create an attractive environment.

- **Martin Luther King Jr. Medical Center Campus Subarea.** As described above, this subarea is developed with medical and medical support uses. The proposed Specific Plan would implement additional infill uses pursuant to the County's 2012 MLK Medical Center Campus Master Plan & the Willowbrook MLK Wellness Community Vision documents, which include: medical, clinic, medical office, retail, supportive residential, and parking uses. Although build-out of the MLK subarea was initially identified in the Campus Master Plan and Community Vision documents, the proposed Specific Plan would serve as the regulatory document for build-out of the MLK campus. The implementation of the proposed uses within the MLK subarea would be consistent with the character of the existing MLK uses because the proposed uses would be similar to the existing uses.

  As described, the Specific Plan would implement new uses in the MLK subarea that would be similar to existing uses, but would be more intensified. Similarly, the landscaping within the subarea would be improved with each development within the subarea, and would continue to consist of ornamental non-native trees, shrubs, and grass areas. Thus, implementation of the proposed Specific Plan within the MLK subarea would not result in degradation of the existing visual character or quality of the area, and impacts would be less than significant.

- **CDU Subarea.** As described above, the CDU subarea is mostly developed with institutional uses that are medical and educationally related. Development of the CDU area under the Specific Plan includes 119 new residential units within the campus. The housing would consist of dormitories for undergraduate students, shared housing for graduate student, and housing for visiting faculty. Additionally, build-out of the CDU area would also include university related facilities such as, conference areas, research labs, classrooms, and parking structures. While the new uses within the CDU subarea would be four to six stories in height, which is slightly higher than the two to four story structures currently in the area, the Specific Plan requires new campus buildings to be set back from the adjoining streets, which is responsive to the scale of nearby residential uses. Landscaping in the area would be similar to

the existing ornamental vegetation along sidewalks and in open spaces between buildings. Implementation of the proposed Specific Plan within the CDU subarea would implement additional uses that are similar to the same educational uses and would not result in degradation of the existing visual character or quality of the area, and impacts would be less than significant.

- **Northwest Subarea.** The Northwest Subarea encompasses a variety of urban uses, including educational, retail, residential and institutional. This subarea is adjacent to CDU and in proximity to the Willowbrook/Rosa Parks Station, which provides a good location for university housing and employment generating medical/educational uses. The Specific Plan encourages uses such as medical back office, laboratory facilities, hospital equipment facility, medical or university support businesses, etc. In addition, the Specific Plan provides for multi-family developments to provide housing options for employees, students and transit-dependent users. As described above, the Specific Plan includes design standards that provide architectural guidelines, including: setbacks, sidewalk widths, signage standards, landscaping standards, and lighting standards to create an attractive environment. Implementation of the new infill and redevelopment uses within the Northwest Subarea would be required to be consistent with these standards. Thus, implementation of the Specific Plan project in the Northwest Subarea would not result in degradation of the existing visual character or quality of the area, and impacts would be less than significant.
- **Kenneth Hahn Plaza Subarea.** The subarea consists of a 189,287-square-foot shopping center that is surrounded by parking areas. Approximately, 1.5 acres of land on the northern end of the subarea is in the process of being acquired by Metro and will be used for the expansion of the Willowbrook/Rosa Parks Station. The other portion of the site is planned by the Specific Plan to be transformed to a mixed use (residential and retail) transit oriented development. Development on the site could be integrated vertically (up to four stories high with residential or office uses above retail uses), or horizontally on site.

  The Specific Plan design for the Plaza would include removal of the perimeter fence to allow pedestrian access to the Willowbrook/Rosa Parks Station, the hospital, CDU, mixed use areas, as well as the nearby residential neighborhoods.

  Additionally, the Specific Plan provides for a large outdoor plaza or gathering space to be located in the Plaza that would include amenities, such as: street furniture, landscaped open space, public art, a water feature, and concessions.

  In addition, 119th Street is the primary connection to residential and transit uses, and the Specific Plan would improve crosswalks, sidewalks, and landscaping in the area. The planned land uses for 119th Street intends to build upon the connection to residential and transit by providing for retail or service uses (such as child care, senior care, attorney offices etc.) or residential town-home/walk-ups facing the single family residential uses on the south side of 119th Street. The design standards for this subarea require the massing and scale of these buildings to be similar to adjacent uses to respond to the existing densities in the area.

  Furthermore, the Specific Plan includes design standards for the Kenneth Hahn Plaza Subarea that provides architectural guidelines, including: setbacks, sidewalk widths, signage

standards, landscaping standards, and lighting standards to create an attractive environment. Thus, implementation of the Specific Plan project in the Kenneth Hahn Plaza Subarea would not result in degradation of the existing visual character or quality of the area, and impacts would be less than significant.

- **Willowbrook/Rosa Parks Station Subarea.** Metro is working on the Willowbrook/Rosa Parks Station Improvement Project that will upgrade the existing station structure and access to the Willowbrook/Rosa Parks Station. The proposed Specific Plan would build upon the Station project and provide improvements to facilities that are adjacent and related to the Willowbrook/Rosa Parks Station.

  These include improvements to the at-grade crossing at the north end of the Blue Line platform to increase pedestrian connectivity to the residential neighborhoods to the east of the rail tracks. Another at-grade crossing would occur at the south end of the Blue Line platform to improve connectivity for residents to the east. The Specific Plan would also provide improved bicycle access to Metro Station by development of a bicycle path along Willowbrook Avenue West between Imperial Highway and 119th Street.

  The Specific Plan improvements in the Willowbrook/Rosa Parks Station Subarea are generally infrastructure and circulation connectivity related and improvements to enhance non-vehicular mobility in the subarea. Thus, the character of the subarea would remain urban transit related. However, the proposed Specific Plan provides the opportunity for public art to be installed in the area and would provide streetscape improvements, which would soften the urban character of the transit facilities.

  Overall, the Specific Plan would implement enhancements to the transit and circulation facilities in this subarea, which would have the same character as existing uses; however, character quality of the area would be improved through implementation of streetscaping and public art. Thus, implementation of the proposed Specific Plan within the Willowbrook/Rosa Parks Station Subarea would not result in degradation of the existing visual character or quality of the area, and impacts would be less than significant.

- **Imperial Highway Corridor Subarea.** As previously described, this is a highly urban area that is located in a narrow area between the Imperial Highway and the I-105 Freeway. Therefore, the Specific Plan prohibits any new residential uses to be developed within this area. New uses that would be implemented by the proposed Specific Plan include maintenance yards, parking facilities, industrial, or storage facilities.

  The Specific Plan includes design standards for the Imperial Highway Corridor Subarea that provides architectural guidelines, including: setbacks, sidewalk widths, signage standards, landscaping standards, and lighting standards to create an attractive environment. Implementation of the new infill and redevelopment uses within the subarea would be required to be consistent with these standards. Thus, implementation of the Specific Plan project would not result in degradation of the existing visual character or quality of the area, and impacts would be less than significant.

- **Residential Neighborhoods Subarea.** Implementation of the Specific Plan would preserve the existing residential uses and increase options for adding living quarters as living suites or

relaxing the requirements for construction of second units, which would result in an increase of residential density in the subarea. The Specific Plan would also implement streetscape improvements, including installation of street trees and pedestrian-scaled street lighting.

The Specific Plan includes design standards for the subarea that are specific for residential uses and provide guidelines that include: setbacks, sidewalk widths, signage standards, landscaping standards, and lighting standards. Implementation of the new infill and redevelopment uses within the subarea would be required to be consistent with these residential standards. Thus, implementation of the Specific Plan project would not result in degradation of the existing visual character or quality of the residential area, and impacts would be less than significant.

Build-out of the Specific Plan would alter the existing visual character of the Specific Plan area by increasing density and implementing streetscape and circulation changes. The visual character of the area and its vicinity would remain urban and would not be degraded. The design guidelines in the Specific Plan were intentionally included to enhance the aesthetics and land use compatibility in each specific subarea, and include requirements for façades, building heights and massing, character and urban pattern. The development standards, design guidelines, and streetscape improvements that would be implemented by the proposed Specific Plan would provide a unifying and identifying character to the Willowbrook area.

Overall, the Specific Plan would enhance, not degrade, the visual character and quality of the area. Therefore, less than significant impacts relating to the existing visual character or quality of the area would occur.

Cumulative

The cumulative study area for land use and planning includes all areas within the Willowbrook community and the areas (such as the City of Los Angeles, City of Lynwood, and City of Compton areas) that are adjacent to the Specific Plan area. Like the Specific Plan area, the cumulative land use study area is a developed, urban area that contains a mix of uses, including medical, educational, commercial, residential, and public facilities.

Similar to the proposed Specific Plan, future growth within the project vicinity is reasonably anticipated to represent orderly, contiguous, and largely infill development that would reinforce the existing urban and developed character of the area. Because development resulting from future growth is expected to be consistent with uses in the surrounding area, future developments are anticipated to result in less than significant environmental effects related to the visual character or quality of the area.

The Specific Plan proposes to rezone and amend General Plan land uses of specific parcels within the project area to implement a transit-oriented development pattern to the area. The modifications to land uses by implementation of the proposed Specific Plan are consistent with the existing residential, commercial, medical, educational, and public land uses within each of the subareas, as described above. In addition, the infill and redevelopment projects that would be implemented by the Specific Plan are expected to be consistent with future development in the

cumulative study area. Because the proposed Specific Plan would result in less than significant visual charter and quality impacts, the project's contribution to the cumulative impact related to the visual character or quality of the area would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

3.8.6 References

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3.9 Noise and Vibration

Introduction

This section evaluates the potential for noise and groundborne vibration impacts to result from implementation of the proposed Specific Plan. This includes the potential for developments occurring in the Specific Plan area to result in exposure of people in the vicinity of the project site to excessive noise and groundborne vibration levels. The evaluation includes a determination of whether this exposure is in excess of standards established in the local general plan or noise ordinance. In addition, the evaluation includes a determination of whether project construction and operation would result in a substantial temporary or permanent increase, respectively, in ambient noise levels within and in the vicinity of the project site. Mitigation measures intended to reduce noise and vibration impacts are proposed, where appropriate, to avoid or reduce the potential for significant noise and vibration impacts of the proposed Specific Plan.

The Specific Plan area is located within the northwestern portion of the Willowbrook community, which is an unincorporated community of the County of Los Angeles. Criteria used to evaluate the noise impacts of the proposed uses were obtained from the Noise Element of the County's General Plan, the Los Angeles County Code (LACC) Noise Control Ordinance, and by modeling existing and future traffic noise levels on major roadways in the Specific Plan area. Criteria used to evaluate the noise impacts on uses in the vicinity of the Specific Plan area were obtained from the adjacent jurisdictions. Traffic information contained in the *Willowbrook TOD Specific Plan EIR Traffic Study (The Mobility Group, 2017)* (**Appendix D**) was used to prepare the noise modeling of traffic noise exposure.

Noise Principles and Descriptors

Noise is generally defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. Pressure waves traveling through air exert a force registered by the human ear as sound.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements. Some representative noise sources and their corresponding A-weighted noise levels are shown in **Table 3.9-1**.

TABLE 3.9-1
REPRESENTATIVE NOISE SOURCES AND CORRESPONDING NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-Over at 1,000 Feet		
	--100--	
Gas Lawn Mower at 3 Feet		
	--90--	
Diesel Truck at 50 Feet at 50 MPH		Food Blender at 3 Feet
	--80--	Garbage Disposal at 3 Feet
Noisy Urban Area, Daytime		
Gas Lawn Mower at 100 Feet	--70--	Vacuum Cleaner at 10 Feet
Commercial Area		Normal Speech at 3 Feet
Heavy Traffic at 300 Feet	--60--	
		Large Business Office
Quiet Urban Daytime	--50--	Dishwasher Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		
	--30--	Library
Quiet Rural Nighttime		Bedroom at Night
	--20--	
		Broadcasting/Recording Studio
	--10--	
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: Caltrans, 1998

Noise Exposure and Community Noise

An individual's noise exposure is a measure of noise over a period of time. A noise level is a measure of noise at a given instant in time. The noise levels presented in Table 3.9-1 are representative of measured noise at a given instant in time; however, they rarely persist consistently over a long period of time. Rather, community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing

background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.

These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

L_{eq}: The L_{eq}, or equivalent sound level, is used to describe noise over a specified period of time in terms of a single numerical value. The L_{eq} may also be referred to as the average sound level.

L_{max}: L_{max} is the maximum, instantaneous noise level experienced during a given period of time.

L_{min}: L_{min} is the minimum, instantaneous noise level experienced during a given period of time.

L_x: L_x is the noise level exceeded a percentage of a specified time period. The "x" represents the percentage of time a noise level is exceeded. For instance, L_{50} and L_{90} represents the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.

L_{dn}: L_{dn} is the average A-weighted noise level during a 24-hour day, obtained after an addition of 10 dBA to measured noise levels between the hours of 10:00 pm to 7:00 am to account nighttime noise sensitivity. L_{dn} is also termed the day-night average noise level or DNL.

CNEL: CNEL, or Community Noise Equivalent Level, is the average A-weighted noise level during a 24-hour day that is obtained after an addition of 5 dBA to measured noise levels between the hours of 7:00 pm to 10:00 pm and after an addition of 10 dBA to noise levels between the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Effects of Noise on People

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance)
- Interference effects (e.g., communication, sleep, and learning interference)
- Physiological effects (e.g., startle response)
- Physical effects (e.g., hearing loss)

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects of environmental noise refer to those effects that interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening

and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

Overall, there is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to changes in A-weighted noise level, the following relationships generally occur:

- A change in noise levels of 1 dBA cannot be perceived.
- A change in noise levels of 3 dBA change in noise levels is considered to be a barely perceivable difference.
- A change in noise levels of 5 dBA is considered to be a readily perceivable difference.
- A change in noise levels of 10 dBA is subjectively perceived as doubling of loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion, hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate between 6 dBA for hard sites and 7.5 dBA for soft sites for each doubling of distance from the reference measurement. Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites, similar to the Willowbrook Specific Plan area, and the changes in noise levels with distance is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites. Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement (Caltrans, 1998).

Fundamentals of Vibration

As described in the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* (FTA, 2006), groundborne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operation of heavy earth-moving equipment. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration.

There are two different methods and units of measure that are used to quantify vibration levels for potential structural damage to buildings and human perception/annoyance, respectively. The peak particle velocity (PPV), measured in inches per second (in/sec), is most frequently used to describe potential vibration impacts to buildings, and is defined as the maximum instantaneous peak of the vibration signal. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body (i.e., perception and annoyance), which is defined as the average of the squared amplitude of the signal, and commonly measured in VdB. The difference in PPV and RMS velocity is expressed in terms of the "crest factor," defined as the ratio of the PPV amplitude to the RMS amplitude. The PPV is typically a factor of 1.7 to 6 times greater than RMS velocity (FTA, 2006). The decibel notation of VdB acts to compress the range of numbers required to describe vibration.

Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration sensitive equipment, typically, within buildings. The effects of ground-borne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause structural damage to buildings, depending upon its structural integrity. The potential for structural damage to buildings is not a factor for most projects, except when rock blasting or pile-driving during construction in proximity to buildings (i.e., typically, within approximately 100 feet). Human annoyance from vibration often occurs when the vibration levels exceed the threshold of human perception by only a small margin. However, a vibration level that is at the threshold of human annoyance will be well below the threshold of structural damage for buildings of conventional construction. The FTA measure of the threshold of architectural damage for conventional structures is 0.2 in/sec PPV (FTA, 2006).

In residential areas, the typical background vibration level is approximately 50 VdB (or in PPV, approximately 0.0013 in/sec), which is well below the threshold of perception for humans of approximately 65 VdB. A vibration level of 75 VdB is considered to be the approximate differentiation between barely perceptible and distinctly perceptible levels for many people (FTA, 2006).

3.9.1 Environmental Setting

Existing Noise Sources

Sources of noise in the Willowbrook community are typical of those found in other urban developed areas include, but not limited to, traffic, construction work, commercial operations, human activities, emergency vehicles, rail noise, aircraft overflights, etc. The noise environment in the Specific Plan area is dominated by transportation-related sources, including traffic on the local roadway network and freeway and the activity of Metro passenger trains. The key roadway facilities serving the Specific Plan area that have been identified in the project traffic report include San Pedro Street, Avalon Boulevard, Central Avenue, Compton Avenue, Wilmington Avenue, Alameda Street, State Street/Santa Fe, 103rd Street, 108th Street, Imperial Highway, I-105, 120th Street, 119th Street, El Segundo Boulevard, Rosecrans Avenue, Compton Boulevard, and Alondra Boulevard (The Mobility Group 2017).

The Specific Plan area also includes the daily operation of Metro trains though the Willowbrook/Rosa Parks Station, which is located at the intersection of the I-105 and South Wilmington Avenue. The station is a multimodal transit facility that serves both the Metro Blue and Green light rail lines, along with six Metro bus routes, and local buses and shuttles that connect with the wider Metro rail and bus network throughout the region. Currently, the station has the fourth highest volume of ridership in the Metro rail system with approximately 30,000 daily transit riders (Metro, 2015).

The nearest residence to the station from the existing Blue Line platform is approximately 110 feet. The station is currently undergoing improvements, after which completed, the nearest residence would be approximately 68 feet from the platform. The nearest residence to the Blue line or the Union Pacific (UP) rail line which runs parallel to the Blue Line is 70 feet and experiences a noise level of 65.6 dBA Ldn. The noise level at 75 feet from the Blue Line or UP line is approximately 65 dBA Ldn.

Existing Roadway Noise Levels

Existing roadway noise levels were calculated for 67 roadway segments, including one freeway segment, located within and in proximity to the Specific Plan area. The roadway segments selected for analysis are considered to be those that are expected to be most directly impacted by project-related traffic; which, for the purpose of this analysis, includes the roadways that are located within and immediately adjacent to the Specific Plan area. These roadways, when compared to roadways located further away from the Specific Plan area, would experience the greatest percentage increase in traffic generated by buildout under the Specific Plan.

Calculation of the existing roadway noise levels was accomplished using the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108) and traffic volumes at the study intersections analyzed in the project's traffic study. The model calculates the average noise level at specific locations based on traffic volumes, average speeds, and site environmental conditions. The average daily noise levels along these roadway segments are presented in **Table 3.9-2**.

TABLE 3.9-2
EXISTING ROADWAY NOISE LEVELS

Roadway Segment	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a]
Segments Within Specific Plan Area		
County of Los Angeles		
Imperial Highway		
Compton Ave to Wilmington Ave	Residential/Commercial	70.6
Wilmington Ave to Mona Blvd	Commercial	70.9
I-105		
Compton Ave to Mona Blvd	Residential/Commercial	65.0[b]
118th Street		
Compton Ave to Wilmington Ave	Residential/School	62.4
119th Street		
Compton Avenue to Wilmington Ave	School/Hospital	66.9
Wilmington Ave to Willowbrook Ave	Residential/Commercial	65.3
Willowbrook Ave to Mona Blvd	Residential	63.3
Compton Ave		
Imperial Hwy to 120th Street	Residential/School	67.4
120th Street to Southern Boundary[c]	Hospitals	65.9
Wilmington Ave		
Imperial Hwy to I-105	Commercial	67.7
I-105 to 119th Street	Commercial	70.5
119th Street to Southern Boundary	Residential/Commercial	68.9
Mona Blvd		
Imperial Hwy to 119th Street	Residential	66.9
Segments Outside of Specific Plan Area		
City of Los Angeles		
103rd Street		
West of Central Ave	Residential/Commercial	64.1
Central Ave to Wilmington Ave	Residential/School/Park/Commercial	66.4
Wilmington Ave to Alameda Street	Residential/School/Commercial	65.1
108th Street		
Central Avenue to West of Avalon Blvd	Residential/Commercial	65.1
112th Street		55.4
Railroad to Mona Blvd	Residential/School/Commercial	
Imperial Highway		
San Pedro Street to West of Main Street	Residential/School/Commercial	71.1
San Pedro Street to Avalon Blvd	Residential/Commercial	69.3
Avalon Blvd to Slater Ave	Residential/Commercial	70.7
Slater Ave to Wilmington Ave	Residential/Commercial	70.6
Wilmington Ave to Mona Blvd	Residential/School/Commercial	70.9

Roadway Segment	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a]
Main Street		
North and South of Imperial Hwy	Residential/Commercial	65.9
San Pedro Street		
108th Street to 120th Street	Residential/School/Commercial	66.8
Avalon Blvd		
North of Imperial Hwy	Commercial	69.3
Imperial Hwy to 120th Street	Residential/Commercial	68.4
Central Ave		
Century Blvd to 108th Street	Residential/Park/Commercial	70.5
108th Street to 120th Street	Residential/School/Commercial	70.1
Compton Ave		
Century Blvd to Imperial Hwy	Residential/School/Commercial	67.4
Wilmington Ave		
Century Blvd to 112th Street	Residential/School/Commercial	67.2
112th Street to Imperial Hwy	Residential/Commercial	67.7
Alameda Street		
103rd Street to Imperial Hwy	School/Commercial	70.6
County of Los Angeles		
Imperial Highway		
Mona Blvd to Alameda Street	Residential/Commercial	70.9
120th Street		
San Pedro Street to Central Ave	Residential/Park/Commercial	67.7
Central Ave to Compton Ave	Residential/School/Commercial	68.1
El Segundo Blvd		
San Pedro Street to Slater Ave	Residential/School/Park/Commercial	69.6
Slater Ave to Wilmington Ave	Residential/School/Park/Commercial	69.8
Wilmington Ave to Alameda Street	Residential/Commercial	67.9
Rosecrans Ave		
East of Central Ave	Residential/Commercial	69.4
San Pedro Street		
120th Street to 135th Street	Residential/School/Commercial	66.8
Avalon Blvd		
120th Street to Rosecrans Ave	Residential/School/Park/Commercial	68.4
Central Ave		
120th Street to South of El Segundo Blvd	Residential/Commercial	69.4
South of El Segundo Blvd	Residential/Commercial	69.4
North of Rosecrans	Residential/Commercial	69.4
Compton Ave		
Imperial Hwy to 120th Street	Residential/Commercial	67.4
120th Street to El Segundo Blvd	Residential/Commercial	65.9

Roadway Segment	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a]
Wilmington Ave		
Imperial Hwy to I-105	Commercial	67.7
Southern Boundary to El Segundo Blvd	Residential/Commercial	68.9
Alameda Street		
124th Street to Oris Street	Commercial	70.0
City of Lynwood		
Imperial Highway		
Alameda Street to East of State Street	Commercial	71.1
Mona Blvd		
Imperial Hwy to 119th Street	Commercial	66.9
Alameda Street		
103rd Street to Imperial Hwy	School/Commercial	70.6
Imperial Hwy to North of 124th Street	Commercial	70.0
State Street/Santa Fe Ave		
N/O Imperial Hwy to S/O El Segundo	Residential/Park/Commercial	67.7
City of Compton		
El Segundo Blvd		
East and West of State Street	Residential/Commercial	64.9
Rosecrans Ave		
San Pedro Street to Willowbrook Ave	Residential/School/Commercial	69.4
Willowbrook Ave to Alameda Street	Commercial	69.8
Compton Blvd		
West of Central to East of Willowbrook	Residential/Library/Commercial	69.2
Alondra Blvd		
West and East of Willowbrook Ave	Residential/Commercial	68.7
Central Ave		
South of El Segundo Blvd to Rosecrans	Residential/School/Commercial	69.4
Rosecrans Ave to Walnut Street	Residential/School/Commercial	68.8
Wilmington Ave		
El Segundo Blvd to Rosecrans Ave	Residential/School/Commercial	68.9
Rosecrans Ave to SR-91	Residential/School/Commercial	69.3
Alameda Street		
North of 124th Street to Rosecrans Ave	Commercial	70.0
Rosecrans Ave to SR-91	Residential/Commercial	70.2
Santa Fe Avenue		
North of Weber to S/O El Segundo Blvd	Residential/Commercial	67.7

Notes:
[a] Noise level is at 25 feet from nearest curb.
[b] Accounts for existing earthen berm
[c] Southern Boundary of Specific Plan Area

As shown in Table 3.9-2, existing traffic noise levels range from 62.4 dBA CNEL (118th Street from Compton Avenue to Wilmington Avenue) to 71.1 dBA CNEL (Imperial Highway from San Pedro Street to west of Main Street and Imperial Highway from Alameda Street to east of State Street) at 25 feet from the nearest roadway curb to the land use.

Existing Ground-borne Vibration Levels

As described previously, some common sources of ground-borne vibration include trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operation of heavy earth-moving equipment. Existing vibration in the Specific Plan area is currently experienced by vehicular roadway traffic along the I-105 Freeway, Metro Rail operations along the elevated Metro Green Line, and at-grade Metro Blue Line, as well as Union Pacific freight rail operations adjacent to the Blue Line tracks. Within the Specific Plan area, light rail passenger trains associated with the Metro Blue and Green Line pass through the Willowbrook/Rosa Parks Station on a daily basis.

As described in the FTA's *Transit Noise and Vibration Impact Assessment* (FTA, 2006), locomotive-powered passenger trains traveling at 50 miles per hour (mph) can generate vibration levels up to approximately 84.5 VdB (0.067 in/sec PPV) at 50 feet from the track centerline. However, it should be noted that this vibration level represents the upper range of measurement data collected by FTA from well-maintained systems (FTA, 2006). Existing vibration levels at the closest residences along Willowbrook Avenue (approximately 70 feet from the track centerline) are estimated to range from 69 VdB (vibration decibels) for Metro Blue Line train passbys at 30 mph to 75 VdB for Union Pacific freight locomotive passbys at 30 mph. Existing vibration levels from the freight train passbys are above the threshold of perception of 65 VdB (LACMTA 2015).

Additionally, aside from periodic construction work that may occur throughout the Specific Plan area, the only other sources of groundborne vibration in the Specific Plan area and vicinity are heavy-duty vehicular travel (e.g., refuse trucks, delivery trucks, and transit buses) on local roadways. Traveling trucks and buses typically generate groundborne vibration velocity levels of approximately 63 VdB (approximately 0.006 in/sec PPV) at a distance of 50 feet, and these levels could reach approximately 72 VdB (approximately 0.016 in/sec PPV) where trucks pass over bumps in the road (FTA, 2006). Traveling heavy-duty vehicles traveling at a distance of 50 feet can result in a vibration level of approximately 0.001 in/sec PPV.

Noise Sensitive Receptors

The Specific Plan area contains a range of land uses, including: residential, retail, office, educational, institutional facilities, and service facilities. Some of the key land uses within the Specific Plan area include: Martin Luther King, Jr. (MLK) Medical Center, Charles R Drew University of Medicine and Science (CDU), Kenneth Hahn Plaza, Willowbrook Library, and Martin Luther King, Jr. (MLK) Center for Public Health.

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure and the types of activities typically conducted at a receptor location. People in

residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, natural areas, parks and outdoor recreation areas are generally more sensitive to noise than are people at commercial and industrial establishments. Consequently, noise standards for sensitive land uses are more stringent than for those at less sensitive uses. The LACC Noise Control ordinance defines noise-sensitive zones as those having residential or semi-residential/commercial land uses, as well as zones designated by the Director of the County's Department of Health Services, provided that conspicuous signs are displayed near the institution or facility within the zones.

As shown in Table 3.9-2, the noise sensitive receptors in the Specific Plan area include residential (both single- and multi-family) located within and surrounding the Specific Plan area, as well as, schools, parks, and hospitals. The proposed Specific Plan itself would also introduce noise sensitive receptors (e.g., potential new residential uses) within the Specific Plan area.

3.9.2 Regulatory Setting

Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of general plan policies and noise ordinance standards. Local general plans identify general principles intended to guide and influence development plans; local noise ordinances establish standards and procedures for addressing specific noise sources and activities. Detailed below is a discussion of the relevant regulatory setting and noise regulations, plans, and policies.

Federal

There are no federal noise standards that directly regulate environmental noise related to the construction or operation of the proposed Specific Plan. With regard to noise exposure and workers, the Office of Safety and Health Administration (OSHA) regulations safeguard the hearing of workers exposed to occupational noise. Federal regulations also establish noise limits for medium and heavy trucks (more than 4.5 tons, gross vehicle weight rating) under 40 Code of Federal Regulations (CFR), Part 205, Subpart B. The federal truck pass-by noise standard is 80 dBA at approximately 50 feet (15 meters) from the vehicle pathway centerline. These controls are implemented through regulatory controls on truck manufacturers.

Federal Transit Authority Vibration Standards

The FTA has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. The vibration damage criteria adopted by the FTA are shown in **Table 3.9-3**.

TABLE 3.9-3
CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

SOURCE: FTA, 2006.

In addition, the FTA has also adopted standards associated with human annoyance for groundborne vibration impacts for the following three land-use categories: Vibration Category 1 – High Sensitivity, Vibration Category 2 – Residential, and Vibration Category 3 – Institutional. The FTA defines Category 1 as buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes. Category 2 refers to all residential land uses and any buildings where people sleep, such as hotels and hospitals. Category 3 refers to institutional land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Under conditions where there are an infrequent number of events per day, the FTA has established thresholds of 65 VdB for Category 1 buildings, 80 VdB for Category 2 buildings, and 83 VdB for Category 3 buildings.[1] Under conditions where there are an occasional number of events per day, the FTA has established thresholds of 65 VdB for Category 1 buildings, 75 VdB for Category 2 buildings, and 78 VdB for Category 3 buildings.[2] No vibration thresholds have been adopted or recommended for commercial and office uses.

State

California Department of Health Services Noise Standards

The California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. These guidelines for land use and noise exposure compatibility are shown in **Table 3.9-4**. In addition, Section 65302(f) of the California Government Code requires each county and city in the state to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element

1 "Infrequent events" is defined by the Federal Transit Administration as being fewer than 30 vibration events of the same kind per day.

2 "Occasional events" is defined by the Federal Transit Administration as between 30 and 70 vibration events of the same source per day.

must: (1) identify and appraise noise problems in the community; (2) recognize Office of Noise Control guidelines; and (3) analyze and quantify current and projected noise levels.

TABLE 3.9-4
COMMUNITY NOISE EXPOSURE (L_{DN} OR CNEL)

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Residential - Low Density Single-family, Duplex, Mobile Homes	55 - 60	55 - 70	70 - 75	75
Residential - Multi-Family Homes	55 - 65	60 - 70	70 - 75	75
Transient Lodging – Motels, Hotels	55 - 65	60 - 70	70 - 80	75
Schools, Libraries, Churches, Hospitals, Nursing Homes	55 - 70	60 - 70	70 - 80	80
Auditoriums, Concert Halls, Amphitheaters	---	55 - 70	---	65
Sports Arena, Outdoor Spectator Sports	---	55 - 75	---	70
Playgrounds, Neighborhood Parks	55 - 70	---	67 - 75	72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	55 - 75	---	70 - 80	80
Office Buildings, Business Commercial and Professional	55 - 70	67 - 77	75	---
Industrial, Manufacturing, Utilities, Agriculture	55 - 75	70 - 80	75	---

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

SOURCE: Office of Planning and Research, 2003.

The State of California also establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the State pass-by standard is consistent with the federal limit of 80 dB. The state pass-by standard for light trucks and passenger cars (less than 4.5 tons, gross vehicle rating) is also 80 dBA at approximately 50 feet (15 meters) from the centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by state and local law enforcement officials.

The state has also established noise insulation standards for new multi-family residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards (Title 24, California Code of Regulations). The noise insulation standards set forth an interior standard of 45 dBA (L_{dn} or CNEL) in any habitable room. They require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are

proposed in areas subject to noise levels greater than 60 dBA L_{dn}/CNEL. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

State Vibration Standards

There are no state vibration standards applicable to the proposed project. Moreover, according to the California Department of Transportation's (Caltrans) *Transportation- and Construction-Vibration Guidance Manual* (2013), there are no official Caltrans standards for vibration. However, this manual provides guidelines for assessing vibration damage potential to various types of buildings, ranging from 0.08 to 0.12 in/sec PPV for extremely fragile historic buildings, ruins, and ancient monuments to 0.50 to 2.0 in/sec PPV for modern industrial/commercial buildings.

Local

Noise Standards

Los Angeles County General Plan, Noise Element

The overall purpose of the noise element of a general plan is to protect people from the harmful and annoying effects of exposure to excessive noise. The Noise Element in the Los Angeles County General Plan focuses on noise issues associated with transportation, including airports, highways, and railroads. The Noise Element quantifies the community noise environment by establishing noise exposure contours for both near- and long-term levels of growth and noise-generating activity. This information guides development of goals and policies to achieve noise-compatible land uses, and identifies baseline noise levels and sources to help local noise ordinance enforcement. The Los Angeles County General Plan EIR identified noise compatibility at noise-sensitive exterior areas as exceeding 65 dBA CNEL and noise compatibility for interior habitable noise-sensitive areas as exceeding 45 dBA CNEL (County of Los Angeles, 2015a). General land use-noise compatibility noise levels for the County of Los Angeles are identified in **Table 3.9-5** (County of Los Angeles, 2015b). These general noise levels for the County are categorized as Normally Acceptable, Conditionally Acceptable, Normally Unacceptable and Clearly Unacceptable.

Los Angeles County Code

In addition to regulating noise through implementation of the policies of general plan noise elements, local jurisdictions regulate noise through enforcement of local noise standards. These standards generally relate to noisy activities (e.g., construction) and stationary noise sources and facilities (e.g., heating, ventilation, and air conditioning (HVAC) units and industrial activities). Generally, federal and state laws preempt local agencies from establishing noise standards for transportation-related noise sources, such as aircraft, ships, trains, and motor vehicles.

TABLE 3.9-5
COMMUNITY NOISE EXPOSURE (L_{DN} OR CNEL)

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Residential - Low Density Single-family, Duplex, Mobile Homes	55 - 60	55 - 70	70 - 75	75
Residential - Multi-Family Homes	55 - 65	60 - 65	70 - 75	75
Transient Lodging – Motels, Hotels	55 - 65	60 - 65	70 - 75	80
Schools, Libraries, Churches, Hospitals, Nursing Homes	55 - 70	60 - 65	70 - 75	80
Auditoriums, Concert Halls, Amphitheaters	---	55 - 70	---	65
Sports Arena, Outdoor Spectator Sports	---	55 - 75	---	70
Playgrounds, Neighborhood Parks	55 - 70	---	70 - 75	75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	55 - 75	---	70 - 75	80
Office Buildings, Businesses, Commercial and Professional	55 - 70	70 - 75	75	---
Industrial, Manufacturing, Utilities, Agriculture	55 - 75	70 - 80	75	---

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

SOURCE: County of Los Angeles, 2015b.

The LACC outlines exterior noise standards for four noise zones based on land use type: noise-sensitive areas, residential properties, commercial properties, and industrial properties (County of Los Angeles, 2017). The County's maximum exterior noise standards set forth in LACC Section 12.08.390 are provided in **Table 3.9-6Error! Reference source not found.**. For residential-zoned areas, the presumed ambient noise level is 50 dBA during the daytime and 45 dBA during the nighttime. The following standards are used to evaluate compliance:

- Standard No. 1: Exterior noise cannot exceed levels set forth in Table 3.9-6 for a cumulative period of more than 30 minutes in any hour.
- Standard No. 2: Exterior noise cannot exceed levels set forth in Table 3.9-6 plus 5 dBA for a cumulative period of more than 15 minutes in any hour.
- Standard No. 3: Exterior noise cannot exceed levels set forth in Table 3.9-6 plus 10 dBA for a cumulative period of more than 5 minutes in any hour.
- Standard No. 4: Exterior noise cannot exceed levels set forth in Table 3.9-6 plus 15 dBA for a cumulative period of more than one minute in any hour.

- Standard No. 5: Exterior noise cannot exceed levels set forth in Table 3.9-6 plus 20 dBA at any time.

TABLE 3.9-6
COUNTY OF LOS ANGELES EXTERIOR NOISE STANDARD (BY ZONE)

Noise Zone	Zone	Daytime Hours (7 A.M. to 10 P.M.) dBA (L_{eq})	Nighttime Hours (10 P.M. to 7 A.M.) dBA (L_{eq})
I	Noise-sensitive area	45	45
II	Residential	50	45
III	Commercial	60	55
IV	Industrial	70	70

SOURCE: LACC, Section 12.08.390.

If ambient noise levels exceed the exterior noise levels in Table 3.9-6, then the aforementioned standards can be adjusted by substituting relevant noise levels in Table 3.9-6 with the following ambient measurements.

- Standard No. 6: Ambient L_{50}, the noise level exceeded 50% of the time over an hour period.
- Standard No. 7: Ambient L_{25}, the noise level exceeded 25% of the time over an hour period.
- Standard No. 8: Ambient $L_{8.3}$, the noise level exceeded 8.3% of the time over an hour period.
- Standard No. 9: Ambient $L_{1.7}$, the noise level exceeded 1.7% of the time over an hour period.
- Standard No. 10: Ambient L_0, the maximum noise level over an hour period.

LACC Section 12.08.440 prohibits construction between the hours of 7:00 p.m. and 7:00 a.m. and at any time on Sundays or holidays, given that it creates a noise disturbance across a residential or commercial real property line. **Table 3.9-7**Error! Reference source not found. outlines the maximum noise levels permissible by construction equipment at affected buildings depending on land use. These noise thresholds pertain to two timeframes: daytime hours from 7:00 a.m. to 8:00 p.m. daily (except Sundays and holidays) and nighttime hours from 8:00 p.m. to 7:00 a.m. daily (or all day Sundays and holidays).

The County Noise Ordinance states that noise levels caused by any air-conditioning or refrigeration equipment shall not exceed the levels identified in **Table 3.9-8**, County of Los Angeles Noise Restrictions on Residential Air Conditioning and Refrigeration Equipment.

TABLE 3.9-7
COUNTY OF LOS ANGELES NOISE RESTRICTIONS ON CONSTRUCTION EQUIPMENT AT RECEPTOR

Equipment Type	Receptor Type	Daytime Hours	Nighttime Hours
Mobile short-term operation (less than 10 days)	Single-family Residential	75	60
	Multi-family Residential	80	64
	Semi residential/Commercial	85	70
	Business Structures	85	85
Stationary - long-term operation (more than 10 days)	Single-family Residential	60	50
	Multi-family Residential	65	55
	Semi residential/Commercial	70	60

Source: LACC, Section 12.08.440.

TABLE 3.9-8
COUNTY OF LOS ANGELES NOISE RESTRICTIONS ON RESIDENTIAL AIR CONDITIONING AND REFRIGERATION EQUIPMENT

Measurement Location	Units Installed Before 1-1-80 dBA	Units Installed On or After 1-1-80 dBA
Any point on neighboring property line, 5 feet above grade level, no closer than 3 feet from any wall.	60	55
Center of neighboring patio, 5 feet above grade level, no closer than 3 feet from any wall.	55	50
Outside the neighboring living area window nearest the equipment location, not more than 3 feet from the window opening, but at least 3 feet from any other surface.	55	50

Source: LACC, Section 12.08.530

Surrounding Jurisdictions

City of Los Angeles

The City's noise standard for increases in permanent noise levels is if a project causes the ambient noise level at a land use to increase by 3 dBA CNEL to or within the "normally acceptable" or "clearly acceptable" category identified in Table 3.9-4, or an increase of 5 dBA or greater noise increase.

City of Compton

The City of Compton's noise standard for increases in permanent noise levels is if a project increases ambient noise levels by more than 5 dBA CNEL or if a project increases ambient noise levels by 3 dBA or greater and exceeds the acceptable noise levels by land use. The acceptable noise level by land use is 70 dB CNEL or less for residential uses, 78 dBA CNEL or less for commercial/office buildings, 80 dB CNEL or less for industrial uses, 75 dB CNEL or less of institutional land uses, and 60 dB CNEL or less for noise-sensitive land uses such as schools, libraries, hospitals, and nursing homes.

City of Lynwood

The City of Lynwood's noise standard for increases in permanent noise levels is if noise level increases exceed the noise exposure level as shown in **Table 3.9-9**.

TABLE 3.9-9
SIGNIFICANCE OF CHANGES IN OPERATIONAL ROADWAY NOISE EXPOSURE

Existing Exterior Exposure	Allowable Noise Exposure Increase Ldn or Leq in dBA
45-50	7
50-55	5
55-60	3
60-65	2
65-75	1
75+	0

SOURCE: City of Lynwood, 2016.

Vibration Criteria

The County has adopted the following provision of Section 12.08.560 of the LACC that governs impacts from vibration:

> *the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.*

Vibration-Related Human Annoyance

Table 3.9-10 shows the FTA and Caltrans vibration criteria to evaluate vibration-related annoyance due to resonances of the structural components of a building. These criteria are based on the work of many researchers that suggested that humans are sensitive to vibration velocities in the range of 8 to 80 Hz.

Vibration-Related Structural Damage

Structures amplify groundborne vibration, and wood-frame buildings such as typical residential structures are more affected by ground vibration than heavier buildings. The level at which groundborne vibration is strong enough to cause architectural damage has not been determined conclusively. The most conservative estimates are reflected in the FTA standards, shown in **Table 3.9-11**.

TABLE 3.9-10
GROUNDBORNE VIBRATION CRITERIA: HUMAN ANNOYANCE

Land Use Category	Vibration Velocity, in/sec (RMS amplitude)	Vibration Velocity, in/sec (PPV)	Vibration Velocity Level (VdB)	Description
Workshop	0.032[2]	0.128	90[3]	Distinctly felt vibration. Appropriate to workshops and non-sensitive areas
Office	0.016[2]	0.064	84[3]	Felt vibration. Appropriate to offices and non-sensitive areas.
Residential – Daytime	0.008[2]	0.032	78[3]	Barely felt vibration. Adequate for computer equipment.
Residential – Nighttime	0.004[2]	0.016	72[3]	Vibration not felt, but groundborne noise may be audible inside quiet rooms.

[1] As measured in 1/3-octave bands of frequency over the frequency ranges of 8 to 80 Hz
[2] SOURCE: County of Los Angeles, 2015a.
[3] SOURCE: FTA, 2006.

TABLE 3.9-11
GROUNDBORNE VIBRATION IMPACT CRITERIA: ARCHITECTURAL DAMAGE

Building Category		PPV (in/sec)
I.	Reinforced concrete, steel, or timber (no plaster)	0.5
II.	Engineered concrete and masonry (no plaster)	0.3
III.	Non-engineered timber and masonry buildings	0.2
IV.	Buildings extremely susceptible to vibration damage	0.12

SOURCE: FTA, 2006.

3.9.3 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, the project could have a significant noise and/or ground-borne vibration impact if it would result in:

- 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 (See Impact 3.9-1 below);
- Exposure of persons to, or generation of, excessive ground-borne vibration or ground-borne noise levels (See Impact 3.9-2 below);
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas (See Impact 3.9-3 below);

- 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 (See Impact 3.9-4 below);
- 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, exposure of people residing or working in the project area to excessive noise levels (See Section 5.1.11 in this EIR); or
- For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels (See Section 5.1.11 in this EIR).

Noise Criteria

For the purpose of determining whether the implementation of the proposed Specific Plan would result in the exposure of persons to or generate noise levels that would exceed established noise standards, construction and stationary operational noise levels associated with the Project would result in a significant impact if the County's construction noise regulations are violated and the County's operational noise standards are exceeded. The County's regulations and standards are identified in Section 3.9.3 Regulatory Setting above.

The *CEQA Guidelines* does not define the levels at which permanent and temporary increases in ambient noise are considered "substantial." Therefore, with regards to traffic noise, the significance of the proposed Specific Plan's traffic noise impacts can be determined by comparing estimated project-related noise levels to existing no-project noise levels. With respect to the community noise environment, the average healthy ear can barely perceive a noise level change of 3 dBA. A change from 3 to 5 dBA may be noticed by some individuals who are sensitive to changes in noise. A 5 dBA increase is readily noticeable, while the human ear perceives a 10 dBA increase as a doubling of sound. Each jurisdiction adjacent to the evaluated roadway segments (i.e., County of Los Angeles, City of Los Angeles, City of Compton and City of Lynwood) has established a significant traffic noise increase standard. As such, for the purpose of the proposed Specific Plan's traffic noise analysis, it is assumed that a significant permanent increase in roadway noise levels within the County of Los Angeles jurisdiction would occur if project-related traffic increases the ambient noise environment by 3 dB or more and the ambient noise level under the with-project conditions fall within the Normally Unacceptable or Clearly Unacceptable land use categories in Table 3.9-5. In addition, a significant permanent traffic noise impact would occur if project-related traffic increases the ambient noise environment by 5 dB or more regardless of the ambient noise level under the with-project conditions. Furthermore, for traffic noise increases along roadway in other jurisdictions, a significant impact would occur if the proposed Specific Plan increases ambient traffic noise levels along those roadways that would exceed the applicable jurisdiction's traffic noise increase standard as discussed in Section 3.9.3 Regulatory Setting above.

Vibration Criteria

The *CEQA Guidelines* also do not define the levels at which groundborne vibration or groundborne noises are considered "excessive." The thresholds for vibration impacts causing human annoyance and structural damage were obtained from the Los Angeles County General

Plan EIR. Construction activities would cause significant human annoyance impacts if groundborne vibration exceeds 0.032 in/sec PPV (78 VdB) and would cause significant impacts due to structural damage to timber and masonry buildings if groundborne vibration exceeds 0.2 in/sec PPV. In addition, construction activities would cause significant impacts due to structural damage to historic age buildings if groundborne vibration exceeds 0.12 in/sec PPV. Furthermore, significant human annoyance impacts would occur if groundborne vibration exceeds 72 VdB during the nighttime at residential uses.

3.9.4 Methodology

Implementation of the proposed Specific Plan could result in the introduction of noise levels that may exceed permitted County noise levels. The primary sources of noise associated with the proposed Specific Plan would be construction activities within the Specific Plan area and project-related traffic volumes generated by the new residential and non-residential land uses. Secondary sources of noise would include new stationary sources (such as HVAC units) associated with the new land use developments. The increase in noise levels generated by these activities and other sources associated with the proposed Specific Plan have been quantitatively estimated and compared to the applicable noise standards and thresholds of significance.

In addition to noise levels, groundborne vibration would also be generated during the construction of the new developments occurring throughout the Specific Plan area by various construction-related activities and equipment. Thus, the groundborne vibration levels generated by these sources have also been quantitatively estimated and compared to thresholds identified in the Los Angeles County General Plan EIR.

Construction Noise Levels

Construction noise levels were estimated by data published by the United States Environmental Protection Agency (USEPA) for general outdoor construction activities. These noise levels are then analyzed against the construction noise standards established in the LACC to determine whether an exceedance of allowable noise levels would occur across any adjacent property boundaries.

Roadway Noise Levels

Roadway noise levels were calculated for selected study area intersection segments located within and in proximity to the Specific Plan area based on information provided in the traffic report for the proposed Specific Plan. The roadway segments selected for analysis are expected to be most directly impacted by project-related traffic, which, for the purpose of this analysis, includes the roadways located within and immediately adjacent to the Specific Plan area. These roadways would experience the greatest percentage increase in traffic generated by the Specific Plan, when compared to roadways located further away from the Specific Plan area. The existing and future traffic noise levels with and without the project were calculated using the FHWA-RD-77-108 model and daily traffic volumes estimated from the peak hour volumes provided in the traffic analysis, and compared to determine whether traffic noise levels with the project would exceed permanent noise level increase standards established by each jurisdiction adjacent to the evaluated roadway segments.

Stationary Operational Noise Levels

Stationary point-source noise impacts were evaluated by identifying the noise levels generated by outdoor stationary noise sources such as rooftop mechanical equipment and loading dock activities, calculating the hourly L_{eq} noise level from each noise source at surrounding sensitive receiver property line locations, and comparing such noise levels to existing ambient noise levels.

Groundborne Vibration Associated with Project Construction and Operation

Groundborne vibration levels resulting from construction activities occurring within the Specific Plan area were estimated based on data published by the FTA in its *Transit Noise and Vibration Impact Assessment* document. Potential vibration levels resulting from construction of new transit-oriented developments under the proposed Specific Plan are identified for locations within the Specific Plan Area that are sensitive to vibration based on their distance from construction activities. The County has not adopted any quantitative thresholds for construction or operational groundborne vibration impacts. As such, the potential vibration levels at off-site sensitive locations resulting from implementation of the proposed Specific Plan are analyzed against the vibration thresholds for human annoyance and structural damage established by the FTA to determine whether an exceedance of allowable vibration levels would occur.

3.9.5 Impact Analysis

Exceedance of Established Noise Standards

Impact 3.9-1: Implementation of the project could expose persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Project-Specific

Construction

The proposed Specific Plan identifies sites within the Specific Plan area that have the potential for redevelopment, infill development, and/or adaptive reuse of existing under-utilized structures. The Specific Plan proposes to rezone and amend General Plan land uses of specific parcels within the project area with the intent of introducing a transit-oriented development pattern to the area. As discussed in Section 2.3, buildout under the proposed Specific Plan would involve the proposed new development of 2,104 residential uses, 584,075 square feet of institutional uses, 1,366,590 square feet of public uses, and 1,094,134 square feet of commercial/office uses. Of the 968 existing residential units, 152 residential units are proposed to be demolished. With a total of 2,104 residential units proposed to be constructed, the proposed development buildout would be 2,920 residential units. There are 1,910,523 square feet of existing non-residential uses of which 378,764 square feet of non-residential uses is proposed to be demolished. With a total of 3,044,799 square feet of non-residential uses proposed to be constructed, the proposed development buildout would be 4,576,558 square feet of non-residential uses.

Site specific development within the Specific Plan would be market driven such that they would occur in response to the existing and future needs of the residential and commercial markets over

the build out period. Institutional and public uses will also be implemented within the Specific Plan area. As such, it is expected that the proposed Specific Plan's construction activities would occur intermittently throughout the 20-year buildout period of the Specific Plan. Construction noise impacts associated with each new individual development would be short-term in nature and limited to the period of time when construction activity is taking place for that particular development. Development of future residential, commercial, and light industrial land uses would generally involve construction phases such as demolition, grading/excavation, building construction, and asphalt paving.

Construction, although typically short-term, can be a significant source of noise. Construction noise is most significant when it takes place near sensitive land uses, occurs at night, or in early morning hours. The construction activity noise levels at and near site specific development projects within the Specific Plan area would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Generally, each new residential, commercial, or mixed-use development would require the use of heavy construction equipment for activities such as site demolition, grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of construction for each individual development, there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The USEPA has compiled data for outdoor noise levels for typical construction activities that are presented in **Table 3.9-12**, and represent composite noise levels associated with typical construction activities, which take into account both the number of pieces and spacing of heavy construction equipment that are typically used during each phase of construction. These noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA L_{eq} measured at 50 feet from the noise source to the receptor would reduce to 78 dBA L_{eq} at 100 feet from the source to the receptor, and reduce by another 6 dBA L_{eq} to 72 dBA L_{eq} at 200 feet from the source to the receptor.

TABLE 3.9-12
TYPICAL CONSTRUCTION NOISE LEVELS

Construction Phase	Noise Level (dBA, L_{eq})[a]
Ground Clearing	84
Excavation	89
Foundations	78
Erection	85
Finishing	89

[a] Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: USEPA, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, 1971.

Table 3.9-13 shows typical noise levels produced by various types of construction equipment.

TABLE 3.9-13
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT

Construction Equipment	Noise Level (dBA, L_{eq} at 50 feet)
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Crane (Mobile)	83
Dozer	85
Grader	85
Jack Hammer	88
Loader	85
Paver	89
Pile –Driver (Impact)	101
Pile-Driver (Sonic)	96
Scraper	89
Truck	88

Source: FTA, 2006.

The construction activities for each new site-specific development project that would occur within the proposed Specific Plan area would expose nearby existing uses to increased noise levels. Because the Specific Plan would increase densities within the Specific Plan area, construction of new developments could be located less than 50 feet from a sensitive receptor, such as existing residential units. Consequently, construction that occurs immediately adjacent to these existing offsite receptors would generate noise levels that would be substantially greater than the existing noise levels at these receptor locations. Based on the project construction noise levels for general outdoor construction activities and specific construction equipment shown in Tables 3.9-12 and 3.9-13, respectively, these construction noise levels at adjacent receptors located off of a specific construction site and located within 50 feet of an existing residential, commercial, or mixed-use development could reach up to 89 dBA L_{eq} or above. It should be noted that this noise level is not anticipated to occur throughout the entire course of a construction day, as construction equipment and activities rarely operate continuously for a full day at a construction site. Typically, the operating cycle for construction equipment would involve one or two minutes of full power operation followed by three or four minutes at lower power settings. Additionally, construction equipment engines would likely be intermittently turned on and off over the course of a construction day.

With respect to construction activities, the County's General Plan Noise Element does not establish a numerical standard to regulate construction noise levels. However, Section 12.08.440 of the LACC has established numerical standards to regulate construction noise levels at buildings with specific land uses as shown in Table 3.9-7. In addition, Section 12.08.440 of the LACC limits construction activities in the County to between the hours of 7:00 am to 7:00 pm on weekdays (including Saturday's), and prohibits construction on Sundays and holidays. Construction activities may occur outside of these hours if the County determines that the emergency maintenance, repair, or improvement of public service utilities is needed or if a variance is issued by the health officer.

All new development projects in the Specific Plan area would be subject to these regulations. Because construction activities are required to comply with the regulations in the LACC, the construction activities associated with future developments in the Specific Plan area would not exceed any standards established in the LACC. Thus, impacts would be less than significant.

Operations

Exterior Noise Standards

With respect to non-vehicular operational noise levels, the County has established exterior noise standards that are correlated with land use zoning classifications, which are shown in Table 3.9-6. The standards aim to prohibit unnecessary, excessive, and annoying noises from all sources, as certain noise levels are detrimental to the health and welfare of individuals.

The Specific Plan would implement new land uses that would include residential, commercial, institutional, and public developments. These new developments may introduce higher noise levels than currently exist adjacent to existing sensitive uses, such as residences. However, the noise environment in a high density, urban, walkable transit-oriented environment is anticipated to be louder than other areas in the existing Willowbrook community that are less dense. The general noise sources associated with the proposed uses include temporary and intermittent nuisance noise from residential uses. Commercial, school and hospital uses include parking lot noises, delivery trucks, loading docks and HVAC units. Potential noise from HVAC units and loading docks are discussed further below.

These noise sources have the potential to expose existing noise-sensitive land uses to noise levels that exceed the County's exterior noise limits for residential uses (50 dBA during the daytime and 45 dBA at night) and for commercial uses (60 dBA during the daytime and 55 dBA at night). However, through implementation of specific environmental review and development permit processes, future developments in the Specific Plan area would be considered on a case-by-case basis to ascertain whether the operational noise levels generated by an individual development could result in exceedance of the County's noise standards, which regulate the appropriate location for various types of uses in relation to noise generation. Development permits are provided pursuant to the applicant's compliance with the LACC related to noise, which are provided to reduce potential noise impacts. With implementation of existing County noise regulations, noise impacts on land uses in the Specific Plan area from operation of future developments would be less than significant.

Heating, Ventilating, and Air Conditioning Equipment Noise

Once the new site specific development projects associated with the proposed Specific Plan are operational, a constant source of noise may be generated from these developments from operation of HVAC systems. However, as an industry practice, the design of the onsite HVAC units and other noise-generating mechanical equipment associated with the new developments in the Specific Plan area would typically be installed on the rooftops of residential and non-residential buildings and located either within an enclosure or behind other intervening structures that would provide a level of noise shielding for nearby noise-sensitive uses to comply with the regulations within the LACC. When these design measures are taken into consideration with the existing urban noise environment of the Specific Plan area, the noise generated from HVAC systems and other mechanical equipment at the new development sites would not increase ambient noise levels that would exceed the maximum exterior noise standards set forth in LACC Section 12.08.390. As a result, noise impacts from HVAC or other mechanical equipment on the existing and future land uses adjacent to new development within the Specific Plan area would be less than significant.

Loading Dock Noise

As the proposed Specific Plan would place a mix of residential and non-residential uses in the Specific Plan area, noise generated by activities at the non-residential uses could affect both nearby existing and new noise-sensitive receptors. Operational noise from the new non-residential uses associated with the proposed Specific Plan would be primarily related to the arrival, departure, and loading/unloading of goods from delivery trucks and their on-site circulation. While the noise levels generated by loading docks are not ordinarily loud, they may create temporary, sporadic increases in ambient noise. Because the temporary and sporatic increases related to loading and unloading activities would be required to comply with LACC, Section 12.08.390, loading dock noise levels associated with new Specific Plan land uses would be less than significant.

Transportation Related Noise

Based on the County's noise/land use compatibility matrix shown in Table 3.9-5, the County identifies normally acceptable exterior noise level limits in outdoor activity areas for various land uses. The normally acceptable compatibility standard for new single family residential uses is 60 dBA CNEL, for multiple family residential uses is 65 dBA CNEL, for schools and hospitals uses is 70 dBA CNEL, and for new single-family and multi-family residential, churches, libraries, schools, and hospitals of up to 70 dBA CNEL, parks, offices, and commercial uses of up to 75 dBA CNEL, and industrial uses of up to 80 dBA CNEL. The CNEL noise levels are allowed if the buildings are constructed using conventional design and that fresh air supply systems or air conditioning are provided to allow windows to be kept closed and interior noise levels achieve 45 dBA CNEL.

From a community noise perspective, the 24-hour average noise levels within and surrounding the Specific Plan area are influenced primarily by traffic on local roadways. With respect to traffic noise levels, the existing noise levels on roadway segments located within and in the vicinity of the Specific Plan area, as shown in Table 3.9-2, range from 62.4 dBA CNEL (118th Street from Compton Avenue to Wilmington Avenue) to 71.1 dBA CNEL (Imperial Highway

from San Pedro Street to west of Main Street and Imperial Highway from Alameda Street to east of State Street between Wilmington Avenue and Alameda Street) at 25 feet from the nearest roadway curb to the land use. This roadway modeling provides a representative indication of the current noise levels within the Specific Plan area.

To evaluate the future traffic noise environment in the Specific Plan area, the future traffic noise levels on the roadways located within the Specific Plan area were estimated based on future traffic volumes (existing with project) provided in the project's traffic study. The calculation of future traffic noise levels was conducted using the FHWA-RD-77-108, which calculates the CNEL noise level based on site-specific traffic volumes, distances, and speeds. The noise levels in **Table 3.9-14** accounted for noise barriers only along I-105 from Compton Avenue to Mona Boulevard. The future roadway noise levels are shown in Table 3.9-14.

As shown in Table 3.9-14, the existing with project traffic noise levels within the Specific Plan area would range from 62.9 dBA CNEL (118th Street from Compton Avenue to Wilmington Avenue) to 72.2 dBA CNEL (Wilmington Avenue from I-105 to 119th Street) at 25 feet from the roadway curb nearest the land use. As shown in Table 3.9-14, the traffic noise levels under existing with project conditions are anticipated to exceed the County's normally acceptable compatibility standards along 7 of the 13 roadway segments. Therefore, implementation of the proposed project could result in significant noise impacts at the land use receptors within the Specific Plan area.

Additionally, the Metro passenger trains and the Union Pacific freight trains that run through the Willowbrook/Rosa Parks Station on a daily basis are also a noise source in the Specific Plan area. As discussed previously, the existing day-night average noise level at 75 feet from operations along the Blue Line and along the Union Pacific tracks is 65 dBA Ldn and the combined noise level from operations along both tracks is 68 dBA Ldn. (LACMTA 2015). Because rail operations along both the Blue Line and Union Pacific tracks would not change as a result of the proposed project, no change in noise levels is expected from operations on either track.

However, as residential developments under the Specific Plan are proposed adjacent to, and in the immediate vicinity of the Metro rail line or Union Pacific rail tracks (i.e., closer than 75 feet), the noise generated by trains traveling through the Specific Plan area daily would result in noise levels of up to 68 dBA Ldn at 75 feet. If new residential uses are proposed adjacent to the rail lines and potentially exposed to rail noise exceeding 65 dBA Ldn for multiple family residential uses or 60 dBA Ldn for single family residential uses, the new residential uses could experience significant noise impacts.

TABLE 3.9-14
EXISTING WITH PROJECT ROADWAY NOISE LEVELS WITHIN SPECIFIC PLAN AREA

Segments Within Specific Plan Area	Proposed Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a]			
		Existing	Existing With Project	Significance threshold[b]	Exceed Threshold?[c]
Imperial Highway					
Compton Ave to Wilmington Ave	Commercial	70.6	70.9	75	No
Wilmington Ave to Mona Blvd	Commercial	70.9	71.8	75	No
I-105					
Compton Ave to Mona Blvd	MF Residential/Commercial	65[d]	65.2[d]	65/75	Yes/No
118th Street					
Compton Ave to Wilmington Ave	MF Residential/School	62.4	62.9	65/70	No/No
119th/120th Street					
Compton Avenue to Wilmington Ave	School/Hospital	66.9	68.4	70/70	No/No
Wilmington Ave to Willowbrook Ave	SF, MF Residential/ Commercial	65.3	65.6	60, 65/75	Yes, Yes/No
Willowbrook Ave to Mona Blvd	SF, MF Residential	63.3	63.6	60, 65	Yes, No
Compton Ave					
Imperial Highway to 120th Street	MF Residential/School/ Commercial	67.4	68.7	65/70/70	Yes/No/No
120th Street to Southern Boundary[e]	Hospital	65.9	66.9	70	No
Wilmington Ave					
Imperial Highway to I-105	Commercial	67.7	68.8	75	No
I-105 to 119th Street	MF Residential/ Commercial	70.5	72.2	65/75	Yes/No
119th Street to Southern Boundary[e]	MF Residential/Hospital/ Commercial	68.9	69.9	65/70/75	Yes/No/No
Mona Blvd					
Imperial Highway to 119th Street	SF, MF Residential	66.9	67.2	60, 65	Yes, Yes

[a] Noise level is at 25 feet from nearest curb.
[b] Significance Threshold is provided for each existing land use located along the existing roadway segment
[c] The determination of significance is for each existing land use located along the existing roadway segment
[d] Accounts for existing earthen berm
[e] Southern Boundary of Specific Plan Area

Cumulative

The geographic scope for cumulative noise impacts depends on the noise source. The geographic scope for construction noise includes areas directly adjacent to the Specific Plan area that could contribute to construction noise levels occurring within the Specific Plan area. The geographic scope for operational noise includes areas throughout the Specific Plan and directly adjacent to the Specific Plan area. The geographic scope for roadway noise includes areas along roadway segments between intersections evaluated in the traffic report.

Construction activities occurring in areas directly adjacent to the Specific Plan area could contribute cumulative noise levels with project construction activities. The areas that could be exposed to the highest cumulative construction noise levels are those areas that are not separated by existing roadways such as the area south of the existing MLK Medical Center. The areas that are located west, north, and east of the Specific Plan area are separated by roadways including Compton Avenue, Imperial Highway and Mona Boulevard, respectively. Construction activities occurring at cumulative developments would increase ambient noise levels; however, these cumulative construction activities would be required to comply with the construction equipment noise standards provided in Section 12.08.440 of the LACC. Because construction activities would be required to comply with the LACC, cumulative construction activities would result in less than significant noise impacts. Because the proposed project would also be required to comply with the LACC, the project's contribution to cumulative construction noise levels would be less than cumulatively considerable.

Cumulative development could result in exterior noise from operational activities including HVAC systems and loading docks. These cumulative noise levels from operational activities could increase ambient noise levels. However, operational activities occurring in the immediate vicinity of the Specific Plan area including within areas under the jurisdictions of the City of Los Angeles and the City of Lynwood as well as within the Specific Plan area, each operational activity would be required to comply with the operational noise regulations of the applicable jurisdiction. Therefore, noise levels from cumulative operational activities would be reduced to less than significant through compliance with the applicable noise regulations. Because operational activities associated with the proposed project are required to comply with the LACC, the noise levels contributed by project operational activities would be considered less than cumulatively considerable.

As shown in **Table 3.9-15**, the cumulative with project traffic noise levels within the Specific Plan area would range from 63.6 dBA CNEL (119th Street from Willowbrook Avenue to Mona Boulevard) to 72.4 dBA CNEL (Wilmington Avenue from I-105 to 119th Street) at 25 feet from the roadway curb nearest the land use.

As shown in Table 3.9-15, the traffic noise levels under cumulative with project conditions are anticipated to exceed the County's normally acceptable compatibility standards along 8 of the 13 roadway segments. Therefore, cumulative development would result in significant noise impacts at the land use receptors within the Specific Plan area. Because project traffic would contribute to cumulative traffic noise levels along roadways within the Specific Plan area, the project's contribution to cumulative noise impact at the land use receptors within the Specific Plan area would be cumulatively considerable.

TABLE 3.9-15
CUMULATIVE WITH PROJECT ROADWAY NOISE LEVELS WITHIN SPECIFIC PLAN AREA

Segments Within Specific Plan Area	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a]			
		Existing	Cumulative With Project	Significance threshold[b]	Exceed Threshold?[c]
Imperial Highway					
Compton Ave to Wilmington Ave	Commercial	70.6	70.9	75	No
Wilmington Ave to Mona Blvd	Commercial	70.9	71.9	75	No
I-105					
Compton Ave to Mona Blvd	MF Residential/Commercial	65.0[d]	65.6[d]	65/75	Yes/No
118th Street					
Compton Ave to Wilmington Ave	MF Residential/School	62.4	66.9	65/70	Yes/No
119th/120th Street					
Compton Avenue to Wilmington Ave	School/Hospital	66.9	68.4	70/70	No/No
Wilmington Ave to Willowbrook Ave	SF, MF Residential/ Commercial	65.3	65.6	60, 65/75	Yes/Yes/No
Willowbrook Ave to Mona Blvd	SF, MF Residential	63.3	63.6	60, 65	Yes, No
Compton Ave					
Imperial Hwy to 120th Street	MF Residential/School/ Commercial	67.4	68.7	65/70/70	Yes/No/No
120th Street to Southern Boundary[e]	Hospital	65.9	66.9	70	No
Wilmington Ave					
Imperial Hwy to I-105	Commercial	67.7	69.0	75	No
I-105 to 119th Street	MF Residential/Commercial	70.5	72.4	65/75	Yes/No
119th Street to Southern Boundary[e]	MF Residential/Hospital/ Commercial	68.9	70.0	65/70/75	Yes/No/No
Mona Blvd					
Imperial Hwy to 119th Street	SF, MF Residential	66.9	67.2	60, 65	Yes, Yes

[a] Noise level is at 25 feet from nearest curb.
[b] Significance Threshold is provided for each existing land use located along the existing roadway segment
[c] The determination of significance is for each existing land use located along the existing roadway segment
[d] Accounts for existing earthen berm
[e] Southern Boundary of Specific Plan Area

Cumulative development could be located adjacent to the Metro rail line or Union Pacific rail tracks outside of the Specific Plan and could be exposed to exterior noise levels exceeding the normally acceptable compatibility standards. Therefore, cumulative development could be exposed to significant noise impacts from rail operations. Because the implementation of the proposed project could also expose proposed residential developments within the Specific Plan area to significant noise impacts from rail operations, the project's contribution to rail noise impacts on land uses would be considered cumulatively considerable.

Mitigation Measures

Project-Specific

Mitigation Measure NOI-1: Prior to the issuance of building permits, exterior areas of proposed single family and multiple family residential uses that are projected to be exposed to existing with project roadway noise levels and cumulative with project roadway noise levels exceeding the County's exterior noise standards (i.e., 60 dBA CNEL for single family residential and 65 dBA CNEL for multiple family residential) shall include noise attenuation features including, but not limited to, setbacks, soundwalls, glass noise barriers, and landscaping so that exterior areas meet the County's exterior noise standards. To ensure that the County's exterior noise standards are met, the project applicant shall demonstrate compliance through the preparation of an acoustical evaluation.

Mitigation Measure NOI-2: Prior to the issuance of building permits, proposed residential developments adjacent to the Blue line and Union Pacific rail line that are exposed to rail noise of greater than 60 dBA CNEL for single family residential uses and 65 dBA CNEL for exterior areas of multiple family residential uses shall include noise attenuation features including, but not limited to, setbacks, soundwalls, glass noise barriers, and landscaping so that exterior areas meet the County's exterior noise standards. To ensure that the County's exterior noise standards are met, the project applicant shall demonstrate compliance through the preparation of an acoustical evaluation.

Cumulative

Implementation of Mitigation Measures NOI-1 and NOI-2 is required.

Significance Determination

Project-Specific

Less than significant. Implementation of Mitigation Measure NOI-1 and NOI-2 would ensure that exterior noise levels from roadway traffic volumes and rail noise would meet the County's exterior noise standards.

Cumulative

Less than significant. Implementation of Mitigation Measure NOI-1 and NOI-2 would ensure that exterior noise levels from cumulative with project roadway traffic volumes and rail noise would meet the County's exterior noise standards.

Exposure to Vibration Levels

Impact 3.9-2: Implementation of the project could expose persons to, or generate, excessive ground-borne vibration or ground-borne noise levels.

Project-Specific

Construction

Construction activities for individual development projects that would occur within the Specific Plan area would include demolition and grading activities, which would have the potential to generate low levels of groundborne vibration. Persons residing and working in close proximity to a construction site could be exposed to the generation of excessive groundborne vibration or groundborne noise levels related to construction activities. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Site ground vibrations from construction activities very rarely reach the levels that can damage structures, but they can be perceived in the audible range and be felt in buildings very close to a construction site.

The various PPV levels and RMS velocity (in VdB) levels for the types of construction equipment that would operate during the construction of the individual development projects are identified in **Table 3.9-16**. As shown, vibration velocities could reach as high as approximately 0.089 inch-per-second PPV at 25 feet for typical construction activities that corresponds to a RMS velocity level of 87 VdB at 25 feet. When high impact activities such as pile driving are required, vibration velocities could reach as high as 0.644 inch-per-second PPV at 25 feet, which corresponds to a RMS velocity level of 104 VdB at 25 feet.

TABLE 3.9-16
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

	Approximate PPV (in/sec)					Approximate RMS (VdB)				
Equipment	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Pile Driver (Impact)	0.644	0.228	0.173	0.124	0.081	104	95	93	90	86
Pile Driver (Sonic)	0.170	0.060	0.046	0.033	0.021	93	84	82	79	75
Large Bulldozer	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Caisson Drilling	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Loaded Trucks	0.076	0.027	0.020	0.015	0.010	86	77	75	72	68
Jackhammer	0.035	0.012	0.009	0.007	0.004	79	70	68	65	61
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004	58	49	47	44	40

SOURCE: FTA, 2006; ESA, 2015.

Over the course of the Specific Plan build out, construction activities associated with new development could occur adjacent to or in the vicinity of sensitive receptors since these developments would primarily require redevelopment of already developed properties in the

Specific Plan area, which includes mixed uses. Because the Specific Plan area contains existing land uses, it is anticipated that some existing adjacent uses could be located 50 feet or less from a construction site. Consequently, receptors that are located immediately adjacent to a construction site could be exposed to excessive groundborne vibration levels. Based on the vibration source levels shown in Table 3.9-16, adjacent receptors that are located less than 50 feet from a construction site could be exposed to peak vibration levels of above 0.031 PPV and 78 VdB during construction that does not include pile driving equipment. Under scenarios where a construction site associated with the proposed project is located within 25 feet from an existing adjacent land use, the peak vibration levels experienced by these adjacent land uses can be above 0.089 PPV and 87 VdB during typical construction activities that do not include pile driving equipment. While most of the new development in the Specific Plan area is not anticipated to require pile driving, under conditions where such activities are required, peak vibration levels of above 0.644 PPV and 104 VdB could occur at adjacent receptors that are located less than 25 feet from the activity.

As individual development projects would be spread over the Specific Plan's 20-year build out period and construction events are short-term in nature, it is anticipated that there would be an infrequent amount of vibration events at sensitive land use receptors. However, depending on how close an actual receptor location is to a construction site, the type of construction equipment and the type of receptor building (non-engineered timber and masonry building, history-age building, etc.), the vibration levels at a receptor location could exceed the vibration threshold for structural damage (i.e., 0.2 PPV for non-engineered timber and masonry building and 0.12 for historic-age buildings that are extremely susceptible to vibration damage), as well as, the vibration threshold for human annoyance (i.e., 78 VdB for daytime residential areas and 72 VdB for nighttime residential areas). As such, vibration impacts during construction associated with the proposed Specific Plan could be potentially significant.

Operations

Groundborne vibration within and surrounding the Specific Plan area currently result from heavy-duty vehicular travel (e.g., refuse trucks, delivery trucks, and transit buses) on the nearby local roadways. The land uses proposed within the Specific Plan would increase the use of these existing heavy-duty vehicles on the local roadways. As discussed previously, groundborne vibration from heavy-duty vehicular travel could generate velocity levels of approximately 63 VdB (approximately 0.006 in/sec) at a distance of 50 feet and these levels could reach approximately 72 VdB (approximately 0.016 in/sec PPV) where trucks pass over bumps in the road. Based on a human annoyance threshold of 78 VdB (0.032 in/sec PPV) and a structural damage threshold of up to 0.12 in/sec PPV, heavy-duty vehicular travel associated with the uses proposed within the Specific Plan would result in a less than significant groundborne vibration impact.

As such, vibration impacts associated with operation of the future residential and non-residential developments implemented by the proposed Specific Plan would be less than significant.

Future development in the Specific Plan area would introduce additional residential uses in the immediate vicinity of the Metro Blue line. As described previously, trains are a common source

of groundborne vibration, where locomotive-powered passenger trains traveling at 50 mph can generate vibration levels up to approximately 84.5 VdB (0.067 in/sec PPV) at 50 feet from the track centerline. Given that future residential developments under the Specific Plan could be located as close as approximately 68 feet from the Metro Blue line, the resulting vibration levels at these developments could reach up to 82 VdB (or 0.05 in/sec PPV) (FTA, 2006). It should be noted that the vibration level of 82 VdB is a conservative estimate, as trains making a stop at the Willowbrook/Rosa Parks Station would be coming in at much lower speeds than 50 mph when entering the Specific Plan area. However, because not all trains would make a stop at the Metro Station, it is assumed for the purpose of conducting a worst-case analysis that these trains could be traveling at speeds up to 50 mph.

Metro currently operates passenger trains daily through this area. Existing vibration levels at the closest existing residences along Willowbrook Avenue are estimated, based on similar urban conditions, to range from 69 VdB (vibration decibels) for Metro Blue Line train passbys at 30 mph, to 75 VdB for Union Pacific freight locomotive passbys (approximately two to six daily) at 30 mph (LACMTA 2015). Based on Metro train timetables, Metro currently operates passenger trains daily from 4:00 a.m. to 12:00 a.m. approximately every 15 minutes in the eastbound and the westbound direction through this area and the Willowbrook/Rosa Parks Station (approximately 160 daily events). Because vibration events would occur more than 70 times per day, these events are considered to be "frequent" events. The FTA human annoyance threshold for frequent events is 72 VdB for residences and buildings where people normally sleep.

At the closest residence (68 feet from the centerline of the rail tracks), the vibration levels of 69 VdB (0.011 in/sec PPV) for Metro Blue Line train passbys at 30 mph, to 75 VdB (0.02 in/sec PPV) for Union Pacific freight locomotive passbys (approximately two to six daily) at 30 mph would be below the daytime human annoyance threshold of 78 VdB (0.032 in/sec PPV); however, the nighttime human annoyance threshold of 72 VdB (0.016 in/sec PPV) could be exceeded. The vibration levels from the rail operations would be below the structural damage threshold of 0.12 in/sec PPV.

Therefore, daytime human annoyance and structure damage thresholds would not be exceeded by existing rail operations and the potential impact would be less than significant. However, proposed residential uses within the Specific Plan that are planned to be located in close proximity to the rail tracks could be exposed to vibration levels that exceed the nighttime human annoyance threshold of 72 VdB (0.016 in/sec PPV) from the trains traveling through the Specific Plan area. These nighttime vibration impacts would be potentially significant.

Cumulative

The geographic scope for cumulative vibration impacts includes areas directly adjacent to the Specific Plan area that could contribute to construction or operational vibration levels within the Specific Plan.

Cumulative development could occur adjacent to the Specific Plan area. Construction activities associated with the cumulative development could exceed the vibration thresholds for human annoyance and structural damage depending on the distance to the receptor and the construction

equipment used. This exceedance of the vibration threshold would result in a significant vibration impact. Because the proposed project could result in significant human annoyance and structural damage vibration impacts from construction activities, the project's contribution to cumulative vibration impacts from construction activities would be cumulatively considerable.

Cumulative development could increase heavy-duty vehicular truck traffic within the Specific Plan area. This truck traffic is estimated to generate vibration levels of up to 72 VdB (approximately 0.016 in/sec PPV). This vibration level from cumulative development would not exceed the human annoyance or structural damage threshold, and therefore, would result in less than significant impacts. Because the proposed project would generate similar vibration levels from truck traffic as cumulative development, the project's contribution to cumulative impacts would be less than cumulatively considerable.

Cumulative development could contribute to groundborne vibration through operational activities; however, these activities are expected to occur in the daytime and result in a nominal potential increase in vibration levels on future residential uses within the Specific Plan area. Cumulative vibration levels would not exceed the daytime human annoyance threshold or structural damage threshold. Therefore, cumulative vibration impacts would be less than significant. Because the proposed project would result in less than significant vibration impacts associated with daytime human annoyance and structural damage, the project contribution to these vibration impacts would be less than cumulatively considerable.

Although future residential uses associated with the Specific Plan could be exposed to vibration levels that would exceed the nighttime human annoyance, future growth associated with cumulative development would not contribute to nighttime vibration impacts. Therefore, cumulative development would result in no nighttime vibration impacts.

Mitigation Measures

Project-Specific

Mitigation Measure NOI-3: Prior to approval of a grading permit or building permit, construction equipment shall be prohibited within 50 feet of occupied residential structures. If construction equipment is required to be within 50 feet of occupied residential structures, the project applicant shall demonstrate that the human annoyance threshold of 78 VdB (0.032 in/sec PPV) and structural damage thresholds of 0.2 in/sec PPV for non-engineered timber and masonry buildings and 0.12 in/sec PPV for historic-age buildings that are extremely susceptible to vibration damage is achieved. Demonstration of compliance shall be provided through the preparation of a vibration analysis.

Mitigation Measure NOI-4: Prior to the issuance of a building permit for a residential development within 100 feet of the rail tracks, the project applicant shall demonstrate that nighttime vibration level at the proposed residential uses shall not exceed the 72 VdB (0.016 in/sec PPV) threshold for human annoyance.

Cumulative

Implementation of Mitigation Measure NOI-3 is required.

Significance Determination

Project-Specific

Less than significant. Implementation of Mitigation Measure NOI-3 would prohibit the use of construction equipment that generates high levels of vibration within 50 feet of an occupied residential structure. If construction equipment is required to be used, the project applicant will be required to demonstrate that the human annoyance and structure damage thresholds from vibration impacts are achieved. Implementation of NOI-4 would ensure that future residential development is not exposed to vibration levels that exceed the nighttime human annoyance threshold of 72 VdB (0.016 in/sec PPV).

Cumulative

Less than significant. Implementation of NOI-2 would reduce the project's contribution to potential vibration impacts on occupied residential structures to less than cumulatively considerable.

Permanent Increase in Ambient Noise Levels

Impact 3.9-3: Implementation of the project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Project-Specific

The noise environment in the Specific Plan area is primarily transportation-related, with local traffic being the most significant source of community noise. Because the project includes development of residential and non-residential uses that would generate additional population within the Specific Plan, most of the permanent noise levels that would be generated would primarily be traffic-generated noise. The Specific Plan would contribute to an increase in local traffic volumes, which results in higher noise levels along local roadways. Based on the traffic study prepared for the proposed project, included as Appendix D of this EIR, in combination with an analysis of the surrounding land uses, roadway noise levels were forecasted to determine if the proposed Specific Plan's vehicular traffic would result in a substantial increase in noise at receptor locations located within and in proximity to the Specific Plan area. A substantial increase in ambient traffic noise levels would occur if the existing with project traffic volumes exceed the permanent noise level increase standards established by each jurisdiction adjacent to the evaluated roadway segments.

Table 3.9-17 identifies the existing roadway noise levels and the existing with project with and without the project, the noise level increase, and whether as shown traffic noise levels within and in proximity to the Specific Plan area would slightly increase with build out of the proposed Specific Plan.

TABLE 3.9-17
EXISTING WITH PROJECT ROADWAY NOISE LEVEL INCREASE

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a]				
		Existing	Existing With Project	Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
Segments Within Specific Plan Area						
Imperial Highway						
Compton Ave to Wilmington Ave	Commercial	70.6	70.9	0.3	3,70/3,75	No/No
Wilmington Ave to Mona Blvd	Commercial	70.9	71.9	1.0	3,75	No
I-105						
Compton Ave to Mona Blvd	MF Residential/ Commercial	65.0[e]	65.6e[e]	0.6	3,65/3,75	No/No
118th Street						
Compton Ave to Wilmington Ave	MF Residential/School	62.4	66.9	4.5	3,65/3,70	No/No
119th/120th Street						
Compton Avenue to Wilmington Ave	School/Hospital	66.9	68.4	1.5	3,70/3,70	No/No
Wilmington Ave to Willowbrook Ave	SF, MF Residential/ Commercial	65.3	65.6	0.3	3,60; 3,65/ 3,75	No/No/No
Willowbrook Ave to Mona Blvd	SF, MF Residential	63.3	63.6	0.3	3,60; 3,65	No, No
Compton Ave						
Imperial Hwy to 120th Street	MF Residential/School/ Commercial	67.4	68.7	1.3	3, 65/3,70/ 3,75	No/No/No
120th Street to Southern Boundary[f]	Hospital	65.9	66.9	1.0	3,70	No
Wilmington Ave						
Imperial Hwy to I-105	Commercial	67.7	69.0	1.3	3,75	No
I-105 to 119th Street	MF Residential/ Commercial	70.5	72.4	1.9	3,65/3,75	No/No
119th Street to Southern Boundary[f]	MF Residential/Hospital/ Commercial	68.9	70.0	1.1	3,65/3,70/ 3,75	No/No/No
Mona Blvd						
Imperial Hwy to 119th Street	SF, MF Residential	66.9	67.2	0.3	3,60/3,65	No/No
Segments Outside of Specific Plan Area						
City of Los Angeles						
103rd Street						
West of Central Ave	Residential/Commercial	64.1	64.6	0.5	3,70/3,75	No/No
Central Ave to Wilmington Ave	Residential/School/ Park/Commercial	66.4	66.8	0.4	3,70/3,70/ 3,70/3,75	No/No/ No/No
Wilmington Ave to Alameda Street	Residential/School/ Commercial	65.1	65.6	0.5	3,70/3,70/ 3,75	No/No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a]				
		Existing	Existing With Project	Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
108th Street						
Central Avenue to West of Avalon Blvd	Residential/Commercial	65.1	65.6	0.5	3,70/3,75	No/No
112th Street						
Railroad to Mona Blvd	Residential/School/ Commercial	55.4	59.0	3.6	3,70/3,70/ 3,75	No/No/No
Imperial Highway						
San Pedro Street to West of Main Street	Residential/School/ Commercial	71.1	71.8	0.7	3,70/3,70/ 3,75	No/No/No
San Pedro Street to Avalon Blvd	Residential/Commercial	69.3	70.0	0.7	3,70/3,75	No/No
Avalon Blvd to Slater Ave	Residential/Commercial	70.7	71.3	0.6	3,70/3,75	No/No
Slater Ave to Wilmington Ave	Residential/Commercial	70.6	70.9	0.3	3,70/3,75	No/No
Wilmington Ave to Mona Blvd	Residential/School/ Commercial	70.9	71.9	1.0	3,70/3,70/ 3,75	No/No/No
Main Street						
North and South of Imperial Hwy	Residential/Commercial	65.9	66.5	0.6	3,70/3,75	No/No
San Pedro Street						
108th Street to 120th Street	Residential/School/ Commercial	66.8	67.2	0.4	3,70/3,70/ 3,75	No/No/No
Avalon Blvd						
North of Imperial Hwy	Commercial	69.3	69.9	0.6	3,75	No
Imperial Hwy to 120th Street	Residential/Commercial	68.4	68.9	0.5	3,70/3,75	No/No
Central Ave						
Century Blvd to 108th Street	Residential/Park/ Commercial	70.5	71.1	0.6	3,70/3,70/ 3,75	No/No/No
108th Street to 120th Street	Residential/School/ Commercial	70.1	72.0	1.9	3,70/3,70/ 3,75	No/No/No
Compton Ave						
Century Blvd to Imperial Hwy	Residential/School/ Commercial	67.4	68.7	1.3	3,70/3,70/ 3,75	No/No/No
Wilmington Ave						
Century Blvd to 112th Street	Residential/School/ Commercial	67.2	67.7	0.5	3,70/3,70/ 3,75	No/No/No
112th Street to Imperial Hwy	Residential/Commercial	67.7	69.0	1.3	3,70/3,75	No/No
Alameda Street						
103rd Street to Imperial Hwy	School/Commercial	70.6	70.9	0.3	3,70/3,75	No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Existing	Existing With Project	Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
County of Los Angeles						
Imperial Highway						
Mona Blvd to Alameda Street	Residential/Commercial	70.9	71.9	1.0	3,70/3,75	No/No
120th Street						
San Pedro Street to Central Ave	Residential/Park/ Commercial	67.7	68.7	1.0	3,70/3,70/ 3,75	No/No/No
Central Ave to Compton Ave	Residential/School/ Commercial	68.1	69.5	1.4	3,70/3,70/ 3,75	No/No/No
El Segundo Blvd						
San Pedro Street to Slater Ave	Residential/School/ Park/Commercial	69.6	70.3	0.7	3,70/3,70/ 3,70/3,75	No/No/ No/No
Slater Ave to Wilmington Ave	Residential/School/ Park/Commercial	69.8	70.3	0.5	3,70/3,70/ 3,70/3,75	No/No/ No/No
Wilmington Ave to Alameda Street	Residential/Commercial	67.9	68.4	0.5	3,70/3,75	No/No
Rosecrans Ave						
East of Central Ave	Residential/Commercial	69.4	69.8	0.4	3,70/3,75	No/No
San Pedro Street						
120th Street to 135th Street	Residential/School/ Commercial	66.8	67.2	0.4	3,70/3,70/ 3,75	No/No/No
Avalon Blvd						
120th Street to Rosecrans Ave	Residential/School/ Park/Commercial	68.4	68.9	0.5	3,70/3,70/ 3,70/3,75	No/No/ No/No
Central Ave						
120th Street to South of El Segundo Blvd	Residential/Commercial	69.4	70.2	0.8	3,70/3,75	No/No
South of El Segundo Blvd	Residential/Commercial	69.4	70.2	0.8	3,70/3,75	No/No
North of Rosecrans	Residential/Commercial	69.4	70.2	0.8	3,70/3,75	No/No
Compton Ave						
Imperial Hwy to 120th Street	Residential/Commercial	67.4	68.7	1.3	3,70/3,75	No/No
120th Street to El Segundo Blvd	Residential/Commercial	65.9	66.9	1.0	3,70/3,75	No/No
Wilmington Ave						
Imperial Hwy to I-105	Commercial	67.7	69.0	1.3	3,75	No
Southern Boundary to El Segundo Blvd	Residential/Commercial	68.9	70.0	1.1	3,70/3,75	No/No
Alameda Street						
124th Street to Oris Street	Commercial	70.0	70.0	0.0	3,75	No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Existing	Existing With Project	Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
City of Lynwood						
Imperial Highway						
Alameda Street to East of State Street	Commercial	71.1	71.5	0.4	1.0	No
Mona Blvd						
Imperial Hwy to 119th Street	Commercial	66.9	67.2	0.3	1.0	No
Alameda Street						
103rd Street to Imperial Hwy	School/Commercial	70.6	70.9	0.3	1.0/1.0	No/No
Imperial Hwy to North of 124th Street	Commercial	70.0	70.0	0.0	1.0	No
State Street/Santa Fe Ave						
N/O Imperial Hwy to S/O El Segundo Blvd	Residential/Park/ Commercial	67.7	67.7	0.0	1.0/1.0/1.0	No/No/No
City of Compton						
El Segundo Blvd						
East and West of State Street	Residential/Commercial	64.9	65.4	0.5	3,70/3,78	No/No
Rosecrans Ave						
San Pedro Street to Willowbrook Ave	Residential/School/ Commercial	69.4	69.8	0.4	3,70/3,60/ 3,78	No/No/No
Willowbrook Ave to Alameda Street	Commercial	69.8	70.2	0.4	3,78	No
Compton Blvd						
West of Central to East of Willowbrook	Residential/Library/ Commercial	69.2	69.2	0.0	3,70/3,60/ 3,78	No/No/No
Alondra Blvd						
West and East of Willowbrook Ave	Residential/Commercial	68.7	68.9	0.2	3,70/3,78	No/No
Central Ave						
South of El Segundo Blvd to Rosecrans	Residential/School/ Commercial	69.4	70.2	0.8	3,70/3,60/ 3,78	No/No/No
Rosecrans Ave to Walnut Street	Residential/School/ Commercial	68.8	69.3	0.5	3,70/3,60/ 3,78	No/No/No
Wilmington Ave						
El Segundo Blvd to Rosecrans Ave	Residential/School/ Commercial	68.9	70.0	1.1	3,70/3,60/ 3,78	No/No/No
Rosecrans Ave to SR-91	Residential/School/ Commercial	69.3	70.0	0.7	3,70/3,60/ 3,78	No/No/No
Alameda Street						
North of 124th Street to Rosecrans Ave	Commercial	70.0	70.0	0.0	3,78	No
Rosecrans Ave to SR-91	Residential/Commercial	70.2	70.5	0.3	3,70/3,78	No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a]				
		Existing	Existing With Project	Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
Santa Fe Avenue						
North of Weber to S/O El Segundo Blvd	Residential/Commercial	67.7	67.7	0.0	3,70/3,78	No/No

Notes:
SF – Single Family
MF – Multiple Family

[a] Noise level is at 25 feet from nearest curb.

[b] Significance Threshold is provided for each existing land use located along the existing roadway segment

[c] The significance threshold is expressed by noise level increase in dBA (i.e., 3) and then the land use compatibility noise level (i.e., 70) for the roadway segments located within the County of Los Angeles, City of Los Angeles and City of Compton. The significance threshold is expressed by noise level increase in dBA (i.e., 3) for the roadway segments located in the City of Lynwood.

[d] The determination of significance is for each existing land use located along the existing roadway segment

[e] Accounts for existing earthen berm

[f] Southern Boundary of Specific Plan Area

As shown in Table 3.9-17, project development would increase local noise levels by less than the 3 dBA CNEL increase threshold along roadway segments within the County of Los Angeles, City of Los Angeles and City of Compton, except at 112th Street between the railroad and Mona Boulevard (a 3.6 dBA increase) and at 118th Street between Compton Avenue and Wilmington Avenue (a 4.5 dBA CNEL increase); however, the residential noise threshold of 70 dBA CNEL would not be exceeded at these locations. In addition, project development would increase local noise levels by less than the 1.0 dBA CNEL increase threshold along roadway segments within the City of Lynwood. Therefore, the project impact associated with mobile source noise at all of the analyzed roadway segments would be less than significant.

Cumulative

The primary noise source contributing to cumulative operational noise levels from future development projects under the proposed Specific Plan and related projects would be traffic. Cumulative mobile source noise impacts would occur primarily as a result of increased traffic on local roadways due to implementation of the proposed project, ambient growth, and other developments in the project vicinity. Therefore, cumulative traffic-generated noise impacts have been assessed based on the contribution of the proposed project to the future cumulative base traffic volumes on the roadway segments located within and in proximity to the Specific Plan area. The noise levels associated with existing traffic volumes and cumulative with project traffic volumes are identified in **Table 3.9-18**. In addition, Table 3.9-18 identifies the increment (increase) of noise contributed by Cumulative with Project roadway noise levels above existing noise levels.

TABLE 3.9-18
CUMULATIVE WITH PROJECT ROADWAY NOISE LEVELS INCREASES

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Existing	Cumulative With Project	Cumulative With Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
Segments Within Specific Plan Area						
Imperial Highway						
Compton Ave to Wilmington Ave	Commercial	70.6	70.9	0.3	3,70/3,75	No/No
Wilmington Ave to Mona Blvd	Commercial	70.9	71.9	1.0	3,75	No
I-105						
Compton Ave to Mona Blvd	MF Residential/ Commercial	65.0[e]	65.6[e]	0.6	3,65/3,75	No/No
118th Street						
Compton Ave to Wilmington Ave	MF Residential/School	62.4	66.9	4.5	3,65/3,70	No/No
119th/120th Street						
Compton Avenue to Wilmington Ave	School/Hospital	66.9	68.4	1.5	3,70/3,70	No/No
Wilmington Ave to Willowbrook Ave	SF, MF Residential/ Commercial	65.3	65.6	0.3	3,60; 3,65/3,75	No/No/No
Willowbrook Ave to Mona Blvd	SF, MF Residential	63.3	63.6	0.3	3,60; 3,65	No, No
Compton Ave						
Imperial Hwy to 120th Street	MF Residential/School/ Commercial	67.4	68.7	1.3	3, 65/3,70/3,75	No/No/No
120th Street to Southern Boundaryf	Hospital	65.9	66.9	1.0	3,70	No
Wilmington Ave						
Imperial Hwy to I-105	Commercial	67.7	69.0	1.3	3,75	No
I-105 to 119th Street	MF Residential/ Commercial	70.5	72.4	1.0	3,65/3,75	No/No
119th Street to Southern Boundaryf	MF Residential/Hospital/ Commercial	68.9	70.0	1.1	3,65/3,70/ 3,75	No/No/No
Mona Blvd						
Imperial Hwy to 119th Street	SF, MF Residential	66.9	67.2	0.3	3,60/3,65	No/No
Segments Outside of Specific Plan Area						
City of Los Angeles						
103rd Street						
West of Central Ave	Residential/Commercial	64.1	64.6	0.5	3,70/3,75	No/No
Central Ave to Wilmington Ave	Residential/School/ Park/Commercial	66.4	66.8	0.4	3,70/3,70/ 3,70/3,75	No/No/ No/No
Wilmington Ave to Alameda Street	Residential/School/ Commercial	65.1	65.6	0.5	3,70/3,70/ 3,75	No/No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Existing	Cumulative With Project	Cumulative With Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
108th Street						
Central Avenue to West of Avalon Blvd	Residential/Commercial	65.1	65.6	0.5	3,70/3,75	No/No
112th Street						
Railroad to Mona Blvd	Residential/School/ Commercial	55.4	59.0	3.6	3,70/3,70/ 3,75	No/No/No
Imperial Highway						
San Pedro Street to West of Main Street	Residential/School/ Commercial	71.1	71.8	0.7	3,70/3,70/ 3,75	No/No/No
San Pedro Street to Avalon Blvd	Residential/Commercial	69.3	70.0	0.7	3,70/3,75	No/No
Avalon Blvd to Slater Ave	Residential/Commercial	70.7	71.3	0.6	3,70/3,75	No/No
Slater Ave to Wilmington Ave	Residential/Commercial	70.6	70.9	0.3	3,70/3,75	No/No
Wilmington Ave to Mona Blvd	Residential/School/ Commercial	70.9	71.9	1.0	3,70/3,70/ 3,75	No/No/No
Main Street						
North and South of Imperial Hwy	Residential/Commercial	65.9	66.5	0.6	3,70/3,75	No/No
San Pedro Street						
108th Street to 120th Street	Residential/School/ Commercial	66.8	67.2	0.4	3,70/3,70/ 3,75	No/No/No
Avalon Blvd						
North of Imperial Hwy	Commercial	69.3	69.9	0.6	3,75	No
Imperial Hwy to 120th Street	Residential/Commercial	68.4	68.9	0.5	3,70/3,75	No/No
Central Ave						
Century Blvd to 108th Street	Residential/Park/ Commercial	70.5	71.1	0.6	3,70/3,70/ 3,75	No/No/No
108th Street to 120th Street	Residential/School/ Commercial	70.1	72.0	1.9	3,70/3,70/ 3,75	No/No/No
Compton Ave						
Century Blvd to Imperial Hwy	Residential/School/ Commercial	67.4	68.7	1.3	3,70/3,70/ 3,75	No/No/No
Wilmington Ave						
Century Blvd to 112th Street	Residential/School/ Commercial	67.2	67.7	0.5	3,70/3,70/ 3,75	No/No/No
112th Street to Imperial Hwy	Residential/Commercial	67.7	69.0	1.3	3,70/3,75	No/No
Alameda Street						
103rd Street to Imperial Hwy	School/Commercial	70.6	70.9	0.3	3,70/3,75	No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Existing	Cumulative With Project	Cumulative With Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
County of Los Angeles						
Imperial Highway						
Mona Blvd to Alameda Street	Residential/Commercial	70.9	71.9	1.0	3,70/3,75	No/No
120th Street						
San Pedro Street to Central Ave	Residential/Park/ Commercial	67.7	68.7	1.0	3,70/3,70/ 3,75	No/No/No
Central Ave to Compton Ave	Residential/School/ Commercial	68.1	69.5	1.4	3,70/3,70/ 3,75	No/No/No
El Segundo Blvd						
San Pedro Street to Slater Ave	Residential/School/ Park/Commercial	69.6	70.3	0.7	3,70/3,70/ 3,70/3,75	No/No/ No/No
Slater Ave to Wilmington Ave	Residential/School/ Park/Commercial	69.8	70.3	0.5	3,70/3,70/ 3,70/3,75	No/No/ No/No
Wilmington Ave to Alameda Street	Residential/Commercial	67.9	68.4	0.5	3,70/3,75	No/No
Rosecrans Ave						
East of Central Ave	Residential/Commercial	69.4	69.8	0.4	3,70/3,75	No/No
San Pedro Street						
120th Street to 135th Street	Residential/School/ Commercial	66.8	67.2	0.4	3,70/3,70/ 3,75	No/No/No
Avalon Blvd						
120th Street to Rosecrans Ave	Residential/School/ Park/Commercial	68.4	68.9	0.5	3,70/3,70/ 3,70/3,75	No/No/ No/No
Central Ave						
120th Street to South of El Segundo Blvd	Residential/Commercial	69.4	70.2	0.8	3,70/3,75	No/No
South of El Segundo Blvd	Residential/Commercial	69.4	70.2	0.8	3,70/3,75	No/No
North of Rosecrans	Residential/Commercial	69.4	70.2	0.8	3,70/3,75	No/No
Compton Ave						
Imperial Hwy to 120th Street	Residential/Commercial	67.4	68.7	1.3	3,70/3,75	No/No
120th Street to El Segundo Blvd	Residential/Commercial	65.9	66.9	1.0	3,70/3,75	No/No
Wilmington Ave						
Imperial Hwy to I-105	Commercial	67.7	69.0	1.3	3,75	No
Southern Boundary to El Segundo Blvd	Residential/Commercial	68.9	70.0	1.1	3,70/3,75	No/No
Alameda Street						
124th Street to Oris Street	Commercial	70.0	70.0	0.0	3,75	No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Existing	Cumulative With Project	Cumulative With Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
City of Lynwood						
Imperial Highway						
Alameda Street to East of State Street	Commercial	71.1	71.5	0.4	1.0	No
Mona Blvd						
Imperial Hwy to 119th Street	Commercial	66.9	67.2	0.3	1.0	No
Alameda Street						
103rd Street to Imperial Hwy	School/Commercial	70.6	70.9	0.3	1.0/1.0	No/No
Imperial Hwy to North of 124th Street	Commercial	70.0	70.0	0.0	1.0	No
State Street/Santa Fe Ave						
N/O Imperial Hwy to S/O El Segundo Blvd	Residential/Park/ Commercial	67.7	67.7	0.0	1.0/1.0/1.0	No/No/No
City of Compton						
El Segundo Blvd						
East and West of State Street	Residential/Commercial	64.9	65.4	0.5	3,70/3,78	No/No
Rosecrans Ave						
San Pedro Street to Willowbrook Ave	Residential/School/ Commercial	69.4	69.8	0.4	3,70/3,60/ 3,78	No/No/No
Willowbrook Ave to Alameda Street	Commercial	69.8	70.2	0.4	3,78	No
Compton Blvd						
West of Central to East of Willowbrook	Residential/Library/ Commercial	69.2	69.2	0.0	3,70/3,60/ 3,78	No/No/No
Alondra Blvd						
West and East of Willowbrook Ave	Residential/Commercial	68.7	68.9	0.2	3,70/3,78	No/No
Central Ave						
South of El Segundo Blvd to Rosecrans	Residential/School/ Commercial	69.4	70.2	0.8	3,70/3,60/ 3,78	No/No/No
Rosecrans Ave to Walnut Street	Residential/School/ Commercial	68.8	69.3	0.5	3,70/3,60/ 3,78	No/No/No
Wilmington Ave						
El Segundo Blvd to Rosecrans Ave	Residential/School/ Commercial	68.9	70.0	1.1	3,70/3,60/ 3,78	No/No/No
Rosecrans Ave to SR-91	Residential/School/ Commercial	69.3	70.0	0.7	3,70/3,60/ 3,78	No/No/No
Alameda Street						
North of 124th Street to Rosecrans Ave	Commercial	70.0	70.0	0.0	3,78	No
Rosecrans Ave to SR-91	Residential/Commercial	70.2	70.5	0.3	3,70/3,78	No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Existing	Cumulative With Project	Cumulative With Project Increment[b]	Significance Threshold[c]	Exceed Threshold?[d]
Santa Fe Avenue						
North of Weber to S/O El Segundo Blvd	Residential/Commercial	67.7	67.7	0.0	3,70/3,78	No/No

Notes:
SF – Single Family
MF – Multiple Family

[a] Noise level is at 25 feet from nearest curb.

[b] Significance Threshold is provided for each existing land use located along the existing roadway segment

[c] The significance threshold is expressed by noise level increase in dBA (i.e., 3) and then the land use compatibility noise level (i.e., 70) for the roadway segments located within the County of Los Angeles, City of Los Angeles and City of Compton. The significance threshold is expressed by noise level increase in dBA (i.e., 3) for the roadway segments located in the City of Lynwood.

[d] The determination of significance is for each existing land use located along the existing roadway segment

[e] Accounts for existing earthen berm

[f] Southern Boundary of Specific Plan Area

As shown in Table 3.9-18, cumulative with project traffic noise levels along the analyzed roadway segments would not exceed the applicable significance threshold. Therefore, cumulative with project traffic noise levels would result in a less than significant impact on adjacent land uses.

Table 3.9-19 provides the project's contribution to cumulative with project traffic noise levels along the analyzed roadway segments.

TABLE 3.9-19
PROJECT'S CONTRIBUTION TO CUMULATIVE WITH PROJECT ROADWAY NOISE LEVEL INCREASE

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Cumulative Without Project	Cumulative With Project	Project Increment[b]	Significance Threshold	Exceed Threshold?[c]
Segments Within Specific Plan Area						
Imperial Highway						
Compton Ave to Wilmington Ave	Commercial	70.6	70.9	0.3	3,70/3,75	No/No
Wilmington Ave to Mona Blvd	Commercial	71.1	71.9	0.8	3,75	No
I-105						
Compton Ave to Mona Blvd	MF Residential/ Commercial	65.4[d]	65.6[d]	0.2	3,65/3,75	No/No
118th Street						
Compton Ave to Wilmington Ave	MF Residential/School	66.7	66.9	0.2	3,65/3,70	No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Cumulative Without Project	Cumulative With Project	Project Increment[b]	Significance Threshold	Exceed Threshold?[c]
119th Street						
Compton Avenue to Wilmington Ave	School/Hospital	67.0	68.4	1.4	3,70/3,70	No/No
Wilmington Ave to Willowbrook Ave	SF, MF Residential/ Commercial	65.3	65.6	0.3	3,60; 3,65/ 3,75	No/No/No
Willowbrook Ave to Mona Blvd	SF, MF Residential	63.3	63.6	0.3	3,60; 3,65	No, No
Compton Ave						
Imperial Hwy to 120th Street	MF Residential/School/ Commercial	67.5	68.7	1.2	3, 65/3,70/ 3,75	No/No/No
120th Street to Southern Boundarye	Hospital	66.0	66.9	0.9	3,70	No
Wilmington Ave						
Imperial Hwy to I-105	Commercial	67.9	69.0	1.1	3,75	No
I-105 to 119th Street	MF Residential/ Commercial	70.8	72.4	1.6	3,65/3,75	No/No
119th Street to Southern Boundarye	MF Residential/Hospital/ Commercial	69.1	70.0	0.9	3,65/3,70/ 3,75	No/No/No
Mona Blvd						
Imperial Hwy to 119th Street	SF, MF Residential	66.9	67.2	0.3	3,60/3,65	No/No
Segments Outside of Specific Plan Area						
City of Los Angeles						
103rd Street						
West of Central Ave	Residential/Commercial	64.5	64.6	0.1	3,70/3,75	No/No
Central Ave to Wilmington Ave	Residential/School/ Park/Commercial	66.8	66.8	0.0	3,70/3,70/ 3,70/3,75	No/No/ No/No
Wilmington Ave to Alameda Street	Residential/School/ Commercial	65.1	65.6	0.5	3,70/3,70/ 3,75	No/No/No
108th Street						
Central Avenue to West of Avalon Blvd	Residential/Commercial	65.6	65.6	0.0	3,70/3,75	No/No
112th Street						
Railroad to Mona Blvd	Residential/School/ Commercial	55.8	59.0	3.2	3,70/3,70/ 3,75	No/No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Cumulative Without Project	Cumulative With Project	Project Increment[b]	Significance Threshold	Exceed Threshold?[c]
Imperial Highway						
San Pedro Street to West of Main Street	Residential/School/ Commercial	71.6	71.8	0.2	3,70/3,70/ 3,75	No/No/No
San Pedro Street to Avalon Blvd	Residential/Commercial	69.7	70.0	0.3	3,70/3,75	No/No
Avalon Blvd to Slater Ave	Residential/Commercial	71.1	71.3	0.2	3,70/3,75	No/No
Slater Ave to Wilmington Ave	Residential/Commercial	70.6	70.9	0.3	3,70/3,75	No/No
Wilmington Ave to Mona Blvd	Residential/School/ Commercial	71.1	71.9	0.8	3,70/3,70/ 3,75	No/No/No
Main Street						
North and South of Imperial Hwy	Residential/Commercial	66.4	66.5	0.1	3,70/3,75	No/No
San Pedro Street						
108th Street to 120th Street	Residential/School/ Commercial	67.2	67.2	0.0	3,70/3,70/ 3,75	No/No/No
Avalon Blvd						
North of Imperial Hwy	Commercial	69.8	69.9	0.1	3,75	No
Imperial Hwy to 120th Street	Residential/Commercial	68.7	68.9	0.2	3,70/3,75	No/No
Central Ave						
Century Blvd to 108th Street	Residential/Park/ Commercial	71.0	71.1	0.1	3,70/3,70/ 3,75	No/No/No
108th Street to 120th Street	Residential/School/ Commercial	70.7	72.0	1.3	3,70/3,70/ 3,75	No/No/No
Compton Ave						
Century Blvd to Imperial Hwy	Residential/School/ Commercial	67.5	68.7	1.2	3,70/3,70/ 3,75	No/No/No
Wilmington Ave						
Century Blvd to 112th Street	Residential/School/ Commercial	67.6	67.7	0.1	3,70/3,70/ 3,75	No/No/No
112th Street to Imperial Hwy	Residential/Commercial	67.9	69.0	1.1	3,70/3,75	No/No
Alameda Street						
103rd Street to Imperial Hwy	School/Commercial	70.6	70.9	0.3	3,70/3,75	No/No
County of Los Angeles						
Imperial Highway						
Mona Blvd to Alameda Street	Residential/Commercial	71.1	71.9	0.8	3,70/3,75	No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Cumulative Without Project	Cumulative With Project	Project Increment[b]	Significance Threshold	Exceed Threshold?[c]
120th Street						
San Pedro Street to Central Ave	Residential/Park/ Commercial	68.3	68.7	0.4	3,70/3,70/ 3,75	No/No/No
Central Ave to Compton Ave	Residential/School/ Commercial	68.5	69.5	1.0	3,70/3,70/ 3,75	No/No/No
El Segundo Blvd						
San Pedro Street to Slater Ave	Residential/School/ Park/Commercial	70.2	70.3	0.1	3,70/3,70/ 3,70/3,75	No/No/ No/No
Slater Ave to Wilmington Ave	Residential/School/ Park/Commercial	69.9	70.3	0.4	3,70/3,70/ 3,70/3,75	No/No/ No/No
Wilmington Ave to Alameda Street	Residential/Commercial	68.1	68.4	0.3	3,70/3,75	No/No
Rosecrans Ave						
East of Central Ave	Residential/Commercial	69.6	69.8	0.2	3,70/3,75	No/No
San Pedro Street						
120th Street to 135th Street	Residential/School/ Commercial	67.2	67.2	0.0	3,70/3,70/ 3,75	No/No/No
Avalon Blvd						
120th Street to Rosecrans Ave	Residential/School/ Park/Commercial	68.7	68.9	0.2	3,70/3,70/ 3,70/3,75	No/No/ No/No
Central Ave						
120th Street to South of El Segundo Blvd	Residential/Commercial	70.0	70.2	0.2	3,70/3,75	No/No
South of El Segundo Blvd	Residential/Commercial	70.0	70.2	0.2	3,70/3,75	No/No
North of Rosecrans	Residential/Commercial	70.0	70.2	0.2	3,70/3,75	No/No
Compton Ave						
Imperial Hwy to 120th Street	Residential/Commercial	67.5	68.7	1.2	3,70/3,75	No/No
120th Street to El Segundo Blvd	Residential/Commercial	66.0	66.9	0.9	3,70/3,75	No/No
Wilmington Ave						
Imperial Hwy to I-105	Commercial	67.9	69.0	1.1	3,75	No
Southern Boundary to El Segundo Blvd	Residential/Commercial	69.1	70.0	0.9	3,70/3,75	No/No
Alameda Street						
124th Street to Oris Street	Commercial	70.0	70.0	0.0	3,75	No
City of Lynwood						
Imperial Highway						
Alameda Street to East of State Street	Commercial	71.2	71.5	0.3	1.0	No
Mona Blvd						
Imperial Hwy to 119th Street	Commercial	66.9	67.2	0.3	1.0	No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Cumulative Without Project	Cumulative With Project	Project Increment[b]	Significance Threshold	Exceed Threshold?[c]
Alameda Street						
103rd Street to Imperial Hwy	School/Commercial	70.6	70.9	0.3	1.0/1.0	No/No
Imperial Hwy to North of 124th Street	Commercial	70.0	70.0	0.0	1	No
State Street/Santa Fe Ave						
N/O Imperial Hwy to S/O El Segundo Blvd	Residential/Park/ Commercial	67.7	67.7	0.0	1.0/1.0/1.0	No/No/No
City of Compton						
El Segundo Blvd						
East and West of State Street	Residential/Commercial	65.1	65.4	0.3	3,70/3,78	No/No
Rosecrans Ave						
San Pedro Street to Willowbrook Ave	Residential/School/ Commercial	69.6	69.8	0.2	3,70/3,60/ 3,78	No/No/No
Willowbrook Ave to Alameda Street	Commercial	70.0	70.2	0.2	3,78	No
Compton Blvd						
West of Central to East of Willowbrook	Residential/Library/ Commercial	69.2	69.2	0.0	3,70/3,60/ 3,78	No/No/No
Alondra Blvd						
West and East of Willowbrook Ave	Residential/Commercial	68.9	68.9	0.0	3,70/3,78	No/No
Central Ave						
South of El Segundo Blvd to Rosecrans	Residential/School/ Commercial	70.0	70.2	0.2	3,70/3,60/ 3,78	No/No/No
Rosecrans Ave to Walnut Street	Residential/School/ Commercial	69.2	69.3	0.1	3,70/3,60/ 3,78	No/No/No
Wilmington Ave						
El Segundo Blvd to Rosecrans Ave	Residential/School/ Commercial	69.1	70.0	0.9	3,70/3,60/ 3,78	No/No/No
Rosecrans Ave to SR-91	Residential/School/ Commercial	69.4	70.0	0.6	3,70/3,60/ 3,78	No/No/No
Alameda Street						
North of 124th Street to Rosecrans Ave	Commercial	70.0	70.0	0.0	3,78	No
Rosecrans Ave to SR-91	Residential/Commercial	70.2	70.5	0.3	3,70/3,78	No/No

Roadway Segments	Existing Land Uses Located Along Roadway Segment	dBA CNEL at 25 feet[a] Cumulative Without Project	Cumulative With Project	Project Increment[b]	Significance Threshold	Exceed Threshold?[c]
Santa Fe Avenue						
North of Weber to S/O El Segundo Blvd	Residential/Commercial	67.7	67.7	0.0	3,70/3,78	No/No

Notes:
SF – Single Family
MF – Multiple Family

[a] Noise level is at 25 feet from nearest curb.

[b] Significance Threshold is provided for each existing land use located along the existing roadway segment

[c] The significance threshold is expressed by noise level increase in dBA (i.e., 3) and then the land use compatibility noise level (i.e., 70) for the roadway segments located within the County of Los Angeles, City of Los Angeles and City of Compton. The significance threshold is expressed by noise level increase in dBA (i.e., 3) for the roadway segments located in the City of Lynwood.

[d] The determination of significance is for each existing land use located along the existing roadway segment

[e] Accounts for existing earthen berm

[f] Southern Boundary of Specific Plan Area

As shown in Table 3.9-19, the project's contribution to cumulative with project traffic noise levels along the analyzed roadway segments would not exceed the applicable significance threshold. Therefore, the project's contribution to cumulative with project traffic noise levels would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant.

Cumulative

Less than significant.

Temporary Increase in Ambient Noise Levels

Impact 3.9-4: Implementation of the project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Project-Specific

During implementation of the proposed Specific Plan, temporary or periodic increases in noise levels in the Specific Plan area would result primarily from construction activities associated with the proposed residential and non-residential developments. As individual development projects would occur intermittently over the proposed Specific Plan's 20-year build out period, construction activities for each new development would expose their respective nearby existing uses to increased noise levels. Construction noise impacts associated with each site-specific development would be short-term in nature and limited to the period of time when construction activity is taking place for that particular development.

Construction that occurs immediately adjacent to these existing offsite receptors would generate noise levels that would be substantially greater than the existing noise levels at these receptor locations. Based on the project construction noise levels for general outdoor construction activities and specific construction equipment shown in Tables 3.9-12 and 3.9-13, respectively, these construction noise levels could expose adjacent receptors located within 50 feet to noise levels up to 89 dBA L_{eq} or above. It should be noted that this noise level is not anticipated to occur throughout the entire course of a construction day, as construction equipment and activities rarely operate continuously for a full day at a construction site. Typically, the operating cycle for construction equipment would involve one or two minutes of full power operation followed by three or four minutes at lower power settings. Additionally, construction equipment engines would likely be intermittently turned on and off over the course of a construction day.

With respect to construction activities, the County's General Plan Noise Element does not establish a numerical standard to regulate construction noise levels. However, Section 12.08.440 of the LACC has established numerical standards to regulate construction noise levels at buildings with specific land uses as shown in Table 3.9-7. In addition, Section 12.08.440 of the LACC limits construction activities in the County to between the hours of 7:00 am to 7:00 pm on weekdays (including Saturday's), and prohibits construction on Sundays and holidays. Construction activities may occur outside of these hours if the County determines that the emergency maintenance, repair, or improvement of public service utilities is needed or if a variance is issued by the health officer.

All new development projects in the Specific Plan area would be subject to these regulations. Because construction activities are required to comply with the regulations in the LACC, the construction activities associated with future developments in the Specific Plan area would not exceed any standards established in the LACC. Thus, impacts would be less than significant.

Cumulative

The geographic scope for temporary or periodic noise increases such as construction noise includes areas directly adjacent to the Specific Plan area that could contribute to construction noise levels occurring within the Specific Plan area.

Construction activities occurring in areas directly adjacent to the Specific Plan area could contribute cumulative noise levels with project construction activities. The areas that could be exposed to the highest cumulative construction noise levels are those areas that are not separated

by existing roadways such as the area south of the existing MLK Medical Center. The areas that are located west, north, and east of the Specific Plan area are separated by roadways including Compton Avenue, Imperial Highway and Mona Boulevard, respectively. Construction activities occurring at cumulative developments would increase ambient noise levels; however, these cumulative construction activities would be required to comply with the construction equipment noise standards provided in Section 12.08.440 of the LACC. Because construction activities would be required to comply with the LACC, cumulative construction activities would result in less than significant noise impacts. Because the proposed project would also be required to comply with the LACC, the project's contribution to cumulative construction noise levels would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant.

Cumulative

Less than significant.

References

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3.10 Population and Housing

Introduction

This section evaluates the potential population growth impacts of the proposed Specific Plan. The section describes the existing and projected population, employment, and housing conditions; and it evaluates the project's potential to induce population and housing growth. Information in the section is based upon the Los Angeles County General Plan, Los Angeles County Housing Element 2014–2021, Southern California Association of Governments (SCAG) 2012–2035 and 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and U.S. Census demographic information. As part of the update to the Los Angeles County General Plan in 2015, the County included a major focus on Transit Oriented Districts (TOD) as a priority throughout the County. The Specific Plan is being proposed to implement TOD development pursuant to the overall goals and policies of the County's General Plan which will increase both population and housing intensities/densities within the Specific Plan area.

3.10.1 Environmental Setting

Population

The Willowbrook community currently encompasses approximately 3.8 square miles (approximately 2,410 acres) and is identified by the US Census Bureau as a Census Designated Place (CDP). Prior to 2013, the boundary of the Willowbrook CDP encompassed a larger area, and therefore, a comparison of population within the Willowbrook community was limited to the year 2013 and after. In 2013, the Willowbrook community had an estimated population of 20,250. In 2015, the Willowbrook community slightly increased in population to 20,685. The percentage of this increase was higher than the percentage population increase for Los Angeles County during the same time frame. The proposed Willowbrook TOD Specific Plan area is included in the Willowbrook community (CDP).

The proposed Specific Plan area encompasses 312 acres and represents approximately 12.9 percent of the Willowbrook CDP. The population of the Willowbrook TOD Specific Plan area (3,053 people) was derived using the County of Los Angeles Department of Regional Planning existing demographic information and applying the 2015 Specific Plan area total housing units (968) and a housing vacancy rate of 7.7 percent estimated by the U.S. Census Bureau for the Willowbrook community. Using the above data, the existing population was obtained by multiplying the total housing units (968) by the vacancy rate (7.7 percent) to obtain 893 occupied housing units and then multiplying the population to occupied housing unit ratio of 3.4 derived by using the County's demographic information to obtain 3,053 persons (893 occupied housing units x 3.4 persons per occupied unit). **Table 3.10-1** shows recent population growth trends for the Willowbrook community and the County of Los Angeles as a whole and includes a 2015 population estimate for the Willowbrook TOD Specific Plan area.

TABLE 3.10-1
POPULATION GROWTH FOR WILLOWBROOK COMMUNITY AND LOS ANGELES COUNTY (2013–2015)

	2013	2015	% Change (2013-2015)
Willowbrook Community	20,250	20,685	2.1%
Los Angeles County	9,893,481	10,038,388	1.5%

SOURCE: U.S. Census Bureau, 2013a, 2013b, 2015a, and 2015b.

Housing

The U.S. Census estimates that the Willowbrook CDP had approximately 5,163 housing units and an average vacancy rate of 7.7 percent in 2015, as shown on **Table 3.10-2**. Approximately, 3,835 (74 percent) of the housing stock consists of single-family residences and 18.3 percent consists of multi-family structures providing 5 or more residences. Compared to the Willowbrook CDP, the County contains a greater percentage of multi-family residential, as structures providing 5 units or more consist of 34 percent of the housing stock; and single-family units consist of a lower percentage (56 percent) of the housing stock. The greater number of single family units within the Willowbrook CDP compared to the total occupied housing units results in a greater average persons-per-household compared to the County. The Willowbrook CDP has an average persons-per-household ratio of 4.3 while the County's average persons per household was 3.0. As identified above, the Willowbrook TOD Specific Plan area includes 968 dwelling units in 2015 and has an average persons-per-household ratio of 3.4. This persons-per-household ratio is lower for the Willowbrook TOD Specific Plan area compared to the Willowbrook community because the percentage of single family residential units, which results in a higher persons-per-household ratio compared to multiple family residential units, is 74 percent within the Willowbrook community compared to 38 percent in the Willowbrook TOD Specific Plan area.

As shown below, the vacancy rate in 2015 for the County of Los Angeles was 5.0 percent. The Willowbrook CDP vacancy rate was higher than the County's rate at 7.7 percent. As described in Table 2-4 in Chapter 2.0, Project Description, the Specific Plan area currently contains 968 residential units, of which 364 units are single family and 604 units are multiple family units.

TABLE 3.10-2
HOUSING STOCK CHARACTERISTICS IN THE WILLOWBROOK COMMUNITY AND LOS ANGELES COUNTY IN 2015

	Willowbrook Community		County of Los Angeles	
Total Units	**5,163**	**100.0%**	**3,476,718**	**100.0%**
Occupied Units	4,774	86.7%	3,263,069	93.9%
Owner-Occupied	1,826	38.2%	1,499,879	46.0%
Renter-Occupied	2,950	61.8%	1,763,190	54.0%
Vacancy Rate	7.7%		5.0%	
SF Detached	3,433	66.5%	1,721,774	49.5%
SF Attached	402	7.8%	226,474	6.5%
MF 2-4 Units	300	5.8%	283,164	8.1%
MF 5+ Units	947	18.3%	1,189,107	34.2%
Mobile Homes/Other	81	1.6%	56,199	1.7%
Average Household Size (persons)	**4.3**		**3.0**	

SOURCES: U.S. Census Bureau, 2013c, 2013d, 2015c, and 2015d.

Employment

The County of Los Angeles had a labor force of 5,011,700 and 4,610,800 residents that had jobs in 2015, which represents an unemployment rate of 6.7 percent (EDD 2016). The County of Los Angeles had 4,398,089 jobs in 2015 (SCAG 2016). The 2015 unemployment rate of 6.7 percent for Los Angeles County is below the average unemployment rate of 8.2 percent for the County from 1990 to 2015 (EDD, 2017). The 2015 American Community Survey estimates 82.9 percent of County residents take an automobile to work, 10.5 percent take public transportation, walk, or bicycle to work, and the remaining residents take a taxicab or work at home (U.S. Census Bureau, 2015e).

In comparison, the Willowbrook CDP had a labor force of approximately 8,200 and 7,300 residents had jobs in 2015, which represents an unemployment rate of approximately 11 percent (EDD 2016). The 2015 American Community Survey estimates that 87.0 percent of Willowbrook CDP residents take an automobile to work, 10.6 percent take public transportation, walk, or bicycle to work, and the remaining residents take a taxicab or work at home (U.S. Census Bureau, 2015f).

The Willowbrook TOD Specific Plan area included 1,265 jobs in 2010 (Hoffman, 2015). However, for purposes of this analysis, it is assumed that the number of jobs within the Specific Plan area remained at 1,265 jobs in 2015.

Population, Household and Employment Projections

The anticipated population, household, and employment projections are shown in **Table 3.10-3**, which is based on the 2015 California Department of Economic Development (EDD) population figures and SCAG's 2035 estimates for the unincorporated County of Los Angeles areas and for

the County of Los Angeles. The EDD forecasts population within the unincorporated portions of the County will increase 31 percent between 2015 and 2035. Similarly, housing units are anticipated to increase by 29 percent and employment by 29 percent. In addition, the projections show that the population, housing units, and jobs in the unincorporated portions of the County will grow at a substantially faster rate than the County as a whole through 2035.

TABLE 3.10-3
POPULATION, HOUSEHOLDS, AND JOBS PROJECTIONS FOR UNINCORPORATED LOS ANGELES COUNTY AND LOS ANGELES COUNTY

	2015	2035	2015 – 2035 Percent Increase	Compound Annual Growth Rate
Unincorporated Los Angeles County				
Population	1,049,046[1]	1,373,889[2]	31.0%	1.36%
Housing Units	311,272[1]	400,958[2]	28.8%	1.27%
Employment (Jobs)	258,801[5]	333,592[2]	28.9%	1.28%
Employment (Jobs) to Housing Unit Ratio	0.83	0.83	-	
Total Los Angeles County				
Population	10,038,388[6]	11,145,000[3]	11.0%	0.52%
Housing Units	3,476,718[6]	3,809,000[3]	9.5%	0.46%
Employment (Jobs)	4,674,800[4]	5,062,000[3]	8.3%	0.40%
Employment (Jobs) to Housing Unit Ratio	1.34	1.33	-	

[1] Obtained from the California Department of Finance
[2] Based on applying the percent in forecast change for the County of Los Angeles between SCAG's 2012-2035 RTP/SCS and 2016-2040 RTP/SCS and applying the percent change to Unincorporated Los Angeles County estimate for 2035 provided in SCAG's 2012-2035 RTP/SCS to derive an updated 2035 estimate for Unincorporated Los Angeles County areas.
[3] Obtained from SCAG 2016-2040 RTP/SCS.
[4] Obtained from California Economic Development Department 2015 Data.
[5] Used a linear projected growth rate based on the County of Los Angeles 2013 employment projection from the County of Los Angeles General Plan Programmatic EIR and the 2035 employment projection provided in the SCAG 2016 RTP/SCS.
[6] U.S. Census Bureau, 2015b.

SOURCES: DOF 2016, SCAG 2012a, SCAG 2016, EDD 2016, and County of Los Angeles 2015, and U.S. Census Bureau 2015b.

Table 3.10-3 also identifies the jobs to housing ratio. "Jobs-housing ratio" is a general measure of the "balance" between the number of jobs and number of housing units within a geographic area, without regard to economic constraints or individual preferences. The ratio expresses quantitatively the relationship between the number of people working and number of people living in a given area. SCAG uses the jobs-housing balance as a general tool for analyzing where people work, where they live, and how efficiently they can travel between the two. Jobs-housing balance is achieved by increasing opportunities for people to work and live in close proximity. As described in the County's General Plan EIR Population and Housing Section, the County considers a jobs-housing ratio ranging between 1.3 and 1.7 is ideal (County of Los Angeles, 2015).

As described above, the Willowbrook TOD Specific Plan area includes 968 housing units and 1,265 jobs for 2015 which equates to a 1.31 jobs to housing ratio. As shown in Table 3.10-3 for

the year 2015, there are 311,272 residential units and 258,801 jobs within the unincorporated areas of the county, which equates to 0.83 jobs per housing unit. For the year 2015, there are 3,476,718 residential units and 4,506,400 jobs within the County, which equates to 1.34 jobs per housing unit. Based on the above, the Willowbrook TOD Specific Plan area and the County of Los Angeles have jobs to housing ratios that are considered ideal by the County. The unincorporated areas of the County are considered job poor and typically provide a higher ratio of residential uses compared to employment uses. As shown in Table 3.10-3, in 2035, the County is projected to have a jobs to housing ratio at 1.33. This ratio is between the 1.3 and 1.7 ratio that is considered ideal in the County's General Plan EIR.

Both the County of Los Angeles Department of Regional Planning and SCAG have provided growth projections throughout the County of Los Angeles. The current growth forecasts for the Willowbrook TOD Specific Plan area (i.e., not including projected growth resulting from the proposed Specific Plan) are provided in **Table 3.10-4**. As shown in Table 3.10-4, the growth forecasts for the Specific Plan area are higher from the County of Los Angeles compared to SCAG. According to County staff, the projections by the County used a different methodology than SCAG and once the County completed their growth projections for the unincorporated areas of the County, there was not enough time for SCAG to resolve the discrepancies between the two growth forecasts.

TABLE 3.10-4
POPULATION, HOUSING, AND JOBS PROJECTIONS FOR WILLOWBROOK TOD SPECIFIC PLAN AREA

		General Plan 2035 Projections		SCAG 2035 Projections	
	Existing	Incremental 2035 Growth	Total 2035 Growth	Incremental 2035 Growth	Total 2035 Growth
Population	3,108[1]	4,348[4]	7,456[7]	3,447[8]	6,555[11]
Housing	968[2]	1,479[5]	2,447[7]	887[9]	1,855[11]
Employment	1,265[3]	2,021[6]	3,286[7]	615[10]	1,880[11]
Average Household Size	3.21	2.94	3.05	3.89	3.53
Employment (Jobs) to Housing Unit Ratio	1.31	1.37	1.34	0.69	1.01

[1] County of Los Angeles Regional Planning, Geographic Information Systems Section, 2017.
[2] Existing number of units is based on The Arroyo Group existing land use information.
[3] Based on Stan Hoffman Associates existing employment information provided in the Economic Development Strategy Report.
[4] Based on subtracting County of Los Angeles Regional Planning, Geographic Information Systems Section total population projection for 2035 from the existing population.
[5] Based on subtracting County of Los Angeles Regional Planning, Geographic Information Systems Section total housing unit projection for 2035 from the existing housing units.
[6] Based on subtracting County of Los Angeles Regional Planning, Geographic Information Systems Section total employment projection for 2035 from the existing employment.
[7] County of Los Angeles Regional Planning, Geographic Information Systems Section growth projections
[8] Based on subtracting SCAG RTP/SCS total population projection for 2035 from the existing population.
[9] Based on subtracting SCAG RTP/SCS total housing unit projection for 2035 from the existing housing units.
[10] Based on subtracting SCAG RTP/SCS total employment projection for 2035 from the existing employment.
[11] SCAG RTP/SCS growth projections.

SOURCES: County of Los Angeles 2017, The Arroyo Group 2016, Hoffman 2015, SCAG 2017.

3.10.2 Regulatory Setting

Senate Bill 375

Adopted into law in 2008, Senate Bill (SB) 375[1] links regional transportation and housing planning with state greenhouse gas reduction goals. The law requires the California Air Resources Board to establish, for each region of the state, GHG reduction targets for the automobile and light truck sector, and requires the regional transportation plan for each region to include a Sustainable Communities Strategy (SCS) to achieve its GHG reduction target.

The law assigns responsibility for developing the SCS for Southern California to the Southern California Association of Governments (SCAG). The SCS must identify the general location of uses, residential densities, and building intensities in the region and identify areas within the region that will house all of the region's population, including all economic segments of the population, taking into account migration into the region and population growth, over the next 25 years. SB 375 requires regional Sustainable Communities Strategies to forecast development patterns that, when integrated with the region's transportation system, achieves statewide GHG reduction targets.

State of California Housing Element Requirements

California Housing Element Law (Government Code Section 65580, et seq.) requires cities and counties to include, as part of their general plans, a housing element to address housing conditions and needs in the community. The housing element law requires the California Department of Housing and Community Development, in consultation with each regional council of governments, to determine each region's existing and projected housing need. The regional council of governments in turn develops a regional housing allocation plan that includes the actual allocation of housing need to the cities and counties within the region. Allocations are based on factors that consider existing employment, employment growth, household growth, and the availability of transit; need is determined for households in all income categories from very-low to above-moderate (SCAG, 2016). Cities and counties are required to plan for their allocated number of housing units within the housing elements of their general plans. Housing elements are required to be updated every eight years, following timetables adopted by the state. Each agency's housing element must identify and analyze existing and projected housing needs and "make adequate provision for the existing and projected needs of all economic segments of the community," among other requirements.

Southern California Association of Governments

SCAG is the federally-designated Metropolitan Planning Organization (MPO) for the six-county Southern California region consisting of Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial counties. SCAG is responsible for developing regional plans for transportation, growth management, and hazardous waste management, and a regional growth

[1] SB 375 amended California Government Code Sections 65080, 654000, 65583, 65584.01, 65584.02, 65584.04, 65587, and 65588; added Government Code Sections 14522.1, 14522.2, and 65080.01; amended Public Resources Code (PRC) Section 21063; and added PRC Section 21159.28 and Chapter 4.2 (commencing with Section 21155) to Division 13 of the PRC relating to environmental quality.

forecast that is the foundation for these plans as well as for the regional air quality plan developed by the South Coast Air Quality Management District (SCAQMD). SCAG prepares several plans to address regional growth, including the Regional Comprehensive Plan and Guide (RCPG), the Southern California Compass Growth Vision, the Regional Housing Needs Assessment (RHNA), the RTP, the Regional Transportation Improvement Program (RTIP), and annual State of the Region reports to measure progress toward achieving regional planning goals and objectives.

Regional Comprehensive Plan and Guide

The Regional Comprehensive Plan (RCP), which was adopted by SCAG in 2008, is a major advisory plan prepared by SCAG that addresses important regional issues like housing, traffic/transportation, water, and air quality. The RCP serves as a framework for decision-making by local governments, assisting them in meeting federal and state mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes through the year 2035 and beyond (SCAG, 2008). Further, the RCP lays the groundwork for the more robust 2012 and 2016 updates of the Regional Transportation Plan (RTP), and recommends key roles and responsibilities for public and private sector stakeholders and invites them to implement reasonable policies that are within their control.

The RCP, like several other SCAG policy documents, divides the six-county region into 14 subregions. Some subregions consist of entire counties (e.g., Orange, San Bernardino, Imperial, and Ventura counties), while others include multiple sub-county areas (e.g., Los Angeles and Riverside counties). The project site is located within City of Los Angeles subregion.

The RCP consists of chapters that contain goals, policies, implementation strategies, and technical data that support the overall vision for the region, which is to foster a southern California region that addresses future needs while recognizing the interrelationship between economic prosperity, natural resource sustainability, and quality of life. The Land Use and Housing Chapter of the RCP is particularly relevant to population and housing.

The Land Use and Housing Chapter includes advisory strategies for linking land use and housing to transportation planning, and how the choices we make about how land should be used and what kinds of buildings we construct. Its goals include maximizing the efficiency of the existing and planned transportation network, providing necessary amount and mix of housing for a growing population, enable a diverse and growing economy and protect important natural resources.

As part of a triennial process of updating the federally mandated RTP, SCAG is responsible for producing socioeconomic forecasts and developing, refining, and maintaining macro and small-scale forecasting models. These forecasts are developed in close consultation with a Technical Advisory Committee comprised of local government and other public agencies, California Department of Finance (DOF), County Transportation Commissions and other major stakeholders. The forecasts are developed in five-year increments through the year 2035 in the 2008 RTP and 2012 RTP/SCS and through the year 2040 in the 2016 RTP/SCS. The forecast is

relied upon for preparation of the RTP, the Air Quality Management Plan (AQMP), RTIP, and the RHNA. Consistency with the growth forecast, at the subregional level, is one criterion that SCAG uses in exercising its federal mandate to review "regionally significant" development projects for conformity with regional plans. SCAG's current forecast is the one prepared for the 2012-2035 RTP, which utilizes 2010 Census data as a baseline.

Based on SCAG's 2016 Forecast (included in Table 3.10-3 above), unincorporated Los Angeles County area is anticipated to have a population growth of 1.36 percent annually, a household growth of 1.27 percent annually, and employment growth of 1.28 annually.

SCAG Southern California Compass Growth Vision Report

The SCAG Southern California Compass Growth Vision Report (Compass Growth Vision), published in June 2004, presents a comprehensive growth vision for the six-county SCAG region, as well as achievements in the process of developing the growth vision. It details the evolution of the draft vision from the study of emerging growth trends and systematic modeling of the effects of alternative growth pattern scenarios on transportation systems, land consumption, and other factors.

The Compass Growth Vision Report notes that population and household growth trends, and existing housing conditions point to an unmet demand for a greater diversity of housing throughout the six-county region. For example, while existing multi-family units account for a substantial proportion of the overall supply (i.e., approximately 40 percent), multi-family buildings are being added to the total housing stock at a much lower proportion. As a result, the demand for multi-family housing (e.g., from young adults and seniors, etc.) is outpacing multi-family housing production.

SCAG Regional Housing Needs Assessment

State housing law requires that that local governments, through Councils of Governments (such as SCAG), identify existing and future housing needs in a Regional Housing Needs Assessment (RHNA). The RHNA provides recommendations and guidelines to identify housing needs within cities and unincorporated areas, but does not impose requirements as to housing development. SCAG, as the regional planning agency, is responsible for allocating the RHNA to each local jurisdiction within its region.

The RHNA adopted by SCAG for the planning period of 2014-2021 has identified a future housing need of 30,574 for unincorporated areas of Los Angeles County to be accommodated within the 7-year RHNA planning period. **Table 3.10-5** shows the RHNA allocation for unincorporated Los Angeles County. Specific RHNA allocations for the Willowbrook community are not available because individual unincorporated area numbers are not determined. However, the County's General Plan has provided land use policies and designations to direct this growth toward transit facilities in a transit oriented land use pattern, such is being implemented by the proposed Specific Plan.

TABLE 3.10-5
RHNA NEEDS BY INCOME CATEGORY FOR UNINCORPORATED LOS ANGELES COUNTY

Income Category	RHNA Need
Very Low	7,854
Low	4,650
Moderate	5,060
Above Moderate	12,581
Total	**30,145**

SOURCE: SCAG 2012b.

Local

Los Angeles County 2035 General Plan

The Los Angeles County General Plan contains policies that regulate the use of land within the County, including the project site and its vicinity, and provides a long-term vision for the future physical evolution of the County as it seeks to achieve its desired future. Following are goals and policies of the Economic Development Element and the Housing Element that are relevant to the project.

Economic Development Element

The Economic Development Element outlines the County's economic development goals, and provides strategies that contribute to the economic well-being of the County. The overall performance of the economy and economic development efforts strongly impact land use and development patterns. Through the implementation of this Element, the County is planning for the economic health and prosperity of its physical and social environments, and planning strategically for the future economy. The Element works in conjunction with the Los Angeles County Strategic Plan for Economic Development, which was adopted by the Los Angeles County Board of Supervisors in 2010. The goals in the Economic Development Element that are relevant to population, housing and employment issues and the proposed project include:

Goal 2: Land use practices and regulations that foster economic development and growth.

Policy 2.5: Encourage employment opportunities to be located in proximity to housing.

Policy 2.7: Incentivize economic development and growth along existing transportation corridors and in urbanized areas.

Policy 4.4: Incentivize infill development that revitalizes underutilized commercial and industrial areas.

Policy 4.6: Retrofit and reuse vacant and underutilized industrial and commercial sites for emerging and targeted industries.

Housing Element

The Housing Element sets forth goals, policies, and programs to address the City's existing and projected need for housing in the community in terms of affordability, availability, adequacy, and accessibility, pursuant to state law (Los Angeles County 2014). The goals and supporting policies in the Housing Element that are relevant to the project are the following:

Goal 1: A wide range of housing types in sufficient supply to meet the needs of current and future residents, particularly for persons with special needs, including but not limited to low income households, seniors, persons with disabilities, large households, single-parent households, the homeless and at risk of homelessness, and farmworkers.

Policy 1.1: Make available through land use planning and zoning an adequate inventory of vacant and underutilized sites to accommodate the County's Regional Housing Needs Assessment (RHNA) allocation.

Policy 2.1: Support the development of housing for low and moderate income households and those with special needs near employment and transit.

Policy 2.2: Encourage mixed use developments along major commercial and transportation corridors.

Policy 3.1: Promote mixed income neighborhoods and a diversity of housing types throughout the unincorporated areas to increase housing choices for all economic segments of the population.

Policy 6.2: Allocate state and federal resources toward the preservation of housing, particularly for low income households, near employment and transit.

Policy 8.1: Support the distribution of affordable housing, shelters, and transitional housing in geographically diverse locations throughout the unincorporated areas, where appropriate support services and facilities are available in close proximity.

3.10.3 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the Los Angeles County CEQA Checklist, the project could have a significant impact on population and housing if it would:

- 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 infrastructure) (see Impact 3.10-1);
- Displace a substantial number of existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere (see Section 5.1.12 in this EIR);
- Displace a substantial number of people, necessitating the construction of replacement housing elsewhere (see Section 5.1.12 in this EIR).

3.10.4 Methodology

The focus of environmental analysis prepared under CEQA is a project's potential to cause effects on the physical environment.[2] Accordingly, the *CEQA Guidelines* state that while economic or social information may be included in an EIR, or may be presented in whatever form the lead agency desires; social and economic effects shall not be treated as significant effects on the environment.[3] The *CEQA Guidelines* make clear that there must be a physical change resulting from the proposed project directly or indirectly for an impact to be considered significant.[4]

Social and economic effects, including employment, are relevant CEQA issues to the extent that a chain of cause and effect can be traced from a proposed project through anticipated social and economic changes resulting from the project, to physical changes caused in turn by the economic and social changes (*CEQA Guidelines*, Sections 15131(a) and 15064(f)). If a project's physical impacts would cause social or economic effects, the magnitude of the social or economic effects may be relevant in determining whether a physical impact is "significant" (*CEQA Guidelines* Section 15131(b)). If the physical change causes adverse economic or social effects on people, those adverse effects may be used as the basis for determining that the physical change is significant (*CEQA Guidelines*, Section 15064(f)).

Population growth impacts are based on an analysis of the number of residents anticipated at build out of the proposed Specific Plan. The scale of population at build out is then compared with official population growth forecasts for the project region (i.e., County of Los Angeles). The project area's population and growth that would result from Specific Plan implementation was examined in the context of existing and projected population for the County of Los Angeles. If build out of the Specific Plan would exceed growth projections, the resulting growth would be determined to be "substantial." However, the determination of whether the proposed project represents a significant impact is whether the project would induce additional growth that would result in significant impacts to the environment.

3.10.5 Impact Analysis

Induce Population Growth

Impact 3.10-1: The proposed project would not 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 infrastructure).

New housing development implemented under the proposed Specific Plan would involve up to a net total increase of 1,952 residential units, as well as approximately 2,666,035 square feet of

2 "Environment" means the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance (Pub. Res. Code §21060.5).

3 *CEQA Guidelines* §15131(a) and 15064(f); see also Public Resources Code §21100 and 21151. "Significant effect on the environment" means a substantial, or potentially substantial adverse change in the environment (Pub. Res. Code §21068).

4 See discussion following *CEQA Guidelines* §15131.

non-residential employment generating uses. This new development would result in population growth as it provides new homes and businesses in the Willowbrook TOD Specific Plan area.

Using the County's average household size of 2.94 (see Table 3.10-4) for incremental 2035 growth within the Willowbrook TOD Specific Plan area, the addition of 1,952 residential units into the Willowbrook TOD Specific Plan would generate a population of approximately 5,739 persons (see **Table 3.10-6**). The County's incremental population growth projection for the Willowbrook TOD Specific Plan area is the addition of 4,348 persons. The project's incremental population growth represents an approximately 32 percent increase (5,739 persons/4,348 persons) or 1,391 persons over the County's population growth projection for the Specific Plan area. In addition, the project's incremental population growth represents an approximately 66 percent increase (5,739 persons/3,447 persons) or 2,292 persons over SCAG RTP/SCS's population growth projection for the Specific Plan area. In comparison to the SCAG RTP/SCS population growth projections for County of Los Angeles as a whole, the proposed Specific Plan's incremental population growth is approximately 0.5 percent (5,739 persons/1,106,612 persons) of the County's incremental population growth.

TABLE 3.10-6
PROPOSED SPECIFIC PLAN 2035 BUILDOUT PROJECTIONS FOR POPULATION, HOUSING, AND EMPLOYMENT FOR WILLOWBROOK TOD SPECIFIC PLAN AREA

		Proposed Specific Plan 2035 Buildout Projections	
	Existing[1]	Incremental 2035 Growth	Total 2035 Growth
Population	3,108	5,739	8,847
Housing	968	1,952	2,920
Employment (Jobs)	1,265	5,632	6,897
Average Household Size	3.21	2.94	3.03
Employment (Jobs) to Housing Unit Ratio	1.31	2.89	2.36

[1] See Table 3.10-4.

The proposed Specific Plan 2035 incremental increase of 1,952 residential units would represent an approximately 202 percent increase in residential units over existing residential units in 2015 for a total of 2,920 residential units (see Table 3.10-6). Over an approximate 20-year buildout, the growth in residential units would be approximately 98 residential units per year or a compound average residential growth of 5.7 percent annually. This growth is greater than the anticipated growth in the County's General Plan that assumed 1,479 additional residential units, an average of approximately 74 units per year over an approximate 20-year buildout, and a compound average residential growth of 4.8 percent. The project's incremental residential growth represents an approximately 32 percent increase (1,952 units/1,479 units) over the County's residential growth projection. In addition, the proposed growth is greater than the anticipated growth in the SCAG RTP/SCS that assumed 887 additional residential units, an average of approximately 44 residential units per year or a compound average residential growth of 3.3 percent annually. The

project's incremental residential growth represents an approximately 120 percent increase (1,952 units/887 units) over the SCAG RTP/SCS residential growth projection for the Specific Plan area. In comparison to the SCAG RTP/SCS residential growth projections for County of Los Angeles as a whole, the proposed Specific Plan's incremental residential growth is approximately 0.6 percent (1952 units/332,282 units) of the County's incremental residential growth.

In addition, the proposed project would involve a net total of approximately 2,666,035 square feet of non-residential employment generating uses, which will result in a net increase of approximately 5,632 jobs, and therefore, by 2035 there would be a total of 6,897 jobs within the Specific Plan area (Hoffmann 2015) (see Table 3.10-6). This projected job growth is greater than both the job growth forecasts by the County of Los Angeles and SCAG for the Specific Plan area. The County of Los Angeles job growth for the Specific Plan area is a net increase of 2,021 and the SCAG job growth is a net increase of 615. The proposed project's incremental job growth over the 20-year buildout is 3,611 additional jobs which is approximately 179 percent greater than the County job growth estimate and 5,017 additional jobs which is 1,121 percent greater than the SCAG job growth estimate for the Specific Plan area. In comparison to the SCAG RTP/SCS job growth projections for County of Los Angeles as a whole, the proposed Specific Plan's incremental job growth is approximately 1.5 percent (5,632 jobs/387,200 units) of the County's incremental job growth over 20 years.

As shown above, the population, housing, and employment projections under the proposed Willowbrook TOD Specific Plan are greater than the projections identified for the Specific Plan area within the County General Plan and the SCAG RTP/SCS. This increase in population, housing and employment projections is considered substantial. However, the determination of whether the proposed growth represents a significant impact is whether the project would induce additional growth that would result in significant impacts to the environment.

The determination of whether the proposed project would induce growth in the project vicinity or within the County is based on whether the increase in population and housing in the Specific Plan area would increase the need for additional commercial or public services beyond the existing commercial or public services and the commercial services proposed as part of the project. In addition, a determination of inducement of growth is whether the increase in job growth within the Specific Plan would increase the need for additional housing beyond the existing housing and the housing proposed as part of the project.

As discussed above, the proposed project would exceed the County's population and housing projection for the Specific Plan area by 1,391 persons and 473 residential units. This exceedance of population and housing projection over 20 years within the region is considered nominal because the growth within the Specific Plan would represent 0.5 percent of the County's incremental population growth and 0.6 percent of the County's incremental residential growth. Therefore, the proposed Specific Plan would not induce additional population and housing growth that would result in significant impacts to the environment.

Also discussed above is the project's projected increase in job growth over 20 years. The project would exceed the County's 2035 job growth projection for the Specific Plan area by 3,611 jobs.

The Specific Plan's projected jobs are anticipated to include approximately 63 percent of professional office jobs, 21 percent of retail and other local services, 8 percent in industrial, and 6 percent in health and education jobs (Hoffmann 2015). Because a majority of the jobs created within the Specific Plan area would be skilled or managerial, a majority of these jobs are expected to be filled by persons outside of the Specific Plan area. The jobs are anticipated to be filled by people within the County due to the transit-oriented development nature of the proposed Specific Plan, its accessibility to the Willowbrook/Rosa Parks Station and multiple freeways, and the larger available labor force within the County. In addition, the increase in jobs within the Specific Plan represents 0.7 percent of the projected jobs within the County for 2035. Furthermore, based on an average County of Los Angeles unemployment rate of 8.2 percent over the past 25 years, it is reasonable to assume that there will be available people living within the County and region to fill the increase in jobs created in the Specific Plan area without a substantial number of people requiring to migrate into the County and region and require new housing in addition to the available housing either within the Specific Plan area, the County or region. Therefore, the proposed Specific Plan's increase in job growth would not induce additional growth that would result in significant impacts to the environment.

Construction of projects that would occur within the Specific Plan area would include need for construction labor during short time periods. Due to the employment patterns of construction workers in southern California, and the market for construction labor, construction workers are not likely, to any significant degree, to relocate their households as a consequence of the job opportunities presented by the project. The construction industry differs from most other industry sectors in several important ways that are relevant to potential impacts on housing:

- There is no regular place of work. Construction workers commute to job sites that change many times in the course of a year. These often lengthy daily commutes are made possible by the off-peak starting and ending times of the typical construction work day.
- Many construction workers are highly specialized (e.g., crane operators, steel workers, masons), and move from job site to job site as dictated by the demand for their skills.
- The work requirements of most construction projects are also highly specialized and workers are employed on a job site only as long as their skills are needed to complete a particular phase of the construction process.

Therefore, construction activities associated with the project would not result in an inducement of population, housing and job growth that would result in significant impacts to the environment.

As discussed above, both operational and construction activities associated with the implementation with the Specific Plan would not induce population, housing and job growth that would result in impacts to the environment.

Cumulative

The geographic context for an analysis of cumulative impacts would be Los Angeles County, which represents the planning area that includes the Specific Plan area and the overall population, housing and job projections for the County as a whole.

Past and present development projects have resulted in the population, housing inventory and non-residential growth that creates jobs that currently exist in the County. These existing developments are within SCAG's population, housing and job projections for the County. SCAG's projections include incremental increases of 1,106,612 people, 332,282 housing units and 387,200 jobs within Los Angeles County between 2015 and 3035. As development occurs within the County, SCAG works with the counties and cities to re-evaluate projected growth to ensure there is a balance in geographical areas so that overall projections are not exceeded. Therefore, the implementation of the proposed Specific Plan along with future growth projected by SCAG would not induce growth that would result in significant impacts to the environment.

Because the implementation of the proposed Specific Plan would not induce population, housing and job growth that would result in significant impacts to the environment, the project's incremental contribution to environmental impacts associated with projected growth would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

3.10.6 References

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3.11 Public Services and Recreation

Introduction

This section analyzes the proposed Specific Plan's potential impacts to fire protection, police services, public schools, parks, libraries, other public facilities, and recreational facilities at buildout. This section is based on comparisons of existing and anticipated levels of service with buildout of the proposed Specific Plan. Information within this section has been obtained from each of the respective service providers.

3.11.1 Environmental Setting

Fire Protection

The Los Angeles County Fire Department (LACFD) provides fire protection and emergency medical services throughout the unincorporated County areas, including Willowbrook. One fire station is located within the Specific Plan area; Station No. 41 is located at 1815 E. 120th Street. Station No. 41 is staffed with a 4-person assessment engine, which is an engine company with paramedic capabilities, and a 2-person paramedic squad. Station 41 is staffed with 1 captain, 1 firefighter specialist, 3 fire fighter/paramedics, and 1 fire fighter.

In 2014, Station 41 responded to 4,920 emergency incidents, of which 110 were fires, 4,044 were Emergency Medical Services, and 766 were miscellaneous calls. In 2014, the Station had an average emergency response time of 4:46 minutes, which is within the General Plan Standard of 5 minutes or less (LACFD, 2015).

The closest LACFD Fire Station outside of the Specific Plan area is Station Number 147, located at 3161 East Imperial Highway in Lynwood, 1 mile from the northeast boundary of the Specific Plan area. The response time to the project area from Fire Station No. 147 is approximately 7 minutes. Fire Station No. 147 contains a four-person quint, which provides a pump, water tank, fire hose, aerial device, and ground ladders.

In addition, there are six other fire stations within 3.1 miles from the Specific Plan boundary, as listed below

- Station 65: 1801 E. Century Boulevard: 1.2 miles from the northern boundary of the Specific Plan area
- Station 64: 10811 S Main Street: 1.7 miles from the northern boundary of the Specific Plan area
- Station 16: 8010 S. Compton Avenue: 2.5 miles from the northern boundary of the Specific Plan area
- Station 148: 4264 Martin Luther King Jr. Boulevard: 2.2 miles from the eastern boundary of the Specific Plan area
- Station 14: 1401 W. 108th Street: 3.1 miles from the western boundary of the Specific Plan area

- Station 95: 137 W. Redondo Beach Blvd: 2.7 miles from the southern boundary of the Specific Plan area

Sheriff Protection Services

The Los Angeles County Sheriff's Department provides sheriff protection services and operates 23 stations throughout LA County. The station that serves the Specific Plan area is the Century Station, which is located at 11703 S. Alameda Street, Lynwood, CA 90262 (Sheriff, 2016a). The station is located adjacent and east of the Specific Plan area, and serves: Lynwood, the unincorporated areas of Florence/Firestone Walnut Park, Athens Park, Rosewood, and Willowbrook; and is staffed with 311 employees. Currently, Century Station has 91.7 patrol personnel dedicated to the 119,933 residents that live in the unincorporated area that is served by the station (Sheriff, 2016b), which equates to approximately 0.76 officers per 1,000 population. As described in the County's General Plan EIR, an officer-to-population ratio of one officer to every 1,000 residents provides the desired level of service for its service area (County of Los Angeles 2015).

However, the Sheriff's Department has an established an optimal service response time of 10 minutes or less for emergency response incidents (a crime that is presently occurring and is a life or death situation), 20 minutes or less for priority response incidents (a crime or incident that is currently occurring but which is not a life or death situation), and 60 minutes or less for routine response incidents (a crime that has already occurred and is not a life or death situation) (County of Los Angeles 2015).

The average response times in 2015 for service to the Century Station were 4.1 minutes for emergency calls; 8.3 minutes for priority calls; and 34.8 minutes for routine calls for service (Sheriff, 2016a). Thus, the existing services provided by the Sheriff's Century Station are well within the established response time goals.

Schools

The Specific Plan area is located within the Compton Unified School District (CUSD), and the following schools serve students residing in the Specific Plan area:

Lincoln-Drew Elementary (K-6) is located within the Specific Plan area at 1667 E. 118th Street. The school site is approximately 8.32 acres and the school buildings total 42,200 square feet, including: 45 classrooms, a cafeteria, a library, a computer lab, a science lab, one staff lounge, and two play areas.

Carver Elementary School (K-6) is located at 1425 E. 120th Street, west of the Specific Plan area. The school site is 5.33 acres and has buildings totaling 30,600 square feet, which includes 26 classrooms (4 of them are portables), a library, two computer labs, one staff lounge, one playground, a parent center, a professional development center, tennis court, and the main office.

McNair Elementary School (K-6) is located at 1450 W. El Segundo Avenue, southwest of the Specific Plan area. The school site is approximately 11.23 acres and the school buildings total 50,500 square feet, which includes: 23 classrooms (10 of them portables), a multi-

purpose/resource room, a cafeteria, a library, one computer lab, a parent center, and two playgrounds.

Bunche Middle School (7-8) is located at 12338 Mona Boulevard, which is on the boundary of the southeastern portion of the Specific Plan area. The school site is approximately 21.68 acres and the school buildings total 81,600 square feet, which includes: 36 classrooms, a library, two computer labs, a staff lunch room, a cafeteria, two recreation rooms, and two locker rooms.

Willowbrook Middle School (7-8) is located at 2601 N. Wilmington Avenue, which is south of the Specific Plan area. The school site is approximately 12.34 acres and the school buildings total 82,100 square feet, which includes: 41 classrooms (one of them a portable), a library, a staff lounge, a cafeteria, a parent center, one athletic field, and two locker rooms.

Centennial High School is located at 2606 N Central Avenue, which is south of the Specific Plan area. The school site is approximately 32.39 acres and the school buildings total 165,100 square feet, which includes: 74 classrooms (13 of them portables), one library, three computer labs, one staff lounge, a professional development room and three athletic fields.

Cesar Chavez High School is located at 12501 Wilmington Avenue, which is south of the Specific Plan area. The school site is approximately 21 acres and the school buildings total 43,800 square feet that includes: 21 classrooms, four computer labs, a multi-media room, a staff lounge, outdoor physical education areas, and a cafeteria.

As described in the Compton Unified School District's Facilities Master Plan, over the past 15 years the school district had a peak enrollment of 32,550 students in the 2002/2003 school year, and has declined by 8,705 students to the 2014/2015 school year, which equals a 26.74 percent decrease in enrollment and an average enrollment decline of 670 students per year (CUSD 2015). In addition, the school district anticipates the student enrollment to continue to decline from 23,845 students in school year 2014/2015 to 21,334 students by school year 2021/2022. This amounts to a projected decrease of 2,511 students, or 10.53 percent over that time (CUSD 2015). **Table 3.11-1** lists the schools that may serve students from the Specific Plan area, along with their current and anticipated future enrollment.

TABLE 3.11-1
CURRENT AND PROJECTED ENROLLMENT OF THE COMPTON USD SCHOOLS SERVING THE SPECIFIC PLAN AREA

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Carver Elementary	399	447	480	473	465	456	449	445
Lincoln Elementary	315	310	303	298	291	287	281	280
Martin L King Elementary	589	580	569	556	546	535	528	525
McNair Elementary	528	518	505	497	488	473	471	468
Bunche Middle	518	431	404	403	399	394	386	377
Vanguard Middle	302	283	280	280	277	274	269	262
Willowbrook Middle	344	305	261	260	258	254	250	244
Centennial High	961	934	905	888	871	874	865	850
Cesar Chavez High	418	424	398	386	373	377	368	366
Total	**4,374**	**4,232**	**4,105**	**4,041**	**3,968**	**3,924**	**3,867**	**3,817**

SOURCE: Compton Unified School District, 2015.

As shown below in **Table 3.11-2**, the number of elementary students is anticipated to decrease by 113, middle school students by 281, and high school students by 163, which totals 575 students within the schools serving the Specific Plan area.

TABLE 3.11-2
CHANGE IN CUSD ENROLLMENT FOR SCHOOLS SERVING THE SPECIFIC PLAN AREA BETWEEN 2014/15 AND 2021/22

	Enrollment		
School	**2014/15**	**2021/22**	**Change**
Carver Elementary	399	445	46
Lincoln Elementary	315	280	-35
Martin L King Elementary	589	525	-64
McNair Elementary	528	468	-60
Subtotal Elementary School	1,831	1,718	-113
Bunche Middle	518	377	-141
Vanguard Middle	302	262	-58
Willowbrook Middle	344	244	-100
Subtotal Middle School	1,164	883	-281
Centennial High	961	850	-111
Cesar Chavez High	418	366	-52
Subtotal High School	1,379	1,216	-163
Total for Schools in Specific Plan Area	**4,374**	**3,817**	**-557**

SOURCE: Compton Unified School District, 2015

In addition to the schools that are in the CUSD, there are alternative and private schools within and in the vicinity of the Specific Plan area. These include the CDI Head Start Preschool, Nickerson Gardens Sage Center Day Car and the Watts Christian School for kindergarten and first grade. There are also two additional public schools within the Specific Plan area. The King-Drew Magnet High School is a Los Angeles Unified School District (LAUSD) alternative high school that serves students in the LAUSD boundary which is located west and north of the Specific Plan area. The Barack Obama Charter School serves students Kindergarten through sixth grades and is open to students within the CUSD as an alternative school.

Parks and Recreation

The Willowbrook community is a fully developed and urbanized area that lacks natural open space. Open space within the community consists of developed parks that provide passive and active recreation and open space areas.

There are three parks located within the Specific Plan, and four additional parks that are located within the Willowbrook community. **Table 3.11-3** provides an overview of these parks. As shown, there are currently 149.06 acres of parkland within the Willowbrook community.

TABLE 3.11-3
PARKS WITHIN THE WILLOWBROOK COMMUNITY

Name and Address	Park Facilities	Location Relative to Specific Plan	Facility Acreage
Mona Park 2291 E 121st Street	baseball/softball field ,children's play area, community room, gymnasium, kitchen, basketball court, restrooms, picnic shelter, swimming pool	Within Specific Plan area	7.8
MLK Fitness Center 11833 South Wilmington	Fitness stations, picnic tables, walking path	Within Specific Plan area	0.13
Faith and Hope Park 2247 E 119th Street	walking path, open lawn, trees and native plant landscaping	Within Specific Plan area	0.46
George Washington Carver Park 1400 E. 118th Street	arts and crafts room, lighted baseball/ softball fields, multi-purpose field, multi-purpose room, picnic areas with barbecues, swimming pool,	0.20 mile east of Specific Plan area	7.07
Magic Johnson Park 905 E El Segundo Boulevard	children's play areas, picnic areas with barbecues, restrooms, soccer fields, two fishing lakes, walking path	0.60 mile east of Specific Plan area	103.79
Enterprise Park 13055 Clovis Avenue	children's play area, community room, gymnasium, lighted baseball/ softball fields, multi-purpose field, picnic areas with barbecues, swimming pool	0.75 mile southeast of Specific Plan area	10.02
Athens Park 12603 S. Broadway Avenue	community building, computer lab, fitness area, gymnasium, lighted baseball/ softball fields, lighted basketball courts, multi-purpose field, multi-purpose room, picnic areas with barbecues, restrooms, skate park. swimming pool	1.80 mile west of the Specific Plan area	18.7
Total County Facility Acreage			**147.97**

SOURCE: County of Los Angeles Department of Parks and Recreation, 2016.

County of Los Angeles' goal for local parkland is 4.0 acres per 1,000 residents (County of Los Angeles, 2015). As described in Section 3.10, Population and Housing, the Willowbrook CDP had an estimated population of 20,685 in 2015. Based on the parkland listed in Table 3.11.3, there are approximately 7.2 acres of County parkland-per-1,000 population in the Willowbrook CDP.

Libraries

The County of Los Angeles Library provides public library services to the Willowbrook community. The Willowbrook Library is a 2,200-square-foot building that was constructed in 1987. It is located at 11838 South Wilmington Avenue, near the center of the Specific Plan area. The Willowbrook Library has: 4 public computers, 2 early literacy computers, and free wireless internet. In addition to this facility, there are three additional County libraries within the vicinity of the Specific Plan area, which include:

- Compton Library located at 240 W. Compton Boulevard. This library building 20,542 square feet and constructed in 1974. The building includes a meeting room with a capacity of 95

persons, and has: 14 public computers, 4 children's computers, 4 early literacy computers, 1 literacy computer, and free wireless internet.

- AC Bilbrew Library located at 12603 S. Broadway. This library building 21,843 square feet was constructed in 1977 and is currently being renovated. The building includes a meeting room with a capacity of 113 persons, and has: 11 public computers, 4 children's computers, 3 early literacy computers, 3 teen computers, and free wireless internet.
- Lynwood Library located at 11320 Bullis Road. This library building 11,722 square feet was constructed in 1977 and refurbished in 2004. The building includes a meeting room with a capacity of 106 persons. Lynwood Library has: 15 public computers, 3 children's computers, 2 early literacy computers, and free wireless internet.

Due to the increasing resources being available online, the availability of high speed internet services and a decrease in the need to physically visit a library, the County's library service needs are changing. The County provides thousands of online reference materials, books, magazines, music, videos, online learning resources, and a mobile library app. Thus, many of the library's resources can be obtained offsite (e.g. from home, work, or mobile internet device).

Other Public Facilities

In addition to Sheriff, fire, school and library facilities, there are typical urban public service facilities such as the MLK Medical Center within the Specific Plan, and four U.S Post Offices near the Specific Plan, including: one located at 2241 East El Segundo Boulevard, approximately 0.42 miles south of the Specific Plan; one located at 12003 Avalon Boulevard, 1.12 miles west of the Specific Plan boundary; one located at 11200 Long Beach Boulevard, approximately 1.13 miles east of the Specific Plan boundary; and one located at 10301 Compton Avenue, approximately 0.90 miles north of the Specific Plan boundary.

3.11.2 Regulatory Setting

State

Senate Bill 50

Senate Bill (SB) 50, also known as the Leroy F. Greene School Facilities Act of 1998 (School Facilities Program), was originally established to streamline the state's school construction funding process (State of California, 1998). The program provides grants to school districts to match local contributions for new construction and modernization projects, based on "unhoused pupils," from revenues obtained through the sale of State General Obligation Bonds when approved by voters in statewide elections. It provides funding for higher education facilities, K-12 facilities, modernization of older schools, additional funding for districts in hardship situations, and funding for class size reduction. The School Facilities Program also establishes the mandated CEQA mitigation measure for impacts related to school capacity and prohibits the denial of a land use application on the basis of school capacity. The CEQA mandated mitigation measure is the collection of fees to be used by schools affected by the proposed development. The base fee that can be levied for all new residential development is $2.14 per dwelling unit and $0.34 per square foot for new commercial and industrial development. Additional fees can be

levied if the applicable school district meets certain criteria, such as approval of a five-year school facilities plan.

Quimby Act (Government Code 66477)

State Subdivision Map, Section 66477 (Quimby Act) allows the legislative body of a city or county, by ordinance, to require the dedication of land, the payment of in-lieu fees, or a combination of both, for park and recreational purposes as a condition of approval for a final tract map or parcel map. The Quimby Act requires that developers set aside land, donate conservation easements, or pay fees for park improvements. The goal of the Quimby Act is to require developers to help mitigate the impacts of development.

Local

Los Angeles General Plan Public Services and Facilities Element

The following General Plan policies for public services are relevant to the Specific Plan project:

Sufficient Infrastructure

Policy 1.1: Discourage development in areas without adequate public services and facilities.

Policy 1.2: Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.

Policy 1.3: Ensure coordinated service provision through collaboration between County departments and service providers.

Policy 1.5: Focus infrastructure investment, maintenance and expansion efforts where the General Plan encourages growth, such as TODs.

Educational Facilities

Policy 7.2: Proactively work with school facilities and education providers to coordinate land use and facilities planning.

Libraries

Policy 8.1: Ensure a desired level of library service through coordinated land use and facilities planning.

Policy 8.2: Support library mitigation fees that adequately address the impacts of new development.

Los Angeles County General Plan Safety Element

The following General Plan policies from the safety element are relevant to the Specific Plan project:

Policy 4.2: Support County emergency providers in reaching their response time goals.

Policy 4.5: Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.

Los Angeles County General Plan Parks and Recreation Element

Policy 3.1: Acquire and develop local and regional parkland to meet the following County goals: 4 acres of local parkland per 1,000 residents in the unincorporated areas and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County.

Policy 3.2: For projects that require zone change approvals, general plan amendments, specific plans, or development agreements, work with developers to provide for local and regional parkland above and beyond their Quimby obligations.

Policy 4.1: Create multi-use trails to accommodate all users.

Los Angeles County Fire Strategic Plan

In June 2011, the LA County Board of Supervisors approved the update to goals and actions to achieve the goals of the fire services within LA County. The overall strategic priority related to the proposed Specific Plan is to maximize the effectiveness of process, structure, and operations to support timely delivery of customer-oriented and efficient public services.

Los Angeles County Quimby Park Requirements

County Code Section 21.24.340 (Residential Subdivisions, Local Park Space Obligation, Formula) contains the methodology used to determine the amount of parkland required to be dedicated by the subdivider as a part of the subdivision map approval process. In accordance with Section 21.28.140, the developer may also be allowed to pay a fee in-lieu of the provision of parkland. The County Code is applicable to new development requiring a subdivision map.

Willowbrook Community Parks and Recreation Plan

The Department of Parks and Recreation has completed the Community Parks and Recreation Plans to envision futures for the following six unincorporated communities in Los Angeles County: East Los Angeles, East Rancho Dominguez, Lennox, Walnut Park, West Athens-Westmont, and Willowbrook. As part of the public outreach process for the Willowbrook Community Parks and Recreation Plan, residents expressed the need for a wide variety of recreational amenities, including the following: exercise facilities, including new walking and running paths; play space for children; spaces for older youth, including sports facilities; gathering places for community and family events; an arts facility; a performance space; a splash pad; and an equestrian center, including stables, riding rings, equestrian trails; and green infrastructure.

Los Angeles Countywide Parks and Recreation Needs Assessment

Adopted by the Board of Supervisors on July 5, 2016, the Parks Needs Assessment was a historic and significant undertaking to engage all communities within Los Angeles County in a

collaborative process to gather data and input for future decision-making on parks and recreation. The primary goal of the Parks Needs Assessment was to quantify the magnitude of need for parks and recreational facilities, and determine the potential costs of meeting that need. This goal has been accomplished, as evidenced by the final report which uses a transparent, best-practices approach to evaluate park and recreation needs, and is the product of an engagement process that involved the public, cities, unincorporated communities, community-based organizations, and other stakeholders. Specifically, the Parks Needs Assessment:

- Uses a set of metrics to measure and document park needs for each study area;
- Establishes a framework to determine the overall level of park need for each study area;
- Offers a list of priority park projects for each study area;
- Details estimated costs for the priority park projects by study area;
- Builds a constituency of support and understanding of the park and recreational needs and opportunities; and
- Informs future decision-making regarding planning and funding for parks and recreation.

The project site is located within the unincorporated Willowbrook Community, which contains six County parks maintained and operated by the Department of Parks and Recreation.

Los Angeles County Park Safe Neighborhood Parks Proposition of 1992, 1996, Proposition A

The Safe, Clean Neighborhood Parks & Beaches Measure (Measure A) was approved by voters in 2016. This measure will replace expiring, voter-approved funding with new funding for parks, beaches, recreation and open spaces; and generate approximately $92.7 million per year. Funding from the measure will be used to upgrade playground equipment, parks, recreation centers and senior centers; provide children in our community safe places to play and opportunities to participate in after school programs in parks and recreation centers; allow for implementation of drought-tolerant plants and use of recycled water and rainwater to reduce the amount of water wasted; and help protect and preserve undeveloped natural areas for future generations.

3.11.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist. The project could have a significant environmental impact on public services if it would:

- 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, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- Fire protection (See Impact 3.11-1);
- Sheriff Protection (See Impact 3.11-2);
- Schools (See Impact 3.11-3);
- Parks (See Impact 3.11-4);
- Libraries (See Impact 3.11-5); or
- Other public facilities (See Impact 3.11-6).

In accordance with Appendix G of the *CEQA Guidelines* and the County of Los Angeles Environmental Checklist, the project would have a significant environmental impact on recreation if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that a substantial physical deterioration of the facility would occur or be accelerated (See Impact 3.11-7);
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (See Impact 3.11-8); or
- Interfere with regional open space connectivity (See Section 5.1.13)

3.11.4 Methodology

Fire Facilities

Impacts on public services are considered significant if an increase in population or development levels would result in inadequate staffing levels, response times, and/or increased demand for services that would require the construction or expansion of new or altered facilities that might have an adverse physical effect on the environment.

For fire services, a significant impact could occur if the project generated the need for additional personnel or equipment that could not be accommodated within the existing stations and would require the construction of a new station or an expansion of an existing station that might have an adverse physical effect on the environment.

Sheriff Facilities

For sheriff services, a significant impact would occur if the project generated the need for additional personnel or equipment that could not be accommodated within the existing stations and would require the construction of a new station or an expansion of an existing station that might have an adverse physical effect on the environment.

School Facilities

The analysis of school facilities identifies the increased student generation due to increased residential units that would be developed with buildout of the proposed Specific Plan, and considers the context of existing schools, current capacity, and any pending or planned

improvements to school facilities. Pursuant to SB 50 (described above), impacts related to schools are considered to be less than significant with payment of development fees to the Compton Unified School District, which were established to provide for school facilities construction, improvements, and expansion.

Library Facilities

The analysis of library facilities is considered in the context of the capacity and use of existing libraries. As described above, library service needs are changing with increasing resources being available online and the availability of high speed internet services. As a result, library service standards (e.g., a certain number of volumes or square feet of building space per thousand residents) are no longer appropriate when assessing the needs of a municipal library. A more appropriate standard is related to the physical usage of the library facility in relation to its physical capacity. Thus, a significant impact would occur if the project generated the need for additional library services that could not be accommodated within existing facilities and would require the construction of a new library or the expansion of an existing library, which could have an adverse physical effect on the environment.

In general, employment generating land uses do not typically generate a demand for library services. As such, the analysis of impacts on library services is based on the number of residents generated by the Specific Plan and their anticipated usage of library facilities.

Park and Recreation Facilities

The analysis of park and recreation facilities considers the increase in use that would be generated by the implementation of the Specific Plan in relation to the ability of existing park and recreation facilities to meet that demand. The analysis considers whether an increase in use would result in the need for new or expanded park and recreational facilities, or an increase in use would result in substantial physical deterioration of existing recreational facilities. The County's goal for the provision of parkland is 4.0 acres of local parkland per 1,000 residents and 6.0 acres of regional parkland per 1,000 residents(County of Los Angeles, 2015). Based on these goals, the impact of the Specific Plan on park and recreation facilities is evaluated.

Other Facilities

Impacts on other public facilities are considered significant if an increase in population or development levels would result in inadequate staffing levels, response times, and/or increased demand for services that would require the construction of new or expansion of existing facilities that might have an adverse physical effect on the environment.

3.11.5 Impact Analysis

Fire Protection Services

Impact 3.11-1: The proposed project would not result in substantial adverse physical impacts associated with the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts.

Project-Specific

Buildout of the Specific Plan would result in 1,952 additional residential units that would house approximately 6,383 persons, and approximately 2,666,035 square feet of non-residential uses that would generate approximately 5,632 jobs. This increase in development and persons within the Specific Plan area would result for additional calls for fire department services.

As described above, the Specific Plan areas includes one County Fire Station (Station 41), and another County Fire Station is located within one mile of the of the Specific Plan area (Station 147), and 6 more County Fire Stations are located within 4.5 miles of the Specific Plan. The proposed Specific Plan would result in infill development, increased residents and employees; and therefore, an increased number of calls for fire services that would increase needs for fire department staffing and equipment. This increase would occur gradually over the incremental implementation of the proposed 20-year plan, and the fire department would add staff and equipment to the existing stations on an as-needed basis in order to accommodate these increased demands. Due to the large number of existing County fire stations within the Willowbrook area, and the infill nature of the development that would occur by the Specific Plan that would locate all new development within the already served area, the increase in fire department staffing and equipment required to serve the buildout of the proposed Specific Plan would be accommodated by the existing fire stations, and new or physically altered fire protection facilities would not be required to serve the buildout of the Specific Plan. Thus, physical impacts to the environment related to the development of or expansion of fire department facilities would not occur.

Individually proposed development projects within the Specific Plan area would require incorporation of fire detection and suppression systems (fire alarms and sprinklers), emergency access (fire lanes), and properly placed fire hydrants as required by the Los Angeles County Fire Code (Chapter 12.14 of the County Municipal Code). These project design elements are reviewed and approved by the County Public Works Division and Fire Department prior to the issuance of development permits for each development project in the Specific Plan. These existing County development permitting procedures further minimize potential impacts associated with provision of fire protection services. Therefore, implementation of the Specific Plan would not require provision of new or physically altered fire protection facilities construction of which could cause significant environmental impacts. Hence, the Specific Plan would not result in impacts related to fire protection services.

Cumulative

The geographic context for cumulative fire protection and emergency services is the typical service areas of the primary fire stations that are serving the Specific Plan area. Numerous

cumulative development projects are anticipated to occur within the Specific Plan vicinity throughout the 20-year implementation period of the proposed Specific Plan, which would generate demand for additional fire protection and emergency medical services. Like the proposed Specific Plan, the related projects would be reviewed County Fire Department staff prior to permit approval and would be required to implement fire protection design features per the California Building Code and Los Angeles County Fire Code (Chapter 12.14 of the County Municipal Code), which would reduce potential fire hazards. Because the cumulative area is urban and developed and contains one fully staffed fire station and seven additional stations within 4.5 miles of the Specific Plan, and future cumulative development projects would consist of redevelopment or infill development of new uses that would be required to meet current fire codes, cumulative development would not result in physical environmental impacts related to the need to provide additional facilities for fire protection services.

Because the proposed project and cumulative projects would not result in physical environmental impacts related to fire protection services, the proposed project would not have a cumulatively considerable impact.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

Police Protection Services

Impact 3.11-2: The proposed project would not result in substantial adverse physical impacts associated with the need for new or physically altered sheriff facilities, the construction of which could cause significant environmental impacts.

Project-Specific

Buildout of the Specific Plan would result in 1,952 additional residential units that would house approximately 5,739 persons, and approximately 2,666,035 square feet of non-residential uses that would generate approximately 5,632 jobs. This increase in development and persons within the Specific Plan area would result in additional calls for sheriff services.

As described above, Los Angeles County has a staffing goal of one sworn officer-per-thousand population. Based on this staffing goal, an addition of approximately 5,739 new residents would require approximately six sworn officers by buildout of the Specific Plan (a 20-year timeline).

The demand for sheriff services and facility/equipment maintenance needs would increase gradually over the incremental implementation of the Specific Plan, and the Sheriff's Department would add staff, equipment, and maintenance services on an as-needed basis in order to accommodate these increased demands. As described by the County's General Plan EIR and confirmed by the Sheriff's Department, the existing Century Station facility would be able to accommodate buildout of the General Plan (County of Los Angeles, 2015 and Sheriff, 2016). In addition, as described in Section 3.10, Population and Housing, the growth anticipated by the buildout of the proposed Specific Plan is within that which was identified for the County's General Plan. Hence, the Sheriff Department facilities serving the Specific Plan area would be able to accommodate the proposed buildout.

Overall, because the Sheriff's Century Station is located adjacent and east of the Specific Plan boundary and can directly serve the Plan area, and would be able to accommodate six additional sworn officers needed to meet the anticipated demand from buildout of the proposed Specific Plan (County of Los Angeles, 2015 and Sheriff, 2016), implementation of the Specific Plan would not require new or physically altered Sheriff Department facilities, construction of which could cause significant environmental impacts. Hence, the Specific Plan would not result in physical environmental impacts related to the development or expansion of sheriff department facilities.

Cumulative

The geographic context for cumulative police services is the service area of the Sheriff's Century Station, which serves the Specific Plan area. Numerous cumulative development projects are anticipated to occur within the 20-year implementation period of the proposed Specific Plan, which would generate additional calls for sheriff services. As described above, the existing Century Station facilities would be able to accommodate buildout of the General Plan as described in the County General Plan EIR (County of Los Angeles, 2015).

The related projects would be reviewed by County and Sheriff Department staff prior to the developer's receipt of permits to ensure that appropriate security measures are included in each development, which would reduce the cumulative need for sheriff services to a level that could be accommodated by existing facilities. Overall, as described by the County General Plan, projected growth in the County is not anticipated to result in the need for new or expanded sheriff facilities in the portion of the County including the Specific Plan area, and the existing facilities would be able to accommodate buildout of the proposed Specific Plan. Therefore, cumulative development would not result in physical environmental impacts related to sheriff services and cumulative impacts would be less than significant. Because the proposed project and cumulative projects would not result in physical environmental impacts related to sheriff services, the proposed project would not have a cumulatively considerable impact.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

Schools

Impact 3.11-3: The proposed project would not result in substantial adverse physical impacts associated with the need for new or expanded school facilities, the construction of which could cause significant environmental impacts.

Project-Specific

The County General Plan EIR identifies a student generation rate of 0.7 student per household to determine how many students would be generated by new residential dwelling units. At buildout the proposed Specific Plan is anticipated that approximately 1,952 additional residential units will exist within the Plan area. Assuming maximum buildout and full occupancy of the proposed residential units, approximately 1,366 additional students would be generated.

As described above, the Compton USD has experienced a 26.74 percent decrease in enrollment over the last 15 years, and the enrollment of the schools serving the Specific Plan area is anticipated to continue to decrease by an additional 557 students between the 2014/15 and 2021/22 school years (there are no additional Compton USD projections beyond 2021/22). A decrease of 557 students represents a 12.7 percent decrease in enrollment for the schools serving the Specific Plan area.

The difference in the anticipated decrease in students by 2022 projected by the Compton USD and the increase in students that would result from buildout of the Specific Plan though 2035 is 809 students. Hence, the schools serving the Specific Plan area would need to accommodate 809 more students than are currently accommodated. Due to the District's expected decline of 2,511 students by 2022 throughout the District, the additional 809 students generated in the Specific Plan area could be accommodated by schools within the District (CUSD, 2015).

As described previously, many of the schools have portables which accommodate a fluctuation of students as needed, and installation and removal of such structures do not generally result in any environmental effects. Additionally, the Compton USD Facilities Master Plan describes improvements and maintenance needs to the existing facilities described above, to continue to provide educational services. Thus, it is anticipated that the existing schools serving the Specific

Plan area would continue to provide services, and the CUSD would be able to accommodate the additional students from buildout of the Specific Plan.

As described above, SB 50 prohibits the denial of a land use application because of school capacity and specifically establishes a mandated fee for mitigation of impacts under CEQA. Government Code Section 65995 authorizes school districts to collect fees on future development at a minimum of $2.14 per square foot for residential construction and $0.34 for commercial/industrial construction (Level I fees). Level I fees are adjusted every two years according to the inflation rate. Higher fees are permitted for school districts that adopt long-range school facilities plans. Class B construction fees are determined by the State Allocation Board. Government Code Section 66001 requires that a reasonable relationship exist between the amount and use of the fees and the development on which the fees are to be charged.

Payment of development impact fees, as required by Government Code Section 65995 and the Compton USD would be required for each development project, which would provide for funding of new facilities and would constitute mitigation of impacts related to the provision of school services. Therefore, impacts related to school facilities from implementation of the proposed Specific Plan would be less than significant.

Cumulative

The geographic context for cumulative school services is the area served by the Compton USD. Numerous cumulative development projects are anticipated to occur throughout the USD service area within the 20-year implementation period of the proposed Specific Plan that are anticipated to result in an increase in population, which will generate additional needs for public school classroom seating capacity in local schools. However, as described previously, the school district's overall enrollment has declined by 26.74 percent in the last 15 years, and a student reduction of 557 students through the 2021/22 school year is anticipated for schools that serve the Specific Plan area. Thus, the increase in student population that would result from implementation of cumulative projects would help to offset declines.

In addition, all new private development is required to pay statutory impact fees in accordance with Government Code Section 65995(b) to the Compton USD to help fund facility improvements and offset any additional increases in education demand at schools. Because these fees are required by law for mitigation of impacts to schools under CEQA, the payment of these fees would provide funding for needed school facilities and would constitute full mitigation of potential impacts to existing school facilities from implementation of the proposed Specific Plan. Given the payment of these fees, the cumulative impact of cumulative development on public schools would be less than significant. Because the proposed project and cumulative projects would result in less than significant impacts on public schools, the proposed project's contribution to cumulative impacts on public schools would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Parks

Impact 3.11-4: The proposed project would not result in substantial adverse physical impacts associated with the need for new or physically altered parks and recreation facilities, the construction of which could cause significant environmental impacts.

Project-Specific

The proposed Specific Plan would result in an increase in population by 5,778 residents (assuming no vacancy) over the 20-year Specific Plan implementation timeline. As described above, there are 147.97 acres of County parkland within the Willowbrook community which based on the 2015 population of 20,685 residents provides 7.15acres of County parkland per 1,000 residents. The increase in population from buildout of the proposed Specific Plan would reduce the park acreage to 5.63 acres of County parkland per 1,000 residents, which is above the County's goal to provide 4.0 acres of local parkland per 1,000 residents (County of Los Angeles, 2015). Therefore, based on the County's planning criteria, buildout of the proposed Specific Plan would not result in the need for new or physically altered parks and recreation facilities, the construction of which could cause significant environmental impacts, and impacts would not occur.

Cumulative

As described above, the Willowbrook CDP area, currently provides 7.15 acres of County parkland per 1,000 population, and the County's planning service goal is to provide 4.0 acres of local parkland per 1,000 residents. Related projects throughout the Willowbrook CDP area would reduce the amount of acreage per population. Assuming the Willowbrook community area grows proportionally with the Metro Area (Outside Community-Based Plan) as provided in the County of Los Angeles General Plan EIR, the Willowbrook community would increase in population by 27.6 percent from the current population of 20,685 to 26,394. With the addition of the proposed Specific Plan, the Willowbrook community would have a buildout population of 32,172. Assuming the Willowbrook community contains the existing 147.97 parkland acres, this parkland

would provide 4.6 acres per 1,000 residents at buildout of the Willowbrook community and the buildout of the proposed Specific Plan. Therefore, cumulative growth would result in less than significant cumulative environmental impacts related to park and recreation facilities. Because the proposed project would not cause environmental impacts to park and recreational facilities, the proposed project would not contribute to cumulative environmental impacts to parks and recreational facilities.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

Library Facilities

Impact 3.11-5: The proposed project would not result in the need for new or physically altered library facilities, the construction of which could result in significant environmental impacts.

Project-Specific

As described above, the Specific Plan area contains one library, and three additional County libraries are located within three miles of the Specific Plan area. In addition, the County's library service needs are changing with the advent of increasing library resources being available online and the availability of high speed internet services. Many of the library's resources can be obtained offsite. Therefore, new residential uses in the Specific Plan area does not immediately equate to an increased need for library resources/services or square footage of library space.

The addition of 6,383 new residents within the Specific Plan area over the 20-year plan is anticipated to increase demand for library services and facilities. However, based on the widespread use of the internet by people of Los Angeles County, it is reasonable to assume that many of the residential units could be equipped with internet access, which provides access to many of the same resources provided by the library and would limit the increased need for library services and resources. Thus, the existing four County library facilities would be able to accommodate the increased demand from the addition of 6,383 residents over the 20-year buildout of the Specific Plan. Buildout of the proposed Specific Plan would not result

in the need for new or physically altered library facilities, the construction of which could cause significant environmental impacts. Therefore, impacts to library services associated with implementation of the proposed Specific Plan would not occur.

Cumulative

The geographic scope for cumulative library services is the portions of the County of Los Angeles that are utilizing the four libraries serving the Specific plan area. As described previously, library usage has been changing with the advent of increasing resources being available online and the availability of high speed internet services. Therefore, new development results in a limited need for library resources/services or square footage of library space. However, cumulative increases in population growth over time could increase the demand for library services.

As described in Section 3.10, Population and Housing, SCAG estimates that the County's population will continue to increase over the next 20 years to the year 2035, which will generate increases in demand for library services. Although library use would be expected to incrementally increase from demand by cumulative developments, there are four existing libraries serving the Specific Plan area that would be able to meet the increased need. Additionally, technology and the information available on the internet is anticipated to increase and would limit the demands on library services.

Overall, cumulative development is not anticipated to result in the need for a new or expanded library, the construction of which could result in significant impacts. Therefore, no impacts from cumulative projects associated with library services would occur. Because the proposed project and cumulative projects would not cause environmental impacts related to new or expanded library services, the proposed project would not contribute to cumulative environmental impacts to library services.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

Other Public Facilities

Impact 3.11-6: The proposed project would not result in the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts.

Project-Specific

As described above there are no other public facilities that are related to implementation of the Specific Plan. The Specific Plan area is served by MLK Medical Center and several post offices, neither of which would need to be physically altered to serve the additional 6,383 new residents within the Specific Plan area over the 20-year plan. As described in Section 2.0, Project Description, Tier I of the MLK Center Campus Redevelopment Project implemented redevelopment of the hospital portion of the project, which has been completed. Hence, the hospital would not require physical expansion to serve the Specific Plan buildout.

Also, as described above, there are four U.S Post Offices within 1.13 miles of the Specific Plan area. These existing post office facilities would be able to accommodate the additional mail volume to the 1,952 residential units that would be developed at buildout. Because the proposed Specific Plan would implement redevelopment and infill development within the urban area that is already served by developed service infrastructure, as directed by the County General Plan's policies, the project would not require development of other public service facilities, the construction of which could cause significant environmental impacts.

Cumulative

The geographic scope for cumulative hospital and post office services is the portions of the County of Los Angeles that are utilizing the hospital and post offices that serve the Specific Plan area. Cumulative development over the next 20 years would increase the population and need for hospital and post office services; however, because the cumulative projects would implement redevelopment and infill development within the urban area, no substantial increase in the demand for hospital and post office services would occur. Therefore, cumulative development would result in less than significant cumulative impacts on other public services such as hospital and post office services. Because the proposed project would not require the development of other public services such as hospital and post office services, the proposed project would not contribute to cumulative impacts on other public services.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

Increase Use of Recreational Facilities

Impact 3.11-7: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that a substantial physical deterioration of the facility would occur or be accelerated.

Project-Specific

As described above, there are 147.97 acres of County parkland within the Willowbrook community which based on the 2015 population of the Willowbrook community of 20,685, provides 7.2 acres of County parkland per 1,000 residents. The increase in population from buildout of the proposed Specific Plan would reduce the park acreage to 5.63 acres of County parkland per 1,000 residents, which is above the County's goal to provide four acres of parkland per 1,000 residents (County of Los Angeles, 2015). Therefore, based on the County's planning criteria, buildout of the proposed Specific Plan would not result in the substantial acceleration of physical deterioration of park and recreation facilities.

Additionally, as described in the County General Plan EIR, enforcement of the General Plan goal of four acres of local parkland for every 1,000 residents as a condition of approval where an appropriate nexus exist would serve to reduce the potential for deterioration of facilities by allowing for new facilities and adequate funding. The Los Angeles County Measure A funding would add a parcel tax of one-and-a-half cent per square foot of developed property. The additional development that would occur by implementation of the Specific Plan would generate additional Measure A funds which will provide funding for parks and recreation projects. Overall, implementation of the proposed Specific Plan would result in less than significant impacts related to physical deterioration of existing park and recreation facilities.

Cumulative

As described above, the Willowbrook community currently provides 7.15 acres of County parkland per 1,000 population, and the County's planning service goal is to provide 4.0 acres of parkland per 1,000 residents. Cumulative development throughout the Willowbrook community would reduce the amount of acreage per 1,000 residents to 4.6 (see above under Parks) and increase the use of existing facilities. However, with the implementation of Quimby Park Requirements, Measure A and General Plan Policy P/R 3.2, the future buildout of the Willowbrook community would result in less than significant cumulative impacts resulting from physical deterioration of existing park and recreation facilities. Because the proposed project would result in less than significant impacts related to physical deterioration of existing parks and recreational facilities, the proposed project's contribution to cumulative impacts would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Recreational Facilities Physical Effect on the Environment

Impact 3.11-8: The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Project-Specific

The proposed Specific Plan does not include development of recreational facilities. In addition, as described above, the increase in population from buildout of the proposed Specific Plan would result in 5.63 acres of County parkland per 1,000 residents, which is above the County's goal to provide 4.0 acres of local parkland per 1,000 residents (County of Los Angeles, 2015). Therefore, because the buildout of the proposed Specific Plan would be adequately accommodated by existing park and recreational facilities within the Willowbrook community, the project would not require the construction of new or physically altered recreation facilities, and impacts would not occur.

Cumulative

The geographic context of cumulative impacts on recreational facilities is the Willowbrook community. Cumulative projects within the Willowbrook community may include recreation facilities, the construction of which would be evaluated by the County prior to permit or development approval. The potential development of recreational facilities associated with cumulative projects could result in significant impacts. Because no parkland or recreational facilities are proposed as part of Specific Plan, there would be no potential for the project to contribute to a cumulatively significant adverse physical effect on the environment.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

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3.12 Transportation and Traffic

Introduction

The analysis within this section was prepared in accordance with the County of Los Angeles Traffic Study Guidelines, and is consistent with traffic impact assessment guidelines set forth in the *2004 Congestion Management Program for Los Angeles County* (CMP). This EIR section was prepared with information and analysis findings contained in the *Willowbrook TOD Specific Plan EIR Traffic Study*, May 4, 2017, which was prepared by The Mobility Group and included as **Appendix F**.

This traffic analysis evaluates potential Specific Plan-related impacts at 66 study intersections, ten freeway segments, and ten freeway off-ramps that provide local and regional access to the traffic study area and define the extent of the boundaries for this traffic impact analysis. LOS investigations at these key locations were used to evaluate potential traffic-related impacts associated with build out of the proposed Specific Plan. This section also provides mitigation measures, where feasible, that would reduce potential impacts from build out of the proposed Specific Plan.

3.12.1 Environmental Setting

Roadway Network

Regional

The unincorporated community of Willowbrook is located approximately 10 miles south of downtown Los Angeles and is accessible by several regional freeways. Interstate 110 (I-110) defines the Willowbrook community's western boundary. I-110, known as the Harbor Freeway, runs north-south from San Pedro (near the Ports of Los Angeles and Long Beach) to downtown Los Angeles. In addition, Interstate 105 (I-105) defines the northern boundary of the Willowbrook community. I-105 runs east–west from the Los Angeles International Airport in the City of Los Angeles to the City of Norwalk where it connects to Interstate 605 (I-605). The Willowbrook community can also be accessed from Interstate 710 (I-710), which is located approximately 2.5 miles east of the eastern Specific Plan boundary and State Route (SR-91), which is located approximately 3.25 miles south of the southern Specific Plan boundary.

Local

The Specific Plan area and vicinity are served by a comprehensive grid system of surface streets, with two access points to the I-105 freeway (Wilmington Avenue and Central Avenue) and four access points to the I-110 freeway (Century Boulevard, Imperial Highway, El Segundo Boulevard and Rosecrans Avenue). The key surface streets serving the Specific Plan area and vicinity are described below (street classification references are from the Los Angeles County General Plan).

East-West Roadways

103th Street is a two-way street extending between Alameda Street and South 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 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 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 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 108^{th} Street.

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 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, 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 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 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 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 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 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 center two-way left turn lane. On-street parking is generally allowed on both sides of the 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 center two-way 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.

North-South Roadways

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 center two-way left turn lane.

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 (i.e., frontage roads) immediately adjacent to it on either side, which each allow travel in both directions with parking permitted on both sides.

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 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 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 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 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 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.

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 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.

State Street/Santa Fe Avenue 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.

Transit Services

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, one GTrans (formerly Gardena Municipal Bus Lines) bus line, two Los Angeles 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. All transit lines are described, including the frequency of service (headways) during the peak periods.

Rail Transit

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 Metro Blue Line runs between Downtown Los Angeles and Downtown Long Beach. It operates between approximately 4:00 am and 1:00 am, and until about 2:00 am on weekend nights. It operates every six to 12 minutes during weekday peak periods and every ten to 15 minutes on weekends. Passengers can transfer to the Metro Green Line at this station.

The Metro Green Line runs between Redondo Beach and Norwalk. It operates between approximately 4:00 am and 12:00 am, and until about 2:00 am on weekend nights. It operates every seven to ten minutes during weekday peak periods and every 15 minutes on weekends. Passengers can transfer to the Metro Blue Line at this station.

Bus Transit

Willowbrook/Rosa Parks Station

The Willowbrook/Rosa Parks 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 ten- to 30-minute headways during weekday peak periods and at about 20- to 60-minute headways on weekends. It operates 24-hours a day.

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 on weekends.

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 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. [MLK] Community Hospital) 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

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.

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 Station. It operates at about 30-minute headways on weekdays and Saturdays.

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 Department of Transportation (LADOT) 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.

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 vicinity of the Specific Plan area. 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 existing bike paths, bike lanes, or bike routes in the Specific Plan area. The nearest existing bicycle facilities are a single Bicycle Path that runs along Compton Creek and Bicycle Lanes on Central Avenue between Century Boulevard and Imperial Highway, and 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 and Wilmington Avenue, which is a signalized crosswalk. There are also two unsignalized crosswalks on 118th Street between Compton Avenue & Wilmington Avenue.

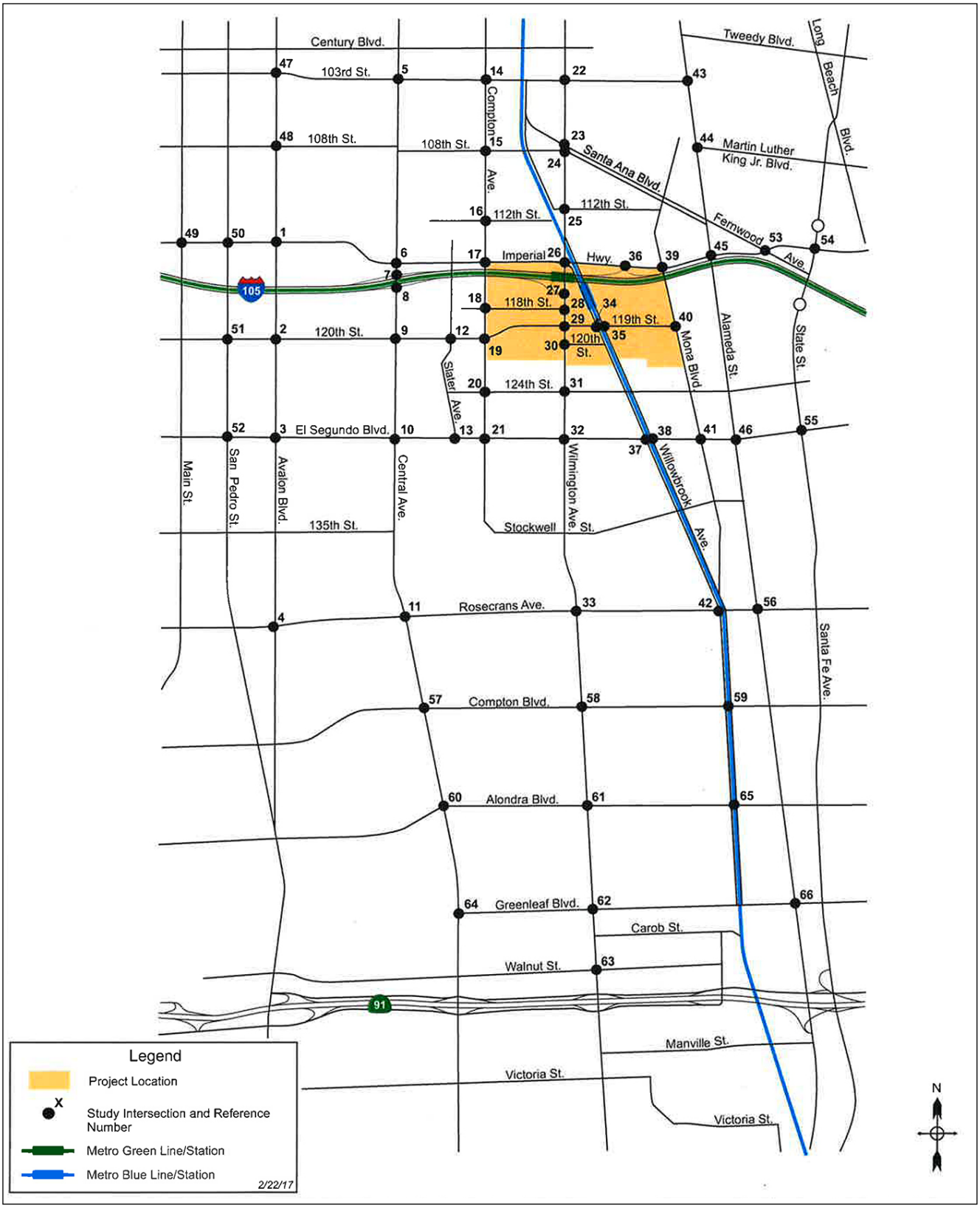
Existing Traffic Conditions

Intersection Operations

A total of 66 study intersections were identified, in conjunction with Los Angeles County staff, for inclusion in the traffic analysis. The analyzed locations are shown in **Figure 3.12-1**, Intersection Study Locations, and were identified as locations where the majority of trips associated with the proposed Specific Plan would be focused based on the trip distribution developed for the Project. These locations consist of the intersections through which Specific Plan 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



SOURCE: Willowbrook TOD Specific Plan, 2017

Figure 3.12-1
Intersection Study Locations

Existing Traffic Volumes

Recent traffic counts were used for all of the analyzed intersections. AM and PM peak period 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 traffic volume counts are provided in **Appendix F**.

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 for signalized intersections. Three of the 66 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 3.12-1** defines the ranges of delay and V/C ratios and their corresponding levels of service for unsignalized and signalized 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. The methodology used in this evaluation was based on each agency's methodology for intersections in their jurisdiction.

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 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 Methodology

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.

TABLE 3.12-1
DEFINITIONS FOR INTERSECTION LEVEL OF SERVICE

Unsignalized Intersections			Signalized Intersections	
Description	Average Total Vehicle Delay (Seconds)	Level of Service Grade	Volume-to-Capacity (V/C) Ratio	Description
No delay for stop-controlled approaches.	≤10.0	A	≤0.60	Excellent: No vehicle waits longer than one Red light, and no approach phase is fully used.
Operations with minor delay.	>10.0 and ≤15.0	B	>0.60 and ≤0.70	Very Good: An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
Operations with moderate delays.	>15.0 and ≤25.0	C	>0.70 and ≤0.80	Good: Occasionally, drivers may have to wait through more than one Red light; backups may develop behind turning vehicles.
Operations with increasingly unacceptable delays.	>25.0 and ≤35.0	D	>0.80 and ≤0.90	Fair: Delays may be substantial during portions of the rush hours, but enough lower-volume periods occur to permit clearing of developing queues, preventing excessive backups.
Operations with high delays, and long queues.	>35.0 and ≤50.0	E	>0.90 and ≤1.00	Poor: Represents the most vehicles that intersection approaches can accommodate; can have long lines of waiting vehicles through several signal cycles.
Operations with extreme congestion, and with very high delays and long queues unacceptable to most drivers.	>50.0	F	>1.00	Failure: Backups from nearby intersections or on cross streets may restrict or prevent movements of vehicles out of the intersection approaches. Lengthy delays with continuously increasing queue lengths.

SOURCES: Transportation Research Board, Highway Capacity Manual, updated 2000; Transportation Research Board, Transportation Research Circular No. 212, Interim Materials on Highway Capacity, 1980.

Existing Intersection LOS

Table 3.12-2 summarizes the existing AM and PM peak hour V/C ratios, delay, and corresponding levels of service at the analyzed intersections. Intersection worksheets are shown in **Appendix F**.

TABLE 3.12-2
EXISTING CONDITIONS – INTERSECTION LEVEL OF SERVICE

			Existing Conditions			
			Weekday AM Peak Hour		Weekday PM Peak Hour	
Intersection		Intersection Type	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

Intersection		Intersection Type	Existing Conditions			
			Weekday AM Peak Hour		Weekday PM Peak Hour	
			V/C or (Delay)	LOS	V/C or (Delay)	LOS
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.	Central 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
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	0.631	B	0.732	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	Unsignalized5	(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

Intersection		Intersection Type	Existing Conditions			
			Weekday AM Peak Hour		Weekday PM Peak Hour	
			V/C or (Delay)	LOS	V/C or (Delay)	LOS
25.	Wilmington Ave & 112th St	Unsignalized5	(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

[1] Shares jurisdiction with City of Compton
[2] Shares jurisdiction with City of Los Angeles
[3] Shares jurisdiction with City of Los Angeles and 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

SOURCE: The Mobility Group, 2017

All 66 study intersections currently operate at LOS D or better during the AM and PM peak hours, with the exception of the following five intersections:

10. Central Ave & El Segundo Blvd – LOS E (PM peak hour)
16. Compton Ave & 112th St – LOS E (PM peak hour)
17. Compton Ave & Imperial Hwy – LOS F (AM peak hour)
25. Wilmington Ave & 112th St – LOS E (AM and PM peak hours)
62. Wilmington Ave & Greenleaf Blvd – LOS E (PM peak hour)

Freeway Segment Operations

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 3.12-2**, Freeway Segment Study Locations, illustrates the location of the freeway segment study locations.

Existing Traffic Volumes

Existing traffic volumes on the ten study 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.

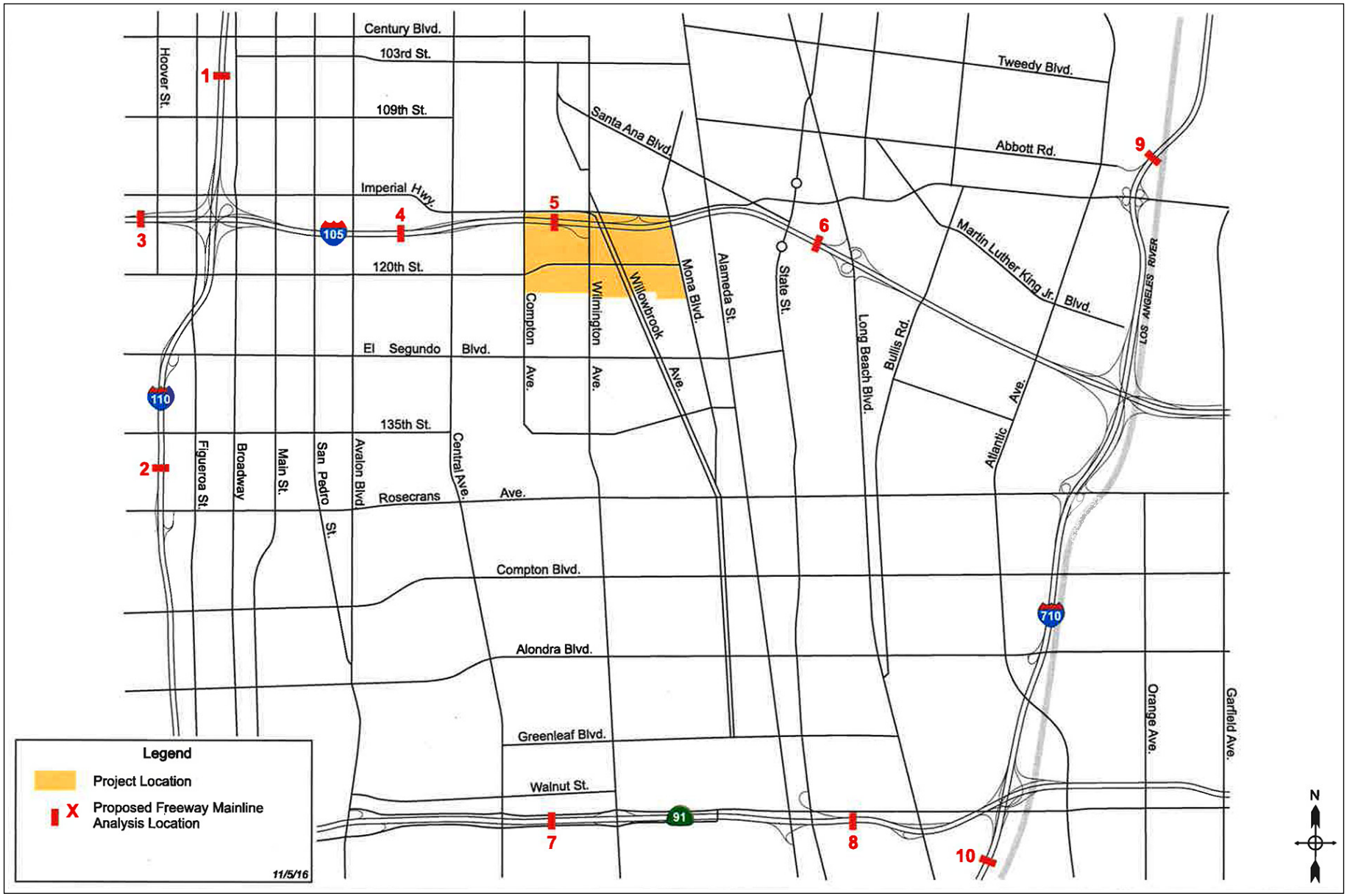
Level of Service Methodology

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 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 below. These demand/capacity (D/C) ratios are then rated for levels of service using the definitions shown below in **Table 3.12-3**.

TABLE 3.12-3
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.



SOURCE: Willowbrook TOD Specific Plan, 2017

Figure 3.12-2
Freeway Segment Study Locations

Existing Freeway Segment Level of Service

The freeway segment LOS analysis is provided below in **Table 3.12-4**, which shows the level of service and D/C ratios for Existing Conditions for the AM and PM peak hours.

TABLE 3.12-4
EXISTING CONDITIONS – FREEWAY SEGMENT LEVEL OF SERVICE

						Existing Conditions[1] (Year 2016)		
No.	**Location**	**Direction**	**Inbound/ Outbound**	**No. of Lanes**	**Capacity**	**Hourly Volume[1]**	**D/C**	**LOS**
AM Peak Hours								
1	I-110 between Century Blvd and 109th St	NB	Outbound	4G+2E	8,000	6,697	0.837	D
		SB	Inbound	5G+2E	10,000	8,811	0.881	D
2	I-110 between 135th St and Rosecrans Ave	NB	Inbound	4G+1E	8,000	7,987	0.998	E
		SB	Outbound	4G+1E	8,000	8,566	1.071	F(0)
3	I-105 between Vermont Ave and Hoover St	EB	Inbound	3G+1HOV	6,000	3,819	0.637	C
		WB	Outbound	3G+1HOV	6,000	6,225	1.038	F(0)
4	I-105 between Avalon Blvd and Central Ave	EB	Inbound	3G+1HOV+1A	7,000	7,029	1.004	F(0)
		WB	Outbound	4G+1HOV	8,000	6,846	0.856	D
5	I-105 between Compton Ave and Wilmington Ave	EB	Inbound	3G+1HOV	6,000	5,190	0.865	D
		WB	Outbound	3G+1HOV	6,000	4,946	0.824	D
6	I-105 between State St and Long Beach Blvd	EB	Outbound	3G+1HOV	6,000	4,852	0.809	D
		WB	Inbound	3G+1HOV	6,000	4,899	0.817	D
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8,000	5,747	0.718	C
		WB	Outbound	4G+1HOV	8,000	7,651	0.956	E
8	SR-91 between Santa Fe Ave and Long Beach Blvd	EB	Outbound	5G+1HOV	10,000	6,446	0.645	C
		WB	Inbound	5G+1HOV	10,000	8,321	0.832	D
9	I-710 between Firestone Blvd and Abbott Rd	NB	Outbound	4G	8,000	6,032	0.754	C
		SB	Inbound	4G	8,000	4,131	0.516	B
10	I-710 between Del Amo Blvd and Long Beach Blvd	NB	Inbound	5G	10,000	5,817	0.582	C
		SB	Outbound	4G	8,000	7,605	0.951	E
PM Peak Hours								
1	I-110 between Century Blvd and 109th St	NB	Outbound	4G+2E	8,000	7,693	0.962	E
		SB	Inbound	5G+2E	10,000	8,144	0.814	D
2	I-110 between 135th St and Rosecrans Ave	NB	Inbound	4G+1E	8,000	7,652	0.957	E
		SB	Outbound	4G+1E	8,000	7,934	0.992	E
3	I-105 between Vermont Ave and Hoover St	EB	Inbound	3G+1HOV	6,000	3,777	0.630	C
		WB	Outbound	3G+1HOV	6,000	5,619	0.937	E

No.	Location	Direction	Inbound/ Outbound	No. of Lanes	Capacity	Existing Conditions[1] (Year 2016) Hourly Volume[1]	D/C	LOS
4	I-105 between Avalon Blvd and Central Ave	EB	Inbound	3G+1HOV+1A	7,000	6,664	0.952	E
		WB	Outbound	4G+1HOV	8,000	6,490	0.811	D
5	I-105 between Compton Ave and Wilmington Ave	EB	Inbound	3G+1HOV	6,000	5,200	0.867	D
		WB	Outbound	3G+1HOV	6,000	4,824	0.804	D
6	I-105 between State St and Long Beach Blvd	EB	Outbound	3G+1HOV	6,000	4,625	0.771	D
		WB	Inbound	3G+1HOV	6,000	5,044	0.841	D
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8,000	6,548	0.819	D
		WB	Outbound	4G+1HOV	8,000	6,214	0.777	D
8	SR-91 between Santa Fe Ave and Long Beach Blvd	EB	Outbound	5G+1HOV	10,000	7,363	0.736	C
		WB	Inbound	5G+1HOV	10,000	6,525	0.653	C
9	I-710 between Firestone Blvd and Abbott Rd	NB	Outbound	4G	8,000	6,031	0.754	C
		SB	Inbound	4G	8,000	4,237	0.530	B
10	I-710 between Del Amo Blvd and Long Beach Blvd	NB	Inbound	5G	10,000	6,826	0.683	C
		SB	Outbound	4G	8,000	6,416	0.802	D

[1] Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% per annum applied for 2016 volumes.

SOURCE: The Mobility Group, 2017

As shown in the Table 3.12-4, five of the freeway study segments currently operate at an LOS D or better in both travel directions during the AM peak hour and six would operate at an LOS D or better in both travel directions during the PM peak hour. The following freeway segments operate at LOS E or F during one or both of the analyzed peak hours:

1. I-110 between Century Blvd and 109th Street – LOS E northbound (PM peak hour)
2. I-110 between 135th Street and Rosecrans Ave – LOS E northbound (AM and PM peak hours), and LOS F/E southbound (AM peak hour/PM peak hour)
3. I-105 between Vermont Ave and Hoover St – LOS F westbound (AM peak hour), and LOS E eastbound (PM peak hour)
4. I-105 between Avalon Blvd and Central Ave – LOS F/E eastbound (AM peak hour/PM peak hour)
7. SR-91 between Central Ave and Wilmington Ave – LOS E westbound (AM peak hour)
10. I-710 between Del Amo Blvd and Long Beach Blvd – LOS E southbound (AM peak hour)

Freeway Off-Ramp Operations

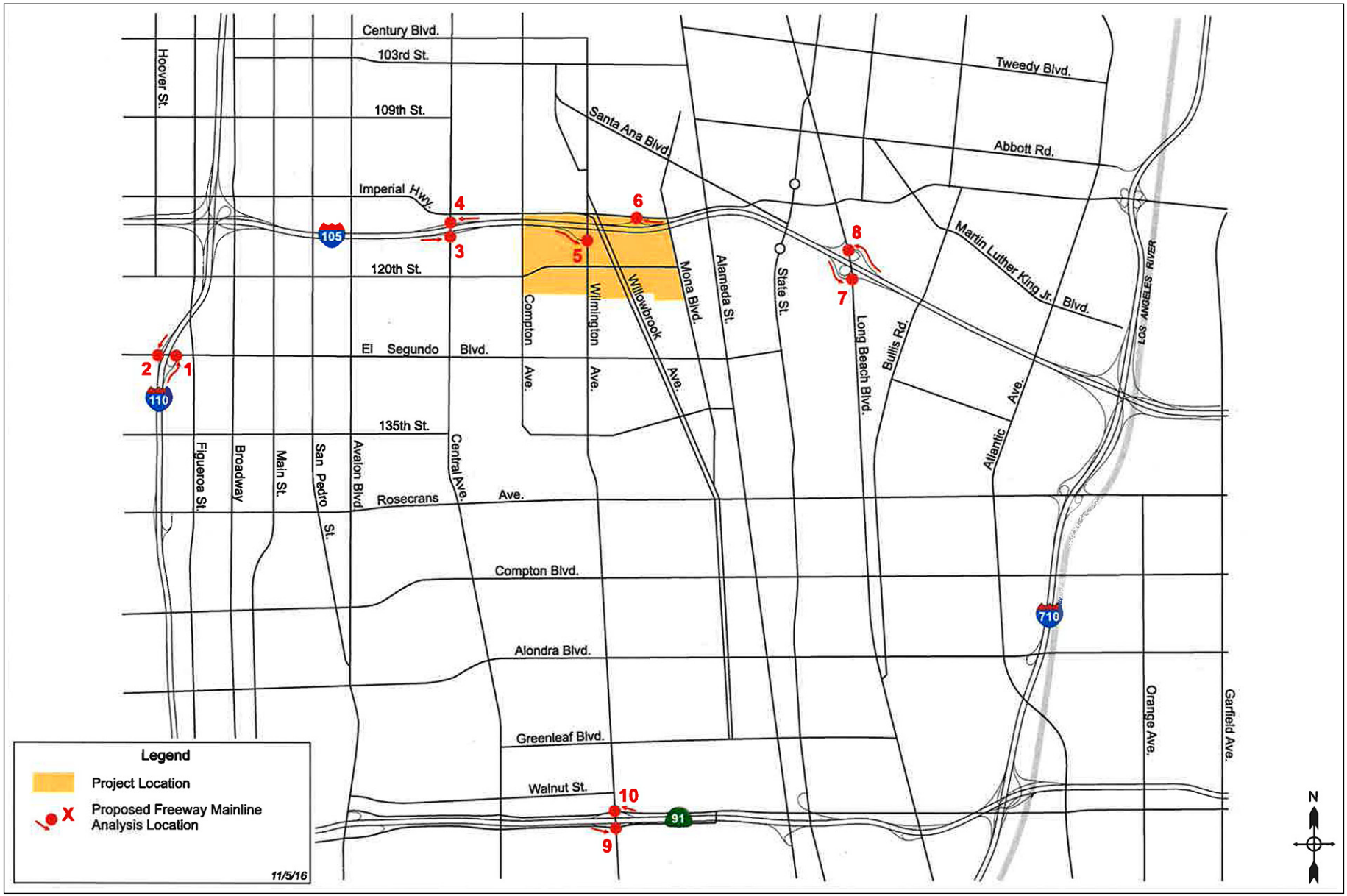
The analysis reviewed a total of ten freeway off-ramps located along the I-110, I-105, and SR-91 freeways that could potentially be used by Project traffic. **Figure 3.12-3**, Freeway Off-Ramp Study Locations, illustrates the location of the freeway off-ramp study locations**.**

Existing Traffic Volumes

Existing traffic volumes on the ten freeway off-ramp study locations were obtained from traffic counts conducted as part of the overall traffic count program described previously for the study intersections.

Methodology

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.



SOURCE: Willowbrook TOD Specific Plan, 2017

Figure 3.12-3
Freeway Off-Ramp Study Locations

Existing Freeway Off-Ramp Conditions

The freeway off-ramp analysis is provided below in **Table 3.12-5**, which shows the ramp storage lengths, ramp volumes, and queue lengths for Existing Conditions for the AM and PM peak hours.

TABLE 3.12-5
EXISTING CONDITIONS – FREEWAY OFF-RAMP CONDITIONS

					Existing Conditions[1] (Year 2016)			
No.	Location	Movement	No. of Lanes	Storage Length (feet)[2]	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed Storage Length
AM Peak Hours								
1	I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	1,646	879	C	392	No
2	I-110 SB Off-ramp at El Segundo Blvd	SB LT	1	558	511	D	546	No
		SB LT/RT	1	355	0	D	492	Yes
		SB RT	1	355	839	C	457	Yes
		RAMP TOTAL	3	1,269	1,350	D	1,495	Yes
3	I-105 EB Off-ramp at Central Ave	EB LT	1	580	664	F	842	Yes
		EB LT/TH/RT	1	580	13	F	867	Yes
		EB RT	1	803	538	C	330	No
		RAMP TOTAL	3	1,963	1,215	F	2,039	Yes
4	I-105 WB Off-ramp at Central Ave	WB LT	1	979	116	D	104	No
		WB TH/LT	1	847	4	D	101	No
		WB RT	1	847	372	F	536	No
		RAMP TOTAL	3	2,672	492	E	741	No
5	I-105 EB Off-ramp at Wilmington	EB LT	1	1,092	411	F	600	No
		EB RT	1	1,092	537	D	361	No
		RAMP TOTAL	2	2,185	948	F	961	No
6	I-105 WB Off-ramp at Imperial Hwy	NB LT	1	599	539	F	491	No
		NB TH/LT	4	540	11	F	491	No
		NB RT	1	540	137	A	4	No
		RAMP TOTAL	6	1,679	687	F	986	No
7	I-105 EB Off-ramp at Long Beach Blvd	EB LT	1	1,018	614	F	438	No
		EB TH/LT	1	620	3	F	445	No
		EB RT	1	620	346	B	172	No
		RAMP TOTAL	3	2,258	963	E	1,055	No
8	I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1,148	165	D	175	No
		WB TH/RT	1	700	27	F	500	No
		WB RT	1	700	792	F	482	No
		RAMP TOTAL	3	2,548	984	F	1,157	No

					Existing Conditions[1] (Year 2016)			
No.	Location	Movement	No. of Lanes	Storage Length (feet)[2]	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed Storage Length
9	SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1,213	771	F	805	No
		EB LT/TH/RT	2	1,213	670	F	669	No
		RAMP TOTAL	3	2,426	1,441	F	1,474	No
10	SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	777	175	D	218	No
		WB LT/TH/RT	2	777	666	F	497	No
		RAMP TOTAL	3	1,554	841	F	715	No
PM Peak Hours								
1	I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	1,646	583	C	202	No
2	I-110 SB Off-ramp at El Segundo Blvd	SB LT	1	558	437	E	437	No
		SB LT/RT	1	355	0	D	320	No
		SB RT	1	355	424	C	206	No
		RAMP TOTAL	3	1,269	861	D	963	No
3	I-105 EB Off-ramp at Central Ave	EB LT	1	580	477	F	653	Yes
		EB LT/TH/RT	1	580	240	F	703	Yes
		EB RT	1	803	378	C	303	No
		RAMP TOTAL	3	1,963	1,095	E	1,659	No
4	I-105 WB Off-ramp at Central Ave	WB LT	1	979	265	D	192	No
		WB TH/LT	1	847	0	D	192	No
		WB RT	1	847	536	F	824	No
		RAMP TOTAL	3	2,672	801	F	1,208	No
5	I-105 EB Off-ramp at Wilmington	EB LT	1	1,092	331	F	446	No
		EB RT	1	1,092	181	A	64	No
		RAMP TOTAL	2	2,185	512	F	510	No
6	I-105 WB Off-ramp at Imperial Hwy	NB LT	1	599	549	F	500	No
		NB TH/LT	4	540	8	F	495	No
		NB RT	1	540	274	C	192	No
		RAMP TOTAL	6	1,679	831	F	1,187	No
7	I-105 EB Off-ramp at Long Beach Blvd	EB LT	1	1,018	328	E	255	No
		EB TH/LT	1	620	1	E	258	No
		EB RT	1	620	215	B	75	No
		RAMP TOTAL	3	2,258	544	D	588	No
8	I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1,148	285	F	441	No
		WB TH/RT	1	700	9	F	695	No
		WB RT	1	700	987	F	677	No
		RAMP TOTAL	3	2,548	1,281	F	1,813	No

					Existing Conditions[1] (Year 2016)			
No.	Location	Movement	No. of Lanes	Storage Length (feet)[2]	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed Storage Length
9	SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1,213	433	F	663	No
		EB LT/TH/RT	2	1,213	694	D	412	No
		RAMP TOTAL	3	2,426	1,127	E	1,075	No
10	SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	777	197	D	274	No
		WB LT/TH/RT	2	777	1,011	F	892	Yes
		RAMP TOTAL	3	1,554	1,208	F	1,166	No

1 Traffic counts conducted in 2015 and factored to 2016 using a rate if 1% per annum.
2 Ramp storage lengths are 85% of the actual storage lengths per Caltrans "Safety" factor.

SOURCE: The Mobility Group, 2017

As shown in the table, the following off-ramps currently experience vehicle queues that exceed the lane storage length at the following three locations during one or both of the analyzed peak hours:

2. I-110 Southbound Off-Ramp at El Segundo Blvd – AM peak hour
3. I-105 Eastbound Off-Ramp at Central Ave – AM and PM peak hours
10. SR-91 Westbound Off-Ramp at Wilmington Ave – PM peak hour

Congestion Management Program

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 the AM or PM peak hours.

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

A review of the CMP also indicated the following freeway monitoring stations that are closest to the project site.

- 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

3.12.2 Regulatory Setting

Senate Bill 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 traveled. Section 3.5, Greenhouse Gas Emissions, in this EIR determined the net change in total vehicle miles traveled with the implementation of the proposed Specific Plan. This discussion is provided in Impact 3.5-1 under operational emissions. At this time, OPR is finalizing its recommendations but no official procedures have been adopted at the statewide level. In anticipation of SB 743 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 as well as methodologies used by the cities of Compton, Lynwood and Los Angeles, and Caltrans and is based on intersection level of service analysis.

Los Angeles Congestion Management Program

The Los Angeles Congestion Management Program (CMP) is a state-mandated program enacted by the State Legislature with the passage of Proposition 111 in 1990, administered by the Los Angeles County Metropolitan Transportation Authority (Metro). The purpose of the CMP is to develop a coordinated approach to managing and decreasing traffic congestion by linking the various transportation, land use, and air quality planning programs throughout the County. One required element of the CMP is a process to evaluate the transportation and traffic impacts of large projects on the regional transportation system. That process is undertaken by local agencies, project applicants, and traffic consultants through a transportation impact report usually conducted as part of the CEQA project review process.

The primary goal of the CMP is to reduce traffic congestion in order to enhance the economic vitality and quality of life for all affected communities. The CMP guidelines require the evaluation of all designated CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where a project could add 50 or more trips during either the am or pm peak hour and the evaluation of mainline freeway monitoring locations where a project could add 150 or more trips, in either direction, during either the am or pm peak hour. Based upon these assessments, the CMP contains specific strategies and identifies proposed improvements to reduce traffic congestion and improve the performance of a multi-modal transportation system. Examples of strategies include increased emphasis on public transportation and rideshare programs, mitigating the impacts of new development and better coordinating land use and transportation planning decisions.

2016 - 2040 Regional Transportation Plan/Sustainable Communities Strategy

The Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) is a long-range transportation plan that is developed and updated by SCAG every four years. As the planning authority for the six counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura, as well as 189 cities, SCAG is the lead agency in facilitating the development of the RTP to provide a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The preparation of an RTP every four years by SCAG is required under federal and state regulations in order for transportation projects in the Southern California region to qualify for federal and state funding. The RTP is updated to reflect changes in trends, progress made on projects, and to adjust the growth forecast for population changes. The most recent RTP was adopted by SCAG's Regional Council in April 2016, and is known as the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Compared to previous RTPs, the 2016-2040 RTP/SCS places a greater emphasis on sustainability and integrated planning, and includes a strong commitment to reduce emissions from transportation sources to comply with California Senate Bill (SB) 375, improve public health, and meet the National Ambient Air Quality Standards as set forth by the federal Clean Air Act. Overall, the 2016–2040 RTP/SCS contains a regional commitment for the broad deployment of zero- and near-zero emission transportation technologies.

Los Angeles County General Plan Mobility Element

Adopted in October 2015, the County of Los Angeles General Plan contains policies in the Mobility Element that address transportation issues relevant to the proposed Specific Plan. The County's intent is to promote and develop efficient and convenient travel by all appropriate modes (e.g., pedestrian, bicycle, regional and local bus transit and rail). The General Plan includes a Transit Oriented District Program (Program LU-2 in Chapter 16 General Plan Implementation Programs). The mobility objective of the Transit Oriented District Program is to increase walking, bicycling, and transit ridership and reduce vehicle miles traveled (VMTs). The 2035 General Plan Policies that are relevant to the proposed Specific Plan are listed below.

Policy M 1.1 Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible.

Policy M 2.1 Provide transportation corridors/networks that accommodate pedestrians, equestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.

Policy M 2.2 Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following street designs, whenever appropriate and feasible:

- Lane width reductions to 10 or 11 feet in low speed environments with a low volume of heavy vehicles.
- Wider lanes may still be required for lanes adjacent to the curb, and where buses and trucks are expected.
- Low-speed designs.
- Access management practices developed through a community-driven process.
- Back in angle parking at locations that have available roadway width and bike lanes, where appropriate.

Policy M 2.3 Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following intersection designs, whenever appropriate and feasible:

- Right angle intersections that reduce intersection skew.
- Smaller corner radii to reduce crossing distances and slow turning vehicles.
- Traffic calming measures, such as bulb-outs, sharrows, medians, roundabouts, and
- Narrowing or reducing the number of lanes (road diets) on streets.
- Crossings at all legs of an intersection.
- Shorter crossing distances for pedestrians.
- Right-turn channelization islands. Sharper angles of slip lanes may also be utilized.
- Signal progression at speeds that support the target speed of the corridor.

- Pedestrian push buttons when pedestrian signals are not automatically recalled.
- Walk interval on recall for short crossings.
- Left-turn phasing.
- Prohibit right turn on red.
- Signs to remind drivers to yield to pedestrians.

Policy M 2.4 Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible:

- Designs that limit dead-end streets and dead-end sidewalks.
- Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops.
- Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA).
- Perpendicular curb ramps at locations where it is feasible.
- Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.)
- Approved devices to extend the pedestrian clearance times at signalized intersections.
- Accessible Pedestrian Signals (APS) at signalized intersections.
- Pedestrian crossings at signalized intersections without double or triple left or right turn lanes.
- Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections.
- Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes.
- Advance stop lines at signalized intersections.
- Pedestrian Hybrid Beacons.
- Medians or crossing islands to divide long crossings.
- High visibility crosswalks.
- Pedestrian signage.
- Advanced yield lines for uncontrolled crosswalks.
- Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic.

- Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.

Policy M 2.5 Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible:

- Bicycle signal heads at intersections.
- Bicycle signal detection at all signalized intersections.
- Wayfinding signage.
- Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction.
- Appropriate lighting on all bikeways, including those in rural areas.
- Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.

Policy M 2.6 Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.

Policy M 2.7 Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.

Policy M 2.8 Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.

Policy M 2.9 Encourage the planting of trees along streets and other forms of landscaping to enliven streetscapes by blending natural features with built features.

Policy M 2.10 Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.

Policy M 2.11 In urban and suburban areas, promote the continuity of streets and sidewalks through design features, such as limiting mid-block curb cuts, encouraging access through side streets or alleys, and promoting shorter block lengths.

Policy M 4.1 Expand transportation options that reduce automobile dependence.

Policy M 4.2 Expand shuttle services to connect major transit centers to community points of interest.

Policy M 4.3 Maintain transit services within the unincorporated areas that are affordable, timely, cost-effective, and responsive to growth patterns and community input.

Policy M 4.4 Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.

Policy M 4.5 Encourage continuous, direct routes through a connected system of streets, with small blocks and minimal dead ends (cul-de-sacs), as feasible.

Policy M 4.6 Support alternatives to LOS standards that account for a multimodal transportation system.

Policy M 4.7: Maintain a minimum LOS D, where feasible; however, allow LOS below D on a case by case basis in order to further other General Plan goals and policies, such as those related to environmental protection, infill development, and active transportation.

Policy M 4.8: Provide and maintain appropriate signage for streets, roads and transit.

Policy M 4.10: Support the linkage of regional and community-level transportation systems, including multimodal networks.

Policy M 4.11: Improve the efficiency of the public transportation system with bus lanes, signal prioritization, and connections to the larger regional transportation network.

Policy M 5.1: Facilitate transit-oriented land uses and pedestrian-oriented design, particularly in the first-last mile connections to transit, to encourage transit ridership.

Policy M 5.2: Implement parking strategies that facilitate transit use and reduce automobile dependence.

Policy M 5.3: Maintain transportation right-of-way corridors for future transportation uses, including bikeways, or new passenger rail or bus services.

Policy M 6.4: Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.

Policy M 7.1: Minimize roadway runoff through the use of permeable surface materials, and other low impact designs, wherever feasible.

Los Angeles County Bicycle Master Plan

The Los Angeles County Bicycle Master Plan, adopted in March 2012, provides policy guidance for building a comprehensive bicycle network throughout the unincorporated areas. The Bicycle Master Plan identifies bikeways and transportation systems that are available for use by bicyclists, such as roadways with bike lanes or designated bike routes, and dedicated off-road bike paths, such as bike paths along the flood protection channels. The purpose of the Bicycle Master Plan is to: 1) guide the development of infrastructure, policies and programs that improve the bicycling environment; 2) depict the general location of planned bikeway routes; and 3) provide for a system of bikeways that is consistent with the General Plan. The Bicycle Master Plan maps depict bikeways along roadways in the unincorporated areas and along rivers, creeks,

and flood protection facilities countywide. These bikeways may be used for both recreational use and commuter travel.

2011 Martin Luther King, Jr. Medical Center Campus Redevelopment EIR Mitigation Measures

The 2011 MLK Medical Campus Redevelopment EIR determined that build out of Tier II of the MLK campus would result in significant cumulative traffic impacts in the year 2020, and identified mitigation measures to reduce the impacts to a less than significant level. The Tier II Master Plan land uses are included in the proposed Specific Plan, and the mitigation measures from the 2011 EIR are applicable to development that would occur by the proposed Specific Plan within the MLK campus, and are listed below:

Measure Traffic-2

In order to address the Tier II project impacts, the County of Los Angeles shall complete the following improvements:

- Compton Avenue / Imperial Highway, County of Los Angeles / City of Los Angeles: Restripe westbound approach to provide a separate right-turn lane.
- I-105 / Imperial Highway: Provide a third northbound, left-turn lane by widening off-ramp by 10 feet for approximately 150 to 200 feet.
- Wilmington Avenue / El Segundo Boulevard: Re-stripe eastbound and westbound approaches to have separate right-turn lanes. Allow buses to go through the intersection from the right-turn lanes.
- Central Avenue / 120th Street: Re-stripe northbound approach to provide a separate right-turn lane. Also, widen the east leg by 3 feet on each curbside (i.e., reduce sidewalk along 120th Street east of Central Avenue by 3 feet for approximately 120 feet and re-stripe westbound 120th Street approach to provide a left-turn, two through lanes and a separate right-turn lane.
- Wilmington Avenue / I-105 Eastbound Ramps, County of Los Angeles: Department of Transportation: Provide an additional eastbound lane by widening (reducing the raised median on the ramp) the off-ramp. The eastbound approach shall have a left-turn lane, shared left-right turn lane, and a separate right-turn lane. The sidewalks on both sides of Wilmington Avenue (as noted above) shall be reduced by 2 feet and the Wilmington Avenue roadway shall be widened by 2 feet on both sides (a total of 4 feet) from the south leg of this intersection. Provide an additional northbound left-turn lane by widening (reducing the medians).
- Wilmington Avenue / 118th Street, County of Los Angeles: Widen Wilmington Avenue roadway by 2 feet on both sides and re-stripe to provide two through lanes, a shared through right-turn lane and dual left-turn lanes along the southbound approach. Restripe the westbound approach to provide a separate right-turn lane and a shared left through lane. Northbound approach shall have the same lane geometry as existing conditions. Under cumulative conditions, widen 118th Street roadway by 4 feet and re-stripe to provide a separate right-turn lane and shared left-through lane along the eastbound approach.

- Wilmington Avenue / 120th Street–119th Street, County of Los Angeles: Widen Wilmington Avenue roadway by 2 feet on both sides and restripe the southbound approach to provide a separate right-turn lane, three through lanes, and a left-turn lane. Re-stripe northbound approach to provide a shared through-right turn lane, two through lanes, and a left-turn lane. Remove median adjacent to northbound approach to facilitate three southbound receiving lanes. Restrict parking along Wilmington Avenue roadway during morning and evening peak periods along the eastside of Wilmington between 120th Street and MLK Community Hospital Driveway entrance. Widen 120th Street west of Wilmington Avenue for 250 feet, on the south side by 2 feet, and re-stripe the eastbound approach to provide a separate right-turn lane, dual left-turn lanes, and a through lane. The westbound approach of 119th Street would have the same lane geometry as existing conditions.
- Wilmington Avenue / MLK Community Hospital Entrance–120th Street, County of Los Angeles: Re-stripe southbound approach to provide a separate right-turn lane, two through lanes, and a left-turn lane. Provide three northbound receiving lanes and restrict on-street curb parking along the eastside of Wilmington Avenue between MLK Community Hospital Driveway and 120th Street and 120th Street and 119th Street during morning and evening peak hours. Remove the median within the hospital entrance and re-stripe the driveway to provide dual left-turn lanes, a through lane, and a separate right-turn lane along the eastbound approach. Re-stripe to provide one receiving lane.

The appropriate conceptual signing and striping plans shall be submitted to the County of Los Angeles Department of Public Works, Traffic and Lighting Division for review and approval during the planning phase.

Measure Traffic-3

In order to address the Tier II cumulative projects impacts, using County of Los Angeles traffic study guidelines, the following mitigation measures shall be implemented to alleviate the cumulative significant impacts:

- Avalon Boulevard / El Segundo Boulevard, County of Los Angeles: Widen northbound approach by 2 feet and re-stripe the approach to provide a left turn lane, two through lanes, and a separate right-turn lane (10 feet, 10 feet, 10 feet, 12 feet). The approach could be widened by narrowing the 5-foot-wide median to a 3-foot-wide median, or by reducing the 12-foot-wide sidewalk to a 10-foot-wide sidewalk. This widening would need to occur all the way to an alley located approximately 100 feet 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.
- Alameda Street / El Segundo Boulevard, County of Los Angeles / Compton: Re-stripe northbound/southbound approaches and provide a southbound right-turn lane. The lanes along the north leg shall be re-striped to provide 13-foot and 11-foot receiving lanes; 10-foot, 11-foot, 10-foot, and 12-foot approach lanes for southbound left-turn lane, southbound through lanes, and southbound right-turn lanes, respectively. The lanes along the south leg would have a 13-foot shared right through-way, 11-foot through lane, 10-foot left-turn lane,

12-foot receiving lane, and a 20-foot receiving lane. Remove two on-street parking spaces along the southbound approach during peak hours.

- Alameda Street / 103rd Street, County of Los Angeles / Lynwood: Re-stripe eastbound approach to provide a 10-foot, left-turn lane and a 12-foot, left-right shared lane. The receiving lane would be re-striped for 18.5 feet.
- Central Avenue / Rosecrans Avenue, County of Los Angeles / Compton: Re-stripe westbound approach to provide a separate right-turn lane. Allow buses to go through the intersection from the right-turn lane.
- Central Avenue / El Segundo Boulevard, County of Los Angeles / Compton: Re-stripe southbound approach to provide a separate right-turn lane. Widen northbound approach by reducing median by 1 foot to 2 foot. Provide re-striping to show a separate northbound right-turn lane. Allow buses to go through the intersection from the right turn lane.
- Alameda Street / Imperial Highway, County of Los Angeles / City of Lynwood: Re-stripe southbound approach to provide the following roadway geometry: two left-turn lanes, two through lanes, and one right-turn lane.

The appropriate conceptual signing and striping plans shall be submitted to the County of Los Angeles Department of Public Works, Traffic and Lighting Division for review and approval during the planning phase.

Measure Traffic-4

Along the southbound approach of Alameda Street, the County of Los Angeles shall provide two left-turn lanes, two through lanes and one right-turn lane instead of one left-turn lane, two through lanes and a separate right-turn lane (i.e., add a second left turn lane). In addition, the County of Los Angeles shall provide the required signal hardware and supporting software to facilitate a right-turn arrow signal indication for southbound right-turn overlap with eastbound-westbound left-turns at the intersection.

3.12.3 Thresholds of Significance

In accordance with the County of Los Angeles CEQA Checklist, the project could have a significant impact on traffic and transportation if it would:

- 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 (See Impact 3.12-1).
- 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 county congestion management agency for designated roads or highways (See Impact 3.12-2).

- 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 (See Section 5.1.14).
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (See Section 5.1.14).
- Result in inadequate emergency access (See Section 5.1.14).
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities (See Section 5.1.14).

The analysis used the following thresholds for determining significant traffic impacts.

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		
LOS	V/C Ratio	Project-Related Increase 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.

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 Specific Plan would cause 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.

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.

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		
LOS	V/C Ratio	Project-Related Increase 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.

Caltrans

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.

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.

Congestion Management Program

The Los Angeles County CMP threshold of significance 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).

Additionally, per the CMP requirements and guidelines, 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.

3.12.4 Methodology

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. 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 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. A detailed description of the methodology used to calculate trip generation for each of the three separate land use areas in the Specific Plan (i.e., MLK Medical Center, Charles R. Drew University of Medicine and Science [CDU] Master Plan, Other) is provided in **Appendix F**.

Table 3.12-6 shows the trip generation totals by key land use area. The Project would add 3,139 new AM peak hour trips in the Specific Plan area and 3,832 new PM peak hour trips. Approximately 43% of the new net 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 3.12-6
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%

SOURCE: The Mobility Group, 2017

Trip Distribution

The trip distribution for the analysis was derived from trip distribution information in the Los Angeles County CMP 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 was determined by the County of Los Angeles staff as too high for the Specific Plan land uses and which are focused on revitalization for the local community rather than creating a regional destination. 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 approach is consistent with the MLK Medical Center EIR Traffic Study, which assigned approximately 35% of the trips to the freeways. The local distribution of trips to local streets was also based on the CMP distribution data, taking into account the population and employment in adjacent and nearby communities, roadway types serving the Specific Plan area, and professional judgment. These distribution percentages and patterns were developed in consultation with, and approved by, County staff.

Traffic Forecasting

In order to evaluate the potential traffic impacts of the proposed project for future conditions, it was necessary to first estimate and analyze future traffic conditions without the project. The year selected for this analysis was 2035, which is the anticipated Specific Plan build out year. Because of the long-term horizon for the proposed Specific Plan, future traffic forecasts were estimated primarily based on regional traffic forecasts, which assure consistency with the County's regional planning process. The traffic growth forecast was taken from the Los Angeles CMP, which projects an average 0.49 percent annual traffic growth through 2035 (i.e., a 9.7 percent growth in traffic to the year 2035) for the part of Los Angeles County in which Willowbrook is located.

Existing traffic volumes were increased by this growth factor to obtain background 2035 traffic forecasts in the traffic study area.

In general, the forecasts include all projected land use growth and transportation improvements in the region to 2035. However, there are specific currently known development projects planned in the local Willowbrook area that would affect local traffic volumes. A list of proposed development projects that could affect traffic conditions in the Specific Plan 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 the cities of 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 Specific Plan area 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 and their associated daily and peak hour trip generation estimates are listed below in **Table 3.12-7**.

Although the traffic generated by the related project is included within the cumulative 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.

Trip generation estimates for the related projects were prepared, as shown in Table 3.12-7. 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 *ITE Trip Generation, 9th Edition*. The trips rates estimated from the ITE information 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.

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.

Future Transportation System Improvements

In addition to the transportation improvements included in the Specific Plan (see Chapter 2, Project Description), 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 include 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.

TABLE 3.12-7
RELATED PROJECT LIST AND TRIP GENERATION ESTIMATES

	Project Name	Location / Address	Jurisdiction	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 bet. 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	24.6	35.4	60
				12,417	s.f.	School	290	264	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**

SOURCE: The Mobility Group, 2017

Willowbrook/Rosa Parks Station

This 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. 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:

Implement Class I Bike Facility in the Specific Plan area on:

- Willowbrook Avenue West between Willowbrook/Rosa Parks 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; and
- 120th Street, between Compton Avenue & Wilmington Avenue.

These projects are included in the Specific Plan, and their incorporation into the traffic study is described below under Section 3.12.5, Impact Analysis.

City of Los Angeles Bicycle Master Plan

This plan includes the following elements that are adjacent to 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 below under Section 3.12.5, Impact Analysis.

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.

3.12.5 Impact Analysis

As identified in Chapter 2, Project Description, the purpose of the 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. The proposed Specific Plan would maintain the existing street system and add improvements related to access, circulation, and walkability as described below.

Roadway Modifications

The Specific Plan would implement roadway modifications to enhance pedestrian and bicycle circulation. The number of traffic lanes and roadway lane configurations would generally remain the same, except where road diets (which reduce the number of car lanes and add bicycle/pedestrian lanes) would be implemented. The roadway modifications included in the Specific Plan are described below. Additional detail is provided in Sections 4.4 and 4.5 of the Specific Plan.

- **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.
- **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 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.

Bicycle Circulation

The Specific Plan Bicycle Network 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. 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. 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.

Pedestrian Circulation

The backbone of the existing 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. (MLK) 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 CDU campus to the rest of the Specific Plan Area, Willowbrook Avenue West between 119th Street & the Willowbrook/Rosa Parks 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.

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.

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. 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 Willowbrook/Rosa Parks 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. It also proposes to install a signalized pedestrian crosswalk on Mona Avenue & 120th Street to allow 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.

Transit Service

The Specific Plan anticipates that current bus routes will continue to serve the Specific Plan area focusing on the rail station. The Specific Plan also anticipates that the existing shuttle routes that are operated by the County, the MLK Medical Center and CDU 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 Northwest Subarea and connect the land uses to the Willowbrook/Rosa Parks 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 (TDM) 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. However, the traffic analysis acknowledged that although a TDM Program could reduce trips, the implementation of a program is not considered to be quantifiable. Such programs would provide incentives and accommodations to encourage the 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 Northwest Subarea as they could reduce the capital costs needs of building parking. The Program should include the Northwest Subarea, CDU, and the MLK 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;
- Encouraging rideshare;
- Providing preferential parking for carpools;
- Facilitating formation of carpools and vanpools; and

- 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.

Traffic Increase

Impact 3.12.1: The proposed project could 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.

Project-Specific

Existing Plus Project Intersection Levels of Service

The intersection level of service analysis compared the V/C ratios at each intersection for the Existing Condition and the Existing Plus Project Condition, to determine the incremental difference in V/C ratios that would be caused by the Specific Plan. The results of the analysis are summarized in **Table 3.12-8** for the AM peak hour and in **Table 3.12-9** for the PM peak hour. These tables compare the level of service for Existing Conditions and Existing Plus 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.

TABLE 3.12-8
EXISTING PLUS PROJECT CONDITIONS – INTERSECTION LEVEL OF SERVICE (AM PEAK HOUR)

			Existing Conditions		Existing + Project Conditions			
Intersection		Intersection Type	V/C or (Delay)	LOS	V/C or (Delay)	LOS	Change in V/C (Delay)	Significant Impact
County of Los Angeles								
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

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		
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	Yes
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	B	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	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.	Central 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	D	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	D	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	E	0.032	Yes
63	Wilmington Ave & Walnut St	Signalized	0.595	A	0.627	C	0.032	No
64.	Central Ave & Greenleaf Blvd	Signalized	0.534	A	0.541	B	0.007	No
65.	Willowbrook Ave & Alondra Blvd	Signalized	0.532	A	0.535	A	0.003	No
66.	Alameda St & Greenleaf Blvd	Signalized	0.631	B	0.641	C	0.010	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

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		
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	0.454	A	0.010	No
48.	Avalon Blvd & 108th St	Signalized	0.564	B	0.578	A	0.014	No
49.	Imperial Hwy & Main St	Signalized	0.590	B	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

1 Shares jurisdiction with City of Compton
2 Shares jurisdiction with City of Los Angeles
3 Shares jurisdiction with City of Los Angeles and 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

SOURCE: The Mobility Group, 2017

TABLE 3.12-9
EXISTING PLUS PROJECT CONDITIONS – INTERSECTION LEVEL OF SERVICE (PM PEAK HOUR)

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		
County of Los Angeles								
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	Yes
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

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		
55.	El Segundo Blvd & Santa Fe Ave	Signalized	0.700	B	0.717	C	0.019	No
56.	Alameda St & Rosecrans Ave	Signalized	0604	B	0.638	B	0.034	No
57.	Central 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	D	0.924	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	0.732	C	0.748	C	0.016	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
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	A	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

Intersection		Intersection Type	Existing Conditions V/C or (Delay)	Existing Conditions LOS	Existing + Project Conditions V/C or (Delay)	Existing + Project Conditions LOS	Change in V/C (Delay)	Significant Impact
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

1 Shares jurisdiction with City of Compton
2 Shares jurisdiction with City of Los Angeles
3 Shares jurisdiction with City of Los Angeles and 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

SOURCE: The Mobility Group, 2017

Table 3.12-8 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. Based on the impact thresholds by jurisdiction described in Section 3.12.3, there would be significant impacts at 21 of the 66 intersections during the AM peak hour. Table 3.12-9 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. There would significant impacts at 26 of the 66 intersections during the PM peak hour. Below is the list of intersections where significant impacts are expected to occur at one or both analyzed peak hours:

County of Los Angeles

3. Avalon Blvd & El Segundo Blvd – LOS D (PM Peak)

10. Central Ave & El Segundo Blvd – LOS E (AM and PM peak hours)

11. Central Ave & Rosecrans Ave – LOS D (AM peak hour)

17. Compton Ave & Imperial Hwy – LOS F/E (AM peak hour/PM peak hour)

19. Compton Ave & 120th St – LOS E/D (AM peak hour/PM peak hour)

26. Wilmington Ave & Imperial Hwy – LOS D (AM and PM peak hours)

27. Wilmington Ave & I-105 e/b Ramps – LOS F/E (AM peak hour/PM peak hour)

28. Wilmington Ave & 118th St – LOS F (AM and PM peak hours)

29. Wilmington Ave & 120th St (West) – LOS E (AM and PM peak hours)

30. Wilmington Ave & 120th St (East) – LOS C (PM peak hour)

32. Wilmington Ave & El Segundo Blvd – LOS D/E (AM peak hour/PM peak hour)

36. Imperial Hwy & I-105 w/b Ramps – LOS E (AM and PM peak hours)

39. Mona Blvd & Imperial Hwy – LOS D (PM peak hour)

43. Alameda St & 103rd St – LOS D (PM peak hours)

45. Alameda St & Imperial Hwy – LOS D (AM peak hour)

46. Alameda St & El Segundo Blvd – LOS D (AM peak hour)

City of Compton

21. Compton Ave & El Segundo Blvd – LOS E/C (AM peak hour/PM peak hour)

33. Wilmington Ave & Rosecrans Ave – LOS E (AM and PM peak hours)

58. Wilmington Ave & W Compton Blvd – LOS D (PM peak hour)

61. Wilmington Blvd & Alondra Blvd – LOS D/E (AM peak hour and PM peak hours)

62. Wilmington Ave & Greenleaf Blvd – LOS E (AM peak hour and PM peak hours)

63. Wilmington Ave & Walnut St – LOS D (PM peak hour)

City of Lynwood

54. Imperial Hwy & State St – LOS D (PM peak hour)

City of Los Angeles

1. Avalon Blvd & Imperial Hwy – LOS C (AM and PM peak hours)

2. Avalon Blvd & 120th Street – LOS C (PM peak hour)

6. Central Ave & Imperial Hwy – LOS C/D (AM Peak hour/PM peak hour)

7. Central Ave & I-105 w/b Ramps – LOS D (AM and PM peak hours)

9. Central Ave & 120th St – LOS D (AM and PM peak hours)

25. Wilmington Ave & 112th St – LOS F (AM and PM peak hours)

City of Los Angeles/County of Los Angeles Shared Jurisdiction

Four of the 27 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 four intersections were also analyzed using the City of Los Angeles methodology and significant impact criteria. Below is the list of intersections where significant impacts are expected to occur at one or both analyzed peak hours:

17. Compton Ave & Imperial Hwy – LOS F/D (AM peak hour/PM peak hour)

36. Imperial Hwy & I-105 w/b Ramps – LOS D (AM and PM peak hours)

39. Mona Blvd & Imperial Hwy – LOS C (PM peak hour)

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.

Existing Plus Project Freeway Segment Level of Service

The freeway segment analysis is summarized in **Table 3.12-10** and **Table 3.12-11**, which show the levels of service and demand/capacity (D/C) ratios for Existing Conditions, and Existing Plus 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).

TABLE 3.12-10
EXISTING PLUS PROJECT CONDITIONS – FREEWAY SEGMENT LEVEL OF SERVICE (AM PEAK HOUR)

						Existing Conditions (Year 2016)[1]			Existing Plus Project Conditions (Year 2016)					
No.	Location	Dir	Inbound/ Outbound	No. of Lanes	Capacity	Hourly Volume	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS	Increase in D/C	% Increase Volume due to Project
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)**[2]	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	1.0375	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	0.88	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	0.9	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	0.03	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%

[1] Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% annum applied for 2016 volumes.

[2] Bold LOS indicates a significant impact.

SOURCE: The Mobility Group, 2017

TABLE 3.12-11
EXISTING PLUS PROJECT CONDITIONS – FREEWAY SEGMENT LEVEL OF SERVICE (PM PEAK HOUR)

						Existing Conditions[1] (Year 2016)			Existing Plus Project Conditions (Year 2016)					
No.	Location	Dir	Inbound/ Outbound	No. of Lanes	Capacity	Hourly Volume	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS	Increase in D/C	% Increase Volume due to Project
1	I-110 between Century Blvd and 109th St	NB	Outbound	4G+2E	8000	7693	0.962	E	150	7843	0.98	E	0.018	1.9%
		SB	Inbound	5G+2E	10000	8144	0.814	D	96	8240	0.824	D	0.009	1.2%
2	I-110 between 135th St and Rosecrans Ave	NB	Inbound	4G+1E	8000	7652	0.957	E	52	7704	0.963	E	0.006	0.7%
		SB	Outbound	4G+1E	8000	7934	0.992	E	77	8011	1.001	**F(0)**[2]	0.009	1.0%
3	I-105 between Vermont Ave and Hoover St	EB	Inbound	3G+1HOV	6000	3777	0.630	C	123	3900	0.65	C	0.02	3.3%
		WB	Outbound	3G+1HOV	6000	5619	0.937	E	195	5814	0.969	E	0.032	3.5%
4	I-105 between Avalon Blvd and Central Ave	EB	Inbound	3G+1HOV+1A	7000	6664	0.952	E	257	6921	0.989	E	0.037	3.9%
		WB	Outbound	4G+1HOV	8000	6490	0.811	D	397	6887	0.861	D	0.049	6.1%
5	I-105 between Compton Ave and Wilmington Ave	EB	Inbound	3G+1HOV	6000	5200	0.867	D	177	5377	0.896	D	0.029	3.4%
		WB	Outbound	3G+1HOV	6000	4824	0.804	D	254	5078	0.846	D	0.041	5.3%
6	I-105 between State St and Long Beach Blvd	EB	Outbound	3G+1HOV	6000	4625	0.771	D	370	4995	0.833	D	0.062	8.0%
		WB	Inbound	3G+1HOV	6000	5044	0.841	D	234	5278	0.88	D	0.039	4.6%
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8000	6548	0.819	D	15	6563	0.82	D	0.001	0.2%
		WB	Outbound	4G+1HOV	8000	6214	0.777	D	25	6239	0.78	D	0.003	0.4%
8	SR-91 between Santa Fe Ave and Long Beach Blvd	EB	Outbound	5G+1HOV	10000	7363	0.736	C	51	7414	0.741	C	0.004	0.7%
		WB	Inbound	5G+1HOV	10000	6525	0.653	C	30	6555	0.656	C	0.003	0.5%
9	I-710 between Firestone Blvd and Abbott Rd	NB	Outbound	4G	8000	6031	0.754	C	52	6083	0.76	C	0.006	0.9%
		SB	Inbound	4G	8000	4237	0.530	B	41	4278	0.535	B	0.005	1.0%
10	I-710 between Del Amo Blvd and Long Beach Blvd	NB	Inbound	5G	10000	6826	0.683	C	32	6858	0.686	C	0.003	0.5%
		SB	Outbound	4G	8000	6416	0.802	D	53	6469	0.809	D	0.007	0.8%

1 Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% annum applied for 2016 volumes.
2 Bold LOS indicates a significant impact.
SOURCE: The Mobility Group, 2017

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 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 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.

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 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.

Existing Plus Project Off-Ramp Analysis

The freeway off-ramp analysis for the Existing Plus Project Conditions is summarized in **Table 3.12-12** for the AM peak hour and in **Table 3.12-13** for the PM peak hour. These tables show the ramp storage lengths, the ramp volumes, and queue lengths for the Existing Condition and the Existing Plus Project Condition.

TABLE 3.12-12
EXISTING PLUS PROJECT CONDITIONS – FREEWAY OFF-RAMP ANALYSIS (AM PEAK HOUR)

					Existing Conditions[1] (Year 2016)				Existing Plus Project Conditions (Year 2016)				
No.	Location	Movement	No. of Lanes[2]	Storage Length (feet)	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed Storage Length
1	I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	1,646	879	C	392	No	15	894	C	400	No
2	I-110 SB Off-ramp at El Segundo Blvd	SB LT	1	558	511	D	546	No	6	517	D	557	No
		SB LT/RT	1	355	0	D	492	Yes	0	0	D	492	Yes
		SB RT	1	355	839	C	457	Yes	0	839	C	457	Yes
		RAMP TOTAL	*3*	*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	580	664	F	842	Yes	56	720	F	958	Yes
		EB LT/TH/RT	1	580	13	F	867	Yes	0	13	F	958	Yes
		EB RT	1	803	538	C	330	No	77	615	D	458	No
		RAMP TOTAL	*3*	*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	979	116	D	104	No	0	116	D	104	No
		WB TH/LT	1	847	4	D	101	No	0	4	D	101	No
		WB RT	1	847	372	F	536	No	0	372	F	564	No
		RAMP TOTAL	*3*	*2,672*	*492*	*E*	*741*	*No*	*0*	*492*	*F*	*769*	*No*
5	I-105 EB Off-ramp at Wilmington	EB LT	1	1,092	411	F	600	No	4	415	D	499	No
		EB RT	1	1,092	537	D	361	No	204	741	D	907	No
		RAMP TOTAL	*2*	*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	599	539	F	491	No	294	833	F	757	Yes
		NB TH/LT	4	540	11	F	491	No	9	20	F	761	Yes
		NB RT	1	540	137	A	4	No	12	149	A	14	No
		RAMP TOTAL	*6*	*1,679*	*687*	*F*	*986*	*No*	*315*	*1,002*	*F*	*1,532*	*No*

					Existing Conditions[1] (Year 2016)				Existing Plus Project Conditions (Year 2016)				
No.	**Location**	**Movement**	**No. of Lanes[2]**	**Storage Length (feet)**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Project Added Volume**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**
7	I-105 EB Off-ramp at Long Beach Blvd	EB LT	1	1,018	614	F	438	No	0	614	F	438	No
		EB TH/LT	1	620	3	F	445	No	0	3	F	445	No
		EB RT	1	620	346	B	172	No	0	346	B	172	No
		RAMP TOTAL	*3*	*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	1,148	165	D	175	No	0	165	D	175	No
		WB TH/RT	1	700	27	F	500	No	0	27	F	502	No
		WB RT	1	700	792	F	482	No	5	797	F	488	No
		RAMP TOTAL	*3*	*2,548*	*984*	*F*	*1,157*	*No*	*0*	*984*	*F*	*1,165*	*No*
9	SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1,213	771	F	805	No	22	793	F	817	No
		EB LT/TH/RT	2	1,213	670	F	669	No	0	670	F	686	No
		RAMP TOTAL	*3*	*2,426*	*1441*	*F*	*1,474*	*No*	*0*	*1,441*	*F*	*1,503*	*No*
10	SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	777	175	D	218	No	0	175	D	218	No
		WB LT/TH/RT	2	777	666	F	497	No	47	713	F	558	No
		RAMP TOTAL	*3*	*1,554*	*841*	*F*	*715*	*No*	*0*	*841*	*F*	*776*	*No*

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.

SOURCE: The Mobility Group, 2017.

TABLE 3.12-13
EXISTING PLUS PROJECT CONDITIONS – FREEWAY OFF-RAMP ANALYSIS (PM PEAK HOUR)

					Existing Conditions[1] (Year 2016)				Existing Plus Project Conditions (Year 2016)				
No.	**Location**	**Movement**	**No. of Lanes[2]**	**Storage Length (feet)**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Project Added Volume**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**
1	I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	1,646	583	C	202	No	11	594	C	204	No
2	I-110 SB Off-ramp at El Segundo Blvd	SB LT	1	558	437	E	437	No	4	441	E	435	No
		SB LT/RT	1	355	0	D	320	No	0	0	D	319	No
		SB RT	1	355	424	C	206	No	0	424	C	231	No
		RAMP TOTAL	*3*	*1,269*	*861*	*D*	*963*	*No*	*4*	*865*	*D*	*985*	*No*
3	I-105 EB Off-ramp at Central Ave	EB LT	1	580	477	F	653	Yes	36	513	F	712	Yes
		EB LT/TH/RT	1	580	240	F	703	Yes	0	240	F	780	Yes
		EB RT	1	803	378	C	303	No	44	422	C	377	No
		RAMP TOTAL	*3*	*1,963*	*1095*	*E*	*1659*	*No*	*80*	*1175*	*F*	*1,869*	*No*
4	I-105 WB Off-ramp at Central Ave	WB LT	1	979	265	D	192	No	0	265	D	192	No
		WB TH/LT	1	847	0	D	192	No	0	0	D	192	No
		WB RT	1	847	536	F	824	No	0	536	F	856	Yes
		RAMP TOTAL	*3*	*2,672*	*801*	*F*	*1208*	*No*	*0*	*801*	*F*	*1,240*	*No*
5	I-105 EB Off-ramp at Wilmington	EB LT	1	1,092	331	F	446	No	3	334	C	346	No
		EB RT	1	1,092	181	A	64	No	173	354	B	240	No
		RAMP TOTAL	*2*	*2,185*	*512*	*F*	*510*	*No*	*176*	*688*	*C*	*586*	*No*
6	I-105 WB Off-ramp at Imperial Hwy	NB LT	1	599	549	F	500	No	217	766	F	697	Yes
		NB TH/LT	4	540	8	F	495	No	7	15	F	695	Yes
		NB RT	1	540	274	C	192	No	10	284	C	208	No
		RAMP TOTAL	*6*	*1,679*	*831*	*F*	*1187*	*No*	*234*	*1065*	*F*	*1,600*	*No*

					Existing Conditions[1] (Year 2016)				Existing Plus Project Conditions (Year 2016)				
No.	**Location**	**Movement**	**No. of Lanes[2]**	**Storage Length (feet)**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Project Added Volume**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**
7	I-105 EB Off-ramp at Long Beach Blvd	EB LT	1	1,018	328	E	255	No	0	328	F	255	No
		EB TH/LT	1	620	1	E	258	No	0	1	F	258	No
		EB RT	1	620	215	B	75	No	0	215	B	75	No
		RAMP TOTAL	*3*	*2,258*	*544*	*D*	*588*	*No*	*0*	*544*	*D*	*588*	*No*
8	I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1,148	285	F	441	No	0	285	F	441	No
		WB TH/RT	1	700	9	F	695	No	0	9	F	695	No
		WB RT	1	700	987	F	677	No	3	990	F	682	No
		RAMP TOTAL	*3*	*2,548*	*1281*	*F*	*1813*	*No*	*3*	*1284*	*F*	*1,818*	*No*
9	SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1,213	433	F	663	No	15	448	F	672	No
		EB LT/TH/RT	2	1,213	694	D	412	No	0	694	D	452	No
		RAMP TOTAL	*3*	*2,426*	*1127*	*E*	*1075*	*No*	*15*	*1142*	*E*	*1124*	*No*
10	SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	777	197	D	274	No	0	197	D	274	No
		WB LT/TH/RT	2	777	1011	F	892	Yes	30	1041	F	920	Yes
		RAMP TOTAL	*3*	*1,554*	*1208*	*F*	*1166*	*No*	*30*	*1238*	*F*	*1,194*	*No*

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.

SOURCE: The Mobility Group, 2017.

The Project would add between 133 and 315 trips to three ramps in the AM peak hour, and 0 to 47 trips at the other off-ramps analyzed. For the Existing Plus 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:

2. I-110 SB Off-ramp at El Segundo Blvd
3. 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.

The Project would add between 80 to 234 trips to three off-ramps in the PM peak hour, and 0 to 30 trips at the other off-ramps analyzed. For the Existing Plus 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 movements, 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 would exceed the storage length for that movement, but the overall queue length for the ramp would not exceed the overall ramp storage capacity. For the SR-91 WB off-ramp at Wilmington Avenue, the queue for 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 cause the overall queue lengths to exceed the overall storage capacity of any ramps during the AM or PM peak periods, the impact of the Project for the Existing Plus Project Conditions would be *less than significant*.

Cumulative

Existing Plus Project Plus Cumulative Intersection Levels of Service

The intersection level of service analysis compared the V/C ratios at each intersection for the Existing Condition and the Existing Plus Project Plus Cumulative Condition, to determine the incremental difference in V/C ratios caused by the Project. The results of the analysis are summarized in **Table 3.12-14** and **Table 3.12-15** for the AM peak hour and in **Table 3.12-16 and Table 3.12-17** for the PM peak hour. These tables compare the level of service for Existing Conditions and Existing Plus Project Plus Cumulative Conditions, show the increase in V/C ratios at each intersection due to the Project, and identify if the increase constitutes a significant impact.

TABLE 3.12-14
EXISTING PLUS PROJECT PLUS CUMULATIVE CONDITIONS
LOS ANGELES COUNTY, CITY OF COMPTON AND CITY OF LYNWOOD INTERSECTION LEVELS OF SERVICE (AM PEAK HOUR)

			Existing Conditions		Existing + Project Conditions				Existing + Project + Cumulative Conditions			
No.	Intersection	Intersection Type	V/C or (Delay)	LOS	V/C or (Delay)	LOS	Change in V/C (Delay)	Significant Impact	V/C or (Delay)	LOS	Change in V/C (Delay)	Significant Impact
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	0.87	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	1.12	F	0.113	Yes	1.127	F	0.12	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	0.713	C	0.139	Yes	0.926	E	0.352	Yes
20	Compton Ave & 124th St	Signalized	0.378	A	0.428	A	0.05	No	0.432	A	0.054	No
26	Wilmington Ave & Imperial Hwy[2]	Signalized	0.657	B	0.82	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	0.28	Yes
28	Wilmington Ave & 118th St	Signalized	0.641	B	1.161	F	0.52	Yes	1.208	F	0.567	Yes
29	Wilmington Ave & 120th St (West)	Signalized	0.84	D	1.024	F	0.184	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	0.26	No
31	Wilmington Ave & 124th St	Signalized	0.557	A	0.697	B	0.14	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	0.47	A	0.023	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	0.91	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

No.	Intersection	Intersection Type	Existing Conditions V/C or (Delay)	Existing Conditions LOS	Existing + Project Conditions V/C or (Delay)	Existing + Project Conditions LOS	Change in V/C (Delay)	Significant Impact	Existing + Project + Cumulative Conditions V/C or (Delay)	Existing + Project + Cumulative Conditions LOS	Change in V/C (Delay)	Significant Impact
39	Mona Blvd & Imperial Hwy[3]	Signalized	0.73	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	0.55	A	0.038	No
43	Alameda St & 103rd St[4]	Signalized	0.79	C	0.812	D	0.022	Yes	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	0.05	Yes	0.827	D	0.062	Yes
52	El Segundo & San Pedro St	Signalized	0.589	A	0.598	A	0.009	No	0.611	B	0.022	No
City of Compton												
13	Slater Ave & El Segundo Blvd	Signalized	0.687	B	0.71	C	0.023	No	0.717	C	0.03	No
21	Compton Ave & El Segundo Blvd	Signalized	0.804	C	0.925	E	0.121	Yes	0.94	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 & Santa Fe[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	Central 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	0.61	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	0.035	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	0.631	B	0.641	B	0.010	No	0.641	B	0.010	No

No.	Intersection	Intersection Type	Existing Conditions V/C or (Delay)	Existing Conditions LOS	Existing + Project Conditions V/C or (Delay)	Existing + Project Conditions LOS	Change in V/C (Delay)	Significant Impact	Existing + Project + Cumulative Conditions V/C or (Delay)	Existing + Project + Cumulative Conditions LOS	Change in V/C (Delay)	Significant Impact
City of Lynwood												
44	Alameda St & Abbott Rd	Signalized	0.66	B	0.673	B	0.013	No	0.679	B	0.019	No
53	Alameda St & Abbott Rd	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

[1] Shares Jurisdiction with City of Compton
[2] Shares Jurisdiction with City of Los Angeles
[3] Shares Jurisdiction with City of Los Angeles and City of Lynwood
[4] Shares Jurisdiction with City of Lynwood
[5] Unsignalized intersection shows delay/LOS for controlled approach

SOURCE: The Mobility Group, 2017.

TABLE 3.12-15
EXISTING PLUS PROJECT PLUS CUMULATIVE CONDITIONS
CITY OF LOS ANGELES AND COMBINED LOS ANGELES COUNTY/CITY OF LOS ANGELES INTERSECTION LEVELS OF SERVICE (AM PEAK HOUR)

			Existing Conditions		Existing + Ambient + Cumulative Conditions		Existing + Project + Ambient + Cumulative Conditions			
No.	**Intersection**	**Intersection Type**	**V/C or Delay**	**LOS**	**V/C or Delay**	**LOS**	**V/C or Delay**	**LOS**	**Change in V/C (Delay)**	**Significant Impact**
	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
24	Wilmington Ave & Santa Ana Blvd N	Signalized	0.473	A	0.503	A	0.517	A	0.014	No
25	Wilmington Ave & 108th St	Signalized	0.593	A	0.633	B	0.661	B	0.028	No
47	Wilmington Ave & 112th St	Unsignalized[1]	(44.5)	E	(78.0)	F	Overflow	F	Overflow	Yes
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

No.	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 & 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

[1] Unsignalized intersection show delay/LOS for controlled approach
[2] Analyzed per City of Los Angeles methodology.

SOURCE: The Mobility Group, 2017.

TABLE 3.12-16
EXISTING PLUS PROJECT PLUS CUMULATIVE CONDITIONS
LOS ANGELES COUNTY, CITY OF COMPTON AND CITY OF LYNWOOD INTERSECTION LEVELS OF SERVICE (PM PEAK HOUR)

			Existing Conditions		Existing + Project Conditions				Existing + Project + Cumulative Conditions			
No.	Intersection	Intersection Type	V/C or (Delay)	LOS	V/C or (Delay)	LOS	Change in V/C (Delay)	Significant Impact	V/C or (Delay)	LOS	Change in V/C (Delay)	Significant Impact
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	0.48	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	0.634	B	0.186	No	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	0.82	D	0.166	Yes	0.84	D	0.186	Yes
27	Wilmington Ave & I-105 e/b Ramps	Signalized	0.68	B	0.988	E	0.308	Yes	1.01	F	0.33	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	1.022	F	0.256	Yes	0.956	E	0.19	Yes
30	Wilmington Ave & 120th St (East)	Signalized	0.426	A	0.756	C	0.33	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	0.13	Yes	0.948	E	0.155	Yes
34	Willowbrook Ave W & 119th Street	Signalized	0.436	A	0.468	A	0.032	No	0.486	A	0.05	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	0.54	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	0.05	Yes	0.885	D	0.06	Yes
40	Mona Blvd & 119th St[4]	Unsignalized[5]	(17.0)	C	(21.6)	C	(4.6)	No	(21.6)	C	(4.6)	No

No.	Intersection	Intersection Type	Existing Conditions		Existing + Project Conditions				Existing + Project + Cumulative Conditions			
			V/C or (Delay)	LOS	V/C or (Delay)	LOS	Change in V/C (Delay)	Significant Impact	V/C or (Delay)	LOS	Change in V/C (Delay)	Significant Impact
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	0.02	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	Yes	0.931	E	0.033	Yes
52	El Segundo & San Pedro St	Signalized	0.601	B	0.612	B	0.011	No	0.646	B	0.045	No
City of Compton												
13	Slater Ave & El Segundo Blvd	Signalized	0.649	B	0.676	B	0.027	No	0.69	B	0.041	No
21	Compton Ave & El Segundo Blvd	Signalized	0.706	C	0.79	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	0.76	C	0.041	Yes
55	El Segundo & Santa Fe[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	Central 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	0.732	C	0.748	C	0.016	No	0.751	C	0.019	No

No.	Intersection	Intersection Type	Existing Conditions V/C or (Delay)	Existing Conditions LOS	Existing + Project Conditions V/C or (Delay)	Existing + Project Conditions LOS	Change in V/C (Delay)	Significant Impact	Existing + Project + Cumulative Conditions V/C or (Delay)	Existing + Project + Cumulative Conditions LOS	Change in V/C (Delay)	Significant Impact
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	Alameda St & Abbott Rd	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

[1] Shares Jurisdiction with City of Compton
[2] Shares Jurisdiction with City of Los Angeles
[3] Shares Jurisdiction with City of Los Angeles and City of Lynwood
[4] Shares Jurisdiction with City of Lynwood
[5] Unsignalized intersection shows delay/LOS for controlled approach

SOURCE: The Mobility Group, 2017.

TABLE 3.12-17
EXISTING PLUS PROJECT PLUS CUMULATIVE CONDITIONS
CITY OF LOS ANGELES AND COMBINED LOS ANGELES COUNTY/CITY OF LOS ANGELES INTERSECTION LEVELS OF SERVICE (PM PEAK HOUR)

			Existing Conditions		Existing + Ambient + Cumulative Conditions		Existing + Project + Ambient + Cumulative Conditions			
Intersection		**Intersection Type**	**V/C or Delay**	**LOS**	**V/C or Delay**	**LOS**	**V/C or Delay**	**LOS**	**Change in V/C (Delay)**	**Significant Impact**
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
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
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

[1] Unsignalized intersection show delay/LOS for controlled approach
[2] Analyzed per City of Los Angeles methodology.
SOURCE: The Mobility Group, 2017.

Table 3.12-14 and Table 3.12-15 show 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 53 of the 66 total intersections analyzed. Based on the impact thresholds by jurisdiction described in Section 3.12.3, there would significant impacts at 22 of 66 intersections during the AM peak hour. Table 3.12-16 and Table 3.12-17 show that for the PM peak hour, with the addition of Project traffic the level of service would remain LOS D or better at a 49 of the 66 total intersections analyzed. There would significant impacts at 31 of 66 intersections during the PM peak hour. Below is the list of intersections where significant impacts are expected to occur at one or both analyzed peak hours:

County of Los Angeles

3. Avalon Blvd & El Segundo Blvd – LOS E (PM peak hour)
10. Central Ave & El Segundo Blvd – LOS E/F (AM peak hour/PM peak hour)
11. Central Ave & Rosecrans Ave – LOS D (AM and PM peak hours)
17. Compton Ave & Imperial Hwy – LOS F/E (AM peak hour/PM peak hour)
19. Compton Ave & 120th St – LOS E/D (AM peak hour/PM peak hour)
26. Wilmington Ave & Imperial Hwy – LOS D (AM and PM peak hours)
27. Wilmington Ave & I-105 e/b Ramps – LOS F (AM and PM peak hours)
28. Wilmington Ave & 118th St – LOS F (AM and PM peak hours)
29. Wilmington Ave & 120th St (West) – LOS E (AM and PM peak hours)
30. Wilmington Ave & 120th St (East) – LOS C (PM peak hour)
32. Wilmington Ave & El Segundo Blvd – LOS D/E (AM peak hour/PM peak hour)
36. Imperial Hwy & I-105 w/b Ramps – LOS E (AM and PM peak hours)
39. Mona Blvd & Imperial Hwy – LOS C/D (AM peak hour/PM peak hour)
43. Alameda St & 103rd St – LOS D (PM peak hours)
45. Alameda St & Imperial Hwy – LOS D (AM peak hours)
46. Alameda St & El Segundo Blvd – LOS D/E (AM peak hour/PM peak hour)

City of Compton

21. Compton Ave & El Segundo Blvd – LOS E/C (AM peak hour/PM peak hour)
33. Wilmington Ave & Rosecrans Ave – LOS E (AM and PM peak hours)
42. Willowbrook Ave & Rosecrans Ave – LOS C (PM peak hour)
57. Central Ave & W Compton Blvd LOS D (PM peak hour)
60. Central Ave & Alondra Blvd – LOS E (PM peak hour)
61. Wilmington Ave & Alondra Blvd – LOS D/E (AM and PM peak hours)

62. Wilmington Ave & Greenleaf Blvd - LOS D/E (AM and PM peak hours)

63. Wilmington Ave & Walnut St – LOS D (PM peak hour)

City of Lynwood

54. Imperial Hwy & State St – LOS D (PM peak hour)

City of Los Angeles

1. Avalon Blvd & Imperial Hwy – LOS D (AM and PM peak hours)

2. Avalon Blvd & 120th Street – LOS C (PM peak hour)

6. Central Ave & Imperial Hwy – LOS D (AM and PM peak hours)

7. Central Ave & I-105 w/b Ramps – LOS E (AM and PM peak hours)

9. Central Ave & 120th St – LOS E (AM and PM peak hours)

25. Wilmington Ave & 112th St – LOS F (AM and PM peak hours)

City of Los Angeles/County of Los Angeles Shared Jurisdiction

There are 4 of the 27 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. Below is the list of intersections where significant impacts are expected to occur at one or both analyzed peak hours:

17. Compton Ave & Imperial Hwy – LOS F/D (AM peak hour/PM peak hour)

26. Wilmington Ave & Imperial Hwy – LOS C (AM and PM peak hours)

36. Imperial Hwy & I-105 w/b Ramps – LOS D/E (AM peak hour/PM peak hour)

39. Mona Blvd & Imperial Hwy – LOS D (PM peak hour)

These results are the same as the analysis under the County methodology.

Future Plus Project Freeway Segment Level of Service

The freeway segment analysis is summarized in **Table 3.12-18** and **Table 3.12-19**, which show the levels of service and demand/capacity (D/C) ratios for Existing Conditions, and Future Without Project (2035), and Future Plus Project (2035) 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.

TABLE 3.12-18
FUTURE PLUS PROJECT CONDITIONS – FREEWAY SEGMENT LEVEL OF SERVICE (AM PEAK HOUR)

						Existing Conditions (Year 2016)			Future Without Project Conditions (Year 2035)			Future With Project Conditions (Year 2035)					
No.	Location	Dir	Inbound/ Outbound	No of Lanes	Capacity	Hourly Volume[1]	D/C	LOS	Hourly Volume	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS	Increase in D/C	% Increase Volume due to Project
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	8733	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)	9367	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	4197	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)	6809	1.135	F(0)	94	6,903	1.15	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)	7702	1.1	F(0)	342	8,044	1.149	F(0)	0.048	4.9%
		WB	Outbound	4G+1HOV	8,000	6,846	0.856	D	7479	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	5696	0.949	E	209	5,905	0.984	E	0.035	4.0%
		WB	Outbound	3G+1HOV	6,000	4,946	0.824	D	5425	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	5309	0.885	D	179	5,488	0.915	D	0.03	3.7%
		WB	Inbound	3G+1HOV	6,000	4,899	0.817	D	5372	0.895	D	314	5,686	0.948	**E**[2]	0.052	6.4%
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8,000	5,747	0.718	C	6274	0.784	D	22	6,296	0.787	D	0.003	0.4%
		WB	Outbound	4G+1HOV	8,000	7,651	0.956	E	8363	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	7037	0.704	C	23	7,060	0.706	C	0.002	0.4%
		WB	Inbound	5G+1HOV	10,000	8,321	0.832	D	9094	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	6583	0.823	D	35	6,618	0.827	D	0.004	0.6%
		SB	Inbound	4G	8,000	4,131	0.516	B	4515	0.564	C	45	4,560	0.57	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	6353	0.635	C	48	6,401	0.64	C	0.005	0.8%
		SB	Outbound	4G	8,000	7,605	0.951	E	8300	1.038	F(0)	23	8,323	1.04	F(0)	0.002	0.3%

1 Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% annum applied for 2016 volumes.

2 Bold LOS indicates a significant impact.

SOURCE: The Mobility Group, 2017.

TABLE 3.12-19
FUTURE PLUS PROJECT CONDITIONS – FREEWAY SEGMENT LEVEL OF SERVICE (PM PEAK HOUR)

						Existing Conditions[1] (Year 2016)			Future Without Project Conditions (Year 2035)			Future With Project Conditions (Year 2035)					
No.	Location	Dir	Inbound/ Outbound	No of Lanes	Capacity	Hourly Volume	D/C	LOS	Hourly Volume	D/C	LOS	Project Trips	Hourly Volume	D/C	LOS	Increase in D/C	% Increase Volume due to Project
1	I-110 between Century Blvd and 109th St	NB	Outbound	4G+2E	8,000	7,693	0.962	E	8437.93	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	8924.43	0.892	D	96	9,020	0.902	D	0.01	1.2%
2	I-110 between 135th St and Rosecrans Ave	NB	Inbound	4G+1E	8,000	7,652	0.957	E	8395.75	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	8689.21	1.086	F(0)	77	8,766	1.096	F(0)	0.01	1.0%
3	I-105 between Vermont Ave and Hoover St	EB	Inbound	3G+1HOV	6,000	3,777	0.630	C	4170.48	0.695	C	123	4,293	0.716	C	0.021	3.3%
		WB	Outbound	3G+1HOV	6,000	5,619	0.937	E	6183.43	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	7314.00	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	7137.45	0.892	D	397	7,534	0.942	**E[2]**	0.049	6.1%
5	I-105 between Compton Ave and Wilmington Ave	EB	Inbound	3G+1HOV	6,000	5,200	0.867	D	5734.20	0.956	E	177	5,911	0.985	E	0.029	3.4%
		WB	Outbound	3G+1HOV	6,000	4,824	0.804	D	5329.15	0.888	D	254	5,583	0.931	**E[2]**	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	5101.06	0.85	D	370	5,471	0.912	D	0.062	8.0%
		WB	Inbound	3G+1HOV	6,000	5,044	0.841	D	5548.39	0.925	D	234	5,782	0.964	**E[2]**	0.038	4.6%
7	SR-91 between Central Ave and Wilmington Ave	EB	Inbound	4G+1HOV	8,000	6,548	0.819	D	7178.27	0.897	D	15	7,193	0.899	D	0.002	0.2%
		WB	Outbound	4G+1HOV	8,000	6,214	0.777	D	6790.50	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	8067.58	0.807	D	51	8,119	0.812	D	0.005	0.7%
		WB	Inbound	5G+1HOV	10,000	6,525	0.653	C	7129.92	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	6599.04	0.825	D	52	6,651	0.831	D	0.006	0.9%
		SB	Inbound	4G	8,000	4,237	0.530	B	4628.89	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	7452.32	0.745	C	32	7,484	0.748	C	0.003	0.5%
		SB	Outbound	4G	8,000	6,416	0.802	D	7014.00	0.877	D	53	7,067	0.883	D	0.006	0.8%

[1] Traffic volumes for Existing Conditions from Caltrans, 2015. Growth factor of 1% annum applied for 2016 volumes.

[2] Bold LOS indicates a significant impact.

SOURCE: The Mobility Group, 2017.

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 sevenx 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 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 Plus Project Conditions.

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 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 Plus Project Conditions.

Future Plus Project Off-Ramp Analysis

The freeway off-ramp analysis for the Future Plus Project Conditions is summarized in **Table 3.12-20** for the AM peak hour and in **Table 3.12-21** for the PM peak hour. These tables show the ramp storage lengths, the ramp volumes, and queue lengths for the Existing Condition, the Future Without Project Condition, and the Future With Project Condition.

TABLE 3.12-20
FUTURE PLUS PROJECT CONDITIONS – FREEWAY OFF-RAMP ANALYSIS (AM PEAK HOUR)

					Existing Conditions[1] (Year 2016)				Future Without Project Conditions (Year 2016)				Future With Project Conditions (Year 2016)				
No.	**Location**	**Movement**	**No. of Lanes**	**Storage Length (feet)[2]**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Project Added Volume**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**
1	I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	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	558	511	D	546	No	574	E	648	Yes	6	580	E	656	Yes
		SB LT/RT	1	355	0	D	492	Yes	0	D	571	Yes	0	0	D	572	Yes
		SB RT	1	355	839	C	457	Yes	916	D	532	Yes	0	916	D	532	Yes
		RAMP TOTAL	*3*	*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	580	664	F	842	Yes	727	F	951	Yes	56	783	F	1,052	Yes
		EB LT/TH/RT	1	580	13	F	867	Yes	14	F	960	Yes	0	14	F	1,063	Yes
		EB RT	1	803	538	C	330	No	599	E	513	No	77	676	F	647	No
		RAMP TOTAL	*3*	*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	979	116	D	104	No	151	D	126	No	0	151	D	126	No
		WB TH/LT	1	847	4	D	101	No	4	D	126	No	0	4	D	127	No
		WB RT	1	847	372	F	536	No	406	F	651	No	0	406	F	654	No
		RAMP TOTAL	*3*	*2,672*	*492*	*E*	*741*	*No*	*561*	*F*	*903*	*No*	*0*	*561*	*F*	*907*	*No*
5	I-105 EB Off-ramp at Wilmington	EB LT	1	1,092	411	F	600	No	449	D	564	No	4	453	D	572	No
		EB RT	1	1,092	537	D	361	No	604	C	554	No	204	808	E	1,035	No
		RAMP TOTAL	*2*	*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	599	539	F	491	No	591	F	538	No	294	885	F	803	Yes
		NB TH/LT	4	540	11	F	491	No	12	F	538	No	9	21	F	808	Yes
		NB RT	1	540	137	A	4	No	150	A	15	No	12	162	A	24	No
		RAMP TOTAL	*6*	*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	1,018	614	F	438	No	670	F	448	No	0	670	F	488	No
		EB TH/LT	1	620	3	F	445	No	3	F	490	No	0	3	F	490	No
		EB RT	1	620	346	B	172	No	378	C	239	No	0	378	C	239	No
		RAMP TOTAL	*3*	*2,258*	*963*	*E*	*1,055*	*No*	*1,051*	*F*	*1,177*	*No*	*0*	*1,051*	*F*	*1,217*	*No*

					Existing Conditions[1] (Year 2016)				Future Without Project Conditions (Year 2016)				Future With Project Conditions (Year 2016)				
No.	**Location**	**Movement**	**No. of Lanes**	**Storage Length (feet)[2]**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Project Added Volume**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**
8	I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1,148	165	D	175	No	180	D	190	No	0	180	D	190	No
		WB TH/RT	1	700	27	F	500	No	30	F	581	No	0	30	F	586	No
		WB RT	1	700	792	F	482	No	864	F	563	No	5	869	F	566	No
		RAMP TOTAL	*3*	*2,548*	*984*	*F*	*1,157*	*No*	*1,074*	*F*	*1,334*	*No*	*0*	*1,074*	*F*	*1,342*	*No*
9	SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1,213	771	F	805	No	841	F	895	No	22	863	F	907	No
		EB LT/TH/RT	2	1,213	670	F	669	No	732	F	753	No	0	732	F	770	No
		RAMP TOTAL	*3*	*2,426*	*1,441*	*F*	*1,474*	*No*	*1,573*	*F*	*1,648*	*No*	*0*	*1,573*	*F*	*1,677*	*No*
10	SR-91 WB Off-ramp at Wilmington Ave	WB LT	1	777	175	D	218	No	191	D	254	No	0	191	D	254	No
		WB LT/TH/RT	2	777	666	F	497	No	726	F	573	No	47	773	F	630	No
		RAMP TOTAL	*3*	*1,554*	*841*	*F*	*715*	*No*	*917*	*F*	*827*	*No*	*0*	*917*	*F*	*884*	*No*

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.

SOURCE: The Mobility Group, 2017.

TABLE 3.12-21
FUTURE PLUS PROJECT CONDITIONS – FREEWAY OFF-RAMP ANALYSIS (PM PEAK HOUR)

					Existing Conditions[1] (Year 2016)				Future Without Project Conditions (Year 2016)				Future With Project Conditions (Year 2016)				
No.	Location	Movement	No. of Lanes	Storage Length (feet)[2]	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed Storage Length	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed Storage Length	Project Added Volume	Ramp Volume	Ramp LOS	95% Queue Length (feet)	Exceed Storage Length
1	I-110 NB Off-ramp at El Segundo Blvd	NB LT/RT	2	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	558	437	E	437	No	520	F	508	No	4	524	F	512	No
		SB LT/RT	1	355	0	D	320	No	0	D	405	Yes	0	0	D	408	Yes
		SB RT	1	355	424	C	206	No	463	D	343	No	0	463	D	362	No
		RAMP TOTAL	*3*	*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	580	477	F	653	Yes	524	F	757	Yes	36	560	F	826	Yes
		EB LT/TH/RT	1	580	240	F	703	Yes	262	F	820	Yes	0	262	F	893	Yes
		EB RT	1	803	378	C	303	No	441	D	505	No	44	485	E	571	No
		RAMP TOTAL	*3*	*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	979	265	D	192	No	330	D	234	No	0	330	D	234	No
		WB TH/LT	1	847	0	D	192	No	0	D	235	No	0	0	D	235	No
		WB RT	1	847	536	F	824	No	585	F	989	Yes	0	585	F	1,013	Yes
		RAMP TOTAL	*3*	*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	1,092	331	F	446	No	361	D	378	No	3	364	D	383	No
		EB RT	1	1,092	181	A	64	No	207	A	101	No	173	380	B	270	No
		RAMP TOTAL	*2*	*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	599	549	F	500	No	603	F	549	No	217	820	F	744	Yes
		NB TH/LT	4	540	8	F	495	No	9	F	543	Yes	7	16	F	744	Yes
		NB RT	1	540	274	C	192	No	299	D	235	No	10	309	D	253	No
		RAMP TOTAL	*6*	*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	1,018	328	E	255	No	358	F	283	No	0	358	F	283	No
		EB TH/LT	1	620	1	E	258	No	1	F	285	No	0	1	F	285	No
		EB RT	1	620	215	B	75	No	235	B	107	No	0	235	B	107	No
		RAMP TOTAL	*3*	*2,258*	*544*	*D*	*588*	*No*	*594*	*E*	*675*	*No*	*0*	*594*	*E*	*675*	*No*

					Existing Conditions[1] (Year 2016)				Future Without Project Conditions (Year 2016)				Future With Project Conditions (Year 2016)				
No.	**Location**	**Movement**	**No. of Lanes**	**Storage Length (feet)[2]**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**	**Project Added Volume**	**Ramp Volume**	**Ramp LOS**	**95% Queue Length (feet)**	**Exceed Storage Length**
8	I-105 WB Off-ramp at Long Beach Blvd	WB LT	1	1,148	285	F	441	No	311	F	483	No	3	311	F	483	No
		WB TH/RT	1	700	9	F	695	No	10	F	797	Yes	0	10	F	798	Yes
		WB RT	1	700	987	F	677	No	1,077	F	780	Yes	0	1,077	F	783	Yes
		RAMP TOTAL	*3*	*2,548*	*1,281*	*F*	*1,813*	*No*	*1,398*	*F*	*2,060*	*No*	*0*	*1,398*	*F*	*2,064*	*No*
9	SR-91 EB Off-ramp at Wilmington Ave	EB LT	1	1,213	433	F	663	No	473	F	742	No	15	488	F	750	No
		EB LT/TH/RT	2	1,213	694	D	412	No	746	E	509	No	0	746	E	545	No
		RAMP TOTAL	*3*	*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	777	197	D	274	No	215	E	313	No	0	215	E	313	No
		WB LT/TH/RT	2	777	1,011	F	892	Yes	1,103	F	986	Yes	30	1,133	F	1,014	Yes
		RAMP TOTAL	*3*	*1,554*	*1,208*	*F*	*1,166*	*No*	*1,318*	*F*	*1,299*	*No*	*30*	*1,348*	*F*	*1,327*	*No*

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.

SOURCE: The Mobility Group, 2017.

The Project would add between 133 and 315 trips to three ramps in the AM peak hour, and 0 to 47 trips at the other off-ramps analyzed. For the Future plus 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 Existing Conditions and Future Without Project Conditions:

2. I-110 SB Off-ramp at El Segundo Blvd
3. 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.

The Project would add between 80 to 234 trips to three off-ramps in the PM peak hour, and 0 to 30 trips at the other off-ramps analyzed. For the Future Plus Project conditions, the queues would not exceed the total ramp storage lengths at any of the ramps, except at three locations:

2. I-110 SB Off-ramp at El Segundo Blvd
3. I-105 EB Off-ramp at Central Ave
6. 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 Plus 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 Plus 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 Plus 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 Plus 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 Plus 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 Plus 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.

Mitigation Measures

Project-Specific

Existing Plus Project Intersection LOS

As noted previously, 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, including the installation of road diets to reduce traffic lanes in certain locations. These non-vehicular transportation improvements are consistent with the Los Angeles County General Plan land use policies. These policies include Policy 4.1 - expand transportation options that reduce automobile dependence, Policy 4.10 - support the linkage of regional and community-level transportation systems, including multi-modal networks and Policy 5.1 - the facilitation of transit-oriented land uses and pedestrian-oriented design, particularly in the first-mile connections to transit, to encourage transit ridership. The implementation of increasing the roadway curb-to-curb widths to accommodate additional vehicular traffic is not consistent with the County's non-vehicular policies because increasing road widths within existing rights-of-way would reduce the potential for wider sidewalks for pedestrian and installation of bicycle lanes. Because the increase in roadway curb-to-curb widths is not consistent with the County's policies, they would not be considered feasible. Therefore, if restriping of traffic lanes within the existing curb-to-curb roadway cross section is adequate to improve the operation of the transportation facility, it would be considered feasible and would not conflict with County's policies to encourage multi-modal and non-vehicular transportation 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 the County General Plan policies); 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 TDM 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 MLK Medical Campus Tier 2 Expansion is included in the Specific Plan and the traffic study. 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 (i.e., consistent with the current County General Plan land use policies). In the Specific Plan area, a number of those mitigations that involved roadway widening are considered to be now infeasible because the existing curb-to-curb roadway cross sections are not adequate to accommodate the recommended improvements. F and so are not included in the following list of mitigation measures for this study.

County of Los Angeles

The proposed project would result in significant impacts at 16 intersections within the County of Los Angeles. Because the existing curb-to-curb roadway widths do not allow for additional improvements at the following four intersections located in the jurisdiction of the County of Los Angeles and additional rights-of-way would be required for additional improvements which would not be consistent with the County General Plan land use policies discussed above, the County determined that there are no feasible mitigation measures at these intersections.

19. Compton Ave & 120th St – LOS E/D (AM peak hour/PM peak hour)
26. Wilmington Ave & Imperial Hwy – LOS D (AM and PM peak hours)
29. Wilmington Ave & 120th St (West) – LOS E (AM and PM peak hours)
39. Mona Blvd & Imperial Hwy – LOS D (PM peak hour)

As such, impacts at these four intersections would be *significant and unavoidable*.

At the remaining 12 intersections in the County of Los Angeles where significant impacts were identified, the following mitigation measures are proposed to address impacts in the Existing Plus Project Conditions.

Mitigation Measure TRAF-1: Avalon Blvd & El Segundo Blvd (#3)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in the PM peak hour at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the northbound approach to add a right turn lane prior to an individual project exceeding the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 feet. This would need to occur all the way to an alley located approximately 100 feet 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, the County of Los Angeles shall ensure the restriping of the southbound approach to provide a separate right turn lane by narrowing the median to 2 feet prior to an individual project exceeding the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 Plus Project Condition, this mitigation measure would fully mitigate the PM peak hour impact at this location.

Significance after Mitigation: Less than Significant

Mitigation Measure TRAF-2: Central Ave & El Segundo Blvd (#10)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the southbound approach to provide a separate right-turn lane and restriping the northbound approach by reducing the median to 2 feet before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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. Buses would be allowed 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, the County of Los Angeles shall ensure the restriping of the westbound approach to provide a separate right turn lane by narrowing the median to 2 feet prior to an individual project exceeding the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 Plus Project Conditions this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Mitigation Measure TRAF-3: Central Ave & Rosecrans Ave (#11)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in the AM Peak hour at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the westbound approach to provide a separate right-turn lane by narrowing the median to 2 feet before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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. Buses would be allowed 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 Plus Project Condition this mitigation measure would fully mitigate the AM peak hour impact.

Significance after Mitigation: Less than Significant

Mitigation Measure TRAF-4: Compton Ave & Imperial Hwy (#17)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the westbound approach to provide a separate right-turn lane before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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.

For the Existing Plus Project Condition, the proposed restriping 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. Additional improvements to improve the AM and PM peak hours would be required so that there is not an exceedance of the County's significant impact criteria. However, additional improvements would require the acquisition of additional right-of-way. Because the widening of roadways is not consistent with the County's General Plan land use policies

as discussed above, additional improvements requiring right-of-way acquisition at this intersection are considered not feasible.

Significance after Mitigation: Significant and Unavoidable. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection located in the jurisdiction of the County of Los Angeles and additional rights-of-way would be required for additional improvements, the County determined that there are no feasible mitigation measures at this intersection.

Mitigation Measure TRAF-5: Wilmington Ave & I-105 e/b Ramps (#27)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure that an additional eastbound lane will be installed by widening (reducing the raised median on the ramp) the off-ramp before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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, the County of Los Angeles shall ensure that an additional northbound left-turn lane is provided by reducing the median width. This improvement 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 Plus Project Condition, these mitigation measures would fully mitigate the impacts in both the AM and PM peak hours.

Significance after Mitigation: Significant and Unavoidable. Although the above improvements would fully mitigate the impacts, the required installation of an additional eastbound lane is proposed on the off-ramp that is not under the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementing this off-ramp improvement would occur prior to the intersection exceeding the County's significant impact criteria. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-6: Wilmington Ave & 118th St (#28)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the eastbound approach of 118th Street to provide a separate right-turn lane before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 Plus Project Condition, this improvement 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. Additional improvements to improve the AM and PM peak hours would be required so that there is not an exceedance of the County's significant impact criteria. However, additional improvements would require the acquisition of additional right-of-way. Because the widening of roadways is not consistent with the County's General Plan land use policies as discussed above, additional improvements requiring right-of-way acquisition at this intersection are considered not feasible.

Significance after Mitigation: Significant and Unavoidable. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection located in the jurisdiction of the County of Los Angeles and additional rights-of-way would be required for additional improvements, the County determined that there are no feasible mitigation measures at this intersection beyond the proposed restriping improvement.

Mitigation Measure TRAF-7: Wilmington Ave & 120th St (East) (#30)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in the PM peak hour at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure that 120th Street west of Wilmington Avenue (the driveway to the MLK Medical Campus) is widened for 250 feet, on the south side by 2 feet and the eastbound approach is restriped to provide dual left-turn lanes before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 Plus Project Condition, this mitigation measure would fully mitigate the PM peak hour impact.

Significance after Mitigation: Less than Significant

Mitigation Measure TRAF-8: Wilmington Ave & El Segundo Blvd (#32)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the eastbound and westbound approaches to add separate right-turn lanes before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement would allow buses to go through the intersection from the right-turn lanes. This improvement 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 Plus Project Conditions, the proposed restriping would partially mitigate the impact in the AM peak hour (the level of service would improve to LOS C), and would fully mitigate the impact in the PM peak hour. Additional improvements to improve the AM peak hour would be required so that there is not an exceedance of the County's significant impact criteria. However, additional improvements would require the acquisition of additional right-of-way. Because the widening of roadways is not consistent with the County's General Plan land use policies as discussed above, additional improvements requiring right-of-way acquisition at this intersection are considered not feasible.

Significance after Mitigation: Significant and Unavoidable. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection located in the jurisdiction of the County of Los Angeles and additional rights-of-way would be required for additional improvements, the County determined that there are no feasible mitigation measures at this intersection.

Mitigation Measure TRAF-9: Imperial Hwy & I-105 w/b Ramps (#36)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure that a third northbound left-turn lane is provided by widening the off-ramp by 10 feet for approximately 150 feet to 200 feet before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the

County. This improvement 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 Plus 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. Additional improvements to improve the AM and PM peak hours would be required so that there is not an exceedance of the County's significant impact criteria. However, additional improvements would require the acquisition of additional right-of-way. Because the widening of roadways is not consistent with the County's General Plan land use policies as discussed above, additional improvements requiring right-of-way acquisition at this intersection are considered not feasible.

Significance after Mitigation: Significant and Unavoidable. Although the above improvement would partially mitigate the AM and PM peak hour impacts, the required widening of the off-ramp is not under the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementing this off-ramp improvement would occur prior to the intersection exceeding the County's significant impact criteria. In addition, because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection and additional rights-of-way would be required for additional improvements, the County determined that there are no feasible mitigation measures at this intersection.

Mitigation Measure TRAF-10: Alameda St & 103rd St (#43)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the eastbound approach for a separate left-turn lane before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 Plus Project Condition, this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Mitigation Measure TRAF-11: Alameda St & Imperial Hwy (#45)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in the AM peak hour at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the southbound approach for dual right-turn lanes before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 Plus Project Condition, this mitigation measure would fully mitigate the impact in the AM peak hour.

Significance after Mitigation: Less than Significant

Mitigation Measure TRAF-12: Alameda St & El Segundo Blvd (#46)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a building permit, the County of Los Angeles shall ensure the restriping of the northbound and southbound approaches to provide separate right-turn lanes before an individual project exceeds the County's significance criteria. The timing of this improvement shall be determined through the preparation of a traffic evaluation by the individual project applicant and reviewed by the County. This improvement 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 Plus Project Condition, this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

City of Compton

The proposed project would result in significant impacts at 6 intersections within the City of Compton. The following measures are proposed to address impacts in the Existing Plus Project Condition.

Mitigation Measure TRAF-13: Wilmington Ave & Greenleaf Blvd (#62)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions there is a significant impact in both the AM and PM peak hours at this location. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection, additional right-of-way is necessary to improve the intersection so that the project does not exceed the City of Compton's significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this intersection are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition, there is uncertainty if the City of Compton would establish a proportionate share funding program to acquire additional right-of-way at this intersection and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-14: Compton Ave & El Segundo Blvd (#21)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the eastbound and westbound approaches to provide separate right-turn lanes by narrowing the medians to 2 feet. This proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism.

In the Existing Plus Project Condition, the above restriping 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. Additional improvements to improve the AM peak hour would be required so that there is not an exceedance of the City of Compton's significant impact criteria. However, additional improvements would require the acquisition of additional right-of-way. To address this additional impact, the

project applicant shall provide the following in addition to the funding for the restriping improvements identified above.

Prior to the issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to further improve the AM peak hour level of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the proposed improvements are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition, there is uncertainty if the City of Compton would establish a proportionate share funding program to restripe this intersection as well as acquire additional right-of-way to provide the necessary improvements at this intersection to improve the levels of service so that the City of Compton's significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Compton, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

Mitigation Measure TRAF-15: Wilmington Ave & Rosecrans Ave (#33)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. To address this impact, the proposed mitigation measure is as follows:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound approach to provide a separate right-turn lane by narrowing the median to 2 feet. This improvement 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 proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

In the Existing Plus 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. Additional improvements to improve the AM and PM peak hours

would be required so that there is not an exceedance of the City of Compton's significant impact criteria. However, additional improvements would require the acquisition of additional right-of-way. To address this additional impact, the project applicant shall provide the following in addition to the funding for the restriping improvements identified above.

Prior to the issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to further improve the AM and PM peak hours level of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable Because the proposed improvements are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition, there is uncertainty if the City of Compton would establish a proportionate share funding program to restripe this intersection as well as acquire additional right-of-way to provide the necessary improvements at this intersection to improve the levels of service so that the City of Compton's significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Compton, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

Mitigation Measure TRAF-16: Wilmington Ave & W Compton Blvd (#58)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is no significant impact in the AM peak hours, but there is a significant impact in the PM peak hours at this location. The proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this intersection are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that

the timing of implementing these improvements would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition, there is uncertainty if the City of Compton would establish a proportionate share funding program to acquire additional right-of-way at this intersection and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-17: Wilmington Ave & Alondra Blvd (#61)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location.

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the westbound approach to provide a separate right-turn lane by narrowing the median to 3 feet. This improvement 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 proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

In the Existing Plus Project Condition, the above restriping 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. Additional improvements to improve the PM peak hour would be required so that there is not an exceedance of the City of Compton's significant impact criteria. However, additional improvements would require the acquisition of additional right-of-way. To address this additional impact, the project applicant shall provide the following in addition to the funding for the restriping improvements identified above.

Prior to the issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding of the additional right-of-way acquisition and improvement to further improve the PM peak hour level of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the proposed improvements are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition,

there is uncertainty if the City of Compton would establish a proportionate share funding program to restripe this intersection as well as acquire additional right-of-way to provide the necessary improvements at this intersection to improve the levels of service so that the City of Compton's significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Compton, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

Mitigation Measure TRAF-18: Wilmington Ave & Walnut St (#63)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is no significant impact in the AM peak hours, but a significant impact in the PM peak hours at this location. The proposed mitigation measure is as follows:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping and modifying the eastbound approach from a left-turn lane, a through lane, and a right-turn lane to 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-foot lane and a 12-foot curb lane prior to merging back to one lane, and prohibiting on-street parking for the same distance. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

In the Existing Plus Project Condition, this mitigation measure would fully mitigate the impacts in the PM peak hour. In the PM peak hour, the level of service would improve to LOS C.

Significance after Mitigation: Significant and Unavoidable. Although the above improvements could reduce the impact at this intersection to less than significant, the proposed improvements are not located within the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition, there is uncertainty if the City of Compton would establish a proportionate share funding program to restripe this intersection to improve the levels of service so that the City of Compton's significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Compton, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

City of Lynwood

The proposed project would result in significant impacts at one intersection within the City of Lynwood. The following mitigation measure is proposed to address impacts in the Existing Plus Project Conditions.

Mitigation Measure TRAF-19: Imperial Hwy & State St (#54)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is no significant impact in the AM peak hours, but a significant impact in the PM peak hours at this location. The proposed mitigation measure is as follows:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound and southbound approaches to provide separate right-turn lanes. This improvement 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 improvements require removal of two on-street parking spaces on each approach. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Lynwood. The proportionate share funding shall be provided by the project applicant if the City of Lynwood has established a proportionate share funding mechanism for the improvement at this intersection.

In the Existing Plus Project Condition, this mitigation measure would fully mitigate the impacts in the PM peak hour. In the PM peak hour, the level of service would improve to LOS C.

Significance after Mitigation: Significant and Unavoidable. Although the above improvement could reduce the impact at this intersection to less than significant, the proposed improvements are not located within the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Lynwood's significant impact criteria. In addition, there is uncertainty if the City of Lynwood would establish a proportionate share funding program to restripe this intersection to improve the levels of service so that the City of Lynwood's significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Lynwood, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

City of Los Angeles

The proposed project would result in a significant impact at 6 intersections within the City of Los Angeles. The following measures are proposed to address impacts in the Existing Plus Project Condition.

Mitigation Measure TRAF-20: Avalon Blvd & Imperial Hwy (#1)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection, additional right-of-way is necessary to improve the intersection so that the project does not exceed the City of Los Angeles' significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this intersection are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the intersection exceeding the City of Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to acquire additional right-of-way at this intersection and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-21: Avalon Blvd & 120th Street (#2)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in the PM peak hour at this location. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection, additional right-of-way is necessary to improve the intersection so that the project does not exceed the City of Los Angeles' significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this intersection are not located

within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the intersection exceeding the City of Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to acquire additional right-of-way at this intersection and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-22: Central Ave & Imperial Hwy (#6)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection, additional right-of-way is necessary to improve the intersection so that the project does not exceed the City of Los Angeles' significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this intersection are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the intersection exceeding the City of Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to acquire additional right-of-way at this intersection and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-23: Central Ave & I-105 WB Ramps (#7)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping 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. This proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County

of Los Angeles and City of Los Angeles. The proportionate share funding shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism.

In the Existing Plus Project Condition, this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours.

Significance after Mitigation: Significant and Unavoidable. Although the above improvements could reduce the impact at this intersection to less than significant, the proposed improvements are not located within the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to restripe this intersection to improve the levels of service so that the City of Los Angeles' significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Los Angeles, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

Mitigation Measure TRAF-24: Central Ave & 120th St (#9)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. The proposed mitigation measure is as follows:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound approach to provide a separate right-turn lane. This improvement 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. The proportionate share funding of the restriping improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.

In the Existing Plus Project Condition, this mitigation measure would partially mitigate the impacts in both the AM and PM peak hours, with the level of service remaining at LOS D in both peak hours. Additional improvements to improve the AM and PM peak hours would be required so that there is not an exceedance of the City of Los Angeles' significant impact criteria. However, additional improvements would require the acquisition of additional right-of-way. To address this additional impact, the project applicant shall provide the following in addition to the funding for the restriping improvements identified above.

Prior to the issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding of the additional right-of-way acquisition and improvement to further improve the AM and PM peak hours level of service shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the proposed improvements are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to restripe this intersection as well as acquire additional right-of-way to provide the necessary improvements at this intersection to improve the levels of service so that the City of Los Angeles' significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Los Angeles, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

Mitigation Measure TRAF-25: Wilmington Ave & 112th St (#25)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus 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. The proposed mitigation measure is as follows:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of installation of a new traffic signal at this location because the signal warrant analysis indicated that a traffic signal would be warranted. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Los Angeles. The proportionate share funding shall be provided by the project applicant if the City of Los Angeles has established a proportionate share funding mechanism for the improvement at this intersection.

In the Existing Plus Project Condition, this mitigation measure would fully mitigate the impacts in both the AM and PM peak hours.

Significance after Mitigation: Significant and Unavoidable. Although the above improvement could reduce the impact at this intersection to less than significant, the proposed improvement is not located within the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementation

would occur prior to the intersection exceeding the City of Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to install a new traffic signal at this intersection to improve the levels of service so that the City of Los Angeles' significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Los Angeles, the implementation of the improvement within this mitigation measure is considered potentially significant and unavoidable.

Existing Plus Project Freeway Segment LOS

The proposed project would result in a significant impact at one freeway segment. The following mitigation measure is proposed to address impacts in the Existing Plus Project Condition.

Mitigation Measure TRAF-26: I-110 southbound between 135th St & Rosecrans Ave

As shown in Tables 3.12-10 and 3.12-11, in the Existing Plus Project Conditions, there is a significant impact in both the AM and PM peak hours at this location. Because the existing freeway right-of-way is constrained along this segment, additional lane improvements along this segment would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the Caltrans significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements along this freeway segment through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this freeway segment are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the intersection exceeding Caltrans' significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way along this freeway segment and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Existing Plus Project Off-Ramp Analysis

No mitigation measures are required.

Cumulative

Existing Plus Project Plus Cumulative Intersection LOS

County of Los Angeles

The proposed project would result in significant impacts at 16 intersections within the County of Los Angeles. Because the existing curb-to-curb roadway widths do not allow for additional improvements at the following four intersections located in the jurisdiction of the County of Los Angeles and additional rights-of-way would be required for additional improvements which would not be consistent with the County General Plan land use policies discussed above, the County determined that there are no feasible mitigation measures at these intersections.

19. Compton Ave & 120th St – LOS E/D (AM peak hour/PM peak hour)
26. Wilmington Ave & Imperial Hwy – LOS D (AM and PM peak hours)
29. Wilmington Ave & 120th St (West) – LOS E (AM and PM peak hours)
39. Mona Blvd & Imperial Hwy – LOS D (PM peak hour)

As such, impacts at these four intersections would be *significant and unavoidable*.

At the remaining 12 intersections in the County of Los Angeles where significant impacts were identified, the following mitigation measures are proposed to address impacts in the Existing Plus Project Plus Cumulative Conditions.

> Implementation of Mitigation Measures **TRAF-1** through **TRAF-12** is required.
>
> *Significance after Mitigation: Significant and Unavoidable*

City of Compton

The proposed project would result in significant impacts at 9 intersections within the City of Compton. The following measures are proposed to address impacts identified in the jurisdiction of the City of Compton:

> Implementation of **Mitigation Measures TRAF-13 through TRAF-18** is required.
>
> **Mitigation Measure TRAF-27:** Willowbrook Ave & Rosecrans Ave (#42)
>
> As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Plus Cumulative Conditions, there is no significant impact in the AM peak hour, but a significant impact in the PM peak hour at this location. Because the existing curb-to-curb roadway width does not allow for additional improvements at this intersection, additional right-of-way is necessary to improve the intersection so that the project does not exceed the City of Los Compton's significant impact criteria. To address this impact, the proposed mitigation measure is as follows:
>
> Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share

funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this intersection are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition, there is uncertainty if the City of Compton would establish a proportionate share funding program to acquire additional right-of-way at this intersection and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-28: Central Ave & Compton Blvd (#57)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Plus 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:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound approach to provide a separate right-turn lane by narrowing the median to 2 feet. 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 improvement requires removal of five on-street parking spots on the northbound approach. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

In the Existing Plus Project Plus 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.

Significance after Mitigation: Significant and Unavoidable. Although the above improvement could reduce the impact at this intersection to less than significant, the proposed improvements are not located within the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition, there is uncertainty if the City of Compton would establish a proportionate share funding program to restripe this intersection to improve the levels of service so that the City of Compton's significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate

share funding program by the City of Compton, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

Mitigation Measure TRAF-29: Central Ave & Alondra Blvd (#60)

As shown in Tables 3.12-8 and 3.12-9, in the Existing Plus Project Plus Cumulative Condition, 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:

Prior to the issuance of a grading permit for each individual project, the project applicant shall determine their project's proportionate share funding of restriping the northbound and southbound approaches to provide a separate right-turn lane by narrowing the median to 2 feet. 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. The proportionate share funding shall be determined through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and City of Compton. The proportionate share funding shall be provided by the project applicant if the City of Compton has established a proportionate share funding mechanism for the improvement at this intersection.

In the Existing Plus Project Condition, this mitigation measure would fully mitigate the impacts in the PM peak hour and the level of service would remain at LOS D.

Significance after Mitigation: Significant and Unavoidable. Although the above improvement could reduce the impact at this intersection to less than significant, the proposed improvements are not located within the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Compton's significant impact criteria. In addition, there is uncertainty if the City of Compton would establish a proportionate share funding program to restripe this intersection to improve the levels of service so that the City of Compton's significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Compton, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

Lynwood

The proposed project would result in a significant impact at one intersection within the City of Lynwood. The following measure is proposed to address the impact identified in the jurisdiction of the City of Lynwood:

Implementation of Mitigation Measure **TRAF-19** is required.

Significance after Mitigation: Significant and Unavoidable. Although the above improvement could reduce the impact at this intersection to less than significant, the proposed improvements are not located within the jurisdiction of the County of Los

Angeles. Therefore, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of Lynwood's significant impact criteria. In addition, there is uncertainty if the City of Lynwood would establish a proportionate share funding program to restripe this intersection to improve the levels of service so that the City of Lynwood's significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Lynwood, the implementation of the improvements within this mitigation measure is considered potentially significant and unavoidable.

City of Los Angeles

The proposed project would result in a significant impact at 6 intersections within the City of Los Angeles. The following measures are proposed to address the impact identified in the jurisdiction of the City of Los Angeles:

Implementation of **Mitigation Measures TRAF-20** through **TRAF-25** is required.

Significance after Mitigation: Significant and Unavoidable.

The implementation of Mitigation Measures TRAF-20 through TRAF-22 could reduce the impact at these intersections; however, because additional right-of-way acquisition and improvement are needed to improve these intersections, and these intersections are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the intersections exceeding the City of Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to acquire additional right-of-way at these intersections and to provide the necessary improvements. As a result, the implementation of these improvements is considered potentially significant and unavoidable.

The implementation of Mitigation Measures TRAF-23 and TRAF-25 could reduce the impact at these intersections to less than significant; however, the proposed improvements are not located within the jurisdiction of the County of Los Angeles. Therefore, the County cannot guarantee that the timing of implementation would occur prior to the intersections exceeding the City of Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to implement the improvements to improve the levels of service so that the City of Los Angeles' significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Los Angeles, the potential impacts at these two intersections are considered potentially significant and unavoidable.

The implementation of Mitigation Measure TRAF-24 could reduce the impact at this intersection to less than significant. Because the proposed improvements are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementation would occur prior to the intersection exceeding the City of

Los Angeles' significant impact criteria. In addition, there is uncertainty if the City of Los Angeles would establish a proportionate share funding program to restripe this intersection as well as acquire additional right-of-way to provide the necessary improvements at this intersection to improve the levels of service so that the City of Los Angeles' significance criteria are not exceeded. Because of the uncertainty of the timing of implementation and the establishment of a proportionate share funding program by the City of Los Angeles, the impact at this intersection is considered potentially significant and unavoidable.

Future Plus Project Freeway Segment LOS

The proposed project would result in a significant impact at one freeway segment. The following mitigation measure is proposed to address impacts in the Future Plus Project Condition.

Mitigation Measure TRAF-30: I-105 westbound between Avalon Blvd and Central Ave

As shown in Tables 3.12-18 and 3.12-19, in the Existing Plus Project Conditions, there is a significant impact in the PM peak hour at this location. Because the existing freeway right-of-way is constrained along this segment, additional lane improvements along this segment would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the Caltrans significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements along this freeway segment through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this freeway segment are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the freeway segment exceeding Caltrans' significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way along this freeway segment and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-31: I-105 westbound between Compton Ave and Wilmington Ave

As shown in Tables 3.12-18 and 3.12-19, in the Existing Plus Project Conditions, there is a significant impact in the PM peak hour at this location. Because the existing freeway right-of-way is constrained along this segment, additional lane improvements along this segment would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the Caltrans significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements along this freeway segment through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this freeway segment are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the freeway segment exceeding Caltrans' significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way along this freeway segment and to provide the necessary improvements. As a result, the impact at this freeway segment is considered potentially significant and unavoidable.

Mitigation Measure TRAF-32: I-105 westbound between State St & Long Beach Blvd

As shown in Tables 3.12-18 and 3.12-19, in the Existing Plus Project Conditions, there is a significant impact in the AM and PM peak hours at this location. Because the existing freeway right-of-way is constrained along this segment, additional lane improvements along this segment would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the Caltrans significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements along this freeway segment through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this freeway segment are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the freeway segment exceeding Caltrans' significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way along this freeway segment and to provide the necessary improvements. As a result, the impact at this freeway segment is considered potentially significant and unavoidable.

Future Plus Project Off-Ramp Analysis

The proposed project would result in a significant impact at two off-ramps. The following mitigation measures are proposed to address impacts in the Future Plus Project Condition.

Implementation of **Mitigation Measure TRAF-9** is required for I-105 WB off-ramp at Imperial Highway to reduce the impact in the PM peak hour.

Mitigation Measure TRAF-33: I-110 SB off-ramp at El Segundo Blvd.

As shown in Tables 3.12-20 and 3.12-21, in the Future Plus Project Conditions, there is a significant impact in the AM and PM peak hours at this location. Because the existing right-of-way is constrained along the off-ramp, additional lane improvements would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the Caltrans significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this off-ramp through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this off-ramp are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the off-ramp exceeding Caltrans' significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way for this off-ramp and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Significance Determination

Project-Specific

Existing Plus Project Intersection LOS

Significant and unavoidable impact. After the implementation of Mitigation Measures TRAF-1 through TRAF-25, a total of 18 of the 25 intersections would still exceed the significance threshold and result in significant and unavoidable adverse impacts. In addition to the 18 intersections, there are 4 additional intersections within the County jurisdiction where additional right-of-way would be required for additional improvements which would not be consistent with the County General Plan land use policies. The County determined that there are no feasible measures to implement at these 4 intersections. Therefore, there are a total of 22 intersections that would exceed the significance standards and represent a significant and unavoidable impact. The 22 intersection are identified below along with the mitigation measure for each intersection.

- **Mitigation Measure TRAF-4**: Compton Ave & Imperial Hwy (#17)
- **Mitigation Measure TRAF-5:** Wilmington Ave & I-105 e/b Ramps (#27)
- **Mitigation Measure TRAF-6:** Wilmington Ave & 118th St (#28)
- **Mitigation Measure TRAF-8**: Wilmington Ave & El Segundo Blvd (#32)
- **Mitigation Measure TRAF-9:** Imperial Hwy & I-105 w/b Ramps (#36)
- **Mitigation Measure TRAF-13:** Wilmington Ave & Greenleaf Blvd (#62)
- **Mitigation Measure TRAF-14**: Compton Ave & El Segundo Blvd (#21)
- **Mitigation Measure TRAF-15**: Wilmington Ave & Rosecrans Ave (#33)
- **Mitigation Measure TRAF-16**: Wilmington Ave & W Compton Blvd (#58)
- **Mitigation Measure TRAF-17**: Wilmington Ave & Alondra Blvd (#61)
- **Mitigation Measure TRAF-18**: Wilmington Ave & Walnut St (#63)
- **Mitigation Measure TRAF-19**: Imperial Hwy & State St (#54)
- **Mitigation Measure TRAF-20:** Avalon Blvd & Imperial Hwy (#1)
- **Mitigation Measure TRAF-21:** Avalon Blvd & 120th Street (#2)
- **Mitigation Measure TRAF-22:** Central Ave & Imperial Hwy (#6)
- **Mitigation Measure TRAF-23**: Central Ave & I-105 WB Ramps (#7)
- **Mitigation Measure TRAF-24** Central Ave & 120th St (#9)
- **Mitigation Measure TRAF-25**: Wilmington Ave & 112th St (#25)
- **No Feasible Mitigation Measure:** Compton Ave & 120th St (#19)
- **No Feasible Mitigation Measure:** Wilmington Ave & Imperial Hwy (#26)
- **No Feasible Mitigation Measure:** Wilmington Ave & 120th St (West) (#29)
- **No Feasible Mitigation Measure:** Mona Blvd & Imperial Hwy (#39)

A specific discussion of the significance after mitigation is provided above under Mitigation Measures for each significant impact.

Existing Plus Project Freeway Segment LOS

Significant and unavoidable impact. There is one freeway segment that would exceed the significance standards and represent a significant and unavoidable impact. The freeway segment is identified below along with the mitigation measure.

- **Mitigation Measure TRAF-26:** I-110 southbound between 135th St & Rosecrans Ave

A specific discussion of the significance after mitigation is provided above under Mitigation Measures.

Existing Plus Project Off-Ramp Analysis

Less than significant impact.

Cumulative

Existing Plus Project Plus Cumulative Intersection LOS

County of Los Angeles

After the implementation of Mitigation Measures TRAF-1 through TRAF-28, a total of 26 of the 28 intersections would still exceed the significance threshold and result in significant and unavoidable adverse impacts. In addition to the 26 intersections, there are 4 additional intersections that the County has no feasible measures to implement. Therefore, there are a total of 30 intersections that would exceed the significance standards and represent a significant and unavoidable impact. The 30 intersection are identified below along with the mitigation measure for each intersection.

- **Mitigation Measure TRAF-1:** Avalon Blvd & El Segundo Blvd (#3)
- **Mitigation Measure TRAF-2:** Central Ave & El Segundo Blvd (#10)
- **Mitigation Measure TRAF-3:** Central Ave & Rosecrans Ave (#11)
- **Mitigation Measure TRAF-4:** Compton Ave & Imperial Hwy (#17)
- **Mitigation Measure TRAF-5:** Wilmington Ave & I-105 e/b Ramps (#27)
- **Mitigation Measure TRAF-6:** Wilmington Ave & 118th St (#28)
- **Mitigation Measure TRAF-8:** Wilmington Ave & El Segundo Blvd (#32)
- **Mitigation Measure TRAF-9:** Imperial Hwy & I-105 w/b Ramps (#36)
- **Mitigation Measure TRAF-11:** Alameda St & Imperial Hwy (#45)
- **Mitigation Measure TRAF-12:** Alameda St & El Segundo Blvd (#46)
- **Mitigation Measure TRAF-13:** Wilmington Ave & Greenleaf Blvd (#62)
- **Mitigation Measure TRAF-14:** Compton Ave & El Segundo Blvd (#21)
- **Mitigation Measure TRAF-15:** Wilmington Ave & Rosecrans Ave (#33)

- **Mitigation Measure TRAF-16:** Wilmington Ave & Compton Blvd (#58)
- **Mitigation Measure TRAF-17:** Wilmington Ave & Alondra Blvd (#61)
- **Mitigation Measure TRAF-18**: Wilmington Ave & Walnut St (#63)
- **Mitigation Measure TRAF-19**: Imperial Hwy & State St (#54)
- **Mitigation Measure TRAF-20:** Avalon Blvd & Imperial Hwy (#1)
- **Mitigation Measure TRAF-21:** Avalon Blvd & 120th Street (#2)
- **Mitigation Measure TRAF-22:** Central Ave & Imperial Hwy (#6)
- **Mitigation Measure TRAF-23**: Central Ave & I-105 WB Ramps (#7)
- **Mitigation Measure TRAF-24** Central Ave & 120th St (#9)
- **Mitigation Measure TRAF-25**: Wilmington Ave & 112th St (#25)
- **Mitigation Measure TRAF-27:** Willowbrook Ave & Rosecrans Ave (#42)
- **Mitigation Measure TRAF-28**: Central Ave & Compton Blvd (#57)
- **Mitigation Measure TRAF-29**: Central Ave & Alondra Blvd (#60)
- **No Feasible Mitigation Measure:** Compton Ave & 120th St (#19)
- **No Feasible Mitigation Measure:** Wilmington Ave & Imperial Hwy (#26)
- **No Feasible Mitigation Measure:** Wilmington Ave & 120th St (West) (#29)
- **No Feasible Mitigation Measure:** Mona Blvd & Imperial Hwy (#39)

A specific discussion of the significance after mitigation is provided above under Mitigation Measures for each significant impact.

Future Plus Project Freeway Segment LOS

Significant and unavoidable impact. There are 3 freeway segments that would exceed the significance standards and represent a significant and unavoidable impact. The 3 freeway segments are identified below along with the mitigation measure for each segment.

- **Mitigation Measure TRAF-30:** I-105 westbound between Avalon Blvd and Central Ave
- **Mitigation Measure TRAF-31:** I-105 westbound between Compton Ave and Wilmington Ave
- **Mitigation Measure TRAF-32:** I-105 westbound between State St & Long Beach Blvd

A specific discussion of the significance after mitigation is provided above under Mitigation Measures for each significant impact.

Future Plus Project Off-Ramp Analysis

Significant and unavoidable impact. There are 2 off-ramps that would exceed the significance standards and represent a significant and unavoidable impact. The 2 off-ramp locations are identified below along with the mitigation measure for each segment.

- **Mitigation Measure TRAF-9:** I-105 WB off-ramp at Imperial Highway
- **Mitigation Measure TRAF-33:** I-110 SB off-ramp at El Segundo Blvd.

A specific discussion of the significance after mitigation is provided above under Mitigation Measures for each significant impact.

Congestion Management Program

Impact 3.12.2: The proposed project could 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 county congestion management agency for designated roads or highways.

Project-Specific and Cumulative

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 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.

A review of the CMP also indicated the following freeway monitoring stations that are nearest to the Project Site.

- 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).

CMP Arterial Analysis

Based on the trip generation and trip distribution characteristics of the Project as described in Section 3.12.4, Methodology, the number of Project trips that would be added to the CMP arterials identified in Section 3.12-1, Environmental Setting, was calculated. For locations further from the Project site, Project trips were dispersed onto an increasing number of roadways so the incremental addition of trips will reduce with distance from the Project. There are four of the six CMP arterial locations that were in proximity of the project site and that the project will exceed the incremental volumes of 50 trips, which would exceed the threshold to require analysis. Further analysis of these four locations in **Table 3.12-22** was therefore conducted.

The analysis was based on existing traffic counts, forecasts of Future Without Project traffic volumes, and the addition of Proposed Project trips, to analyze the Future With Project conditions. The analysis of the four CMP intersections is summarized in Table 3.12-22. As shown in the table, 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 result in less than significant traffic impacts at the four analyzed CMP monitoring intersections.

TABLE 3.12-22
CMP INTERSECTION ANALYSIS

No.	CMP Intersection	Existing Conditions (2016) V/C	Existing Conditions (2016) LOS	Future Without Project Conditions V/C	Future Without Project Conditions LOS	Future With Project Conditions V/C	Future With Project Conditions LOS	Change in V/C	Significant Impact
AM Peak Hour									
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
PM Peak Hour									
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

SOURCE: The Mobility Group, 2017

CMP Freeway Analysis

Existing traffic volumes on these freeway segments in the AM and PM peak hours were obtained from applying an average 0.49 percent annual traffic growth to the 2010 CMP for Los Angeles County (LACMTA). Freeway levels of service are determined by calculating demand/capacity ratios per the definitions shown in Table 3.12-3 (Section 3.12.1 Environmental Setting).

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 CMP). The 2017 Future Without Project freeway traffic volumes were projected by factoring existing volumes by the regional growth factors discussed in Section 3.12.4, Methodology. Trips from the Project were assigned to the freeway system using the Project trip generation and the Project trip distribution (also discussed in Section 3.12.4). The number of Project vehicle trips expected to pass through the CMP monitoring locations closest to the Project was estimated based on the methodology described above. There are four of the seven CMP freeway locations that were in the vicinity of the project site and that the project will exceed the incremental volumes of 150 trips. The CMP freeway impact analysis at the four locations is shown in **Table 3.12-23** for the AM and PM peak hours.

TABLE 3.12-23
CMP FREEWAY ANALYSIS

				Existing Conditions[1, 2] (Year 2016)			Future Without Project Conditions (Year 2035)			Future With Project Conditions (Year 2035)					
No.	**Location**	**Dir**	**Capacity**	**Hourly Volume**	**D/C**	**LOS**	**Hourly Volume**	**D/C**	**LOS**	**Project Trips**	**Hourly Volume**	**D/C**	**LOS**	**Increase in D/C**	**Significant Impact?**
AM Peak Hour															
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
PM Peak Hour															
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

[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).
[2] Growth factor of 1% per annum applied for 2016 volumes.

SOURCE: The Mobility Group, 2017.

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.

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 Analysis

The number of transit trips that would be generated by the Project was estimated based on the trip generation methodology described in Section 3.12.4, Methodology, and in **Appendix F**. The estimated number of transit trips for the CMP analysis is discussed below. 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). The highest number of additional transit trips would therefore occur in the PM peak hour.

TABLE 3.12-24
CMP TRANSIT ANALYSIS

	Transit Trips					
	AM Peak Hour			PM Peak Hour		
Project Component	**Total**	**In**	**Out**	**Total**	**In**	**Out**
MLK Medical Center	326	218	108	433	166	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

SOURCE: The Mobility Group, 2017.

Based on the information presented in Section 3.12.1, Environmental Setting 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, the project's projected increase in transit ridership of approximately 8% would not the existing capacity of the transit system and the project would result in a less than significant impact on transit services (Greene, 2017).

Mitigation Measures

Project-Specific/Cumulative

CMP Arterial Monitoring Locations

No mitigation measures are required.

CMP Mainline Freeway Monitoring Stations

The proposed project would result in a significant impact at four freeway monitoring locations. The following mitigation measures are proposed to address impacts.

> **Mitigation Measure TRAF-34:** I-105 eastbound (West of I-710, East of Harris Ave)
>
> As shown in Table 3.12-23, there is a significant impact in the PM peak hour at this location. Because the existing right-of-way is constrained along this freeway location, additional lane improvements would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the CMP significant impact criteria. To address this impact, the proposed mitigation measure is as follows:
>
> Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this freeway location through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.
>
> *Significance after Mitigation: Significant and Unavoidable.* Because the additional right-of-way acquisition and improvements needed to improve this freeway location are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the freeway location exceeding the CMP significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way for this freeway location and to provide the necessary

improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-35: I-105 westbound (West of I-710, East of Harris Ave)

As shown in Table 3.12-23, there is a significant impact in the AM and PM peak hours at this location. Because the existing right-of-way is constrained along this freeway location, additional lane improvements would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the CMP significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this freeway location through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this freeway location are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the freeway location exceeding the CMP significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way for this freeway location and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-36: I-105 eastbound (East of Bellflower Blvd. West of I-605)

As shown in Table 3.12-23, there is a significant impact in the PM peak hour at this location. Because the existing right-of-way is constrained along this freeway location, additional lane improvements would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the CMP significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this freeway location through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the PM peak hour level of service shall be provided by the project applicant if

Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this freeway location are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the freeway location exceeding the CMP significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way for this freeway location and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

Mitigation Measure TRAF-37: I-105 westbound (East of Bellflower Blvd. West of I-605)

As shown in Table 3.12-23, there is a significant impact in the AM and PM peak hours at this location. Because the existing right-of-way is constrained along this freeway location, additional lane improvements would require additional right-of-way. Additional lane improvements would be required so that the project does not exceed the CMP significant impact criteria. To address this impact, the proposed mitigation measure is as follows:

Prior to issuance of a grading permit, each project applicant shall determine their project's proportionate share funding of acquiring additional right-of-way and implementing additional improvements at this freeway location through the preparation of a traffic evaluation to be reviewed by the County of Los Angeles and Caltrans. The proportionate share funding of the additional right-of-way acquisition and improvement to improve the AM and PM peak hour levels of service shall be provided by the project applicant if Caltrans has established a proportionate share funding mechanism for the improvement at this intersection.

Significance after Mitigation: Significant and Unavoidable. Because the additional right-of-way acquisition and improvements needed to improve this freeway location are not located within the jurisdiction of the County of Los Angeles, the County cannot guarantee that the timing of implementing these improvements would occur prior to the freeway location exceeding the CMP significant impact criteria. In addition, there is uncertainty if Caltrans would establish a proportionate share funding program to acquire additional right-of-way for this freeway location and to provide the necessary improvements. As a result, the impact is considered potentially significant and unavoidable.

CMP Transit

No mitigation measures are required.

Significance Determination

Project-Specific/Cumulative

CMP Arterial Monitoring Locations

Less than significant impact.

CMP Mainline Freeway Monitoring Stations

Significant and unavoidable impact. There are 4 freeway locations that would exceed the significance standards and represent a significant and unavoidable impact. The 4 freeway locations are identified below along with the mitigation measure for each segment.

- **Mitigation Measure TRAF-34:** I-105 eastbound (West of I-710, East of Harris Ave)
- **Mitigation Measure TRAF-35:** I-105 westbound (West of I-710, East of Harris Ave)
- **Mitigation Measure TRAF-36:** I-105 eastbound (East of Bellflower Blvd. West of I-605)
- **Mitigation Measure TRAF-37:** I-105 westbound (East of Bellflower Blvd. West of I-605)

A specific discussion of the significance after mitigation is provided above under Mitigation Measures for each significant impact.

CMP Transit

Less than significant.

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3.13 Utilities and Service Systems

Introduction

The purpose of this section is to assess the potential impacts of buildout of the proposed Specific Plan on water supply and service, wastewater collection and treatment, stormwater drain systems, energy utility systems, and solid waste disposal capacity. This section is based on comparisons of existing and anticipated levels of service with buildout of the proposed Specific Plan, and the ability to provide services to the net new development that would occur from the Specific Plan, in addition to other service commitments. As CEQA evaluates potential impacts on the environment, the focus of this section is to determine if new or expanded infrastructure would need to be constructed as a result of implementation of the project, and if those improvements would result in a potential physical impact to the environment. Infrastructure capacity information is sourced from the *Infrastructure Study* (JMC^2, 2015), and information related to water supplies and service is from the Liberty Utilities 2015 Urban Water Management Plan (UWMP) (Liberty, 2016), City of Los Angeles Department of Water & Power UWMP (LADWP 2016), and information provided by the Golden State Water Company (GSWC, 2016).

3.13.1 Environmental Setting

Water Supply

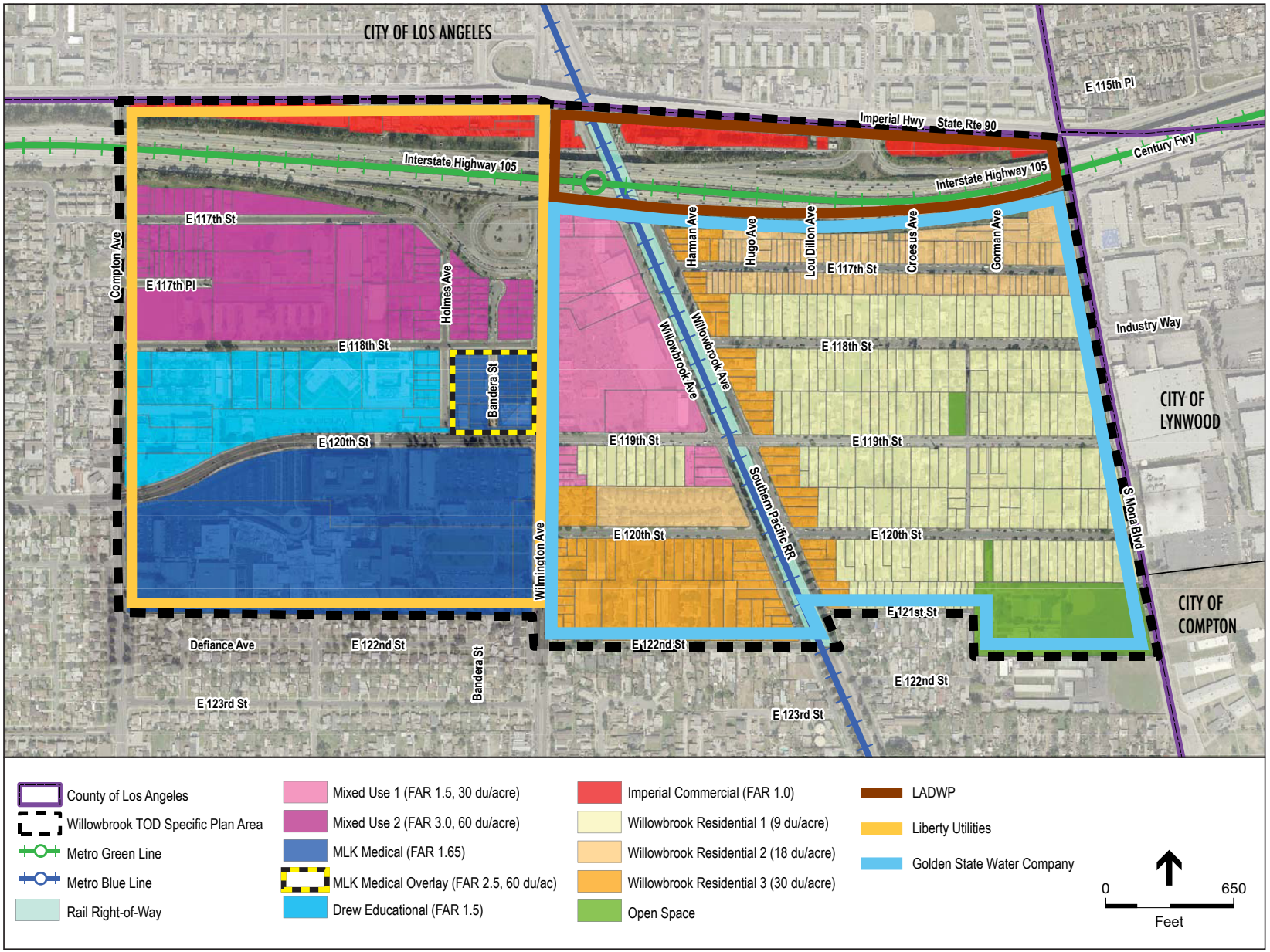
The Specific Plan area is served by three different water purveyors, Liberty Utilities, Golden State Water Company, and the City of Los Angeles Department of Water and Power (LADWP). As shown on **Figure 3.13-1**, Water Service Areas, within the Specific Plan area, Liberty Utilities provides water supply south of the Imperial Highway and west of Wilmington Avenue; Golden State Water Company provides water supply south of the I-105 freeway and east of Wilmington Avenue; and LADWP provides water supply north of the I-105 freeway and east of Wilmington Avenue.

Liberty Utilities

Liberty Utilities provides retail water service to approximately 27,353 connections in three non-contiguous water systems in southeast Los Angeles County. These systems are designated as the Compton/Willowbrook (Compton West) Water System, the Lynwood (Compton East) Water System, and the Bellflower/Norwalk Water System (Liberty, 2016). The Specific Plan area is served by Liberty's Compton/Willowbrook (Compton West) Water System.

Liberty Utilities water supplies are obtained from the Central Basin groundwater (that is managed by the Water Replenishment District of Southern California [WRD]), imported water purchased from the Central Basin Municipal Water District from the Metropolitan Water District (MWD), and recycled water (Liberty, 2016). The water supply to the Compton West Water System (that serves that Specific Plan area) is provided by two groundwater wells, two potable purchase water connections, and two reservoirs.

Liberty currently owns 822.3 acre-feet per year (AFY) of groundwater rights from the Central Groundwater Basin and leases between 2,500-3,571 AFY of groundwater from the Basin per year



SOURCE: Willowbrook TOD Specific Plan

Figure 3-13-1
Water Service Areas

in the past five years. Liberty plans to increase its purchases of groundwater in future years and reduce its purchases of MWD imported water (Liberty, 2016).

Liberty uses recycled water to augment valuable groundwater and imported water within its service area. In 2015, Liberty provided 224 AF of recycled water to its 29 locations within Liberty's service area for landscape and golf course irrigation. Landscape irrigation will continue to be the leading users of recycled water in Liberty's service area. **Table 3.13-1** shows Liberty's projected water supplies through 2035.

TABLE 3.13-1
PROJECTED AVERAGE YEAR LIBERTY WATER SUPPLIES (AFY)

Water Supply Source	2020	2025	2030	2035
Groundwater	5,030	5,030	5,030	5,030
Imported Water	7,039	6,523	6,077	5,761
Recycled Water	224	241	260	280
Total Supply	**12,293**	**11,794**	**11,367**	**11,701**

SOURCE: Liberty, 2016.

In 2015, Liberty supplied a total of 9,579 acre feet (AF) of water to meet the service area demand of 10,791 in 2035, as shown in **Table 3.13-2** (Liberty, 2016). The service provider anticipates water demand to remain approximately the same as growth occurs within its service area. This is because Liberty anticipates water demand meeting the required 20 percent water use reduction in gallons per capita per day (GPCD) by year 2020. Liberty has based the anticipated growth within the district on the SCAG RTP/SCS Growth Forecast, and has determined that it has adequate water supplies to service its existing connections, plus the anticipated growth as defined by SCAG (Liberty, 2016).

TABLE 3.13-2
CURRENT AND PROJECTED AVERAGE YEAR LIBERTY WATER DEMAND (AFY)

Service Type	2015	2020	2025	2030	2035
Single-Family	6,264	7,415	7,030	6,696	6,461
Multi-Family	901	1,353	1,276	1,209	1,162
Commercial	1,044	1,491	1,470	1,454	1,441
Industrial	87	113	114	114	115
Institutional/Government	511	775	778	781	784
Other	39	69	69	69	70
Losses	733	853	816	783	760
Total Demand	**9,579**	**12,069**	**11,553**	**11,107**	**10,791**

SOURCE: Liberty, 2016.

Table 3.13-3 provides a comparison of the Liberty projected water supply and demand between 2020 and 2035. As shown, Liberty would have a surplus of supply throughout the period and would have a surplus of 910 AFY in 2035.

TABLE 3.13-3
LIBERTY PROJECTED AVERAGE YEAR WATER SUPPLY AND DEMAND COMPARISON (AFY)

	2020	2025	2030	2035
Supply	12,293	11,794	11,367	11,701
Demand	12,069	11,553	11,107	10,791
Surplus Supply	**224**	**241**	**260**	**910**

SOURCE: Liberty, 2016.

Golden State

Golden State Water Company (GSWC) provides water to approximately 20,000 customers in its Central Basin West Service area, which stretches across South Los Angeles County and includes portions of Bell, Bell Gardens, Cudahy, Hollydale, Huntington Park, Paramount, South Gate, Vernon, Willowbrook and adjacent county territory (GSWC, 2015). Separate water systems serve different geographical areas within the Central Basin West Service area. The Golden State Willowbrook water system serves 1,411 connections (GSWC, 2015).

Within the Specific Plan area, GSWC provides water supply south of the I-105 freeway and east of Wilmington Avenue. Water delivered to customers in the Willowbrook System is a blend of groundwater pumped from two wells that extract supplies from the Central Groundwater Basin and imported water from MWD (GSWC, 2015).

GSWC's annual adjudicated amount of groundwater is 16,439.2 AF from the Central Basin, which is use to serve all of Golden State's Central Basin water systems. In addition, GSWC has carry over rights to any groundwater supplies that are not used. In 2015, GSWC had 3,166.58 AF carry over rights (GSWC, 2016). Approximately, 687AF of this groundwater supply is used to serve the Willowbrook service area (GSWC, 2016).

Table 3.13-4 provides a breakdown of the GSWC's existing and projected water supplies. As shown, the total water supply is anticipated to increase by 224 AF between 2015 and 2035.

TABLE 3.13-4
CURRENT AND PROJECTED AVERAGE YEAR GOLDEN STATE WATER COMPANY WATER SUPPLY (AFY) THAT SERVES THE WILLOWBROOK SERVICE AREA

Water Supply Source	2015	2020	2025	2030	2035
Groundwater	687	687	687	687	687
Imported Water	184	353	371	389	408
Total Supply	**871**	**1,040**	**1,058**	**1,076**	**1,095**

SOURCE: GSWC, 2016

Table 3.13-5 provides a breakdown of the GSWC's existing and projected water demands. As shown by comparing Tables 3.13-4 and 3.13-5, GSWC's projected supply is expected to meet its anticipated demand, and GSWC has determined that it has adequate water supplies to service its existing connections, plus the anticipated growth (GSWC, 2016).

TABLE 3.13-5
CURRENT AND PROJECTED AVERAGE YEAR GOLDEN STATE WATER COMPANY WATER DEMAND (AFY)

Service Type	2015	2020	2025	2030	2035
Single-Family	303	382	389	396	403
Multi-Family	444	561	570	580	590
Commercial	28	36	36	37	38
Irrigation	7	9	9	10	10
Losses	88	52	53	54	55
Total Demand	**871**	**1,040**	**1,058**	**1,076**	**1,095**

SOURCE: GSWC, 2016.

City of Los Angeles Department of Water and Power

LADWP provides water supply to the portion of the Specific Plan that is located north of the I-105 freeway, west of Wilmington Avenue, and south of the Specific Plan northern boundary. Primary sources of water supply for the LADWP service area are the Los Angeles Aqueducts (imported water), local groundwater, and imported water from MWD. In addition, recycled water is also used for irrigation purposes. Supplies in 2015 totaled 513,540 AF with 10 percent from the Los Angeles Aqueducts, 17 percent from local groundwater, 71 percent from MWD, and 2 percent from recycled water (LADWP, 2016).

As shown in **Table 3.13-6**, the five-year (2010 - 2015) average of water supply sources are: 29 percent from the Los Angeles Aqueducts, 12 percent from local groundwater, 57 percent from MWD, and 2 percent from recycled waters (LADWP, 2016). The imported water (Los Angeles Aqueducts water plus MWD water) supplied over the last five years totaled, on average, approximately 87 percent of the City's demands. Groundwater supplies in 2040 are anticipated to be increased; however, a large portion of water would continue to be obtained from the Los Angeles Aqueducts and MWD.

TABLE 3.13-6
LADWP WATER SUPPLY SOURCES

	Groundwater	Los Angeles Aqueducts	MWD	Recycled Water
2010 – 2015 Average	12%	29%	57%	2%
2040 Depending on Rain Conditions	23% – 24%	7% – 42%	11% – 44 %	6% – 7%

SOURCE: LADWP, 2016

Groundwater: Groundwater is obtained from the Central Basin, and LADWP currently has entitlement of 16,546 AF. In addition to its annual entitlement, the LADWP can carryover unused water rights for up to a maximum of 40 percent of its annual pumping allocation. In 2015, LADWP only utilized 6,948 AF of its annual pumping allocation; and thus, had unused water rights to carryover. In 2015, LADWP had 11,270 AF of groundwater in storage (LADWP, 2016). Additionally, the LADWP can also extract an additional 20 percent under emergency situations that would be debited against the following year's entitlement.

Los Angeles Aqueducts: Water supply from the Los Angeles Aqueducts is dependent on snowfall in the eastern Sierra Nevada. Years with abundant snowpack provide for larger water deliveries from the Los Angeles Aqueducts, and typically reduced purchases of supplemental water from MWD. Conversely, low Los Angeles Aqueducts deliveries in dry years increase the demand for supplemental water from MWD. The variable related to precipitation is shown in Table 3.13-6 above.

MWD: As shown in Table 3.13-6 above, LADWP obtains a large portion of existing and water supply from MWD. LADWP purchases MWD water to make up the deficit between demand and other supplies. Hence, LADWP's water supply reliability is dependent on MWD's water supply. As described in the LADWP 2015 UWMP and shown in **Table 3.13-7**, with both the current capacity and future capacity (with implementation of planned water supply projects) MWD would have a surplus of water supply to meet water supply needs.

TABLE 3.13-7
MWD WATER DEMAND AND SUPPLY CAPACITY (AFY)

	2020	2025	2030	2035
MWD Current Capacity	3,653	3,755	3,925	4,055
MWD Future Capacity with Future Supply Programs	3,716	3,855	4,268	4,440
Total Demands on MWD	**1,860**	**1,918**	**1,959**	**2,008**
Surplus with Current Capacity	1,793	1,837	1,966	2,047
Surplus with Future Capacity with Future Supply Programs	1,856	1,937	2,309	2,432

SOURCE: LADWP, 2016

Additionally, the LADWP 2015 UWMP states that a total production capacity of 709,500 AFY is anticipated, and as shown in **Table 3.13-8**, LADWP supplied an average of 566,990 AF annually between 2011 and 2014, and anticipates an annual demand of 661,848 AF in 2035. Therefore, LADWP has an additional supply of 47,652 AFY in 2035.

TABLE 3.13-8
RECENT AND PROJECTED LADWP WATER DEMAND (AFY)

Water Supply Source	2011-2014 Average	2020	2025	2030	2035
Single-Family	209,651	222,958	224,729	226,770	231,776
Multi-Family	165,364	184,679	206,065	211,454	216,071
Commercial/Govt.	141,537	148,600	155,994	156,788	156,186
Industrial	17,663	18,869	19,235	18,701	18,104
Other	32,774	36,709	38,682	39,173	39,711
Total Demand	**566,990**	**611,815**	**644,706**	**652,886**	**661,848**

SOURCE: LADWP, 2016

As described in the LADWP 2015 UWMP, LADWP has performed an analysis of future water demand and supply based on SCAG population projections and has determined that adequate water supplies exist through 2040 with the projected growth considered, and that developments that are consistent with the most recent SCAG projections are also assumed to have adequate future water supply (LADWP, 2016).

Water Infrastructure

Liberty Utilities

Liberty Utilities owns and maintains the water supply network west of Wilmington Avenue within the Specific Plan area. Water lines within the Liberty service area are located in almost all streets and alleys within this area, and consist of steel pipe that range from 4-inches to 20-inches in diameter. No deficiencies have been observed within Liberty's Willowbrook service area and no upgrades of existing water lines are planned. However, a new 2,000 gallons-per-minute water-pumping well is planned to be installed in 2016 within the City of Compton, which will also serve the Willowbrook area (JMC^2, 2015).

Golden State Water Company

Golden State Water Company owns and maintains the water supply network east of Wilmington Avenue and south of I-105 freeway within the Specific Plan area, and water lines are located in almost all streets and alleys within this area. The Golden State water infrastructure within the Willowbrook Specific Plan area is mostly older water pipes made of asbestos cement, with some made of ductile iron, cast iron steel pipes. The pipe diameter sizes range from 4-inches to 12-inches. There are no major planned upgrades or expansions of the existing water system serving the Willowbrook area (JMC^2, 2015).

City of Los Angeles Department of Water and Power

LADWP provides water service to a small portion of the Specific Plan area that is located north of I-105 freeway, east of Wilmington Avenue, and south of the Specific Plan's northern boundary. This area is served by an 8 to 10-inch water main that is located in Imperial Highway that connects to a 10-inch water line that runs in 118th Street to the south.

Wastewater Infrastructure

There is a comprehensive network of sewer lines in the Willowbrook Specific Plan area. The existing sewer system in the unincorporated area of Willowbrook is owned and maintained by the County of Los Angeles Department of Public Works (LACDPW) and Sanitation Districts of Los Angeles County (LACSD).

There are several major LACSD sewer trunks crossing the Willowbrook Specific Plan area that are located in Compton Avenue, 118th Street, Mona Boulevard, and Willowbrook Avenue. The LACSD keeps a clearance record of the some of the sewer trunks, which is a comparison chart of the sewage flow at peak hours versus the design capacity of the sewer trunk. According to the latest available sewage clearance record, the Compton Creek trunk which is along Compton Avenue, and the Holmes-Willowbrook trunk in Mona Boulevard have a low sewage flow, when compared to their design capacity. At maximum recorded flow, the sewage flow at Compton Creek trunk is at 12 percent of the maximum capacity and the Holmes-Willowbrook trunk is at 25 percent. Per LACSD, the sewage flow in the Willowbrook Specific Plan area has been slightly reduced in recent years, and there are no planned upgrades of the sewer trunk system. Furthermore, the Compton Creek trunk was rehabilitated in 2005, and is in good condition (JMC^2, 2017).

Wastewater Treatment

Wastewater from the Specific Plan area is collected and treated at the Joint Water Pollution Control Plant (JWPCP) in Carson. The JWPCP is located in the City of Carson just east of the I-110 freeway. The plant provides primary and secondary treatment for approximately 280 MGD and has a total permitted capacity of 400 MGD serving a population of 3.5 million in Los Angeles County. Effluent from JWPCP is disinfected and discharged into the Pacific Ocean through a network of outfalls (LACSD, 2015a).

Storm Water Drainage

The main lines of the storm drain system in the unincorporated Willowbrook area are owned and maintained by the County of Los Angeles Flood Control District (LACFCD). The storm drain main lines within the Specific Plan area consist of reinforced concrete pipe and reinforced concrete box. The general topography of the Willowbrook Specific Plan area slopes from north to south and west to east; therefore, the drainage from the Specific Plan area runs from northwest to southeast and eventually discharges into the Los Angeles River east of the Specific Plan area next to the I-710 freeway. Storm drain pipes range in size, and generally increase in diameter from north to south. Currently, there are no storm drain capacity concerns, and no plans to upgrade the existing storm drain system within the Specific Plan area (JMC^2, 2015).

Solid Waste

The LACSD operates solid waste collection facilities in the Willowbrook community and surrounding areas. LACSD solid waste management sites provide about half of the countywide solid waste management needs. The District operates two sanitary landfills, four landfill energy

recovery facilities, two recycle centers, and three materials recovery/transfer facilities, and participate in the operation of two refuse-to-energy facilities (LACSD, 2015b).

Solid waste in the community of Willowbrook is taken to two recycling and transfer facilities: the Downey Area Recycling and Transfer facility and the South Gate Transfer Station facility. The Downey Area Recycling & Transfer facility is located at 9770 Washburn Road in the City of Downey, which is located approximately 7 miles east of the proposed Specific Plan area, and has a daily maximum permitted capacity of 5,000 tons of waste per day and in 2015 accepted an average of 800 tons of waste per day (LACSD, 2016). The South Gate Transfer Station is located at 530 South Garfield Avenue in the City of South Gate, approximately 4 miles northeast of the Specific Plan area, and has a daily maximum permitted capacity of 1,000 tons of waste per day and in 2015 accepted a projected average of approximately 370 tons of waste per year (LACSD 2015c).

After separation of recyclable materials, the remaining solid waste is transported to a permitted landfill. The landfills within the County of Los Angeles that are available to accept waste from these transfer station facilities include the Sunshine Canyon Landfill, Antelope Valley Landfill and the Lancaster Landfill. As shown in **Table 3.13-9**, the Sunshine Canyon Landfill has a maximum permitted daily capacity of 12,100 tons, an average daily tonnage of 7,701, and a remaining daily capacity of 4,399 tons. The Sunshine Canyon Landfill is projected to remain open until 2047. The Antelope Valley Landfill has a maximum permitted daily capacity of 1,800 tons, an average daily tonnage of 1,567, and a remaining daily capacity of 233 tons. The Antelope Valley Landfill is projected to remain open until 2038. The Lancaster Landfill has a maximum permitted daily capacity of 3,000 tons, an average daily tonnage of 364, and a remaining daily capacity of 2,636 tons. The Lancaster Landfill is projected to remain open until 2041. Solid waste from the transfer stations can also be transported to other non-County landfills such as landfills within Orange, Riverside, Ventura, and Kern counties.

TABLE 3.13-9
LANDFILLS IN THE PROJECT REGION

Landfill	Distance from Specific Plan	Maximum Permitted Daily Tons	Average Daily Tonnage in 2014	Average Remaining Daily Capacity 2014 (tons)	Expected Closure Date
Sunshine Canyon Landfill	46 miles	12,100	7,701	4,399	2037
Antelope Valley Landfill	51 miles	1,800	1,567	233	2038
Lancaster Landfill	51 miles	3,000	364	2,636	2041

SOURCE: LACDPW, 2016.

3.13.2 Regulatory Setting

Federal

Safe Drinking Water Act

The United States Environmental Protection Agency (USEPA) administers the Safe Drinking Water Act, which is the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The Department of Health Services (DHS) implements the requirements of the Act and oversees public water system quality statewide. DHS establishes legal drinking water standards for contaminates that could threaten public health.

National Pollution Discharge Elimination System Permits

The NPDES permit system was established in the CWA to regulate both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point source discharges, such as sewer outfalls, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge.

Clean Water Act

The Clean Water Act established the basic structure for regulating discharges of pollutants into "waters of the U.S." The act specifies a variety of regulatory and non-regulatory tools to manage stormwater runoff. Clean Water Act Section 402 is relevant to drainage in the proposed Specific Plan.

Section 402 regulates point- and nonpoint-source discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. In California, the State Water Resources Control Board (SWRCB) oversees the NPDES program, which is administered by the RWQCBs. The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits.

State

California Urban Water Management Planning Act

Section 10610 of the California Water Code established the California Urban Water Management Planning Act (CUWMPA), requires urban water suppliers to initiate planning strategies to ensure an appropriate level of reliability in its water service. CUWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that annually provides more than 3,000 acre-feet of water service, should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The CUWMPA describes the contents of Urban Water Management Plans as well as methods for urban water suppliers to adopt and implement the plans.

SBx7-7 Requirements

In February 2008, the California legislature introduced a seven part comprehensive plan for improving the Sacramento-San Joaquin Delta. As part of that effort, several state agencies were directed to develop a plan to reduce per capita water use state-wide by 20 percent by the year 2020. Legislation titled the "Water Conservation Act of 2009" (SBx7-7) enacted the 20 x 2020 concept. As part of the 20 x 2020 plan, all retail water agencies in the state are required to detail how they plan to achieve the mandatory reductions through their UWMP. Retail water agencies who have either 3,000 or more connections or provide 3,000 AF or more of water per year, are required to be in compliance with SBx7-7.

CalGreen Building Code

California Code of Regulations Title 24, Part 11, establishes the California Green Building Code or CALGreen. The CALGreen Code was recently updated in 2013 and went into effect January 1, 2014. CALGreen sets forth water efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures.

Governor Brown's Executive Order B-29-15

On April 1, 2015, Governor Brown issued Executive Order B-29-15, finding that, among other things, "…conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions…" and ordering that, among other things, the "State Water Resources Control Board shall impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use." On July 15, 2015, the State Water Resources Control Board released the water-use-reduction targets that were imposed on each individual urban water supplier. Then based on rainfall the reduction targets were revised and the new targets became effective March 1, 2016.

State Water Resources Control Board Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems

The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SWRCB Order No 2006-0003-DWQ) applies to sanitary sewer systems that are greater than one-mile-long and collect or convey untreated or partially treated wastewater to a publicly owned treatment facility. The goal of Order No. 2006-0003 is to provide a consistent statewide approach for reducing Sanitary Sewer Overflows (SSOs), accidental releases of untreated or partially treated wastewater from sanitary sewer systems, by requiring that:

1. In the event of an SSO, all feasible steps must be taken to control the released volume and prevent untreated wastewater from entering storm drains, creeks, etc.
2. If an SSO occurs, it must be reported to the SWRCB using an online reporting system developed by the SWRCB.

3. All publicly owned collection system agencies with more than one mile of sewer pipe in the State must develop a Sewer System Management Plan (SSMP), which must be updated every five years.

Construction General Permit

The State of California adopted a Statewide NPDES Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The last Construction General Permit amendment became effective on February 16, 2012. The Construction General Permit regulates construction site storm water management. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre, but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the general permit for discharges of storm water associated with construction activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

To obtain coverage under this permit, project operators must electronically file Permit Registration Documents, which include a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents. The SWPPP is required to identify specific BMPs that would be implemented to control drainage from project sites.

California Water Resources Control Board Low Impact Development Policy

The SWRCB adopted the Low Impact Development (LID) Policy which, at its core, promotes the idea of "sustainability" as a key parameter to be prioritized during the design and planning process for future development. The SWRCB has directed its staff to consider sustainability in all future policies, guidelines, and regulatory actions. LID is a proven approach to manage stormwater. The RWQCBs are advancing LID in California in various ways, including provisions for LID requirements in renewed Phase I municipal stormwater NPDES permits.

California Integrated Waste Management Act of 1989 (AB 939)

The California Integrated Waste Management Act of 1989 (AB 939) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. AB 939 was adopted in an effort to reduce the volume and toxicity of solid waste that is landfilled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 required each of the cities and unincorporated portions of the counties to divert a minimum of 25 percent of the solid waste sent to landfills by 1995 and 50 percent by the year 2000. To attain goals for reductions in disposal, AB 939 established a planning hierarchy utilizing new integrated solid waste management practices. These practices include source reduction, recycling and composting, and environmentally safe landfill disposal and transformation. Other state statutes pertaining to solid waste include compliance with the California Solid Waste Reuse and Recycling Act of 1991 (AB 1327), which requires adequate areas for collecting and loading recyclable materials within a

project site. As a new waste generator, the proposed project would be subject to the requirements of these solid waste provisions, as enforced by the County of Los Angeles.

California Assembly Bill 341

On October 6, 2011, Governor Brown signed AB 341 establishing a state policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. The bill also mandates local jurisdictions to implement commercial recycling by July 1, 2012.

Regional

Regional Municipal Separate Storm Sewer System (MS4) Permits

The County of Los Angeles is a co-permittee under the NPDES stormwater permit covering Los Angeles County (NPDES No. CAS614001). The LARWQCB completed a revision of the NPDES permit for the Los Angeles region in 1996 and 2001. The MS4 Permit requires permittees to reduce the discharge of storm water pollutants to the maximum extent practicable and ensure MS4 discharges do not cause or contribute to violations of water quality standards. The MS4 Permit also requires implementation of various site design best management practices (BMPs) and treatment control BMPs to reduce the possibility of pollutants stored or produced on-site from entering surface water or sewer system.

Regional Water Quality Control Board

Each RWQCB is required to develop, adopt, and implement a Basin Plan for its respective region. The Basin Plan is the master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in each region. Basin Plans identify beneficial uses of surface waters and groundwater within the corresponding region; specify water quality standards, known as water quality objectives, for both surface water and groundwater; and develop the actions necessary to maintain the standards to control nonpoint and point sources of pollutants to the state's waters. All discretionary projects requiring permits from the RWQCB (i.e., waste and pollutant discharge permits) must implement Basin Plan requirements (i.e., water quality standards), taking into consideration the beneficial uses to be protected.

The Specific Plan Area is located within the jurisdiction of LARWQCB, and the proposed Specific Plan is subject to the LARWQCB's Water Quality Control Plan.

Los Angeles County Standard Urban Storm Water Mitigation Plan

The Los Angeles County Standard Urban Storm Water Mitigation Plan (SUSMP) provides drainage regulations for specific types of development projects, which include:

- Ten or more unit homes (includes single-family homes, multi-family homes, condominiums, and apartments);
- Automotive service facilities (SIC codes 5013, 5014, 5541, 7532-7534, and 7536-7539);
- Restaurants (SIC code 5812);

- 100,000 square feet or more of impervious surface in industrial/commercial
- Retail gasoline outlet;
- Parking lot 5,000 square feet or more of surface area or with 25 or more parking spaces;
- Redevelopment projects in subject categories that meet redevelopment thresholds (SUSWMP 2000).

Development projects, included in the list above would be required to comply with the County SUSMP submittal requirements, as listed below:

- Provide a hydrology analysis to determine the design flow rate (QPM) or Volume (VM) for the first 3/4-inch of rainfall that must be treated.
- Submit site specific hydraulic calculations along with the recommended structural BMP manufacturer's product specifications to verify the BMP will adequately handle the minimum design flow required for treatment.
- Show locations of BMPs on building/drainage plans.
- Determine and provide the pre and post development pervious and impervious areas created by the proposed development.
- Submit Operation and Maintenance Guidelines that include the designated responsible party to manage the SUSMP devices, employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits. Inspection and servicing of all SUSMP devices must occur on an annual basis at a minimum.

The County includes example BMPs within the Standard Urban Storm Water Mitigation Plan (SUSWMP) to be implemented on sites that would aid in stormwater drainage; examples of these include using minimum pavement widths and permeable pavement, directing of rooftop runoff to pervious areas, and including vegetated swales and strips and infiltration basins throughout the development (LARWQCB 2000).

Local

County of Los Angeles Hydrology Manual

The County of Los Angeles Hydrology Manual provides information relevant to conducting hydrologic study within the County of Los Angeles. This manual provides examples and methods to explain the steps involved in converting rainfall to runoff flow rates and volumes using Public Works' standards. In addition, this manual contains procedures and standards developed and revised by the Water Resources Division of the County Department of Public Works based on historic rainfall and runoff data collected within the County. The techniques in this manual apply to the design of local storm drains, retention and detention basins, pump stations, and major channel projects. The techniques also apply to storm drain deficiency and flood hazard evaluations. Low flow hydrology methods related to water quality standards are also discussed.

Los Angeles County Integrated Waste Management Plan

The California Integrated Waste Management Act of 1989 (AB 939) requires that the responsibility for solid waste management be shared between state and local governments. The State of California has directed the County to prepare and implement a local integrated waste management plan in accordance with AB 939. The Los Angeles County Integrated Waste Management Plan Executive Summary presents the County-wide goals and objectives for integrated solid waste management and describes the County's system of governmental solid waste management infrastructure and the current system of solid waste management in the cities and unincorporated areas of the County. This document also summarizes the types of programs planned for individual jurisdictions and describes countywide programs that could be consolidated.

The Los Angeles County Integrated Waste Management Plan, 2015 Annual Report on the Countywide Summary Plan and Countywide Siting Element, describes the County's approach to dealing with a broad range of solid waste issues, including processing capacity; markets for recovered materials; waste reduction mandates; waste disposed at Class I (i.e., hazardous waste–only landfills) and Class II (i.e., landfills that accept specified hazardous waste and non-hazardous wastes) disposal facilities; allocation of "orphan" waste (waste that comes from an unknown origin); the accuracy of the State Disposal Reporting System (DRS); and the California Integrated Waste Management Board (CIWMB) enforcement policy. This document also includes the Los Angeles County Integrated Waste Management strategies to maintain adequate solid waste disposal capacity through 2030. The proposed project would be subject to the Los Angeles County Integrated Waste Management Plan. (LACDWP, 2016).

Los Angeles County General Plan

The following goals and policies in the General Plan address are applicable to the proposed Specific Plan.

Effective Service and Facilities Planning and Maintenance

Goal 1: A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.

Policy 1.1: Discourage development in areas without adequate public services and facilities.

Policy 1.2: Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.

Policy 1.5: Focus infrastructure investment, maintenance and expansion efforts where the General Plan encourages growth, such as TODs.

Drinking Water

Goal 2: Increased water conservation efforts.

Policy 2.1: Implement water conservation measures, such as drought tolerant landscaping and restrictions on water used for landscaping.

Policy 3.2: Support the increased production, distribution and use of recycled water, gray water, and rainwater harvesting to provide for groundwater recharge, seawater intrusion barrier injection, irrigation, industrial processes and other beneficial uses.

Solid Waste

Policy 5.1: Maintain an efficient, safe and responsive waste management system that reduces waste while protecting the health and safety of the public.

Policy 5.7: Encourage the recycling of construction and demolition debris generated by public and private projects.

Policy 6.7: Encourage projects that incorporate onsite renewable energy systems.

3.13.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *CEQA Guidelines* and the County of Los Angeles Environmental Checklist. Impacts on utilities and service systems could result in a significant impact if it would:

- Exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Boards (See Impact 3.13-1, below);
- 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 (See Impact 3.13-2, below);
- 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 (See Impact 3.13-3, below);
- 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 (See Impact 3.13-4, below);
- 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 (See Impact 3.13-5, below);
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs (See Impact 3.13-6, below); or
- Not comply with federal, state, and local statutes and regulations related to solid waste (See Impact 3.13-7, below).

3.13.4 Methodology

The potential for adverse impacts on utilities and service systems has been evaluated based on information concerning current service levels and the ability of the service providers to accommodate the increased demand created by the proposed Specific Plan.

Wastewater Treatment Regulations: The analysis related to wastewater treatment requirements identifies the types of wastewater that is anticipated to be generated by implementation of the Specific Plan, and regulations related to wastewater. Impacts would be considered significant if implementation of the Specific Plan would not comply, would be in conflict with, or would exceed regulations related to wastewater, such that an impact on the environment could result. This analysis only addressed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board (RWQCB) because the project site is not within the Lahontan RWQCB service area.

Water/Sewer Capacity: The analysis of water and sewer infrastructure capacity focuses on the magnitude of the change in demand for water supplies and wastewater treatment from buildout of the Specific Plan, based on the projected increase in water demand and wastewater generation over the 20-year horizon of the Specific Plan. From the estimated increase in water demand and wastewater generation and location of dense planned uses, an analysis of whether any infrastructure improvements, beyond those proposed as part of the Specific Plan, would be necessary to provide service to the project area over the life of the proposed Specific Plan was determined. Impacts are considered significant if buildout of the Specific Plan would result in the need for construction of water and wastewater facilities that could result in a significant impact on the environment.

Water Supply: The analysis of water supply is focused on the nature and magnitude of the change in levels of water use from buildout of the Specific Plan. The primary resources used for this analysis include the Liberty Utilities 2015 UWMP, LADWP UWMP (LADWP, 2016), and information provided by the Golden State Water Company. The projected increase in water demand over the 20-year horizon of the Specific Plan is compared to future available supplies. The demand generated by the proposed Specific Plan at buildout compared to water supplies available determines whether an impact from implementation of proposed Specific Plan would occur. If buildout of the Specific Plan would result in new or expanded water supply entitlements, a significant impact could occur.

In addition, if the projected water demand associated with the proposed project is accounted for in the most recently adopted UWMP, the analysis incorporates the supporting information from the UWMP. If the water demand within a service area is not accounted for in a UWMP, the EIR includes a discussion with regard to whether the public water system's total projected available water supplies will meet the proposed project’s water demand.

Energy System Capacity: A number of factors are considered when weighing whether a project would use a proportionately large amount of energy that could result in energy capacity problems to existing infrastructure and requiring the expansion of infrastructure or energy supplies. Factors

such as the use of on-site renewable energy features and energy conservation features or programs are considered.

Energy usage during project operation would be considered to have a potential impact on energy infrastructure or supplies if the project were to violate federal, state, and/or local energy standards, including Title 24 of the California Code of Regulations, CALGREEN standards, preclude use of onsite renewable energy systems, inhibit the use of solar energy, or otherwise conserve energy. Impacts would be considered significant if the project would result in a substantial increase in energy demand that would result in the need to construct or expand energy facilities (electricity and natural gas) that could cause a significant impact on the environment.

Stormdrain Capacity: The analysis of the proposed Specific Plan's impact on storm water drainage facilities identifies the general increase or decrease in stormwater that is anticipated to occur from buildout of the proposed Specific Plan, and identifies the existing drainage infrastructure that serves the Specific Plan area. Impacts would be considered significant if the project would result in a substantial increase in stormwater that would result in the need to construct or expand drainage facilities that could cause a significant impact on the environment.

Landfill Capacity: The analysis of the proposed Specific Plan's impact on landfill facilities identifies solid waste that is anticipated to be generated during both construction and operation of the Specific Plan. The analysis identifies the anticipated amount of non-hazardous construction debris and operational solid waste that would be generated from implementation of the Specific Plan and the amount that would be disposed of in landfills after compliance with recycling/diversion requirements. It was assumed that demolition and construction activities would occur throughout implementation of the 20-year plan. In addition, the maximum development that would occur was multiplied by the per capita solid waste generation.

The results (i.e., solid waste after recycling/diversion) are compared with the available capacity of the landfill serving the Specific Plan areas to assess the significance of the Plan's solid waste generation during construction and at buildout. Impacts would be considered significant if the project would result in a substantial increase in solid waste that would affect landfill capacity, such that a new or expanded landfill facility would be required; the development of which could result in an impact on the environment.

Solid Waste Regulations: The analysis of the proposed Specific Plan's impact related to solid waste regulations identifies the non-hazardous solid waste that is anticipated to be generated during both construction and operation of the Specific Plan, and how the Plan would implement the regulations related to disposal of that solid waste.

Impacts would be considered significant if implementation of the Specific Plan would not comply or would be in conflict with federal state, or local statutes or regulations related to solid waste, such that an impact on the environment could result.

3.13.5 Impact Analysis

Wastewater Treatment Requirements

Impact 3.11-1: The proposed project would not exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.

Project-Specific

The project would introduce 2,666,035 square feet of non-residential uses and 1,952 new residential units within the Specific Plan area, which would result in increased generation of wastewater. Wastewater generated by the proposed Specific Plan development would be treated at the JWPCP, for which wastewater treatment requirements have been established by the LARWQCB NPDES Permit CA0053911. Waste discharge requirements for the facilities are based on all applicable state and federal regulations, policies and guidelines, and include limitations on effluent discharge and receiving water. In general, waste effluent discharge requirements include specifications for adequate disinfection treatment and limitations on radioactivity, pollutant concentrations, sediments, pH, temperature, and toxicity. Receiving water requirements include limitations related to temperature, sediments, pH, dissolved oxygen, fecal coliform and other pollutant concentrations, water clarity and color, turbidity, and toxicity.

The land uses proposed by the Specific Plan include residential, mixed-use, medical, educational and commercial uses that would not discharge wastewater that contains harmful levels of toxins beyond the regulations of the LARWQCB and all effluent would comply with the wastewater treatment standards of the RWQCB. The Specific Plan would not facilitate any industrial use development that would generate hazardous wastewater flows, which generally has more adverse impacts on wastewater treatment. Furthermore, discussed in Impact 3.13-2 below, wastewater generated by the Specific Plan would not exceed the existing capacity of wastewater treatment facilities serving the Specific Plan area. Therefore, the project would result in less than significant impacts related to the wastewater treatment requirements of the LARWQCB.

Cumulative

Cumulative wastewater treatment requirements impacts are considered on a system wide basis and are associated with the operation of the wastewater disposal at the JWPCP. Cumulative developments within the urban and developed areas that are served by the JWPCP would consist of infill and redevelopment projects that could include similar to those that would be implemented by the proposed Specific Plan. These similar land uses are not expected to discharge wastewater that contains harmful levels of toxins beyond the regulations of the LARWQCB and all effluent would comply with the wastewater treatment standards of the RWQCB. Cumulative development could also include industrial uses. Any industrial facilities that have the potential to discharge hazardous wastewater would require specific permitting by the RWQCB prior to connecting to the sewer system, which would ensure that flows are within the regulations of the LARWQCB. Therefore, impacts related to the potential for cumulative projects to exceed wastewater treatment requirements of the LARQCB would be less than significant.

As described above, implementation of the proposed Specific Plan would not generate wastewater that contains harmful levels of toxins and all effluent would comply with the wastewater treatment standards of the LARWQCB. Therefore, the Specific Plan would not

generate wastewater that could combine with wastewater from related projects to result in an exceedance of the LARWQCB regulations. The Specific Plan would result in a less than cumulatively considerable impact to wastewater treatment requirements of the LARWQCB.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Water or Wastewater Treatment Facilities

Impact 3.13-2: The proposed project would not create water system or wastewater treatment capacity problems or result in the construction of new water or wastewater treatment facilities that would cause significant environmental effects; however, the proposed project would create wastewater system capacity problems that would result in the need for new or expanded wastewater facilities, the construction of which could cause significant environmental effects.

Project-Specific

Water Infrastructure

The proposed Specific Plan land uses would contribute to an increase in residential, mixed use, medical, educational and commercial uses within the Specific Plan area. The proposed Specific Plan would introduce 2,666,035 square feet of non-residential uses and 1,952 new residential units within the Specific Plan area at buildout.

As described in Section 2.0, Project Description, the Specific Plan proposes improvements to the existing water system to accommodate buildout of the proposed Specific Plan. Most of the existing water pipelines in the Specific Plan area are eight-inches in diameter and above, and have the capacity to accommodate the increase in water demand/load at buildout of the proposed Specific Plan (JMC^2, 2015). However, several lines that are smaller than eight-inches would need to be improved to accommodate buildout of the proposed Specific Plan. Proposed water system improvements include:

- Replace existing six-inch water line in the alley between Holmes Avenue and Bandera Street, north of 118th Street, with an eight-inch line.

- Upgrade existing four-inch water line on 117th Street from Compton Avenue to Holmes Avenue and the existing four-inch water line in 117th Place, east of Compton Avenue, with eight-inch lines.
- Upgrade existing six and four-inch water lines in 119th Street to eight-inch lines from Willowbrook Avenue to Mona Boulevard.
- Replace existing six and four-inch water lines in 118th Street with eight-inch lines from Willowbrook Avenue to Mona Boulevard.

These water infrastructure improvements are included as part of the proposed Specific Plan. There are no additional areas of water infrastructure that would need to be improved to serve the Specific Plan area at buildout. Therefore, the Specific Plan would result in no impacts related to water infrastructure expansion beyond the improvements that are part of the project.

Wastewater Infrastructure

The proposed Specific Plan would intensify land uses within the Specific Plan area and would result an increased generation of wastewater flows. As shown below in **Table 3.13-10,** buildout of the proposed Specific Plan would result in wastewater generation of approximately 1,421,112 gallons per day (gpd) which is approximately 1.4 million gpd (mgd).

TABLE 3.13-10
ESTIMATED INCREASE IN WASTEWATER GENERATION

	Increase at Buildout	Wastewater Generation Factor (gpd)[1]	Estimated Wastewater Generated (gpd)
Residential	1,952 du units	250/du	488,000
Non-Residential	2,666,035 sf	350 gpd/1,000 sf	933,112
		Total:	**1,421,112**

[1] SOURCE: Sanitation Districts of Los Angeles County. http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3531
[2] Average rate used due to the range in existing development (i.e. commercial, institutional, etc.).

du=dwelling unit
sf = square feet

As described above, the trunk sewers that serve the Specific Plan area are flowing at 12 – 25 percent of their maximum capacity. In addition, the JWPCP has a 400 mgd capacity for primary and secondary treatment and treated an average of 264 mgd in 2013 (County of Los Angeles, 2014). Therefore, the JWPCP has excess treatment capacity of approximately 136 mgd and would have sufficient capacity to process the additional average wastewater flow of approximately 1.4 mgd that would be generated by the Specific Plan at buildout.

Therefore, the proposed Specific Plan would not increase wastewater generation such that the existing capacity at JWPCP would be exceeded, and would, therefore, not require the construction or expansion of existing wastewater treatment facilities, which could cause significant environmental effects. An evaluation of the projected wastewater flow from the proposed land uses to the existing sewer trunk sewers within the Specific Plan was conducted

(JM^2, 2017). The evaluation identified projected wastewater generated by proposed land uses in the northern and central portions of the Specific Plan would exceed the existing capacities in the trunk sewers along Wilmington Avenue and Mona Boulevard in the northern portions of the Specific Plan and along Willowbrook Avenue in the central portion of the Specific Plan. Therefore, the implementation of the Specific Plan would result in the need to upgrade the existing trunk sewers which could cause significant environmental effects associated with air quality and greenhouse gas emissions, noise and traffic safety during construction activities.

Cumulative

Water Infrastructure

Cumulative water infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. The cumulative system evaluated includes the Liberty Utilities, Golden State, and Los Angeles Department of Water and Power infrastructure systems that are serving the Willowbrook area and adjacent land uses. Non-contiguous Liberty Utilities, Golden State, and LADWP service areas are not part of the geographical area of cumulative analysis.

Cumulative development within the water service areas would include infill and redevelopment projects. These cumulative projects could result in the need for new or upgraded water infrastructure. The construction activities associated with new or upgraded water facilities could result in significant environmental impacts. The Specific Plan has evaluated infrastructure needs for water service and has included improvements to existing water service pipelines to ensure that buildout of the Specific Plan would be served by adequate infrastructure. Because the project would not require the construction of water facilities beyond the improvements that are part of the project, the Specific Plan would not have a cumulatively considerable contribution to potential significant cumulative impacts associated with water infrastructure.

Wastewater Infrastructure

Cumulative wastewater infrastructure impacts are considered on a system-wide basis and are associated with the capacity of existing and planned infrastructure. The cumulative system discussed below includes Willowbrook sewer system and the conveyance system through wastewater disposal at the JWPCP.

As described above, the trunk sewers that serve the Specific Plan area are flowing at 12 – 25 percent of their maximum capacity, and the JWPCP has an excess treatment capacity of approximately 136 mgd, respectively. Although the trunk sewers that are located within the Specific Plan area currently have excess capacity, wastewater from the proposed Specific Plan land uses is projected to exceed the existing capacities of the trunk sewers within the Specific Plan area. In addition, downstream trunk sewers to the JWPCP could require upgrades or expansions as cumulative development occurs. These improvements could result in significant environmental impacts associated with air quality and greenhouse gas emissions, noise and traffic safety during construction activities. Therefore, cumulative development could result in significant cumulative impacts associated with upgrading trunk sewers. Because the proposed project could also result in significant impacts associated with upgrading trunk sewers within the

Specific Plan area, the project's contribution to cumulative impacts associated with wastewater infrastructure upgrades would be cumulatively considerable.

Mitigation Measures

Project-Specific

Mitigation Measure USS-1: Prior to the issuance of a building permit, the individual project applicants shall submit a sewer study that confirms that the existing trunk sewers have adequate capacity to accommodate the projected wastewater flow from the proposed individual project as well as cumulative projects. If the projected wastewater flow exceeds the existing sewer capacity, the sewer trunk(s) shall be upgraded to accommodate the projected wastewater. Construction activities shall use best management practices to reduce (1) noise levels and limit construction in accordance with the County Code, (2) air quality and greenhouse gas emissions in accordance with the thresholds identified by the South Coast Air Quality Management District (see Section 3.2, Air Quality and Section 3.5, Greenhouse Gas Emissions in this EIR) and (3) traffic safety issues through the implementation of a traffic control plan that includes features such as signage, land closures, flaggers, detours and notifications to surrounding property owners.

Cumulative

Implementation of Mitigation Measure USS-1 is required.

Significance Determination

Project-Specific

Less than significant impact. After the implementation of Mitigation Measures USS-1, construction impacts associated with wastewater infrastructure upgrades would be reduced to less than significant.

Cumulative

Less than significant impact. After the implementation of Mitigation Measures USS-1, the proposed project's contribution to cumulative construction impacts associated with wastewater infrastructure upgrades would be reduced to less than cumulatively considerable.

Stormwater Drainage Facilities

Impact 3.13-3: The proposed project would not create drainage 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.

Project-Specific

The Specific Plan area is a developed urban area that is primarily covered with impervious surfaces. No surface streams or rivers pass through the area. Stormwater run-off sheet flows across impervious surfaces, and is collected by curbs and gutters and conveyed to storm drains.

The infill development and redevelopment projects pursuant to the Specific Plan would consist of residential, mixed use, medical, educational, and commercial uses that would not generate an

increase in the amount of runoff. Implementation of the Specific Plan would develop pervious areas to retain and infiltrate stormwater on development sites pursuant to the County's SUSWMP and LID requirements that reduce and manage drainage. County SUSWMP requirements provide that projects conduct a drainage hydrologic/hydraulic analysis that details the site's anticipated runoff calculations. From these calculations, a WQMP is prepared to ensure that a net increase in stormwater runoff would not occur from implementation of the development. Development projects are required through implementation of a project-specific WQMP to retain and treat the storm water quality volume generated by the project. In addition, the County requires LID standards to reduce runoff by using smart growth practices, stormwater infiltration, evapotranspiration, biofiltration, and rainfall harvest and use.

Additionally, implementation of development under the Specific Plan would install landscaping along streets and within outdoor courtyards and gathering spaces within the Specific Plan area. These vegetated areas would help to capture, retain, and utilize some surface water runoff for irrigation, which would reduce the amount of surface runoff in the storm drain pipelines. Overall, with implementation of the new pervious areas and compliance with applicable regulatory requirements, impacts related to the need to construct or expand stormwater drainage facilities would be less than significant.

Cumulative

The geographic scope for cumulative impacts on stormwater drainage includes the existing stormwater infrastructure that serves the Specific Plan areas (i.e., the drainage lines that extend to Compton Creek and the Compton Creek to the Los Angeles River Reach 1 located near the interchange of I-710 and I-405). These facilities include pipelines and culverts that are owned and maintained by the Los Angeles County Flood Control District (LACFCD). Because the cumulative area is urban, developed, and is generally covered with impervious surfaces, development of cumulative projects would not result in a substantial increase in impervious surfaces in the area or substantially increase stormwater and runoff flows through the stormwater drainage system. In accordance with state and regional MS4, LID, and County SUSWMP regulations, development projects are required to maintain pre-project hydrology, such that no net increase of offsite stormwater flows would occur. RWQCB Permit conditions require a hydrology study/drainage to demonstrate that all runoff would be appropriately conveyed and not leave the project sites at rates exceeding pre-project conditions, prior to receipt of necessary permits. As a result, increases of runoff from cumulative projects that could cumulatively combine to impact stormwater drainage capacity would be less than cumulatively significant.

The Specific Plan area is generally covered with impervious surfaces and development of projects pursuant to the Specific Plan would not substantially increase the amount of impervious surfaces and runoff, such that existing storm drains would be overwhelmed because all development projects would be required to comply with the same SUSWMP, LID, and RWQCB permit requirements to retain the difference between the volume pre- and post-construction runoff volume. In addition, implementation of the Specific Plan would include installation of landscaping along streets and within open space areas. The new landscaping areas would help to capture, retain, and utilize some surface water runoff for irrigation, which would reduce the amount of surface runoff in the storm drain pipelines. Overall, with implementation of the new

pervious areas and compliance with applicable regulatory requirements, the project's contribution to cumulative impacts related to stormwater drainage capacity would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Water Supplies

Impact 3.13-4: The proposed project would have sufficient water supplies available to serve the project demands from existing entitlements and resources, and would not require new or expanded entitlements.

Project-Specific

The proposed Specific Plan would increase the amount of development within the existing Specific Plan area. The proposed Specific Plan would introduce 2,666,035 square feet of non-residential uses and 1,952 new residential units within the Specific Plan area at buildout, which would result in a net increase in population of approximately 5,778 residents and 5,632 employees. The development under the proposed Plan is expected to increase the demand for potable water. As described above three water purveyors provide services within the Specific Plan area; including Liberty Utilities, Golden State, and LADWP. The Specific Plan includes 1,590 residential units and 4,706 residents within the Liberty Utility service area, 362 residential units and 1,072 residents within the Golden State service area, and no residential units or residents within the LADWP service area.

Each of the three water purveyors forecasted water demand within their service areas based on SCAG demographic data for the year 2035. Because the Economic Development Strategy and Capital Improvement Program for the Willowbrook TOD Specific Plan identified SCAG baseline net employment growth for the Specific Plan area, this baseline net employment growth was subtracted from the projected growth within the Specific Plan resulting in the amount of employees proposed within the Specific Plan that exceed the SCAG baseline employment growth for the Specific Plan area. The baseline SCAG growth was identified for the Specific Plan area as 2,690 employees (Hoffman, 2015). Based on the ratio of non-residential square footage proposed

within each of the water service areas, the amount of employees that exceed the SCAG baseline employment growth within the Specific Plan area are as follows: the Liberty Utilities service area would include an increase of 2,818 employees, Golden State service area would include an increase of 63 employees, and LADWP would include an increase of 61 employees.

In addition, SCAG projected a net housing unit growth for the Willowbrook TOD Specific Plan area. This net increase is 887 units. Based on the number of units proposed within each of the water service areas, the amount of housing units that exceed the SCAG baseline housing unit growth within the Specific Plan area are as follows: the Liberty Utilities service area would include an exceedance of the SCAG projected housing growth (722 units) by 868 units, Golden State service area would include an exceedance of the SCAG projected housing growth (165 units) by 197 units and LADWP would not include an increase of residential units.

Liberty Utilities

Within the Specific Plan area, Liberty Utility Service provides water supply south of Imperial Highway and west of Wilmington Avenue. The net increase in development at buildout of the Specific Plan within the Liberty Utilities service area is approximately 1,590 residential units and 2,553,496 square feet on non-residential development. This would result in an exceedance of the SCAG residential unit growth (722 units) for this service area by 868 residential units. The Specific Plan would result in a net increase in residential population of approximately 4,706 additional residents which would exceed the SCAG residential population growth (2,137 residents) for this area by 2,569 residents. The Specific Plan would also result in a net increase in employees (jobs) of approximately 5,394 jobs which would exceed the SCAG job growth (2,576 jobs) for this area by 2,818 jobs.

As described in the Draft 2015 Liberty Utilities UWMP, the average base daily water use per capita since 1998 (17 years) is 99 gallons per day. However, neither the Liberty Utilities UWMP nor County's General Plan EIR provides a water demand rate for employees or employment uses. Because a substantial portion of the Specific Plan area would be developed for employment uses (such as mixed use, medical, educational, and commercial), the water demand rate of 84 gallons per employee per day (as used in the East Los Angeles 3rd Street Specific Plan EIR [County 2014]) was utilized to identify the water demand from the number of employees that exceeded the SCAG employment growth. Both the East Los Angeles and proposed TOD Specific Plan projects are located within an urban developed portion of Los Angeles County and would implement similar residential mixed uses and employment generation infill and redevelopment projects near Metro stations. Thus, the use of this demand factor is appropriate to use for analysis of the net water demand that would occur from implementation of the proposed Specific Plan.

As shown in **Table 3.13-11**, it is anticipated that an increased water demand of 1,029 AFY would result from buildout of the Specific Plan within the Liberty Utilities water service area. Because Liberty Utility has included water demand projections for 2035 within its service area, these projections are subtracted from the total increase water demand for the Specific Plan area. These projections are based on SCAG growth projections. Therefore, the proposed Specific Plan would result in an exceedance of Liberty's projection by approximately 527 AFY. As shown previously in Table 3.13-3, including anticipated growth, the Liberty UWMP anticipates having a surplus

water supply of 910 AFY in 2035. Because the Liberty Utilities would have an excess water supply of 910 AFY in excess of their growth projections based on SCAG projected growth, the Specific Plan's increased demand of 527 AFY is able to be accommodated. The proposed project would not require or result in the need for new or expanded water supply entitlements. Therefore, buildout of the proposed Specific Plan would result in a less than significant impact to Liberty Utilities water supply entitlements for an average year.

TABLE 3.13-11
NET WATER DEMAND AND WATER DEMAND IN EXCESS OF 2035 BUILDOUT PROJECTIONS WITHIN LIBERTY UTILITIES SERVICE AREA OF THE SPECIFIC PLAN AREA

	Net Increase at Buildout	Demand Rate	Net Increased Water Demand at Buildout
Residents			
Specific Plan Total	4,706 residents	99 gpd[3]	465,894 gpd
SCAG Total	-2,137 residents	99 gpd[3]	-211,563 gpd
Net Subtotal[1]	*2,569 residents*		*254,331 gpd*
Employees			
Specific Plan Total	5,394 employees	84 gpd[4]	453,096 gpd
SCAG Total	-2,818 employees	84 gpd[4]	-236,712 gpd
Net Subtotal[2]	*2,576 employees*		*216,384 gpd*
Total Increased Demand			
Specific Plan Total Demand			918,990 gpd (1,029 AFY)
SCAG Total 2035 Projected Demand			-448,275 gpd (502 AFY)
Total Demand in Excess of Liberty Utility's 2035 Projected Demand for Specific Plan Site			**470,715 gpd (527 AFY)**

gpd = gallons per day
AFY = acre feet per year

1 The net subtotal in residents is the number of residents in excess of the SCAG residential population projections for the Specific Plan area because Liberty Utilities water demand projections already includes water use by projected residential population based on SCAG's population forecast. Therefore, the net increase in water demand at buildout is the amount of water demand in excess of Liberty's projected water demand for the Specific Plan area based on SCAG growth projections.
2 The net subtotal in employees is the number of employees in excess of the SCAG employment growth projections for the Specific Plan area because Liberty Utilities water demand projections already includes water use by projected employment growth based on SCAG's employment forecast.
3 SOURCE: Liberty, 2016.
4 SOURCE: County of Los Angeles, 2014.

Golden State

Within the Specific Plan area, Golden State Water Company (GSWC) provides water supply south of the I-105 freeway and east of Wilmington Avenue. The net increase in development at buildout of the Specific Plan within the GSWC service area is approximately 362 residential units and 57,259 square feet on non-residential development. This would result in an increase of 121 additional employees within the GSWC service area. The average monthly residential water usage in the Willowbrook service area is 8,416 gallons per month per residence (GSWC, 2016), (280 gallons per day per residence assuming 30 days per month). Additionally, as described

above, the water demand rate of 84 gallons per employee per day (as used in the East Los Angeles 3rd Street Specific Plan EIR [County of Los Angeles, 2014]) is used.

As shown in **Table 3.13-12**, the buildout of the Specific Plan within the GSWC's water service area would result in the water demand of approximately 125 AFY. Because GSWC has included water demand projections for 2035 within its service area, these projections are subtracted from the total increase water demand for the Specific Plan area. These projections are based on SCAG growth projections. Therefore, the proposed Specific Plan would result in an exceedance of GSWC's projection by approximately 68 AFY.

TABLE 3.13-12
NET WATER DEMAND AND WATER DEMAND IN EXCESS OF 2035 BUILDOUT PROJECTIONS WITHIN GOLDEN STATE WATER COMPANY'S SERVICE AREA OF THE SPECIFIC PLAN AREA

	Net Increase at Buildout	Demand Rate	Net Increased Water Demand at Buildout
Residential Units			
Specific Plan Total	362 units	280 gpd[3]	101,360 gpd
SCAG Total	-165 units	280 gpd[3]	-46,200 gpd
Net Subtotal[1]	*197 units*		*55,160 gpd*
Employees			
Specific Plan Total	121 employees	84 gpd[4]	10,164 gpd
SCAG Total	-58 employees	84 gpd[4]	-4,872 gpd
Net Subtotal[2]	*63 employees*		*5,292 gpd*
Total Increased Demand			
Specific Plan Total Demand			111,524 gpd (125 AFY)
SCAG Total 2035 Projected Demand			-51,072 gpd (57 AFY)
Total Demand in Excess of GSWC's 2035 Projected Demand for Specific Plan Site			**60,452 gpd (68 AFY)**

gpd – gallons per day
AFY - acre feet per year

1 The net subtotal in residents is the number of residents in excess of the SCAG residential population projections for the Specific Plan area because GSWC water demand projections already includes water use by projected residential population based on SCAG's population forecast. Therefore, the net increase in water demand at buildout is the amount of water demand in excess of GSWC's projected water demand for the Specific Plan area based on SCAG growth projections.
2 The net subtotal in employees is the number of employees in excess of the SCAG employment growth projections for the Specific Plan area because GSWC water demand projections already includes water use by projected employment growth based on SCAG's employment forecast.
3 SOURCE: GSWC, 2016.
4 SOURCE: County of Los Angeles, 2014.

As shown previously in Table 3.13-4, GSWC anticipates an increased demand and supply of 224 AF between 2015 and 2035 to accommodate growth projections. According to GSWC staff, the increase in water demand resulting from the development of the Specific Plan would not result in a water supply issue because GSWC has an adjudicated amount of groundwater available from the Central Basin of 16,439 AFY. Therefore, the proposed project would not require or result in the need for new or expanded water supply entitlements within the GSWC service area, and

buildout of the proposed Specific Plan would result in a less than significant impact to GSWC water supply entitlements.

LADWP

The existing uses include a Metro parking lot and vacant site. The development capacity for the vacant site is approximately 55,281 square feet of commercial uses. This would result in approximately 56 additional employees in the LADWP service area at buildout. Using the 84 gpd per employee water demand rate described above, buildout of the proposed Specific Plan within the LADWP water service area would result in an increased water demand of 11 AFY as shown in **Table 3.13-13**. Because LADWP has included water demand projections for 2035 within its service area, these projections are subtracted from the total increase water demand for the Specific Plan area. These projections are based on SCAG growth projections. Therefore, the proposed Specific Plan would result in an exceedance of LADWP's projection by approximately 6 AFY.

TABLE 3.13-13
NET WATER DEMAND AND WATER DEMAND IN EXCESS OF 2035 BUILDOUT PROJECTIONS WITHIN THE LOS ANGELES DEPARTMENT OF WATER & POWER'S SERVICE AREA OF THE SPECIFIC PLAN AREA

	Net Increase at Buildout	Demand Rate	Net Increased Water Demand at Buildout
Residential Units			
Specific Plan Total	0 units	154 gpd[3]	0 gpd
SCAG Total	0 units	154 gpd[3]	0 gpd
Net Subtotal[1]	0 units		0 gpd
Employees			
Specific Plan Total	117 employees	84 gpd[4]	9,828 gpd
SCAG Total	-56 employees	84 gpd[4]	-4,704 gpd
Net Subtotal[2]	61 employees		5,124 gpd
Total Increased Demand			
Specific Plan Total Demand			9,828 gpd (11 AFY)
SCAG Total 2035 Projected Demand			-4,704 gpd (5 AFY)
Total Demand in Excess of LADWP's 2035 Projected Demand for Specific Plan Site			**5,124 gpd (6 AFY)**

gpd – gallons per day
AFY - acre feet per year

1 The net subtotal in residents is the number of residents in excess of the SCAG residential population projections for the Specific Plan area because GSWC water demand projections already includes water use by projected residential population based on SCAG's population forecast. Therefore, the net increase in water demand at buildout is the amount of water demand in excess of LADWP's projected water demand for the Specific Plan area based on SCAG growth projections.
2 The net subtotal in employees is the number of employees in excess of the SCAG employment growth projections for the Specific Plan area because LADWP water demand projections already includes water use by projected employment growth based on SCAG's employment forecast.
3 Based on ten-year average reported in 2015 Urban Water Management Plan for LADWP.
4 Source: County of Los Angeles, 2014.

As described previously, including anticipated growth, the LADWP UWMP anticipates having a surplus water supply of 47,652 AFY in 2035. The LADWP water supply would be able to

accommodate the proposed Specific Plan's exceedance of LADWP's 2035 water demand of 6 AFY. Therefore, the proposed project would not require or result in the need for new or expanded water supply entitlements within the LADWP service area, and buildout of the proposed Specific Plan would result in a less than significant impact to GSWC water supply entitlements.

Combined Water Use

Based on the individual water demand projections identified above for each service area, the total water demand by the proposed Specific Plan is 1,165 AFY (1,029 AFY within Liberty service area, 125 AFY within GSWC service area and 11 AFY within LADWP service area). Because a portion of this future water demand is already accounted for within water demand projections by the three water purveyors, the total water demand in excess of 2035 projections is 601 AFY (527 AFY within Liberty service area, 68 AFY within GSWC service area, and 6 AFY within LADWP service area). As discussed above, buildout of the proposed Specific Plan would result in a less than significant impact on existing water supply entitlements.

Cumulative

Cumulative water supply impacts are considered on a purveyor service area basis and are associated with the adequacy of the primary sources of water that include groundwater, imported water, and recycled water.

As described above groundwater rights are adjudicated in the Basin, which has regulated groundwater supplies. The Watermaster management of the adjudicated basin and the prescriptive allowable pumping rights for each agency that accesses the groundwater basin reduces the potential of incremental increases to groundwater pumping that could result in a cumulatively considerable impact on the groundwater supplies.

In addition, as described previously, each of the water purveyors provides projections for water supply and demand through 2035 that includes imported water and recycled water sources, and shows that with anticipated growth per SCAG projections, each water purveyor would have a water surplus. Furthermore, all development is required to meet water conservation goals including a 20 percent reduction in per capita demand statewide by 2020. As a result, cumulative development would result in less than significant cumulative impacts to water supply.

Because the proposed project as well as cumulative projects would result in less than significant impacts, the implementation of the proposed project would result in less than cumulatively considerable impacts to water supply.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Energy Facilities

Impact 3.13-5: The proposed project would not create energy utility system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, or would it require or result in the new or expanded entitlements.

Project-Specific

Once operational, site-specific developments that would occur pursuant to the Specific Plan would include residential, mixed use, medical, educational and commercial uses that generate demand for electricity, natural gas, as well as gasoline for motor vehicle trips. However, these types of land uses would involve energy consumption quantities that are typical for urban infill development, and no operational activities or land uses would occur that would result in extraordinary energy consumption.

New development under the proposed Specific Plan would be required to meet Title 24 energy and CALGREEN efficiency standards. According to the California Energy Commission, the CALGREEN/Title 24 standards are 25 percent more efficient than previous standards for residential construction and 30 percent better for nonresidential construction (CEC, 2012).Typical CALGREEN measures include: insulation; use of energy-efficient heating, ventilation and air conditioning equipment (HVAC); solar-reflective roofing materials; energy-efficient indoor and outdoor lighting systems; reclamation of heat rejection from refrigeration equipment to generate hot water; incorporation of skylights, etc.

In complying with these standards, impacts to peak energy usage periods that could result in the need to expand the energy infrastructure system would be minimized, and impacts on the existing energy system would be reduced. Additionally, the infill development that would occur by the proposed Specific Plan would be within an urbanized area where infrastructure exists for new development to connect to; therefore, implementation of the proposed Specific Plan would not result in the need to develop or extend infrastructure to serve buildout. Furthermore, buildout of the proposed Specific Plan would not create energy utility system capacity problems, or require new or expanded entitlements. Thus, impacts related to energy infrastructure and services would be less than significant.

Cumulative

The geographic context for analysis of cumulative impacts regarding energy includes past, present, and future development within southern California because energy (including electricity,

natural gas, and petroleum) are generated and distributed by regional utility providers throughout the southern California region.

All development projects throughout the region would be required to comply with the energy efficiency standards in CALGREEN/Title 24 and LID requirements; additionally, some of the developments could provide for additional reductions in energy consumption by use of solar panels, sky lights, or other LEED type energy efficiency infrastructure. With implementation of the existing energy conservation regulations, cumulative energy utility system capacity problems would not result, and the construction of new or expanded energy facilities would not be required from the related infill development within the urban and developed region. Therefore, impacts from cumulative projects associated with energy would be less than significant.

Development pursuant to the proposed Specific Plan would incrementally contribute to the need for regional energy. As discussed above, the Specific Plan would include uses that would involve energy consumption quantities that are typical for urban infill development, and no operational activities or land uses would occur that would result in extraordinary energy consumption. Overall, implementation of the proposed Specific Plan would not result in a significant demand on regional energy infrastructure, and would not create energy utility system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities or entitlements. As a result, the project's contribution to cumulative impacts related to the energy infrastructure system and entitlements would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Landfill Capacity

Impact 3.13-6: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Project-Specific

Construction

As described in Section 3.0 Project Description, the proposed Specific Plan would result in development of 1,952 residential units and 2,666,035 square feet of non-residential uses. Construction activities would occur over the 20-year plan implementation period.

Demolition and construction activities generate solid waste, including cardboard, wood, metals, glass, plastics, concrete, asphalt, and other building materials. The average estimate of overall demolition waste from residential is 50 pounds per square foot, and demolition waste from non-residential is estimated to be 158 pounds per square foot (USEPA, 2003). The average estimate of overall construction waste from new residential development is 4.39 pounds per square foot, and construction waste from non-residential is estimated to be 4.34 pounds per square foot (USEPA 2003). As shown in **Table 3.13-14**, it is estimated that demolition and construction would generate approximately 35,622 tons of solid waste over the 20-year buildout of the proposed Specific Plan. Based on an assumption that demolition and construction waste would be generated approximately 50 percent of the 20-year buildout period, the Specific Plan could result approximately 3,562 tons in one year or approximately 11 tons in one day (based on a 6 day per week landfill schedule).

TABLE 3.13-14
ESTIMATED CONSTRUCTION SOLID WASTE

	Construction Waste (lbs per sf)	Net Square Footage Demolished or Constructed	Total Solid Waste Generation over 20 Years
Demolition			
Residential	50[1]	152 du	11,400,000 lbs[2]
Non-Residential	158[1]	378,764 sf	59,844,712 lbs
Subtotal			71,244,712 lbs (35,622 tons)
Construction			
Residential	4.39[1]	1,952 du	12,853,420 lbs[2]
Non-Residential	4.34[1]	2,666,035 sf	11,570,591 lbs
Subtotal			24,424,511 lbs (12,212 tons)
Total Solid Waste			**95,669,223 lbs or 47,834 tons**

lbs – pounds
sf – square foot
du – dwelling unit

[1] SOURCE: USEPA, 2003
[2] Based on an average residential square footage of 1,500 for each dwelling unit.

As described previously, the landfills that can serve the Specific Plan area has an average remaining daily capacity of 4,399 tons (Sunshine Canyon Landfill), 233 tons (Antelope Valley Landfill, and 2,636 tons (Lancaster Landfill). These landfills are projected to remain open until at least the year 2037 (see Table 3.13-9 above). Based on the available capacity, these landfills would have the capacity to dispose of the approximately 11 tons per day over approximately 10 years of construction related solid waste that would occur from buildout of the proposed Specific Plan. Construction of the proposed Specific Plan would not result in the need to expand the existing landfill facilities or construct a new landfill facility. As a result, construction activities would result in less than significant impacts related to landfill facilities.

Operation

The Specific Plan buildout would result in the net development of 1,952 residential units and 2,666,035 square feet of non-residential uses. The increased development that would occur from buildout of the proposed Specific Plan would result in increased generation of solid waste. As shown in **Table 3.13-15**, buildout of the proposed Specific Plan would generate an estimated 39,869 pounds (20 tons) per day. Based on the current recycling requirements, this would result in approximately 10 tons of solid waste from operation of the proposed Specific Plan at buildout. In 2020, when AB 341 becomes effective diversion of 75 percent of solid waste from landfills would be required, and solid waste landfill disposal from operation of the Specific Plan at buildout would be reduced to approximately 5 tons per day.

TABLE 3.13-15
SOLID WASTE GENERATION AND DISPOSAL FROM OPERATION OF THE PLAN AT BUILDOUT

	Generation Factor[1,2]	Increase at Buildout	Solid Waste Generated
Residential	12.23 lbs/du/day	1,952	23,873 lbs/day
Non-Residential	6 lbs/1,000 sf/day	2,666,035	15,996 lbs/day
Total			**39,869 lbs/day** **20 tons/day**
Daily Landfill Disposal Amount Per Current Regulations			10 tons/day
Daily Landfill Disposal Amount in 2020 Per AB 341			5 tons/day

[1] Derived from a list of generation rates maintained by CalRecyle (CalRecycle, 2017).
[2] These factors are estimates prior to recycling, composting or other waste diversion programs.

Waste generated within the Specific Plan area would continue to be hauled to the Downey Area Recycling and Transfer facility and the South Gate Transfer Station facility and then transported to the Sunshine Canyon Landfill, Antelope Valley Landfill, and the Lancaster Landfill for disposal. As described above, these landfills have an average remaining daily capacity of 4,399 tons (Sunshine Canyon Landfill), 233 tons (Antelope Valley Landfill, and 2,636 tons (Lancaster Landfill) Savage Canyon Landfill. These landfills are also projected to remain open until at least the year 2037 (see Table 3.13-9 above). Based on the available capacity, these landfills would have the capacity to dispose of the approximately 5 tons per day of solid waste at buildout.

Therefore, the increase in solid waste from operation of the proposed Specific Plan at buildout would not require construction of a new landfill or expansion of the existing landfill to meet capacity needs. As a result, operational impacts related to capacity of landfill facilities would be less than significant.

Cumulative

The geographic scope of cumulative analysis for landfill capacity is the service area for the Sunshine Canyon Landfill, Antelope Valley Landfill and Lancaster Landfill which serve the Specific Plan area. The projections of future landfill capacities are based on the projected waste stream going to these landfills. As described above, these landfills are projected to remain open until at least 2037. The lifespan of these landfills include the existing and projected solid waste that is anticipated from the growth in the County (County of Los Angeles, 2015). As a result, impacts from future growth on landfill capacity would be less than cumulatively significant. Although the proposed project would contribute solid waste to the landfills, the addition of up to 11 tons of demolition and construction solid waste per day and up to 5 tons of operational solid waste per day would not substantially impact the permitted capacity of the landfills. Therefore, the increase in solid waste from operation of the proposed Specific Plan in combination with planned growth within the County would not require construction of a new landfill or expansion of the existing landfill to meet capacity needs. As a result, the project's contribution to cumulative impacts on the capacities of the landfill facilities would be less than cumulatively considerable.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

Less than significant impact.

Cumulative

Less than significant impact.

Compliance with Solid Waste Regulations and Statutes

Impact 3.13-7: The proposed project would comply with federal, state, and local statutes and regulations related to solid waste.

Project-Specific

The proposed Specific Plan would result in new development, infill and redevelopment of land uses that would generate solid waste. All solid waste-generating activities within the County of

Los Angeles are subject to the requirements set forth in AB 939 that requires diversion of a minimum of 50 percent of construction and demolition debris. In addition, after 2020 development projects pursuant to the Specific Plan would be required to divert 75 percent of solid waste pursuant to AB 341. Disposal of waste generated from implementation of the proposed Specific Plan would be consistent with all state regulations and the policies within the Los Angeles County Integrated Waste Management Plan. Future development under the proposed Specific Plan would comply with all solid waste statutes and regulations. Therefore, impacts associated with conflict with federal, state, or local statutes or regulations related to solid waste would not occur from implementation of the proposed Specific Plan, and there would be no impacts.

Cumulative

The geographic scope of cumulative analysis for compliance related to solid waste regulations is the service area for the landfills that serve the Los Angeles County region. Disposal of solid waste generated by cumulative development would be subject to the requirements set forth in AB 939, AB 341, and the policies within the Los Angeles County Integrated Waste Management Plan. Therefore, cumulative development would comply with all solid waste statutes and regulations, and cumulative development would result in no impacts.

Because disposal of solid waste generated by the Specific Plan would comply with all solid waste statutes and regulations, the proposed Specific Plan would not contribute impacts related to conflicts with solid waste regulations. Therefore, the project would not contribute to cumulative impacts associate with compliance with solid waste statutes and regulations.

Mitigation Measures

Project-Specific

No mitigation measures are required.

Cumulative

No mitigation measures are required.

Significance Determination

Project-Specific

No impact.

Cumulative

No impact.

3.13.6 References

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CHAPTER 4
Alternatives

In accordance with CEQA Guidelines Section 15126.6, this Draft Environmental Impact Report (Draft EIR) contains a comparative impact assessment of alternatives to the project. The primary purpose of this section is to provide decision makers and the public with a reasonable range of feasible project alternatives that could attain most of the basic project objectives, but would avoid or substantially lessen any of the significant effects of the project.

CEQA Guidelines Section 15126.6 states:

> *Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*

Analysis of four alternatives to the project is guided by the following considerations set forth under CEQA Guidelines Section 15126.6:

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant effects.

Alternatives to a project must be considered even if they would impede, to some degree, the attainment of project objectives or be more costly (CEQA Guidelines Section 15126.6(b)). However, the range of alternatives addressed in an EIR need not be exhaustive, and is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only those that the lead agency determines could feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project. An EIR need not consider an alternative whose effects cannot be reasonably ascertained, whose implementation is remote and speculative, or an alternative that would not substantially lessen or avoid the significant effects of the project. CEQA Guidelines Section 15126.6(d) states that if an

alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternatives shall be discussed, but "in less detail than the significant effects of the project as proposed."

CEQA Guidelines Section 15364 defines feasibility as "capable of being accomplished in a successful manner with a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." The determination of the feasibility of project alternatives may include, but is not limited to, factors such as: site suitability, economic viability, infrastructure availability, general plan consistency, regulatory and jurisdictional limitations, and whether the project proponent can reasonably acquire, control or otherwise have access to an alternative project site (CEQA Guidelines Section 15126.6(f)(1)).

A comparison of impacts associated with the project and alternatives is provided herein. In several cases, the description and severity of the impact may be the same under each scenario when compared with the CEQA Thresholds of Significance (i.e., both scenarios would result in a less than significant impact). However, the actual degree of impact may be slightly different under each scenario, and this relative difference is the basis for a conclusion of greater or lesser impacts. In addition, the alternatives analysis includes the assumption that all applicable mitigation measures associated with the project would be implemented with a given project alternative.

An evaluation of a No Project Alternative is required by CEQA Guidelines Section 15126.6(e) and is included in this section as Alternative 1, No Project/Development in Accordance with Existing Zoning. Three additional alternatives, Alternative 2, Modified Land Use Along 119th Street; Alternative 3, Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR; and, Alternative 4, Construct All Physical Traffic Measures Set Forth in MLK Medical Center Campus EIR are also analyzed and compared to the project.

4.1 Alternative Descriptions

Alternative 1: No Project/Development in Accordance with Existing Zoning: The No Project/Development in Accordance with Existing Zoning would result in the development of the project area up to 80 percent of the development allowed under existing zoning. The recent updates as part of the General Plan Update/Zoning Consistency Program rezoned portions of Specific Plan Area to the Mixed Use Zone which allows for a significantly higher residential density and a commercial mixed-use component. This rezoning was applied to County-owned properties with the understanding that implementation would be refined through a TOD Specific Plan. As new development on the rezoned parcels is subject to County authorization and contingent on the full complement of TOD Specific Plan components, it is unlikely that the potential 1,106 residential units and 2,174,344 square feet of non-residential uses afforded solely through the rezoning along would be realized in the foreseeable future. However, for the purpose of this alternatives analysis, development in accordance with existing zoning is compared to the potential effects of implementing the proposed Specific Plan.

Alternative 2: Modified Land Use along 119th Street: Development under this alternative would result in the implementation of Mixed Use 1 zoning on the south side of E. 119th Street between S. Wilmington Avenue to W. Willowbrook Avenue. The proposed Specific Plan includes 19 single-family residential units along the south side of E. 119th Street. Under this alternative, the parcels with 19 single-family residential units would be rezoned to permit 66 multiple family residential units and 49,555 square feet of non-residential uses. This alternative would include all other land uses under the proposed Specific Plan. Therefore, development under this alternative would result in net increases of 1,999 residential units and 2,715,591 square feet of non-residential uses within the Specific Plan area. In comparison to the proposed Specific Plan, this alternative would result in 47 more residential units and 49,555 square feet of more non-residential uses.

Alternative 3: Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR: This reduced development alternative includes the same land uses as the proposed project, except for the MLK Hospital Center. This alternative includes a 50 percent reduction in non-residential square footage compared to the uses approved as part of the Tier 2 development set forth in the MLK Medical Center Campus EIR. This alternative includes the development of 832,348 square feet of MLK Hospital uses compared to the 1,248,522 square feet of MLK Hospital uses currently proposed as part of the Specific Plan. Therefore, development under this alternative would result in net increases of 1,952 residential units and 2,249,862 square feet of non-residential uses. In comparison to the proposed Specific Plan, this alternative would result in the same number of residential units and 416,174 square feet of fewer non-residential uses.

Alternative 4: Construct All Physical Traffic Measures Set Forth in MLK Medical Center Campus EIR: This alternative includes the implementation of all the physical traffic improvements proposed as mitigation measures as set forth on the MLK Medical Center Campus EIR. Not all of these improvements were included in the proposed Specific Plan improvements because roadway widenings were considered 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; and signal/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. The improvements that are part of this alternative that are not included in the proposed Specific Plan include the following:

- **I-105 / Imperial Highway:** Provide a third northbound, left-turn lane by widening off-ramp by 10 feet for approximately 150 to 200 feet.

- **Wilmington Avenue / I-105 Eastbound Ramps, County of Los Angeles / California Department of Transportation:** Provide an additional eastbound lane by widening (reducing the raised median on the ramp) the off-ramp. The eastbound approach shall have a left-turn lane, shared left-right turn lane, and a separate right-turn lane. The sidewalks on both sides of Wilmington Avenue (as noted above) shall be reduced by 2 feet and the Wilmington Avenue roadway shall be widened by 2 feet on both sides (a total of 4 feet) from the south leg

of this intersection. Provide an additional northbound left-turn lane by widening (reducing the medians).

- **Wilmington Avenue / 118th Street, County of Los Angeles:** Widen Wilmington Avenue roadway by 2 feet on both sides and re-stripe to provide two through lanes, a shared through right-turn lane and dual left-turn lanes along the southbound approach. Restripe the westbound approach to provide a separate right-turn lane and a shared left through lane. Northbound approach shall have the same lane geometry as existing conditions.

- **Wilmington Avenue / 120th Street–119th Street, County of Los Angeles:** Widen Wilmington Avenue roadway by 2 feet on both sides and restripe the southbound approach to provide a separate right-turn lane, three through lanes, and a left-turn lane.

  Re-stripe northbound approach to provide a shared through-right turn lane, two through lanes, and a left-turn lane. Remove median adjacent to northbound approach to facilitate three southbound receiving lanes. Restrict parking along Wilmington Avenue roadway during morning and evening peak periods along the eastside of Wilmington between 120th Street and Martin Luther King, Jr. (MLK) Community Hospital Driveway entrance.

  Widen 120th Street west of Wilmington Avenue for 250 feet, on the south side by 2 feet, and re-stripe the eastbound approach to provide a separate right-turn lane, dual left-turn lanes, and a through lane. The westbound approach of 119th Street would have the same lane geometry as existing conditions.

- Wilmington Avenue / Martin Luther King, Jr. Community Hospital Entrance–120th Street, County of Los Angeles: Re-stripe southbound approach to provide a separate right-turn lane, two through lanes, and a left-turn lane. Provide three northbound receiving lanes an restrict on-street curb parking along the eastside of Wilmington Avenue between Martin Luther King, Jr. Community Hospital Driveway and 120th Street and 120th Street and 119th Street during morning and evening peak hours. Remove the median within the hospital entrance and re-stripe the driveway to provide dual left-turn lanes, a through lane, and a separate right-turn lane along the eastbound approach. Re-stripe to provide one receiving lane.

4.2 Significant, Adverse, and Unavoidable Impacts

The proposed project would result in the following project and cumulative significant impacts which cannot be reduced to less than significant, even with the implementation of feasible mitigation measures.

Air Quality

- Conflict with or obstruct implementation of Air Quality Plan
- Air Quality Standards/Violations related to regional construction ROG, NO_x and CO emissions, regional operational ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions, localized construction NO_x, CO, PM_{10} and $PM_{2.5}$ emissions, and criteria pollutants related to ozone precursors (ROG and NO_x), PM_{10}, and $PM_{2.5}$.

Cultural Resources

- Impacts to historical resources.

Greenhouse Gas Emissions

- Generation of greenhouse gas emissions.

Traffic

- Increase in vehicular traffic at intersections, freeway segments and off-ramps within the jurisdictions of the County of Los Angeles, City of Compton, City of Lynwood, City of Los Angeles and Caltrans.

- Increase in vehicular traffic at Congestion Management Program Mainline Freeway Monitoring Stations.

4.3 Project Objectives

The County of Los Angeles developed the following objectives for the proposed project:

- Provide a transit-oriented development near the Willowbrook/Rosa Parks Station.
- Improve bicycle and pedestrian mobility and safety as well as access to the Willowbrook/Rosa Parks Station.
- Preserve and enhance Willowbrook's economic base and character.
- Provide additional housing for Willowbrook's varied income groups.
- Revitalize the health care services at Martin Luther King, Jr. (MLK) Medical Center.
- Revitalize the services at Charles R. Drew University of Medicine and Science (CDU).
- Preserve the character of the existing residential neighborhoods.
- Create an attractive environment for pedestrians, bicyclists, Metro riders, and local transit users through streetscape improvements.

4.4 Alternatives Considered and Withdrawn

Alternative Sites

Alternative sites were not selected for evaluation because the primary purpose of the proposed project is to guide redevelopment of the services of the MLK Medical Center Campus and CDU as well as the area around the Willowbrook/Rosa Parks Station. This purpose cannot be met by redeveloping another site.

4.5 Alternatives Further Evaluated

This section analyzes the following alternatives: Alternative 1, No Project/Development in Accordance with Zoning. Three additional alternatives, Alternative 2, Modified Land Use Along 119th Street; Alternative 3, Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR; and, Alternative 4, Construct All Physical Traffic Measures Set Forth in MLK Medical Center Campus EIR. **Table 4-1** provides a summary comparison, by individual issue area, for each alternative to the project.

TABLE 4-1
ALTERNATIVE COMPARISON

Environmental Issue	Proposed Project	Alternative 1: No Project/ Development in Accordance with Existing Zoning	Alternative 2: Modified Land Use Along 119th St.	Alternative 3: Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR	Alternative 4: Construct All Physical Traffic Measures Set Forth in MLK Medical Center Campus EIR
Aesthetics					
Scenic Vista	NI	NI (E)	NI (E)	NI (E)	NI (E)
Light and Glare	LS	LS (L)	LS (G)	LS (L)	LS (E)
Air Quality					
Air Quality Plan	SU	SU (L)	SU (G)	SU (L)	SU (E)
Air Quality Standards/Violations					
Regional Construction CO Emissions	SU	LS (L)	SU (G)	LS (L)	SU (G)
Regional Construction ROG and NOx Emissions	SU	SU (L)	SU (G)	SU (L)	SU (G)
Regional Operational ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ Emissions	SU	SU (L)	SU (G)	SU (L)	SU (G)
Localized Construction Emissions	SU	SU (L)	SU (G)	SU (L)	SU (G)
Localized Operational Emissions	LS	LS (L)	LS (G)	LS (L)	LS (G)
Criteria Pollutant	SU	SU (L)	SU (G)	SU (L)	SU (G)
Sensitive Receptors	LSM	LSM (L)	LSM (G)	LSM (L)	LSM (G)
Cultural Resources					
Historical Resources	SU	SU (L)	SU (G)	SU (L)	SU (E)
Archaeological Resources	LSM	LSM (L)	LSM (G)	LSM (L)	LSM (E)
Paleontological Resources	LSM	LSM (L)	LSM (G)	LSM (L)	LSM (E)
Human Remains	LSM	LSM (L)	LSM (G)	LSM (L)	LSM (E)
Tribal Cultural Resources	LSM	LSM (L)	LSM (G)	LSM (L)	LSM (E)

Geology and Soils					
Strong Seismic Ground Shaking	LS	LS (L)	LS (G)	LS (L)	LS (E)
Liquefaction and Lateral Spreading	LS	LS (L)	LS (G)	LS (L)	LS (E)
Soil Erosion or Topsoil Loss	LS	LS (L)	LS (G)	LS (L)	LS (E)
Geologic Instability	LS	LS (L)	LS (G)	LS (L)	LS (E)
Greenhouse Gases					
Greenhouse Gas Emissions	SU	LS (L)	SU (G)	LS (L)	SU (G)
Conflict with Plan, Policy, or Regulation that Reduces Greenhouse Gas Emissions	LS	LS (L)	LS (G)	LS (L)	LS (G)
Hazards and Hazardous Materials					
Accident Conditions	LS	LS (L)	LS (G)	LS (L)	LS (E)
Schools	LS	LS (L)	LS (G)	LS (L)	LS (E)
Hazardous Materials Site Listing	LS	LS (L)	LS (G)	LS (L)	LS (E)
Hydrology and Water Quality					
Water Quality Standards/Waste Discharge Requirements	LS	LS (L)	LS (G)	LS (L)	LS (E)
Groundwater Supplies and Recharge	LS	LS (L)	LS (G)	LS (L)	LS (E)
Erosion/Siltation	LS	LS (L)	LS (G)	LS (L)	LS (E)
Stormwater Drainage Capacity	LS	LS (L)	LS (G)	LS (L)	LS (E)
Surface Water and Groundwater Quality	LS	LS (L)	LS (G)	LS (L)	LS (E)
Degrade Water Quality	LS	LS (L)	LS (G)	LS (L)	LS (E)

Land Use and Planning					
Divide an Established Community	NI	NI (E)	NI (E)	NI (E)	NI (E)
Conflict with Applicable Plans, Policies, or Regulations	LS	SM (G)	LS (G)	LS (L)	LS (E)
Conflict with County Zoning Ordinance	LS	NI (L)	LS (G)	NI (L)	LS (E)
Visual Character	LS	LS (G)	LS (G)	LS (L)	LS (E)
Noise and Vibration					
Noise Levels in Excess of Standards	LSM	LSM (L)	LSM (G)	LSM (L)	LSM (E)
Excessive Ground-Borne Vibration	LSM	LSM (L)	LSM (G)	LSM (L)	LSM (E)
Permanent Increase in Ambient Noise Levels	LS	LS (L)	LS (G)	LS (L)	LS (E)
Temporary or Periodic Increase in Ambient Noise Levels	LS	LS (L)	LS (G)	LS (L)	LS (E)
Population and Housing					
Population Growth	LS	LS (L)	LS (G)	LS (L)	LS (E)
Public Services and Recreation					
Fire Protection Services	NI	NI (E)	NI (E)	NI (E)	NI (E)
Police Protection Services	NI	NI (E)	NI (E)	NI (E)	NI (E)
School Facilities	LS	LS (L)	LS (G)	LS (E)	LS (E)
Parks	NI	NI (E)	NI (E)	NI (E)	NI (E)
Library Facilities	NI	NI (E)	NI (E)	NI (E)	NI (E)
Other Public Facilities	NI	NI (E)	NI (E)	NI (E)	NI (E)
Increase Use of Recreational Facilities	LS	LS (L)	LS (G)	LS (E)	LS (E)
Recreational Facilities Physical Effect on the Environment	NI	NI (E)	NI (E)	NI (E)	NI (E)
Transportation and Traffic					
Traffic Increase	SU	SU (L)	SU (G)	SU (L)	SU (L)
Congestion Management Program	SU	SU (L)	SU (G)	SU (L)	SU (L)

Utilities					
Wastewater Treatment Requirements	LS	LS (L)	LS (G)	LS (L)	LS (E)
Water or Wastewater Treatment Facilities	LSM	LSM (L)	LSM (G)	LSM (L)	LSM (E)
Stormwater Drainage Facilities	LS	LS (L)	LS (G)	LS (L)	LS (E)
Water Supplies	LS	LS (L)	LS (G)	LS (L)	LS (E)
Energy Facilities	LS	LS (L)	LS (G)	LS (L)	LS (E)
Landfill Capacity	LS	LS (L)	LS (G)	LS (L)	LS (E)
Compliance with Solid Waste Regulations and Statutes	LS	LS (L)	LS (G)	LS (L)	LS (E)

NOTES:

NI = No Impact
LS = Less than Significant
LSM = Less than Significant with Mitigation
SU = Significant and Unavoidable

(L) = Less than Project
(G) = Greater than Project
(E) = Equivalent to Project

4.5.1 Alternative 1: No Project/Buildout According to Existing Zoning

The following discusses the impacts associated with the No Project Alternative (Buildout According to Existing Zoning), Alternative 1, in comparison to the impacts of the proposed Specific Plan.

Aesthetics

Under the No Project/Build Out According to Existing Zoning Alternative, fewer residential units and less non-residential uses would be implemented compared to the proposed project.

Development under this Alternative would not affect identified or designated scenic views or a scenic vista because neither exists in the project vicinity. Therefore, similar to the proposed project, the implementation of this Alternative would not impact a scenic view or scenic vista.

Development under this Alternative would include new lighting throughout the development and involve exterior lighting for streetlights, parking lots, signs, walkways, and interior lighting, which could be visible through windows to the outside similar to the proposed project. Because there is a substantial amount of ambient nighttime light that exists in the Specific Plan area, limited views of stars and the nighttime sky are provided. Thus, the increase in light that would occur from implementation of this Alternative would not significantly impact nighttime views of the sky (ability to see the stars) because such views are already limited in an urban setting. Less new lighting would be generated under this Alternative compared to the proposed project, and new uses would be required to either use low-scaled lighting or shielded lighting to focus lighting and prevent lighting from spilling onto adjacent sensitive uses, such as residential. The requirements of Section 22.44.1270, Exterior Lighting, of the Los Angeles County Code related to lighting and shielding would limit the potential of increased lighting on sensitive uses. These regulations state that lighting shall be the minimum necessary in order to achieve the purpose of the light and that all lights shall be directed, oriented and shielded to prevent light from shining onto adjacent properties, onto public rights-of-way, and into driveway areas in a manner that would obstruct motorists' vision. Similar to the proposed project, this Alternative assumes that the Performance Standards would ensure sensitive uses would not be adversely affected by light and glare. These light and glare performance standards state that all outdoor lighting shall be designated to minimize light trespass; that existing residential uses should be buffered from light and glare effects from new development; and that parking lot and building security lighting shall not impact surrounding properties. Because compliance with the County Code would be checked by the County through the development plan check process, impacts associated with this Alternative related to increased sources of light would be less than significant similar to the proposed project.

Similar to the proposed project, the land uses proposed under this Alternative would be typical institutional, commercial, residential, and mixed use structures. Typically, these structures would be designed with non-reflective textured surfaces on building exteriors (such as stucco, brick, stone, wood). Windows included as part of the design of the building exteriors would be require

to comply with Section 22.44.1320 (Construction Colors, Materials, and Design) of the County Code that requires windows to be comprised of non-glare/non-reflective glass. In addition, the Performance Standards included in the proposed Specific Plan would also be implemented as part of this Alternative and require that new development preclude generation of direct glare by ensuring that no surfaces reflect direct glare onto adjoining property, streets, or skyward. Because compliance with the County Code would be checked by the County through the development plan check process, impacts associated with this Alternative related to increased sources of glare would be less than significant similar to the proposed project.

Air Quality

The No Project/Buildout in Accordance with Existing Zoning Alternative would not result in changes to existing zoning. Based on a review of SCAG growth projections for the project area which include 3,447 residents, 887 residential units, and 615 jobs, the proposed growth for this Alternative which is 3,274 residents, 1,106 residential units and 4,618 jobs is not consistent with the SCAG growth projections because the combined growth under this alternative would exceed the combined growth under the SCAG projections. Because SCAG growth projections form the basis of the land use and transportation control portions of the Air Quality Management Plan (AQMP), this Alternative would conflict with and obstruct implementation of the AQMP. This Alternative would have less impact to the AQMP compared to the proposed project. The proposed project would also not be consistent with SCAG growth projection and therefore would conflict and obstruct implementation of the AQMP. There are mitigation measures proposed to reduce the proposed project's impact on the AQMP and these measures can be implemented as part of this Alternative; however, after the implementation of the mitigation measures, impacts to the AQMP would remain significant.

Because this Alternative would result in fewer residential units and less non-residential square feet compared to the proposed project, this Alternative would result in daily maximum construction activities that are less than the proposed project. In addition, with less development, this Alternative would result in less operational air pollutant emissions. Because this Alternative would result in 43 percent less residential units and 18 percent less non-residential square footage compared to the proposed project, this Alternative would not exceed regional construction emission threshold for CO, unlike the proposed project which exceeded the CO threshold by approximately 14 percent. However, this Alternative would exceed the regional construction thresholds for ROG and NO_x and result in significant impacts similar to the proposed project. Although less operational criteria pollutants would be generated under this Alternative, it would result in significant ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ operational emissions similar to the proposed project. Also similar to the proposed project, the project mitigation measures could reduce the regional construction emissions; however, this alternative would still result in significant regional ROG and NOx construction emissions and significant regional NO_x, CO, PM_{10}, and $PM_{2.5}$ operational emissions.

With less development and less average daily trips, this Alternative would result in less localized construction and operational criteria pollutants. However, this Alternative, similar to the proposed project, would result in significant construction emissions of NO_x, PM_{10} and $PM_{2.5}$ and less than

significant localized criteria pollutant emissions during operational activities. With the implementation of the recommended project mitigation measures, emissions from this Alternative, similar to the proposed project, would be reduced, but emissions would still remain significant during construction activities, but less than significant localized emission impacts would occur during operational activities.

As with the proposed project, this Alternative would expose existing and future sensitive receptors to toxic air contaminates (TACs) in the forms of diesel particulate matter (DPM) during construction and TACs from solvents, cleaners, and motor vehicle emissions during operational activities. Construction activities would occur under this Alternative over an approximate 20-year time period similar to the proposed project. Because construction activities would be short-term and limited, this Alternative's exposure of DPM by sensitive receptors would be less than significant similar to the proposed project. During operational activities associated with this Alternative, TACs generated from the use of solvents and cleaners would not occur in an appreciable quantity similar to the proposed project. Stationary sources of TACs would be subject to the rules and regulations of the SCAQMD (i.e., Rule 1401). Because stationary sources of TAC are required to operate in accordance with applicable regulations, the Alternative's TAC emissions impact would be less than significant similar to the proposed project. Residential development under this Alternative are proposed to be located within 500 feet of the I-105 Freeway and within 300 feet of the railroad. Similar to the proposed project, this Alternative's placement of residential units near the freeway and railroad which are sources of TACs would represent a significant impact similar to the proposed project. The mitigation measures identified for the proposed project could also be implemented for this Alternative and the resulting impact would be less than significant similar to the proposed project.

Cultural Resources

Implementation of this Alternative has the potential to result in demolition or modification of existing or future eligible state or local historic resources similar to the proposed project. The project area includes an existing state eligible historic district (Martin Luther King, Jr. Medical Campus). There are also numerous residential and commercial buildings that are older than 50 years or buildings that could be older than 50 years prior to construction activities. With the implementation of measures similar to the project mitigation measures, potential impacts on historic resources would be reduced; however, because the measures describe a reduction of the impacts to the maximum extent practicable and not guarantee full mitigation, impacts to eligible historic resources could remain significant similar to the proposed project.

Construction activities associated with this Alternative could unearth previously unknown and unrecorded archaeological and tribal cultural resources and potential paleontological resources that could be located in the subsurface older Quaternary deposits that are known to contain vertebrate fossils similar to the proposed project. The implementation of the mitigation measures identified for the proposed project would reduce potential archaeological and paleontological impacts associated with this Alternative to less than significant similar to the proposed project.

In addition, construction activities associated with this Alternative could uncover unknown human remains similar to the proposed project. The implementation of the project mitigation measure would reduce the potential impact on human remains to less than significant similar to the proposed project.

Geology and Soils

Implementation of development in accordance with this Alternative would expose people and structures to strong seismic ground shaking. However, similar to the proposed project, conformance with the CBC and UBC would reduce impacts to strong seismic ground shaking to the maximum extent possible under currently accepted engineering practices. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts related to exposing people or structures to strong seismic ground shaking. Development in the project area could also be exposed to geologic hazards; however, compliance with the County building code requirements would reduce potential hazards such as unstable soils, liquefaction, lateral spreading, settlement, subsidence, and collapse to less than significant similar to the proposed project. In addition, construction and operational activities associated with this Alternative could result in soil erosion or loss of top soil; however, compliance with the Construction General Permit, MS4 Permit and the County's LID Standards would reduce soil erosion and loss of topsoil during construction and operational activities to less than significant similar to the proposed project.

Greenhouse Gas Emissions

This Alternative would result in fewer residential units and non-residential square footage compared to the proposed project. Therefore, GHG emissions that would result from this Alternative would be less than would occur from implementation of the proposed Specific Plan. Because this Alternative would result in approximately 43 percent less residential units and 18 percent less non-residential uses compared to the proposed project which exceeded the 2035 GHG threshold by approximately 5 percent, this Alternative would not exceed the 2035 annual greenhouse gas threshold, and therefore, would result in a less than significant GHG emissions impact unlike the proposed project. The proposed project resulted in a significant impact before and after the implementation of mitigation measures.

Similar to the proposed project, this Alternative would not exceed the 2020 GHG threshold which would achieve the AB 32 GHG reduction goals. In addition, this Alternative would be consistent with the CARB Scoping Plan and could be consistent with the SCAG SCS GHG emissions reduction policies. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts related to compliance with AB 32, CARB Scoping Plan, and the SCAG SCS GHG emissions reduction policies.

Hazards and Hazardous Materials

Development in accordance with this Alternative would involve demolition that could include asbestos, lead-based paints or PCB-containing materials similar to the proposed project. Hazardous materials released as a result of construction activities would be required to comply with existing laws and regulations, and therefore, potential impacts would be less than significant

similar to the proposed project. Operational activities associated with this Alternative would include the use, storage and disposal of hazardous materials. The proposed residential and commercial uses would include the use of and storage of common hazardous materials such as paints, solvents, and cleaning products. Building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers and pesticides/herbicides. This Alternative also includes the expansion of the Medical Center and Drew University. This expansion would include the generation of hazardous materials such as 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. The medical center as well as Drew University generates biomedical and radiological wastes. Residential and commercial uses would typically use or store small quantities of household hazardous materials. Because the hazardous materials associated with residential and commercial uses are generally in the form of routinely used common chemicals, potential hazard impacts from reasonable foreseeable upset and accident conditions is less than significant. Businesses or facilities that use or generate hazardous materials in excess of the threshold such as the Medical Center and Drew University are required to obtain a handler permit. Amounts less than the threshold would pose a less than significant effect. Amounts greater than the threshold are required to comply with existing regulations that would reduce potential hazard impacts from reasonable upset and accident conditions to less than significant similar to the proposed project.

Because the uses under this Alternative that generate, use or store hazardous materials in excess of thresholds would require to comply with existing regulations to reduce potential impacts of the site where the hazardous materials are located, hazard impacts at nearby schools would be less than significant similar to the proposed project.

Similar to the proposed project, this Alternative would experience less than significant impacts associated with hazardous materials site listed on the Cortese List because the existing site located on the List and located within the Specific Plan site is currently being remediated per federal and state regulations and oversight. Compliance with the existing regulations would result in a less than significant impact on public safety and the environment similar to the proposed project.

Hydrology and Water Quality

Development under this Alternative would include demolition and grading activities that could expose and loosen sediment and building materials that could mix with storm water and urban runoff. Because each individual project would be required to comply with the NPDES and implement a SWPPP if the project disturbs more than one acre, the potential for pollutants to substantially degrade downstream surface water quality would be less than significant. Projects disturbing less than an acre of ground surface during construction would not be required to prepare a SWPPP, but would be required to implement the minimum BMPs required by the Los Angeles County MS4 Permit to prevent water quality degradation and therefore, impacts would be less than significant. Construction impacts related to water quality standards or waste

discharge requirements from implementation of this Alternative would be less than significant similar to the proposed project.

Operational activities associated with this Alternative would be required to meet MS4 Permit requirements through compliance with the County LID Standards Manual. Compliance with the MS4 Permit regulations would minimize pollutants being transported offsite into downstream receiving waters, and projects implemented in accordance with this Alternative would not violate water quality standards or waste discharge requirements.

Similar to the proposed project, this Alternative includes infill and redevelopment and would increase population; thereby increase demand on water supplies. Because the water purveyors that serve the project site have pumping rights to obtain their groundwater from the Central Groundwater Basin, compliance with the judgment that set pumping rights in the Basin would eliminate the potential for the water agencies to substantially impact groundwater supplies. Therefore, similar to the proposed project, the implementation of this Alternative would result in less than significant impacts on the Central Groundwater Basin from groundwater use.

The project site does not have much groundwater recharge potential, and this Alternative would not include excavation activities that would reach the existing groundwater level of approximately 155 feet below ground surface. Therefore, this Alternative would result in less than significant impacts to the existing groundwater levels similar to the proposed project.

Construction and operational activities associated with this Alternative would result in the potential for erosion and siltation impacts. However, construction activities would be required to implement BMP required by the County Pollution Control Requirements for Construction Activities. Operational activities would be required to implement the County LID Standards Manuel. With compliance with these regulations, the implementation of development in accordance with this Alternative would result in a less than significant erosion and siltation impact during project construction and operational activities.

Development in accordance with this Alternative would result in the generation of little to no increase in runoff to the existing drainage system because the majority of the site is developed and approximately 80 to 90 percent of the site is impervious. Development under this Alternative would not trigger the need for upgrades to the County's existing storm drain major backbone facilities mainly due to the LID Ordinance requirements for percolation and on-site detention for new development. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts on existing and planned storm drains. Furthermore, as stated above, this Alternative's compliance with NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the requirements of the County LID Standards Manual would result in less than significant impacts related to the creation of polluted runoff similar to the proposed project.

Land Use and Planning

Under this Alternative, the project area would increase the density/intensity of development as well as the presence of pedestrians throughout the area. Similar to the proposed project, this Alternative would not create physical barriers within the area and therefore, would not physically divide the established community in the project area.

Development in accordance with this Alternative would not include transit-oriented development that provides for cohesive development throughout the project area. With the absence of a Specific Plan, this Alternative would need to implement TOD features on a project-by-project basis which would not provide for a cohesive future land use plan that would maximize TOD land use and circulation opportunities. This alternative would not implement the pedestrian and bicycle circulation patterns identified in the proposed Specific Plan to improve access to the Willowbrook/Rosa Parks Station. In addition, this alternative would not implement SCAG policies to the extent that the proposed project is implementing these policies that encourage greater densities in areas with TOD opportunities and less dependence on the automobile. This alternative would, however, be consistent with the General Plan land uses, unlike the proposed project. Overall, this Alternative would result in greater inconsistency with land use policies compared to the proposed project, and this Alternative would have a potential significant impact on land use policies. Mitigation measures that include the implementation of TOD features would reduce this Alternative's potential impact on land use policies to less than significant.

Because this Alternative would implement the County zoning for the project area, this Alternative would not conflict with the Zoning Ordinance.

Furthermore, the implementation of development in accordance with this Alternative would enhance the visual character and quality of the project area by following existing zoning regulations. Although the character of the area would be visually enhanced, it would not be as visually enhanced as the proposed project because the project would include comprehensive design guidelines for the entire Specific Plan area. Implementation of this Alternative, similar to the proposed project, would result in less than significant impacts relating to the existing visual character and quality of the area.

Noise

This Alternative would result in less development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses. Because this Alternative would result in fewer residential units and less non-residential square feet compared to the proposed project, this Alternative would result in less construction and operational noise levels. This alternative would exceed noise standards and potentially expose sensitive uses to significant ground-borne vibrations; however, this alternative's significant noise and vibration impacts would be less compared to the proposed project and would be reduced to less than significant with the implementation of the project mitigation measures.

Population and Housing

Under this Alternative, 846 fewer residential units and 491,691 fewer square feet of non-residential space than buildout of the proposed Specific Plan would occur. The increase in residential and employment population that would be generated by this Alternative would not be consistent with the SCAG growth forecasts for the site. The increase in population that would be generated by the proposed project would also not be consistent with SCAG forecasts. With the increase in jobs in the project area under this Alternative, the majority of the jobs created within the project area would be skilled or managerial, and a majority of these jobs are expected to be filled by persons outside of the project area similar to the proposed project. Jobs are anticipated to be filled by people within the County due to the accessibility to the Willowbrook/Rosa Parks Station and multiple freeways, and the larger available labor force within the County. Therefore, the implementation of this Alternative would not substantially increase residential and employment population growth, and therefore, impacts would be less than significant similar to the proposed project.

Public Services and Recreation

Under this Alternative, 846 fewer residential units and 491,691 fewer square feet of non-residential space than buildout of the proposed Specific Plan would occur. Because the proposed project which has more development compared to this Alternative and the County fire stations serving the project area could increase staffing and equipment required for buildout of the proposed project by utilizing the existing fire stations, the development in accordance with this Alternative would also be accommodated by the existing fire stations without altering the existing facilities. Therefore, physical impacts to the environment related to the development of or expansion of fire department facilities would not occur.

Development of this Alternative would increase the need for additional officers to respond to additional calls for sheriff services. The increase in additional officers would be less than required for the proposed project. Because the proposed project's need for additional officers could be accommodated at existing Sheriff Department facilities, the demand for additional officers under this Alternative would not require the alteration of existing sheriff facilities. Therefore, physical impacts to the environment related to the development of or expansion of sheriff department facilities would not occur.

This Alternative would increase the number of students in the project area; however, this increase would be less than the increase anticipated under the proposed Specific Plan because fewer residential units are proposed. Because the proposed project would result in a less than significant impact on school facilities and this Alternative would result in the generation of less students, this Alternative would result less impacts to school facilities compared to the proposed project and would result in a similar less than significant impacts to school facilities as the proposed project.

Implementation of this Alternative would increase the population in the project area and thereby increase a demand for parks and recreation, library, and other public (i.e., hospitals and post office) facilities. Because the proposed project would result in a greater population compared to this Alternative and that the proposed project would not result in the need for new or altered parks

and recreation, library, and other public (i.e., hospitals and post office) facilities, this alternative would also not result in the need for new or altered facilities. Therefore, the implementation of this Alternative would result in no impacts caused by construction impacts associated with new or altered parks and recreation, library, and other public (i.e., hospitals and post office) facilities.

The implementation of this Alternative would result in less development and residential population compared to the proposed project. This reduced population would also result in a reduced demand for and use of recreational facilities. Because the Willowbrook Community includes adequate parkland for recreational use and the County has an annual assessment of fees as new development is proposed, this Alternative would result in less than significant impacts related to physical deterioration of existing parks and recreational facilities. In addition, because the Willowbrook Community contains adequate parkland to accommodate buildout of this Alternative, similar to the proposed project, this Alternative would not result in the need to construct new or physically alter recreational facilities.

Traffic

This Alternative would result in less development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses. Because this Alternative would result in fewer residential units and less non-residential square feet compared to the proposed project, this Alternative would result in less vehicular traffic and less impacts at County, city and Caltrans traffic facilities and congestion management facilities. With the implementation of the project mitigation measures, this Alternative would continue to result in significant traffic impacts, but would be less than the impacts associated with the proposed project.

Utilities and Service Systems

This Alternative would result in less development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses, and these uses would not discharge wastewater that contains harmful levels of toxins beyond the regulations of the LARWQCB. In addition, all effluent would comply with the wastewater treatment standards of the RWQCB. Furthermore, the existing capacity of the wastewater treatment facilities serving the project area would not be exceeded under this Alternative similar to the proposed project. Therefore, this Alternative would result in less than significant impacts related to the wastewater treatment requirements of the LARWQCB similar to the proposed project.

This Alternative would increase development in the project area and increase the need for water and sewer services. Because the implementation of this Alternative would generate a lower demand for water and the existing water infrastructure is adequate to accommodate the proposed project, this Alternative would be accommodated by the existing water infrastructure. In addition, although this Alternative would generate less wastewater compared to the proposed project, this Alternative is still anticipated to exceed existing sewer capacities within the Specific Plan area. Implementation of

the project mitigation measure would reduce impacts associated with this Alternative to less than significant. Overall, this Alternative would result in less impacts on existing sewer capacity compared to the proposed project.

Development in accordance with this Alternative would include infill development and redevelopment. This Alternative would develop pervious areas to retain and infiltrate stormwater on development sites pursuant to the County's SUSWMP and LID requirements that reduce and manage drainage. County SUSWMP requirements provide that projects conduct a drainage hydrologic/hydraulic analysis that details the site's anticipated runoff calculations. From these calculations, a WQMP is prepared to ensure that a net increase in stormwater runoff would not occur from implementation of the development. Development projects in accordance with this Alternative, similar to the proposed project, are required through implementation of a project-specific WQMP to retain and treat the storm water quality volume generated by the project. In addition, the County requires LID standards to reduce runoff by using smart growth practices, stormwater infiltration, evapotranspiration, biofiltration, and rainfall harvest and use. With implementation of new pervious areas and compliance with applicable regulatory requirements, this Alternative's impacts related to the need to construct or expand stormwater drainage facilities would be less than significant similar to the proposed project.

This Alternative would increase water demand from the three water purveyors servicing the project site. These water purveyors include Liberty, Golden State Water Company, and LADWP. Because less residential units and less non-residential square feet would occur under this Alternative compared to the proposed project, this alternative would demand less water. Because the proposed project would not require or result in the need for new or expanded water supply entitlements within the service areas of the three water purveyors, this Alternative would also not require the need for new or expanded water entitlements. Therefore, similar to the proposed project, this alternative would result in less than significant impact to water supply entitlements of the three project area water purveyors.

This Alternative would increase the use of energy resources such as electricity and natural gas; however, this increase would be less than the proposed project because less residential and non-residential development is proposed under this Alternative. Because the proposed project would not result in the need to develop or extend infrastructure to serve proposed buildout and this Alternative would result in less demand for energy resources, the implementation of this Alternative would result in less than significant impacts on energy infrastructure similar to the proposed project.

Solid waste generation under this Alternative would be less compared to the proposed project because less development is proposed. Similar to the proposed project, this Alternative would be required to comply with existing and future recycling requirements that are 50 percent reduction to 2020 and then 75 percent reduction after 2020. Because the proposed project's generation of solid waste would not require expansion of existing landfill facilities or construct a new landfill, the implementation of this Alternative would result in less than significant impacts to landfill facilities similar to the proposed project.

Conclusion

Potential impacts associated with the implementation of development under Alternative 1 are compared to the potential impacts of development in accordance with the proposed Specific Plan. Compared to the proposed project, impacts associated with light and glare, air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, population and housing, noise, schools, transportation facilities and utilities would result in fewer impacts. The impacts related to the Air Quality Management Plan (AQMP), regional construction CO emissions would be substantially reduced from significant and unavoidable under the proposed project to no impact (AQMP) and to less than significant impact (regional CO emissions) under this Alternative. Compared to the proposed project, this Alternative would result in greater impacts to land use policies that provide for TOD opportunities and less dependence of the automobile, provision of pedestrian and bicycle circulation patterns and cohesive future development. This Alternative would result in the same no impacts related to scenic vista, division of an established community, public services, and existing wastewater treatment plants.

The implementation of this Alternative would result in less environmental impacts compared to the proposed project. This Alternative would not meet the objectives of providing a transit-oriented development in the project area and providing an attractive environment for pedestrian, bicyclists, Metro riders, and local transit users through streetscape improvements because these improvements would not be comprehensively and cohesively implemented in accordance with a uniform design guideline such as the proposed Specific Plan.

4.5.2 Alternative 2: Modified Land Uses Along 119th Street

The following discusses the impacts associated with Alternative 2, Modified Land Uses Along 119th Street, in comparison to the impacts of the proposed Specific Plan.

Aesthetics

Under the Modified Land Uses Along 119th Street Alternative, 47 more residential units and 49,555 square feet of more non-residential uses would be implemented compared to the proposed project.

Development under this Alternative would not affect identified or designated scenic views or a scenic vista because neither exists in the project vicinity. Therefore, similar to the proposed project, the implementation of this Alternative would not impact a scenic view or scenic vista.

Development under this Alternative would include new lighting throughout the development and involve exterior lighting for streetlights, parking lots, signs, walkways, and interior lighting, which could be visible through windows to the outside similar to the proposed project. Because there is a substantial amount of ambient nighttime light that exists in the Specific Plan area, limited views of stars and the nighttime sky are provided. Thus, the increase in light that would occur from implementation of this Alternative would not significantly impact nighttime views of the sky (ability to see the stars) because such views are already limited in an urban setting. More

new lighting would be generated under this Alternative compared to the proposed project, and new uses would be required to either use low-scaled lighting or shielded lighting to focus lighting and prevent lighting from spilling onto adjacent sensitive uses, such as residential. The requirements of Section 22.44.1270, Exterior Lighting, of the County Code related to lighting and shielding would limit the potential of increased lighting on sensitive uses. These regulations state that lighting shall be the minimum necessary in order to achieve the purpose of the light and that all lights shall be directed, oriented and shielded to prevent light from shining onto adjacent properties, onto public rights-of-way, and into driveway areas in a manner that would obstruct motorists' vision. Similar to the proposed project, this Alternative assumes that the Performance Standards would ensure sensitive uses would not be adversely affected by light and glare. These light and glare performance standards state that all outdoor lighting shall be designated to minimize light trespass; that existing residential uses should be buffered from light and glare effects from new development; and that parking lot and building security lighting shall not impact surrounding properties. Because compliance with the County Code and the Specific Plan Performance Standards would be checked by the County through the development plan check process, impacts associated with this Alternative related to increased sources of light would be less than significant similar to the proposed project.

Similar to the proposed project, the land uses proposed under this Alternative would be typical institutional, commercial, residential, and mixed use structures. Typically, these structures would be designed with non-reflective textured surfaces on building exteriors (such as stucco, brick, stone, wood). Windows included as part of the design of the building exteriors would be require to comply with Section 22.44.1320 (Construction Colors, Materials, and Design) of the Los Angeles County Code that requires windows to be comprised of non-glare/non-reflective glass. In addition, the Performance Standards included in the proposed Specific Plan would also be implemented as part of this Alternative and require that new development preclude generation of direct glare by ensuring that no surfaces reflect direct glare onto adjoining property, streets, or skyward. Because compliance with the Specific Plan Performance Standards would be checked by the County through the development plan check process, impacts associated with this Alternative related to increased sources of glare would be less than significant similar to the proposed project.

Air Quality

This Alternative would include proposed growth this is not accounted for within the SCAG growth projections similar to the proposed project. Because SCAG growth projections form the basis of the land use and transportation control portions of the Air Quality Management Plan (AQMP), this Alternative would conflict with and obstruct implementation of the AQMP. This Alternative would have greater impact to the AQMP compared to the proposed project because this Alternative includes a greater amount of development. There are mitigation measures proposed to reduce potential impacts on the AQMP associated with this Alternative; however, after the implementation of the mitigation measures, impacts to the AQMP would remain significant similar to the proposed project.

Because this Alternative would result in greater residential units and greater non-residential square feet compared to the proposed project, this Alternative would result in daily maximum construction activities that are more than the proposed project. In addition, with more development, this Alternative would result in more operational air pollutant emissions. Because this Alternative would result in approximately 2 percent more residential units and 1.8 percent more non-residential square footage compared to the proposed project, this Alternative would exceed regional construction emission threshold for CO, similar to the proposed project which exceeded the CO threshold by approximately 14 percent. This Alternative would also exceed the regional construction thresholds for ROG and NO_x and result in significant impacts similar to the proposed project. Because more operational criteria pollutants would be generated under this Alternative, it would result in significant ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ operational emissions similar to the proposed project. Also similar to the proposed project, the project mitigation measures could reduce the regional construction emissions; however, this Alternative would still result in significant regional ROG and NOx construction emissions and significant regional NO_x, CO, PM_{10}, and $PM_{2.5}$ operational emissions.

With more development and more average daily trips, this Alternative would result in more localized construction and operational criteria pollutants. This Alternative, similar to the proposed project, would result in significant construction emissions of NO_x, PM_{10} and $PM_{2.5}$ and less than significant localized criteria pollutant emissions during operational activities. With the implementation of the recommended project mitigation measures, emissions from this Alternative, similar to the proposed project, would be reduced, but emissions would still remain significant during construction activities, but less than significant localized emission impacts would occur during operational activities.

As with the proposed project, this Alternative would expose existing and future sensitive receptors to toxic air contaminates (TACs) in the forms of diesel particulate matter (DPM) during construction and TACs from solvents, cleaners, and motor vehicle emissions during operational activities. Construction activities would occur under this Alternative over an approximate 20-year time period similar to the proposed project. Because construction activities would be short-term and limited, this Alternative's exposure of DPM by sensitive receptors would be less than significant similar to the proposed project. During operational activities associated with this Alternative, TACs generated from the use of solvents and cleaners would not occur in an appreciable quantity similar to the proposed project. Stationary sources of TACs would be subject to the rules and regulations of the SCAQMD (i.e., Rule 1401). Because stationary sources of TAC are required to operate in accordance with applicable regulations, the Alternative's TAC emissions impact would be less than significant similar to the proposed project. Residential development under this Alternative are proposed to be located within 500 feet of the I-105 Freeway and within 300 feet of the railroad. Similar to the proposed project, this Alternative's placement of residential units near the freeway and railroad which are sources of TACs would represent a significant impact similar to the proposed project. The mitigation measures identified for the proposed project could also be implemented for this Alternative and the resulting impact would be less than significant similar to the proposed project.

Cultural Resources

Implementation of this Alternative has the potential to result in demolition or modification of existing or future eligible state or local historic resources similar to the proposed project. The project area includes an existing state eligible historic district (Martin Luther King, Jr. Medical Campus). There are also numerous residential and commercial buildings that are older than 50 years or buildings that could be older than 50 years prior to construction activities. With the implementation of the project mitigation measures, potential impacts on historic resources would be reduced; however, because the measures describe a reduction of the impacts to the maximum extent practicable and not guarantee full mitigation, impacts to eligible historic resources could remain significant similar to the proposed project.

Construction activities associated with this Alternative could unearth previously unknown and unrecorded archaeological and tribal cultural resources and potential paleontological resources that could be located in the subsurface older Quaternary deposits that are known to contain vertebrate fossils similar to the proposed project. The implementation of the mitigation measures identified for the proposed project would reduce potential archaeological and paleontological impacts associated with this Alternative to less than significant similar to the proposed project.

In addition, construction activities associated with this Alternative could uncover unknown human remains similar to the proposed project. The implementation of the project mitigation measure would reduce the potential impact on human remains to less than significant similar to the proposed project.

Geology and Soils

Implementation of development in accordance with this Alternative would expose people and structures to strong seismic ground shaking. However, similar to the proposed project, conformance with the CBC and UBC would reduce impacts to strong seismic ground shaking to the maximum extent possible under currently accepted engineering practices. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts related to exposing people or structures to strong seismic ground shaking. Development in the project area could also be exposed to geologic hazards; however, compliance with the County building code requirements would reduce potential hazards such as unstable soils, liquefaction, lateral spreading, settlement, subsidence, and collapse to less than significant similar to the proposed project. In addition, construction and operational activities associated with this Alternative could result in soil erosion or loss of top soil; however, compliance with the Construction General Permit, MS4 Permit and the County's LID Standards would reduce soil erosion and loss of topsoil during construction and operational activities to less than significant similar to the proposed project.

Greenhouse Gas Emissions

This Alternative would result in more residential units and more non-residential square footage compared to the proposed project. Therefore, GHG emissions that would result from this Alternative would be more than would occur from implementation of the proposed Specific Plan. Similar to the proposed project, this Alternative would exceed the 2035 annual greenhouse gas

threshold, and therefore, would result in a significant GHG emissions impact similar to the proposed project. Both this Alternative and the proposed project would implement the project mitigation measures, however, GHG impacts would remain significant.

Similar to the proposed project, this Alternative would not exceed the 2020 GHG threshold which would achieve the AB 32 GHG reduction goals. In addition, this Alternative would be consistent with the CARB Scoping Plan and could be consistent with the SCAG SCS GHG emissions reduction policies. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts related to compliance with AB 32, CARB Scoping Plan, and the SCAG SCS GHG emissions reduction policies.

Hazards and Hazardous Materials

Development in accordance with this Alternative would involve demolition that could include asbestos, lead-based paints or PCB-containing materials similar to the proposed project. Hazardous materials released as a result of construction activities would be required to comply with existing laws and regulations, and therefore, potential impacts would be less than significant similar to the proposed project. Operational activities associated with this Alternative would include the use, storage and disposal of hazardous materials. The proposed residential and commercial uses would include the use of and storage of common hazardous materials such as paints, solvents, and cleaning products. Building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers and pesticides/herbicides. This Alternative also includes the expansion of the Medical Center and Drew University. This expansion would include the generation of hazardous materials such as 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. The medical center as well as Drew University generates biomedical and radiological wastes. Residential and commercial uses would typically use or store small quantities of household hazardous materials. Because the hazardous materials associated with residential and commercial uses are generally in the form of routinely used common chemicals, potential hazard impacts from reasonable foreseeable upset and accident conditions is less than significant. Businesses or facilities that use or generate hazardous materials in excess of the threshold such as the Medical Center and Drew University are required to obtain a handler permit. Amounts less than the threshold would pose a less than significant effect. Amounts greater than the threshold are required to comply with existing regulations that would reduce potential hazard impacts from reasonable upset and accident conditions to less than significant similar to the proposed project.

Because the uses under this Alternative that generate, use or store hazardous materials in excess of thresholds would require to comply with existing regulations to reduce potential impacts of the site where the hazardous materials are located, hazard impacts at nearby schools would be less than significant similar to the proposed project.

Similar to the proposed project, this Alternative would experience less than significant impacts associated with hazardous materials site listed on the Cortese List because the existing site

located on the List and located within the Specific Plan site is currently being remediated per federal and state regulations and oversight. Compliance with the existing regulations would result in a less than significant impact on public safety and the environment similar to the proposed project.

Hydrology and Water Quality

Development under this Alternative would include demolition and grading activities that could expose and loosen sediment and building materials that could mix with storm water and urban runoff. Because each individual project would be required to comply with the NPDES and implement a SWPPP if the project disturbs more than one acre, the potential for pollutants to substantially degrade downstream surface water quality would be less than significant. Projects disturbing less than an acre of ground surface during construction would not be required to prepare a SWPPP, but would be required to implement the minimum BMPs required by the Los Angeles County MS4 Permit to prevent water quality degradation and therefore, impacts would be less than significant. Construction impacts related to water quality standards or waste discharge requirements from implementation of the proposed Specific Plan development would be less than significant.

Operational activities associated with this Alternative would be required to meet MS4 Permit requirements through compliance with the County LID Standards Manual. Compliance with the MS4 Permit regulations would minimize pollutants being transported offsite into downstream receiving waters, and projects implemented in accordance with this Alternative would not violate water quality standards or waste discharge requirements.

Similar to the proposed project, this Alternative includes infill and redevelopment and would increase population; thereby increase demand on water supplies. Because the water purveyors that serve the project site have pumping rights to obtain their groundwater from the Central Groundwater Basin, compliance with the judgment that set pumping rights in the Basin would eliminate the potential for the water agencies to substantially impact groundwater supplies. Therefore, similar to the proposed project, the implementation of this Alternative would result in less than significant impacts on the Central Groundwater Basin from groundwater use.

The project site does not have much groundwater recharge potential, and this Alternative would not include excavation activities that would reach the existing groundwater level of approximately 155 feet below ground surface. Therefore, this Alternative would result in less than significant impacts to the existing groundwater levels similar to the proposed project.

Construction and operational activities associated with this Alternative would result in the potential for erosion and siltation impacts. However, construction activities would be required to implement BMP required by the County Pollution Control Requirements for Construction Activities. Operational activities would be required to implement the County LID Standards Manuel. With compliance with these regulations, the implementation of development in accordance with this Alternative would result in a less than significant erosion and siltation impact during project construction and operational activities.

Development in accordance with this Alternative would result in the generation of little to no increase in runoff to the existing drainage system because the majority of the site is developed and approximately 80 to 90 percent of the site is impervious. Development under this Alternative would not trigger the need for upgrades to the County's existing storm drain major backbone facilities mainly due to the LID Ordinance requirements for percolation and on-site detention for new development. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts on existing and planned storm drains. Furthermore, as stated above, this Alternative's compliance with NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the requirements of the County LID Standards Manual would result in less than significant impacts related to the creation of polluted runoff similar to the proposed project.

Land Use and Planning

Under this Alternative, the project area would increase the density/intensity of development as well as the presence of pedestrians throughout the area. Similar to the proposed project, this Alternative would not create physical barriers within the area and therefore, would not physically divide the established community in the project area.

Development in accordance with this Alternative includes transit-oriented development that provides for cohesive development throughout the project area similar to the proposed project. This alternative would implement the pedestrian and bicycle circulation patterns identified in the proposed Specific Plan to improve access to the Willowbrook/Rosa Parks Station. In addition, this alternative would implement SCAG policies that encourage greater densities in areas with TOD opportunities and less dependence on the automobile. This alternative would, however, not be consistent with the General Plan land uses similar to the proposed project. Overall, this Alternative would result in less than significant impacts related to land use policies similar to the proposed project.

Because the proposed Specific Plan would implement the County's plans and planning concepts of implementing a TOD in the project area, this Alternative, similar to the proposed project, would result in less than significant environmental impacts related to consistency with establish development regulations.

Furthermore, the implementation of development in accordance with this Alternative would enhance the visual character and quality of the project area by following the proposed comprehensive design guidelines that are part of the Specific Plan. These guidelines were intentionally included to enhance the aesthetics and land use massing, character and urban pattern. The proposed development standards, design guidelines and streetscape improvements would provide a unifying and identifying character to the project area. This Alternative, similar to the proposed project, would result in less than significant impacts related to the existing visual character and quality of the area.

Noise

This Alternative would result in more development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses. Because this Alternative would result in more residential units and more non-residential square feet compared to the proposed project, this Alternative would result in more construction and operational noise levels. This alternative would exceed noise standards and potentially expose sensitive uses to significant ground-borne vibrations. These potential noise and vibration impacts would be greater than the proposed project's impacts; however, this alternative's significant noise and vibration impacts would be reduced to less than significant with the implementation of the project mitigation measures.

Population and Housing

Under this Alternative, 47 more residential units and 49,555 more square feet of non-residential space than buildout of the proposed Specific Plan would occur. The increase in population that would be generated by this Alternative would not be within the SCAG growth forecasts for the site similar to the proposed project. With the increase in jobs in the project area under this Alternative, the majority of the jobs created within the project area would be skilled or managerial, and a majority of these jobs are expected to be filled by persons outside of the project area similar to the proposed project. Jobs are anticipated to be filled by people within the County due to the accessibility to the Willowbrook/Rosa Parks Station and multiple freeways, and the larger available labor force within the County. Therefore, the implementation of this Alternative would not substantially induce population growth, and therefore, impacts would be less than significant similar to the proposed project.

Public Services and Recreation

Under this Alternative, 47 more residential units and 49,555 more square feet of non-residential space than buildout of the proposed Specific Plan would occur. Although this Alternative would have slightly more development compared to the proposed project, the County fire stations serving the project area could increase staffing and equipment required for buildout of this Alternative similar to the proposed project. This increase in staffing and equipment is expected to occur by utilizing the existing fire stations. Development in accordance with this Alternative as well as the proposed project would be accommodated by the existing fire stations without altering the existing facilities. Therefore, physical impacts to the environment related to the development of or expansion of fire department facilities would not occur.

Development of this Alternative would increase the need for additional officers to respond to additional calls for sheriff services. The increase in additional officers would be slightly more than required for the proposed project. Development under this Alternative is expected to require additional officers that could be accommodated at existing Sheriff Department facilities. The demand for additional officers under this Alternative would not require the alteration of existing sheriff facilities. Therefore, physical impacts to the environment related to the development of or expansion of sheriff department facilities would not occur.

This Alternative would increase the number of students in the project area, and this increase would be slightly more than the increase anticipated under the proposed Specific Plan because 47 more residential units are proposed. Although slightly more students would be generated under this Alternative, the additional students would result in similar less than significant impacts to school facilities as the proposed project.

Implementation of this Alternative would increase the population in the project area and thereby increase a demand for parks and recreation, library, and other public (i.e., hospitals and post office) facilities. Although this Alternative would result in slightly greater population compared to the proposed project, this Alternative would also not require new or altered parks and recreation, library, and other public (i.e., hospitals and post office) facilities similar to the proposed project. Therefore, the implementation of this Alternative would result in no impacts caused by construction impacts associated with new or altered parks and recreation, library, and other public (i.e., hospitals and post office) facilities.

The implementation of this Alternative would result in more development and residential population compared to the proposed project. This increased population would also result in an increased demand for and use of recreational facilities. Because the Willowbrook Community includes adequate parkland for recreational use and the County has an annual assessment of fees as new development is proposed, this Alternative would result in less than significant impacts related to physical deterioration of existing parks and recreational facilities. In addition, because the Willowbrook Community contains adequate parkland to accommodate buildout of this Alternative, similar to the proposed project, this Alternative would not result in the need to construct new or physically alter recreational facilities.

Traffic

This Alternative would result in slightly more development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses. Because this Alternative would result in greater residential units and non-residential square feet compared to the proposed project, this Alternative would result in greater vehicular traffic and greater impacts at County, city and Caltrans traffic facilities and congestion management facilities. With the implementation of the project mitigation measures, this Alternative would continue to result in significant traffic impacts, and would be greater than the impacts associated with the proposed project.

Utilities and Service Systems

This Alternative would result in slightly more development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses, and these uses would not discharge wastewater that contains harmful levels of toxins beyond the regulations of the LARWQCB. In addition, all effluent would comply with the wastewater treatment standards of the RWQCB. Furthermore, the existing capacity of the wastewater treatment facilities serving the project area would not be

exceeded under this Alternative similar to the proposed project. Therefore, this Alternative would result in less than significant impacts related to the wastewater treatment requirements of the LARWQCB similar to the proposed project.

This Alternative would increase development in the project area and increase the need for water and sewer services. The implementation of this Alternative would generate a slightly greater demand for water compared to the proposed project. The existing water infrastructure is anticipated to be adequate to accommodate this slight increase compared to the proposed project. Therefore, although this Alternative would result in a slightly greater demand for water, impacts would be less than significant. In addition, this Alternative would generate greater wastewater compared to the proposed project; however, the implementation of the project mitigation measure would reduce impacts associated with this Alternative to less than significant. Overall, this Alternative would result in greater impacts on existing sewer capacity compared to the proposed project.

Development in accordance with this Alternative would include infill development and redevelopment. This Alternative would develop pervious areas to retain and infiltrate stormwater on development sites pursuant to the County's SUSWMP and LID requirements that reduce and manage drainage. County SUSWMP requirements provide that projects conduct a drainage hydrologic/hydraulic analysis that details the site's anticipated runoff calculations. From these calculations, a WQMP is prepared to ensure that a net increase in stormwater runoff would not occur from implementation of the development. Development projects in accordance with this Alternative, similar to the proposed project, are required through implementation of a project-specific WQMP to retain and treat the storm water quality volume generated by the project. In addition, the County requires LID standards to reduce runoff by using smart growth practices, stormwater infiltration, evapotranspiration, biofiltration, and rainfall harvest and use. With implementation of new pervious areas and compliance with applicable regulatory requirements, this Alternative's impacts related to the need to construct or expand stormwater drainage facilities would be less than significant similar to the proposed project.

This Alternative would increase water demand from the three water purveyors servicing the project site. These water purveyors include Liberty, Golden State Water Company, and LADWP. This Alternative would slightly increase (approximately 2 percent) water demand compared to the proposed project. Because the proposed project would not require or result in the need for new or expanded water supply entitlements within the service areas of the three water purveyors, it is anticipated that this Alternative would also not require the need for new or expanded water entitlements. Therefore, similar to the proposed project, this alternative would result in less than significant impact to water supply entitlements of the three project area water purveyors.

This Alternative would increase the use of energy resources such as electricity and natural gas, and this increase would be slightly greater (approximately 2 percent greater) compared to the proposed project. Because the proposed project would not result in the need to develop or extend infrastructure to serve proposed buildout, it is anticipated that this Alternative would also not require the development of new or extended infrastructure. Therefore, the implementation of this Alternative would result in less than significant impacts on energy infrastructure similar to the proposed project.

Solid waste generation under this Alternative would be slightly more compared to the proposed project because approximately 2 percent more development is proposed. Similar to the proposed project, this Alternative would be required to comply with existing and future recycling requirements that are 50 percent reduction to 2020 and then 75 percent reduction after 2020. Because the proposed project's generation of solid waste would not require expansion of existing landfill facilities or construct a new landfill, the implementation of this Alternative would also not require expansion of existing landfill facilities. Therefore, implementation of this Alternative would result in less than significant impacts to landfill facilities similar to the proposed project.

Conclusion

Potential impacts associated with the implementation of development under Alternative 2 are compared to the potential impacts of development in accordance with the proposed Specific Plan. Compared to the proposed project, impacts associated with light and glare, air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use plans, policies and ordinances, population and housing, noise, schools, transportation facilities and utilities would result in greater impacts. This Alternative would result in the same no impacts related to scenic vista, division of an established community, public services, and existing wastewater treatment plants.

The implementation of this Alternative would result in slightly greater environmental impacts compared to the proposed project. This Alternative would meet all of the objectives of the proposed project including the provision of a transit-oriented development in the project area and provision of an attractive environment for pedestrian, bicyclists, Metro riders, and local transit users through streetscape improvements.

4.5.3 Alternative 3: Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR Alternative

The following discusses the impacts associated with the Alternative 3, Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR Alternative in comparison to the impacts of the proposed Specific Plan.

Aesthetics

Under this Alternative, the same amount of residential units is proposed and 416,173 less non-residential square feet would be implemented compared to the proposed project. The decrease in non-residential square feet is related to a decrease in MLK Medical Center uses.

Development under this Alternative would not affect identified or designated scenic views or a scenic vista because neither exists in the project vicinity. Therefore, similar to the proposed project, the implementation of this Alternative would not impact a scenic view or scenic vista.

Development under this Alternative would include new lighting throughout the development and involve exterior lighting for streetlights, parking lots, signs, walkways, and interior lighting, which could be visible through windows to the outside similar to the proposed project. Because there is a substantial amount of ambient nighttime light that exists in the Specific Plan area,

limited views of stars and the nighttime sky are provided. Thus, the increase in light that would occur from implementation of this Alternative would not significantly impact nighttime views of the sky (ability to see the stars) because such views are already limited in an urban setting. Less new lighting would be generated under this Alternative compared to the proposed project, and new uses would be required to either use low-scaled lighting or shielded lighting to focus lighting and prevent lighting from spilling onto adjacent sensitive uses, such as residential. The requirements of Section 22.44.1270, Exterior Lighting, of the County Code related to lighting and shielding would limit the potential of increased lighting on sensitive uses. These regulations state that lighting shall be the minimum necessary in order to achieve the purpose of the light and that all lights shall be directed, oriented and shielded to prevent light from shining onto adjacent properties, onto public rights-of-way, and into driveway areas in a manner that would obstruct motorists' vision. Similar to the proposed project, this Alternative assumes that the Performance Standards would ensure sensitive uses would not be adversely affected by light and glare. These light and glare performance standards state that all outdoor lighting shall be designated to minimize light trespass; that existing residential uses should be buffered from light and glare effects from new development; and that parking lot and building security lighting shall not impact surrounding properties. Because compliance with the County Code and the Specific Plan Performance Standards would be checked by the County through the development plan check process, impacts associated with this Alternative related to increased sources of light would be less than significant similar to the proposed project.

Similar to the proposed project, the land uses proposed under this Alternative would be typical institutional, commercial, residential, and mixed use structures. Typically, these structures would be designed with non-reflective textured surfaces on building exteriors (such as stucco, brick, stone, wood). Windows included as part of the design of the building exteriors would be require to comply with Section 22.44.1320 (Construction Colors, Materials, and Design) of the County Code that requires windows to be comprised of non-glare/non-reflective glass. In addition, the Performance Standards included in the proposed Specific Plan would also be implemented as part of this Alternative and require that new development preclude generation of direct glare by ensuring that no surfaces reflect direct glare onto adjoining property, streets, or skyward. Because compliance with the County Code and the Specific Plan Performance Standards would be checked by the County through the development plan check process, impacts associated with this Alternative related to increased sources of glare would be less than significant similar to the proposed project.

Air Quality

Based on a review of SCAG growth projections for the project area, the proposed growth for this Alternative is not consistent with the SCAG growth projections. Because SCAG growth projections form the basis of the land use and transportation control portions of the Air Quality Management Plan (AQMP), this Alternative would conflict with and obstruct implementation of the AQMP. This Alternative would have less impact to the AQMP compared to the proposed project. The proposed project would also not be consistent with SCAG growth projection and therefore would conflict and obstruct implementation of the AQMP. There are mitigation measures proposed to reduce the proposed project's impact on the AQMP and these measures can

be implemented as part of this Alternative; however, after the implementation of the mitigation measures, impacts to the AQMP would remain significant.

Because this Alternative would result in less non-residential square feet compared to the proposed project, this Alternative would result in daily maximum construction activities that are less than the proposed project. In addition, with less development, this Alternative would result in less operational air pollutant emissions. Because this Alternative would result in 16 percent less non-residential square footage compared to the proposed project, this Alternative would not exceed regional construction emission threshold for CO, unlike the proposed project which exceeded the CO threshold by approximately 14 percent. However, this Alternative would exceed the regional construction thresholds for ROG and NO_x and result in significant impacts similar to the proposed project. Although less operational criteria pollutants would be generated under this Alternative, it would result in significant ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$ operational emissions similar to the proposed project. Also similar to the proposed project, the project mitigation measures could reduce the regional construction emissions; however, this alternative would still result in significant regional ROG and NOx construction emissions and significant regional NO_x, CO, PM_{10}, and $PM_{2.5}$ operational emissions.

With less development and less average daily trips, this Alternative would result in less localized construction and operational criteria pollutants. However, this Alternative, similar to the proposed project, would result in significant construction emissions of NO_x, PM_{10} and $PM_{2.5}$ and less than significant localized criteria pollutant emissions during operational activities. With the implementation of the recommended project mitigation measures, emissions from this Alternative, similar to the proposed project, would be reduced, but emissions would still remain significant during construction activities, but less than significant localized emission impacts would occur during operational activities.

As with the proposed project, this Alternative would expose existing and future sensitive receptors to toxic air contaminates (TACs) in the forms of diesel particulate matter (DPM) during construction and TACs from solvents, cleaners, and motor vehicle emissions during operational activities. Construction activities would occur under this Alternative over an approximate 20-year time period similar to the proposed project. Because construction activities would be short-term and limited, this Alternative's exposure of DPM by sensitive receptors would be less than significant similar to the proposed project. During operational activities associated with this Alternative, TACs generated from the use of solvents and cleaners would not occur in an appreciable quantity similar to the proposed project. Stationary sources of TACs would be subject to the rules and regulations of the SCAQMD (i.e., Rule 1401). Because stationary sources of TAC are required to operate in accordance with applicable regulations, the Alternative's TAC emissions impact would be less than significant similar to the proposed project. Residential development under this Alternative are proposed to be located within 500 feet of the I-105 Freeway and within 300 feet of the railroad. Similar to the proposed project, this Alternative's placement of residential units near the freeway and railroad which are sources of TACs would represent a significant impact similar to the proposed project. The mitigation measures identified

for the proposed project could also be implemented for this Alternative and the resulting impact would be less than significant similar to the proposed project.

Cultural Resources

Implementation of this Alternative has the potential to result in demolition or modification of existing or future eligible state or local historic resources similar to the proposed project. The project area includes an existing state eligible historic district (Martin Luther King, Jr. Medical Campus). Because less development would occur at the MLK Campus under this Alternative compared to the proposed project, this Alternative would result in less potential impacts on eligible historic resources. There are also numerous residential and commercial buildings that are older than 50 years or buildings that could be older than 50 years prior to construction activities. With the implementation of the project mitigation measures, potential impacts on historic resources would be reduced; however, because the measures describe a reduction of the impacts to the maximum extent practicable and not guarantee full mitigation, impacts to eligible historic resources could remain significant similar to the proposed project. However, because there would be less development within the MLK Medical Center, this Alternative would result in less impacts on the four existing eligible historic resources.

Construction activities associated with this Alternative could unearth previously unknown and unrecorded archaeological and tribal cultural resources and potential paleontological resources that could be located in the subsurface older Quaternary deposits that are known to contain vertebrate fossils similar to the proposed project. The implementation of the mitigation measures identified for the proposed project would reduce potential archaeological and paleontological impacts associated with this Alternative to less than significant similar to the proposed project.

In addition, construction activities associated with this Alternative could uncover unknown human remains similar to the proposed project. The implementation of the project mitigation measure would reduce the potential impact on human remains to less than significant similar to the proposed project.

Geology and Soils

Implementation of development in accordance with this Alternative would expose people and structures to strong seismic ground shaking. However, similar to the proposed project, conformance with the CBC and UBC would reduce impacts to strong seismic ground shaking to the maximum extent possible under currently accepted engineering practices. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts related to exposing people or structures to strong seismic ground shaking. Development in the project area could also be exposed to geologic hazards; however, compliance with the County building code requirements would reduce potential hazards such as unstable soils, liquefaction, lateral spreading, settlement, subsidence, and collapse to less than significant similar to the proposed project. In addition, construction and operational activities associated with this Alternative could result in soil erosion or loss of top soil; however, compliance with the Construction General Permit, MS4 Permit and the County's LID Standards would reduce soil erosion and loss of

topsoil during construction and operational activities to less than significant similar to the proposed project.

Greenhouse Gas Emissions

This Alternative would result in less non-residential square footage compared to the proposed project. Therefore, GHG emissions that would result from this Alternative would be less than would occur from implementation of the proposed Specific Plan. Because this Alternative would result in approximately 16 percent less non-residential uses compared to the proposed project which exceeded the 2035 GHG threshold by approximately 5 percent, this Alternative would not exceed the 2035 annual greenhouse gas threshold, and therefore, would result in a less than significant GHG emissions impact unlike the proposed project. The proposed project resulted in a significant impact before and after the implementation of mitigation measures.

Similar to the proposed project, this Alternative would not exceed the 2020 GHG threshold which would achieve the AB 32 GHG reduction goals. In addition, this Alternative would be consistent with the CARB Scoping Plan and could be consistent with the SCAG SCS GHG emissions reduction policies. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts related to compliance with AB 32, CARB Scoping Plan, and the SCAG SCS GHG emissions reduction policies.

Hazards and Hazardous Materials

Development in accordance with this Alternative would involve demolition that could include asbestos, lead-based paints or PCB-containing materials similar to the proposed project. Hazardous materials released as a result of construction activities would be required to comply with existing laws and regulations, and therefore, potential impacts would be less than significant similar to the proposed project. Operational activities associated with this Alternative would include the use, storage and disposal of hazardous materials. The proposed residential and commercial uses would include the use of and storage of common hazardous materials such as paints, solvents, and cleaning products. Building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers and pesticides/herbicides. This Alternative also includes the expansion of the Medical Center; however, the expansion is to a lesser extent under this Alternative compared to the proposed project. This expansion would include the generation of hazardous materials such as 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. The medical center as well as Drew University generates biomedical and radiological wastes. Residential and commercial uses would typically use or store small quantities of household hazardous materials. Because the hazardous materials associated with residential and commercial uses are generally in the form of routinely used common chemicals, potential hazard impacts from reasonable foreseeable upset and accident conditions is less than significant. Businesses or facilities that use or generate hazardous materials in excess of the threshold such as the Medical Center and Drew University are required to obtain a handler permit. Amounts less than the threshold would pose a less than significant effect. Amounts greater than the threshold are

required to comply with existing regulations that would reduce potential hazard impacts from reasonable upset and accident conditions to less than significant similar to the proposed project.

Because the uses under this Alternative that generate, use or store hazardous materials in excess of thresholds would require to comply with existing regulations to reduce potential impacts of the site where the hazardous materials are located, hazard impacts at nearby schools would be less than significant similar to the proposed project.

Similar to the proposed project, this Alternative would experience less than significant impacts associated with hazardous materials site listed on the Cortese List because the existing site located on the List and located within the Specific Plan site is currently being remediated per federal and state regulations and oversight. Compliance with the existing regulations would result in a less than significant impact on public safety and the environment similar to the proposed project.

Hydrology and Water Quality

Development under this Alternative would include demolition and grading activities that could expose and loosen sediment and building materials that could mix with storm water and urban runoff. Because each individual project would be required to comply with the NPDES and implement a SWPPP if the project disturbs more than one acre, the potential for pollutants to substantially degrade downstream surface water quality would be less than significant. Projects disturbing less than an acre of ground surface during construction would not be required to prepare a SWPPP, but would be required to implement the minimum BMPs required by the Los Angeles County MS4 Permit to prevent water quality degradation and therefore, impacts would be less than significant. Construction impacts related to water quality standards or waste discharge requirements from implementation of the proposed Specific Plan development would be less than significant.

Operational activities associated with this Alternative would be required to meet MS4 Permit requirements through compliance with the County LID Standards Manual. Compliance with the MS4 Permit regulations would minimize pollutants being transported offsite into downstream receiving waters, and projects implemented in accordance with this Alternative would not violate water quality standards or waste discharge requirements.

Similar to the proposed project, this Alternative includes infill and redevelopment and would increase population; thereby increase demand on water supplies. Because the water purveyors that serve the project site have pumping rights to obtain their groundwater from the Central Groundwater Basin, compliance with the judgment that set pumping rights in the Basin would eliminate the potential for the water agencies to substantially impact groundwater supplies. Therefore, similar to the proposed project, the implementation of this Alternative would result in less than significant impacts on the Central Groundwater Basin from groundwater use.

The project site does not have much groundwater recharge potential, and this Alternative would not include excavation activities that would reach the existing groundwater level of

approximately 155 feet below ground surface. Therefore, this Alternative would result in less than significant impacts to the existing groundwater levels similar to the proposed project.

Construction and operational activities associated with this Alternative would result in the potential for erosion and siltation impacts. However, construction activities would be required to implement BMP required by the County Pollution Control Requirements for Construction Activities. Operational activities would be required to implement the County LID Standards Manuel. With compliance with these regulations, the implementation of development in accordance with this Alternative would result in a less than significant erosion and siltation impact during project construction and operational activities.

Development in accordance with this Alternative would result in the generation of little to no increase in runoff to the existing drainage system because the majority of the site is developed and approximately 80 to 90 percent of the site is impervious. Development under this Alternative would not trigger the need for upgrades to the County's existing storm drain major backbone facilities mainly due to the LID Ordinance requirements for percolation and on-site detention for new development. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts on existing and planned storm drains. Furthermore, as stated above, this Alternative's compliance with NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the requirements of the County LID Standards Manual would result in less than significant impacts related to the creation of polluted runoff similar to the proposed project.

Land Use and Planning

Under this Alternative, the project area would increase the density/intensity of development as well as the presence of pedestrians throughout the area. Similar to the proposed project, this Alternative would not create physical barriers within the area and therefore, would not physically divide the established community in the project area.

Development in accordance with this Alternative includes transit-oriented development that provides for cohesive development throughout the project area similar to the proposed project. This alternative would implement SCAG policies that encourage greater densities in areas with TOD opportunities and a reduced dependence on the automobile. Similar to the proposed project, this Alternative would be consistent with the greenhouse gas reduction policies within the regional and local plans similar to the proposed project.

Because the proposed Specific Plan would implement the County's plans and planning concepts of implementing a TOD in the project area, this Alternative, similar to the proposed project, would result in less than significant environmental impacts related to consistency with establish development regulations.

Furthermore, the implementation of development in accordance with this Alternative would enhance the visual character and quality of the project area by following the proposed comprehensive design guidelines that are part of the Specific Plan. This Alternative, similar to the

proposed project, would result in less than significant impacts related to the existing visual character and quality of the area.

Noise

This Alternative would result in less development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses. Because this Alternative would result in less non-residential square feet compared to the proposed project, this Alternative would result in less construction and operational noise levels. This alternative would exceed noise standards and potentially expose sensitive uses to significant ground-borne vibrations; however, this alternative's significant noise and vibration impacts would be less compared to the proposed project and would be reduced to less than significant with the implementation of the project mitigation measures.

Population and Housing

Under this Alternative, the same residential units and 416,173 fewer square feet of non-residential space than buildout of the proposed Specific Plan would occur. The increase in population that would be generated by this Alternative would not be consistent with SCAG growth forecasts for the site similar to the proposed project. With the increase in jobs in the project area under this Alternative, the majority of the jobs created within the project area would be skilled or managerial, and a majority of these jobs are expected to be filled by persons outside of the project area similar to the proposed project. Jobs are anticipated to be filled by people within the County due to the accessibility to the Willowbrook/Rosa Parks Station and multiple freeways, and the larger available labor force within the County. Therefore, the implementation of this Alternative would not substantially induce population growth, and therefore, impacts would be less than significant similar to the proposed project.

Public Services and Recreation

Under this Alternative, 416,173 fewer square feet of non-residential space than buildout of the proposed Specific Plan would occur. Because the proposed project which has more development compared to this Alternative and the County fire stations serving the project area could increase staffing and equipment required for buildout of the proposed project by utilizing the existing fire stations, the development in accordance with this Alternative would also be accommodated by the existing fire stations without altering the existing facilities. Therefore, physical impacts to the environment related to the development of or expansion of fire department facilities would not occur.

Development of this Alternative would increase the need for additional officers to respond to additional calls for sheriff services. The increase in additional officers would be less than required for the proposed project. Because the proposed project's need for additional officers could be accommodated at existing Sheriff Department facilities, the demand for additional officers under this Alternative would not require the alteration of existing sheriff facilities. Therefore, physical impacts to the environment related to the development of or expansion of sheriff department facilities would not occur.

This Alternative would increase the number of students in the project area; however, this increase would be the same as the proposed project because the same number of residential units is proposed. Because the proposed project would result in a less than significant impact on school facilities, this Alternative would also result in less than significant impacts to school facilities.

Implementation of this Alternative would increase the population in the project area and thereby increase a demand for parks and recreation, library, and other public (i.e., hospitals and post office) facilities. Because the proposed project would result in the same population compared to this Alternative and that the proposed project would not result in the need for new or altered parks and recreation, library, and other public (i.e., hospitals and post office) facilities, this alternative would also not result in the need for new or altered facilities. Therefore, the implementation of this Alternative would result in no impacts caused by construction impacts associated with new or altered parks and recreation, library, and other public (i.e., hospitals and post office) facilities.

The implementation of this Alternative would result in the same number of residential units and population as the proposed project. Because the Willowbrook Community includes adequate parkland for recreational use and the County has an annual assessment of fees as new development is proposed, this Alternative would result in less than significant impacts related to physical deterioration of existing parks and recreational facilities. In addition, because the Willowbrook Community contains adequate parkland to accommodate buildout of this Alternative, similar to the proposed project, this Alternative would not result in the need to construct new or physically alter recreational facilities.

Traffic

This Alternative would result in less development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses. Because this Alternative would result in less non-residential square feet compared to the proposed project, this Alternative would result in less vehicular traffic and less impacts at County, city and Caltrans traffic facilities and congestion management facilities. With the implementation of the project mitigation measures, this Alternative would continue to result in significant traffic impacts, but would be less than the impacts associated with the proposed project.

Utilities and Service Systems

This Alternative would result in less development compared to the proposed project. The land uses that would be implemented under this Alternative would be similar to those that would be implemented with the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses, and these uses would not discharge wastewater that contains harmful levels of toxins beyond the regulations of the LARWQCB. In addition, all effluent would comply with the wastewater treatment standards of the RWQCB. Furthermore, the existing capacity of the wastewater treatment facilities serving the project area would not be exceeded under this Alternative similar to the proposed project. Therefore, this Alternative would result in less than

significant impacts related to the wastewater treatment requirements of the LARWQCB similar to the proposed project.

This Alternative would increase development in the project area and increase the need for water and sewer services. Because the implementation of the proposed project would generate a higher demand for water and higher generation of wastewater and the existing water and sewer infrastructure is adequate to accommodate the proposed project, this Alternative would be accommodated by the existing water and sewer facilities. Similar to the proposed project, this Alternative would result in no impacts related to water or sewer infrastructure expansion beyond the improvements that are part of the proposed project.

Development in accordance with this Alternative would include infill development and redevelopment. This Alternative would develop pervious areas to retain and infiltrate stormwater on development sites pursuant to the County's SUSWMP and LID requirements that reduce and manage drainage. County SUSWMP requirements provide that projects conduct a drainage hydrologic/hydraulic analysis that details the site's anticipated runoff calculations. From these calculations, a WQMP is prepared to ensure that a net increase in stormwater runoff would not occur from implementation of the development. Development projects in accordance with this Alternative, similar to the proposed project, are required through implementation of a project-specific WQMP to retain and treat the storm water quality volume generated by the project. In addition, the County requires LID standards to reduce runoff by using smart growth practices, stormwater infiltration, evapotranspiration, biofiltration, and rainfall harvest and use. With implementation of new pervious areas and compliance with applicable regulatory requirements, this Alternative's impacts related to the need to construct or expand stormwater drainage facilities would be less than significant similar to the proposed project.

This Alternative would increase water demand from the three water purveyors servicing the project site. These water purveyors include Liberty, Golden State Water Company, and LADWP. Because less non-residential square feet would occur under this Alternative compared to the proposed project, this alternative would demand less water. Because the proposed project would not require or result in the need for new or expanded water supply entitlements within the service areas of the three water purveyors, this Alternative would also not require the need for new or expanded water entitlements. Therefore, similar to the proposed project, this alternative would result in less than significant impact to water supply entitlements of the three project area water purveyors.

This Alternative would increase the use of energy resources such as electricity and natural gas; however, this increase would be less than the proposed project because less non-residential development is proposed under this Alternative. Because the proposed project would not result in the need to develop or extend infrastructure to serve proposed buildout and this Alternative would result in less demand for energy resources, the implementation of this Alternative would result in less than significant impacts on energy infrastructure similar to the proposed project.

Solid waste generation under this Alternative would be less compared to the proposed project because less development is proposed. Similar to the proposed project, this Alternative would be required to comply with existing and future recycling requirements that are 50 percent reduction to 2020 and then 75 percent reduction after 2020. Because the proposed project's generation of solid waste would not require expansion of existing landfill facilities or construct a new landfill, the

implementation of this Alternative would result in less than significant impacts to landfill facilities similar to the proposed project.

Conclusion

Potential impacts associated with the implementation of development under Alternative 3 are compared to the potential impacts of development in accordance with the proposed Specific Plan. Compared to the proposed project, impacts associated with light and glare, air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use plans and policies, population and housing, noise, transportation facilities and utilities would result in fewer impacts. This Alternative would result in the same no impacts related to scenic vista, division of an established community, public services, and existing wastewater treatment plants.

The implementation of this Alternative would result in less environmental impacts compared to the proposed project. This Alternative would meet most of the objectives of providing a transit-oriented development in the project area and providing an attractive environment for pedestrian, bicyclists, Metro riders, and local transit users through streetscape improvements. This Alternative would partially meet the objective of revitalizing health care services at MLK with the reduced improvements at MLK.

4.5.4 Alternative 4: Construct All Physical Traffic Measures Set Forth in MLK Medical Center Campus EIR Alternative

The following discusses the impacts associated with the Alternative 3, Construct All Physical Traffic Measures Set Forth in MLK Medical Center Campus EIR Alternative in comparison to the impacts of the proposed Specific Plan.

Aesthetics

Under this Alternative, the same amount of residential units and non-residential square feet would be implemented in the same locations as the proposed project.

Development under this Alternative would not affect identified or designated scenic views or a scenic vista because neither exists in the project vicinity. Therefore, similar to the proposed project, the implementation of this Alternative would not impact a scenic view or scenic vista.

Development under this Alternative would include the same amount of new lighting as the proposed project. The increase in light that would occur from implementation of this Alternative would not significantly impact nighttime views of the sky (ability to see the stars) similar to the proposed project. New uses would be required to either use low-scaled lighting or shielded lighting to focus lighting and prevent lighting from spilling onto adjacent sensitive uses, such as residential. The requirements of Section 22.44.1270, Exterior Lighting, of the County Code related to lighting and shielding would limit the potential of increased lighting on sensitive uses. Similar to the proposed project, this Alternative assumes that the Performance Standards would

ensure sensitive uses would not be adversely affected by light and glare. These light and glare performance standards state that all outdoor lighting shall be designated to minimize light trespass; that existing residential uses should be buffered from light and glare effects from new development; and that parking lot and building security lighting shall not impact surrounding properties. Because compliance with the County Code and the Specific Plan Performance Standards would be checked by the County through the development plan check process, impacts associated with this Alternative related to increased sources of light would be less than significant similar to the proposed project.

Similar to the proposed project, the land uses proposed under this Alternative would be typical institutional, commercial, residential, and mixed use structures. Typically, these structures would be designed with non-reflective textured surfaces on building exteriors (such as stucco, brick, stone, wood). The Performance Standards included in the proposed Specific Plan would also be implemented as part of this Alternative and require that new development preclude generation of direct glare by ensuring that no surfaces reflect direct glare onto adjoining property, streets, or skyward. Because compliance with the Specific Plan Performance Standards would be checked by the County through the development plan check process, impacts associated with this Alternative related to increased sources of glare would be less than significant similar to the proposed project.

Air Quality

Similar to the proposed project, this Alternative would include proposed growth this is not accounted for within the SCAG growth projections. Because SCAG growth projections form the basis of the land use and transportation control portions of the Air Quality Management Plan (AQMP), this Alternative would conflict with and obstruct implementation of the AQMP. This Alternative would have the same impact to the AQMP compared to the proposed project. There are mitigation measures proposed to reduce potential impacts on the AQMP associated with this Alternative; however, after the implementation of the mitigation measures, impacts to the AQMP would remain significant similar to the proposed project.

Because this Alternative would result in the same residential units and the same non-residential square feet compared to the proposed project, this Alternative would result in the same construction air emissions as the proposed project. Therefore, this Alternative would exceed the regional and localized construction thresholds for ROG, NO_X and CO similar to the proposed project. This alternative would result in slightly higher daily traffic volumes because the street improvements to accommodate vehicular traffic would not allow the pedestrian and bicycle improvements that are part of the proposed project and encourage residents and employees to use alternative means of transportation compared to the automobile. With a slightly greater increase in vehicular traffic, the regional and localized operational emissions would be slightly greater than the proposed project.

With the provision of roadway improvements to accommodate vehicular traffic, there would be a greater potential for mobile TAC emissions to impact adjacent sensitive receptors compared to the proposed project. This Alternative would result in potential impacts to future sensitive

receptors that are located 500 feet from the I-105 Freeway and 300 feet from the railroad tracks similar to the proposed project. Project mitigation measures would be implemented with this Alternative to reduce potential impacts to less than significant.

Cultural Resources

Implementation of this Alternative includes the same amount of development as the proposed project and therefore, impacts to historical, archaeological and tribal cultural, paleontological, and human remain resources would be the same as the proposed project. The project mitigation measures for each of these resources would be implemented with this Alternative. After implementation of the mitigation measures, historical resources would remain significant and impacts to archaeological, paleontological and human remain resources would be reduced to less than significant similar to the proposed project.

Geology and Soils

Implementation of development in accordance with this Alternative would expose people and structures to strong seismic ground shaking. Similar to the proposed project, conformance with the CBC and UBC would reduce impacts to strong seismic ground shaking to the maximum extent possible under currently accepted engineering practices. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts related to exposing people or structures to strong seismic ground shaking. Development in the project area could also be exposed to geologic hazards; however, compliance with the County building code requirements would reduce potential hazards such as unstable soils, liquefaction, lateral spreading, settlement, subsidence, and collapse to less than significant similar to the proposed project. In addition, construction and operational activities associated with this Alternative could result in soil erosion or loss of top soil; however, compliance with the Construction General Permit, MS4 Permit and the County's LID Standards would reduce soil erosion and loss of topsoil during construction and operational activities to less than significant similar to the proposed project.

Greenhouse Gas Emissions

This alternative would result in slightly higher daily traffic volumes because the street improvements to accommodate vehicular traffic would not allow the pedestrian and bicycle improvements that are part of the proposed project and encourage residents and employees to use alternative means of transportation compared to the automobile. With a slightly greater increase in vehicular traffic, a greater amount of greenhouse gas emissions would occur compared to the proposed project. Project mitigation measures would be implemented; however, this Alternative would still result in significant greenhouse gas emissions impacts similar to the proposed project.

Similar to the proposed project, this Alternative would not exceed the 2020 GHG threshold which would achieve the AB 32 GHG reduction goals. In addition, this Alternative would be consistent with the CARB Scoping Plan and could be consistent with the SCAG SCS GHG emissions reduction policies. Therefore, similar to the proposed project, this Alternative would result in less than significant impacts related to compliance with AB 32, CARB Scoping Plan, and the SCAG SCS GHG emissions reduction policies.

Hazards and Hazardous Materials

Development in accordance with this Alternative would involve the same demolition, construction and operational activities as the proposed project and therefore, the same potential for the release of hazardous materials. Similar to the proposed project, this Alternative would result in less than significant hazard impacts from reasonable upset and accident conditions, less than significant hazard impacts at nearby schools, and less than significant impacts associated with hazardous material sites listed on the Cortese List.

Hydrology and Water Quality

Development under this Alternative would include the same demolition, grading, construction and operational activities as the proposed project. Therefore, surface and groundwater quality impacts would be the same as the proposed project. Impacts on groundwater supplies and groundwater recharge would be the same as the proposed project. Erosion, siltation and stormwater drainage capacity impacts would also be the same as the proposed project. Each of these impacts would be less than significant similar to the proposed project.

Land Use and Planning

Under this Alternative, the project area would increase the density/intensity of development as well as the presence of pedestrians throughout the area. Similar to the proposed project, this Alternative would not create physical barriers within the area and therefore, would not physically divide the established community in the project area.

Development in accordance with this Alternative includes transit-oriented development that provides for cohesive development throughout the project area similar to the proposed project. This alternative would implement the pedestrian and bicycle circulation patterns where they could, but would be limited due to the desire to implement improvements for motor vehicles improvements and not implement pedestrian and bicycle improvements. This alternative would implement SCAG policies that encourage greater densities in areas with TOD opportunities and a reduced dependence on the automobile. Similar to the proposed project, this Alternative would be consistent with the greenhouse gas reduction policies within the regional and local plans similar to the proposed project.

Because the proposed Specific Plan would implement the County's plans and planning concepts of implementing a TOD in the project area, this Alternative, similar to the proposed project, would result in less than significant environmental impacts related to consistency with establish development regulations.

Furthermore, the implementation of development in accordance with this Alternative would enhance the visual character and quality of the project area by following the proposed comprehensive design guidelines that are part of the Specific Plan. This Alternative, similar to the proposed project, would result in less than significant impacts related to the existing visual character and quality of the area.

Noise

This Alternative would result in the same residential units and the same non-residential square feet compared to the proposed project. As a result, this Alternative would result in the same construction noise levels as the proposed project. Similar to the proposed project, this Alternative would exceed noise standards and potentially expose sensitive uses to significant ground-borne vibrations. However, similar to the proposed project, this alternative would result in significant noise and vibration impacts. The implementation of the project mitigation measures would reduce potential noise and vibration impacts to less than significant.

Population and Housing

Under this Alternative, the amount of development in the project area would be the same as the proposed project. The same number of residential units, population, non-residential square footage, and employment as the proposed project would occur. Similar to the proposed project, the increase in population that would be generated by this Alternative would not be within the SCAG growth forecasts for the site. With the increase in jobs in the project area under this Alternative, the majority of the jobs created within the project area would be skilled or managerial, and a majority of these jobs are expected to be filled by persons outside of the project area similar to the proposed project. Jobs are anticipated to be filled by people within the County due to the accessibility to the Willowbrook/Rosa Parks Station and multiple freeways, and the larger available labor force within the County. Therefore, the implementation of this Alternative would not substantially increase population growth, and therefore, impacts would be less than significant similar to the proposed project.

Public Services and Recreation

Under this Alternative, the amount of development in the project area would be the same as the proposed project. The same number of residential units, population, non-residential square footage, and employment as the proposed project would occur. Therefore, impacts on public services and recreational facilities would be the same under this Alternative as the proposed project. With the development of this Alternative, there would be no physical impacts to the environment related to the development of or expansion of fire, sheriff, parks and recreation, library, and other public (i.e., hospitals and post office) facilities similar to the proposed project. In addition, as with the proposed project, potential impacts to school facilities would be less than significant with this Alternative.

Traffic

Under this Alternative, the amount of development in the project area would be the same as the proposed project. The land uses that would be implemented under this Alternative would be the same as those proposed under the proposed project. These land uses include residential, mixed-use, medical, educational and commercial uses. Because this Alternative would result in the same amount of residential and non-residential square feet compared to the proposed project, this Alternative would result in the same amount of vehicular traffic. This Alternative includes more traffic improvements to County facilities and would result in fewer unavoidable adverse impacts, but the same impacts at city and Caltrans traffic facilities and congestion management facilities

would still result. With the implementation of the project mitigation measures, this Alternative would continue to result in significant traffic impacts, but would be less than the impacts associated with the proposed project.

Utilities and Service Systems

Under this Alternative, the amount of development in the project area would be the same as the proposed project. The same number of residential units, population, non-residential square footage, and employment as the proposed project would occur. Therefore, potential impacts to wastewater, water, stormwater drainage, energy, and landfill facilities and water supplies would be less than significant similar to the proposed project. In addition, this Alternative would not impact wastewater treatment facilities similar to the proposed project.

Conclusion

Potential impacts associated with the implementation of development under Alternative 3 are compared to the potential impacts of development in accordance with the proposed Specific Plan. Compared to the proposed project, impacts associated with scenic vistas, light and glare, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use plans and policies, population and housing, public services, and utilities would result in the same impacts.

Due to the implementation of street improvements to accommodate vehicular traffic, less pedestrian and bicycle improvements would be implemented under this Alternative compared to the proposed project. With less pedestrian and bicycle improvements, fewer residents and employees would be encouraged to use alternative means of transportation compared to the automobile. Therefore, slightly greater vehicle trips would occur under this alternative and would result in greater air quality, greenhouse gas and noise impacts as well as impacts on transportation facilities outside of the Specific Plan. Overall, this alternative would result in more environmental impacts compared to the proposed project.

This Alternative would meet the majority of the project objectives; however, it would not meet the objective to provide an attractive environment for pedestrian and bicyclists through streetscape improvements because some of these improvements cannot occur in favor of street improvement to accommodate motor vehicles.

4.6 Environmentally Superior Alternative

As required by CEQA Guideline Section 15126.6, one of the alternatives must be identified as an Environmentally Superior Alternative. The Environmentally Superior Alternative is the one that would result in the fewest or least significant impacts. If the Environmentally Superior Alternative is the No Project Alternative, then an Environmentally Superior Alternative must be selected from the remaining alternatives.

Alternative 3, Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR Alternative would result in less environmental effects compared to each of the alternatives. While this alternative would lessen the project's environmental impacts in areas such as light and

glare, air quality, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use plans and policies, population and housing, noise, transportation facilities and utilities, it would not eliminate any of the significant unavoidable impacts of the proposed project. Because the impacts would be incrementally reduced as compared to the proposed project, the Reduced MLK Tier 2 Development Set Forth in MLK Medical Center Campus EIR Alternative would be the environmentally superior alternative. This Alternative would meet most of the objectives of providing a transit-oriented development in the project area and providing an attractive environment for pedestrian, bicyclists, Metro riders, and local transit users through streetscape improvements. This Alternative would partially meet the objective of revitalizing health care services at MLK with the reduced improvements at MLK.

CHAPTER 5
Other CEQA Considerations

5.1 Environmental Effects Found not to be Significant

As required by Section 15128 of the CEQA Guidelines, an EIR shall contain a brief discussion stating the reasons why various possible significant effects of a project were determined not significant and are, therefore, not discussed in detail in the EIR. In accordance with the CEQA Guidelines, this section discusses the environmental issue areas where impacts were found to not be significant. These discussions address the CEQA Guidelines Appendix G and County of Los Angeles Environmental Checklist Form questions for each of the environmental topic areas where the proposed Willowbrook TOD Specific Plan would result in either a less than significant impact or no impact. Most of the discussions are the same as those provided in the Notice of Preparation/Initial Study that was distributed for public review on October 30, 2015. There are a few discussions that have been modified to substantiate the findings.

5.1.1 Aesthetics

The Specific Plan would not 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 (County of Los Angeles, 2015a). 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 Los Angeles) 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. As a result, no impacts would occur from implementation of the proposed project.

The Specific Plan would not 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.

5.1.2 Agricultural and Forest Resources

The Specific Plan would not 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, 2010). 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.

The Specific Plan would not 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.

The Specific Plan would not 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

The Specific Plan would not result in the loss of forest land or conversion of forest land to non-forest use.

No Impact. Willowbrook does not contain forest land and would not convert forest land to a non-forest use. Therefore, the project would not impact forest land.

The Specific Plan would not 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. Because the Specific Plan area does not contain farmland or forest land as described above, the project would not result in the conversion of farmland to non-agricultural use or conversion of forest land to a non-forest use.

5.1.3 Air Quality

The Specific Plan would not 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.

5.1.4 Biological Resources

The Specific Plan would not 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) (CDFW, 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.

The Specific Plan would not 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 easternmost boundary of the Specific Plan area. Compton Creek is located 2 miles west of the westernmost 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.

The Specific Plan would not 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 close 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. Therefore, no impacts would occur.

The Specific Plan would not 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.

The Specific Plan would not 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.

The Specific Plan would not 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.

The Specific Plan would not 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.

5.1.5 Energy

The Specific Plan would not 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.

The Specific Plan would not 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.

5.1.6 Geology and Soils

The Specific Plan would not 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 within or adjacent to an Alquist-Priolo Fault Rupture Hazard Zone fault and is, therefore, unlikely to experience surface fault rupture (CDOC, 2015; County of Los Angeles, 2014). The closest active fault to the Specific Plan area is the Newport-Inglewood-Rose Canyon Fault, Strike 334, located approximately 1.8 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) 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.

The Specific Plan would not 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.

The Specific Plan would not 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.

The Specific Plan would not 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.

5.1.7 Hazards and Hazardous Materials

The Specific Plan would not 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 (County of Los Angeles, 2015b).

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.

The Specific Plan would not be 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. The project would not 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 project would not result in a safety hazard for people residing or working in the vicinity of an airport.

The Specific Plan would not be located within the vicinity of a private airstrip and would not result in a safety hazard for people residing or working in the project area.

No Impact. The nearest private airport to the Specific Plan area is approximately five miles to the southwest at the Goodyear Blimp Base Airport located in the City of Carson. Development in accordance with the Specific Plan would not be result in a safety hazard for people residing or working within the Specific Plan area.

The Specific Plan would not 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.

The Specific Plan would not expose people or structures to a significant risk of loss, injury or death involving fires, because the project is not located:

- **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.

- **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

- **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.

- **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, medical, open space, and public uses. These land uses would not generate potential impacts related to a dangerous fire hazard.

The Specific Plan does not propose a use that would 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 associated with development in accordance with the Specific Plan would not occur.

5.1.8 Hydrology and Water Quality

The Specific Plan would not 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 a substantial increase in runoff and flooding on or offsite would result. Impacts related to flooding would be less than significant.

The Specific Plan would not 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 Los Angeles County Low Impact Development (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.

The Specific Plan would not 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, 2013). Thus, impacts associated with discharges into an ASBS would not occur.

The Specific Plan would not 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.

The Specific Plan would not 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 (DWR, 2015).

The Specific Plan would not place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain.

No Impact. As discussed above, the Specific Plan area is not located within a 100-year flood hazard area and therefore, the project would result in impacts related to placement of structures in a flood hazard area.

The Specific Plan would not 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, 2014). 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, 2014a), 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.

5.1.9 Land Use

The Specific Plan would not 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.

5.1.10 Mineral Resources

The Specific Plan would not 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, 2014b). 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 would occur.

The Specific Plan would not 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. Based on a review of the Los Angeles County General Plan, the County has not designated any locally-important mineral recovery site in the Willowbrook area. Therefore, implementation of the Specific Plan would result in no impacts on the loss of availability of a locally-important mineral resource recovery site (County of Los Angeles DRP, 2015)

5.1.11 Noise

The Specific Plan is not 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. The project would not 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.

The Specific Plan would not be within the vicinity of a private airstrip and would not expose people residing or working in the project area to excessive noise levels.

No Impact. The nearest private airport to the Specific Plan area is approximately five miles to the southwest at the Goodyear Blimp Base Airport located in the City of Carson. Development in accordance with the Specific Plan would not be exposed to noise levels from operations at this private airport.

5.1.12 Population and Housing

The Specific Plan would not 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 1,952 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.

Implementation of the proposed Specific Plan would result in demolition of 152 dwelling units in order to implement infill and redevelopment of projects. However, the Willowbrook CDP has a vacancy rate of 7 percent and the County has a vacancy rate of 6.3 percent in 2014, which indicates that both areas provide a range of available housing. Thus, units are available in the existing housing market for residents of the units to be demolished. Additionally, the proposed project would result in development of 1,952 new residential units. Therefore, adequate residential units could be available to fill the needs of residents in the Specific Plan area.

In addition, the demolition of existing housing and displacement of residents would not result in the need for construction of replacement housing above the amount of housing to be provided under the proposed Specific Plan. As a result, impacts related to the displacement of housing or people, necessitating the construction of replacement housing elsewhere would not occur. In contrast, the proposed project would encourage infill development that would result in additional residential units within the Specific Plan area.

The Specific Plan would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

No Impact. As discussed above, substantially more residential units are proposed within the Specific Plan area compared to the number of units proposed to be demolished. Therefore, no substantial number of people would require the construction of replacement housing elsewhere.

5.1.13 Public Services and Recreation

The Specific Plan would not 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.

5.1.14 Transportation and Traffic

The Specific Plan would not 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 Hawthorne 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.

The Specific Plan would not 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 could involve 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 (FHWA, 2014). All development within the Specific Plan would be required to meet Los Angeles 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.

The Specific Plan would not 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 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.

The Specific Plan would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Less than Significant Impact. The proposed Specific Plan itself is based on the encouragement of TOD. Therefore, the development of the proposed components 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.

5.2 Growth Inducement

CEQA Guidelines Section 15126.2(d) requires that an environmental impact report (EIR) evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by CEQA Guidelines Section 15126.2 (d) as follows:

> *the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth…Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also…the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.*

There are two types of growth-inducing impacts a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the project features that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated.

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community that directly induces population growth or the construction of additional developments in the same area of the proposed project, thereby triggering related growth-associated impacts.

Included in this analysis are projects that would remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant that could allow more construction in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they trigger. In contrast, projects that physically remove obstacles to growth, projects that indirectly induce growth, are those that may provide a catalyst for future unrelated development in an area (such as a new residential community that requires additional commercial uses to support residents).

A project can have a direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for instance, involved the construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. For example, a project providing an increased water supply in an area where water service historically limited growth could be considered growth inducing.

The CEQA Guidelines explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Typically, the growth-inducing potential would be considered significant if it stimulates human population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth potential

could also occur if the project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies.

As discussed below, this analysis evaluates whether the proposed project would directly or indirectly induce economic, population, or housing growth in the surrounding environment.

5.2.1 Direct and Indirect Growth-Inducing Impacts

New housing development implemented under the proposed Specific Plan would involve up to a net total increase of 1,952 residential units, as well as approximately 2,666,035 square feet of non-residential employment generating uses. This new development would result in population growth as it provides new homes and businesses in the Willowbrook Specific Plan area.

Using the County's average household size of 2.94 (see Table 3.10-4) for incremental 2035 growth within the Willowbrook TOD Specific Plan area, the addition of 1,952 residential units into the Willowbrook TOD Specific Plan would generate a population of approximately 5,739 persons. The County's incremental population growth projection for the Willowbrook TOD Specific Plan area is the addition of 4,348 persons. The project's incremental population growth represents an approximately 32 percent increase (5,739 persons/4,348 persons) or 1,391 persons over the County's population growth projection for the Specific Plan area. In addition, the project's incremental population growth represents an approximately 66 percent increase (5,739 persons/3,447 persons) or 2,292 persons over SCAG RTP/SCS's population growth projection for the Specific Plan area. In comparison to the SCAG RTP/SCS population growth projections for County of Los Angeles as a whole, the proposed Specific Plan's incremental population growth is approximately 0.5 percent (5,739 persons/1,106,612 persons) of the County's incremental population growth.

As described in Chapter 3.10, Population and Housing, the Specific Plan area currently has 968 units and approximately 3,108 residents. The proposed Specific Plan 2035 incremental increase of 1,952 residential units would represent an approximately 202 percent increase in residential units over existing residential units in 2015 for a total of 2,920 residential units. Over an approximate 20-year buildout, the growth in residential units would be approximately 98 residential units per year or a compound average residential growth of 5.7 percent annually. This growth is greater than the anticipated growth in the County's General Plan that assumed 1,479 additional residential units, an average of approximately 74 units per year over an approximate 20-year buildout, and a compound average residential growth of 4.8 percent. The project's incremental residential growth represents an approximately 32 percent increase (1,952 units/1,479 units) over the County's residential growth projection. In addition, the proposed growth is greater than the anticipated growth in the SCAG RTP/SCS that assumed 887 additional residential units, an average of approximately 44 residential units per year or a compound average residential growth of 3.3 percent annually. The project's incremental residential growth represents an approximately 120 percent increase (1,952 units/887 units) over the SCAG RTP/SCS residential growth projection for the Specific Plan area. In comparison to the SCAG RTP/SCS residential growth projections for County of Los Angeles as a whole, the proposed Specific Plan's incremental residential growth is approximately 0.6 percent (1952 units/332,282 units) of the County's incremental residential growth.

Although the project would provide greater residential growth, the project is consistent with the County's General Plan Housing Element. The project is specifically accommodated for by the Housing Element Program 6: Transit Oriented Districts Program that establishes transit oriented districts within 0.5-mile radius from Metro stations. A program outlined in the Housing Element is to create a transit-oriented district for Willowbrook that would encourage urban infill development on vacant or underutilized sites; promote and encourage transit-oriented development along major transportation corridors; encourage mixed use development to facilitate the linkage between housing and employment opportunities; and promote increased residential density in appropriately designated areas (Housing Element Policy 1.1). The Housing Element also targets areas as prime locations to accommodate the remaining RHNA allocated units for the County (Housing Element Policies 1.1 and 2.1).

As discussed above, the proposed project would exceed the County's population and housing projection for the Specific Plan area by 1,391 persons and 473 residential units. This exceedance of population and housing projection over 20 years within the region is considered nominal because the growth within the Specific Plan would represent 0.5 percent of the County's incremental population growth and 0.6 percent of the County's incremental residential growth. Therefore, the proposed Specific Plan would not induce additional population and housing growth that would result in significant impacts to the environment.

In addition, the proposed project would involve a net total of approximately 2,666,035 square feet of non-residential employment generating uses, which will result in a net increase of approximately 5,632 jobs, and therefore, by 2035 there would be a total of 6,897 jobs within the Specific Plan area. This increase in job growth is approximately 100 percent more jobs than projected in the County General Plan for the Specific Plan area. The jobs within the Specific Plan area are anticipated to include approximately 63 percent of professional office jobs, 21 percent of retail and other local services, 8 percent in industrial, and 6 percent in health and education jobs (Hoffmann 2015). Because a majority of the jobs created within the Specific Plan area would be skilled or managerial, a majority of these jobs are expected to be filled by persons outside of the Specific Plan area. The jobs are anticipated to be filled by people within the County due to the transit-oriented development nature of the proposed Specific Plan, its accessibility to the Willowbrook/Rosa Parks Station and multiple freeways, and the larger available labor force within the County. In addition, the increase in jobs within the Specific Plan represents 0.7 percent of the projected jobs within the County for 2035 and is within the job growth projected for the County. Furthermore, based on an average County of Los Angeles unemployment rate of 8.2 percent over the past 25 years, it is reasonable to assume that there will be available people living within the County to fill the increase in jobs created in the Specific Plan area. Therefore, although the proposed project would exceed residential and job growth in the Specific Plan area compared to the County General Plan projects, the increased job growth would accommodate the historical unemployed labor pool within the County. In addition, due to the site's accessibility, no substantial additional growth in the Specific Plan area or immediately adjacent to the Specific Plan area would occur. Therefore, the proposed Specific Plan would not result in a significant inducement of indirect growth from operation of the proposed uses.

Construction of projects that would occur within the Specific Plan area would include need for construction labor during short time periods. Due to the employment patterns of construction workers in southern California, and the market for construction labor, construction workers are not likely, to any significant degree, to relocate their households as a consequence of the job opportunities presented by the project. The construction industry differs from most other industry sectors in several important ways that are relevant to potential impacts on housing:

- There is no regular place of work. Construction workers commute to job sites that change many times in the course of a year. These often lengthy daily commutes are made possible by the off-peak starting and ending times of the typical construction work day.
- Many construction workers are highly specialized (e.g., crane operators, steel workers, masons), and move from job site to job site as dictated by the demand for their skills.
- The work requirements of most construction projects are also highly specialized and workers are employed on a job site only as long as their skills are needed to complete a particular phase of the construction process.

Therefore, the construction activities associated with the implementation of the proposed Specific Plan would not result in a significant inducement of indirect growth.

5.3 Significant and Irreversible Environmental Changes

Section 21100(b)(2)(B) of CEQA and Section 15126.2(c) of the CEQA Guidelines require that an EIR include a detailed statement setting forth "[a]ny significant effect on the environment that would be irreversible if the project is implemented." (Public Resources Code § 21100(b(2)(B). "Significant irreversible environmental changes" include the use of nonrenewable natural resources during the initial and continued phases of the project, should this use result in the unavailability of these resources in the future. Primary impacts and, particularly, secondary impacts generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with projects. Irretrievable commitments of these resources are required to be evaluated in an EIR to ensure that such consumption is justified (CEQA Guidelines §15126.2(c)).

Approval of the proposed project would cause irreversible environmental changes consisting of the following:

Project construction and operation would result in an irretrievable loss of, and irreversible commitment of, natural resources. The Specific Plan area is located in an existing urbanized area, but would require the commitment of resources such as lumber and steel to construct the infill development. Development projects that would be implemented in accordance with the Specific Plan would involve construction and operation that would use fossil fuels and other natural materials, such as wood and metals. Construction and operation of infill developments would also emit pollution into the air, from construction machines and vehicles, and from vehicles traveling to and from each infill development project during operation. These developments would also consume fossil fuels (petroleum and natural gas), and electricity generated by fossil fuels and other non-renewable resources during operation. As described throughout this EIR, the Specific

Plan would implement a TOD in such a manner that would reduce vehicle trips, encourage pedestrian and bicycle circulation, and promote public transit use. In addition, development projects that would be implemented by the Specific Plan would be required to comply with federal, state, and local requirements (described within each environmental resource section), such as Title 24 requirements and low impact development requirements that would reduce the irretrievable loss of, and irreversible commitment of, natural resources.

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CHAPTER 6
Report Preparers

6.1 Lead Agency

County of Los Angeles

Los Angeles County Department of Regional Planning
Community Studies West Section

Address: 320 West Temple Street
Los Angeles, CA 90012
Phone (213) 974-6406

Anita Gutierrez, AICP, *Supervising Regional Planner*

Leon Freeman, *Regional Planning Assistant II*

6.2 Specific Plan Consultant

Arroyo Group

Address: 16 Marengo Avenue #405
Pasadena, CA 91101
Phone (626) 795-9771

Simran Malhotra, AICP, *Associate AIA, Principal*

6.3 EIR Consultant

Environmental Science Associates (ESA)

Address: 626 Wilshire Boulevard, Suite 1100
Los Angeles, CA 90017
Phone (213) 559-4300

EIR Sections

Deanna Hansen, *Project Director*

Michael Houlihan, AICP, *Project Manager*

Renee Escario, *Deputy Project Manager*

Arabesque Abdelwahed, *Senior Technical Analyst*

Katelyn Matroni, *Technical Analyst*

Paige Anderson, *Technical Analyst*

Ha Chung, *Air Quality and Greenhouse Gas*

Jeff Goodson, *Air Quality, Greenhouse Gas, and Noise Senior Specialist*

Candace Ehringer, *Senior Archaeologist*

Kyle Kim, *Noise Specialist*

Shadde Rosenblum, *Senior Traffic Expert*

Jessie Lee, *GIS Technician*

Ian Hillway, *Document Production*

Metis Environmental Group

Lloyd Zola, *Senior CEQA Specialist*

6.4 Traffic and Transportation Consultant

The Mobility Group

Michael Bates, *Traffic Engineer*

Saeedeh Farivar, *Traffic Engineer*

6.5 Economic Consultant

Stanley R. Hoffman Associates

Stan Hoffman, AICP, *Economist*

6.6 Infrastructure Consultant

JMC^2

John M. Cruikshank, PE, *Utility Engineer*