Florence-Firestone Blue Line First/Last Mile Memorandum

FINAL

Florence-Firestone TOD Specific Plan
County of Los Angeles

Department of Regional Planning

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Quality information

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1 Introduction

What is the Blue Line First/Last Mile Plan?

The Blue Line First/Last Mile (FLM) Plan, adopted in March 2018 for all 22 stations on the Metro A Line (previously known as the Blue Line), was a groundbreaking effort for Metro and its project team composed of transportation planners and Community-Based Organizations (CBOs). This was a first-of-its-kind effort to plan comprehensive transit access improvements for an entire transit line, with the goal of improving safety, comfort, and access for Metro riders through the identification and implementation of first/last mile improvements. “First/last mile” improvements refer to the set of infrastructure and service improvements that help connect riders from the neighborhood surrounding the station to the station itself, so that transit riders can complete their full journey from origin to destination, including the transit component and other multi-modal components. More information about Metro’s first/last mile programs are available on Metro’s website at https://www.metro.net/projects/first-last/.

The Blue Line First/Last Mile Plan piloted an inclusive, equity-focused community engagement process. As part of the consultant team led by Fehr & Peers, Metro partnered with a coalition of CBOs to lead outreach efforts on the project, and to help shape the overall direction of the Plan. The coalition consisted of the Los Angeles County Bicycle Coalition, T.R.U.S.T South LA, Asian Pacific Islander Forward Movement, Multicultural Communities for Mobility, Ride On! Bike Co-Op, East Side Riders Bike Club, and Healthy Active Streets.

In addition to the Community Coalition, the consultant team included technical subconsultants focused on public space and transportation access. This structure enabled broad participation to identify community-driven concerns for transit riders accessing the system. The team also provided technical support to develop a comprehensive project list and associated cost estimates for implementing the community-identified improvements (included as appendices to the Plan).

As Metro increasingly underscores equity as a key consideration in planning and investment decisions, this more open and inclusive approach set a new template for outreach. The Plan captures lessons learned from this effort, including opportunities and challenges in pursuing new working relationships between government agencies and CBOs. As such, the final Plan amplified the social and infrastructural history of the Metro A Line corridor, incorporating a variety of voices that were distinct from a typical Metro or public agency planning document.

Addressing the first/last mile challenges is important because the easier it is to access the rail system, the more likely people will be to use it and the more access people will have to the broader transit network. Further, most Metro transit riders access the station by walking, biking, or rolling (terminology used by Metro to encompass the range of small wheeled personal mobility devices like wheelchairs, scooters, or roller skates); therefore, first/last mile improvements are crucial to serving existing riders and growing future ridership.

By their nature, first/last mile infrastructure can provide support for the most neighborhood-oriented elements of a transportation system that a person uses. Sidewalks—or the lack of them—define the character of a local street. Bicycle lanes can support children who use bicycles to go to local schools. Crosswalks and lighting can support a community’s sense of safety and security, while also reducing the risk of collisions at night. Many of the neighborhoods served by the Metro A Line have experienced historic disinvestment and neglect from the public and private sector on a range of issues, including these foundational elements of transportation infrastructure. Investments in first/last mile improvements can help address some of those injustices.

How does the Blue Line First/Last Mile Plan relate to the Florence-Firestone Transit Oriented District Plan?

The purpose of this memorandum is to highlight the barriers, opportunities, and project lists included in the Blue Line First/Last Mile Plan, to help inform the mobility and transportation projects and policies that will be considered for the Florence-Firestone Transit Oriented District Specific Plan (FFTOD Specific Plan) currently in process. While Metro invested substantial time and effort developing the recommendations included in the Blue Line First/Last Mile Plan, the County of Los Angeles has the jurisdiction to implement the project ideas contained within it. In addition, the Blue Line First/Last Mile Plan included extensive and meaningful community engagement, which is particularly relevant and important given the current COVID-19 limitations on the ability to conduct in-person community engagement for the FFTOD Specific Plan.

1.1 Project Overview

The Blue Line First/Last Mile Plan closely followed the process described in the First Last Mile Strategic Plan (FLMSP), which was adopted by Metro in 2014. Many of the existing conditions components of the process were completed as part of the Active Transportation Strategic Plan (ATSP), adopted by Metro in 2016. The Blue Line First/Last Mile Plan summarized the results of the walk audit (a site visit conducted on foot to collect data about the conditions of the station area) and community outreach process with the intention to capture the broadest possible range of community-supported, community-identified first/last mile needs.

The Station Area Plans (created in Step 5 of the process outlined below) include project improvements such as infrastructure for walking, rolling, and biking; shared use services; facilities to transfer or connect to a different mode of transportation; landscaping/greening; and information that eases travel, including signage, wayfinding, and real-time technology. The first/last mile process consisted of gathering data, performing walk audits, drafting a layout of the “Pathway Network” (the top priority corridors to receive improvements based on direct path of travel to the station, existing needs, and overall demand), gathering feedback on project recommendations, finalizing recommendations, and prioritizing recommendations that were summarized into the Station Area Plans. The figure below shows the process for developing each Station Area Plan.

Following the definition of each station’s study area (the area within ½ mile of the station), the first phase of the project included a walk audit of all twenty-two A Line stations where CBO leaders led groups of residents to collect data about the conditions in the study area. Participants collected data on standardized forms, took photos, and debriefed as a group following the audit to identify the most prevalent observations, barriers, and concerns related to first/last mile access and infrastructure. Participants also assigned scores from one (worst) to five (best) for overall safety, access to the station, transfers between modes, and aesthetics, which were then averaged to create station scores for each category and a single score to reflect overall station conditions.

During phase two of the project, CBOs coordinated a series of events in 11 of the 22 station areas. From the walk audit summaries, the project team developed a menu of transportation treatments along the Pathway Network that residents could reference to determine which ones would be most relevant to meet their needs. At each event, these treatments were displayed on large poster boards and residents were given corresponding stickers to place on a large map of the station area where these treatments were needed. Following this community engagement, Station Area Plans were developed for each station, captured in Appendix A to the Plan.

Three stations from the Plan are key to the FFTOD Specific Plan: Firestone Station, Florence Station, and Slauson Station. The remainder of this memorandum

summarizes key findings from walk audits and transportation assessments undertaken during the Blue Line First/Last Mile Plan, highlighting existing conditions of the areas surrounding the stations, necessary access improvements, and suggested projects. All figures, renderings, and photos are courtesy of Metro, Here LA, Los Angeles County Bicycle Coalition, and Fehr & Peers.

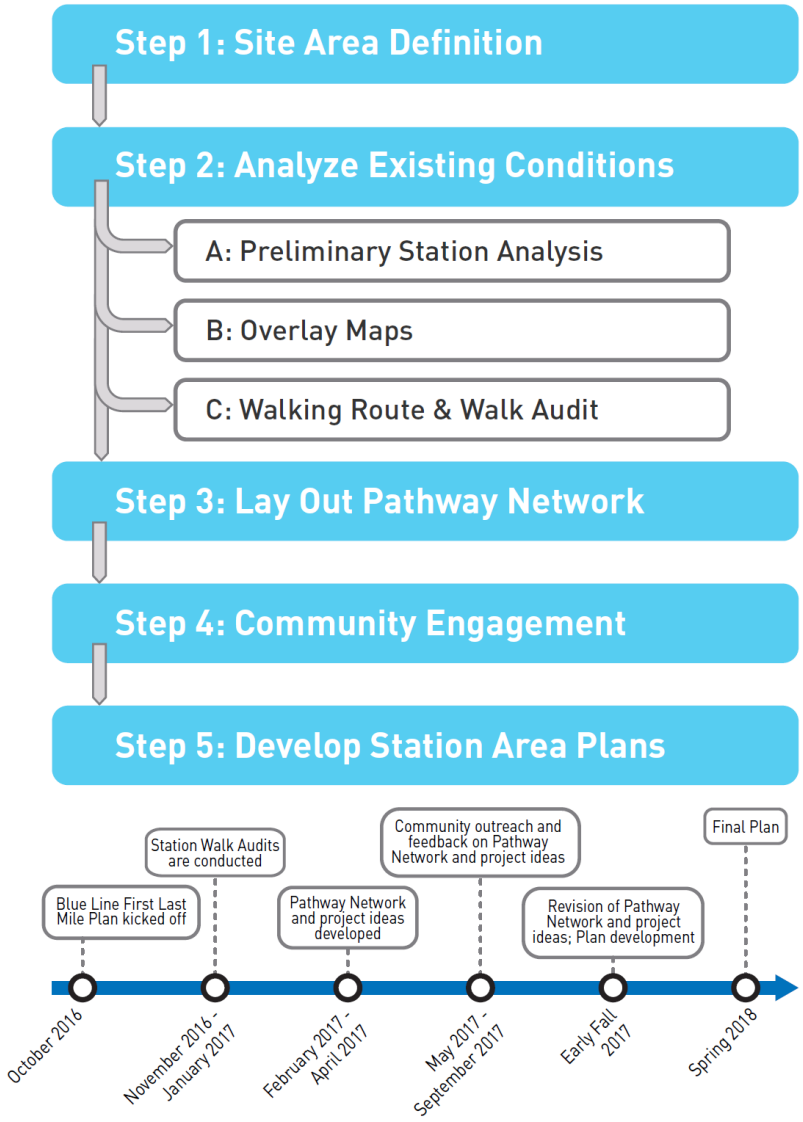


Figure 1: Blue Line First/Last Mile Process

2 Slauson Station First/Last Mile Station Area Summary

The Metro A Line Slauson Station is located at the intersection of Slauson Avenue and Randolph Street. The station is adjacent to the Vermont-Slauson neighborhood in South LA and is surrounded by both industrial and residential land uses, including schools, a park, a playground, and a community center.

2.1 Existing Conditions

The area around the Slauson Station lacks sufficient and quality signage and wayfinding, and many sidewalks have elements obstructing the path of travel and insufficient curb ramps. The high volume of freight activity and rail infrastructure causes pervasive conflicts that affect the ability of transit riders to navigate the area.

Existing conditions around the station were scored on a scale of one to five to evaluate safety, accessibility, transfers, and aesthetics, with an overall score calculated by averaging the category scores. The Slauson Station and surrounding area received an overall score of 1.7 out of 5 based on observations from walk audits. Slauson Station's score was below average in comparison to all stations on the A Line. Safety and accessibility received scores of 1.77 and 1.71, respectively. Many streets lacked crosswalks, bike lanes, and pedestrian lighting, including areas around schools. In terms of accessibility, discontinuous sidewalks, street vendors, and other physical barriers impede pedestrian access to the station. Many sidewalks lack curb ramps and truncated domes. In addition, many residents access the station using an informal, unpaved path under the train tracks.

Although the area around the station is relatively well connected with other transit services, including a bus stop in front of the station and additional transit stops, transfers received a score of 1.58. This was because wayfinding signage was lacking in quality and availability. The lack of wayfinding signage also impacts the accessibility to nearby amenities such as Augustus Hawkins Park. While Augustus Hawkins Park positively impacts the aesthetics of the area, many streets have lots of litter, poor storm drainage, overgrown trees, and poor landscaping. Aesthetics for the station area received a score of 1.6.

Some of the barriers identified by walk auditors near the station along Slauson Avenue include the following: feeling of lack of safety due to no "eyes on the street," trash dumping along the sidewalk, active rail tracks without gates, and no buffer from traffic. The narrow station entrance on Randolph Street was also identified as a barrier near the station. Barriers for nearby intersections such as Long Beach Boulevard and Holmes Avenue were also highlighted. The lack of sidewalks and crosswalks pose safety concerns on Long Beach Boulevard. On Holmes Avenue, several infrastructure gaps were identified as significant barriers, including missing ramps, the need to repair existing ramps, narrow sidewalks, and lack of bike lanes. One of the main issues identified for the station was the lack of a crosswalk at the station to the bus stop on the other side of the street.

Corridor strengths that enhance the experience of transit riders were also highlighted for the station area. On Slauson Avenue, a food truck that services customers regularly on the north side of the street was mentioned as a strength. In addition, in some locations along Slauson Avenue and at the station itself, walk auditors noted good transit informational signage, seating, and room for bikeshare. Streetscaping along Slauson and vines on the walls and fences west of Slauson Station enhanced the aesthetics along the corridor.

2.2 Critical Access Barriers to Slauson Station

Pedestrian Crossings: People were observed crossing arterials and collectors where there is no crosswalk. In some areas it is necessary to cross the rail tracks in order to get to the sidewalk.

Station Access: Access to the station is narrow and difficult, with only three entries/exits. Bicyclists use the sidewalk because there are no bicycle lanes. This makes it difficult to navigate shared space with people on foot.

Wayfinding: The station area lacks wayfinding signage for pedestrians, bicyclists, and transit users.

Pedestrian-Scale Lighting: Many streets lack pedestrian-scale lighting, or street lighting is obscured by tree canopy.

Bicycle Facilities: The station area lacks continuous bicycle lanes.

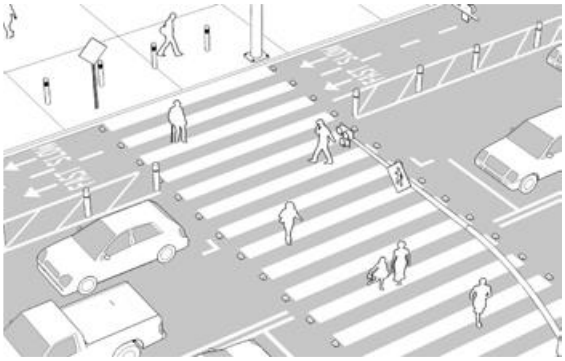
2.3 Community Input

Community input was gathered through a series of events where residents had the opportunity to suggest infrastructure improvements at designated locations. Maps were developed to document community input in Appendix A of the Blue Line First/Last Mile Plan; findings are summarized here. Ten intersections surrounding the Slauson Station were identified in need of infrastructure improvements. Community residents highlighted bike parking and repair stations, bus stop improvements, and new or improved crosswalks as the most significant needs. Bike share and car share stations were also identified as a community priority, especially near the Slauson Station, along with street lighting and public art.

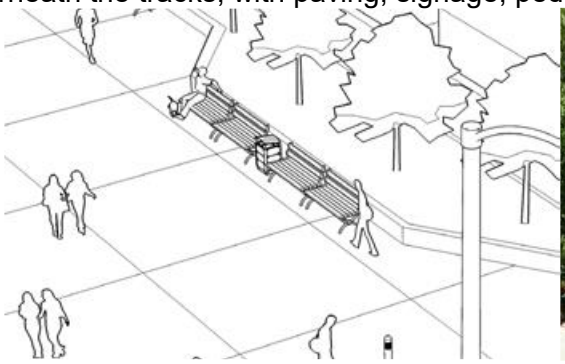
2.4 Access Improvements & Suggested Projects

A series of key project ideas were developed for the Slauson Station based on observations documented during the walk audit and community input at outreach events. Some of these improvements are expected to be included in Metro's upcoming Rail to Rail project (shown in red on the map that follows).

Pedestrian Crossings: Improve pedestrian crossings at major intersections, including at rail crossings, with sufficient countdown timers, improved crosswalks, and ADA-compliant curb ramps.



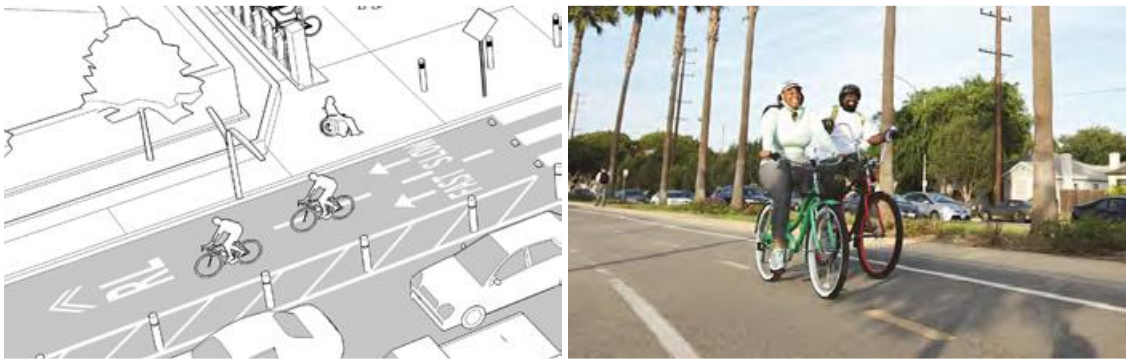

Add New Station Access: Improve the informal pedestrian path leading to the station underneath the tracks, with paving, signage, pedestrian-scale lighting, and landscaping.




Wayfinding & Transit Signage: Install wayfinding signage and transit information along the Pathway Network for bicyclists, pedestrians, and transit users.


Pedestrian-Scale Lighting: Install pedestrian-scale lighting along the Pathway Network, especially at street crossings.

Enhanced Bicycle Facilities: Install enhanced bicycle facilities that connect the station to neighborhood destinations such as nearby schools and Augustus Hawkins Park, as well as connecting to other bicycle facilities in the area.



The suggested project list generated for the Slauson Station was proposed for the area within a ½ mile radius of the station. A series of proposed projects ranging from bus stop improvements, crosswalk improvements, and bike lane installations were highlighted. Figure 2 shows the suggested project improvements for Slauson Station, and Table 1 below shows a summary of the total costs.

Table 1: Slauson Station FLM Cost Estimate

Slauson Station FLM Project List Cost Estimate	
Project Construction Costs:	
Project Construction	$39,485,174
Mobilization (10%)	$3,948,517
Project Construction Cost Subtotal	***$43,433,692***
Project Support (% of Project Construction Cost Subtotal):	
R/W Allowance (20%)	$8,686,738.32
Utility Relocations (10%)	$4,343,369.16
Contingency (25%)	$10,858,422.90
Planning/Design/Environmental/CM (25%)	$10,858,422.90
NPDES/Water Quality/BMPs (3%)	$1,303,010.75
Project Support Subtotal	***$36,049,964***
Project Grand Total	***$79,483,656***

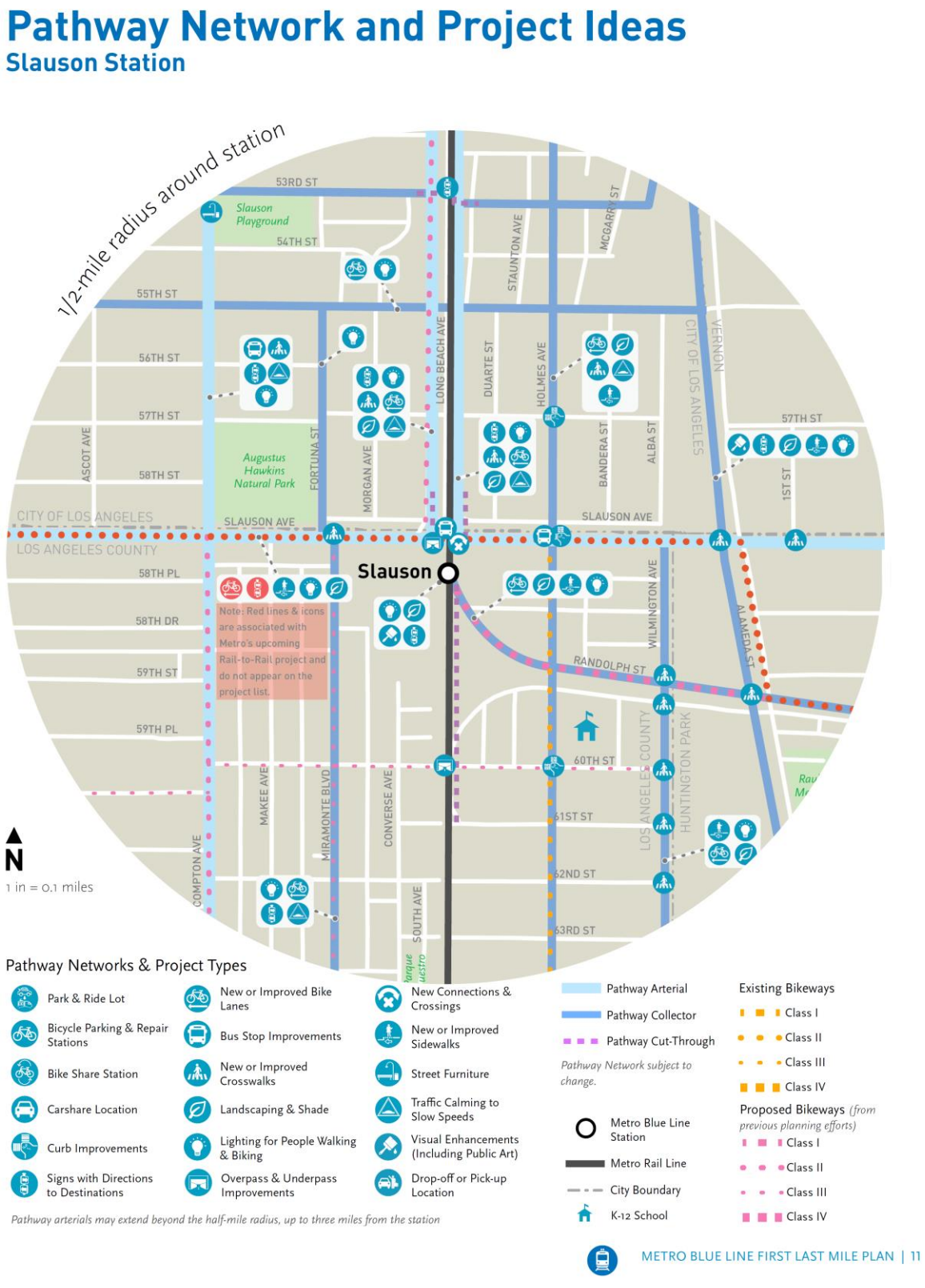


Figure 2: Slauson Station Pathway Network & Project Ideas

3 Florence Station First/Last Mile Station Area Summary

The Metro A Line Florence Station is located on the segment of Florence Avenue between Maie Avenue and Graham Avenue in the unincorporated community of Florence-Firestone in Los Angeles County.

3.1 Existing Conditions

Much of the study area beyond Florence Avenue, within a ½ mile radius from the Florence Station, is residential with multiple elementary schools and Roosevelt Park. The area immediately adjacent to the station has wayfinding signage, but the area within a ½ mile, beyond the station footprint, has little directional signage for pedestrians, bicyclists, or transit users. Many arterials and collectors are oriented toward cars, with minimal pedestrian-friendly elements. In addition, few bicycle lanes exist throughout the project area. In fact, some collector streets have industrial land uses and have poor sidewalk conditions and landscaping. At many signalized crossings, the pedestrian phase seems short and the signals lack a pedestrian countdown timer.

Existing conditions around the station were scored on a scale of one to five to evaluate safety, accessibility, transfers, and aesthetics, with an overall score calculated by averaging the category scores. The Florence Station earned an overall score of 1.9 out of 5 based on observations from walk auditors, positioning it below the average score for all A Line Stations. This score was determined by measuring safety, accessibility, transfers, and aesthetics. Safety scored the highest of these categories with 2.2; however, in the area surrounding the station, the train crossing has short pedestrian-scale safety arms and there is no buffer between pedestrians, bicyclists, and motor vehicles; the space near the crossing is constrained and lacks landscaping. In the study area, there was insufficient lighting and speeding was common on main arterials and some collector streets.

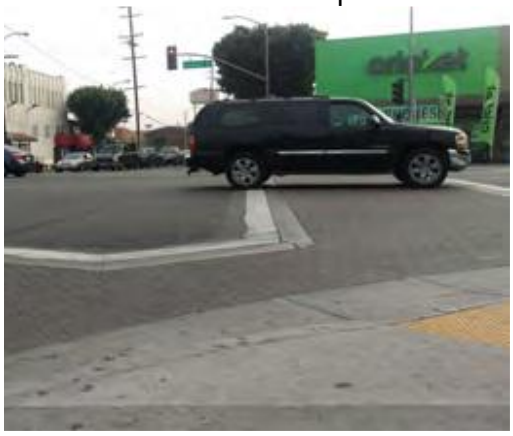
Accessibility to the station was rated with a score of 1.54. The station can only be accessed from the north along Florence Avenue; there is no south exit/entrance to the station. Many sidewalks are in poor to fair condition, and most have curb ramps. Most of the study area needs more wayfinding signage. While there are some enhanced bus shelters along Florence, many still lack shelter and transit services are perceived to be poor/infrequent, posing challenges for transfers (resulting in a score of 1.73). In terms of aesthetics, some streets and areas had trees and greenery, such as those adjacent to Roosevelt Park. However, some areas had graffiti and excessive litter, and some streets had several potholes. The station received a score of 2.22 for aesthetics; improved landscaping and trash management could help to cultivate a better sense of place.

During the walk audit, a series of barriers were identified in the area surrounding the Florence Station. Along Florence Avenue near the station, the lack of quality signage for pedestrians and unsafe vehicle speeds posed obstacles for safety. Some of the observed behaviors included people walking or standing along on train tracks. On Graham Street, uneven pavement and sidewalks were observed, along with a lack of lighting near the station. On the intersection of Maie Avenue and Florence Avenue there is a pedestrian crosswalk, however the crosswalk is faded and is not accessible as there is no audible signal. Along Miramonte Boulevard, poor street lighting was identified. Walk auditors also observed people on bicycles and people on foot competing for space on narrow sidewalks. On nearby Compton Avenue, bus shelters were not present.

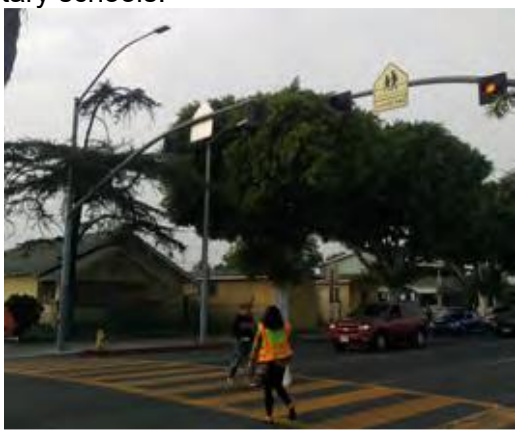
The following strengths were identified near the Florence Station. On Florence Avenue large bus shelters were available as well as enhanced crosswalks. Nearby on the segment of Compton Avenue between Florence Avenue and 71st Street, there were wide sidewalks for pedestrians which could potentially reduce conflicts with bicyclists using the sidewalk.

3.2 Critical Access Barriers to Florence Station

Vehicle Speed: Many vehicles were observed speeding on arterials and collectors, which creates an unsafe and uncomfortable environment for pedestrians and cyclists.

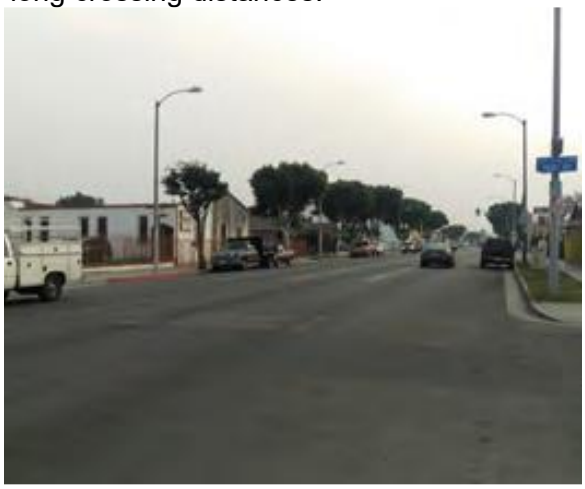


School Crossings: Poor crosswalk conditions, high vehicle traffic speeds, and blind corners were observed near elementary schools.



Pedestrian-Scale Lighting: Many streets lacked enough pedestrian-scale lighting, including at bus stops.

Pedestrian Crossings: Most of the station area had infrequent marked crosswalks, faded or insufficient markings, and long crossing distances.



Potholes: Many streets in the station area had potholes.

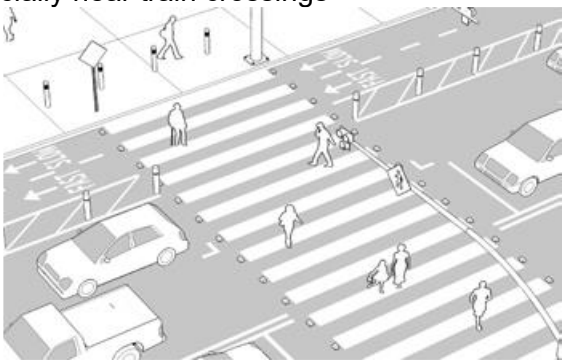
3.3 Community Input

Community input was gathered through a series of events where residents had the opportunity to suggest infrastructure improvements at designated locations. Maps were developed to document community input in Appendix A of the Blue Line First/Last Mile Plan; findings are summarized here. While a series of improvements were requested, improvements for bicyclists were highlighted in particular. These improvements include new bike parking and repair stations, bike share stations, and new or improved bike lanes. In addition, bus stop improvements were requested, along with more landscaping and shade, and lighting for people walking and biking.

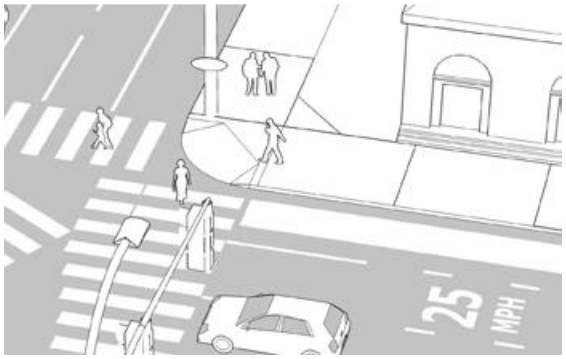
3.4 Access Improvements & Suggested Projects

Based on walk audits, observations, and community input a series of key project ideas were developed for the Florence Station.

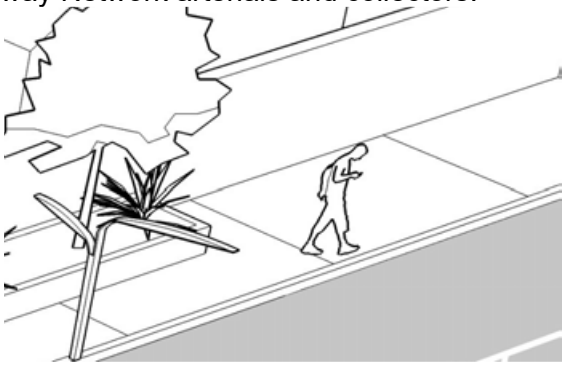
Pedestrian Crossings: Improve pedestrian signals and provide more visible crossing treatments at intersections along Florence Avenue, along with traffic calming measures, especially near train crossings



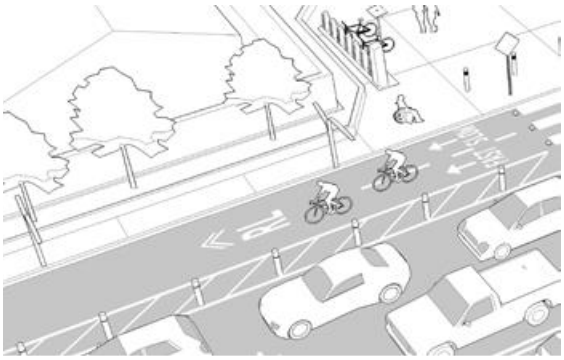

School Area Treatments: Add speed bumps and enhanced crosswalks around the school on Bell Avenue.



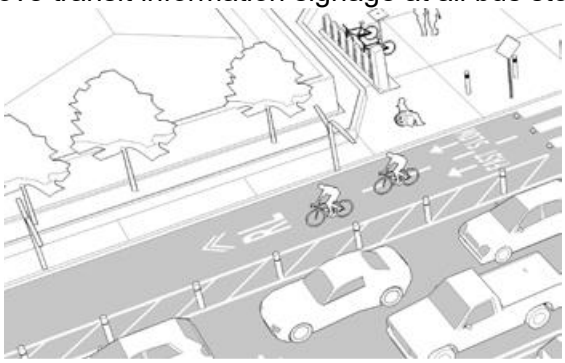
Lighting & Wayfinding: Add lighting and wayfinding signage through the park and along Pathway Network arterials and collectors.




Enhanced Bicycle Facilities: Add enhanced bicycle facilities on Pathway Network arterials and collectors.




Bus Stop Amenities: Provide shelters, lighting, and comfortable seating at all bus stops; improve transit information signage at all bus stops.



The suggested project list generated for the Florence Station was proposed for the area within a ½ mile radius of the station. A series of proposed projects ranging from traffic calming treatments, lighting, bike lanes, and crosswalk improvements were suggested. Figure 3 shows the suggested project improvements for Florence Station, and Table 2 below shows a summary of the total costs.

Table 2: Florence Station FLM Cost Estimate

Florence Station FLM Project List Cost Estimate	
Project Construction Costs:	
Project Construction	$15,930,293
Mobilization (10%)	$1,593,029
Project Construction Cost Subtotal	***$17,523,322***
Project Support (% of Project Construction Cost Subtotal):	
R/W Allowance (20%)	$3,504,664
Utility Relocations (10%)	$1,752,332
Contingency (25%)	$4,380,830
Planning/Design/Environmental/CM (25%)	$4,380,830
NPDES/Water Quality/BMPs (3%)	$525,700
Project Support Subtotal	***$14,544,357***
Project Grand Total	***$32,067,679***

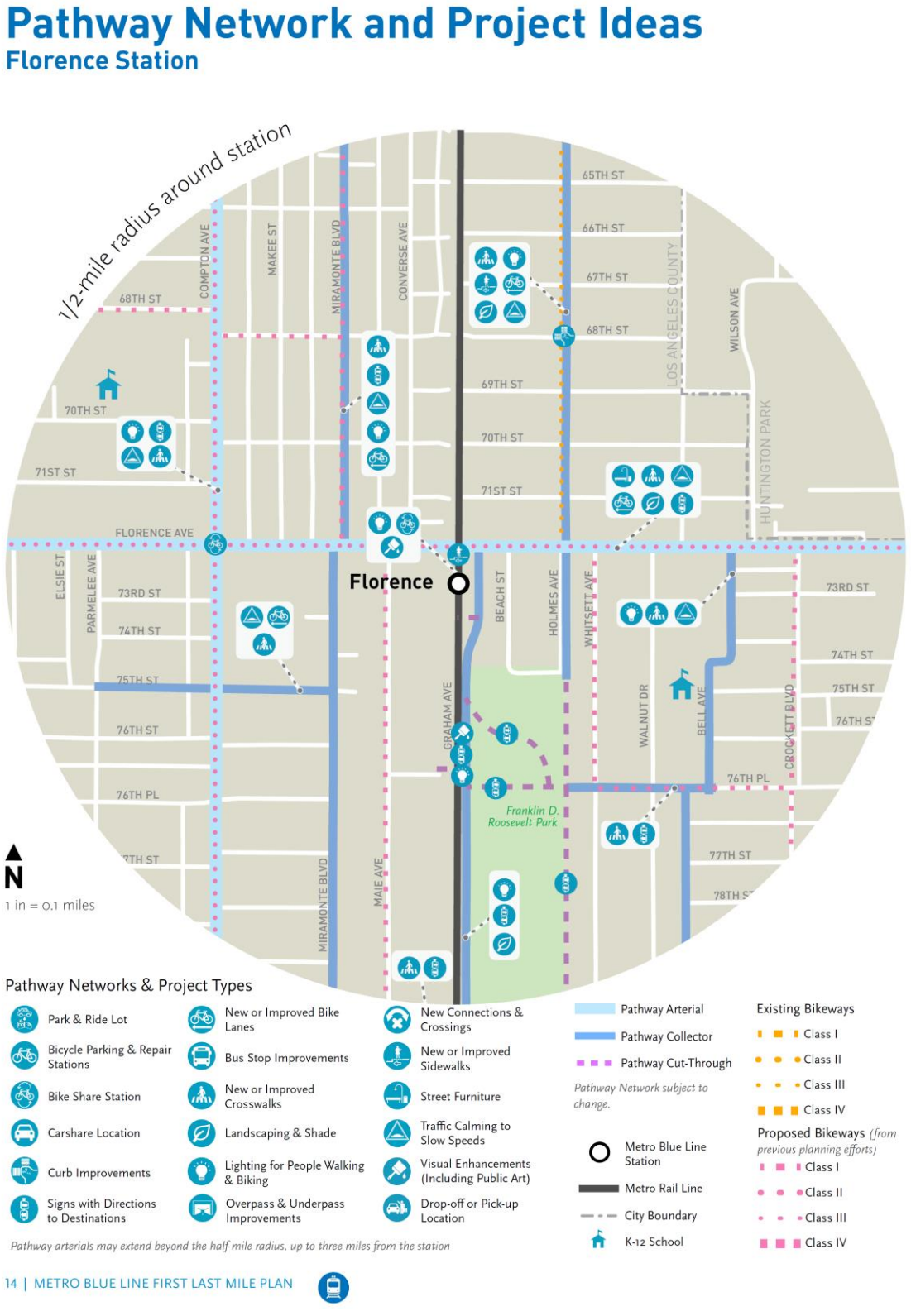


Figure 3: Florence Station Pathway Network & Project Ideas

4 Firestone Station First/Last Mile Station Area Summary

The Metro A Line Firestone Station is located at the intersection of Firestone Avenue and Graham Avenue in the unincorporated community of Florence-Firestone in Los Angeles County.

4.1 Existing Conditions

The area near Firestone Station was observed to be particularly loud, with noise pollution from both vehicle traffic and the train overpass. The land uses around the station includes a mix of industrial and residential areas with high voltage towers, walls, and fences. In addition, most sidewalks are narrow, damaged, and lack sufficient crossing points. Some parts of the station area looked run down and lacked a sense of place. While some areas had adequate and maintained landscaping, others had overgrown plants and trees that required pruning.

Existing conditions around the station were scored on a scale of one to five to evaluate safety, accessibility, transfers, and aesthetics, with an overall score calculated by averaging the category scores. Compared to the Slauson and Florence Stations, Firestone Station earned the lowest overall station area score of 1.4 out of 5. The area suffers from a lack of crosswalks and a lack of lighting, especially under the train overpass where the bus stop is located. The station's safety score of 1.45 was related to personal safety concerns expressed by community members. These concerns were driven by events such as a string of nearby robberies that had occurred around the time the walk audits were conducted.

Accessibility had the lowest category score of 1.33. One of the key challenges was the lack of adequate sidewalks. Many were narrow and had physical barriers that impede pedestrian access to the station. In terms of transfers, although there were many connections to other transit stops, the station received a score of 1.43. This is in large part because the primary connection is beneath the train overpass and did not have adequate lighting. In addition, there was a lack of information related to transit services along the streets near the station. Across all score categories, this station's aesthetics score was highest at 1.57. However, the study area lacked a sense of place due to elements such as numerous walls and electrical towers. Also, much of the land use is industrial and many streets were littered with trash.

A series of barriers were identified in the area surrounding the Firestone Station. On Graham Avenue near the station, excessive bird droppings, a narrow sidewalk near the bus stop connections, and inadequate lighting were identified. Graffiti along Graham Avenue also contributed to poor aesthetics in the area. Along Firestone Boulevard, broken and narrow sidewalks and an open trench near Maie Avenue made it difficult for people to use the sidewalk. In addition, a mechanic driveway exists on Maie Avenue, creating conflicts with pedestrians using the sidewalk. Also on Maie Avenue, bicyclists were observed using the sidewalk along the park, which caused additional conflicts for people on foot.

Along Compton Avenue, some safety concerns included: a misaligned crosswalk, wide gas station driveways, lack of crosswalks, unprotected left lanes, and lack of countdown timers. In addition, the lack of trash cans added to the poor aesthetics in the area. At the intersection with Bandera Street, some issues identified include: a lack of a bus shelter, graffiti on banners, blank walls, and presence of people experiencing homelessness. On the nearby Park Lane, which runs adjacent to the tracks, walk auditors observed that the street was dirty, smelled like urine, experienced dumping, and had a lack of signage and directions.

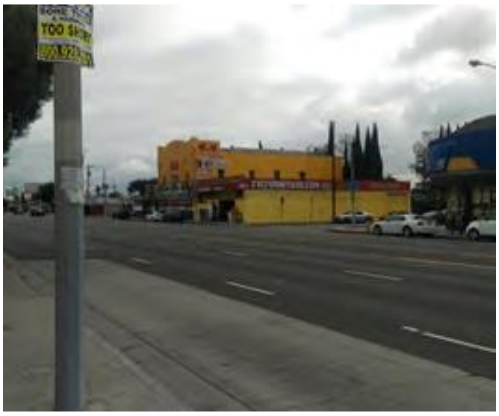
Despite facing many barriers, there were some strengths identified in the area. Near the Firestone Station, the bus connections, benches, trash receptacles, streetlights, art, and

available bike racks enhanced the experience of pedestrians and bicyclists. On Compton Avenue near Charles Drew Middle School, walk auditors noted that the shade trees and school signage improved the area. On 87th Place, a pedestrian flashing beacon made the crosswalk highly visible. Stop signs were also visible along Maie Avenue next to Washington Park.

4.2 Critical Access Barriers to Firestone Station

Pedestrian Crossings: The station area lacked sufficient crosswalks and some crossings did not provide enough time on the signal countdown, such as Firestone Blvd and Graham Ave. The intersections at Firestone/ Compton and Firestone/ Graham seemed confusing for pedestrians.

Vehicle Speed: High vehicle speed was observed on many streets, and especially on Firestone Boulevard.



Bicycle Infrastructure: Many cyclists were observed using the sidewalk. Bicycle facilities were scarce and discontinuous.

Sidewalk Accessibility: Many sidewalks in the station area lacked curb ramps and truncated domes, and were not wide enough to accommodate pedestrians with wheelchairs, mobility devices, or strollers**.**

Street Lighting: The station area lacked sufficient street lighting, especially beneath the train overpass and along many of the streets with industrial uses surrounding the station.

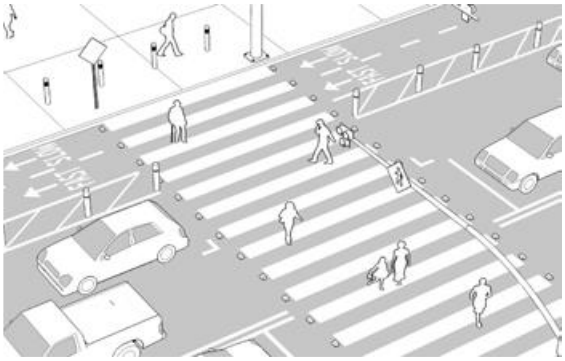
4.3 Community Input

Community input was gathered through a series of events where residents had the opportunity to suggest infrastructure improvements at designated locations. Maps were developed to document community input in Appendix A of the Blue Line First/Last Mile Plan; findings are summarized here. The improvements requested around the Firestone Station focused on implementing new or improved crosswalks and sidewalks, adding bike parking and repair stations, and including traffic calming measures. Some community residents also requested drop-off or pick-up locations in areas near schools. At the intersection of Firestone Boulevard and Graham Avenue where the Firestone Station is located, residents requested more lighting and enhanced crosswalks and sidewalks.

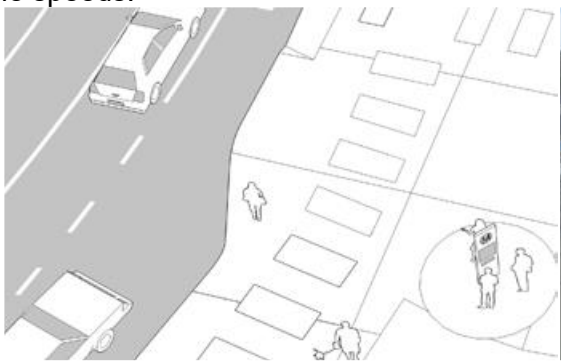
4.4 Access Improvements & Suggested Projects

Based on walk audits, observations, and community input a series of key project ideas were developed for the Firestone Station.

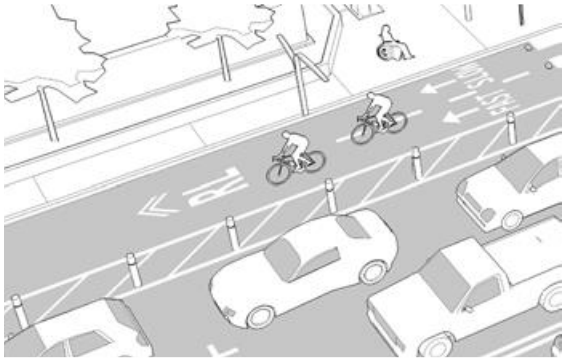
Pedestrian Crossings: Improve pedestrian crossings at major intersections, including at rail crossings, with sufficient countdown time, improved crosswalks, and ADA-compliant curb ramps.



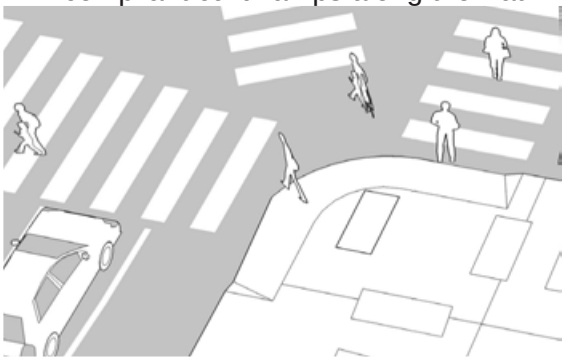

Traffic Calming: Install traffic calming elements and consider road diets along streets with high vehicle speeds.



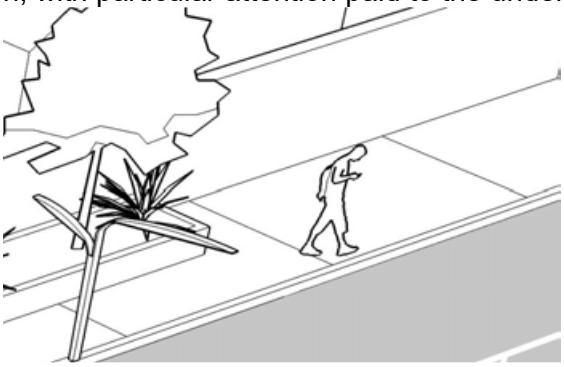

Enhanced Bicycle Facilities: Install enhanced bicycle facilities on Pathway Network arterials and collectors.




Sidewalks & Curb Ramps: Widen sidewalks along the Pathway Network and provide crosswalks and ADA-compliant curb ramps along the Pathway Network.




Pedestrian Lighting: Install pedestrian-scale lighting along the Pathway Network and at the station, with particular attention paid to the underpass at the station entrance.



The suggested project list generated for the Firestone Station was proposed for the area within a ½ mile radius from the station. A series of proposed projects were suggested, including: bike facilities, lighting, sidewalk and crosswalk improvements, and wayfinding. Figure 4 shows the suggested project improvements for Firestone Station, and Table 3 below shows a summary of the total costs.

Table 3: Firestone Station FLM Cost Estimate

Firestone Station FLM Project List Cost Estimate	
Project Construction Costs:	
Project Construction	$18,755,376
Mobilization (10%)	$1,875,538
Project Construction Cost Subtotal	***$20,630,913***
Project Support (% of Project Construction Cost Subtotal):	
R/W Allowance (20%)	$4,126,183
Utility Relocations (10%)	$2,063,091
Contingency (25%)	$5,157,728
Planning/Design/Environmental/CM (25%)	$5,157,728
NPDES/Water Quality/BMPs (3%)	$618,927
Project Support Subtotal	***$17,123,658***
Project Grand Total	***$37,754,572***

Figure 4: Firestone Station Pathway Network & Project Ideas

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