# **Southeast Gateway Line First/Last Mile Planning**

#### FIRST/LAST MILE PLAN Section 3





# Southeast Gateway Line First / Last Mile Plan

# April 2024

#### LOCAL JURISDICTIONS

City of Artesia City of Bell City of Bellflower City of Bell Gardens **City of Cerritos** City of Cudahy City of Downey City of Hawaiian Gardens City of Huntington Park City of Los Angeles City of Lynwood City of Maywood **City of Paramount** City of South Gate City of Vernon County of Los Angeles

#### **METRO DEPARTMENTS**

First/Last Mile Multimodal Integrated Planning Mobility Corridors

#### **COMMUNITY BASED ORGANIZATION (CBO) PARTNERS**

Los Angeles County Bicycle Coalition (BikeLA) Mujeres Unidas Sirviendo Activamente (MUSA) Self-Help Graphics and Art

#### **TECHNICAL TEAM**

Cityworks Design Patricia Smith, RLA, AICP WSP, Inc Arellano Associates

# **TABLE OF CONTENTS**

# 3

## First / Last Mile Plan – Supporting Documents

3.1	Project Charter	1
3.2	Existing Conditions Report	6
3.3	Community Outreach Summary Report Appendices	. 187
3.4	Walk Audit Summary Memo	464
3.5	Cost Estimating Methodology Memo	514
3.6	Gender Analysis Tool	555
3.7	Safety Analysis Tool	564
3.8	Micromobility Planning Summary	608

*Please note in January 2024 following an extensive public renaming contest, the West Santa Ana Branch Transit Corridor (WSAB) was renamed the Southeast Gateway Line (SGL) by the Metro Board of Directors.* 

While the finalized SGL FLM Plan reflects the new name, some FLM planning reports were completed prior to the renaming thus retain the older naming convention if included in Section 3 Supporting Documents.

Supporting documents with no effect on FLM plan recommendations, Metro intends to publish separately, and additional detail may be added following Metro Board adoption.



# **FIRST / LAST MILE PLAN**

# Supporting Documents





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## **PROJECT CHARTER**

#### **Project Charter Purpose**

This project charter document is for all partners to collectively establish values, goals, team norms, and expectations. The document, with the agreement of all parties, can be edited and revised continuously throughout the project duration.

#### Who are we? Partner Mission Statements

Mujeres Unidas Sirviendo Activamente (MUSA) strives towards the goal of empowering, motivating, and encouraging women to bring about productive, meaningful, and responsible civic, educational, and cultural engagement.

Self-Help Graphics (SHG) is dedicated to the production, interpretation, and distribution of prints and other art media by Chicana/o and Latinx artists. Our multidisciplinary and intergenerational programs promote artistic excellence and empower our community by providing access to space, tools, training and resources.

BikeLA is a membership-based nonprofit organization that works to make all communities in LA County healthy, safe, and fun places to ride a bike through advocacy, education, and outreach.

Los Angeles Metro is a multimodal transportation agency that plans, operates, and coordinates funding and transportation services for Los Angeles County. The Metro First/Last Mile (FLM) Team is leading the agency's initiative to make it easier to get around LA, which includes improving every trip with safe and accessible first/last mile (FLM) connections.

Arellano Associates (AA) vision is to positively impact our communities through honest and creative engagement using innovative communication tools and techniques.

Cityworks Design (CWD) specializes in urban design, planning, and architecture with a special focus on the public realm and transportation projects. The firm's work is exemplary of community-based design that addresses issues from pedestrian/bike access solutions to broader land use planning, transit-oriented development, and design frameworks for transit lines.

WSP develops creative, comprehensive, and sustainable engineering solutions for a future in which society can thrive. Equipped with an intimate understanding of local intricacies, world-class talent, and proactive leadership, we plan, design, manage, and engineer long-lasting and impactful solutions to uniquely complex problems.

#### **Shared Values**

#### Honoring community voices in our work

We will acknowledge the context of our communities by being mindful of how this project may affect existing neighborhoods and their physical geography. As we make decisions about the project, we will recognize that we do not know better than the communities we serve. To uplift communities, project decisions will consider past experiences that a community may have had with public entities or projects that could have negatively impacted residents, friends, families, etc. Additionally, we intend to retain neighborhood character (built environment, landmarks, streetscape, etc.) and provide tools for community members to protect and enhance their cherished spaces.

#### Prioritizing Accessibility (physically, educationally, linguistically, culturally, etc.)

We are committed to creating culturally relevant educational resources for community members to minimize barriers to project engagement. Creating access via physical, educational, and linguistic platforms to encourage engagement from all community members.

#### Making a Positive Impact on People's Lives

We are united by a collective passion that envisions growth within the communities we live and work in. We are motivated by seeing and experiencing the community benefits from safe and comfortable access to transit in historically underserved areas. Additionally, planning for future generations of community members and transit riders inspires us to take pride in the legacy of our project's benefits for years to come.

#### **Empowering Community Members**

We will listen and value the knowledge and experiences of community members, and our work will reflect the information they share with us. We are also passionate about empowering community voices by providing accessible platforms (options) for communication, to ensure we can understand their vision for their community.

#### Goals

#### Improving Quality of Life

We understand that implementing a transit system and FLM improvements will require construction that could impact access and conditions on local roadways. These initial temporary changes will result in FLM streetscape projects that aim to directly improve quality of life, especially by providing communities with better access to daily needs, education, healthcare, and/or employment. We will aim to create livable communities that will prioritize community well-being throughout the term of the project.

#### Creating a Transit System for All

We want to build a transit system that is safe and accessible for all users, especially the most vulnerable and/or underserved communities. The project will aim to support a community vision, that will improve the quality of life for current and future generations.

#### Conducting Meaningful Community Engagement

We will propose project ideas that align with community feedback and are supported by community members. Creating engagement that connects with the community is one of our main priorities to build relationships. Community Based Organization (CBO) input will inform our engagement strategy and reach as many people as possible creatively. Improving every day and having fun are two additional goals that will guide our work.

#### **Partnership Working Agreements**

#### Communication and Feedback Styles

Communication among team members will vary based on the circumstances. Communication methods like emails are accepted for less urgent matters, while texting may be better suited for in-person event coordination. Providing team members with notice and time to prepare for meetings or events is crucial.

#### **Decision-Making**

All team members are expected to be open-minded and flexible in decision-making. Each team member will contribute different skillsets and knowledge to decision-making, but all team members are expected to have an open line of communication with each other. Additionally, we will be patient in our decision making and respect the thought processes of our team members.

#### Transparency

We are mindful that team members have varied capacities to attend meetings, so active information sharing is a priority. The team will provide agendas ahead of each meeting and allow team members to contribute agenda items. Following each meeting, notes and action items will be distributed to all team members to ensure transparency. Prioritizing information sharing is essential for team members to be actively involved in decision making and for decisions to be made as a team.

#### Progress meetings and check-in process

Monitoring action items at the end of each meeting to maintain transparency across team members' responsibilities. Monitoring tasks will keep team members accountable for their designated roles.

#### Ongoing relationship building

Keeping open lines of communication and being transparent will strengthen communication between all parties. Relationship building will include local communities, stakeholders, and residents. Maintaining existing relationships among these partners is ideal for our teams as it will increase trust with local communities and foster opportunities for new connections.

#### **Conflict Resolution**

Respecting all team members, setting clear boundaries, and communicating within working hours are all first steps to prevent conflict. If a conflict arises, individual(s) should address issues quickly and directly with involved parties to avoid involving the whole group.

#### Key Project Contacts Section

Name	Organization
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Georgina Arceo	MUSA
Cynthia Navarro	Self Help Graphics
Graham Davidson	BikeLA
Lisa Padilla	Cityworks Design
Esmi Rennick	Cityworks Design
Michael Nájera	Cityworks Design
Patricia Smith	Cityworks Design, PSLA
Yvette Ximenez	Arellano Associates
Josh Francis	Arellano Associates
Isabelle Garvanne	Metro
Jacob Lieb	Metro
Hannah Brunelle	Metro

#### Accessibility and COVID 19

We will consider all our activities in relation to the current global health pandemic. Our individual and public safety are a top priority.

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Our individual and public safety is a top priority. Considerations include continuously monitoring the status of the pandemic and the diverse comfort levels and health needs of the project team and the community. Meetings and community events with be made virtual, hybrid, or in-person, after consideration of whichever is deemed most appropriate, effective, and, most importantly, safe.

# 3.2

# **Existing Conditions Report**

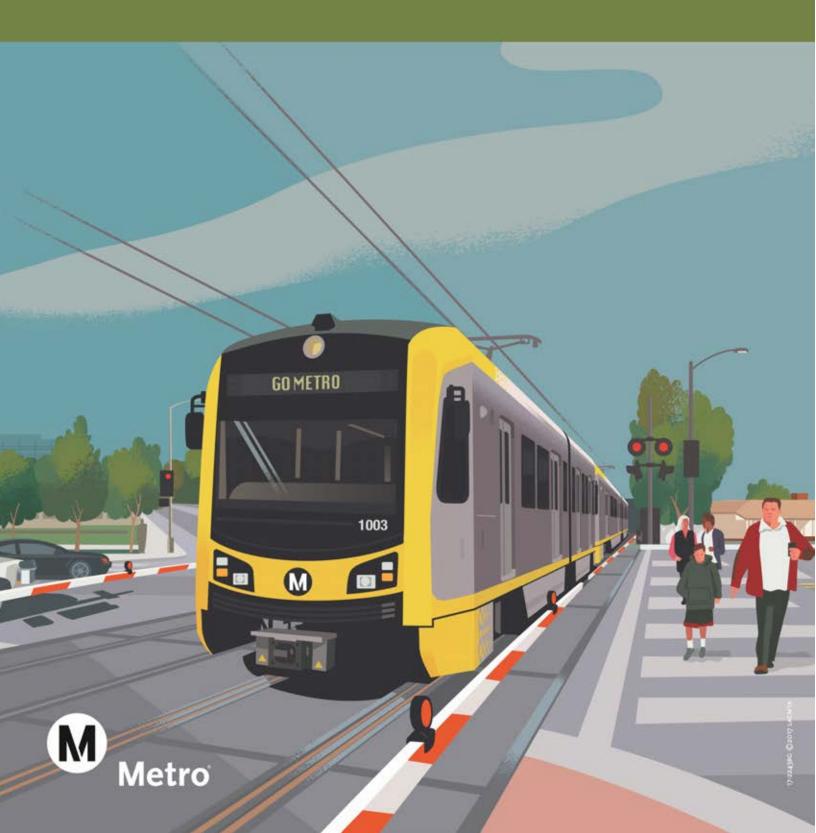
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# West Santa Ana Branch Transit Corridor

First/Last Mile Planning Existing Condition Report Task 31e



## WEST SANTA ANA BRANCH TRANSIT CORRIDOR PROJECT

# First/Last Mile Planning Existing Conditions Report

Task No. 31 (Deliverable 31e)

Prepared for:



Los Angeles County Metropolitan Transportation Authority

Prepared by:



WSP USA, Inc. 444 South Flower Street Suite 800 Los Angeles, California 90071

# **CITYWORKS**design

June 2023

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#### TABLE OF CONTENTS

1	INTRO		1-1
	1.1	Study Background	
	1.2	Alternatives Evaluation, Screening, and Selection Process	1-1
	1.3	Draft Environmental Impact Statement/Environmental Impact Report	
2	PROJI	ECT DESCRIPTION	2-1
3	FIRST	/LAST MILE PLANNING	3-1
	3.1	What is First/Last Mile Planning?	3-1
4	EXIST	ING CONDITIONS ANALYSIS	4-1
	4.1	Existing Conditions	4-1
5	RELE\	ANT PLANS AND PROJECTS	5-1
	5.1	Overview	
6	DATA	ANALYSIS	6-1
	6.1	Overview	6-1
	6.2	Population and Employment Density	6-1
	6.3	Equity Indices	6-2
	6.4	Primary Destinations	6-2
	6.5	Major Arterial Street Conditions	6-2
	6.6	Bicycle-Vehicle Collisions	6-3
	6.7	Existing Bikeways (Wheel Facilities)	6-4
	6.8	Bikeways Proposed on Local Plans	6-6
	6.9	Bikeways Proposed on Regional Plans	6-6
	6.10	Wheel Network Shown in the TODSIP	6-7
	6.11	TODSIP Pedestrian Improvements	6-7
	6.12	Tree Canopy Cover	6-7
	6.13	Half-Mile Walk Zone Analysis	6-20
	6.14	Half-Mile Walk Zone Analysis Findings	
7	NFXT	STEPS	

#### List of Appendices

APPENDIX A PATHWAY NETWORK APPROACH APPENDIX B HALF-MILE STUDY AREA MAPS – BY STATION APPENDIX C ADDITIONAL RELEVANT PLANS AND PROJECTS

#### List of Tables

Table 2-1. Summary of LPA Components	2-4
Table 5-1. Metro and Regional Plans and Projects – with relevance to multiple station	
areas	5-2
Table 5-2. City and County Plans and Projects – with relevance to multiple station	
areas	5-6

#### Figures

Figure 1-1. Draft EIS/EIR Build Alternatives	1-3
Figure 2-1. Locally Preferred Alternative	2-2
Figure 2-2. Locally Preferred Alternative Alignment by Grade	2-3
Figure 6-1. Population Density	6-8
Figure 6-2. Employment Density	6-9
Figure 6-3. Population and Job Density	6-10
Figure 6-4. Equity Indices	6-11
Figure 6-5. Primary Destinations	6-12
Figure 6-6. Posted Speed Limits – Major Arterials	6-13
Figure 6-7. Average Daily Traffic – Major Arterials	6-14
Figure 6-8. Bicycle/Vehicle Collisions	6-15
Figure 6-9. Existing Bikeways	6-16
Figure 6-10. Proposed Bikeways	6-17
Figure 6-11. Metro Regional Bikeway Network	6-18
Figure 6-12. Existing Tree Canopy	6-19

### ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AA	Alternatives Analysis
ADT	Average Daily Traffic
ATP	Active Transportation Plan
ATSP	Active Transportation Strategic Plan
BIPOC	Black, Indigenous, and other People of Color
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
EFC	Equity Focused Communities
EIR	environmental impact report
EIS	environmental impact statement
FLM	First/Last Mile
FTA	Federal Transit Administration
I-	Interstate Freeway
LA	Los Angeles
LADWP	Los Angeles Department of Water and Power
LAUS	Los Angeles Union Station
LPA	Locally Preferred Alternative
LRT	Light rail transit
LRTP	Long Range Transportation Plan
LRV	light rail vehicle
MENI	Metro Equity Need Index
Metro	Los Angeles County Metropolitan Transportation Authority
MRDC	Metro Rail Design Criteria
MSF	Maintenance and storage facility
MWD	Metropolitan Water District
NACTO	National Association of City Transportation Officials
NEPA	National Environmental Policy Act
NOP	Notice of Preparation
PEROW	Pacific Electric Right-of-Way
Project	West Santa Ana Branch Transit Corridor
ROW	Right-of-way

Acronym	Definition
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
SR	State Route
TODSIP	Transit Oriented District Strategic Implementation Plan
TPSS	Traction Power Substation
UFC	Uniform Fire Code
UPRR	Union Pacific Railroad
US	US Route Freeway
USC	United States Code
USDOT	U.S. Department of Transportation
WSAB	West Santa Ana Branch

## INTRODUCTION

#### 1.1 Study Background

1

The West Santa Ana Branch (WSAB) Transit Corridor (Project) is a proposed light rail transit (LRT) line that will extend approximately 14.5 miles from the northern terminus in the City of Los Angeles/Florence-Firestone community of Los Angeles (LA) County to the southern terminus in the City of Artesia, traversing densely populated, low-income, and heavily transit-dependent communities. The Project will provide reliable, fixed-guideway transit service that will increase mobility and connectivity for historically underserved, transit-dependent, and environmental justice communities; reduce travel times on local and regional transportation networks; and accommodate substantial future employment and population growth.

#### 1.2 Alternatives Evaluation, Screening, and Selection Process

A wide range of potential alternatives have been considered and screened through the alternatives analysis processes. In March 2010, the Southern California Association of Governments (SCAG) initiated the Pacific Electric Right-of-Way (PEROW)/WSAB Alternatives Analysis (AA) Study (SCAG 2013) in coordination with the relevant cities, the Orangeline Development Authority (now known as Eco-Rapid Transit), the Gateway Cities Council of Governments, the Los Angeles County Metropolitan Transportation Authority (Metro), the Orange County Transportation Authority, and the owners of the right-of-way (ROW)—Union Pacific Railroad (UPRR), BNSF Railway, and the Ports of Los Angeles and Long Beach. The AA Study evaluated a wide variety of transit connections and modes for a broader 34-mile corridor from Union Station in downtown Los Angeles to the City of Santa Ana in Orange County. In February 2013, SCAG completed the PEROW/WSAB Corridor Alternatives Analysis Report<sup>1</sup> and recommended two LRT alternatives for further study: West Bank 3 and the East Bank.

Following completion of the AA, Metro completed the WSAB Technical Refinement Study (Metro 2015) in 2015 focusing on the design and feasibility of five key issue areas along the 19-mile portion of the WSAB Transit Corridor within LA County:

- Access to Union Station in downtown Los Angeles
- Northern Section options
- Huntington Park Alignment and Stations
- New Green Line Station
- Southern Terminus at Pioneer Station in Artesia

In September 2016, Metro initiated the WSAB Transit Corridor Environmental Study (Environmental Study) with the goal of environmentally clearing the Project under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

<sup>&</sup>lt;sup>1</sup> Initial concepts evaluated in the SCAG report included transit connections and modes for the 34-mile corridor from Union Station in downtown Los Angeles to the City of Santa Ana. Modes included low-speed magnetic levitation (maglev) heavy rail, light rail, and bus rapid transit (BRT).

West Santa Ana Branch Transit Corridor Project

Metro issued a Notice of Preparation (NOP) on May 25, 2017, with a revised NOP issued on June 14, 2017, extending the comment period. In June 2017, Metro held public scoping meetings in the Cities of Bellflower, Los Angeles, South Gate, and Huntington Park. Metro provided project updates and information to stakeholders with the intent to receive comments and questions through a comment period that ended in August 2017. A total of 1,122 comments were received during the public scoping period from May through August 2017. The comments focused on concerns regarding the Northern Alignment options, with specific concerns related to potential impacts to Alameda Street with an aerial alignment. Given potential visual and construction issues raised through public scoping, additional Northern Alignment concepts were evaluated.

In February 2018, the Metro Board of Directors approved further study of the alignment in the Northern Section due to community input during the 2017 scoping meetings. A second alternatives screening process was initiated to evaluate the original four Northern Alignment options and four new Northern Alignment concepts. The Final Northern Alignment Alternatives and Concepts Updated Screening Report was completed in May 2018 (Metro 2018). The alternatives were further refined and, based on the findings of the second screening analysis and the input gathered from the public outreach meetings, the Metro Board of Directors approved Build Alternatives E and G for further evaluation.

On July 11, 2018, Metro issued a revised and recirculated CEQA NOP, thereby initiating a scoping comment period. The purpose of the revised NOP was to inform the public of the Metro Board's decision to carry forward Alternatives E and G into the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). During the scoping period, one agency and three public scoping meetings were held in the Cities of Los Angeles, Cudahy, and Bellflower. The meetings provided project updates and information to stakeholders with the intent to receive comments and questions to support the environmental process. The comment period for scoping ended on August 24, 2018; more than 250 comments were received.

Following the July 2018 scoping period, a number of project refinements were made to address comments received, including additional grade separations, removing certain stations with low ridership, and removing the Bloomfield extension option. The Metro Board adopted these project refinements at its November 2018 meeting.

#### 1.3 Draft Environmental Impact Statement/Environmental Impact Report

The Draft EIS/EIR and corresponding technical studies included evaluation of a No Build Alternative, four Build Alternatives, two design options, and two site options for a maintenance and storage facility (MSF):

- Alternative 1: Los Angeles Union Station to Pioneer Station
  - Design Option 1: Los Angeles Union Station Metropolitan Water District (MWD)
  - Design Option 2: Addition of Little Tokyo Station
- Alternative 2: 7th St/Metro Center to Pioneer Station
- Alternative 3: Slauson/A Line (Blue) to Pioneer Station
- Alternative 4: I-105/C Line (Green) to Pioneer Station
- Paramount MSF site option
- Bellflower MSF site option

Figure 1-1 illustrates the Build Alternatives evaluated in the Draft EIS/EIR.





Source: Metro 2020

The Draft EIS/EIR was released for public review and comment in July 2021 for 45 days, which was then extended to a 60-day public review period through September 28, 2021, to provide additional time for the public to respond. Notices of the Draft EIS/EIR release were done in accordance with CEQA and NEPA regulations and included two rounds of notices to announce details of the release of the Draft EIS/EIR, as well as to provide information on the public hearings and comment methods. The Notice of Availability was distributed to 261 agencies via USB drives, which included an electronic copy of the Draft EIS/EIR.

During the 60-day public review period, Metro hosted four virtual public hearings, four virtual community information sessions, and over 19 pop-up booths for in-person engagement at locations throughout the project corridor. In addition, Metro held approximately 20 briefings to key stakeholders, elected officials, corridor cities, and other agencies. In total, approximately 450 submissions were received during the public review period. In January 2022, the Metro Board of Directors selected Alternative 3 as the Locally Preferred Alternative (LPA) and approved Los Angeles Union Station as the ultimate northern terminus of the Project. The LPA extends from a northern terminus at the Slauson/A Line Station located in the City of Los Angeles/Florence-Firestone unincorporated area of LA County to a southern terminus at the Pioneer Station located in Artesia for a total of 14.5 miles. With selection of the LPA, the Metro Board also selected the MSF site option located in the City of Bellflower. The environmental path forward for the alignment between LA Union Station and the Slauson/A Line Station, inclusive of a station in Little Tokyo, would be determined once an alignment and funding source(s) are identified.

# 2 **PROJECT DESCRIPTION**

This section describes the LPA studied in the WSAB Transit Corridor Final EIS/EIR, including station locations, and the MSF. The LPA was developed through a comprehensive alternatives analysis process and meets the purpose and need of the Project.

Figure 2-1 illustrates the LPA. The northern terminus of the LPA will be located just south of the intersection of Long Beach Avenue and Slauson Avenue, connecting to the current A Line Slauson Station. South of Slauson Avenue, the LPA will follow the UPRR-owned La Habra Branch ROW east along Randolph Street. At the Ports-owned San Pedro Subdivision ROW, the LPA will turn southeast to follow the San Pedro Subdivision ROW and then transition to the Metro-owned PEROW south of the I-105 freeway. The LPA will then follow the PEROW to the southern terminus at the Pioneer Station in Artesia. The LPA will be grade-separated where warranted, as indicated on Figure 2-2.



Figure 2-1. Locally Preferred Alternative

Source: Metro 2020



Figure 2-2. Locally Preferred Alternative Alignment by Grade

Source: Metro 2023

#### Table 2-1. Summary of LPA Components

Component	Quantity
Alignment length	14.5 miles
Stations configurations	9 3 aerial; 6 at-grade
Parking facilities	5 total: 4 surface lots and 1 parking structure (approximately 2,800 spaces)
Length of at-grade, and aerial	12.1 miles at-grade; 2.4 miles aerial <sup>1</sup>
At-grade crossings	29
Freight crossings	6
Freeway crossings	4 (1 aerial/overcrossing at I-105, 3 freeway undercrossings <sup>2</sup> at I-710, I-605, SR 91)
Elevated street crossings	15
River crossings	3 (Rio Hondo, LA River, and San Gabriel)
TPSS facilities	17
Maintenance and Storage Facility site	1 (City of Bellflower)

Source: WSP 2023

Notes: <sup>1</sup> Alignment configuration measurements count retained fill embankments as at-grade.

<sup>2</sup> The light rail tracks crossing beneath freeway structures.

The total alignment length of the LPA will be approximately 14.5 miles, consisting of approximately 12.1 miles of at-grade and 2.4 miles of aerial alignment. The LPA will include nine new LRT stations along the WSAB alignment, of which six will be at-grade and three will be aerial. Additionally, the Project will add one new infill station along the C Line at I-105 to allow transfers between the WSAB alignment and the C Line. Five of the stations will include parking facilities, providing a total of 2,796 to 2,826 dedicated transit parking spaces. Four of the parking facilities will be surface lots and the fifth will be a parking structure. The alignment will include 29 at-grade crossings, 4 freeway crossings (3 freeway undercrossings and 1 aerial freeway crossing), 3 river crossings, 15 aerial road crossings, and 6 freight crossings.

In the north, the LPA will begin at the Slauson/A Line Station, which will serve as a transfer point to the Metro A Line via pedestrian bridges. Two pedestrian bridges will connect between the proposed WSAB station platform and the existing A Line platform utilizing stairs and elevators for vertical circulation. Additionally, street level pedestrian access is proposed beneath the station south of Slauson Avenue as well as a pedestrian plaza north of Slauson Avenue connected by a mezzanine level to the platform. Pedestrian access to the existing A Line Station is currently unavailable from north of Slauson Avenue. Stairs, elevators, and escalators are utilized for vertical circulation for station access.

South of the Slauson/A Line Station, the alignment will turn east along the existing La Habra Branch ROW (owned by UPRR) in the median of Randolph Street. The alignment will be on the south side of the La Habra Branch ROW and the freight tracks will be realigned but remain in the northern portion of the ROW. The alignment will transition to an at-grade configuration west of Alameda Street and will proceed east along the Randolph Street median. Wilmington Avenue, Regent Street, and Malabar Street will be closed to traffic crossing the ROW, altering the intersection design to a right-in, right-out configuration. The Pacific/Randolph Station will be located just east of Pacific Boulevard.

From the Pacific/Randolph Station, the alignment will continue east at-grade. Arbutus Street and Rita Avenue will be closed to traffic crossing the ROW, altering the intersection design to a rightin, right-out configuration. At the San Pedro Subdivision ROW, the alignment will transition to an aerial configuration and turn south to cross over Randolph Street and the freight tracks, returning to an at-grade configuration north of Gage Avenue. The alignment will be located on the east side of the existing San Pedro Subdivision ROW freight tracks and the existing track(s) will be relocated to the west side of the ROW. The alignment will continue at-grade within the San Pedro Subdivision ROW to the at-grade Florence/Salt Lake Station south of Florence Avenue.

South of Florence Avenue, the alignment will extend from the Florence/Salt Lake Station in the City of Huntington Park to the Pioneer Station in the City of Artesia, as shown in Figure 2-1. The alignment will continue southeast from the at-grade Florence/Salt Lake Station within the San Pedro Subdivision ROW, crossing Otis Avenue, Santa Ana Street, and Ardine Street at-grade. Otis Avenue would be closed to traffic crossing the ROW. The alignment will be located on the east side of the existing San Pedro Subdivision freight tracks, and the existing tracks will be relocated to the west side of the ROW. South of Ardine Street, the alignment will transition to an aerial structure to cross over the existing UPRR tracks and Atlantic Avenue. The Firestone Station will be located on an aerial structure between Atlantic Avenue and Firestone Boulevard. The Firestone Station will include a dedicated transit parking facility providing 614 parking spaces.

The alignment will then cross over Firestone Boulevard and transition back to an at-grade configuration prior to crossing Rayo Avenue at-grade. The alignment will continue south along the San Pedro Subdivision ROW, crossing Southern Avenue at-grade and continuing at-grade until it transitions to an aerial configuration to cross over the LA River. The LRT bridge will be constructed next to the existing freight bridge. South of the LA River, the alignment will transition to an at-grade configuration crossing Frontage Road at-grade, then passing under the I-710 freeway through the existing box tunnel structure. The alignment will then return to an aerial structure to cross over the Rio Hondo Channel. South of the Rio Hondo Channel, the alignment will transition to an aerial structure to cross over a realigned spur track, Imperial Highway, and Garfield Avenue. South of Garfield Avenue, the alignment will transition to an at-grade configuration and serve the Gardendale Station north of Gardendale Street.

From the Gardendale Station, the alignment will continue south in an at-grade configuration, crossing Gardendale Street and Main Street to connect to the I-105/C Line Station, which will be located at-grade north of Century Boulevard. The alignment will cross over the I-105 freeway in an aerial configuration within the existing San Pedro Subdivision ROW bridge footprint. The alignment will continue at-grade, crossing Century Boulevard. A new Metro C Line Station will be constructed in the median of the I-105 freeway. The I-105/C Line Station will be connected to the new infill C Line Station in the middle of the freeway via a pedestrian walkway on the new LRT bridge. Vertical pedestrian access will be provided from the LRT bridge to the I-105/C Line Station platform via stairs, escalators, and/or elevators. Emergency egress from the C Line infill station will also be provided via Façade Avenue via stairs and elevators. To accommodate the construction of the new station platform, the existing Metro C Line tracks will be widened and,

as part of the I-105 Express Lanes Project, the I-105 lanes will be reconfigured. The I-105/C Line Station will include a dedicated transit parking facility providing 339 to 363 parking spaces.

South of the I-105 freeway, the alignment will continue at-grade within the San Pedro Subdivision ROW. In order to maintain freight operations and allow for freight train crossings, the alignment will transition to an aerial configuration as it turns southeast and enter the PEROW. The existing freight track will cross beneath the aerial alignment and align on the north side of the PEROW east of the San Pedro Subdivision ROW. The Paramount/Rosecrans Station will be located in an aerial configuration west of Paramount Boulevard and north of Rosecrans Avenue. The existing freight track will be relocated to the east side of the alignment beneath the viaduct structure. The Paramount/Rosecrans Station will include a dedicated transit parking facility providing 487 parking spaces.

The alignment will continue southeast in an aerial configuration over the Paramount Boulevard/Rosecrans Avenue intersection and descend to an at-grade configuration. The alignment will return to an aerial configuration to cross over Downey Avenue descending back to an at-grade configuration north of Somerset Boulevard. The Paramount High School pedestrian bridge will be reconstructed to cross over the LPA and freight tracks to connect Paramount High School and the athletics fields. One of the adjacent freight storage tracks at the World Energy facility will be relocated to accommodate the new LRT tracks and maintain storage capacity. There are no active freight tracks south of the World Energy facility.

The alignment will cross Somerset Boulevard at-grade. South of Somerset Boulevard, the atgrade alignment will parallel the existing Bellflower Bike Trail that is currently aligned on the south side of the PEROW. The alignment will continue at-grade crossing Lakewood Boulevard, Clark Avenue, and Alondra Boulevard. The at-grade Bellflower Station will be located west of Bellflower Boulevard. The Bellflower Station will include a dedicated transit parking facility providing 261 parking spaces.

East of Bellflower Boulevard, the Bellflower Bike Trail will be realigned to the south side of the PEROW to accommodate an existing historic building located near the southeast corner of Bellflower Boulevard and the PEROW. The realigned bike trail will then match the existing bike trail east of the historic building near Bellflower Boulevard. The LRT alignment will continue southeast within the PEROW and transition to an aerial configuration at Cornuta Avenue, crossing over Flower Street and Woodruff Avenue. The alignment will return to an at-grade configuration at Walnut Street. South of Woodruff Avenue, the Bellflower Bike Trail will be relocated to the north side of the PEROW. Continuing southeast, the LRT alignment will cross under the SR-91 freeway in an existing underpass. The alignment will cross over the San Gabriel River on a new bridge, replacing the existing abandoned freight bridge. South of the San Gabriel River, the alignment will transition back to an at-grade configuration before crossing Artesia Boulevard at-grade.

East of Artesia Boulevard the alignment will cross beneath the I-605 freeway in an existing underpass. Southeast of the underpass, the alignment will continue at-grade, crossing Studebaker Road. North of Gridley Road, the alignment will transition to an aerial configuration to cross over 183rd Street and Gridley Road. The alignment will return to an at-grade configuration at 185th Street, crossing 186th Street and 187th Street at-grade. The alignment will then pass through the Pioneer Station on the north side of Pioneer Boulevard at-grade. The Pioneer Station will include a dedicated transit parking facility providing 1,106 parking spaces. Tail tracks accommodating layover storage for a three-car train will extend approximately 1,000 feet south from the station, crossing Pioneer Boulevard and terminating north of South Street.

#### 2.1.1.1 Design Option

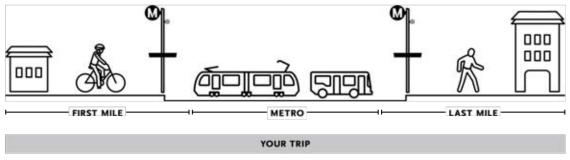
The LPA includes one design option:

• Design Option: Close 186th Street – The design option would close 186th Street but keep 187th Street open to traffic in the City of Artesia. Corby Avenue would be turned into a cul-de-sac with an access driveway for the existing business.

# **3 FIRST/LAST MILE PLANNING**

### 3.1 What is First/Last Mile Planning?

Metro is focused on improving the entire transit experience from door to door. Given that most trips begin or end on foot, it is critical to have safe streets and sidewalks that allow people to connect to transit easily. The first and last part of the journey where riders walk, bike or roll to or from their nearest transit station or bus stop is called the "first/last mile (FLM) connection." Improving FLM connections is part of Metro's commitment to providing outstanding trip experiences for all riders and improving access to Metro's growing transportation network. The captioned diagram below further illustrates FLM, as described by Metro's First/Last Mile Design Guidelines (2021).



\*NOT TO SCALE

"An individual's trip is understood as the entire journey from origin to destination. For transit riders, bus and rail services often form the core of a trip, but riders complete the first and last portion on their own using another mode. Typically, they must first use "active transportation" —walking, biking or rolling—to reach the nearest station from their home or workplace. This is referred to as the first and last mile of the user's trip, or first/last mile (FLM) for short."

#### Source: Metro

FLM Planning is the process by which potential pedestrian and wheeled projects are identified to improve FLM connections for each station within a proposed transit corridor. Metro uses a flexible, data-driven and community-oriented approach to prepare plans that respond to the unique conditions of each station area while strengthening connections to nearby destinations, transit hubs and streets. For each station, a "walk and wheel zone" is analyzed up to one half-mile from the station platform. A broader radius is also analyzed for longer wheel trips (cyclists, scooters, etc.) up to three miles from each station platform.

Following the selection of the Locally Preferred Alternative (LPA) alignment, FLM Planning is underway on the WSAB Project. The next sections present existing conditions, relevant plans and projects, and data analysis findings that serve as the starting point for potential FLM projects along the LPA Corridor.

# 4 EXISTING CONDITIONS ANALYSIS

#### 4.1 Existing Conditions

The Existing Conditions Report presents technical analysis and study findings that will inform potential FLM pedestrian and wheeled projects at each of the 9 LPA stations. This Report is structured to provide a high-level understanding of challenges and opportunities that could improve FLM connections given the existing conditions of each station area. Current planning efforts and projects relevant to FLM access are also identified and could be prioritized as part of Metro's FLM planning process.

Section 5 of this report identifies current planning efforts and projects relevant to FLM access, which could be prioritized as part of Metro's FLM Planning process. The FLM planning team conducted a thorough review of local plans and adopted policies, prior community planning efforts, and funded projects within a half-mile walk and three-mile wheel radius around each station. All plans and projects were transcribed into matrices that describe location and relevancy to WSAB LPA stations.

Section 6 includes analysis maps that illustrate constraints for both walking and wheel conditions. GIS data was collected, mapped and analyzed using the following primary sources:

- Metro's Active Transportation Strategic Plan (2022). Information includes 2020 U.S. Census demographic data, Statewide Integrated Traffic Records System (SWITRS) data, CalEnviroScreen data, as well as data collected from local jurisdictions.
- Active transportation plans and projects at local jurisdictions within 3 miles of the WSAB alignment (see Table 5-2 City and County Plans and Projects)
- United States Forest Service urban canopy GIS data (2018)

Figure 6-1 through Figure 6-12 illustrate the data analyzed for the three-mile wheel access zone. In addition, Appendix B contains the half-mile walk access zone maps showing relevant data analyzed for all nine stations along the LPA.

For more information on Metro's Active Transportation Strategic Plan (ATSP) see <a href="https://www.metro.net/projects/active-transportation-strategic-plan-atsp/">https://www.metro.net/projects/active-transportation-strategic-plan-atsp/</a>

## RELEVANT PLANS AND PROJECTS

## 5.1 Overview

5

This section provides an overview of local plans and adopted policies, prior community planning efforts, and funded projects relevant to FLM access, and located within a half-mile walk and three-mile wheel radius for each of the 9 LPA stations.

Metro and the FLM planning team coordinated requests for planning documents with local jurisdictions listed below, however not all requested information was provided or accessible. Thus, all data reviewed as part of this planning effort was limited based on available information at the time this report was prepared.

- City of Artesia
- City of Bell
- City of Bellflower
- City of Bell Gardens
- City of Cerritos
- City of Cudahy
- City of Downey
- City of Hawaiian Gardens

- City of Huntington Park
- City of Los Angeles
- City of Lynwood
- City of Maywood
- City of Paramount
- City of South Gate
- City of Vernon
- County of Los Angeles

The FLM planning team reviewed existing plans and project documents that varied by level of detail and project-specific information relevant to the FLM planning process. For example, general plans and policies may not specifically inform potential FLM projects that will be proposed later in the FLM planning process. Specific plans and streetscape plans were more relevant for understanding what projects have been considered in the community, had community support, or could extend the impact of potential FLM improvements. Recognizing these plans and projects is helpful for complementing projects, while also preventing duplicative planning when identifying and selecting potential FLM improvements for each station.

The following two matrices summarize plans and projects that were available through public sources or provided directly by an agency or jurisdiction. Table 5-1 Metro and Regional Plans and Projects includes Metro's adopted FLM guidelines, plans and projects, along with regional plans and projects that reach across multiple jurisdictions. Table 5-2 City and County Plans and Projects provides descriptions that focus on relevancy to specific WSAB stations by city. Both matrices include the information listed below:

- Plan or project name
- Description
- Geographic area
- Summary (relevancy to FLM planning)
- Relevance to three-mile wheel zone, half-mile walk zone
- Applicability to WSAB LPA Stations

## Table 5-1. Metro and Regional Plans and Projects – with relevance to multiple station areas

М	letro and Regional Plans and Projects wi	th Relevance to Multiple Station Areas (	3-mile and 1/2-mile)					WSAB LPA Static	ons			
Plan/Project Name, Date	Description	Geographic Area	Summary	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Metro Plans and Projects												
Metro First/Last Mile Strategic Plan March 2014 (Adopted)	Guidelines that outline the First/Last Mile Planning strategy designed to facilitate easy, safe, and efficient access to the Metro system.	Focuses on the 3-mile to half- mile station area	A resource for Metro and public and private organizations throughout the region working to update programs, land- use plans, planning guidelines, business models, entitlement processes, and other tools that take advantage of LA County's significant investment in the public transportation network.	x	x	х	x	x	Х	x	x	x
Metro Active Transportation Strategic Plan 2016 (Adopted update expected 2023)	The ATSP will serve as Metro's overall strategy for funding and supporting implementations of active transportation infrastructure and programs in Los Angeles County	LA County	Plan identifies strategies to improve and grow the active transportation network to increase person travel options and in intended to provide guidance to Metro and partner organizations including local jurisdictions, regional government, and other stakeholders.	x	x	x	x	x	X	x	x	x
Metro First/Last Mile Guidelines May 2021	Guidelines describe the process by which LA Metro and local jurisdictions partner in the planning, design, and construction of FLM improvements for new rail transit and BRT corridor projects.	LA County		x	x	X	x	x	X	X	x	x
Metro West Santa Ana Branch Transit Oriented Development Strategic Implementation Plan May 2019	The TOD SIP provides an overarching vision and strategic guidance for local WSAB jurisdictions to use as a reference as they develop and implement their own plans, policies and economic development and mobility strategies in the 12 station areas along the alignment.	20-mile route, from Downtown Los Angeles to the City of Artesia. 12 station areas in total	Plan provides early station analysis and typologies that could feed into the FLM existing conditions analysis.	X	x	X	x	x	X	X	X	X
Metro Transfers Design Guide March 2018	This guide builds upon Metro's FLM Strategic Plan and recently funded FLM improvement efforts to improve access to transit and create more seamless trips for customers from start to finish.	LA County	Provides a user-friendly "Design Checklist" and flexible "Design Toolbox" that can be used to access and develop improvements for a range of transit conditions.	x	x	X	x	x	X	X	x	X

Ме	etro and Regional Plans and Projects wi	th Relevance to Multiple Station Areas (	3-mile and 1/2-mile)				,	WSAB LPA Statio	ons			
Plan/Project Name, Date	Description	Geographic Area	Summary	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Metro Blue Line FLM Plan (A Line) April 2018 (Adopted)	Metro Blue Line FLM Plan summarizes the results of the walk audit and community outreach process. It aims to identify the broadest possible range of community-supported, community-identified first/last mile needs.	Downtown Los Angeles to Downtown Long Beach	Reinforces already proposed projects, and suggests new projects to address issues that may have developed since the initial evaluation of existing conditions. Plan also proposes projects that will enhance the Rail to River bike path (now under construction). Proposes projects that will enhance the transfer experience between WSAB and A Line.	X								
Metro Rail to Rail Active Transportation Corridor - Segment A Documentation for a Categorical Exclusion April 2017 (Under Construction)	The purpose of this document is to provide support for a Categorical Exclusion. The project consists of on- and off- street bicycle and pedestrian/multi-purpose paths within existing street and railroad rights-of-way (ROW).	Segment A bicycle and pedestrian path is a 6.4-mile corridor, extending from Crenshaw/LAX Fairview Heights LRT Station (under construction) through the City of LA, Florence- Firestone (LA County) to Alameda St	Reinforces already proposed projects, and suggests new projects to address issues that may have developed since the initial evaluation of existing conditions. Plan also proposes projects that will enhance the Rail to River bike path (now under construction). Proposes projects that will enhance the transfer experience between WSAB and A Line.	X								
Metro Rail to Rail/River Active Transportation Corridor Project - Alternatives Analysis Segment B May 2017	The Rail to Rail Active Transportation Corridor (ATC) Project is a 5.6-mile-long segment of the Metro owned Harbor Subdivision rail right-of- way located in South LA and east of Segment A. To reduce the high rate of accidents between vehicles and pedestrians or cyclists between the Metro Blue Line Slauson Station and LA River.	Segment B study area is South LA County, north of Gage Ave, east of Long Beach Ave, south of 26th St, and west of LA River in or near Florence-Firestone (LA County) Huntington Park, Vernon, Maywood, and Bell	Metro-owned pedestrian and bike facility is under construction as of Summer 2022; estimated completion 2023-24. Potential FLM projects should refer to Metro construction documents and coordinate with Metro's R2R PM.	X	x							
Rail to River Segment B Supplemental Alternatives Analysis (SSA) June 2022	The project aims to improve mobility and connectivity for local communities by providing a safe, comfortable, and continuous active transportation route that connects Segment A at the Metro A Line (Blue) Slauson Station to the LA River path.	Project area covers a 4.3 square- mile area between the Metro A Line Slauson Station and the LA River	Rail to River Segment B Supplemental Alternative Analysis (SAA) studied a re- evaluation of Randolph Street as the LPA and/or identified and studied other potential active transportation alternatives. An LPA has not been chosen yet.	X	x							

M	etro and Regional Plans and Projects wi	th Relevance to Multiple Station Areas (	3-mile and 1/2-mile)				١	WSAB LPA Statio	ons			
Plan/Project Name, Date	Description	Geographic Area	Summary	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Metro LA River Path Feasibility Study December 2017	Feasibility study of an 8-mile- long river bike path from to complete the gap in the LA River Bicycle Path, which concludes that the path is feasible if designed in top of bank, channel cut, channel bottom and cantilevered locations as required by local conditions.		Reach 5 (Bandini Blvd to Atlantic Ave) in Vernon would consist of channel cut, channel bottom and/or cantilevered segments.	x	x							
Regional Plans and Projects												
Gateway Cities COG, Strategic Transportation Plan March 2016	Intended to help the Gateway Cities understand a complex travel market, build upon prior regional analysis, understand project interrelationships, think strategically about multimodal transportation investment, and obtain funding for strategic transportation investments.	Gateway Cities, including Artesia, Bell, Bellflower, Bell Gardens, Carson, Cerritos, Commerce, Compton, Cudahy, Downey, Hawaiian Gardens, Huntington Park, Lakewood, Long Beach, Maywood, Norwalk, and Paramount	Active Transportation Plan shows collisions, existing bikeways, proposed regionally significant bicycle facilities, of which all on-street bikeways within 3 miles of WSAB stations are on arterial streets and are listed as Class II/III or Class III.		x	X	x	x	X	X	x	x
Gateway Cities COG, Artesia Boulevard Complete Street Master Plan Evaluation Report 2017	Outlines concepts developed to assist in creating a more attractive, livable and pedestrian/bicycle friendly Corridor that operates effectively and efficiently for all modes of transportation.	Artesia Blvd through Compton, Long Beach, Bellflower, Cerritos and Artesia	Presents each city's goals for its segment, designations that respond to those goals (Downtown Lifestyle, Urban Activity, Residential Calming, Principal Route). Illustrative cross sections/plans show how bike lanes or path could be accommodated in each designation. Focus area cross sections show Class II lanes or Class I path in several locations, but it is unclear whether lanes are feasible elsewhere.							X	x	X
Gateway Cities COG, Atlantic Corridor Complete Street Evaluation Report and Master Plan, July 2021	Outlines concepts developed to assist in creating a more attractive, livable and pedestrian/bicycle friendly Corridor that operates effectively and efficiently for all modes of transportation.	Atlantic Ave through Long Beach, Compton, East Rancho Dominguez (unincorporated county), Lynwood, South Gate, Cudahy, Bell, Maywood, Vernon, Commerce and East Los Angeles	illustrative cross sections that include Class II bike lanes. However, Illustrative cross sections/plans of "focus areas" show Class II bike lanes only in segments					X	X	X		

M	etro and Regional Plans and Projects wi	th Relevance to Multiple Station Areas	(3-mile and 1/2-mile)				,	WSAB LPA Stati	ons			
Plan/Project Name, Date	Description	Geographic Area	Summary	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Gateway Cities COG, Florence Complete Street Final Report, March 2022	Outlines concepts developed to assist in creating a more attractive, livable and pedestrian/bicycle friendly Corridor that operates effectively and efficiently for all modes of transportation.	Florence Ave through Huntington Park, Walnut Park (unincorporated county), Bell, Cudahy, Bell Gardens, Downey, and Santa Fe Springs	Applies same designations with illustrative cross sections that include Class II bike lanes. However, Illustrative cross sections/plans of "focus areas" show bike lanes only in segments in Bell, Bell Gardens and Downey.	x	x	X						
Gateway Cities COG, Lakewood-Rosemead Complete Street Master Plan Evaluation Report, February 2020	Outlines concepts developed to assist in creating a more attractive, livable and pedestrian/bicycle friendly Corridor that operates effectively and efficiently for all modes of transportation.	Lakewood Blvd from Long Beach to Pico Rivera through Lakewood, Bellflower, Paramount, and Downey	Does not indicate where Class II or higher quality facilities are feasible.					x	x	X	x	

## Table 5-2. City and County Plans and Projects – with relevance to multiple station areas

	City and County Plan	ns and Projects with Relevance to (3-mile and 1/2-mile)	o Multiple Station Areas						W	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
City of Artesia				ł				1						
Artesia Boulevard Corridor Specific Plan, December 2011	The Specific Plan establishes a new vision for a 21-acre area along Artesia Boulevard, between Gridley Road and Pioneer Boulevard.	Artesia Blvd from Gridley Road to Pioneer Blvd	No bicycle facilities are proposed.	x										x
Downtown Design Guidelines, April 2009	The Artesia Downtown Design Guidelines focuses on creating a pedestrian friendly human scale environment that encourage the use of high-quality materials and the incorporation of details that establishes a unique sense of place.		Architectural guidelines will help support pedestrian activity and FLM objectives.		X									x
Community Design Guidelines, Revised Finalized Draft 2006	Architectural design guidelines.	Citywide	Not applicable to FLM Planning											x
Housing Element Update, 2021-2029	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Pending certification by California HCD (as of Oct 2022). Will need to confirm with city staff (during outreach process) if new housing sites fall within half-mile area.											x
City of Artesia, Artesia Active Transportation Plan, 2022 (Adopted)	Summarizes relevant background information, community outreach, and recommended projects, programs and actions to "provide safer and enjoyable streets for all residents and visitors."	Citywide	Includes speed limits, existing and proposed bikeways, collisions, bike use, prioritized bikeway projects, and diagrammatic plans demonstrating project feasibility.	x	x									x

	City and County Plan	s and Projects with Relevance to (3-mile and 1/2-mile)	Multiple Station Areas						WS	SAB LPA Station	s			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Artesia Local Roadway Safety Plan, Final 2022	Identifies factors in the transportation network that inhibit safety for all roadway users; recommends measures to improve safety at specific high-crash locations and to reduce serious injury and fatal collisions.	Citywide	<ul> <li>Identifies/analyzes:</li> <li>Artesia Blvd, Pioneer Blvd and 183rd St as "priority corridors" with 183rd St highlighted due to high vehicle, pedestrian and bicycle traffic</li> <li>collisions by type</li> <li>high collision intersections and segments</li> <li>case studies of 5 locations</li> </ul>	x	x									x
Pioneer Blvd Bicycle Improvements ATP Cycle 6 Application (Not funded)	Proposed Class IV bike lanes from 166th St to 183rd St and Class III route from 183rd St to WSAB, consistent with the City's Active Transportation Plan.	Pioneer Blvd WSAB to 166th St	References plans and cross sections in the Artesia ATP for design of proposed bicycle facilities.	x	x									x
Pioneer Blvd Street Signing and Striping Plans (183rd- 186th Street)	Proposed update to Pioneer Downtown Revitalization Project	Pioneer Blvd between 183rd and 186th Streets	Proposed 2022 Street Signing and Striping Plans for Pioneer Boulevard between 183rd and 186th to narrow the center median, install a dedicated northbound right-turn lane, and revised lane striping alignment through the intersection of Pioneer Boulevard and 183rd Street		x									x
Mixed-Use Overlay Zone, January 2023	Administrative Draft Initial Study for a supplement to the city's 2030 General Plan EIR	Pioneer Blvd commercial area in the north-south direction between 166th and South, and in the east- west direction between Gridley and Clarkdale.	Creates a mixed-use overlay zone in 3 areas along Pioneer Blvd that allows up to 3, 5 and 7-story buildings that transition down to residential neighborhoods with 2 sub-areas.		x									x

	City and County Plar	ns and Projects with Relevance (3-mile and 1/2-mile)	to Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
City of Bell														
City of Bell Draft 2030 General Plan, 2016 (Adopted)	Provides policies and programs to guide land use, housing and mobility.	Citywide	Reinforces need to connect to regional transit and promote sustainability. Highest employment is in manufacturing and wholesale (US 2012 Census). Florence Avenue Area Plan is within half-mile station area. New development projects shall promote walkable streets & bicycling. Circulation Element classifies streets, provides average daily traffic (ADT) and level of service (LOS) for arterials, Complete Streets policies, and bicycle master plan routes.	X	X			x						
City of Bell 2030 Housing Element	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Adopted and HCD certified (as of Oct 2022). Confirm with city staff during outreach process if new housing sites fall within half-mile area.					х						
City of Bell, Bell Bicycle Master Plan, 2016 (Draft)	Provides detailed recommendations for infrastructure, policies and programs that promote safe bicycling in the City of Bell.	Citywide	Includes existing and proposed bikeways and traffic calming devices, collisions, and community input.	x	x			x						
City of Bell Gardens														
City of Bell Gardens General Plan, 1995 (Adopted)	Provides policies and programs to guide land use, housing and mobility.	Citywide	Circulation Element includes street classifications, arterial street ADT and LOS, and policies to promote transit use, walking and bicycling.	x					х					
Bell Gardens Housing Element, 2021-2029	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Adopted Feb 2022 and HCD certified Aug 2022.						x					

	City and County Plan						WS	SAB LPA Station	s					
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Complete Streets Plan, 2020	Proposes measures to enable streets to safety accommodate the needs of all uses, focusing on pedestrians, bicyclists and transit riders, as well as motorists.	,	Evaluates existing conditions, including collisions; proposes Class II and Class III bikeways and a "low- stress network" of 15 local streets for slower-moving modes, with proposed elements to reduce vehicle speed and cut-through traffic and improve safety. Proposed Class II lanes on Florence Place and segments of Garfield Avenue, Eastern Avenue, and Scout Avenue.	x					x					
Bike Feasibility Study, 2015	Initial analysis of the feasibility of adding bicycle facilities on major roadways.	Citywide	Highlights Eastern Avenue, Florence Avenue, Florence Place, Garfield Avenue, and Gage Avenue as potential bikeway corridors on which to install substantial bicycle facilities.	x					х					
Bell Gardens Complete Street Improvements ATP Cycle 6 Application (Funded)	Highest ranked application; recommended funding: \$2.96 million.	Unknown	Request details from City staff (during outreach process) and determine if project extents fall within the 3-mile station area.	;					x					
City of Bellflower			•							•				
The Downtown Bellflower Transit Oriented Development Specific Plan, October 2019	Provides " a regulatory framework for the downtown Bellflower area that includes customized land uses and development standards, provides expanded multimodal transportation choices and identifies locations for future development potential"	south, Clark Ave on the	Proposes 2.5 miles of Class III Bike Boulevard on Flower Street, identifies multimodal mobility improvement and future transit and pedestrian connections, recommends policies to support active transportation, as well as relevant background data and community input.	x	X								x	
City of Bellflower Housing Element, 2021-2029	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Adopted and in compliance per HCD as of Oct 2022. Confirm with city staff during outreach process if new housing sites fall within half-mile area.										x	
City of Bellflower Circulation Element Update Final Report, 1997	"Presents information on how to provide a safe, effective, and efficient transportation system."	Citywide	Circulation Element includes street classifications, arterial street ADT and LOS, and policies to promote transit use, walking and bicycling.	х	X								x	

	City and County Plar	ns and Projects with Relevance t (3-mile and 1/2-mile)	to Multiple Station Areas						W	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Cities of Bellflower and Paramount, Bellflower- Paramount Active Transportation Plan, June 2019 (Adopted)	Provides "planning guidance to increase safety for all roadway users and to identify improvements that make multi-modal transportation safe and enjoyable."	Citywide: Bellflower and Paramount	Identifies an integrated network of walkways and bikeways, a prioritized list of projects, safe routes to school improvements, end-of-trip facilities, and recommended policies to support active transportation, as well as relevant background data and community input.	x	x							x	x	
City of Cerritos														
City of Cerritos General Plan, January 2004 (Adopted)	Provides policies and programs to guide land use, housing and mobility.	Citywide	Adopted plan is 19 years old so some sections are outdated. Circulation Element includes street classifications, arterial street ADT and LOS, and a bikeway map.	x										x
City of Cerritos Housing Element Update, 2021-2029	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Adopted and HCD certified (Sep 2022). Confirm with city staff during outreach process if new housing sites fall within half-mile area. TOD Housing Program will offer low- interest loans as gap financing for rental housing developments with affordable units.											x
City of Cerritos Bikeways Map, 2018	Map of existing and future bikeways.	Citywide	Updates Bikeways Map in 2004 General Plan.	Х										X
City of Los Angeles						,	,							
Los Angeles General Plan - Housing Element, 2021-2029	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Transit Opportunity Corridors and TOC high-opportunity areas noted as significant potential. Confirm with staff any notable new/proposed housing projects within half-mile area.			x								
Mobility Plan 2035, 2016 (Adopted)	"Policy foundation for achieving a transportation system that balances the needs of all road users."	Citywide	Establishes roadway classifications, pedestrian districts, neighborhood network (slow-speed network of local- serving streets), transit network, bicycle networks, vehicle network, and goods movement; adopts Complete Streets Design Guide.	X	x	x								

	City and County Plar					WS	AB LPA Station	s						
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
City of LA Complete Streets Design Guide, 2016 (Adopted)	"Lays out a vision for designing safe, accessible and vibrant streets for all users - pedestrians, bicyclists, transit riders, and motorists."	Citywide	Establishes cross sections by street classification and provides examples of how roadway width can be allocated depending on roadway function, and guidance for design of sidewalks and roadways.	x	x	x								
Southeast Los Angeles Community Plan, 2017 (Adopted)	Outlines a vision and actions for long-term development, economic revitalization and community enhancement.	Relevant plan area: North of Slauson Ave, west of Alameda	Includes action to establish TOD district plans. Land uses and density may be superseded by city's recently adopted Housing Element.		x	x								
Los Angeles Vision Zero (2018 Action Plan + Progress Report)	Launched in 2015 to reduce traffic deaths by 2025, the program is evaluated through 2017 and outlines upcoming initiatives.	Citywide	Confirm with staff during outreach process any planned VZ projects in half-mile or 3-mile Slauson station area.			x								
Slauson Corridor Transit Neighborhood Plan Executive Summary of Preliminary Draft Plan, March 2022	Lays out "plans for green jobs, expands affordable housing opportunities, and promotes path-oriented building design next to LA Metro's future Rail to Rail Active Transportation Corridor"		Development standards will help support pedestrian activity and FLM objectives.		x	x								
Active Streets LA (ASLA)	Concept plan for pedestrian and bicycle improvements	Exposition Blvd, Main St,	Includes sharrow markings and traffic calming measures for Class III routes on 42nd St, 51st St, and 60th/59th St.	х		x								
Walk Bike Watts TCC Grant Application, 2022	Recently funded grant application that includes several bikeway improvements	Area bounded by Western Ave, 62nd St, Central Ave, and Vernon Ave	Proposed two-way cycle tracks on Graham Ave and Grandee Ave and "other bicycle facility" on 103rd St. These are not shown on the Mobility 2025 networks and have been added to planned/proposed FLM network.	x		x								
Avalon Boulevard Class II and IV Bikeways	Striping plans	Jefferson Blvd to 120th St	Completed; shown as existing on FLM network.	Х		X								
South Broadway Parking Protected Bike Lanes (Class IV)	Striping plans	Manchester Ave to 117th St	Completed; shown as existing on FLM network.	x		x								
Central Ave Protected Bike Lanes (Class IV)	Listed as "in progress" by LADOT	1st St to Martin Luther King Blvd	Have requested information re: design and timing from City staff.	Х		X								

	City and County Plan	s and Projects with Relevance to (3-mile and 1/2-mile)	Multiple Station Areas						V
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone
Martin Luther King Blvd Protected Bike Lanes (Class IV)	Listed as "in progress" by LADOT	Central Ave to Obama Blvd	Have requested information re: design and timing from City staff.	x		x			
Main St Bike Lanes (Class II)	Listed as "in progress" by LADOT	Mission St to Imperial Hwy	Have requested information re: design and timing from City staff.	х		x			
39th St Bike Enhancements	Listed as "dormant" by LADOT	Grand Ave to Figueroa St	Shown on Mobility 2035 Neighborhood Network and, therefore, on planned/proposed FLM network.	x		x			
91st St Bike Lanes (Class II)	Listed as "dormant" by LADOT	Avalon Blvd to Central Ave	Have requested information re: design and timing from City staff. Mobility 2025 Neighborhood Network shows lanes on 92nd St.	x		x			
Vermont Ave Protected Bike Lanes (Class IV)	Listed as "dormant" by LADOT	Gage Ave to 74th St	Shown on Mobility 2035 Neighborhood Network and, therefore, on planned/proposed FLM network.	x		x			
County of Los Angeles (Unincorpo	orated Florence-Firestone, Walnut Pa	rk, Lynwood Island, East Compt	on, and Rancho Dominquez)				•	•	
Los Angeles County General Plan, 2015 (Adopted)	Provides policies and programs to guide land use, housing and mobility.	Unincorporated areas of Los Angeles County	Land use and housing may be superseded by County's recently adopted Housing Element. Mobility Element provides street classifications, LOS and policies to ensure comfortable walking and bicycling environments where appropriate.	x		x			
County of Los Angeles Housing Element 2021-2029	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the County can meet housing needs of residents, current and future, through 2029.	Unincorporated areas of Los Angeles County	Confirm with staff during outreach process any notable new/proposed housing projects within half-mile area.			x			
Florence Firestone Community Plan September 2019	Policy document for future development, conservation and maintenance of Florence- Firestone community.	Relevant plan area: South of Slauson Ave, east of Wilmington Ave	Land use and housing may be superseded by County's recently adopted Housing Element.			x			

WS	AB LPA Station	S			
ie	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer

	City and County Plan	is and Projects with Relevance ( (3-mile and 1/2-mile)	to Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
County of Los Angeles Bicycle Master Plan Final, 2012	"A vision for a diverse regional bicycle system of interconnected bicycle corridors, support facilities, and programs to make bicycling more practical and desirable to a broader range of people."	Unincorporated areas of Los Angeles County	Documents existing bicycle network, major transit stations and bicycle crashes and proposed prioritized bicycle facilities by Planning Area. Florence-Firestone and Walnut Park (Metro Planning Area) and Lynwood Island, East Compton, and Rancho Dominquez (Gateway Planning Area) are within 3 miles of WSAB stations.	x	X	x	x							
Metro A Line Connections for Unincorporated Los Angeles County, ATP Cycle 6 Application (Funded)	Seconded highest ranked application; recommended funding: \$9.9 million (total project cost \$12.3 million).	Specific locations unknown	Request details from County staff during outreach.		X	x								
City of Cudahy		1					1		1					
Cudahy 2040 General Plan March 2018 (Adopted)	Provides policies and programs to guide land use, housing and mobility.	Citywide	Circulation Element includes street classifications, LOS for arterials, proposed bikeways (shown in more detail in SRTS plan), street improvements (including Salt Lake Ave cul-de-sacs and Otis pocket park), and other Complete Street and streetscape treatments. The land use and housing may be superseded by the City's recently adopted Housing Element.	x	X			X	X					
City of Cudahy 6th Cycle Housing Element Update February 2022	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the County can meet housing needs of residents, current and future, through 2029.	Citywide	Confirm with staff during outreach process any notable new/proposed housing projects within half-mile area.					х	x					
City of Cudahy Local Road Safety Plan and Program August 2022 (Draft)	Identifies factors in the transportation network that inhibit safety for all roadway users; recommends measures to improve safety at specific high-crash locations and to reduce serious injury and fatal collisions.		Document collisions by type; recommends improvements at 9 intersections, including measures to improve pedestrian and bicycle safety.	x	X			X	x					

	City and County Plan	s and Projects with Relevance to (3-mile and 1/2-mile)	Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Cudahy Safe Routes to School Plan January 2015 (Adopted)	"A comprehensive approach tomake it safer for students to walk and bicycle to school, and to increase the number of students walking and bicycling to school."	Citywide	Documents collisions by type, current commute mode and routes, outreach, and recommended improvements, including bikeways for which illustrative plans are provided.	x	х			х	x					
City of Downey														
Vision 2025 General Plan January 2005 (Adopted)	Provides policies and programs to guide land use, housing and mobility.	Citywide	Land use and housing may be superseded by City's recently adopted Housing Element. Circulation Element includes street classifications, arterial street ADT and LOS, and policies to promote transit use, walking and bicycling.	x	x					x				
Rancho Los Amigos South Campus Specific Plan June 2021	Provides development standards, design guidelines and land use regulations for the former long-term care facility, including pedestrian and bicycle improvements.	Rancho Los Amigos South Campus located adjacent to and within half-mile of the Gardendale Station	Proposes Class II bicycle lanes between Gardendale St and Imperial Hwy to connect to Rives Ave on the east and Old River School Rd on the west. Pedestrian improvements like sidewalk widening and intersection improvements are proposed along Erickson in the north-south direction and Flores St/Consuelo St in the east- west direction the key ingress/egress points to the campus.	x	x					x				
City of Downey 2021-29 Housing Element Aug 2022 (Revised/Adopted)	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Request details from City staff (during outreach process) to confirm any notable new/proposed housing projects within half-mile station area.											
Biomedical Facilities Overlay Zone and development Regulations May 2018	Document " sets out Zoning Ordinance text, map and General Plan text amendments necessary to implement the new biomedical land use program"	Citywide	Proposes a biomedical overlay to the Rancho Los Amigos south campus rezoning the property from single- family residential to hospital-medical- arts zone.		x					x				

	City and County Plan	s and Projects with Relevance to (3-mile and 1/2-mile)	Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Walk Downey Active Transportation Plan, 2021	Primary goals of the Active Transportation Plan are to provide safe, efficient, and connected network of multi- modal transportation facilities that residents and stakeholders can enjoy for a variety of purposes.	Citywide	Identifies bicycle and pedestrian projects throughout the city, including several changes to the 2015 Bicycle Master Plan network.	x	X					x				
City of Downey Local Road Safety Plan (LRSP), 2022	Identifies factors in the transportation network that inhibit safety for all roadway users; recommends measures to improve safety at specific high-crash locations and to reduce serious injury and fatal collisions.	Citywide	Documents collisions by type; recommends improvements at 9 intersections. Measures to improve pedestrian and bicycle safety including Class II bike lanes with road diet on Old River School Rd, Brookshire Ave, and Foster Rd. References 2015 Bicycle Master Plan.	x	Х					x				
Downey Bicycle Master Plan, 2015 (Adopted)	Identifies existing and proposed bicycle facilities that create a citywide bicycle network.	Citywide	Documents bicycle collisions, land use and destinations; provides proposed cross sections or plans of several planned bikeways.	х	Х					x				
South Downey Safe Routes to School Phase II ATP Cycle 6 (Not funded)	This project is phase two of the ATP Cycle 2 Program that was awarded to the City of Downey for the Safe Routes to School Project.	Within South Downey: Brunache St, Laura St, Nada St, Pomering Rd, Quoit St, Lankin St, Orizaba Ave, Gneiss Ave, Devenir Ave, Blodgette Ave & Premiere Ave	Safety education program component & construction of sidewalk, crosswalk and curb ramps											
Greenway Traffic Circle Improvement Project ATP Cycle 6 (Not funded)	Improvements are proposed to enhance primarily pedestrian intersection safety and secondarily Class III bikeway safety.	Rives Avenue and Phlox Street	Bulb-out with directional curb ramps, enhanced crosswalks, signage, landscaping, shade & bioswales (70 percent pedestrian; 30 percent bicycle).	x						x				
City of Hawaiian Gardens												,		
City of Hawaiian Gardens General Plan January 2010 (Adopted)	Provides policies and programs to guide land use, housing and mobility.	Citywide	Land use and housing may be superseded by City's recently adopted Housing Element. Circulation Element includes street classifications, arterial-arterial intersection traffic volumes and LOS, and policies to promote pedestrian and bicycle safety.	x										

	City and County Plan	s and Projects with Relevance to (3-mile and 1/2-mile)	o Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
City of Hawaiian Gardens Housing Element, July 2022 (Draft)	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the County can meet housing needs of residents, current and future, through 2029.	Citywide	Not yet certified by HCD as of Oct 2022. Confirm with staff during outreach process any notable new/proposed housing projects within 3-mile wheel zone.											
City of Hawaiian Gardens Bikeway Map 2012	Map of existing and proposed bikeways.	Citywide	Existing and proposed bikeways shown on map have been added to FLM network. City has received 2022 ATP funding for a Bicycle Master Plan.	x										x
City of Huntington Park									,	·			1	
City of Huntington Park 2030 General Plan	Provides policies and programs to guide land use, housing and mobility.	Citywide	Land use and housing may be superseded by City's recently adopted Housing Element. Circulation Element includes street classifications and policies to promote transit use, walking and bicycling.	x	x	x	x	x						
Downtown Huntington Park Specific Plan August 2008	Aimed to create a unique and identifiable Downtown that is economically vibrant and a pedestrian-oriented district.	North-South: Randolph St to Florence Ave. East- West: Seville Ave to Rugby Ave, plus Zoe Ave extension to Miles Ave	Downtown is model of pedestrian- oriented district. Confirm with staff during outreach process any notable developments and enhancement proposed for this station-adjacent zone.		x		x							
City of Huntington Park 2021- 2029 Housing Element (Nov 2021 Draft)	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Not yet certified by HCD as of Oct 2022. Confirm with staff during outreach process any notable new/proposed housing projects within half-mile area.			x	x	x						
City of Huntington Park Bicycle Transportation Master Plan February 2014	Identifies existing and proposed bicycle facilities that create a citywide bicycle network.	Citywide	Documents bicycle collisions, land use, destinations, traffic volumes, transit use, and community outreach; prioritizes proposed bikeways based on regional significance, destinations, collisions, public input, transit access and feasibility.	X	x	x	x	x						

	City and County Plan	ns and Projects with Relevance to (3-mile and 1/2-mile)	o Multiple Station Areas						WS	SAB LPA Station	s			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Local Roadway Safety Plan Project for City of Huntington Park December 2021	Identifies factors in the transportation network that inhibit safety for all roadway users; recommend measures to improve safety at specific high-crash locations, reduce serious injury and fatal collisions.	Citywide	Documents collisions by type; recommends improvements at 14 high-collision intersections.	x	x	x	x	x						
Huntington Park Linear Greenway Project Plans November 2019	Completed greenway with a multi-use path running north- south between Santa Ana St to Walnut St, crossing 9 east- west collector streets with marked crosswalks but no traffic control devices.	Santa Ana St to Walnut St on transmission right-of- way	Greenway has been added to FLM network as an existing Class I facility.	x	x			x						
City of Huntington Park Engineering and Traffic Survey February 2019	Documents ADT, posted speed, 85th percentile speed and recommended speed on arterial streets.	Citywide arterials only	Posted speeds will be used to inform FLM network recommendations for arterial streets.	х	Х	x	x	x						
Uncontrolled Crosswalk and Safety Enhancement Improvement, ATP Cycle 2 Plans Completed in 2021	Pedestrian improvements	Pacific Blvd from 52nd Street to Gage Ave; Soto Street at 57th & Clarendon Ave; Gage Ave from Regent St to Bissell St; Intersection of Saturn Ave and Hood; Intersection of Florence Ave and Bissell St	bulb outs, high visibility crosswalks, street lighting.		X		x	x						
ATP Cycle 3 - Project Plans, Under Construction	Pedestrian improvements	Various locations citywide	Proposed improvements include curb extensions, access ramps, Hawk pedestrian parking and crossing beacons, bulb outs, high visibility crosswalks, street lighting.		x	x	x	x						

	City and County Plan	s and Projects with Relevance to (3-mile and 1/2-mile)	Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Huntington Park Bicycle and Pedestrian Safety and Connectivity Project ATP Cycle 4, Project Application Under Design	The project will create a network of four complete streets boulevards with pedestrian safety and Class III bicycle improvements, as well as downtown pedestrian- focused area.	Gage, Saturn, Florence, Miles, Pacific, Santa Fe and Florence Ave	Combination of wheel and pedestrian projects, including 33,317 LF of Class III bicycle routes on Saturn Ave (collector street) and on Gage, Miles and Florence avenues (high volume arterial streets). As such, will not be shown on FLM network. At the half mile pedestrian improvements including sidewalk enhancements, signal modifications, zebra crosswalks, ped scale lighting, wayfinding signage street trees and benches.	x	X		x	X						
Huntington Park's Safe Routes and Childhood Obesity Project ATP Cycle 5, Project Application Waiting for CTC approval for the design phase	The project builds off previous safety initiatives and targets persistent concerns along Gage Avenue, where ten ramp improvements and 600 lineal feet of sidewalk replacement will improve safety and encourage active transportation for ten schools along Gage Ave.	Gage Ave from Wilmington Ave to Salt Lake Ave; State St from Randolph St to Florence Ave; California Ave from Florence Ave to Cudahy St; Florence Ave at Bissell St	Projects include pedestrian 106 ramp improvements, HAWK pedestrian crossing beacons, pedestrian scramble and signal improvements, placemaking infrastructure, and 7,684 lineal feet of sidewalk repair and replacement		x		x	X						
City of Lynwood										ļ ļ				
City of Lynwood General Plan, August 2003	Provides policies and programs to guide land use, housing and mobility.	Citywide	Land use and housing may be superseded by City's updated Housing Element. Circulation Element includes street classifications, arterial ADT and LOS and policies to promote transit use, walking and bicycling.	x					x		x			
Lynwood Transit Area Specific Plan, March 2019	Comprehensive plan for development of the area around the Lynwood Green Line station at I-105 and Long Beach Blvd., including bicycle improvements.	Area around the I-105/C Line station at I-105 Fwy and Long Beach Blvd	Proposes refinements to the proposed bikeway network in the 2013 Bicycle and Pedestrian Transportation Plan, including buffered Class II lanes on Imperial Hwy., Class IV lanes on Long Beach Blvd., and a continuous Class I path along the I-105.	x					x		x			

	City and County Plan	s and Projects with Relevance to (3-mile and 1/2-mile)	o Multiple Station Areas						W	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
City of Lynwood 2021-2029 Housing Element, February 2022 (Final Draft)	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Not yet certified by HCD as of Oct 2022. Confirm with staff during outreach process any notable new/proposed housing projects within 3-mile wheel zone.											
Lynwood Bicycle and Pedestrian Transportation Plan January 2013	Proposes an extensive network of streets designed to be safe and comfortable for bicyclists and improvements to key intersections considered unsafe for pedestrians.	Citywide	Documents bicycle collisions, land use, destinations, and community outreach; identifies proposed bikeways, including descriptions of required improvements,	x										
City of Maywood		1												
Maywood General Plan, 2003	Circulation Element defines "a safe, efficient and adequate circulation systemthat responds to all circulation needs" and includes "cars, buses, trucks, trains, bicycles, ridesharing, and walking."	Citywide	Circulation Element includes street classifications, policies to promote transit use, walking and bicycling and a Master Plan of Bikeways consisting of a network of Class III bicycle routes.	x										
Maywood General Plan, Housing Element	Provides policies and programs to guide land use, housing and mobility.	Citywide	Land use and housing may be superseded by City's updated Housing Element.											
Community General Plan Update - Housing Element, 2021-2029	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Not yet certified by HCD as of Oct 2022. Confirm with staff during outreach process any notable new/proposed housing projects within 3-mile wheel zone.											
City of Paramount														
Paramount General Plan 2021-2029 Housing Element, December 2022	The 2021-2029 Housing Element is the sixth update and describes goals, policies, and programs to ensure the City can meet housing needs of residents, current and future, through 2029.	Citywide	Certified by HCD in Oct 2022. Confirm with staff during outreach process any notable new/proposed housing projects within half-mile.		x						x	x		

	City and County Plar	is and Projects with Relevance to (3-mile and 1/2-mile)	o Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Paramount General Plan 2021-2029 Health & Safety Element, March 2022	Establishes goals and policies to assure health and safety from natural and manmade hazards.	Citywide	Includes policies for urban heat island effects, tree canopy and urban forest	x							х	x		
Paramount General Plan 2021-2029 Environmental Justice Element, February 2022	Establishes goals and policies to address equity and environmental justice in disadvantaged communities.	Citywide	Includes policies to promote alternative transportation modes, trees and green buffers, physical activity, access to parks/grocery stores/community services.	x	x						х	x		
Paramount General Plan, August 2007 (Adopted)	Provides policies and programs to guide land use, housing and mobility.	Citywide	Land use and housing may be superseded by County's recently adopted Housing Element. Circulation Element includes street classifications, arterial ADT and LOS and policies to promote transit use, walking and bicycling.	x	x						x	x		
North Paramount Gateway Specific Plan, October 2021 (Final)	Comprehensive plan for development of the North Paramount Gateway area, which will be served by two WSABTC stations.	Area along Paramount Blvd between Rosecrans Ave and I-105 within half- mile of both the Paramount Rosecrans and I-105 Stations	Includes a Bicycle Improvement Plan consistent with the Bellflower- Paramount Active Transportation Plan network, including a Class III route on Paramount Blvd (high- volume arterial) and detailed pedestrian realm improvements.	x	X						x	x		
North Paramount Gateway Specific Plan Draft EIR, December 2022	Document " evaluates the environmental effects that may result from the construction and operation of the proposed North Paramount Gateway Specific Plan (NPGSP) Project.		Includes a pedestrian circulation plan with intersection enhancements, bulb-outs. Bicycle circulation plan consistent with the specific plan, and proposes new zoning of the project area	x	x						x	x		
Cities of Bellflower and Paramount, Bellflower- Paramount Active Transportation Plan, June 2019	Provides planning guidance to increase safety for all roadway users and to identify improvements that make multi-modal transportation safe and enjoyable."	Cities of Bellflower and Paramount	Identifies an integrated network of walkways and bikeways, a prioritized list of projects, safe routes to school improvements, end-of-trip facilities, and recommended policies to support active transportation, as well as relevant background data and community input.	x	X						x	x		

	City and County Plar	is and Projects with Relevance to (3-mile and 1/2-mile)	o Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
City of South Gate														
City of South Gate General Plan 2035, December 2009	Provides policies and programs to guide land use, housing and mobility.	Citywide	Land use and housing may be superseded by City's updated Housing Element. HCD had not certified the 2021-29 Housing Element as of October 2022. Circulation Element includes street classifications, standard street cross sections, and policies to promote transit use, walking and bicycling.	x	x				x					
City of South Gate Gateway District Specific Plan February 2019 (Draft)	Comprehensive plan for development of the area around the Firestone station, including land use, development standards, design guidelines, utilities, public realm and mobility improvements.	Area bounded by Firestone Blvd, Atlantic Ave, Patata St, and 7th St	Proposed mobility improvements include widened sidewalks on Firestone Blvd to accommodate bicycle lanes, a cycle track through the area from Atlantic Ave/Patata St to Firestone Blvd/7th St. Identifies pedestrian-related facilities, including illustrative segment plans that show potential plaza connections from the station to Patata St and the intersection of Firestone Blvd and Atlantic Ave.		X				X					
Hollydale Village Specific Plan June 2017	Specific Plan to demonstrate a clear vision for Hollydale with the anticipated arrival of two Eco-Rapid WSAB transit stations in the vicinity.	The Hollydale area within the southeastern portion of the City of South Gate	<ul> <li>Consistent with the Bicycle Plan, proposed bikeways include:</li> <li>Class II lanes on Garfield Ave north of Roosevelt Ave, Main St, Paramount Blvd, and Century Blvd</li> <li>Class III routes/sharrows per the Bicycle Plan.</li> <li>For pedestrians the plan proposes enhanced uncontrolled crosswalks at Harding Ave and Roosevelt Ave and a cross walk signal at McKinley Ave.</li> </ul>	x	X					x	X			
City of South Gate Bicycle Transportation Plan, October 2012	Guiding document for all bicycle infrastructure, policies and programs, proposing an extensive network of streets designed to be safe and comfortable for bicyclists.	Citywide	Identifies existing and proposed bicycle facilities, including illustrative segment plans and descriptions to demonstrate feasibility, ROM costs, and facility design guidelines.	x	x				x	x	x			

	City and County Plar	ns and Projects with Relevance to (3-mile and 1/2-mile)	o Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Long Beach Boulevard Pedestrian Improvements ATP Cycle 2 - Application (Funded)	The proposed project is consistent with the 2012– 2035 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), which seeks to develop a comprehensive and interconnected network of bicycle and pedestrian facilities	Long Beach Boulevard between Santa Ana Street and Tweedy Boulevard in the City of South Gate	Project will upgrade pedestrian lighting, enhanced crosswalks, flashing beacons, sidewalk repairs, curb ramps, and bicycle racks.	x										
2021 Citywide Engineering & traffic Survey Report	This report recommends the establishment and renewal of valid posted speed limits for fifteen (15) street segments on eight (8) citywide streets within the City of South Gate.	Citywide	Posted speeds will be used to inform FLM network recommendations for arterial streets.	x	x				x	x	x			
Tweedy Boulevard Complete Streets ATP Cycle 2 - Application (Funded)	The project seeks to develop an interconnected network of bicycle and pedestrian facilities throughout the region to increase active transportation	Various locations along Tweedy Blvd, California Ave, Otis St, Liberty Blvd, Hildreth Ave, Santa Fe Ave, and Truba Ave	<ul> <li>Install bike lanes, bike routes, curb extensions, sidewalk, curb &amp; gutter, high visibility crosswalks, wayfinding signs, rapid rectangular flashing beacons, pedestrian countdown signals, bicycle racks, and upgrade curb ramps to be ADA compliant.</li> <li>Bike facilities include: <ul> <li>Class II lanes on Hildreth Ave (Tweedy to Southern Ave) and Santa Fe Ave</li> <li>Class III routes on collector streets: Liberty Blvd, Truba Ave, and Hildreth Ave (Abbott to Tweedy)</li> <li>Class III routes on high-volume arterials: Otis St and California Ave</li> </ul> </li> </ul>	X						X				

	City and County Plar	ns and Projects with Relevance to (3-mile and 1/2-mile)	Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Garfield Avenue Complete Streets Corridor ATP Cycle 3 Application (Funded)	Transform Garfield Avenue and adjacent streets into a complete streets corridor that promotes active transportation use within the surrounding disadvantaged community.	Locations: Garfield Avenue between Firestone Blvd and Harding Ave Gardendale St between Garfield Ave and Los Angeles River Trail West Frontage Rd, Frontage Rd East, Miller Way, and Southern Ave (Garfield Ave to I-710 Fwy)	<ul> <li>Project will install:</li> <li>Class I bike path through Hollydale Park from LA River Trail to Gardendale St terminus</li> <li>Class II bike lanes (Garfield Ave south of Firestone Blvd to Wilson Ave, Southern Ave, Frontage Road East)</li> <li>Class III bike routes (other listed locations)</li> <li>Marked crosswalks at the intersections of Garfield Avenue and McKinley Avenue and Pennsylvania Avenue and Century Boulevard</li> <li>Rectangular Rapid Flashing Beacons at Garfield Avenue and McKinley Avenue and Garfield Avenue and Lincoln Avenue.</li> <li>Other pedestrian improvements including sidewalk curb extensions, ADA curb ramps, bus shelters and bike racks.</li> </ul>	X					X	X	X			
Tweedy Boulevard Complete Streets, Phase II ATP Cycle 4 Application (Not funded)	Project is"the first Phase of a larger Citywide regional connectivity project connecting pedestrians and bicyclists between disadvantaged communities and regional destinations including schools, the South Gate Park, and the Los Angeles River Bike Path."	Tweedy Blvd between Dearborn Ave and Dorothy Ave	Install bulb-outs, parklets, in-roadway warning lights, high visibility crosswalks, audible pedestrian push buttons, pedestrian signal countdown heads, LPI-timing, and ADA ramps.											
South Gate Regional Bikeway Connectivity ATP Cycle 4 Application (Not funded)	Convert Independence & Ardmore to a one-way couplet with cycle tracks, lighting, in- road warning lights, bike lanes on State, road re- channelization, bike racks and ADA curb ramps.	St and Long Beach Blvd; State St between Santa Ana St and Tweedy Blvd	Proposed couplet would allow for a one-way protected bike lane (cycle track) on each street (westbound on Independence Ave; eastbound on Ardmore Ave) to serve 8 schools, the Azalea Shopping Center and future WSAB station.	x	x				x					

	City and County Plan	s and Projects with Relevance to (3-mile and 1/2-mile)	Multiple Station Areas						WS	SAB LPA Station	S			
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer
Hollydale Area Access Improvements Project ATP Cycle 5 Application (Not funded)	Promote active transportation and reduce Vehicle Miles Traveled in the Hollydale neighborhood through the construction of bicycle infrastructure and pedestrian crossing improvement	Hollydale neighborhood (south of Gardendale Street, north of Century Blvd, east of the Los Angeles River and west of Paramount Blvd) in South Gate, California	<ul> <li>Proposed bikeways include:</li> <li>Class II lanes on Century Blvd (Pennsylvania Ave - Industrial Ave), Main St (Paramount Bl - west of Center St, and Paramount Bl (Somerset Ranch Rd S - Gardendale St)</li> <li>Class III routes on Century Blvd</li> </ul>	x	X					x	x			
			(Pennsylvania Ave - LA River Trail), Center St, Industrial Ave, and segments of Monroe Ave and McKinley Ave.											
Tweedy Boulevard Traffic Safety Improvements ATP Cycle 5 Application (Not funded)	Install capital safety improvements on the east and west ends of Tweedy Boulevard to improve non- motorized user safety and provide access to local and regional destinations.	On two segments of Tweedy Boulevard. The east segment is between Hildreth Avenue and the Los Angeles River. The west segment is between Alameda Street and Dearborn Avenue.	Install capital safety improvements on the east and west ends of Tweedy Boulevard to improve non-motorized user safety and provide access to local and regional destinations. Does not include bikeway improvements.											
WSAB LRT Stations FLM Bikeway Safety Access Project - ATP Cycle 6 Application (Not funded)	Install 1.5 miles of bicycle lanes, 2 miles of sharrows, 0.3 miles of sidewalk and street lighting, center median islands, curb ramps, and a rest area near the LA River Bike Path.	Located in the eastern quadrant of the city, straddling the existing Union Pacific Railroad right-of-way and future location of the West Santa Ana Branch Transit Corridor.	<ul> <li>Bikeways include:</li> <li>Class II bicycle lanes on Century Blvd (Pennsylvania Ave to Industrial Ave) and Main St (Paramount Bl to west of Center St)</li> <li>Class III sharrows on Dakota Ave (Gardendale St - Main St) and Industrial Ave (Main St to Somerset Ranch Rd N).</li> </ul>	X	X				X	X	X			

City and County Plans and Projects with Relevance to Multiple Station Areas (3-mile and 1/2-mile)							WSAB LPA Stations								
Plan/Project Name, Date	Description	Geographic Area	Summary	<b>3mi</b> (Wheels Only)	<b>1/2mi</b> (Walk & Wheels)	Slauson A Line	Pacific Randolph	Florence Salt Lake	Firestone	Gardendale	I-105 C Line	Paramount Rosecrans	Bellflower	Pioneer	
City of Vernon															
City of Vernon General Plan, Adopted 2007, Amended 2015	The Plan contains the goals, policies, and explanatory detail about issues important to the future of Vernon.	Citywide	Land use and housing may be superseded by City's updated Housing Element. HCD had not certified a 2021-29 Housing Element as of October 2022.	x		x	x								
City of Vernon Bicycle Master Plan December 2017	Identifies "improvements to the bicycling environment in the City of Vernon by providing recommendations for bikeways and support facilities, as well as education, encouragements, enforcement, and evaluation programs."	Citywide	Analysis of land use, destinations, employment density, existing bikeways, regionally proposed bikeways (Metro and Gateway Cities COG), collisions involving bicycles, recommended programs and infrastructure, including feasibility of bikeways requiring a lane reduction and cross sections of Vernon Ave.	x		X	x								

## 6 DATA ANALYSIS

#### 6.1 Overview

The FLM planning team performed a mapping analysis to understand the existing half-mile walking and three-mile wheel conditions. GIS data was collected, mapped and analyzed using the following primary sources:

- Metro's Active Transportation Strategic Plan (2022), which includes 2020 U.S. Census demographic data, Statewide Integrated Traffic Records System (SWITRS) data, CalEnviroScreen data, as well as data collected from local jurisdictions.
- Active transportation plans and projects of local jurisdictions within 3 miles of the alignment (see Table 5-2 City and County Plans and Projects)
- United States Forest Service urban canopy GIS data (2018)

Sections 6.2 to 6.12 summarize the 3-mile wheel zone analysis and its implications to the wheel network and station connectivity. Sections 6.13 and 6.14 summarize the half mile walk zone analysis and the implications to local station connectivity. Key findings from the analyses are detailed in Appendix A. These findings will be instrumental in identifying the pathway network and informing future phases of the FLM Plan. Additionally, all half-mile analysis maps are referenced in Appendix B.

## 6.2 **Population and Employment Density**

The purpose of the FLM wheel network is to connect people living and working within three miles of transit stations with safe and comfortable bicycle facilities. Understanding where people live and work provides insight for planning bicycle facilities that could improve access and connectivity within the WSAB corridor.

Figure 6-1 depicts 2020 population density by U.S. Census block group. There are 1.35 million people in the 3-mile radius corridor. The vast majority live in communities west of the Los Angeles River.

Figure 6-2 illustrates 2020 employment density by block group. There are approximately 450,0000 jobs in the corridor. They are more equally distributed throughout the corridor, with concentrations in Vernon, Downey, Paramount, Artesia and Cerritos.

Figure 6-3 shows combined population and employment density by block group, featuring the density of all people using transit. The combined count is comprised of 75 percent residents and 25 percent jobs, with a higher population density located west of the Los Angeles River.

Figure 6-3 also points out where higher concentrations of residents and jobs are located, relative to each station. Improving wheel access in areas where people live and work will be a key consideration during the prioritization process of wheel facilities. For example, surrounding the Pioneer Station, areas to the south in Hawaiian Gardens, to the north and northeast in Cerritos, and to the northwest at Cerritos Community College could benefit from connections provided by new or improved wheel facilities.

## 6.3 Equity Indices

Figure 6-4 shows census tracts receiving the highest 25 percent of overall CalEnviroScreen scores. The majority of the WSAB corridor, excluding Artesia, Cerritos, and Lakewood, are included in the top 25 percentile of overall CalEnviroScreen scores.

CalEnviroScreen is a statewide analysis that identifies communities that are most affected by pollution and where people are especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information available from state and federal government sources to produce scores for every census tract in the state. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.

The communities represented by census tracts in the highest 25 percentile of CalEnviroScreen scores are referred to as "Disadvantaged Communities" per California senate Bill 535 and are specifically targeted for investment of proceeds from the state's Cap-and-Trade Program. These investments are aimed at improving public health, quality of life and economic opportunity in California's most burdened communities, and at the same time, reducing pollution that causes climate change. The investments are authorized by the California Global Warming Solutions Act of 2006 (Assembly Bill 32, Nunez, 2016).

Figure 6-4 also shows Metro's Equity Focus Communities (EFC), which, based on the same criteria, identifies communities where concentrations of demographics are most aligned with opportunity gaps and lack of access to resources in Los Angeles County, specifically: low-income households; Black, Indigenous, and other People of Color (BIPOC) residents; and households with no access to a car. The Metro Equity Need Index (MENI) analysis includes five tiers of equity need (Very High Need, High Need, Moderate Need, Low Need, and Very Low Need). Within this index, only the top two tiers ("High Need" and "Very High Need") are designated as EFCs.

## 6.4 **Primary Destinations**

Figure 6-5 shows the locations of destinations within the 3-mile project corridor to which people may be traveling to from a transit station; or from their homes or jobs, enroute to a transit station. Mapped destinations are indicated as one of the following categories: colleges, universities, high schools and libraries; government facilities; shopping centers; cultural facilities; emergency facilities; and parks. Understanding the primary destinations surrounding the LPA stations will be an important consideration when wheel routes are prioritized.

## 6.5 Major Arterial Street Conditions

Primary paths to WSAB stations are typically on major arterial streets because stations are often located at or near a major intersection. In addition, regional wheel facilities are typically located on major arterial streets. Due to high traffic volumes and high vehicle speeds observed on arterial streets, they are not considered ideal routes for riding a bicycle, scooter or similar, unless the wheel facilities are protected or off-street.

Figure 6-6 shows that most major arterials have posted speeds of 35 or 40 miles per hour (mph), with 35 mph as the predominant posted speed west of the Los Angeles River and 40 mph east.

Figure 6-7 shows average daily traffic (ADT) on the same major arterial streets.

- Few arterial street segments have volumes below 10,000 ADT.
- Arterial street segments that have volumes below 20,000 ADT and four or more travel may be candidates for lane reduction if wheel facilities are proposed on those street segments and lane reduction is needed to accommodate those facilities. Major arterials with volumes below 20,000 ADT and four or more travel lanes on which Class II or Class IV facilities are proposed include:
  - Central Avenue north of Florence Avenue
  - Santa Fe Avenue north of Firestone Boulevard
  - Atlantic Avenue between Firestone Boulevard and the 91 Freeway
  - Garfield Avenue between Florence Avenue and the 91 Freeway
  - Paramount Boulevard north of the 91 Freeway
  - Pioneer Boulevard
  - Carmenita Road
- In some cases, arterial street segments with volumes of 20,000 to 30,000 ADT and four travel lanes may also be viable candidates for lane reduction if lane reduction is needed to accommodate proposed wheel facilities, particularly if there are parallel arterials in close proximity.
- Arterial street segments with higher volumes may be candidates for lane reduction if lane reduction is needed to accommodate proposed wheel facilities, if they have more than four travel lanes.

Not all arterial streets are included in the ATSP database, and some collector streets (typically those without street names on Figure 6-6 and Figure 6-7) are included. Additional data will be collected as needed to preliminarily evaluate bikeway feasibility on other streets with four or more lanes.

The National Association of City Transportation Officials (NACTO) Contextual Guidance for Selecting All Ages & Abilities Bikeways indicates that protected bike lanes or off-street paths are appropriate for streets with ADT volumes greater than 6,000 and speeds greater than 25 miles per hour.

## 6.6 Bicycle-Vehicle Collisions

Figure 6-8 shows bicycle-vehicle collisions from 2016 through 2021 (six years) according to the ATSP database. These collisions represent 72 percent of the bicycle-vehicle collisions listed on SWITRs for the same period.

Collisions are concentrated in the area west of the A Line in Los Angeles City and County, both where there is high population density and where the arterial street grid is compressed.

Key takeaways to consider for FLM planning are that 83 percent of collisions occurred on arterial streets, and 43 percent of collisions occurred at intersections.

## 6.7 Existing Bikeways (Wheel Facilities)

Figure 6-9 maps the existing bicycle network, showing four types of wheel facilities. These wheel facilities are synonymous with bikeway classifications defined by Caltrans and used by local jurisdictions in their adopted active transportation plans. The four wheel facilities are defined as follows:

- **Class I paths** also known as shared-use paths, are facilities with exclusive right-of-way for wheels and pedestrians, away from the roadway and with cross flows by motor traffic minimized. Some systems provide separate pedestrian facilities.
- Class IV protected lanes also called cycle tracks or separated lanes, are located on roadways but are physically separated from motor vehicle traffic by vertical elements, such as grade separation, flexible posts or inflexible barriers, and ideally by on-street parking as well. Protected lanes can provide one-way or two-way travel. Protected lanes are typically implemented on arterial streets.
- **Class II lanes** are located on roadways and are defined by pavement striping and signage to delineate a portion of a roadway for wheel travel. Lanes are one-way facilities, typically striped adjacent to motor traffic travelling in the same direction. Contraflow bike lanes can be provided on one-way streets for bicyclists traveling in the opposite direction. Striped lanes are best suited to streets with one motor vehicle lane in each direction and lower traffic speeds and volumes.
- Class III routes designate preferred routes for wheels on streets that are not served by dedicated wheel lanes. Wheels share the roadway with motor vehicles. Class III routes on arterial streets are included on the map in Figure 6-9 but will not be included in the FLM Network since they do not provide safety or comfort for cyclists of all ages and abilities. In fact, posted bike route signs may give cyclists a false sense of security and result in more collisions that would otherwise occur.



Class I path, Toronto, ON (Photo: P. Smith)



Class II striped lane, Los Angeles, CA (Photo: P. Smith)



Class IV protected lane, Reseda, CA (Photo: P. Smith)



Class III Wheel-Friendly Street, Portland, OR (miabirk.com)

There are 165.3 miles of bikeways within three miles of proposed WSAB stations. The distribution of these bikeways among bikeway classifications is as follows:

- 40.8 miles of Class I off-street paths primarily located along the Los Angeles River, Rio Hondo Channel, San Gabriel River, and Los Coyotes Creek. In addition, there are Class I paths along the WSAB right-of-way in Artesia, Bellflower and Paramount, on Carson Street in Carson, Southern Avenue in South Gate and on the DWP right-of-way between Broadway and Florence Avenue in Huntington Park.
- 3.6 miles of Class IV protected lanes, primarily on Orange Street in North Long Beach.
- 62.1 miles of Class II lanes, of which 3.4 miles are on one side of the street only. Existing Class II lanes are located primarily in the western half of Slauson Station/A Line station

area and in the Pioneer Station area, with additional locations in the southern portions of the Bellflower and Paramount/Rosecrans Station area (in the City of Long Beach).

- 21.9 miles of Class III routes on collector and local streets.
- 33.5 miles of Class III routes on arterial streets.

## 6.8 Bikeways Proposed on Local Plans

Figure 6-10 maps proposed bikeways shown on local and regional plans. Local plans typically include a preliminary evaluation of feasibility—in particular, whether there is adequate roadway width, whether a lane reduction is required and, if so, whether traffic volumes would allow for that reduction.

The regional plans included are the 2016 Gateway COG Strategic Transportation Plan (STP) Active Transportation Element, 2009 OTCA Commuter Bicycle Strategic Plan, 2012 LA County Transit Oriented Districts Access Study Appendix, and 2006 Metro Bicycle Transportation Strategic Plan. Some of the routes identified in regional plans align with routes shown on local plans, however, the majority do not. In particular, the Gateway COG STP shows 87.7 miles of routes on arterial streets within three miles of proposed WSAB stations that are listed as either Class III or Class II and do not overlap with locally proposed routes. These routes are shown in Figure 6-10 as Class III on arterial streets since they have not been vetted with respect to feasibility to the degree that those shown on local plans have been.

There are 513.7 miles of proposed bikeways within three miles of proposed WSAB stations. The proposed routes are distributed among bikeway classifications are as follows:

- 49.1 miles of Class I off-street paths.
- 36.5 miles of Class IV protected lanes.
- 146 miles of Class II lanes.
- 162.2 miles of Class III routes on collector and local streets.
- 32.2 miles of Class III routes on arterial streets.
- 119.9 miles of Class III or Class II routes on arterial streets (the latter are those shown in the Gateway COG STP).

#### 6.9 Bikeways Proposed on Regional Plans

Figure 6-11 maps bikeways, both existing and proposed, that the Metro ATSP identifies as part of the regional network. Metro's ATSP prioritizes street segments from High to Low Priority, as shown in Figure 6-11, based on the following criteria:

Equity: Serve communities with the highest needs that have historically lacked investments.

**Safety:** Serve high-injury locations by creating low-stress, high-quality facilities for safe walking, biking, and rolling.

**Connectivity/Accessibility:** Ensure that future active transportation projects connect to transit, job centers and the parks.

**Sustainability:** Address climate change by improving active transportation options and transit access for the most polluted communities.

Feasibility: Advance pedestrian and biking projects that are ready to build.

**Community Support:** Implement pedestrian and biking projects that are supported by local community members.

In developing the FLM Network, opportunities for connections to Metro's regional network will be evaluated.

#### 6.10 Wheel Network Shown in the TODSIP

The 2017 Transit Oriented District Strategic Implementation Plan (TODSIP) for the WSAB corridor included a wheel network. That network included existing and locally proposed bikeways as of 2016, as well as other potential wheel facilities need to connect those facilities to WSAB stations. The TODSIP did not map the entire 3-mile radius FLM corridor; it focused on those jurisdictions that were part of the WSAB Technical Advisory Committee, which constituted about 60 percent of the three-mile radius FLM corridor. Since 2016, jurisdictions that did not have bicycle or active transportation plans at that time have since adopted plans or have updated existing plans. Thus, the proposed bikeway network shown in Figure 6-10 is more robust than the locally proposed network in the TODSIP. The TODSIP did not map bikeways shown on regional plans separately or focus specifically on connecting to a regional network. The TODSIP did not prioritize wheel facilities as the FLM process will do.

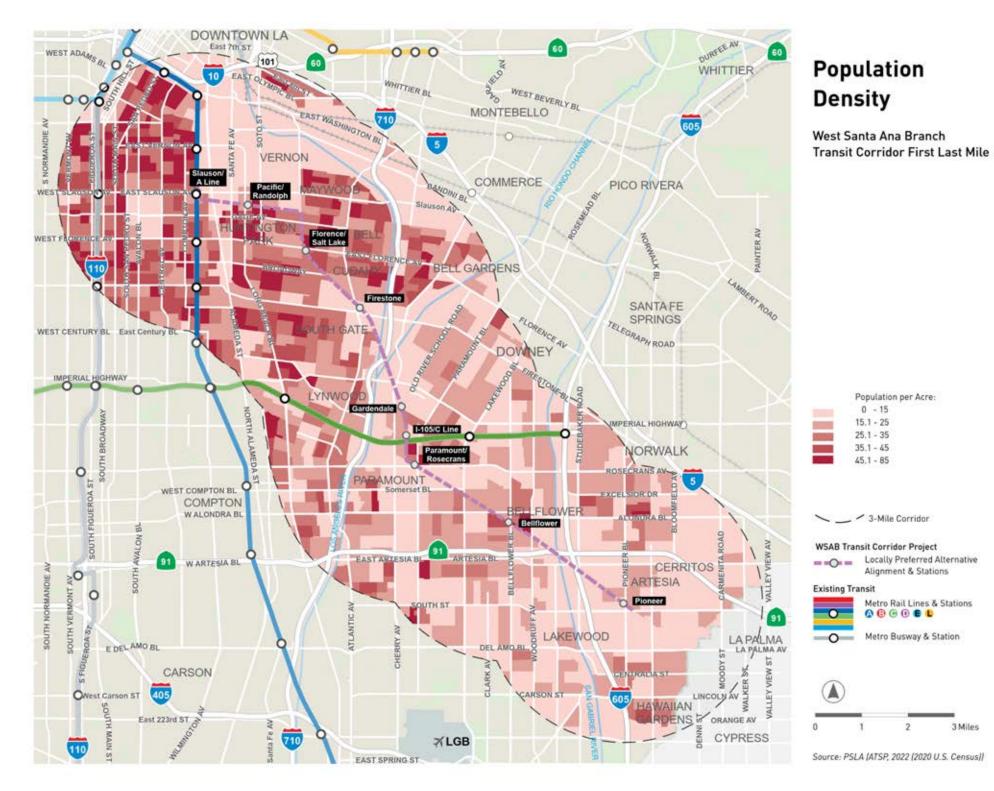
#### 6.11 TODSIP Pedestrian Improvements

Because the TODSIP was primarily about development around the future WSAB transit stations, it focused on pedestrian improvements that local jurisdictions could adopt as development standards or could implement in conjunction with adjacent development, including sidewalk widening through dedications, easements or setbacks; street tree planting; street lighting; and controlled crossings at major intersections. It did not document specific improvements by location or prioritize those improvements as the FLM process will do.

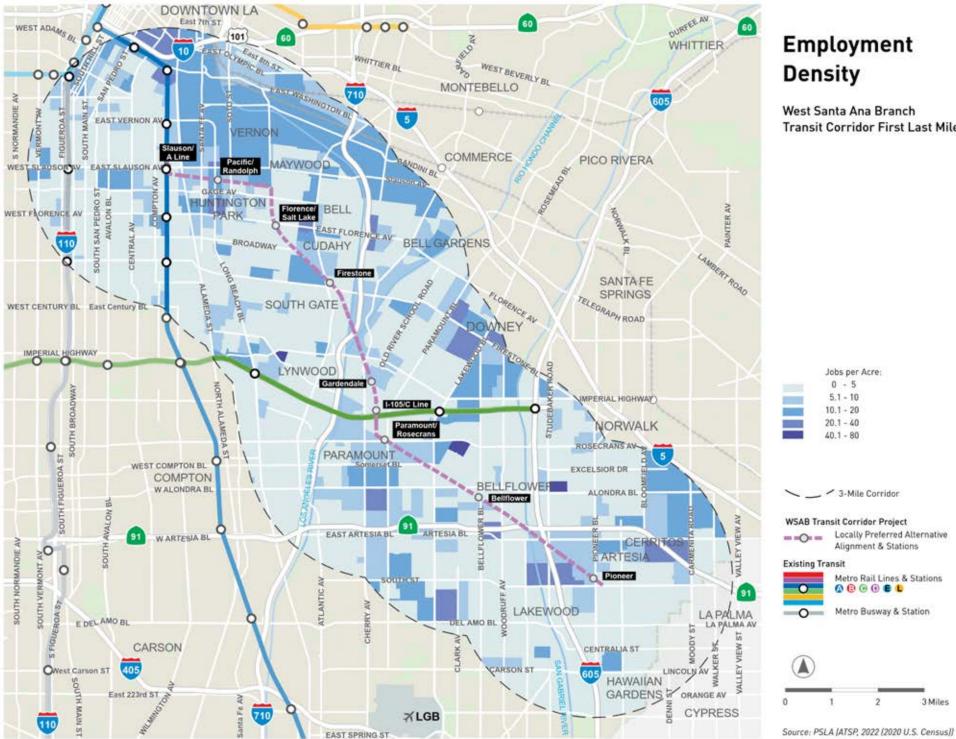
#### 6.12 Tree Canopy Cover

Figure 6-12 shows tree canopy cover in 2018 as mapped by the United State Forest Service (USFS) Pacific Southwest Region in its urban tree canopy GIS database. At the 3-mile radius corridor scale, the data shows that most residential areas have more tree canopy cover than industrial areas, commercial areas and arterial streets.

#### Figure 6-1. Population Density



#### Figure 6-2. Employment Density



# Employment

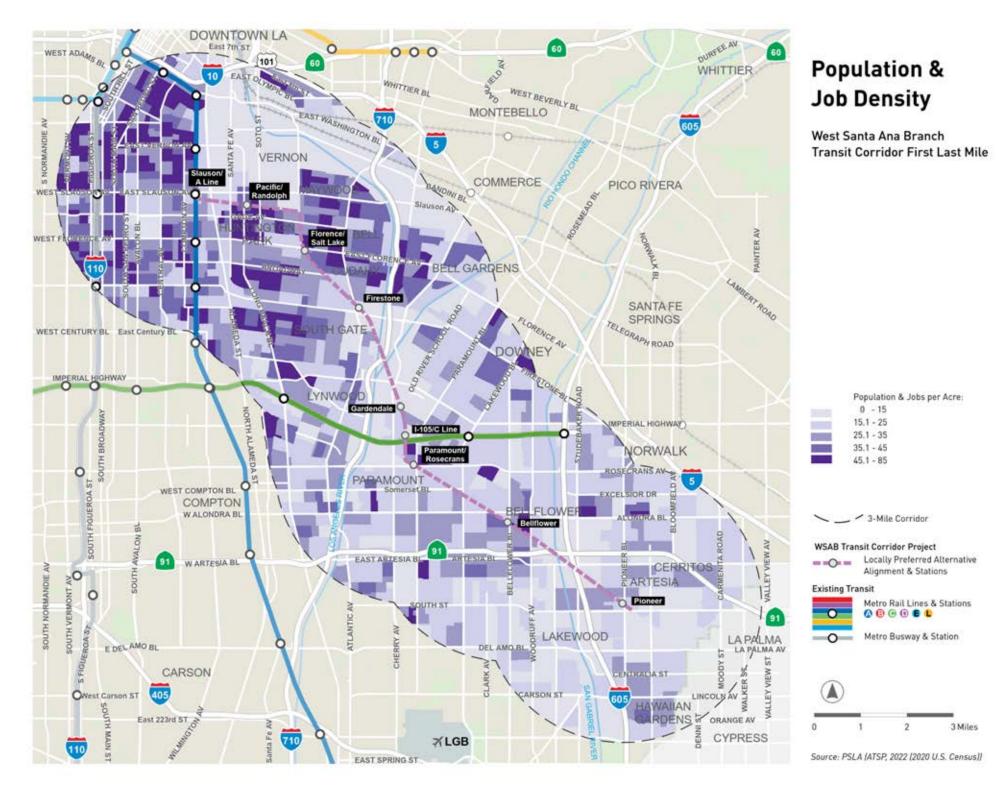
West Santa Ana Branch Transit Corridor First Last Mile

3 Miles

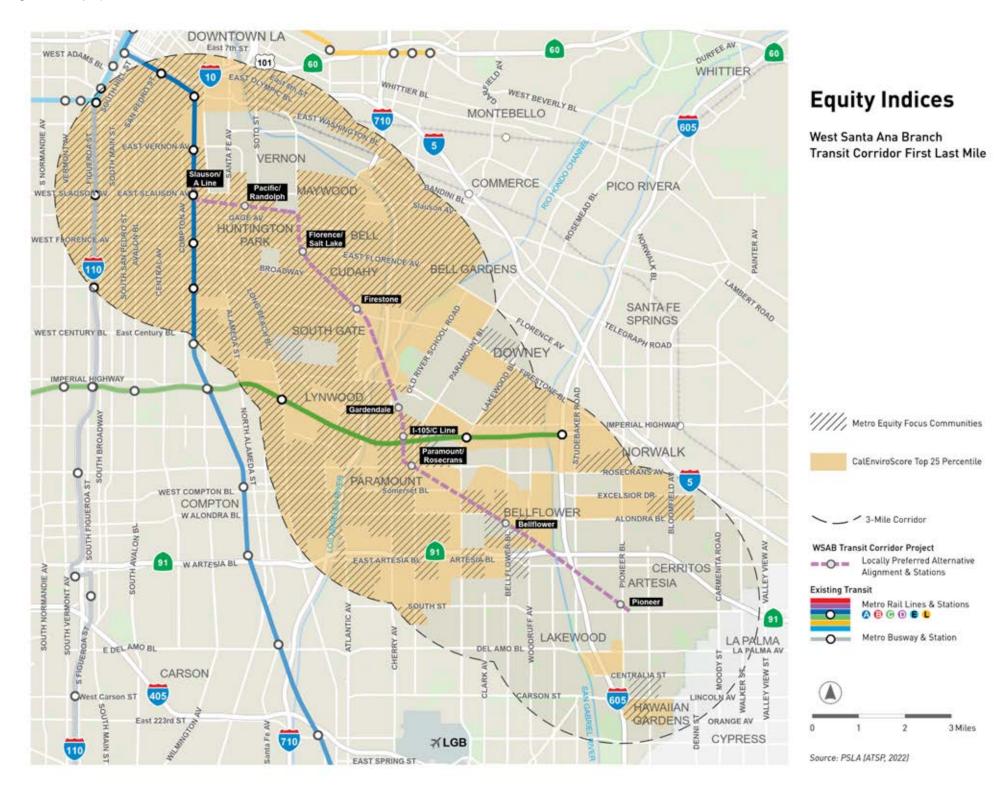
West Santa Ana Branch Transit Corridor Project

First/Last Mile Planning Existing Conditions Report

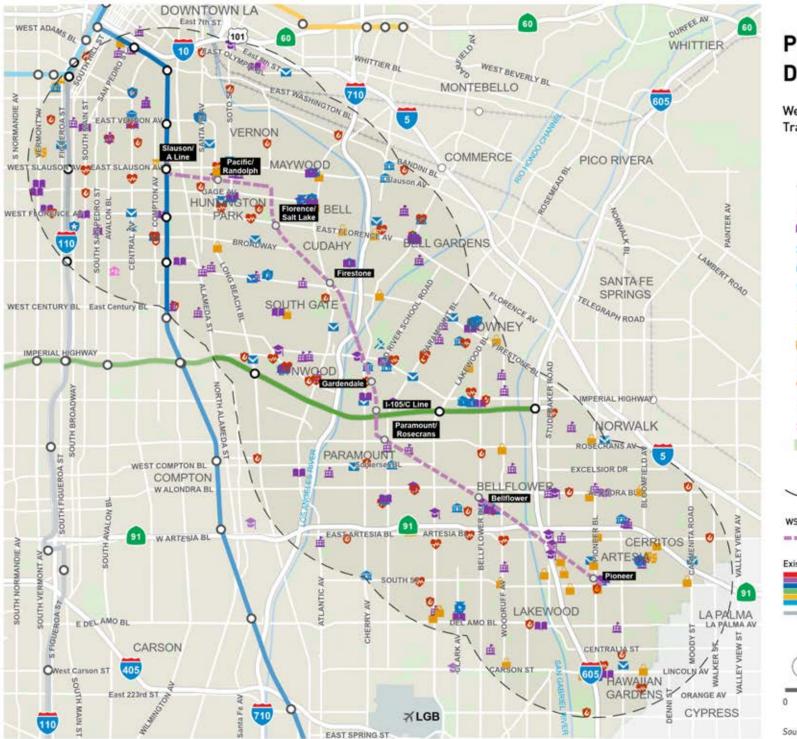
#### Figure 6-3. Population and Job Density



#### Figure 6-4. Equity Indices

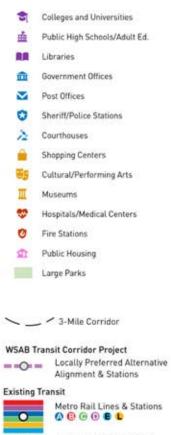


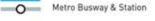
#### Figure 6-5. Primary Destinations

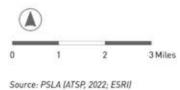


### Primary Destinations

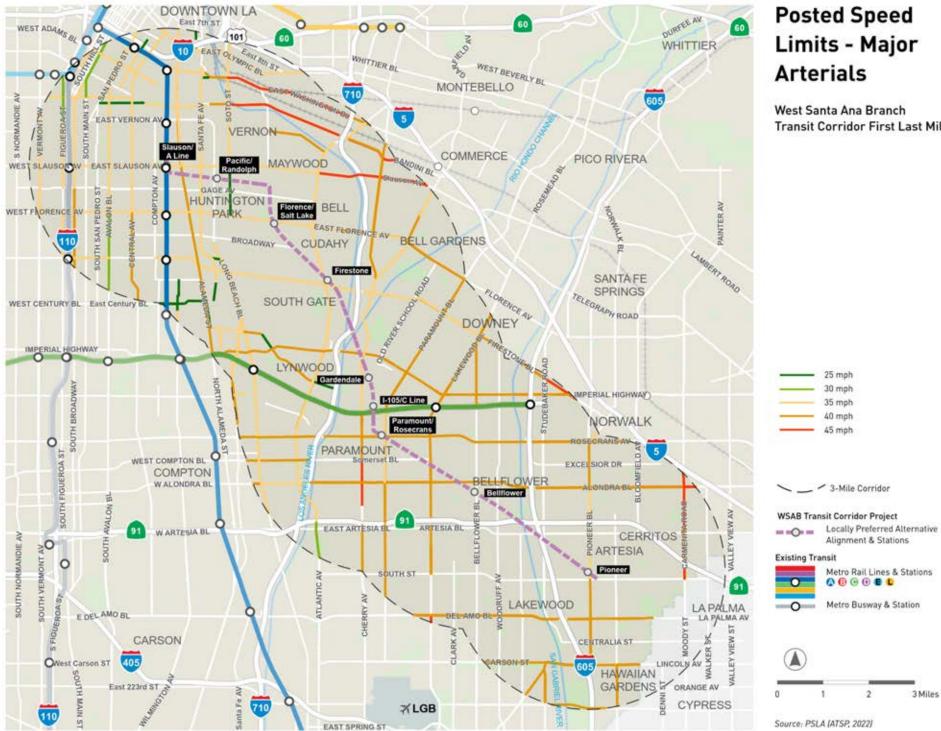
West Santa Ana Branch Transit Corridor First Last Mile







#### Figure 6-6. Posted Speed Limits – Major Arterials



### **Posted Speed** Limits - Major Arterials

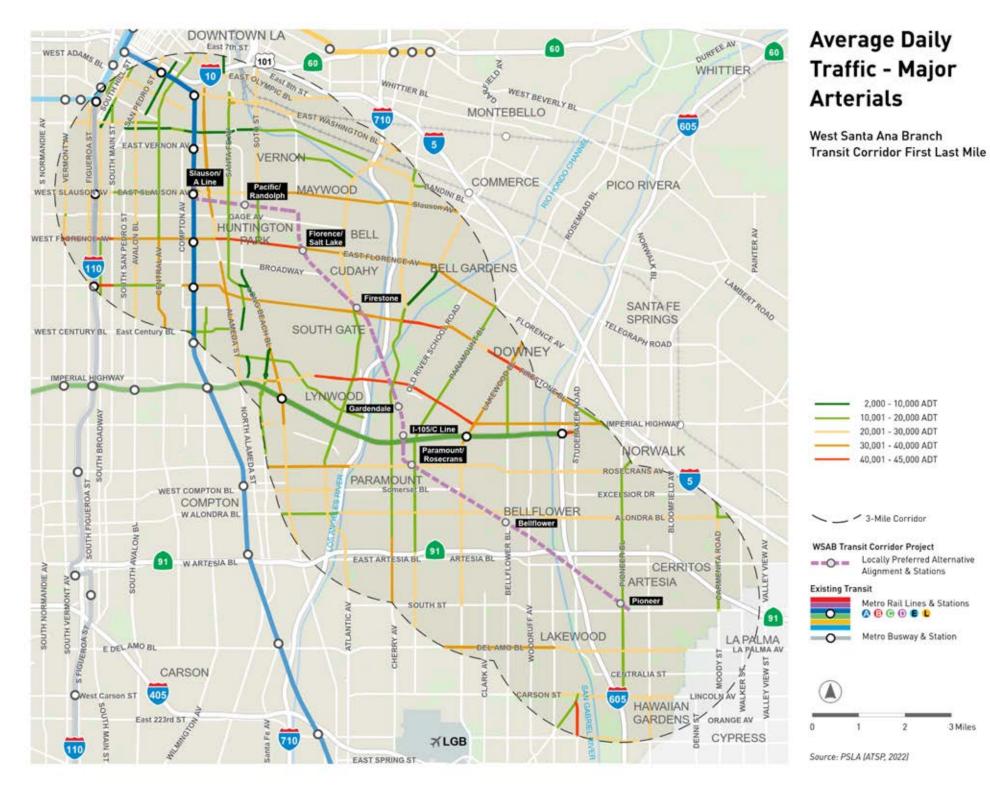
West Santa Ana Branch **Transit Corridor First Last Mile** 

3 Miles

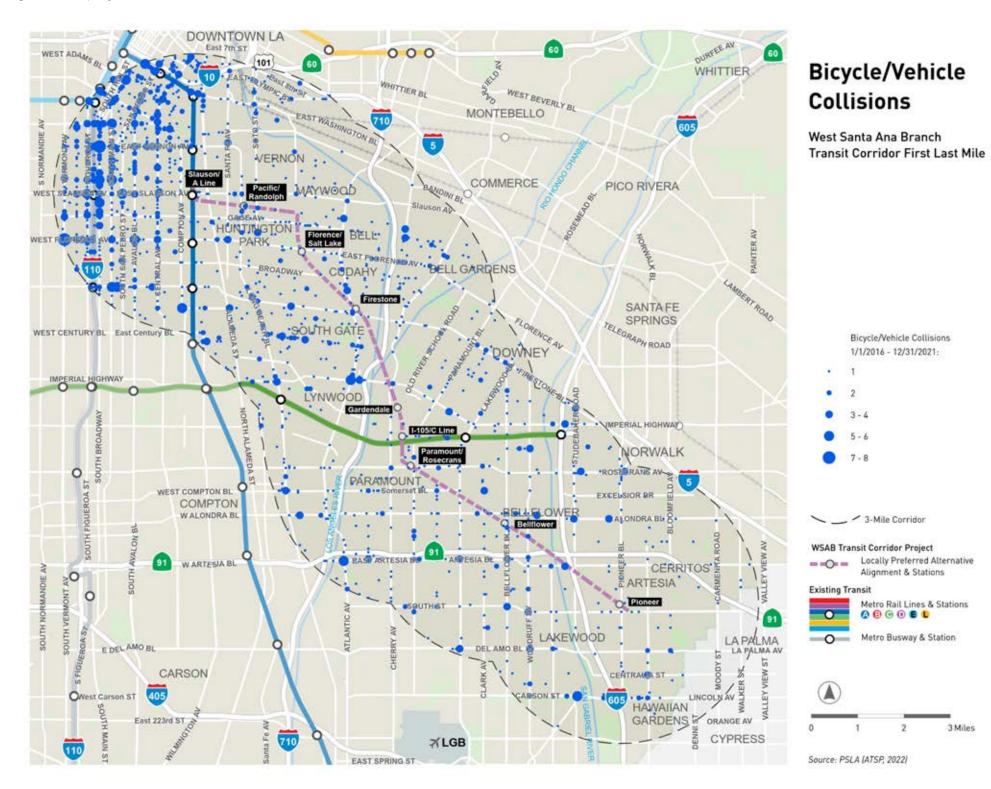
West Santa Ana Branch Transit Corridor Project

First/Last Mile Planning Existing Conditions Report

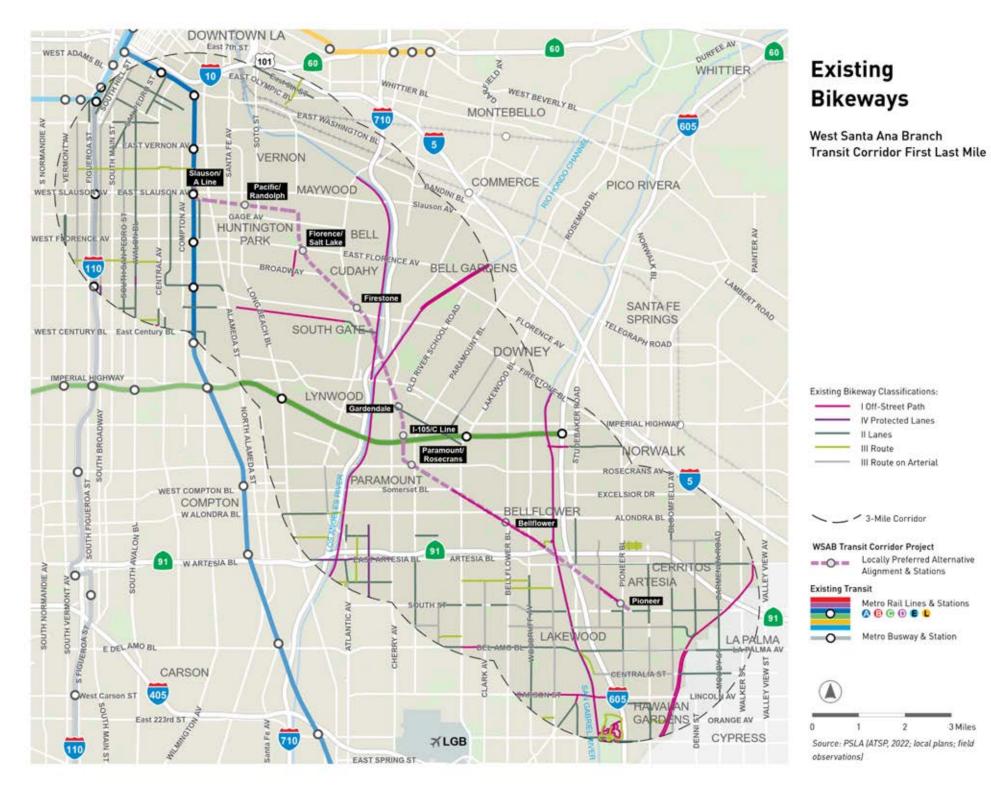
#### Figure 6-7. Average Daily Traffic – Major Arterials



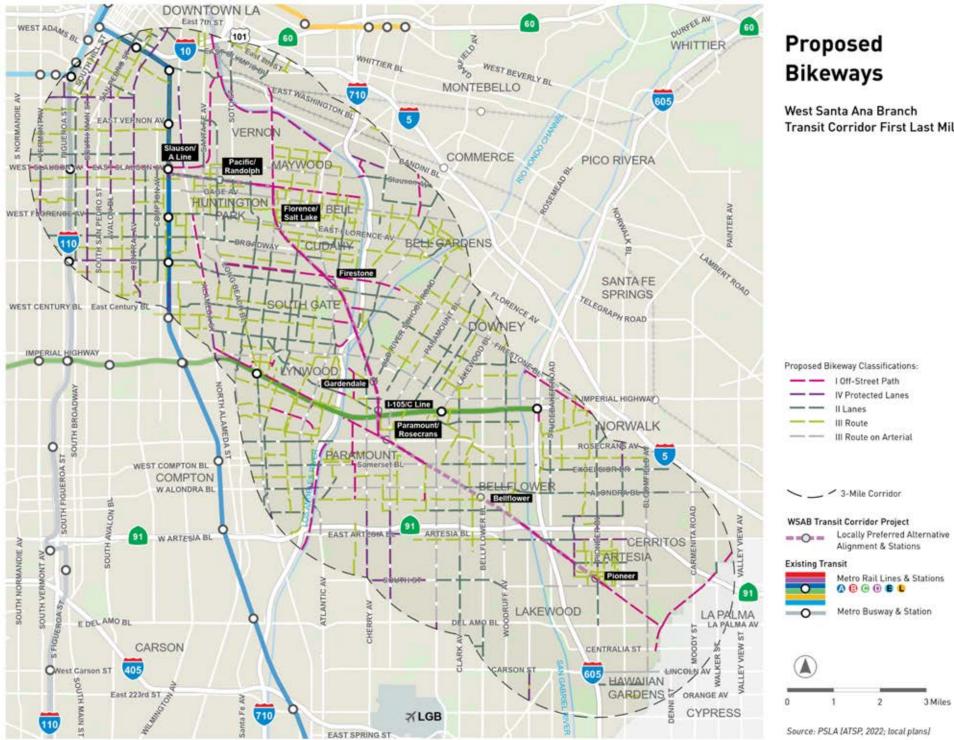
#### Figure 6-8. Bicycle/Vehicle Collisions



#### Figure 6-9. Existing Bikeways



#### Figure 6-10. Proposed Bikeways



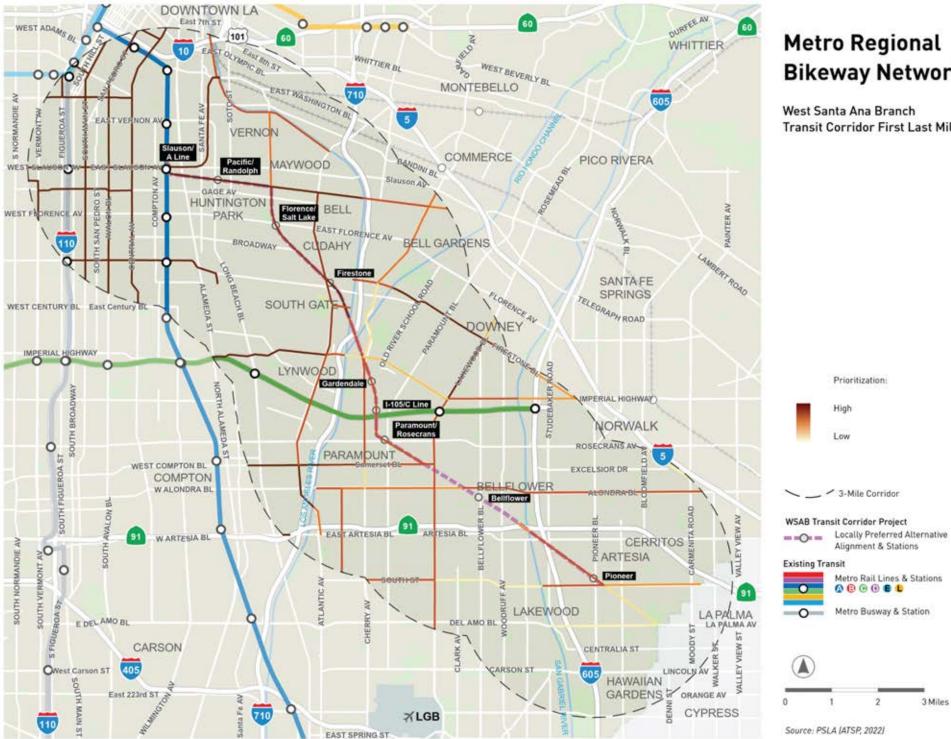
West Santa Ana Branch Transit Corridor First Last Mile

3 Miles

West Santa Ana Branch Transit Corridor Project

First/Last Mile Planning Existing Conditions Report

#### Figure 6-11. Metro Regional Bikeway Network



### **Metro Regional Bikeway Network**

West Santa Ana Branch Transit Corridor First Last Mile

Prioritization:

Alignment & Stations

Metro Rail Lines & Stations

Metro Busway & Station

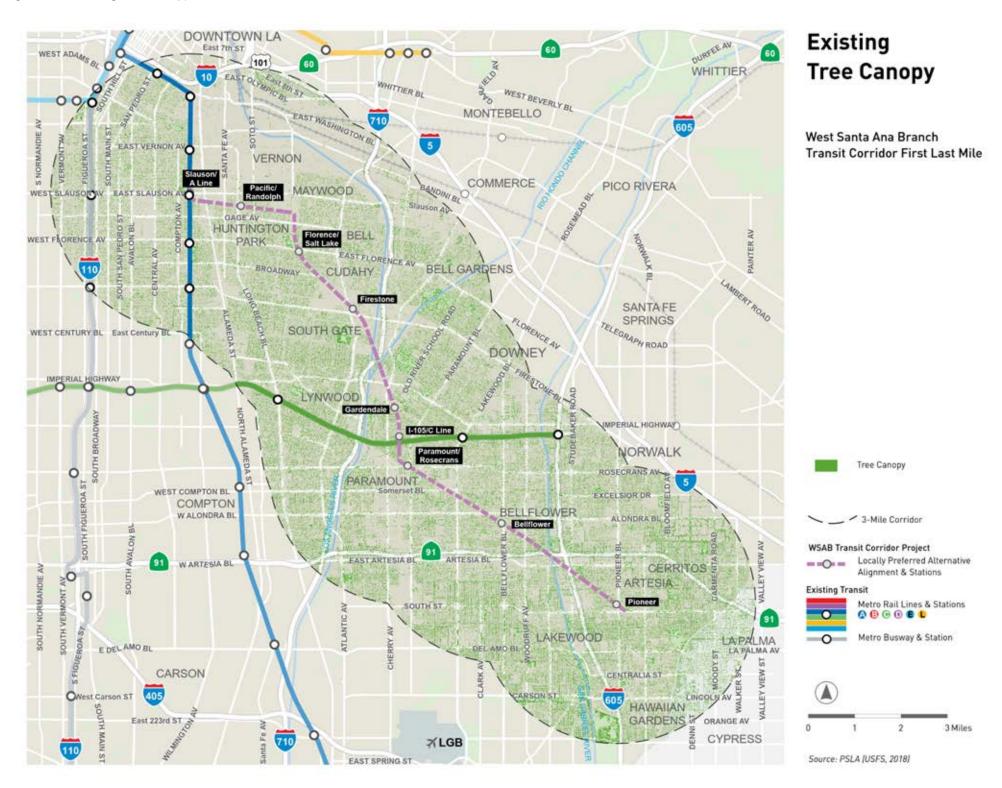
2

3 Miles

High

Low

#### Figure 6-12. Existing Tree Canopy



### 6.13 Half-Mile Walk Zone Analysis

The existing conditions analysis at the half-mile study area provides critical context for identifying potential pedestrian and wheel projects that enhance safety and station connectivity. Data collected at this scale will inform the project's subsequent phases, such as identifying each station's pathway network. The pathway network will inform future community engagement activities, including the walk audit process–which will provide the consultant team with necessary context to help determine potential FLM projects. Data analysis was performed for the following 9 stations along the WSAB LPA, listed by location from north to south:

- Slauson A Line Station
- Pacific/Randolph Station
- Florence/Salt Lake Station
- Firestone Station
- Gardendale Station
- I-105/C Line Station
- Paramount/Rosecrans Station
- Bellflower Station
- Pioneer Station

The following is a list of all data compiled for each station:

- Half-mile Study Area (which identifies major destinations)
- Bike/Auto Collisions
- Pedestrian/Auto Collisions
- Population Density
- Employment Density
- Existing Wheel Facilities
- Proposed Wheel Facilities
- General Plan Land Use
- Existing Tree Canopy
- Posted Speed Limit on Major Arterials
- Equity Focused Communities (EFC)

See Appendix B for the Half-Mile Study Area analysis maps.

### 6.14 Half-Mile Walk Zone Analysis Findings

#### **Bike/Auto Collisions**

Slauson/A Line, Pacific Randolph and Firestone all have the most pedestrian and bicycle collisions spread evenly throughout the station area. While data for stations like Paramount/Rosecrans, Bellflower, and Firestone shows that intersections, particularly close to station entrances, boast high numbers of fatal accidents. The collision data should be a particular focus for wheel access proposals in the half mile area for those stations with high population and employment density (noted below).

#### **Pedestrian/Auto Collisions**

Data for Pacific/Randolph depicts a grim picture of pedestrian/auto collisions, with more than five fatal collisions at no less than four major intersections. Making this station unfriendly to

pedestrians and in need of safety features and traffic calming measures. Florence/Salt Lake, and Paramount/Rosecrans both have many fatal crashes at intersections either directly near or a few blocks away from proposed station entrances. The collision data should be a particular focus for walk access proposals in the half mile area for those stations with high population and employment density (noted below).

#### **Population Density**

The most densely populated half-mile station areas are in the northern portion of the corridor at Slauson/A Line, Pacific/Randolph, Florence/Salt Lake, with notable populations in portions of Paramount/Rosecrans, Bellflower and I-105/C Line (reflecting unusual land use patterns). Firestone, Gardendale and Pioneer stations have lower population density which is not surprising given the pattern of more suburban development in the southern portion of the corridor. The I-105/C Line station will need to address access issues given the population density, I-105 freeway barrier, need for pedestrian bridge(s) and goal for creating a seamless transfer experience–despite platform location constraints inherent to this segment of Metro's ROW.

#### **Employment Density**

Employment density is highest in urban commercial areas like downtown Huntington Park and select employment centers; and lowest in suburban residential and manufacturing/industrial land use areas. Half-mile station access to employment hubs will be an important consideration at Huntington Park, Firestone and Pioneer stations.

#### **Existing Wheel Facilities**

Existing wheel facilities are few and far between, with only Pioneer, having more than two types of facilities within the half-mile station area. Slauson/A Line and Gardendale stations each have one Class II bicycle lane. Florence/Salt Lake and Bellflower stations have one Class I shared use/off-street path.

#### **Proposed Wheel Facilities**

Proposed wheel facilities indicate facilities shown on local and regional plans. All stations offer five or more proposed facilities. It will be up to the consultant team to evaluate the feasibility of those considering the 3-mile project area and connections to regional destinations.

#### **General Plan Land Use**

General plan land use depicts how the station area is zoned, but not how land around the station may be used today. This data shows that five station areas: Florence/Salt Lake, Gardendale, I -105/C Line, Bellflower, and Pioneer are predominately residential. In addition, Firestone station is predominately mixed-use/industrial/other, while the rest show a balanced mix of residential, commercial, mixed-use, and industrial uses.

#### **Existing Tree Canopy**

All 9 WSAB stations would benefit from an increased tree canopy along major arterials to provide more consistent and reliable shade for pedestrians on sidewalks. The issue of shade along the major arterials (typically identified as primary pathways through the FLM process) will only become dire as average daytime temperatures continue to climb for more days of the year.

#### **Posted Speed Limit**

Posted roadway speed indicates how fast vehicles travel around station areas, but field observations tell a different story. During the walk audit phase of the process, the consultant team and community members will be able to observe real-world conditions, experience speeds on adjacent roadways, and respond with proposed improvements to mitigate speeding vehicles.

#### **Equity-Focused Communities**

Under the high need to very high need EFC index, six stations fall entirely or three-quarters of the way within those categories. Less than half the station area for Gardendale and Paramount/Rosecrans fall within the EFC index. In contrast, one station, Pioneer, does not fall within the index.

### NEXT STEPS

7

This summary report concludes the Existing Conditions analysis task of the WSAB FLM planning process. Next, the consultant team will collaborate with Metro's outreach consultant and community-based organizations to conduct outreach and meetings with 16 jurisdictions along the LPA. This process will commence in Spring 2023 with a series of technical walk audits, focused within each station's half-mile walk zone. Participants engaged in the walk audit process will help identify barriers, strengths, and opportunities relating to access and connectivity. The FLM planning team will then use walk audit findings to help determine the draft and final FLM project lists.

#### **Stakeholder Walk Audits**

Following initial technical analysis, Metro will partner with local communities and stakeholders to develop a set of community-supported improvements along key pathways to Metro stations and bus stops.

#### **Supporting Outreach Events**

The analysis findings presented in this report will be summarized into presentation slides to provide an overview of the WSAB FLM Existing Conditions. This presentation will include analysis maps to help illustrate key findings relating to FLM access issues and conditions unique to the 9 LPA stations along the WSAB corridor.

The WSAB FLM Existing Conditions could be presented at the following types of outreach events:

- Elected official briefings
- City staff updates
- Technical Advisory Committee updates
- Walk audit orientations or trainings
- Community stakeholder briefings, updates or workshops

#### **Cross-Checking FLM Project Lists**

After the walk audits have been conducted and each station's primary and secondary pathways have been established, the FLM planning team will identify the nexus between the Existing Conditions Report findings and potential projects being considered. This exercise will help bridge the team's understanding of existing conditions (especially relating to access barriers, challenges and safety issues) and the improvements needed to directly address them, to assure the WSAB FLM Plan responds to the access needs of Metro's customers along the LPA corridor.

### APPENDIX A PATHWAY NETWORK APPROACH

See attachment on next page.

#### West Santa Ana Transit Corridor Project First/Last Mile Planning Existing Conditions Report **Pathway Network Approach** June 2023

#### PATHWAY NETWORK DISCUSSION

#### Approach

- Use connectivity and the top three or four Existing Conditions findings as the guiding themes for the FLM process along the entire alignment
  - For example, as part of the justification for the final prioritized improvements, they must improve or combat the themes
- Incorporate the guiding themes into the prioritization process
- Highlight and present the guiding themes and supporting data within the station materials and presentations as an explanation for the foundation of the process.

#### **Key Findings**

Half-Mile

- No less than six (6) stations are densely populated with serious pedestrian/auto and bicycle/auto collisions. Therefore, the collision data should be a particular focus for walk and wheel access proposals in the half-mile area.
  - The pathway network should also consider daily/local commutes to major destinations within the half-mile. Addressing safety enhancements to major destinations, as well as the proposed station, will improve transit access.
- I-105 Cline station will need particular attention to address access issues given the population density, the I-105 freeway barrier, the need for a pedestrian bridge(s), and goals for creating a seamless transfer experience.
  - The pathway network should consider the unique constraints of the I-105 freeway and the WSAB ROW that divide the station area into quadrants. The technical team's process for identifying the primary and secondary pathways will require a creative approach that supports access to a critical transfer station for the entire station area.
- No less than six (6) stations are categorized as Equity-Focused Communities and included in the top 25 percent of the overall CalEnvironScreen scores.
  - The pathway network should consider connectivity and the impacts of climate change and pollution on low-income communities of color so that the prioritized improvements positively impact these issues.

#### West Santa Ana Transit Corridor Project First/Last Mile Planning Existing Conditions Report **Pathway Network Approach** June 2023

#### Three-Mile

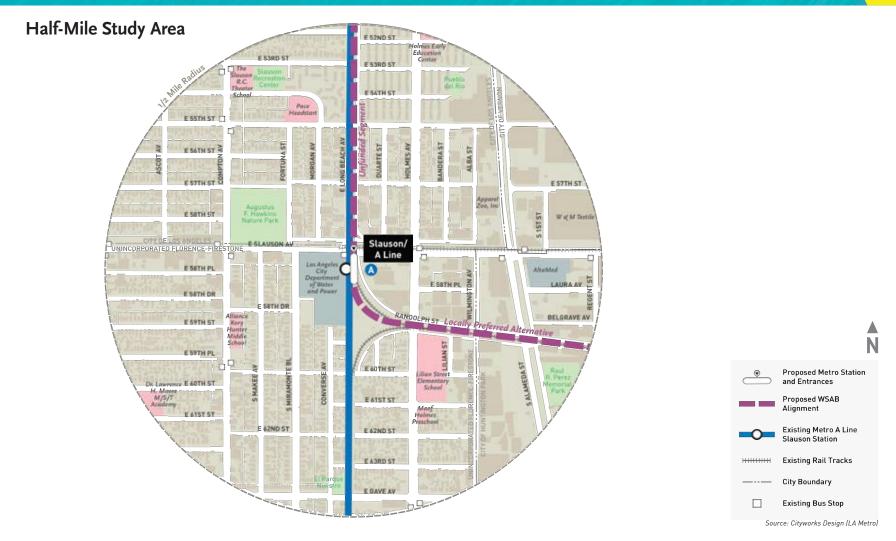
- Currently, wheel access to WSAB station locations is extremely limited. The only existing wheel facilities that connect to stations are the WSAB multi-use paths in the Pioneer and Bellflower station areas and those are not connected to any other wheel facilities.
  - The wheel network should focus on creating direct connections to all stations, which, in turn, connect to both regional and local wheel facilities in the three-mile corridor.
- Population and job density, along with traffic volumes and bicycle/vehicle collisions are significantly higher in the northern half of the corridor.
  - The wheel network should focus on providing access to areas with higher population and job density, as well as to major destinations.
  - The wheel network should focus on improving wheel safety where collisions are higher.
- The majority of the three-mile corridor north of the Bellflower station is in the CalEnvironScreen top 25 Percentile and classified by Metro as Equity Focus Communities.
  - The wheel network should give particular attention providing wheel access to these communities.
- Traffic speeds and volumes on major arterial street are high, making bicycling and other wheeling unsafe. At the same time, Metro's Regional Bikeway Network is located on major arterial streets
  - The wheel network should explore Class IV wheel facilities in order to provide safe wheel access.
  - Where it is not feasible to provide Class IV wheel facilities on major arterial streets, parallel secondary arterial or collector streets should be considered as safer alternatives.

#### Major Destinations

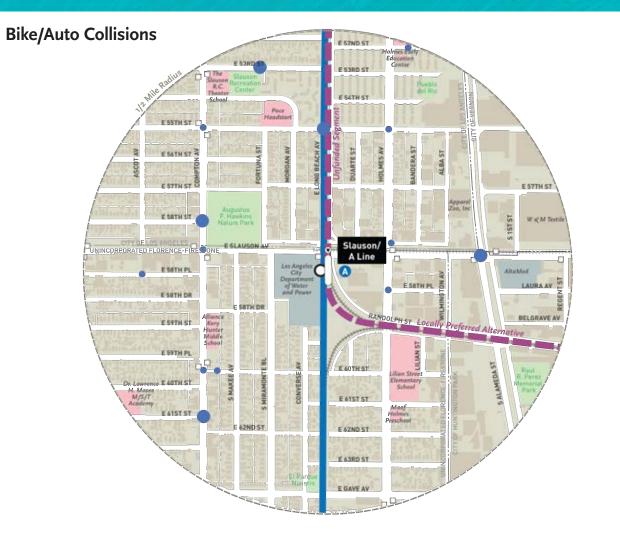
- Major civic destinations in the three-mile corridor include Cerritos Community College, ELAC South Gate Campus, regional parks, and multiple high schools, civic centers, parks and libraries in every jurisdiction.
  - Both the half-mile pathway network and the three-mile wheel network should connect to the above destinations where possible.
- Each of the communities served by the WSAB TC has a "Main Street" or downtown shopping district. In addition, there are several regional shopping centers in the corridor.
  - Both the half-mile pathway network and the three-mile wheel network should connect to the above destinations where possible.

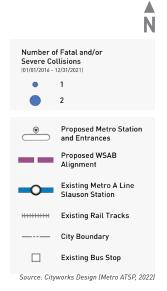
### APPENDIX B HALF-MILE STUDY AREA MAPS – BY STATION

See attachment on next page.

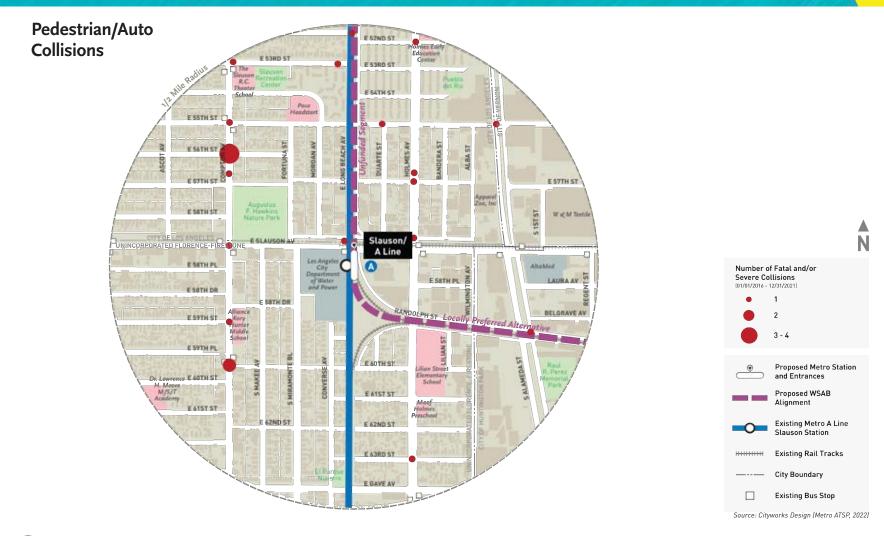




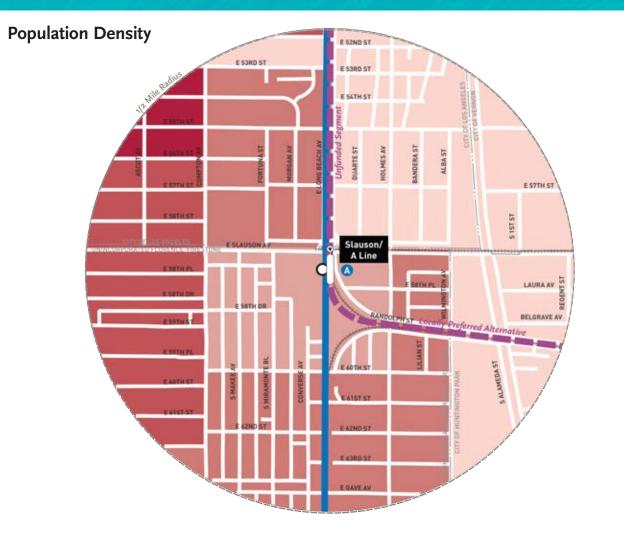


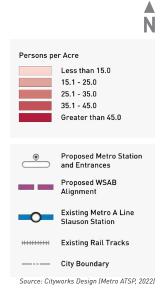








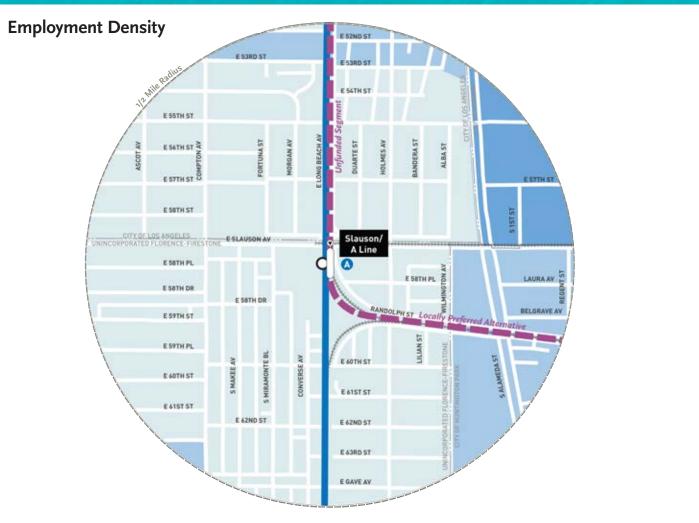






#### WEST SANTA ANA BRANCH TRANSIT CORRIDOR

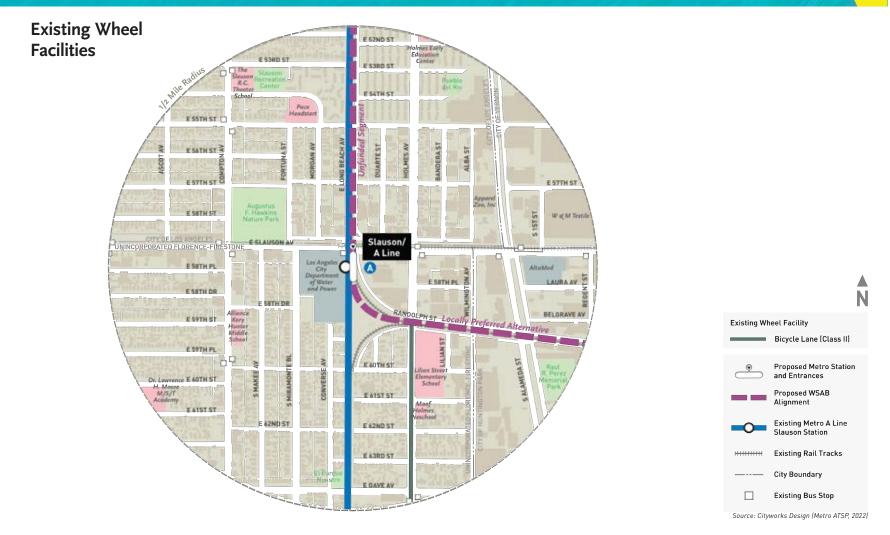
#### West Santa Ana Branch Transit Corridor Project First/Last Mile Planning Existing Conditions Report



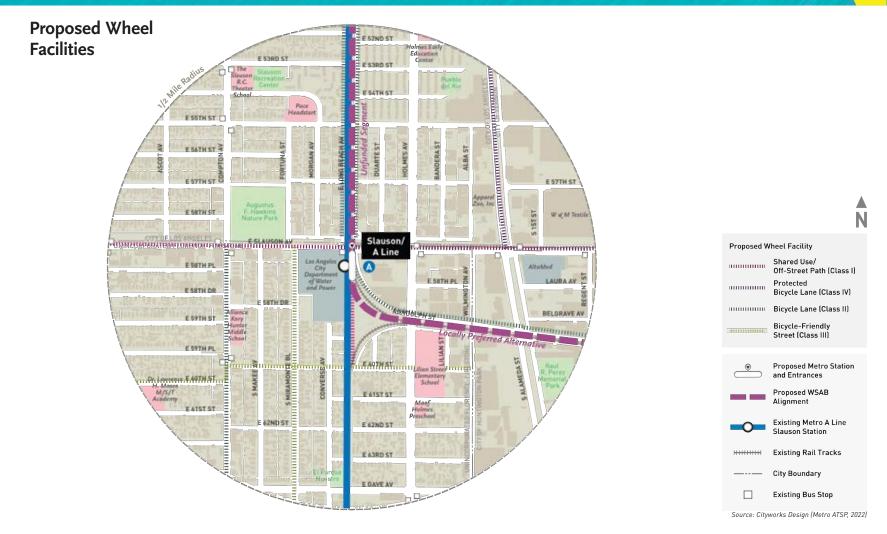
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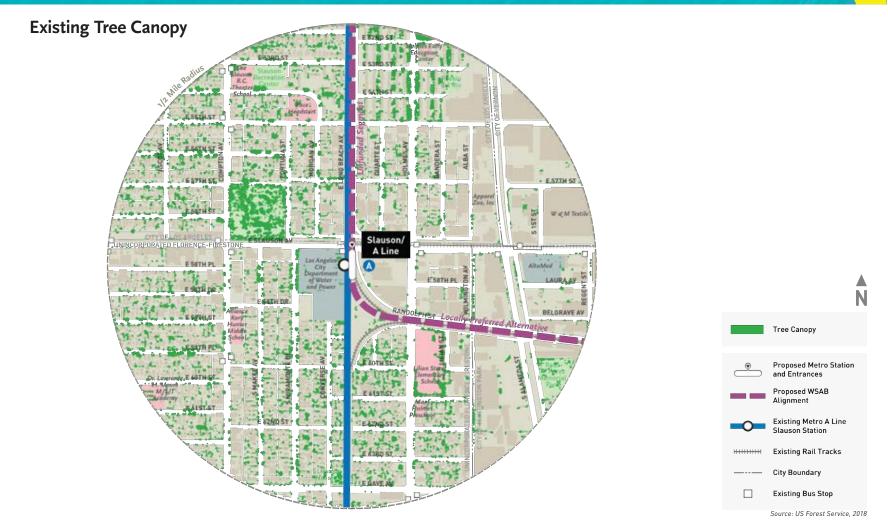




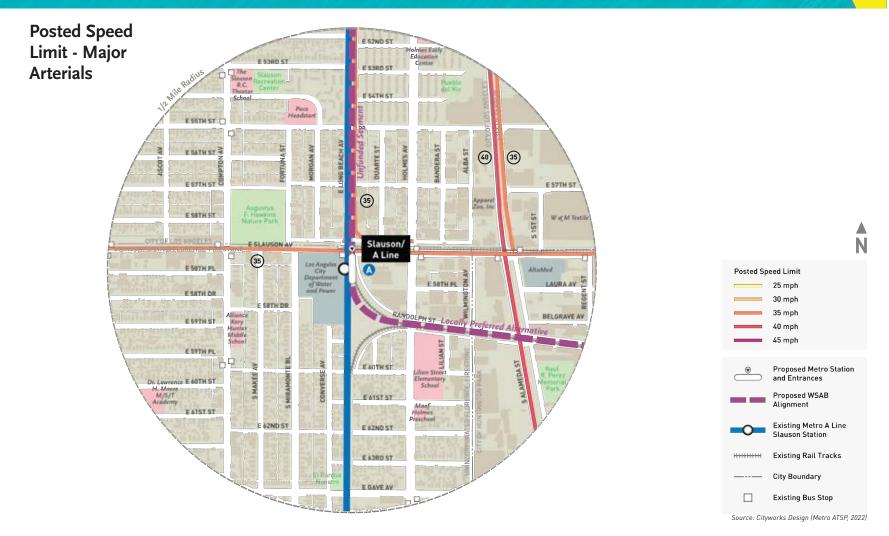




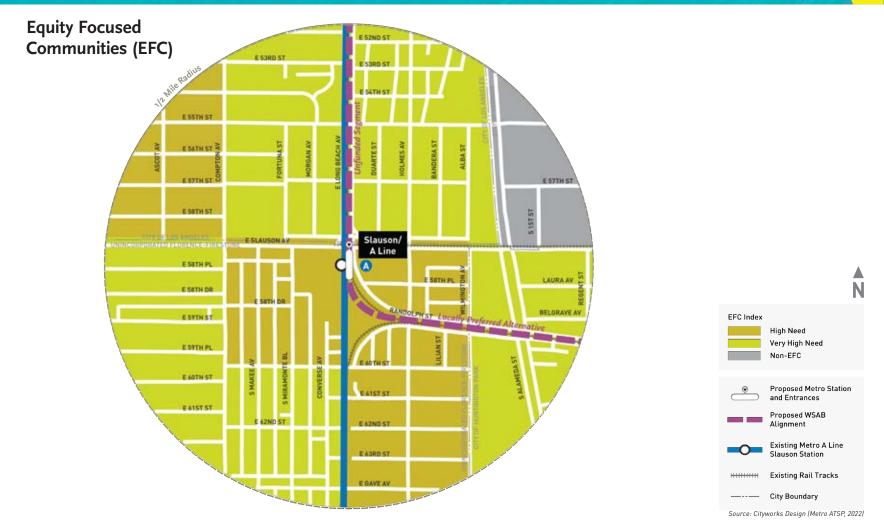




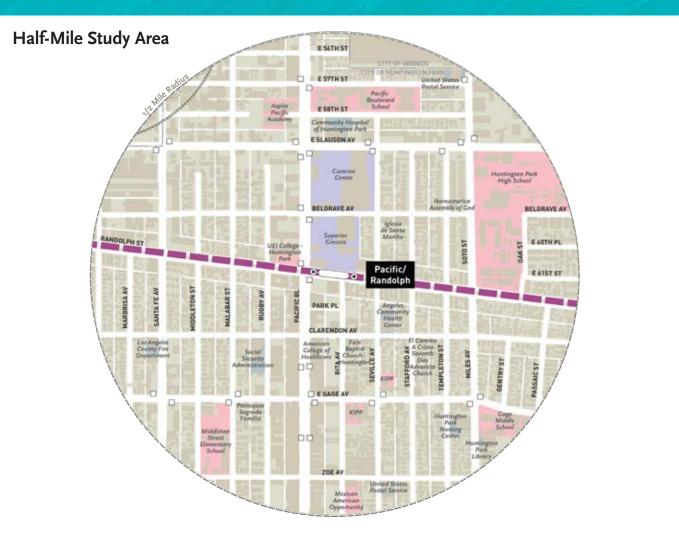






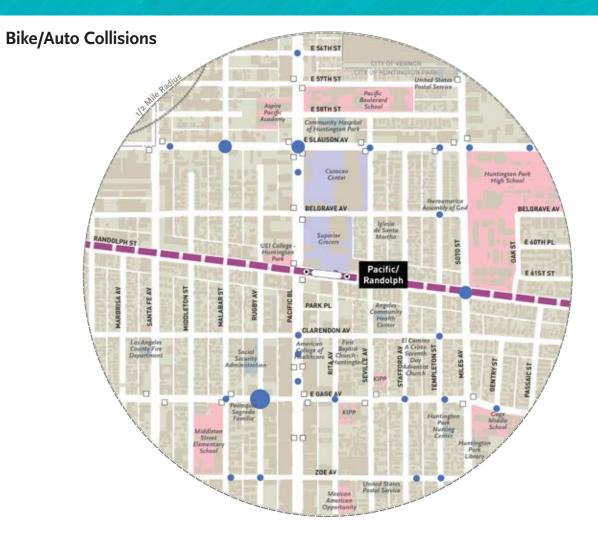










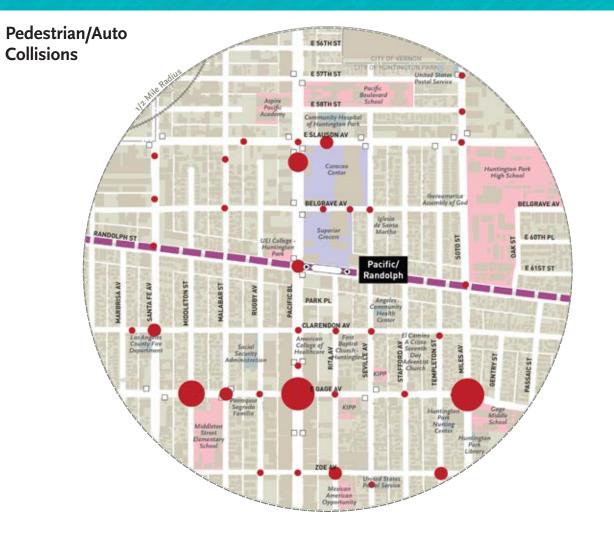


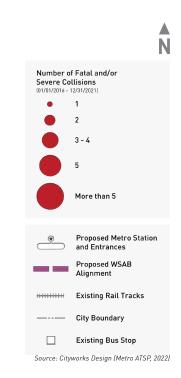




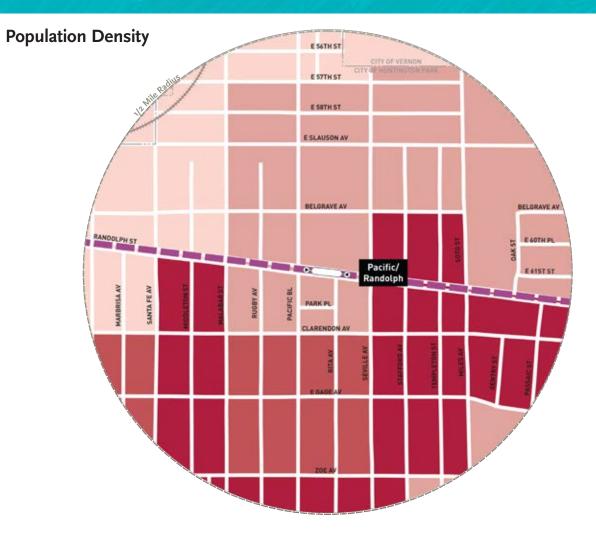
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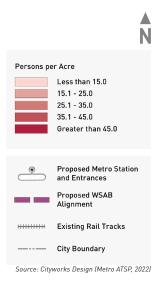
#### West Santa Ana Branch Transit Corridor Project First/Last Mile Planning Existing Conditions Report



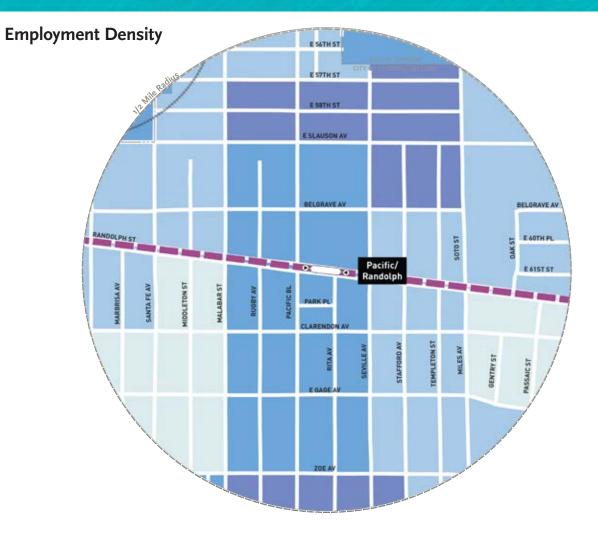


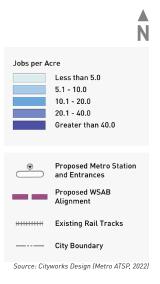






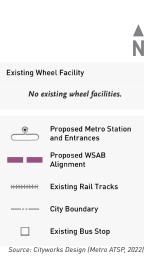




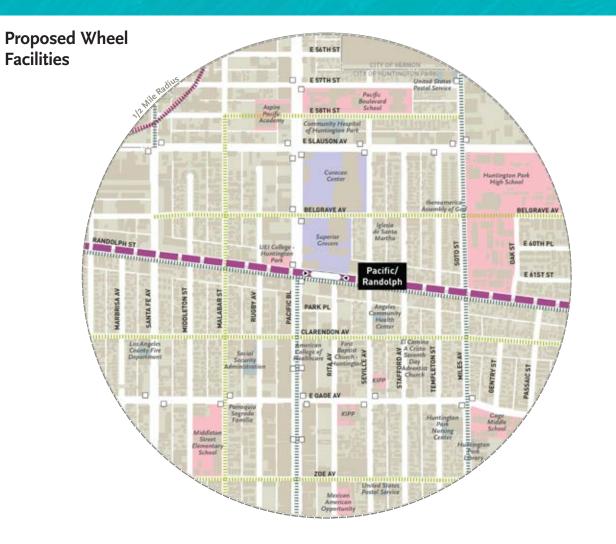










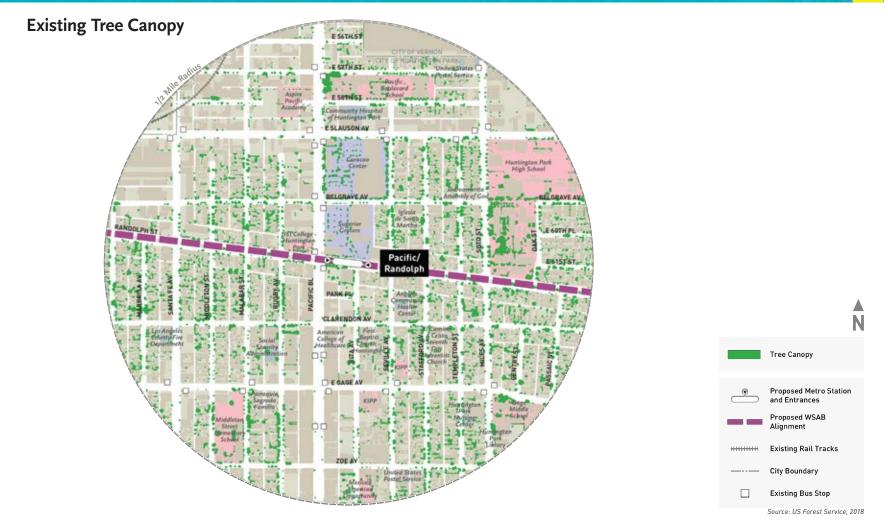




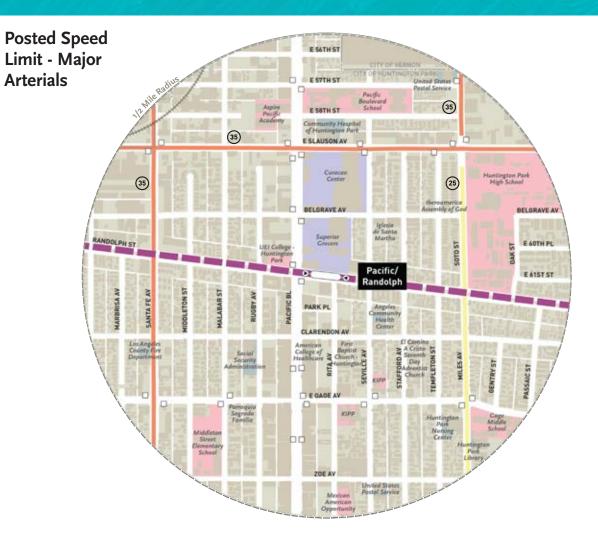


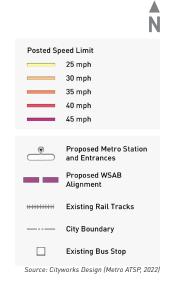










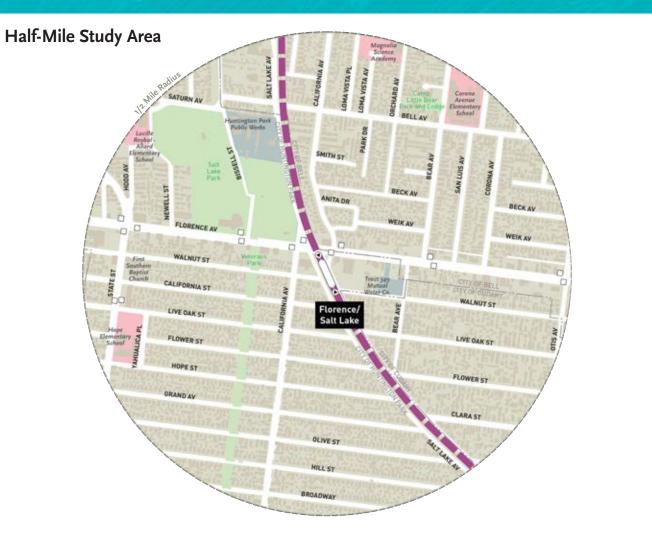






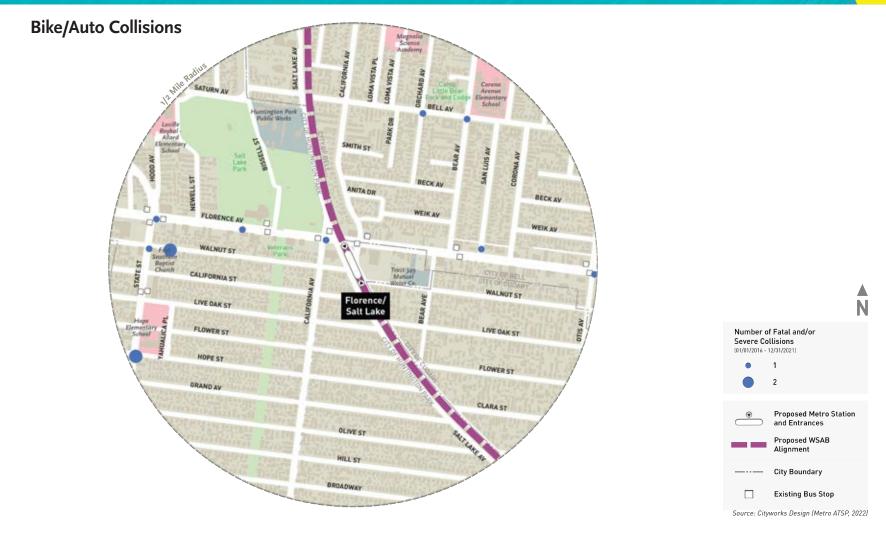




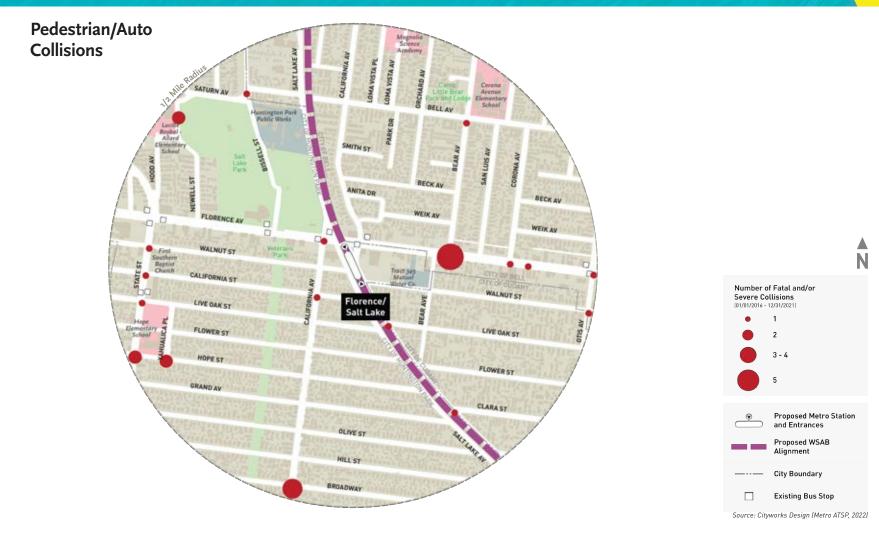




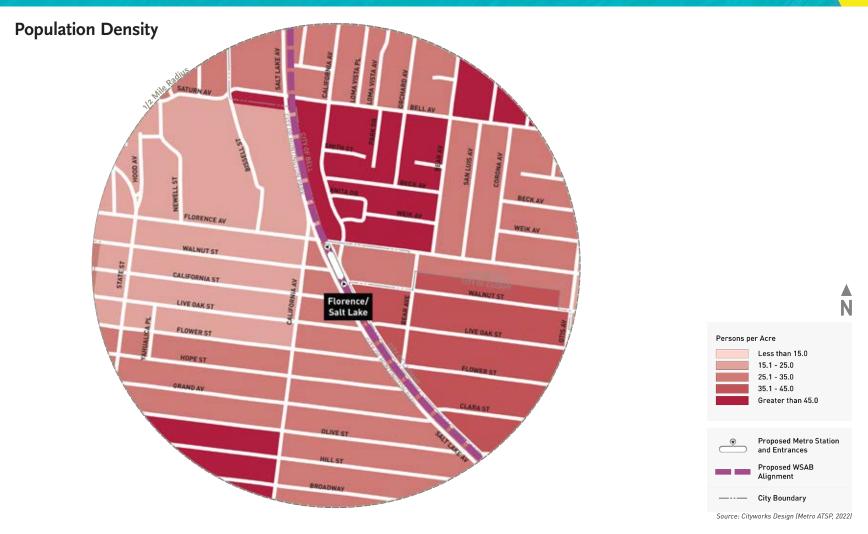








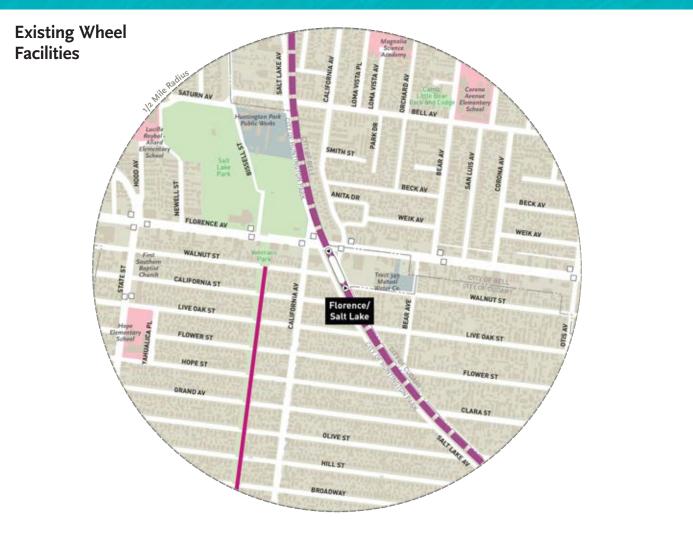
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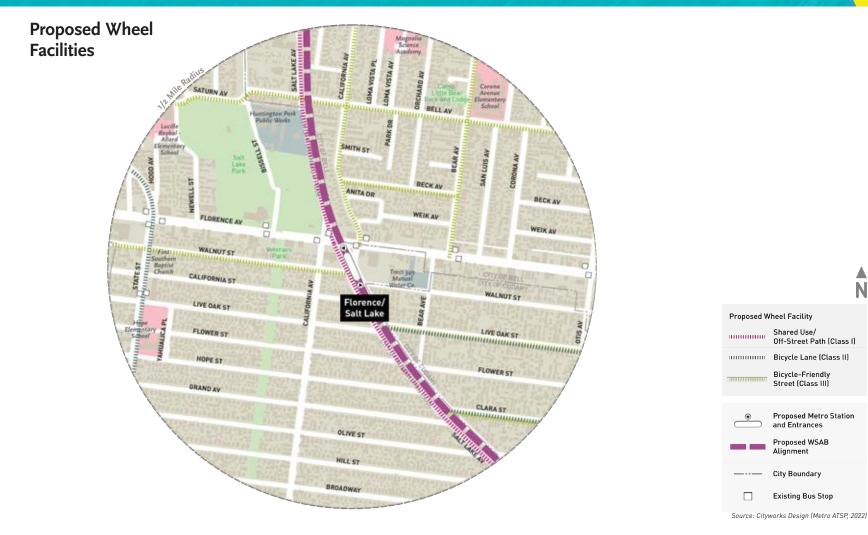


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Existing Wheel Facility Shared Use/ Off-Street Path (Class I) Proposed Metro Station and Entrances Proposed WSAB Alignment City Boundary Existing Bus Stop Source: Cityworks Design (Metro ATSP, 2022)

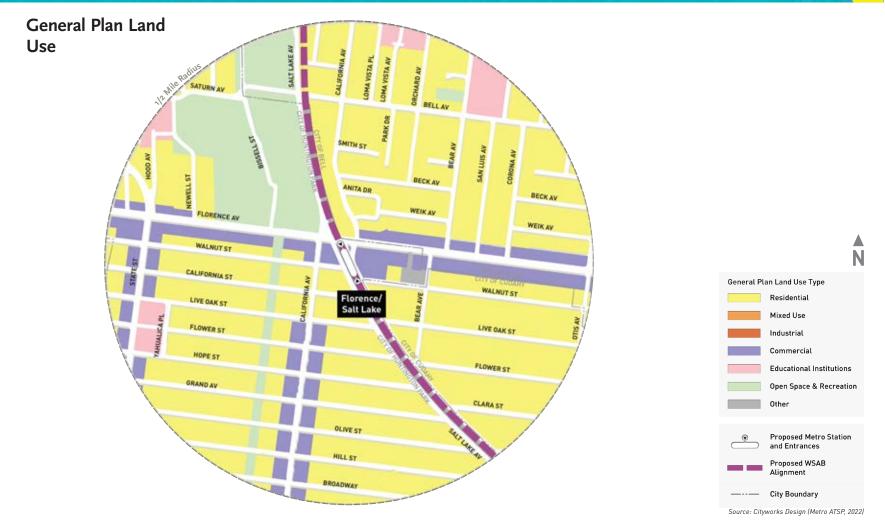




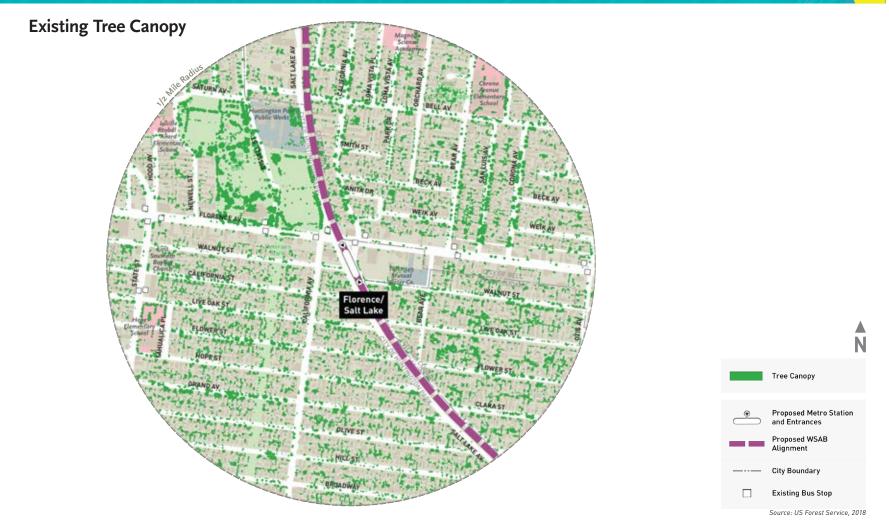


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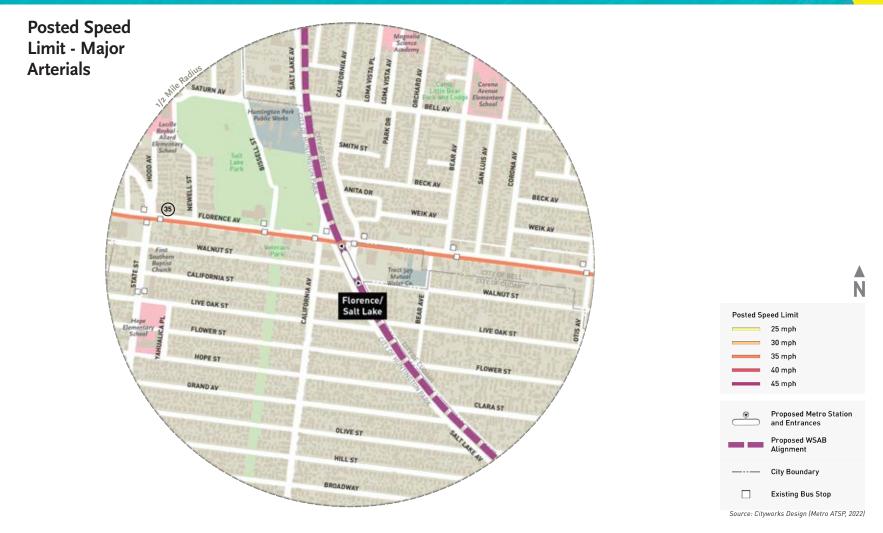
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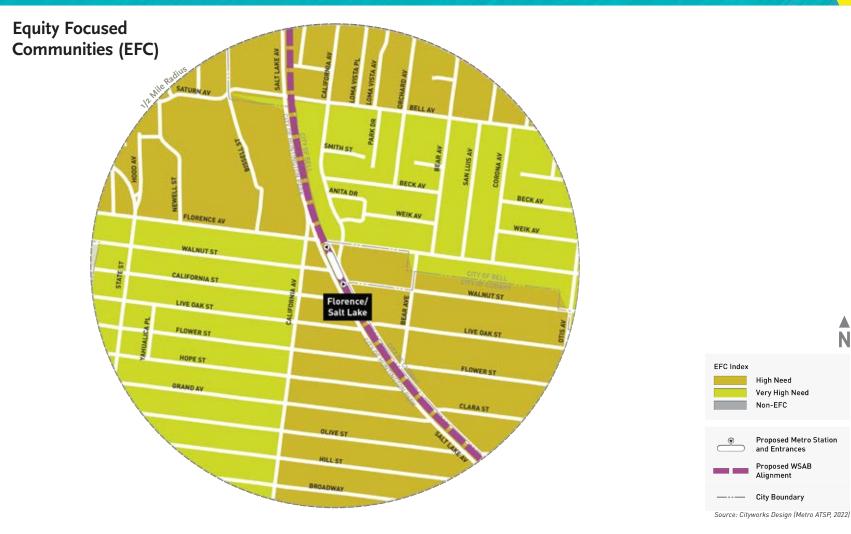
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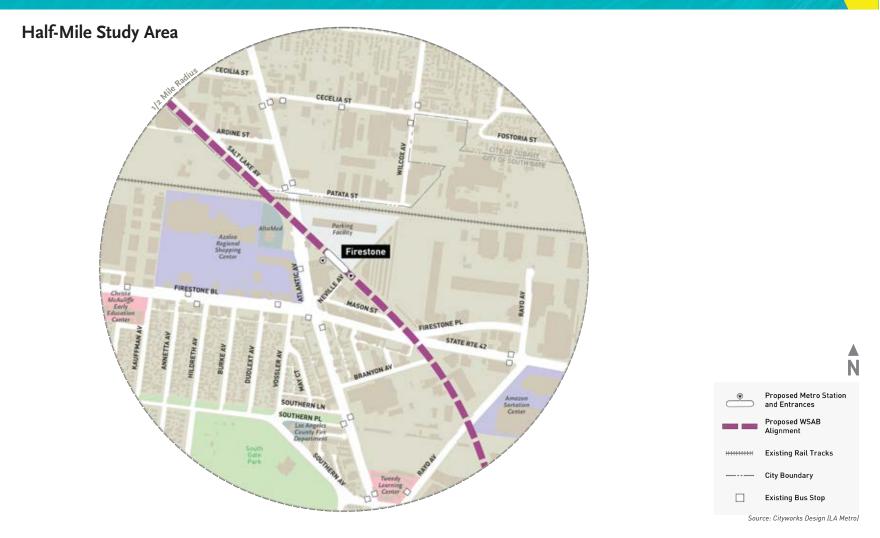




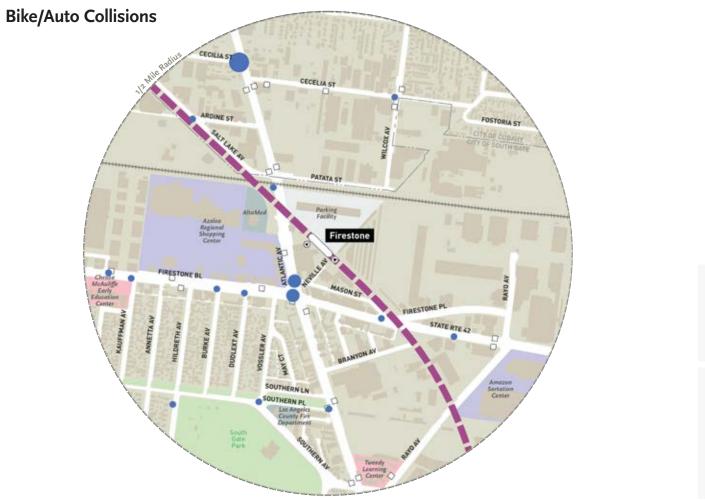
#### WEST SANTA ANA BRANCH TRANSIT CORRIDOR

#### West Santa Ana Branch Transit Corridor Project First/Last Mile Planning Existing Conditions Report

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 Proposed Metro Station and Entrances

 Proposed WSAB Alignment

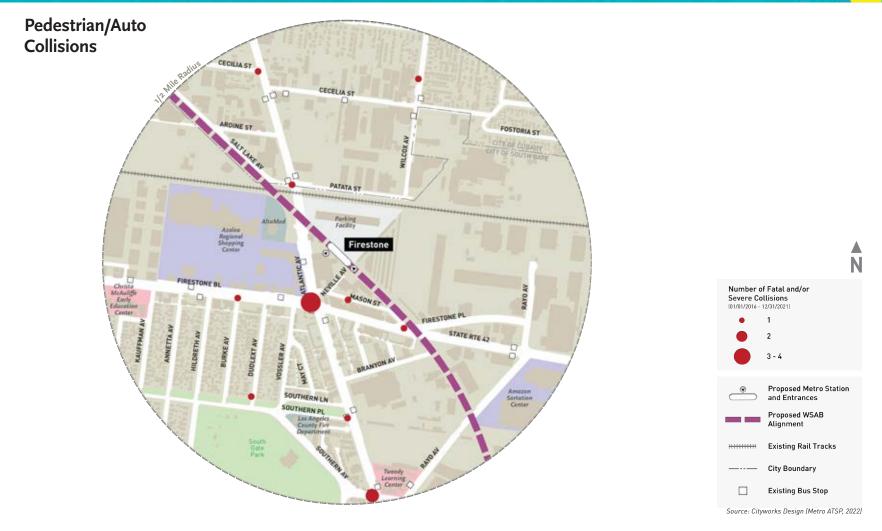
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 Existing Rail Tracks

 City Boundary

 Existing Bus Stop





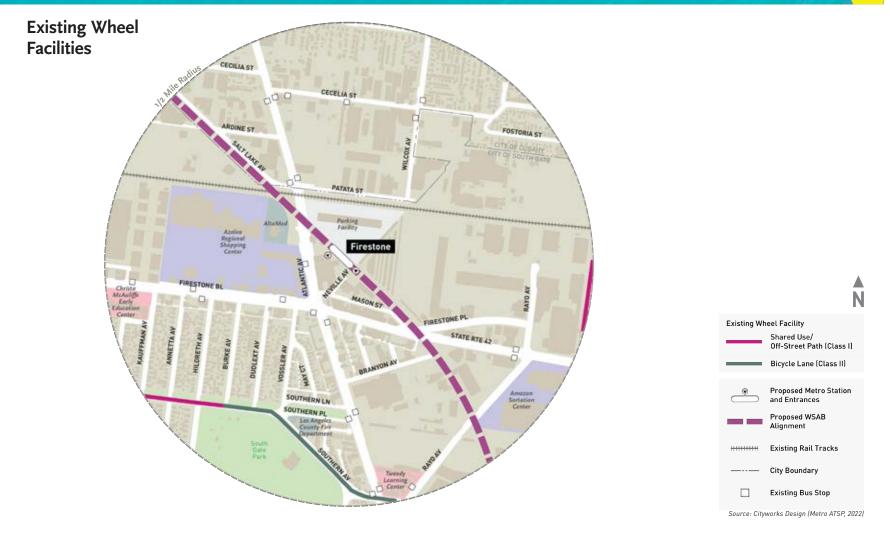




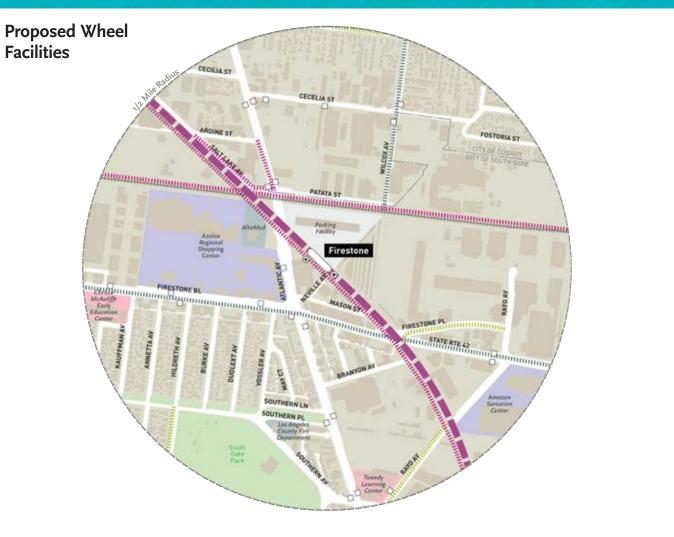










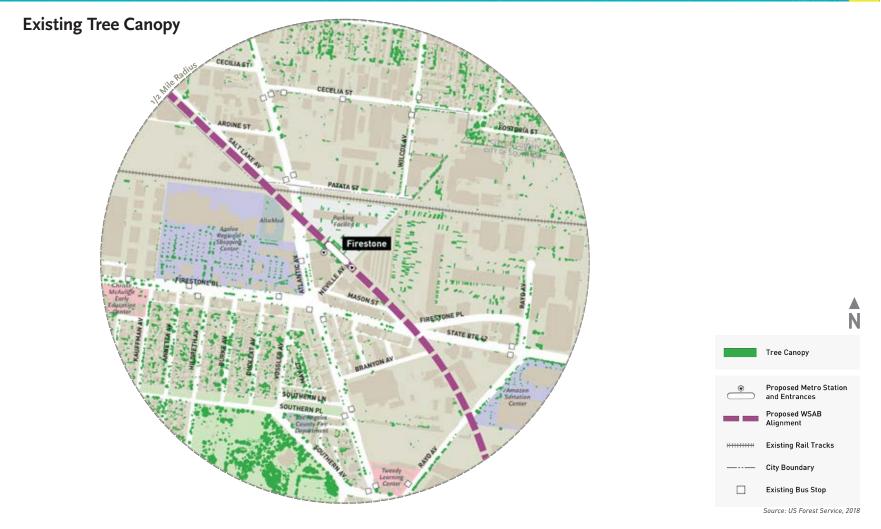




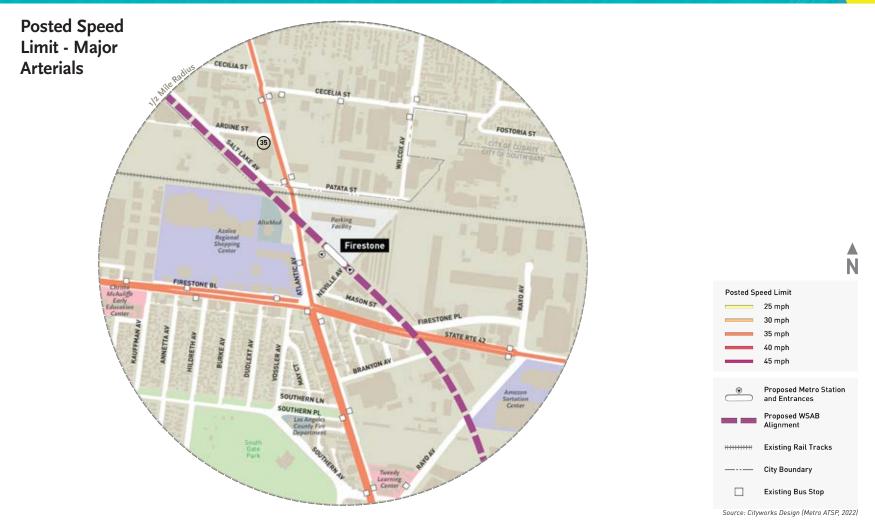












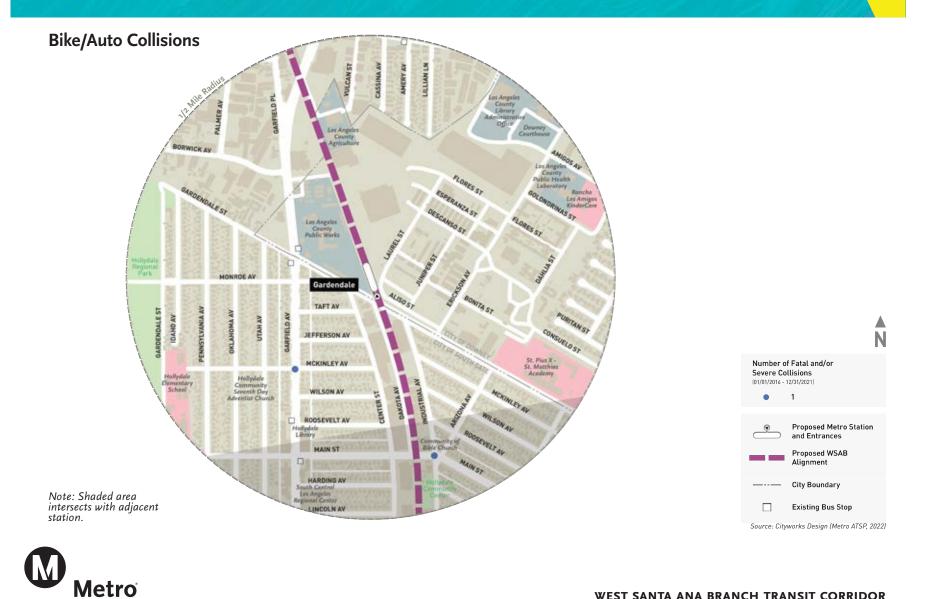




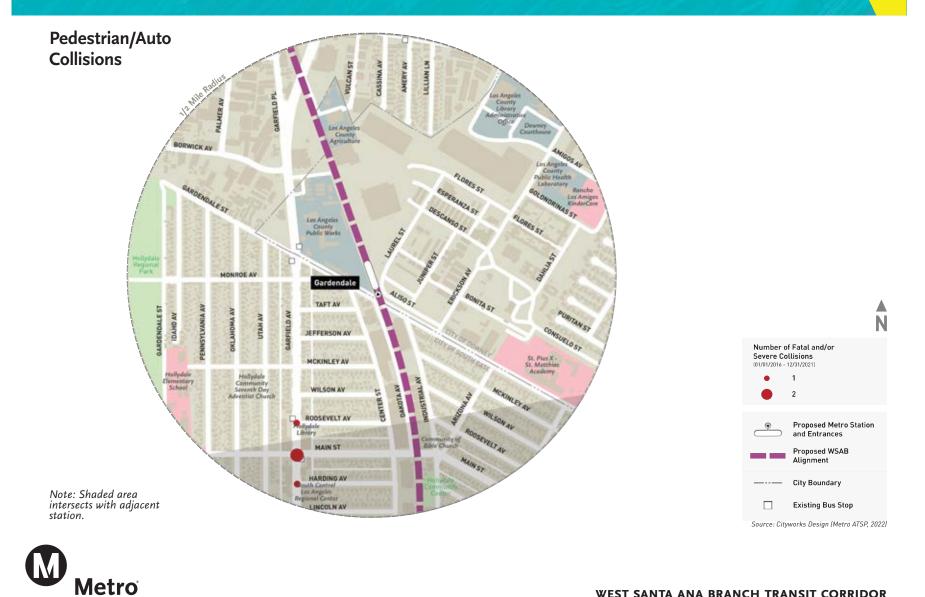
















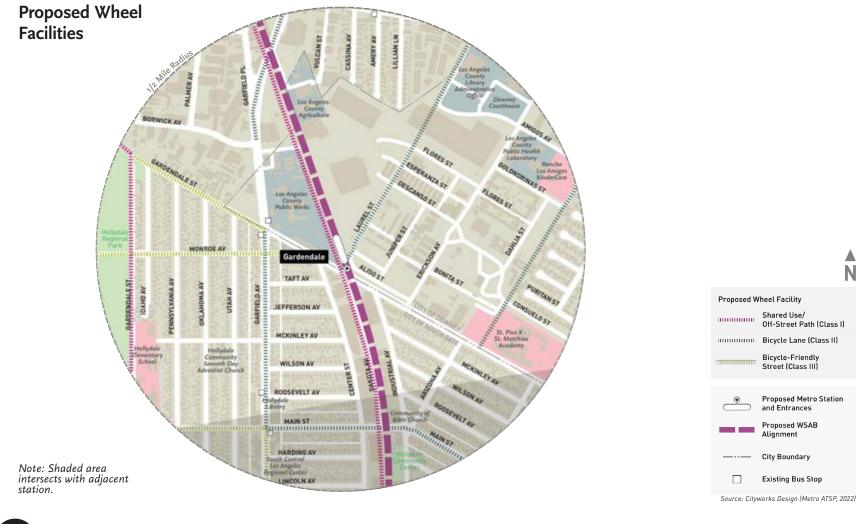












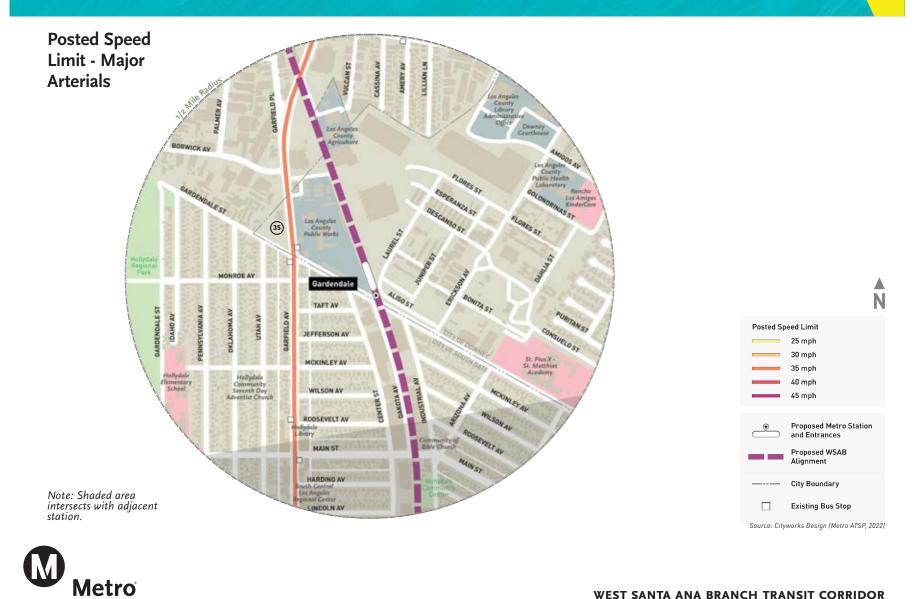






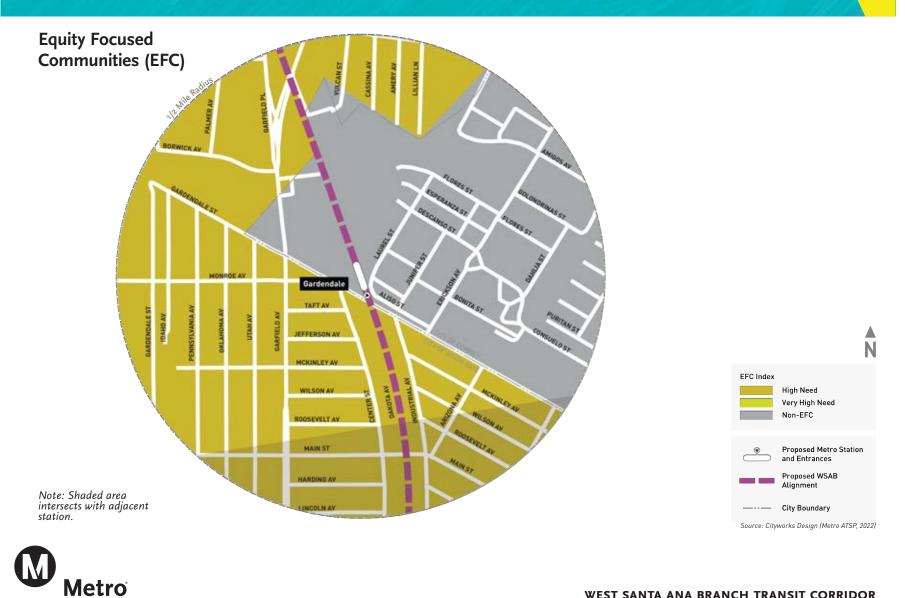








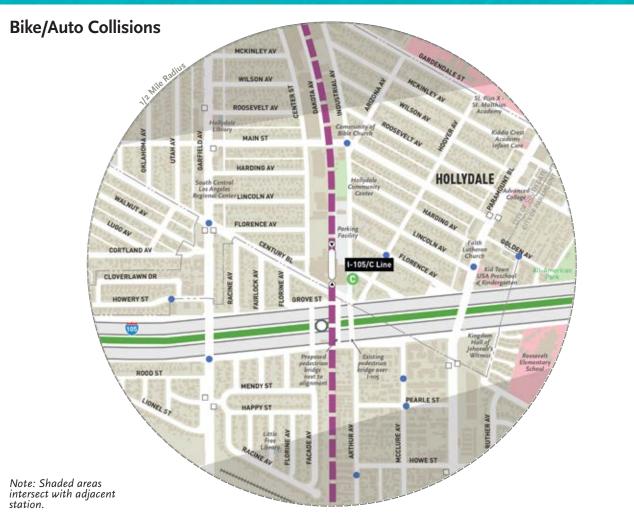
# Gardendale













#### WEST SANTA ANA BRANCH TRANSIT CORRIDOR

#### West Santa Ana Branch Transit Corridor Project First/Last Mile Planning Existing Conditions Report

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Proposed Metro Station

and Entrances

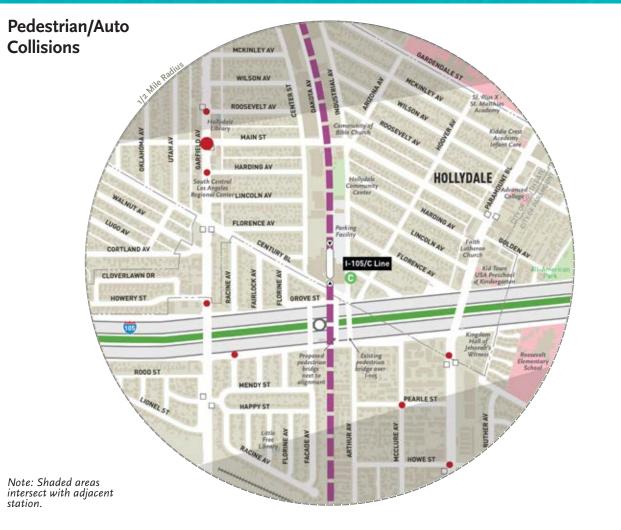
Proposed WSAB Alignment

Proposed I-105/C Line Station

Existing Rail Tracks

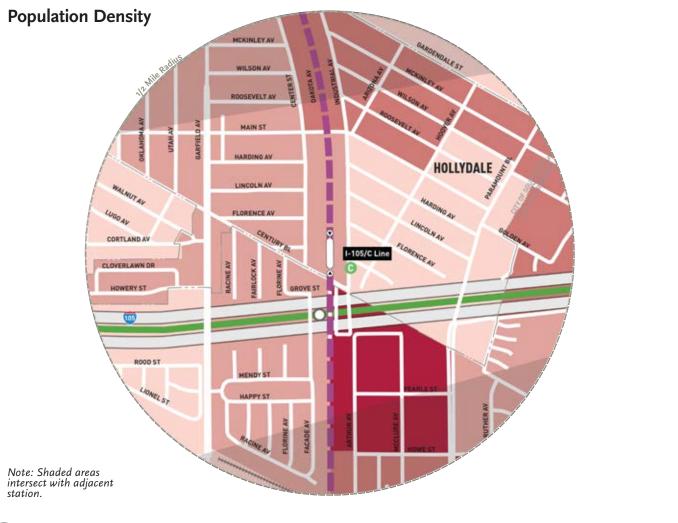
City Boundary

Existing Bus Stop Source: Cityworks Design (Metro ATSP, 2022)



Ν Number of Fatal and/or Severe Collisions (01/01/2016 - 12/31/2021) 2 Proposed Metro Station ۲ and Entrances Proposed WSAB Alignment Proposed I-105/C Line Station Existing Rail Tracks City Boundary Existing Bus Stop Source: Cityworks Design (Metro ATSP, 2022)





Persons per Acre Less than 15.0 15.1 - 25.0 25.1 - 35.0 35.1 - 45.0 Greater than 45.0 Proposed Metro Station and Entrances Proposed WSAB Alignment Proposed I-105/C Line Station Existing Rail Tracks HINNIN City Boundary -----Source: Cityworks Design (Metro ATSP, 2022)

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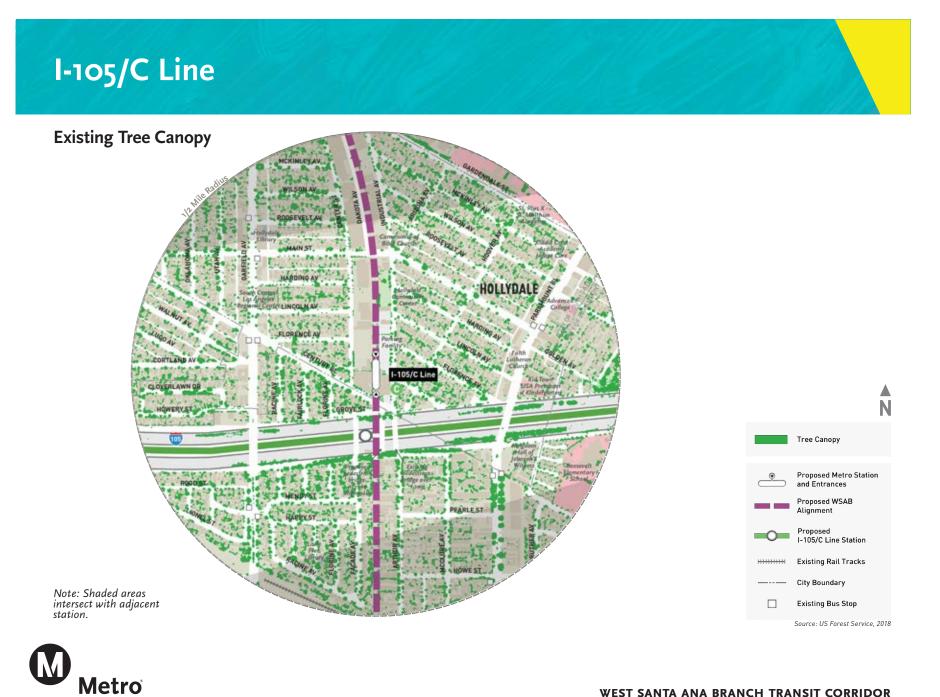










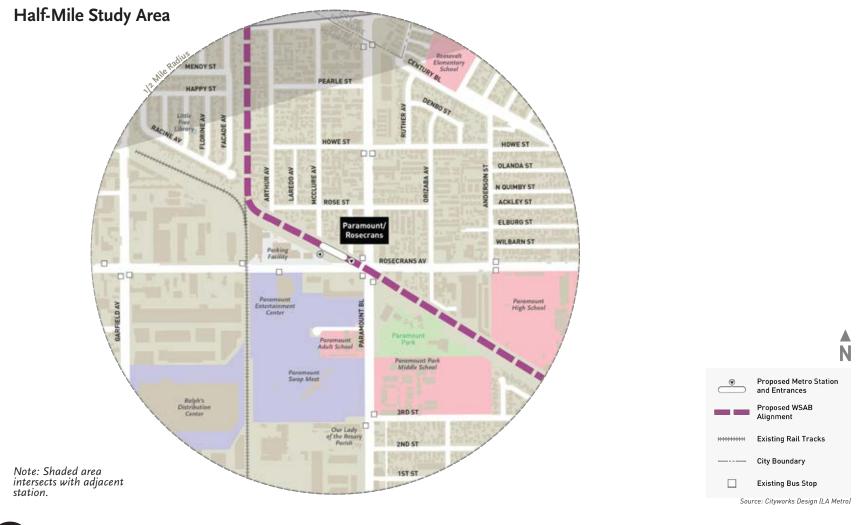








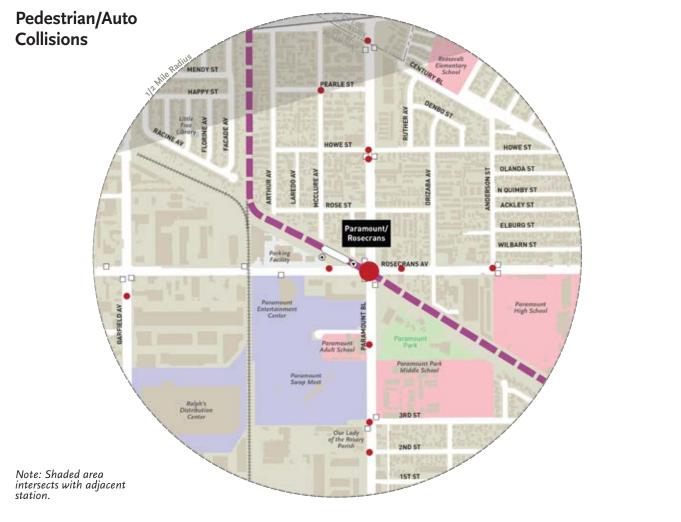








Metro





#### WEST SANTA ANA BRANCH TRANSIT CORRIDOR

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Number of Fatal and/or Severe Collisions

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**Proposed Metro Station** 

and Entrances

Alignment

Proposed WSAB

Existing Rail Tracks

City Boundary

Existing Bus Stop

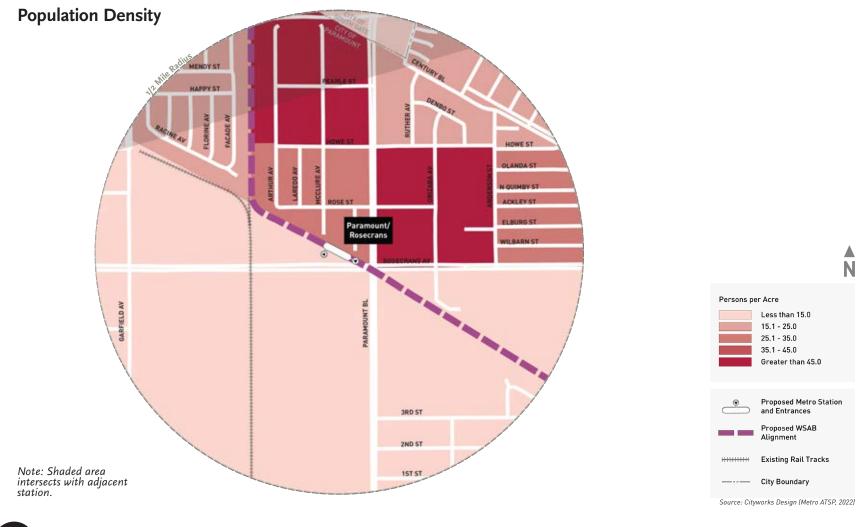
Source: Cityworks Design (Metro ATSP, 2022)

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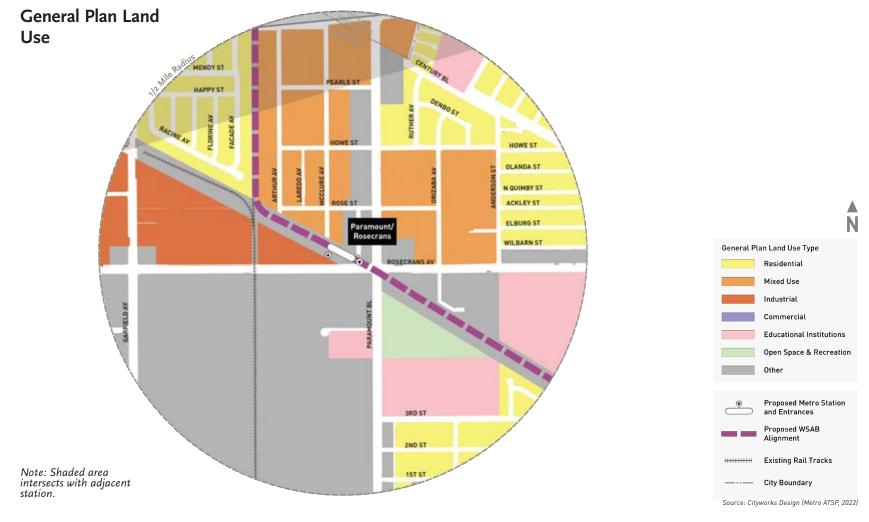




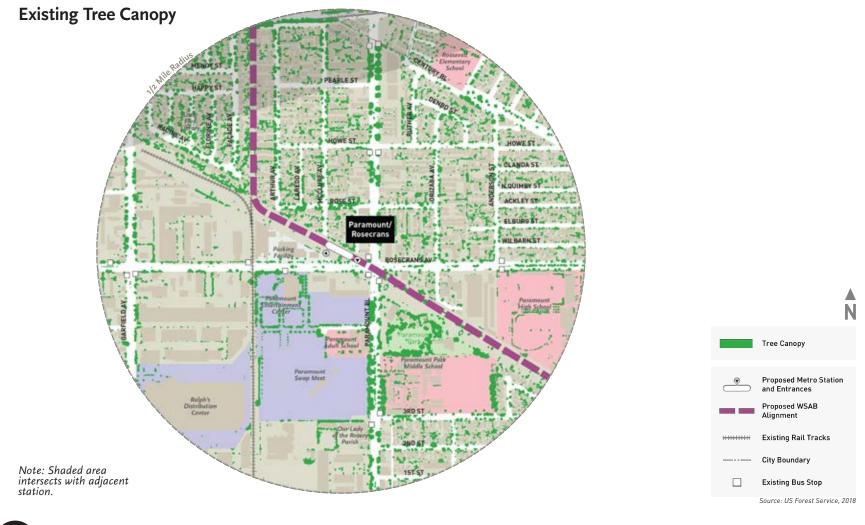




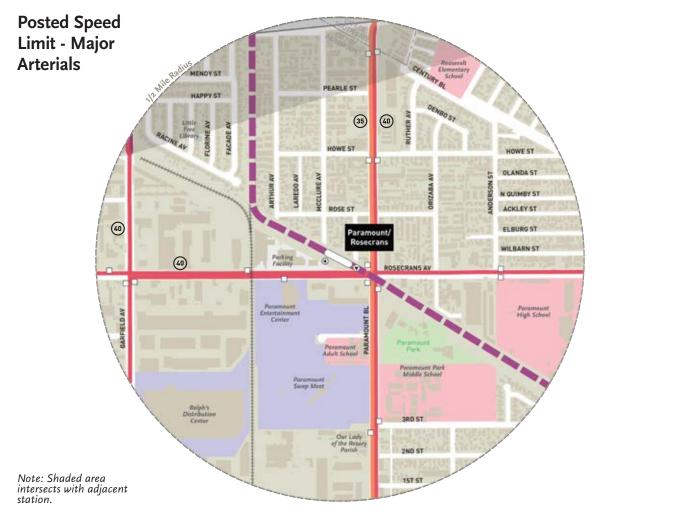










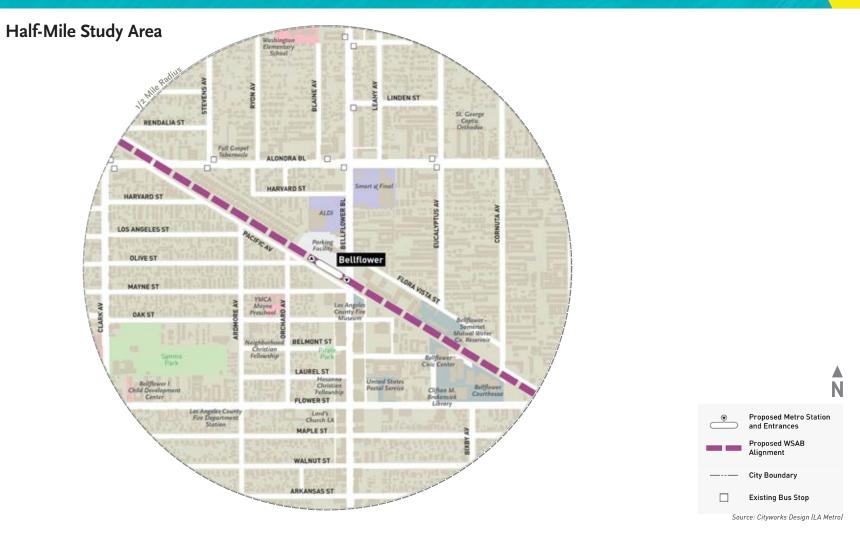


Ν Posted Speed Limit 25 mph 30 mph 35 mph 40 mph 45 mph Proposed Metro Station Ģ and Entrances Proposed WSAB Alignment Existing Rail Tracks ...... City Boundary \_\_\_\_ Existing Bus Stop Source: Cityworks Design (Metro ATSP, 2022)

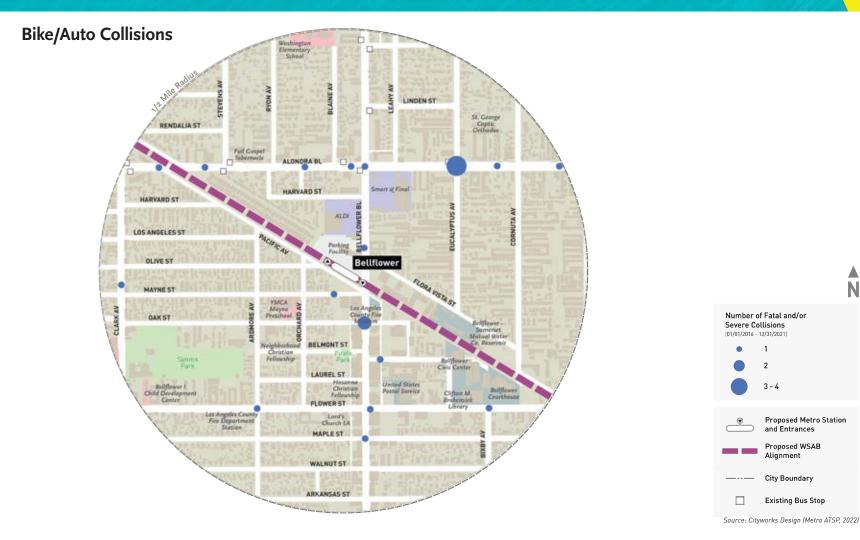








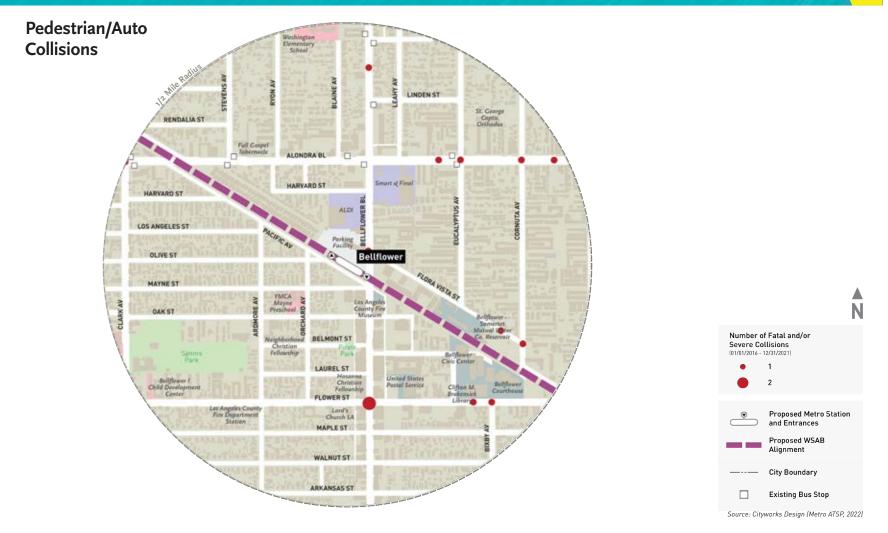




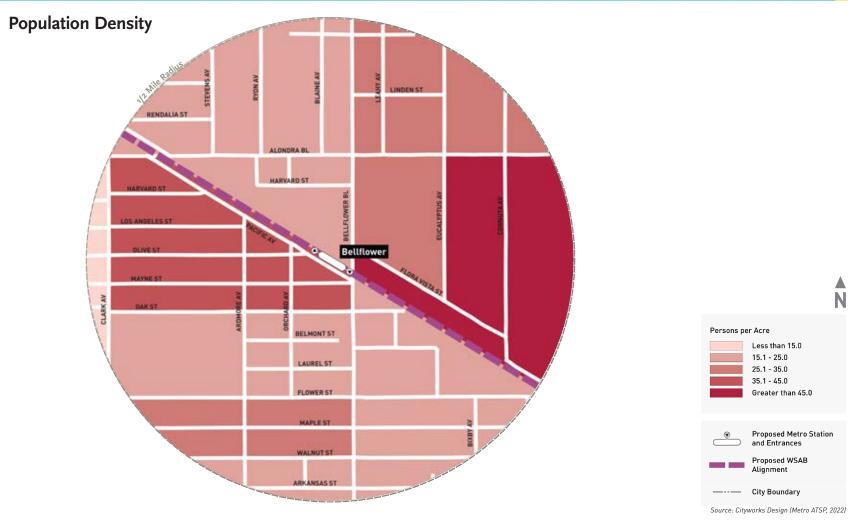


#### WEST SANTA ANA BRANCH TRANSIT CORRIDOR

#### West Santa Ana Branch Transit Corridor Project First/Last Mile Planning Existing Conditions Report



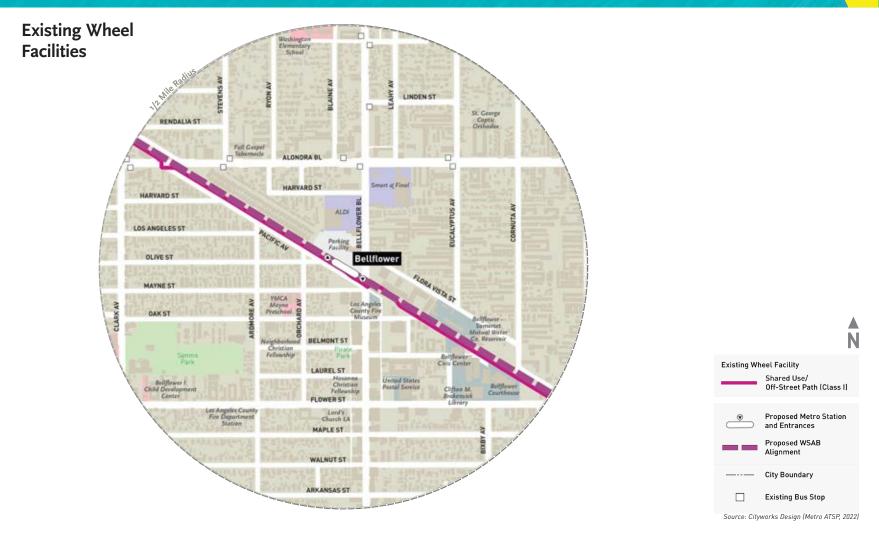




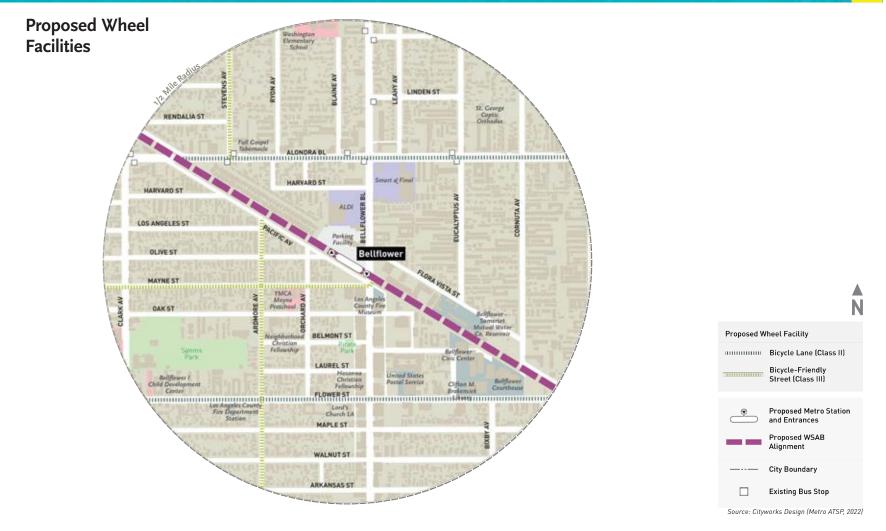




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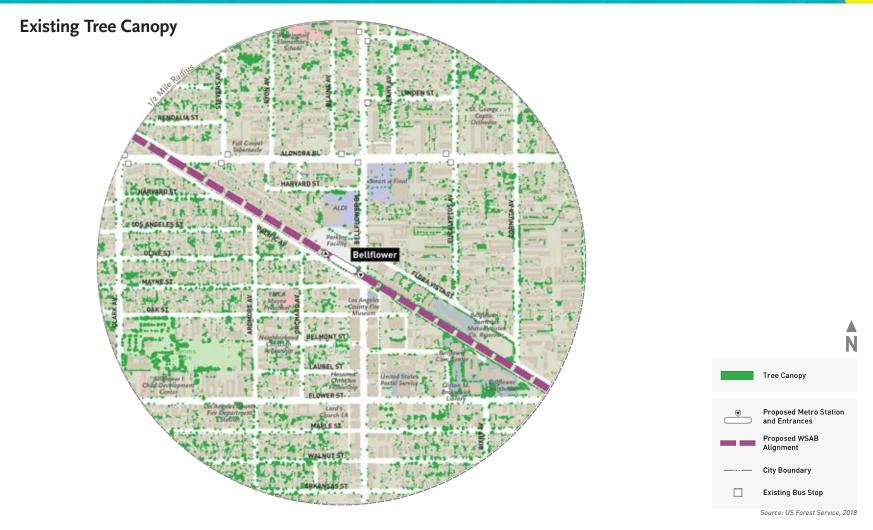




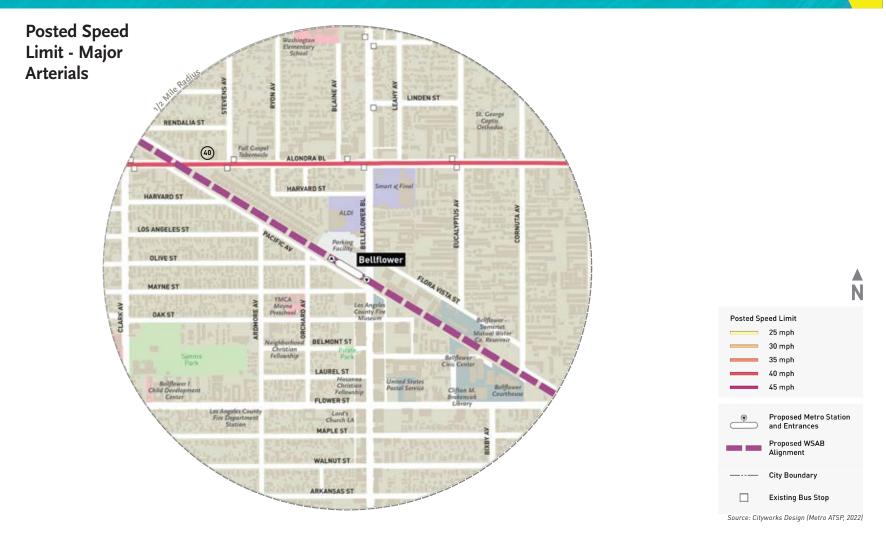




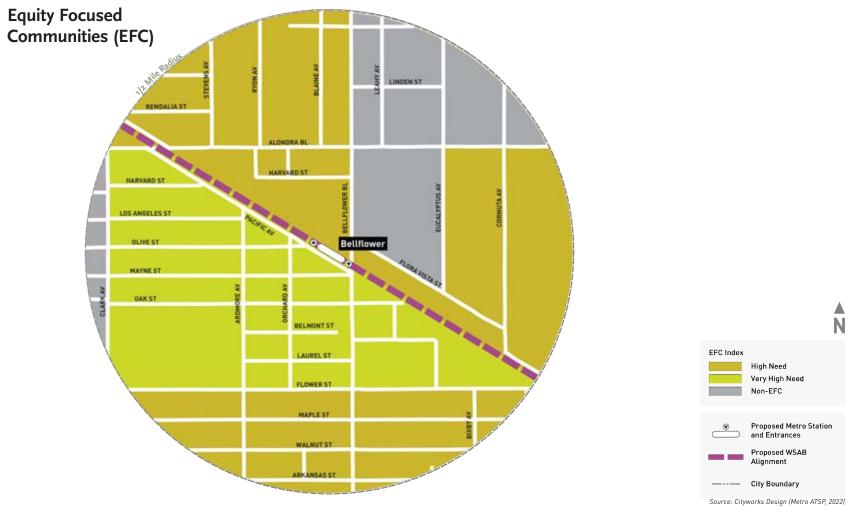






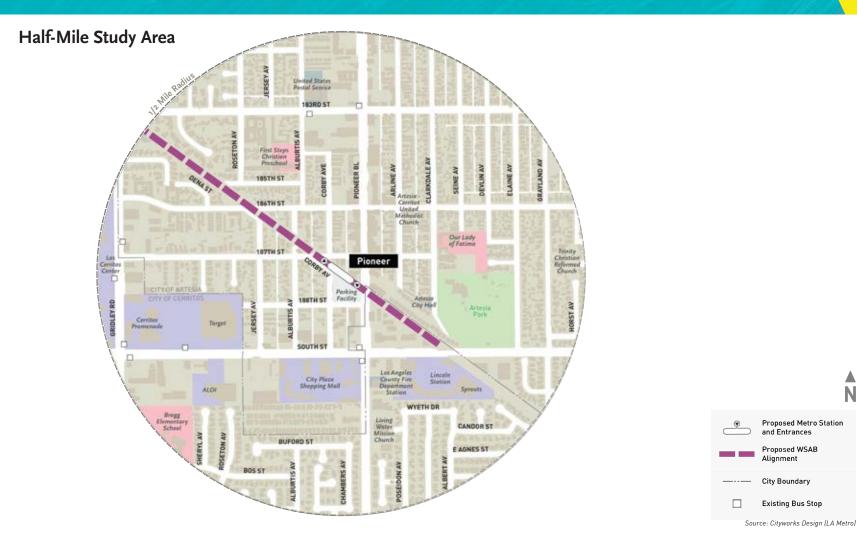








Pioneer

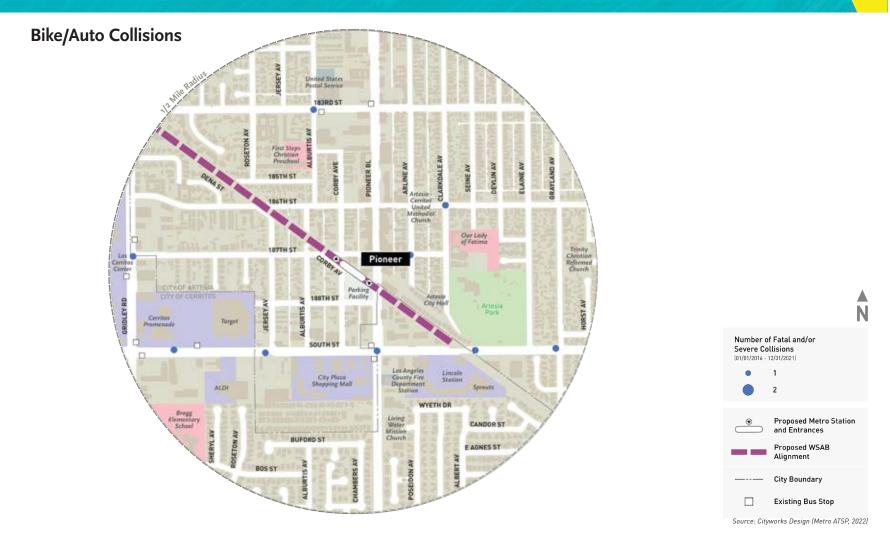




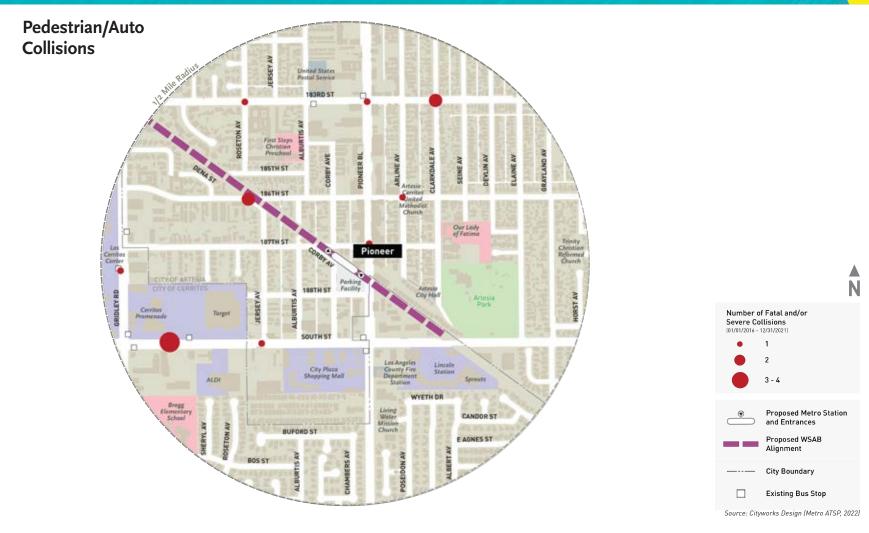
#### WEST SANTA ANA BRANCH TRANSIT CORRIDOR

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Pioneer







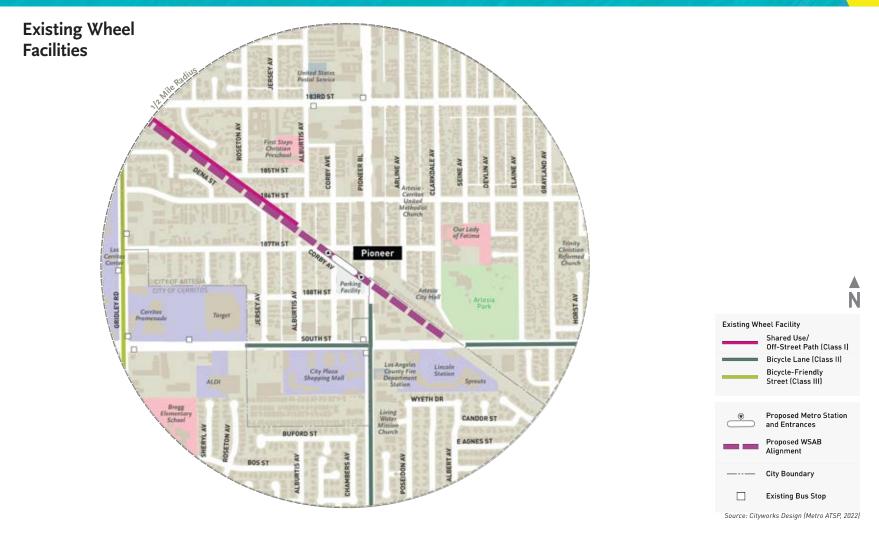














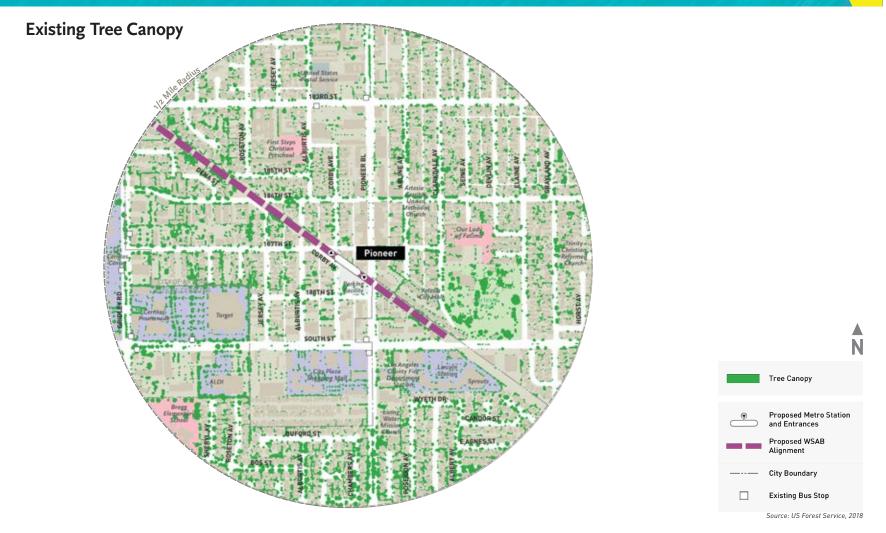




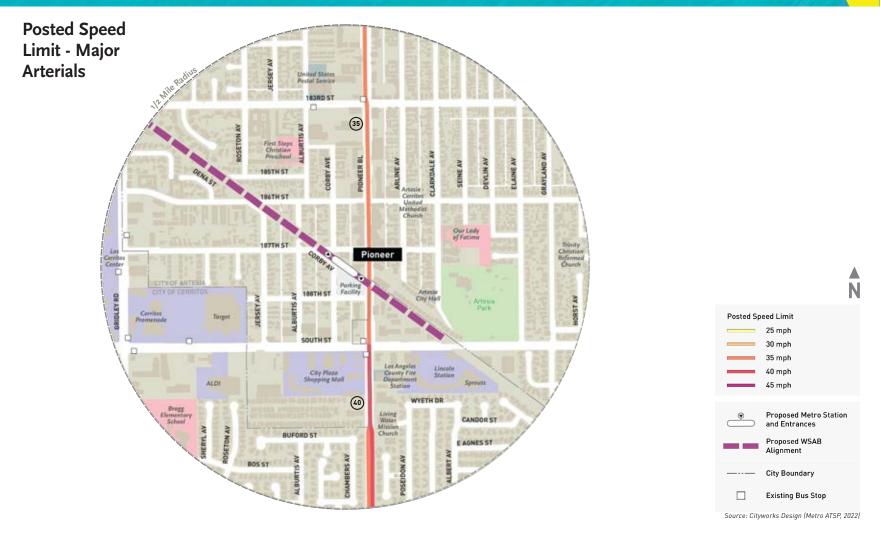


















# APPENDIX C ADDITIONAL RELEVANT PLANS AND PROJECTS

In the Fall of 2022 and 2023, Metro and the FLM planning team coordinated two additional rounds of requests for planning documents and existing FLM projects from jurisdictions. The FLM planning team reviewed these documents for relevant projects to the prioritized project list in the final FLM plan. The final prioritized project list includes a column highlighting those instances of alignment with existing plans or projects.

The following list includes the additional plans and projects provided directly to the team by agencies or jurisdictions.

# City of Artesia

• Artesia Bus Stop Improvements Project

# City of Bell

• Florence Corridor Complete Street Evaluation and Master Plan

# City of Cudahy

- Atlantic Corridor Complete Street Evaluation and Master Plan
- Cudahy LA River Area Improvement Project Salt Lake Ave and Otis Ave Pocket Park
- Citywide Sidewalk Maintenance Project
- Salt Lake Ave Pedestrian Accessibility Project
- Salt Lake Ave/Otis Ave/Elizabeth St Traffic Signal Project TRE-004
- Cudahy Bus Stop Improvement Project
- Atlantic Ave Complete Streets Improvements Project

## City of Huntington Park

- Safe Routes to School and Childhood Obesity Project
- Slauson Ave Corridor & Citywide Pedestrian, Bike and Transit improvements

## **City of Los Angeles**

• Sidewalk Transit Amenities Program

## City of Maywood

- ATP Bike and Pedestrian Master Plan
- Randolph Street Bike and Facilities Improvements

## **City of Paramount**

- Clearwater East Specific Plan
- Climate Action Plan

## City of South Gate

- WSAB LRT 1st First/Last Mile Bikeway Safety & Access
- Hollydale Area Access Improvements Project
- Garfield Ave Street Improvements
- Garfield Avenue and Imperial Highway Improvements project

- FLM improvements from the following projects accepted
  - o I-710 Freeway Southbound On-Ramp Modification
  - o Firestone Blvd Regional Corridor Capacity Enhancements, Phase I and II
  - o Atlantic & Firestone Intersection Improvements Phases I and II

# City of Vernon

• Vernon Randolph-To- River Greenway Project

# County of Los Angeles

MAT Slauson Project

West Santa Ana Branch Transit Corridor Project



# **Community Outreach Summary Report – Appendices**

Supporting documents with no effect on FLM plan recommendations, Metro intends to publish separately, and additional detail may be added following Metro Board adoption.



# Appendix A

Appendix A.1 – Community Engagement Strategy



Appendix A.1 – Community Engagement Strategy

# **Community Engagement Strategy**

# West Santa Ana Branch Transit First/Last Mile Project

# Contents

I.	Introduction
II.	Outreach Timeline
III.	Identify and onboard Community Based Organizations4
IV.	Identification of Key Stakeholders and Community Groups5
V.	Identification of Key Community Events and Pop-up Opportunities5
VI.	Walk Audits6
VII.	Pop up Workshops (9 total)7
VIII.	Visual Content and Interactive Engagement8
IX.	Presentations at Existing Community Meetings9
Х.	Community Survey10
XI.	Traditional Notification Efforts11
XII.	Digital Media Tactics
XIII.	Virtual Interactive Tool11
XIV.	Outreach Summary Report

# I. Introduction

As part of our commitment to engaging with the community in the development and implementation of the West Santa Ana Branch Transit Corridor First/Last Mile Project, we have developed a comprehensive Community Engagement Strategy (CES). This CES includes several chapters that will outline specific outreach efforts designed to present information to garner informed and creative feedback from each of the nine (9) station area communities. By implementing these tactics, we aim to actively involve community members in the project's development, collect valuable feedback and ensure that the project aligns with the community's needs and goals.

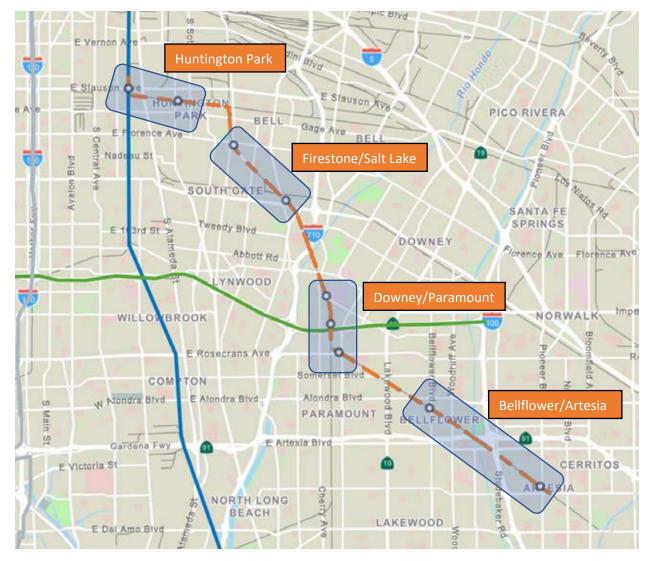


Figure 1 WSAB Corridor Map

This map identifies clusters of station areas in the corridor that outreach efforts will focus on. Community events, presentations and other outreach activities will be segmented into these clusters to ensure a balanced approach when engaging with station area communities.

# II. Outreach Timeline

D = Deliverable, E = Event

													2024		
	Tasks	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
WSAE	3 Project Approval/ Environmental Document (PA/ED) – K	ey Miles	tones												
Env	Community Open Houses														
Env	Project Renaming Campaign														
Env	Metro Board to certify Final EIR														
WSAB First/Last Mile Planning – Key Milestones															
FLM	Technical Walk Audits														
FLM	Layout Pathway Network and Project Ideas														
FLM	Project Prioritization														
FLM	Final FLM Plan														
WSAE	3 First/Last Mile – Outreach														
1	General Project Management														
1.5	CBO Selection and On-Boarding (Modification)			D											
2	Identify Key Stakeholders, Comm. Groups, Local Events			D											
3	Community Engagement Strategy	D													
4	Community Eng. Activities, Events, and Survey														
4.1	CBO Partnerships and Task Support														
4.2	Walk Audits (9x, CBO-led)				E	E									
4.3	Pop-up Workshops (9x with CBO support)					E	Е	E	E			Е	E	Е	E
4.4	Presentations at Existing Comm. Mtgs. (up to 15)					E	Е	E	E			Е	E	E	E
4.5	Survey														
4.6	Traditional Notification Efforts														
4.7	Innovative Social Media Tactics														
4.8	Virtual Interactive Tool				D										
5	Summary Report														D

# **III. Identify and onboard Community Based Organizations**

Arellano Associates will lead and coordinate Community Based Organization (CBO) involvement for this outreach program. The steps below outline the strategy for identifying, onboarding and coordination of tasks during the life of this project.

Objective: Identify and onboard CBOs to support project activities.

# Steps:

# Prepare for CBO invitations (April – early-May 2023)

- 1. Conduct research to identify potential CBOs in the project corridor area.
- 2. Develop criteria to evaluate CBOs and select those that meet the criteria.
- 3. Prepare CBO invitation communications.

# Initiate contact with CBOs (May 4 – May 19, 2023)

- 4. Reach out to potential CBOs to assess their interest and capacity to participate in the project.
- 5. Evaluate CBOs and select partners.

# **Onboarding Process (May 29 – June 8, 2023)**

- 6. Meet with selected CBOs to discuss their roles and responsibilities and establish a working relationship.
- 7. Provide training and support to CBOs to ensure they have the necessary skills and resources to support project activities.

## Activation

- Assign specific tasks to each CBO, including walk audits, community presentations, events, inperson outreach activities, developing a map-based community survey, and developing a social media strategy.
- 9. Monitor and evaluate the performance of each CBO, providing feedback and support as needed. Adjust scope as needed to meet their capacity.
- 10. Collaborate with CBOs to develop effective communication strategies to engage with the community and increase participation in project activities.

## Timeline:



# **IV. Identification of Key Stakeholders and Community Groups**

AA will coordinate the development of a key stakeholders and community groups list using previous project databases (WSAB Environmental, WSAB TOD-SIP, Rio Hondo Confluence Station Feasibility Study) as well as through collaboration with the selected CBO, SWG members and Metro.

**Objective:** Prepare a comprehensive list and interactive map of key stakeholders for effective engagement in the project.

# Steps:

# Identify relevant stakeholders and develop tiered list

- 1. Identify the relevant categories of stakeholders, such as schools, cultural centers, large employers, neighborhood groups, and other potential community stakeholders and organizations.
- 2. Conduct research to identify all the potential stakeholders within each category and compile a comprehensive list.

## Develop key stakeholder map

- 3. Develop an interactive map of the key stakeholders and their locations.
- 4. Integrate the existing resources, including the WSAB stakeholder database, meeting log, comment records, and outreach summary reports, into the comprehensive list and map.
- 5. Incorporate input from Metro, local agencies, CBOs, and SWG members, to ensure that all relevant stakeholders are included.
- 6. Prioritize the stakeholders based on their level of interest in the project.

## **Update list**

7. Update the list and interactive map regularly to reflect any changes in the stakeholders and their locations.

## Timeline:



# V. Identification of Key Community Events and Pop-up Opportunities

AA will lead and coordinate efforts to identify the best opportunities to participate in events and host pop-up booths in key areas with high foot traffic as well as areas with a good volume of transit riders (near existing rail/bus stations). These efforts will be done in collaboration with CBOs, SWG members, local agencies and Metro.

**Objective:** Identify and participate in key community events and pop-up opportunities to increase engagement in the project.

## Steps:

Develop list of community events and pop-up opportunities

- 1. Create a list of potential events and pop-up opportunities within the project corridor area.
- 2. Seek input from Metro, CBO partners, SWG members, and local agencies on which events and opportunities to participate in that will have high foot traffic and visibility.
- 3. Prioritize the events and opportunities based on their proximity to the project area and the level of community engagement.

## Planning & coordination with Metro

- 4. Split up community events into two phases to coincide with survey collection
- 5. Develop a plan for each event and opportunity, outlining the objectives, strategies, and tactics to be used.
- 6. Create informational materials and provide Metro swag to be distributed at the events and opportunities to drive up engagement.

#### Post-event documentation and review feedback

- 7. Collect feedback and data on the engagement activities at each event to evaluate their effectiveness.
- 8. Regularly review and adjust the engagement plan based on the feedback, data, and changes in the project objectives and priorities.

#### Timeline:



# **VI. Walk Audits**

CWD and AA, with the support of its CBO partner(s) will organize and coordinate walk audits of clusters of 2-3 transit stations (total: 9 stations). CWD, with AA's support will develop a worksheet for walk audit participants that will outline what considerations an observations Metro is looking for feedback on as part of this process. Participants will be equipped with maps and a station area checklist to document access strengths, barriers, observed behaviors, and locations for project ideas. They will summarize their observations and priorities for safety, accessibility, and aesthetics by completing checklists for each route. The information collected will inform the development of draft pathway maps, including specific improvement needs at each station area. The project team will conduct a workshop to train CBOs on conducting successful walk audits. A Metro FLM walk audit app or a similar service (SocialPinpoint) will be used to log data on opportunities, barriers, strengths, and ideas for improving the walking and rolling environment in real-time.

**Objective:** Facilitate stakeholder walk audits and collect data for the project team's development of a walk audit summary report.

Steps:

**Planning and preparation** 

- 1. Coordinate with Technical Team and CBO partners to recruit participants and lead walk audits.
- 2. Test and train walk audit team leaders, including supporting CBO staff, to ensure they have the necessary knowledge to conduct successful walk audits.
- 3. Identify apps/programs that can be used to log data on walk audits.
- 4. Prepare materials and logistics for stakeholder walk audit events at the station area clusters.

## **Conduct walk audits**

- 5. Facilitate the stakeholder walk audit events, coordinate documentation such as sign-ins, comment cards, and photos with CBO staff.
- 6. Provide resources to the project team for the development of a walk audit summary report, including records of geo-tagged comments in the app.
- 7. Collect and compile data on the walk audits and stakeholder feedback, using the app or other documentation methods.

## Follow up documentation and data analysis

- 8. Analyze the data to identify patterns, opportunities, and barriers in the walking and rolling environment around each station area.
- 9. Prepare a walk audit summary report for the project team, highlighting the key findings, observations, and recommendations for improving safety, accessibility, aesthetics, and transfers at each station area.
- 10. Share the walk audit summary report with the project team and stakeholders, soliciting feedback and input for the development of the project's next phase.

## Timeline:



# VII. Pop up Workshops (9 total)

AA will lead the coordination of up to nine (9) pop-up workshops, with the support of selected CBOs. The outreach team will also identify opportunities to consolidate workshops for multiple station area communities where it makes sense (*e.g. Gardendale, I-105/C Line, Paramount/Rosecrans stations*). Events will focus on multiple station areas (2-3) and there will be two rounds of pop-up workshops in fall 2023 and winter/spring 2024.

**Objective:** Highlight the Draft Pathway maps for each of the nine WSAB stations at community engagement activities, including nine public pop-up workshops, in-person, online, or hybrid.

## Steps:

- 1. Identify community events, including health fairs, holiday festivals, concerts/movies-in-the-park, school events (PTA, back to school nights), church/cultural events, and others as informed by the CBOs.
- 2. Develop a plan for the 9 pop-up workshops and determine the format of each event.
- 3. Ensure that participation at events is strategic and actively engages participants.

- 4. Prepare event logistics and materials and facilitate in-person engagement activities near the project stations.
- 5. Conduct nine (9) public pop-up workshops, one (1) near each of the nine (9) future WSAB station areas. (*Combine some events, if possible, to free up one event to be used for a youth event, such as a bike rodeo, organized through a CBO in coordination with schools.*)
- 6. Conduct workshops at existing community events to allow access to additional participants beyond those who would have purposely attended a FLM workshop.
- 7. Develop quick, post-event summaries with key metrics and engagement information to inform the team on how to improve or change its approach for subsequent workshops.

# Timeline:



# **VIII. Visual Content and Interactive Engagement**

AA will work with Metro, selected CBOs and the technical team to develop engagement activities that serve the general public and the youth demographics (K-12, community college). These activities will provide opportunities for the public to engage with the project at pop-up workshops and/or community presentations when appropriate.

**Objective:** Develop visual content and interactive engagement activities to encourage participation in the project.

# Steps:

- 1. Collaborate with Metro and CBO partner(s) to develop a "gamified" approach to draw in and encourage participation.
- 2. Develop a "Find and Fix the Gap" game that asks users to identify barriers or gaps that currently prevent them from accessing the station area and prompts them to select from a toolkit of Future of Los Angeles (FLM) solutions to advise the best solution per barrier.
  - a. Develop "Visual Voting" games that involve giving participants five color balls (votes) and asking them to place them in large transparent containers listing FLM improvements.
  - b. Offer a "String Map" exercise to visually map the route that each of the participants would currently have to make to the station area, as well as the route and mode of travel once the FLM improvements are in place. The visual impact of this display would grow as more participants layer on their trips.
- Conduct a youth outreach program that asks students to illustrate their ideal WSAB station area and emphasize what excites them the most about future rail station access in their community. Winners will receive a gift, and their entries will be promoted on Metro social media and on school websites.

- a. **Grades K-8:** Conduct an art contest that involves illustrating the ideal station area for their community.
- b. Grades 9-12: conduct an art or mixed media contest
- c. **Community College:** conduct a social media video or other creative media contest (up to 1 min).
- 4. Integrate proven tactics such as bike and TAP cards giveaways, interactive pop-up elements (inperson/online), and free food and local DJs, artists, and live painting to help generate more event participants.
- 5. Document results of engagement activities and use this data to provide the technical team with for their consideration and incorporation into the FLM Plan.

# *Timeline to coincide with the planning and preparation of community workshops and pop-up opportunities.*

# **IX. Presentations at Existing Community Meetings**

AA and its CBO partners will conduct presentations at up to 15 existing community meetings in either an in-person or virtual format. These presentations are meant to be engaging and will allow for questions from the audience, that will be answered by the project team or taken back and responded to in writing at a later date. These presentations will be made as needed and as directed by the Metro team.

**Objective:** Conduct presentations at existing community forums, as directed by Metro, to proactively engage key community groups, leaders, and civically engaged stakeholders.

# Steps:

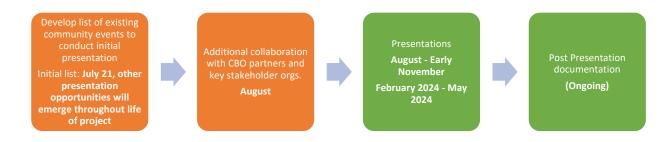
# Planning and preparation

- 1. Identify up to 15 existing community forums to recommend to Metro team for conducting presentations at.
- 2. Collaborate with City Council, CBO partners' organizations, agencies, and other community groups to conduct presentations.
- 3. Schedule presentations at community forums such as City council presentations (with a pop-up open house in the council chamber foyer), CBO partner's organization(s), and other groups recommended by agencies and CBOs, nearby community meetings hosted by Metro or other public agencies, Gateway Cities COG Board, including the WSAB TAC and Transportation Committee, Eco-Rapid Transit Board, etc.

# Presentations

- 4. Conduct presentations
- 5. Provide real-time access for all team members to the master calendar of all scheduled and completed briefings.
- 6. Document feedback and insights from community members during the presentations.
  - a. Provide Metro and Technical Team short recap summaries of each presentation within 72 hours following the presentation.

# Timeline:



# X. Community Survey

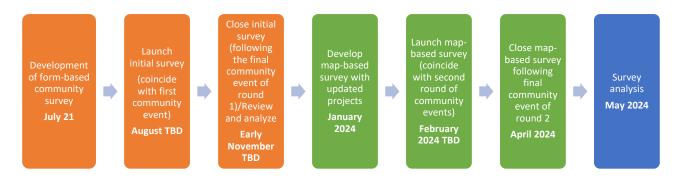
AA will develop an introductory "form" based survey, followed by the development of a map-based survey to present improvements in an easy-to-understand format that will drive informed feedback from the WSAB station area communities, transit riders, and key stakeholders. The surveys will be developed in close collaboration with the technical team who will provide necessary mapping data and improvement sketches and shapefiles.

**Objective:** Develop community survey and an interactive map survey to gather community input on proposed improvements and scenarios.

## Steps:

- 1. Collaborate with the technical consultant to develop two surveys, including a basic form based survey using Typeform, SurveyMonkey, Google Forms, or Microsoft Forms and a community map-based survey using ArcGIS Survey 123, SocialPinpoint, or other preferred survey tools.
  - a. Develop an interactive map that intuitively engages stakeholders to receive project information and provide crowdsourcing map-based feedback.
  - b. Develop the mapping tool capable of featuring the LPA station areas and highlight the proposed improvements for each.
- 2. Distribute surveys electronically to the WSAB station area communities, commuters, and Metro transit riders, and making it accessible at pop-up workshops and community presentations.
- 3. Collaborate with CBO partners and extend outreach efforts to expand the reach of the survey.
- 4. Document and analyze the feedback and insights gathered through the survey and interactive map.
- 5. Use the feedback and insights gathered to inform the development of the project and to ensure that it aligns with the community's needs and goals.

#### Timeline:



# **XI. Traditional Notification Efforts**

Traditional notification efforts will precede all community pop-up workshops. Traditional notification may include the development of flyers and postcards, the placement of newspaper ads, door-to-door flyer distribution and extended outreach through CBO and community partners.

- The existing WSAB communication tools and methods will serve as the primary source for providing ongoing updates related to the FLM planning process.
- AA staff will seek extended outreach strategies for supplementing notification efforts.
- Use established relationships with key stakeholders, GIS mapping, occupancy, and commercial data lists to ensure a variety of notification tactics are offered to reach area residents, organizations, businesses, and elected officials.
- Noticing will address local language needs (English and Spanish).
- Distribution of flyers at public counters and extended outreach to CBO's and partners will also be used.
- Mailed notification will be used on an as-needed basis but will not precede all community workshops.

# Timeline of Traditional notification efforts will coincide with the planning and preparation for community events, workshops, presentations and survey launches.

# **XII. Digital Media Tactics**

Digital media notification efforts will complement traditional notification efforts for larger-scale promotion of events like the nine (9) community pop-up workshops, as well as serve as the primary notification method for smaller-scale events including presentations and pop-up events, and to promote the survey.

Digital media tactics include:

- Web banners / animated ads will be featured in social media sites and community publications with a direct link to FLM resources and/or public notices.
- Digital geofencing ads will be used to push ads on the mobile devices of people who live in or are passing through the project area. These ads will target community members based on their location, demographics, or online behavior.
- SMS ads allow the targeted reach to stakeholders that have opted-in to receive SMS messages from Metro WSAB.
- Social media targeted ads (and posts) through Facebook, Instagram, Twitter and Nextdoor (posts) will be used to promote community meetings and survey tools.
  - AA will provide Metro's Social Media team with content and relevant details for posts and ad campaigns.

*Timeline of digital media tactics will coincide with the planning and preparation for community events, workshops, presentations and survey launches.* 

# XIII. Virtual Interactive Tool

The virtual interactive tool will be developed by AA in close collaboration with Metro and the technical team. The interactive StoryMap tool will serve multiple functions, including a platform to host the most up-to-date project materials, maps and surveys.

**Objective:** Develop an engaging and interactive project subpage to enhance public engagement and provide an in-depth understanding of the project.

## Steps:

## Virtual interactive tool development

- 1. AA's Creative Team will develop an interactive project subpage that complements the main project webpage.
  - StoryMaps to fit the needs of the FLM study.
  - House interactive project surveys and comment forums on the subpage to encourage community input and feedback.
  - Collaborate with technical team to develop interactive renderings and videos to provide the public with an in-depth understanding of the project.
- 2. Develop a StoryMap to showcase information on each of the station areas, integrating interactive maps, station area visuals, and other helpful resources.

## Launch and maintenance

- 3. Promote the StoryMap on the existing project website.
- 4. Ensure that all content on the project subpageand StoryMap is engaging, interactive, and visually appealing.
- 5. Continuously monitor and update the subpage and other interactive tools with new information and resources throughout the FLM planning process.

## Timeline:



# **XIV. Outreach Summary Report**

At the conclusion of outreach activities for the WSAB FLM Project, AA will provide an integrated Outreach Summary Report, which will serve as a summary of public input received.

- The report will include infographics, photographs, videos, and infographics.
- The report will feature quantitative metrics (e.g., number of participants and social media posts) as well as qualitative inputs (e.g., key topics and issues that emerged during public outreach).
- The report will be graphic heavy with minimal easy-to-read text, charts, tables, and infographics.
- The report will provide a quick glance summary of the input received throughout the FLM process.

## Timeline:

Development of first draft March '24 - April '24 (Submit draft on April 15, 2024)

Metro and technical team review April 15 - 26, 2024 Incorporate edits/comments and finalize document for inclusion as appendix item in FLM Plan document May 12, 2024



# Appendix B – Community Based Organizations Partnerships

Appendix B.1 – Project Charter

Appendix B.2 – Partnership Agreements



Appendix B.1 – Project Charter

# **Project Charter**

# **Project Charter Purpose**

This project charter document is for all partners to collectively establish values, goals, team norms, and expectations. The document, with the agreement of all parties, can be edited and revised continuously throughout the project duration.

# Who are we? Partner Mission Statements

*Mujeres Unidas Sirviendo Activamente (MUSA*)strives towards the goal of empowering, motivating, and encouraging women to bring about productive, meaningful, and responsible civic, educational, and cultural engagement.

*Self-Help Graphics (SHG)* is dedicated to the production, interpretation, and distribution of prints and other art media by Chicana/o and Latinx artists. Our multidisciplinary and intergenerational programs promote artistic excellence and empower our community by providing access to space, tools, training and resources.

*BikeLA* is a membership-based nonprofit organization that works to make all communities in LA County healthy, safe, and fun places to ride a bike through advocacy, education, and outreach.

*Los Angeles Metro* is a multimodal transportation agency that plans, operates, and coordinates funding and transportation services for Los Angeles County. The Metro First/Last Mile (FLM) Team is leading the agencies initiative to make it easier to get around LA, which includes improving every trip with safe and accessible first/last mile (FLM) connections.

*Arellano Associates (AA)* vision is to positively impact our communities through honest and creative engagement using innovative communication tools and techniques.

*Cityworks Design (CWD)* specializes in urban design, planning, and architecture with a special focus on the public realm and transportation projects. The firm's work is exemplary of community-based design that addresses issues from pedestrian/bike access solutions to broader land use planning, transit-oriented development, and design frameworks for transit lines.

*WSP* develops creative, comprehensive, and sustainable engineering solutions for a future in which society can thrive. Equipped with an intimate understanding of local intricacies, world-class talent, and proactive leadership, we plan, design, manage, and engineer long-lasting and impactful solutions to uniquely complex problems.

# **Shared Values**

# Honoring community voices in our work

We will acknowledge the context of our communities by being mindful of how this project may affect existing neighborhoods and their physical geography. As we make decisions about the project, we will recognize that we do not know better than the communities we serve. To uplift communities, project decisions will consider past experiences that a community may have had with public entities or projects that could have negatively impacted residents, friends, families, etc. Additionally, we intend to retain neighborhood character (built environment, landmarks,

## West Santa Ana Branch Transit Corridor Project First/Last Mile Planning

streetscape, etc.) and provide tools for community members to protect and enhance their cherished spaces.

# Prioritizing Accessibility (physically, educationally, linguistically, culturally, etc.)

We are committed to creating culturally relevant educational resources for community members to minimize barriers to project engagement. Creating access via physical, educational, and linguistic platforms to encourage engagement from all community members.

# Making a Positive Impact on People's Lives

We are united by a collective passion that envisions growth within the communities we live and work in. We are motivated by seeing and experiencing the community benefits from safe and comfortable access to transit in historically underserved areas. Additionally, planning for future generations of community members and transit riders inspires us to take pride in the legacy of our project's benefits for years to come.

# **Empowering Community Members**

We will listen and value the knowledge and experiences of community members, and our work will reflect the information they share with us. We are also passionate about empowering community voices by providing accessible platforms (options) for communication, to ensure we can understand their vision for their community.

# Goals

# Improving Quality of Life

We understand that implementing a transit system and FLM improvements will require construction that could impact access and conditions on local roadways. These initial temporary changes will result in FLM streetscape projects that aim to directly improve quality of life, especially by providing communities with better access to daily needs, education, healthcare, and/or employment. We will aim to create livable communities that will prioritize community well-being throughout the term of the project.

# Creating a Transit System for All

We want to build a transit system that is safe and accessible for all users, especially the most vulnerable and/or underserved communities. The project will aim to support a community vision, that will improve the quality of life for current and future generations.

# **Conducting Meaningful Community Engagement**

We will propose project ideas that align with community feedback and are supported by community members. Creating engagement that connects with the community is one of our main priorities to build relationships. Community Based Organization (CBO) input will inform our engagement strategy and reach as many people as possible creatively. Improving every day and having fun are two additional goals that will guide our work.

# **Partnership Working Agreements**

# Communication and Feedback Styles

Communication among team members will vary based on the circumstances. Communication methods like emails are accepted for less urgent matters, while texting may be better suited for in-person event coordination. Providing team members with notice and time to prepare for meetings or events is crucial.

# **Decision-Making**

All team members are expected to be open-minded and flexible in decision-making. Each team member will contribute different skillsets and knowledge to decision-making, but all team members are expected to have an open line of communication with each other. Additionally, we will be patient in our decision making and respect the thought processes of our team members.

# Transparency

We are mindful that team members have varied capacities to attend meetings, so active information sharing is a priority. The team will provide agendas ahead of each meeting and allow team members to contribute agenda items. Following each meeting, notes and action items will be distributed to all team members to ensure transparency. Prioritizing information sharing is essential for team members to be actively involved in decision making and for decisions to be made as a team.

# Progress meetings and check-in process

Monitoring action items at the end of each meeting to maintain transparency across team members' responsibilities. Monitoring tasks will keep team members accountable for their designated roles.

# Ongoing relationship building

Keeping open lines of communication and being transparent will strengthen communication between all parties. Relationship building will include local communities, stakeholders, and residents. Maintaining existing relationships among these partners is ideal for our teams as it will increase trust with local communities and foster opportunities for new connections.

## **Conflict Resolution**

Respecting all team members, setting clear boundaries, and communicating within working hours are all first steps to prevent conflict. If a conflict arises, individual(s) should address issues quickly and directly with involved parties to avoid involving the whole group.

Name	Organization	Email
Marciela Parga	MUSA	parga.m2926@gmail.com
Georgina Arceo	MUSA	arceo.georgina@yahoo.com
Cynthia Navarro	Self Help Graphics	cynthia.navarro@selfhelpgraphics.com
Graham Davidson	BikeLA	graham.davidson@bike-la.org
Esmi Rennick	Cityworks Design	erennick@cityworksdesign.com
Michael Nájera	Cityworks Design	mnajera@cityworksdesign.com
Patricia Smith	Cityworks Design, PSLA	patlsmith@me.com
Yvette Ximenez	Arellano Associates	yximenez@arellanoassociates.com
Josh Francis	Arellano Associates	jfrancis@arellanoassociates.com
Isabelle Garvanne	Metro	Garvannei@metro.net
Jacob Lieb	Metro	Liebj@metro.net
Hannah Brunelle	Metro	brunelleh@metro.net

# **Key Project Contacts Section**

# Accessibility and COVID 19

We will consider all our activities in relation to the current global health pandemic. Our individual and public safety and are a top priority.

We will consider all our activities in relation to the current global health pandemic. Our individual and public safety is a top priority.

Our individual and public safety is a top priority. Considerations include continuously monitoring that status of the pandemic and the diverse comfort levels and health needs of the project team and the community. Meetings and community events with be made virtual, hybrid, or in-person, after consideration of whichever is deemed most appropriate, effective, and, most importantly, safe.



Appendix B.2 – Partnership Agreements



# **Community-Based Organization Partnership Activity Menu**

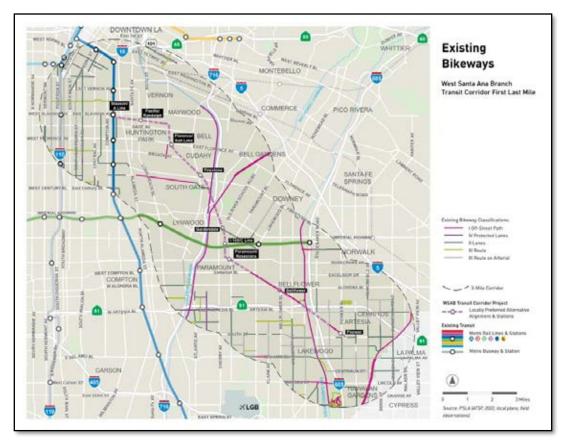
As of June 23, 2023

Dear Mujeres Unidas Sirviendo Activamente (MUSA),

Thank you for your interest in partnering with the Los Angeles County Metropolitan Transportation Authority (Metro) on the West Santa Ana Branch Transit Corridor Project's First/Last Mile (FLM) planning effort. The WSAB Project is a new light rail transit (LRT) line that will connect southeast LA County to downtown Los Angeles. While the project is in the environmental review phase, Metro is proceeding with planning efforts to improve walking and cycling conditions within 3 miles of each of the 9 new stations in an effort to encourage transit use once the line opens.

Our goal as partners in outreach is to raise awareness of the FLM planning effort, encourage public participation, and collect input to ensure that the project aligns with the community's needs. You can learn more about the WSAB Project <u>here</u> and Metro's agency-wide First/Last Mile Strategy <u>here</u>.

This Agreement is between your organization and Arellano Associates (AA). As the outreach contractor for this Community-Based Partnership Program, Arellano Associates serves as the representative for the administration of the scope of services for this Agreement. This Community Partnership Agreement presents the agreed-upon scope of work and terms.



#### Project Area Map



# TERM

The term of this Agreement is from July 2023 through May 2024 (*subject to change or extensions*). You are invited to support the following campaigns of outreach activities to encourage participation in community walk audits, public workshops, surveys, and pop-up workshops:

		2023							2024					
	Tasks	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		
А	Community Engagement Activities	*	*	*	*	*	*	*	*	*	*	*		
В	Walk Audits (up to 3 public)	*	*											
С	Pop-up Workshops (up to 8)	*	*	*	*	*			*	*	*	*		
D	Community Surveys (up to 2)	*	*	*	*	*			*	*	*	*		
E	Presentations at Existing Community Meetings (up to 4)	*	*	*	*	*			*	*	*	*		
F	Host Community Meeting Presentation (up to 2)	*	*	*	*	*			*	*	*	*		

#### SCOPE OF WORK

Please review the information below to ensure your organization has the capacity and resources to successfully perform the tasks outlined for each campaign.

## A. <u>Community Engagement Activities</u>

- Promote and publicize the opportunities for community member engagement through your organization's communication methods and channels, including, but not limited to:
  - Digital activities
    - Post on social media
    - Distribute emails
    - Publish in your newsletters
    - Conduct phone calls
    - Distribute text messages
  - o In person
    - Conduct door-to-door canvassing
    - Conduct flyer canvassing at events
- Promotion may be needed at least once per month, or more during certain campaigns such as the survey campaigns or to promote certain workshops or community meetings.

## B. Walk Audits (July/August 2023)

- Participate in up to 3 walk audits. Walk audits are an existing conditions and fact-finding activity designed to build a data set of barriers, strengths, and initial ideas for an identified area surrounding each station. (Note: Walk audits are conducted using Metro's walk audit application).
- Recruit up to 15 community members for each walk audit.
- Collect data and narratives from community members about the project area.
- Support logistics during the walk audit(s) such as registration, photography, and refreshments.



• Participate in a training with the project team to be prepared for the walk audit(s).

## C. Pop-up Workshops

- Identify and recommend community events, including health fairs, holiday festivals, concerts/movies-in-the-park, school events (PTA, back to school nights), church/cultural events, and others.
- Upon approval of AA, support the coordination of up to 8 pop-up workshops (i.e., booking the event space and equipment coordination).
- Co-staff up to 8 pop-up workshops with the project team staff to engage the public.

# D. Community Surveys (Summer 2023 & Spring 2024)

- Promote 2 rounds of survey campaigns.
- Distribute surveys (electronically and/or in print) and collect completed surveys from the community.
- Maintain estimates of surveys distributed and records of surveys collected.

# E. <u>Presentations at Existing Community Meetings</u>

- Identify and recommend existing community meetings for the project team to present about the project.
- Upon approval from AA, collaborate with City Council, community-based organizations, and agencies to schedule presentations.
- Attend and support up to 4 community presentations.

## F. Host Community Meetings

- Host and coordinate up to 2 project-specific community meetings.
- Lead logistics, notification, and set-up for the meetings.
- The project team will facilitate the presentation. Your organization may have the opportunity to co-facilitate the presentation.
- A bonus will be offered for each meeting participant, up to \$500.

## COMPENSATION

Mujeres Unidas Sirviendo Activamente (MUSA) will receive a maximum of \$18,000 for staff labor and approved direct costs for public engagement for the duration of the term. Partners will be paid based on tasks completed per month. To verify completion of work and reimbursable costs, AA will provide an invoice template which will need to be submitted to Arellano Associates' staff at the beginning of each month. The invoice template includes instructions for detailing outreach conducted, along with providing screenshots of digital outreach, photos of in-person outreach, number of individuals reached,



and invoices for direct costs. **Payment will only be processed with a completed invoice form for outreach tasks completed.** Payment will be provided within 60 days of receipt of the invoice template.

#### AGREEMENT AMENDMENTS AND TERMINATION

This Agreement is amendable, and organizations may increase or decrease their participation to accommodate the organization's capacity at various stages of outreach, or it may also be modified based on previous performance. Compensation may be adjusted, depending on the change.

The partnership is subject to cancelation if there are ongoing communication delays that lead to missed outreach opportunities to the public as well as missing documentation for outreach conducted. If this Agreement is terminated, the organization will submit final invoice templates for any costs incurred at time of termination and will be paid within 60 days. Neither party may assign its interest in this Agreement to any other person or party without express written consent of the other party. This Agreement constitutes the complete and sole Agreement between both parties. Arellano Associates holds the right to cancel or amend this agreement.

### **ACTION REQUIRED**

To advance as an organizational partner for Metro's West Santa Ana Branch First/Last Mile planning effort, please carefully review the following steps:

- 1. Please sign and return this form immediately to confirm your commitment to complete the outreach tasks outlined above. You will not be compensated if you do not submit this signed form.
- 2. Submit the invoice template at the beginning of each month to document tasks completed the month prior and to process payment.

By signing this Agreement, you understand that you will only be compensated for work completed with adequate supporting documentation to verify completion of tasks.

For questions about this scope of work or to discuss the conditions of the Agreement, please contact Yvette Ximenez at <u>yximenez@arellanoassociates.com</u>. Thank you for your participation.

Sincerely,

Genoveva Arellano



### ACCEPTANCE

As an authorized representative for Mujeres Unidas Sirviendo Activamente (MUSA), I hereby accept the terms listed above to join Metro's West Santa Ana Branch First/Last Mile Project.

#### COMMUNITY PARTNER

#### **ARELLANO ASSOCIATES**

Authorized Representative:

Maricela Parga

Name: Genoveva L. Arellano

Title: Principal

Title within Organization:

Founder

ŧ

Signed: Genoveva L. Arellano

Date: \_\_\_\_\_7/26/2023

Compensation Payable to:

Name: Mujeres Unidas Sirviendo Activamente

Mailing Address: 14711 El Camino Ave.

Paramount, CA. 90723

aucel Signed: man 6/28/2023 Date:



### **Community-Based Organization Partnership Activity Menu**

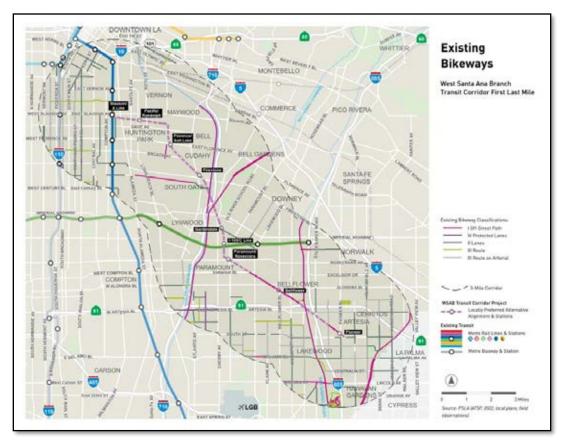
As of July 14, 2023

Dear Bike LA (Los Angeles County Bicycle Coalition),

Thank you for your interest in partnering with the Los Angeles County Metropolitan Transportation Authority (Metro) on the West Santa Ana Branch Transit Corridor Project's First/Last Mile (FLM) planning effort. The WSAB Project is a new light rail transit (LRT) line that will connect southeast LA County to downtown Los Angeles. While the project is in the environmental review phase, Metro is proceeding with planning efforts to improve walking and cycling conditions within 3 miles of each of the 9 new stations in an effort to encourage transit use once the line opens.

Our goal as partners in outreach is to raise awareness of the FLM planning effort, encourage public participation, and collect input to ensure that the project aligns with the community's needs. You can learn more about the WSAB Project <u>here</u> and Metro's agency-wide First/Last Mile Strategy <u>here</u>.

This Agreement is between your organization and Arellano Associates (AA). As the outreach contractor for this Community-Based Partnership Program, Arellano Associates serves as the representative for the administration of the scope of services for this Agreement. This Community Partnership Agreement presents the agreed-upon scope of work and terms.



### Project Area Map



### TERM

The term of this Agreement is from July 2023 through May 2024 (*subject to change or extensions*). You are invited to support the following campaigns of outreach activities to encourage participation in community walk audits, public workshops, surveys, and pop-up workshops:

	2023					2024						
	Tasks	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
А	Community Engagement Activities		*	*	*	*	*	*	*	*	*	*
В	Walk Audits (up to 3 public)			*	*							
D	Community Surveys (up to 2)		*	*	*	*			*	*	*	*

### SCOPE OF WORK

Please review the information below to ensure your organization has the capacity and resources to successfully perform the tasks outlined for each campaign.

### A. Community Engagement Activities

- Promote and publicize the opportunities for community member engagement through your organization's communication methods and channels, including, but not limited to:
  - Digital activities
    - 25 social media posts
    - Distribute 5 email blasts
    - Publish 3 newsletters
- Promotion may be needed at least once per month, or more during certain campaigns such as the survey campaigns or to promote certain workshops or community meetings.

### B. Walk Audits (September/October 2023)

- Participate in 3 walk audits. Walk audits are an existing conditions and fact-finding activity designed to build a data set of barriers, strengths, and initial ideas for an identified area surrounding each station. (Note: Walk audits are conducted using Metro's walk audit application).
- Recruit up to 15 community members and volunteers (as needed) for each walk audit.
- Collect data and narratives from community members about the project area.
- Support logistics during the walk audit(s) such as registration, photography, and refreshments.
- Participate in a training with the project team to be prepared for the walk audit(s).

### D. Community Surveys (Summer 2023 & Spring 2024)

- Promote 2 rounds of survey campaigns.
- Distribute surveys (electronically and/or in print) and collect completed surveys from the community.
- Maintain estimates of surveys distributed and records of surveys collected.



### COMPENSATION

Bike LA (Los Angeles County Bicycle Coalition) will receive a maximum of \$17,500 for staff labor and approved direct costs for public engagement for the duration of the term. Partners will be paid based on tasks completed per month. To verify completion of work and reimbursable costs, AA will provide an invoice template which will need to be submitted to Arellano Associates' staff at the beginning of each month. The invoice template includes instructions for detailing outreach conducted, along with providing screenshots of digital outreach, photos of in-person outreach, number of individuals reached, and invoices for direct costs. **Payment will only be processed with a completed invoice form for outreach tasks completed.** Payment will be provided within 60 days of receipt of the invoice template.

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This Agreement is amendable, and organizations may increase or decrease their participation to accommodate the organization's capacity at various stages of outreach, or it may also be modified based on previous performance. Compensation may be adjusted, depending on the change.

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### **ACTION REQUIRED**

To advance as an organizational partner for Metro's West Santa Ana Branch First/Last Mile planning effort, please carefully review the following steps:

- 1. Please sign and return this form immediately to confirm your commitment to complete the outreach tasks outlined above. You will not be compensated if you do not submit this signed form.
- 2. Submit the invoice template at the beginning of each month to document tasks completed the month prior and to process payment.



By signing this Agreement, you understand that you will only be compensated for work completed with adequate supporting documentation to verify completion of tasks.

For questions about this scope of work or to discuss the conditions of the Agreement, please contact Yvette Ximenez at <u>yximenez@arellanoassociates.com</u>. Thank you for your participation.

Sincerely, Genoveva Arellano Principal

Arellano Associates

#### ACCEPTANCE

As an authorized representative for Bike LA (Los Angeles County Bicycle Coalition), I hereby accept the terms listed above to join Metro's West Santa Ana Branch First/Last Mile Project.

COMMUNITY PARTNER	ARELLANO ASSOCIATES
Authorized Representative:	Name:
Eli Akira Kaufman	Title: Principal
Title within Organization: Executive Director	Signed: Genoveva L. Anellano D996EF6B39A54A6 Date: 7/26/2023
Compensation Payable to:	
Name: Los Angeles County Bicycle Coalition	
Mailing Address: 10575 Virginia Ave, Culver C	ity, CA 90232
Signed:	
Date:7/24/2023	





### Proposal of Services Barrio Mobile Art Studio

Founded in 1970 in the heart of East Los Angeles, Self Help Graphics & Art is dedicated to the production, interpretation, and distribution of prints and other art media by Chicana/o and Latina/o artists. Our multidisciplinary and intergenerational programs promote artistic excellence and empower our community by providing access to space, tools, training and capital.

### About BMAS

Self Help Graphics & Art Barrio Mobile Art Studio (BMAS) serves our mission to nurture emerging artists and present Latino art to a broad audience, and address the vast demographic that is Los Angeles, while also expanding our audiences and community beyond the East Los Angeles and Boyle Heights communities.

### **Project Partner**

Name of Client: Arellano Associates/Metro Address: Phone Number: Email:YXimenez@arellanoassociates.com Primary contact: Yvette Ximenez

### **Project Description**

Date(s) of Service: TBD - 4 Hours in areas of SELA

### Service:

Self Help Graphics will facilitate visual interactive community art installations/visual voting and art workshops in partnership with Arellano Associates to engage and educate communities in South East LA about a new Metro Rail project. The goal of these workshops and interactive community art installations is to learn more of the community's needs, concerns, and accommodation necessary to make the project more accessible and safe for the public.

Both activities will take place at pop-up events organized by Arellano Associates and Metro to encourage community participation.

Community Art installations can include visual voting, maps, collaging of routes, etc.

Art workshops can include Stencil screen printing on posters, relief printing on bike flags, collaging, and more.

Arellano Associates/Metro commit to providing all the tables, tents and chairs necessary for the workshops and activities

Arellano Associates/ Metro will provide training for the artists before the beginning SHG's participation in events.

Fees listed include artist fees, art materials, and preparation.

Item	Project Details	Total Workshop Fee (includes all artist fees, supplies, & preparation)
SHG Artist Training	Arellano Associates trains SHG artists on project, goals, public FAQs.	\$336
Commission SHG Artist to create stitched digital collage	<ul> <li>Concept Development</li> <li>Artist honorarium</li> <li>2 revisions</li> </ul>	\$1,660
One workshop + Original visual voting developed/desig ned by artist	<ul> <li>4 hour Drop-in workshop + Community art/voting</li> <li>2 Lead Artists + 2 Assistant</li> <li>Workshop Prep</li> <li>Community art/voting visuals design</li> <li>Materials for 120-200 people</li> <li>Admin fee</li> </ul>	<mark>\$3,847</mark>
Itemization:	Teaching time + Set up Breakdown (whole team) - <b>\$1,080</b> Workshop Prep - <b>\$140</b> Custom Visual Voting - <b>\$520</b> Mileage - <b>\$63</b> Artworkshop materials - <b>\$720</b> Visual voting professional printing + materials to vote <b>\$700</b> Admin Fee - <b>\$624</b>	
Following workshops if same visual voting is used thereafter	<ul> <li>4 hour Drop-in workshop + Community art/voting</li> <li>2 Lead Artists + 2 Assistant</li> <li>Workshop Prep</li> <li>Materials for 120-200 people</li> <li>Admin fee</li> </ul>	\$2,883
Itemization:	Teaching time + Set up Breakdown (whole team) - <b>\$1,080</b> Workshop Prep - <b>\$140</b> Mileage - <b>\$63</b> Art Workshop materials - <b>\$720</b> Visual voting materials to vote <b>\$400</b> Admin Fee - <b>\$480</b>	

### **Terms and Conditions**

The initial proposal includes an overall concept of the workshop or services to be provided, including materials and staff hours. A detailed lesson plan will be created and provided only upon the approval and signature of both parties.

Should the workshop not take place for any reason after signing this proposal, an administrative fee and artists' fee for developing the lesson plan will still be owed to SHG.

### **Partner Organization**

Gvette Ximenez

Signature

6/23/2023

Date

**Yvette Ximenez** 

Print name

Self Help Graphics and Art

Signature

Date

Print name



## **Appendix C – Project Material**

Appendix C.1 – First-Last Mile Fact Sheet

Appendix C.2 – WSAB Fact Sheet



Appendix C.1 – First/Last Mile Fact Sheet



# Next stop: vibrant communities.

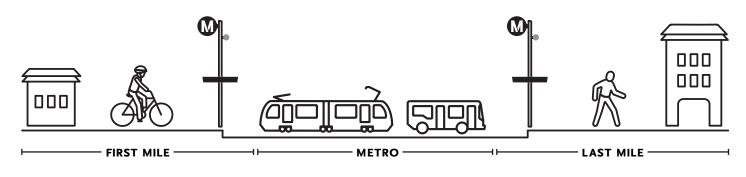
## FIRST/LAST MILE Fact Sheet

## Creating good connections to transit

Metro is focused on improving the entire transit experience from door to door. Given that most trips begin or end on foot, it is critical to have safe streets and sidewalks that allow people to connect to transit easily. The first and last part of the journey where riders walk, bike or roll to or from their nearest transit station or bus stop is called the "first/last mile connection." Improving first/last mile connections is part of Metro's commitment to providing outstanding trip experiences for all riders and improving access to Metro's growing transportation network.

## Why are first/last mile connections important?

- > Provides pathways to transit for people of all ages and abilities
- > Improves safety of public streets and sidewalks for people walking, biking and rolling
- > Improves the transit rider experience
- > Promotes a healthy and active lifestyle
- > Reduces dependency on vehicle trips by offering an attractive alternative



YOUR TRIP

\*NOT TO SCALE

## Metro has a first/last mile vision

In 2016, the Metro Board passed a ground-breaking motion to integrate first/last mile improvements as part of all new rail and bus rapid transit projects. Metro envisions a safe, intuitive and pleasant network of streets surrounding stations that emphasize walking, biking and rolling connections between transit and key destinations. Metro identifies that "pathway network" through a community-centered planning process, then works to implement improvements along those pathways to support transit access. First/last mile planning breaks new ground for Metro by creating a clear focus on active transportation as an integral part of the rider experience, working directly with local agencies to improve streets, and establishing an equity-centered process that deeply engages community groups.



### What is Metro's approach to first/last mile planning?

Metro partners with local communities and stakeholders to develop a set of community-supported improvements along the key pathways to Metro stations and bus stops. Metro uses a flexible, data driven and community-oriented approach to prepare plans that respond to the unique conditions of each station area and strengthen connections to nearby destinations, transit hubs and streets. Examples of first/last mile improvements include street and sidewalk infrastructure:

- > Crosswalks, bulb-outs, street trees and landscaping
- > Signal timing for pedestrians and cyclists
- > Bike lanes, bike parking, bike share stations
- > Wayfinding signage to key destinations and transit connections
- > Real-time signage or transit information kiosks

## How can I participate in first/last mile planning?

As Metro expands the rail and BRT network, there will be many opportunities for community members to participate in the development of first/last mile plans around future stations. There are two key ways to participate:

- > Join a walk audit around a station area of interest. This is a site visit where community stakeholders and Metro representatives walk a station area and note opportunities, barriers and behaviors they observe. This information is collected, then compiled and analyzed to inform first/last mile plans to create safe pathways to transit.
- > Attend community events. These provide information about planning efforts and solicit feedback on the process and planned improvements.



Scramble crosswalks improve pedestrian safety and comfort.



Safe sidewalks are critical for people to access transit.

#### **CONTACT US**



metro.net/firstlastmile @metrolosangeles

- losangelesmetro



## Próxima parada: comunidades vibrantes.

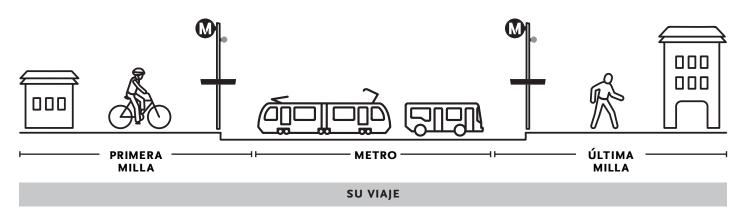
## **PRIMERA/ÚLTIMA MILLA** Hoja informativa

### Creando buenas conexiones al transporte público

Metro se enfoca en mejorar toda la experiencia del transporte público de puerta a puerta. Debido a que la mayoría de los viajes comienzan o terminan a pie, es fundamental tener calles y aceras seguras que permitan que las personas se conecten con el transporte público fácilmente. La primera y la última parte del viaje donde los pasajeros caminan, andan en bicicleta o ruedan hacia o desde su estación de transporte público o parada de autobús más cercana se llama "conexión de primera/última milla". Mejorar las conexiones de la primera y la última excepcionales a todos los pasajeros, así como mejorar el acceso a la creciente red de transporte de Metro.

## ¿Por qué son importantes las conexiones de la primera y la última milla?

- Proporcionan caminos hacia el transporte público para personas de todas las edades y capacidades
- Mejoran la seguridad de las calles y aceras públicas para las personas que caminan, andan en bicicleta o rodan
- > Mejoran la experiencia de transporte del pasajero
- > Promueven un estilo de vida saludable y activo
- Reducen la dependencia de los viajes en vehículo, ofreciendo una alternativa atractiva



\*NO A ESCALA

### Metro tiene una visión de la primera y la última milla

En 2016, la Junta Directiva de Metro aprobó un movimiento innovador para integrar las mejoras de la primera y la última milla como parte de todos los nuevos proyectos de transporte rápido en tren y autobús. Metro contempla una red segura, intuitiva y placentera para las calles que rodean las estaciones que enfaticen el caminar, andar en bicicleta y trasladarse a las conexiones entre el transporte público y los destinos claves. Metro identifica esa "red de vías" a través de un proceso de planificación centrado en la comunidad y luego implementa mejoras en esas vías para permitir el acceso al transporte público. La planeación de la primera y la última milla abre nuevos caminos para Metro mediante la creación de un enfoque claro en el transporte activo, así como un aspecto integral de la experiencia del pasajero, trabajando directamente con las agencias locales para mejorar las calles y estableciendo un proceso centrado en la equidad que comprometa profundamente a los grupos comunitarios.



## ¿Cuál es el enfoque de Metro para la planificación de la primera y la última milla?

Metro se asocia con las comunidades locales y los interesados para desarrollar un conjunto de mejoras apoyadas por la comunidad a lo largo de las principales vías hacia Metro y las paradas de autobús. Metro utiliza un enfoque flexible, basado en datos y orientado hacia la comunidad para elaborar planes que respondan a las condiciones únicas del área de cada estación y que fortalezcan las conexiones a destinos, centros de transporte y calles cercanas. Ejemplos de mejoras de la primera y la última milla que incluyen infraestructura de calles y aceras:

- > Cruces peatonales, ampliaciones de las aceras, árboles en las calles y paisajismo
- > Sincronización de los señalamientos para peatones y ciclistas
- > Carriles de bicicletas, área para estacionar bicicletas y estaciones para bicicletas compartidas (Metro Bike Share)
- > Señalización vial hacia destinos y conexiones de transporte público claves
- Señalización en tiempo real o quioscos de información de transporte público

## ¿Cómo puedo participar en la planificación de la primera y la última milla?

A medida que Metro amplía la red de transporte y el transporte rápido de autobús (en inglés, BRT), habrá muchas oportunidades para que los miembros de la comunidad participen en el desarrollo de los planes de la primera y la última milla alrededor de las estaciones futuras. Hay dos maneras claves para participar:

- Intégrarse en una auditoría a pie alrededor de un área de la estación de interés. Esta es una visita al sitio donde los interesados de la comunidad y los representantes de Metro caminan por el área de una estación y toman nota de las oportunidades, las barreras y los comportamientos que observan. Esta información se recopila y luego se compila y analiza para dar forma a los planes de la primera y la última milla para crear vías seguras hacia el transporte público.
- > Asistir a eventos comunitarios. Estos proporcionan información sobre los esfuerzos de planeación y solicitan retroalimentación sobre el proceso y las mejoras planeadas.



Cruces peatonales marcados mejoran la seguridad y la comodidad de los peatones.



Aceras seguras son esenciales para que las personas accedan al transporte publico.



### **CONTÁCTENOS**

metro.net/firstlastmile





Appendix C.2 – WSAB Fact Sheet

## Next stop: new rail to southeast LA County.

### WEST SANTA ANA BRANCH TRANSIT CORRIDOR Fact Sheet





SUMMER 2023

## Overview

Metro's plan for better transit includes a new light rail transit (LRT) line connecting southeast LA County to downtown Los Angeles. The West Santa Ana Branch Corridor (WSAB) project would connect Artesia, Cerritos, Bellflower, Paramount, Downey, South Gate, Cudahy, Bell, Huntington Park, Vernon, unincorporated Florence-Firestone and Los Angeles Union Station (LAUS) in downtown Los Angeles.

The project area is home to 1.4 million residents and is a job center to approximately 618,500 employees. Projections show the resident population increasing to 1.6 million and jobs increasing to 746,000 by 2042. Population and employment densities are five times higher than the LA County average. Connecting this area to Metro's rail network will provide alternatives to driving and create more access to opportunity.

## Goals

The main goals of the WSAB project are to:

- 1. Provide mobility improvements
- 2. Support local and regional land-use plans and policies
- 3. Minimize environmental impacts
- 4. Ensure cost effectiveness and financial feasibility
- 5. Promote equity

## Milestones

The timeline below highlights the project milestones during the alternatives analysis and environmental (current) phases.

## Slauson/A Line to Pioneer Station (LPA)

In January 2022, the Metro Board of Directors approved the Locally Preferred Alternative (LPA) for the WSAB project from Slauson/A Line in unincorporated Florence-Firestone to Pioneer Station in Artesia. This is a 14.5-mile segment that will feature nine stations (six at-grade, three aerial), including a new C Line infill station at I-105, up to five parking facilities, 31 at-grade crossings and 25 elevated street crossings.

The board also approved a Maintenance and Storage Facility (MSF) in Bellflower, which will be located on a commercial site of 21 acres just east of Lakewood Bl and Somerset Av. The MSF will house general administration, operation and support services. The facility will be equipped to perform inspections, body repairs, cleaning and washing of Metro's light rail vehicle fleet. The MSF will be designed to hold up to 80 light rail vehicles (LRVs).

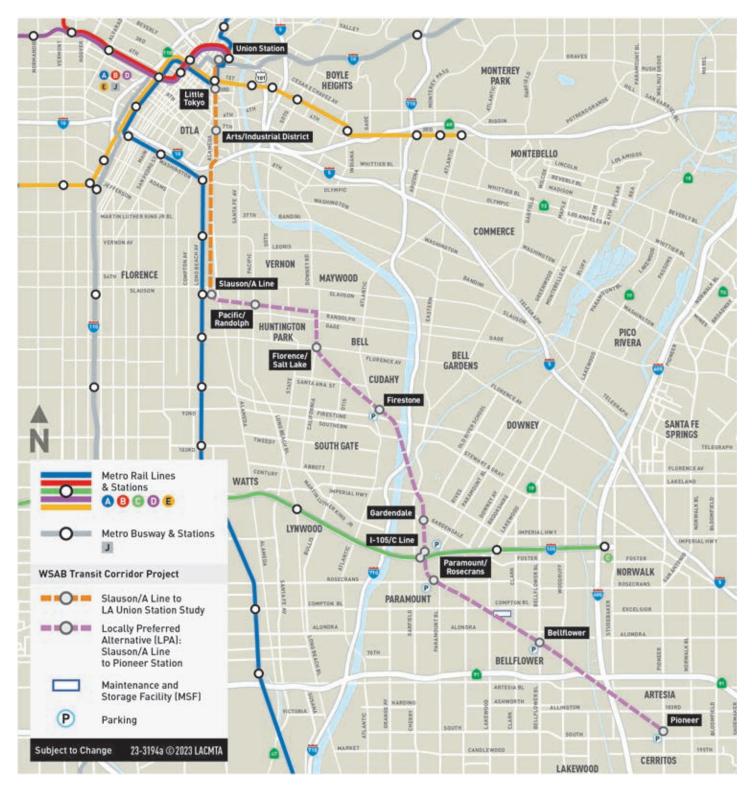
## Slauson/A Line to Union Station Study

The board selected Los Angeles Union Station (LAUS) as the northern terminus for the project and directed staff to conduct a separate study to evaluate options for connecting from Slauson/A Line. The study results are anticipated to be presented to the Metro Board in late summer 2023 and is then expected to advance into a separate environmental planning process, after completion of the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the LPA.

			WE ARE HERE		
2013–2017 *	2017 – 2018 <sup>в</sup>	2019 – 2022 <sup>B</sup>	2023 – 2024 <sup>B</sup>		
Spring 2013 Southern California Association of	Summer 2017 Initiated Draft EIS/EIR	Fall 2019 Metro Board approved	Summer 2023 Initiate First/Last Mile		
Governments (SCAG) approved Alternatives Analysis	Original scoping meetings for Environmental	incorporation of the two Initial Operating Segments options	planning efforts Late Summer 2023		
Fall 2015 Metro Board received the Technical Refinement Study	Conduct Environmental Analysis & Technical Studies (through 2021)	as part of the range of alternatives being evaluated in the Draft EIS/EIR	Present findings of Slauson/ A Line to Union Station Study to Metro Board		
Technical Refinement Study Spring 2017 Metro Board approved the	<b>Spring 2018</b> Updated Northern Alignments Screening Report	<b>Summer 2021</b> Released Draft EIS/EIR	<b>Spring 2024</b> LPA Final EIS/EIR release		
Northern Alignments	Metro Board selected new Northern Alignments for further study	Agency/public review & comment, public hearings and community events	Agency/public review & comment public hearings and community events		
	Summer 2018	Winter 2022 Metro Board selected Locally	Metro Board certifies Final EIR		
	Updated scoping meetings for Environmental	Preferred Alternative (LPA)	<b>Summer 2024</b> Federal Transit Administration		
	Fall 2018	<b>Spring 2022</b> Initiated <i>Slauson/A Line to</i>	(FTA) issues Record of Decision (ROD) for LPA Final EIS		
Project Phase <sup>A</sup> Alternatives Analysis <sup>B</sup> Environmental Analysis Timeline subject to change	Metro Board approved updated project definition for Environmental	Union Station Study	Board approves First/Last Mile Plan (list of prioritized pedestria and bicycle improvements eligib for 3% contribution)		

## West Santa Ana Branch Transit Corridor

**Project Overview** 



This rail corridor is anticipated to serve commuters in a high travel demand corridor by providing relief to the limited transportation systems currently available to these communities. In addition, the project is expected to provide a direct connection to the Metro C Line and A Line, as well as the LA County regional transit network. With the recent opening of the Regional Connector in downtown LA, WSAB transit riders will be able to transfer at Slauson/A Line Station and connect beyond downtown LA to Azusa.

## **Environmental Planning Process**

The WSAB project's environmental process is well defined by federal requirements stipulated in the National Environmental Policy Act (NEPA) and state environmental requirements stipulated in the California Environmental Quality Act (CEQA).

The project is currently in the environmental review phase. The Draft EIS/EIR was released in July 2021 with an original 45-day public review period and was then extended to a 60-day public period, generating over 450 formal comments. Following this process, the Metro Board selected the LPA in January 2022.

The last step in the environmental phase is for the Metro Board to certify the Final EIR and the Federal Transit Administration's issuance of the Record of Decision for the Final EIS, anticipated by summer 2024.

## **Freight Rail Coordination**

The WSAB project involves a shared use of approximately 11 miles of freight-owned Right-of-Way (ROW) that runs along the Wilmington and La Habra branches (owned by Union Pacific Railroad, UPRR) and the San Pedro Subdivision (owned by the Ports of Los Angeles and Long Beach). For the LPA alignment, 8.1 miles of freight will be realigned.

Staff is actively coordinating with UPRR and the ports on design, ROW and necessary agreements, which are needed to advance the project.

**Project Development Process** 

## **Project Delivery**

To maximize project readiness for delivery of the core light rail scope, staff has evaluated and determined that the Construction Manager/General Contractor (CM/GC) is an optimal contract model for the Advanced Engineering scope, which includes utility relocation, freight relocation and gradecrossings. For delivery of the core light rail scope, Metro staff is continuing to evaluate the optimal approach, including evaluating alternative delivery methods such as public-private partnership (P3), design-build (DB), and progressive designbuild (PDB).

Staff is continuing to advance key components in the Advanced Engineering scope, which will help the agency make an informed choice on the best delivery model for the light rail scope.

## Funding

Per Measure M and Metro's Long Range Transportation Plan (LRTP) financial forecast, as amended, the project has a \$4 billion (B) (2015\$) allocation of planned funding (comprised of Measure M and other local, state and federal sources). Measure M funding becomes available in two cycles (2015\$):

- > FY 2022-2028 \$535M
- > FY 2022-2041 \$900M

Since February 2022, Metro staff has re-evaluated the forecasted LPA project cost by considering contingency, escalation to Year of Expenditure (YOE) and accuracy for estimation. As was presented to the Metro Board in September 2022, the updated project forecast range for the LPA of \$7B to \$9B in YOE is inclusive of current construction market escalation costs.



\*This timeline is subject to change based on various factors, including funding opportunities (see Funding section).



metro.net/wsab

Próxima parada: nuevo servicio de tren ligero al sureste del condado de Los Angeles.

## CORREDOR DE TRANSPORTE DE WEST SANTA ANA BRANCH Hoja informativa





VERNANO 2023

### Resumen

El plan de Metro para un mejor tránsito incluye una nueva línea de tren ligero (LRT, en inglés) que conecta el sureste del condado de Los Angeles con el centro de Los Angeles. El proyecto del Corredor de Transporte de West Santa Ana Branch (WSAB, en inglés) conectaría las ciudades y comunidades de Artesia, Cerritos, Bellflower, Paramount, Downey, South Gate, Cudahy, Bell, Huntington Park, Vernon, Florence-Firestone y Los Angeles Union Station (LAUS, en inglés) en el centro de Los Angeles.

El área del proyecto cuenta con 1.4 millones de habitantes y es un centro de trabajo para aproximadamente 618,500 empleados. Las proyecciones muestran que la población residencial aumentará a 1.6 millones y los empleos aumentarán a 746,000 para el año 2042. Las densidades de población y de empleo son cinco veces mayores que el promedio del condado de Los Angeles. Conectar esta área a la red ferroviaria de Metro proporcionará alternativas a la conducción y creará más acceso a las oportunidades.

### Objetivos

Los objetivos principales del proyecto WSAB son:

- Proporcionar mejoras en la movilidad 1.
- Apoyar planes y políticas del uso de la tierra a nivel 2. local y regional
- Minimizar el impacto ambiental 3.
- Asegurar rentabilidad y viabilidad financiera 4.
- Promover la equidad 5.

### Hitos

En el siguiente cronograma se destacan los hitos del proyecto durante las fases de análisis de alternativas y las fases ambientales (actuales)

## Slauson/A Line a Pioneer Station (LPA)

En enero de 2022, la Junta Directiva de Metro aprobó la Alternativa Localmente Preferida (LPA, en inglés) para el proyecto WSAB desde la Slauson/A Line (Blue) en la comunidad no incorporada de Florence-Firestone hasta Pioneer Station en Artesia. Este es un segmento de 14.5 millas que contará con nueve estaciones (seis a nivel, tres aéreas), incluyendo una nueva estación de entrada de la C Line en I-105, hasta cinco instalaciones de estacionamiento, 31 cruces a nivel y 25 cruces de calles elevadas.

La Junta Directiva de Metro también aprobó una instalación de mantenimiento y almacenamiento (MSF, en inglés) en Bellflower que se ubicará en un sitio comercial de 21 acres justo al este de Lakewood Bl y Somerset Av. El MSF almacenará la administración general, la operación y los servicios de apoyo. La instalación estará equipada para realizar inspecciones, reparaciones de carrocería, limpieza y lavado de los vehículos de tren ligero de Metro. El MSF estará diseñado para almacenar hasta 80 vehículos de tren ligero (LRVs, en inglés).

### Estudio de Slauson/A Line a Union Station

La Junta seleccionó a Los Angeles Union Station (LAUS, en inglés) como la terminal norte para el proyecto y dirigió al personal que realizara un estudio separado para evaluar las opciones de conexión desde Slauson/A Line. Se anticipa que los resultados del estudio se presentarán a la Junta Directiva de Metro a fines del verano de 2023 y luego se espera que avancen a un proceso de planificación ambiental separado, después de completar la Declaración de Impacto Ambiental Final / Reporte de Impacto Ambiental (EIS/EIR, en inglés) para la LPA.

una contribución del 3%)

mbientales (actuales).			ESTAMOS AQUÍ
2013–2017 <sup>A</sup>	2017 – 2018 <sup>b</sup>	2019 – 2022 <sup>B</sup>	2023 – 2024 <sup>B</sup>
a Asociación de Gobiernos del Inicio del Borrador EIS/EIR La Ju Sur de California (SCAG, en la inc		<b>Otoño de 2019</b> La Junta Directiva de Metro aprobó la incorporación de las dos	<b>Verano 2023</b> Iniciar los esfuerzos de planificación de la primera y última milla
inglés) aprobó el análisis de alternativas <b>Otoño de 2015</b> La Junta Directiva de Metro recibió	originales para la fase ambiental Realizar análisis ambientales y estudios técnicos (hasta 2021)	opciones de Segmentos Operativos Iniciales (IOS, en inglés) como parte de la serie de alternativas que se están evaluando en el Borrador	Finales de Verano 2023 Presentar los resultados del <i>estudio</i> <i>de Slauson a Union Station</i> a la Junta Directiva de Metro
el Estudio de Refinamiento Técnico <b>Primavera de 2017</b> La Junta Directiva de Metro aprobó las alineaciones del norte	<b>Primavera de 2018</b> Informe de análisis actualizado de las alineaciones del norte	EIS/EIS <b>Verano de 2021</b> Publicación del Borrador EIS/EIR	<b>Primavera de 2024</b> Lanzamiento del EIS/EIR Final del LPA
	La Junta Directiva de Metro selecciono nuevas alineaciones del norte para estudiarlas en más detalle	Revisión y comentarios del publico/agencias, audiencias públicas y eventos comunitarios	Revisión y comentarios del público/agencias, audiencias públicas y eventos comunitarios
	Verano de 2018 Reuniones actualizadas de alcance	Invierno de 2022 La Junta directiva de Metro selecciona las alternativas de	La Junta Directiva de Metro certifica el EIR Final del LPA
	público para la fase ambiental	preferencia a nivel local (LPA, en ingles)	<b>Verano de 2024</b> La Administración Federal de
	Otoño de 2018 La Junta Directiva de Metro aprobó la definición actualizada del	<b>Verano de 2022</b> Iniciación del <i>estudio de Slauson a</i>	Transporte (FTA, en inglés) emite un Registro de Decisión (ROD, en inglés) para el EIS definitivo
<u>Fase del proyecto</u> <sup>A</sup> Un análisis de alternativas <sup>B</sup> Análisis ambiental	proyecto para realizar estudios ambientales	Union Station	La Junta Directiva de Metro aprueba el Plan de primera y última milla (lista de mejoras priorizadas para peatones y bicicletas elegibles para

<sup>B</sup> Análisis ambiental Cronograma sujeto a cambios

## Corredor de Transporte de West Santa Ana Branch

Descripción general del proyecto



Se anticipa que este corredor ferroviario servirá a los viajeros en un corredor de alta demanda de viajes al proporcionar alivio a los sistemas limitados de transporte actualmente disponibles para estas comunidades. Además, se espera que el proyecto proporcione una conexión directa a la Metro C Line y A Line, así como a la red de transporte regional del Condado de Los Angeles.

## Proceso de planificación ambiental

El proceso ambiental del proyecto WSAB está bien definido por los requisitos federales estipulados en la Ley de Política Ambiental Nacional (NEPA, en inglés) y los requisitos ambientales estatales estipulados en la Ley de Calidad Ambiental de California (CEQA, en inglés).

El proyecto se encuentra actualmente en la fase de revisión ambiental. El Borrador de EIS/EIR se publicó en julio de 2021 con un período original de revisión pública de 45 días y luego se extendió a un periodo público de 60 días, generando más de 450 comentarios formales. Después de este proceso, la Junta Directiva de Metro seleccionó la LPA en enero de 2022.

El último paso en la fase ambiental es que la Junta Directiva de Metro certifique el EIR final y la emisión por parte de la Administración Federal de Tránsito del Registro de Decisión para el EIS final, anticipado para el verano de 2024.

## Coordinación de trenes de mercancías del proyecto

El proyecto WSAB incluye un corredor compartido de aproximadamente 11 millas de carga de derecho de paso (ROW, en inglés) que corresponde a la vía de cargas de Wilmington y La Habra rutas de tren (propiedad de Union Pacific Railroad, UPRR, en inglés) y la Subdivisión de San Pedro (propiedad de Ports of Los Angeles y Long Beach). Para la alineación LPA, se realinearán 8.1 millas de carga.

El personal de Metro está coordinando activamente con UPRR y los puertos para obtener un acuerdo sobre el diseño y el derecho de paso necesario para avanzar en el proyecto.

Inicial

## Entrega del proyecto

Para maximizar la preparación del proyecto para la entrega del alcance central del tren ligero, el personal ha evaluado y determinado que el gerente de construcción/contratista general (CM/GC, en inglés) sea el modelo de contrato óptimo para el alcance de ingeniería avanzada, que incluye la reubicación de servicios públicos, la reubicación de carga y los pasos a nivel. Para la entrega del alcance central del tren ligero, el personal de Metro continúa evaluando el enfoque óptimo, incluyendo la evaluación de los métodos de entrega alternativos como la asociación público-privada (P3, en inglés), el diseño-construcción (DB, en inglés) y el diseño progresivo y la construcción (PDB, en inglés).

El personal continúa avanzando en los componentes clave en el alcance de ingeniería avanzada, lo que ayudará a la agencia a tomar una decisión informada sobre el mejor modelo de entrega para el alcance del tren ligero.

## Financiación

Según el pronóstico financiero de la Medida M y el Plan de Transporte a Largo Plazo de Metro , de acuerdo con su modificación, el proyecto tiene una asignación de fondos de \$4 mil millones (en dólares de 2015) (compuesta por la Medida M y otras fuentes locales, estatales y federales). La financiación de la Medida M está disponible en dos ciclos:

- > Año fiscal 2028: \$535 millones
- > Año fiscal 2041: \$900millones

Desde febrero de 2022, el personal de Metro ha reevaluado el costo previsto del proyecto LPA considerando la contingencia, la escalada al Año de Gastos (YOE, en inglés) y la precisión para la estimación. Como se presentó a la Junta Directiva de Metro en septiembre de 2022, el rango actualizado de pronóstico del proyecto es de \$7 mil millones a \$9 mil millones en YOE incluye los costos actuales de escalada del mercado de la construcción.



Operación y Mantenimiento

\*Este cronograma está sujeto a cambios según diversos factores, incluidas las oportunidades de financiación (consulte la sección sobre Financiación).

y Diseño



Medioambiental

ESTAMOS



## Appendix D – Walk Audits

Appendix D.1 – Participation

Appendix D.2 – Feedback (Walk Audit App Results)



Appendix D.1 – Participation

### West Santa Ana Branch Transit Corridor First/Last Mile Community Walk Audit Registrations - October 2023

Audit #	Email Address	First Name	Last Name	Phone #	Address	City	ZIP
1		Georgina	Arceo			Paramount	90723
1		Marylou	Moctezuma			Huntington Park	90255
1		Rafael	Arenas			Paramount	90723
1		Lorraine	Moctezuma			Huntington Park	90255
1		Maricela	Parga			Paramount	90723
1		Graham	Davidson			Highland Park	90042
1		Diego	Renteria			South Gate	90280
1		Marin	Chavez			Bell Gardens	90201
1		Patricia	Laura Ramirez			Lynwood	90262
1		Maria	Sanchez				
1		Soledad	Pineda			Paramount	90723
1		Margarita	Bacera			Paramount	90723
1		Braulio	Delgadillo			Los Angeles	90058
1		Leticia	Ruiz			Compton	90222
1		Rodrigo	Pelayo				
1		Jason	Garcia			Huntington Park	90255
			De Jesus				
1		Mauricio	Urrotia			South Gate	90280
1		Guadalupe	Laskey			Cudahy	90201
1		Raul	Diaz			Cudahy	90201
1		Raul				Huntington Park	90255
1		Jessica	Guillen			Los Angeles	90057
1		Hector	De La Torre			Paramount	90723
2		Leticia	Ruiz			Compton	90222
2		Alejandra	Figueroa			Bellflower	90706
2		Oscar	Cisco				
2		Jessica	Guillen			Los Angeles	90057
2		Olga	Rojo			Paramount	90723
2		Gabriella	Ballesteros			South Gate	90280
2		Sandra	Varela			South Gate	90280
2		Rose	Andrade			Paramount	90723
2		Margarita	Bacera			Paramount	90723
2		Rebecca	Rodriguez			Long Beach	90805

### West Santa Ana Branch Transit Corridor First/Last Mile Community Walk Audit Registrations - October 2023

Audit #	Email Address	First Name	Last Name	Phone #	Address	City	ZIP
2		John	King			Paramount	90723
2		Mark					
2		Rosa	Salazar			Paramount	90723
2		Maricruz	Ledezma			Paramount	90723
2		Sandra	Perez			South Gate	90280
2		Sheila	Cornett			South Gate	90280
2		Bernardina	Beviteza			Compton	90221
2		Lourdes	Lopez			Paramount	90723
2		Faraz	Aqil			Downey	90242
2		Cristina	Romero Aqil			Downey	90242
2		Maria	Alcazar			Paramount	90723
2		Maricela	Parga			Paramount	90723
2		Adriana	Figueroa			Paramount	90723
			De Jesus				
2		Mauricio	Urrotia			South Gate	90280
2		Guillermo	Gonzalez				
2		Pilar	Mendoza				
3		Maria	Lopez				
3		Lourdes	Lopez			Paramount	90723
3		Georgina	Arceo			Paramount	90723
3		Leticia	Ruiz			Compton	90222
3		Maria	Olga Rojo				
3		Rafael	Arenas			Paramount	90723
3		Maria A.	Martinez			Compton	90221
3		Maria V.	Martinez				
3		Beatriz	Guerrero				
3		Maria	Estrada				
			De Jesus				
3		Mauricio	Urrotia			South Gate	90280
3		Emily				Paramount	90723
3		Jorge				Paramount	90723
3		Laura	Castaneda			Los Angeles	90058
3		Shay	Sakett				
4		Carl	Fonseca			Artesia	90701

### West Santa Ana Branch Transit Corridor First/Last Mile Community Walk Audit Registrations - October 2023

Audit #	Email Address	First Name	Last Name	Phone #	Address	City	ZIP
4		Lorelei	Bailey			Artesia	90701
4		Mariel	Angeles			Cerritos	90703
4		Karl	Eggers			Long Beach	90815
4		Norma	Williamson			Cerritos	90703
4		Manjula	Ramanathon			Cerritos	90703
4		Alejandra	Figueroa			Bellflower	90706
4		Maximina	Martinez			Bellflower	90706
4		Lourdes	Lopez			Paramount	90723
4		Maricela	Parga			Paramount	90723
4		Andrew	Isip			Santa Fe Springs	90670
4		Rosa	Andrade			Paramount	90723
4		Carolyn	Camarena			Artesia	90701
4		Peter	Kann			Artesia	90701
4		Karen	Lee			Artesia	90701
4		Leticia	Ruiz				
4		Okina	Dur			Artesia	90701
4		Mauricio	Urrutia			South Gate	90280
4		Maria Olga	Rojo				
4		Dianne	Van Beek			Artesia	90701
4		Alan	Williamson			Cerritos	90703
4		Marina	Perez			Lakewood	90713
4		Ramona	Lara			Norwalk	90650
4		Beatriz	Guerrero			Long Beach	90806
4		Maria A.	Martinez			Compton	90221
4		Hector	De La Torre			Paramount	90723
4		Meena	Dodhiwale			Artesia	90701
5		Maricela	Parga			Paramount	90723
5		Maria V.	Martinez				
5		Maria A.	Martinez			Compton	90221
5		Georgina	Arceo			Paramount	90723
5		Maria	Estrada				
5		Maria	Olga Rojo				
5		Laura	Santiago			Bellflower	90706

Audit #	Email Address	First Name	Last Name	Phone #	Address	City	ZIP
5		Faraz	Aqil			Downey	90242
5		Juana	Lopez			Long Beach	90805
5		Magdalena	Zarate			Bellflower	90706
5		Leticia	Ruiz				
5		Beatriz	Guerrero			Long Beach	90806
			De Jesus				
5		Mauricio	Urrotia			South Gate	90280
6 (Bellflower 2)		Alejandra	Figueroa			Bellflower	90706
6 (Bellflower 2)		Maria	V.			Compton	90221
			Guerrero De				
6 (Bellflower 2)		Beatriz	Vazquez			Long Beach	90806
6 (Bellflower 2)		Magdalena	Cerbantes			Bellflower	90706
6 (Bellflower 2)		Arturo	Briones			Paramount	90723
6 (Bellflower 2)		Faraz	Aqil			Downey	90242
6 (Bellflower 2)		Bonnie	Lin			Cerritos	90703
6 (Bellflower 2)		Helen	Huang			Artesia	90701
6 (Bellflower 2)		Liwen	Shao			La Palma	90623
6 (Bellflower 2)		Mauricio	Urrutia			South Gate	90280
6 (Bellflower 2)		Maria	Lopez			Paramount	90723
6 (Bellflower 2)		Georgina	Arceo			Paramount	90723
6 (Bellflower 2)		Olga	Rojo				
6 (Bellflower 2)		Lupita	Rojo			Paramount	90723
6 (Bellflower 2)		Lourdes	Lopez				



Appendix D.2 – Feedback (Walk Audit App Results)

West Santa Ana Branch Transit Corridor

First/Last Mile Planning – Community Walk Audit Written Notes

### Florence/Salt Lake Community Walk Audit

### Comments that are highlighted have been incorporated into the draft project list.

1.

• Driveways - Safety concern for peds crossing driveway slopes. Idea - use rolled curbs,	Insert photo (optional)
rather than traditional curb and aprons so sidewalk stays more level.	
<ul> <li>Underground overhead utility poles/wires – remove/underground</li> </ul>	
Florence Ave – Shade Trees	
Florence Ave/Bissell St Intersection –	
curb/median extension to provide larger pedestrian refuge for long crosswalk,	
consider pedestrian activated red stop	
light/signal	
• Florence Ave – consider different street for	
bike facilities; feels unsafe due to high traffic	
<ul> <li>speeds</li> <li>Florence Ave – traffic calming to reduce high</li> </ul>	
travel speeds	
<ul> <li>Florence Ave – key pathway</li> </ul>	
California St – narrow sidewalks	
<ul> <li>California St – ADA accessible paths at</li> </ul>	
<mark>driveway aprons</mark>	
<ul> <li>California St – add landscape/shade trees</li> </ul>	
where possible	
<ul> <li>Salt Lake Ave – widen sidewalks/curb extensions especially along 4' sidewalks</li> </ul>	
segments	
** <u>0.114114</u>	

### 2. General Project Questions

- Some participants learned from word of mouth about the audit and thought it was something very different. In the end, they enjoyed it and were very insightful and very helpful. Maybe we need to assume some participants know nothing and explain in very simple terms. Yes, we should be explaining terminology in the simplest terms so anyone can understand with no prior background.
- o The app was challenging since so much terminology was new to some participants

### I-105/C Line Community Walk Audit

1.

I-105 C Line - Questions/Comments	
<b>Paramount Blvd</b> needs a complete upgrade:	
<ul> <li>Consistent sidewalk widths – 12' on east side is good, but west side varies from 6' to 12'</li> <li>Shade at bus stops</li> </ul>	
<ul> <li>Street trees in parkways</li> <li>High visibility crosswalks</li> <li>May need to add pedestrian lighting – need to check at night</li> <li>Looks like there might be just enough room</li> </ul>	
<ul> <li>Cooks like there might be just enough room for standard bike lanes – not great, but some help to bicyclists and scooters</li> <li>Wayfinding signage to direct people to the station since it is tucked away.</li> </ul>	
Paramount Bl at Alhambra and Wilson	
There is a striped crosswalk at Wilson but no traffic control on Paramount Bl. Need to add a pedestrian- activated signal and stripe with a high visibility crosswalk.	
Paramount BI at N. Somerset Ranch Rd	
Because Somerset Ranch Rd is a high speed freeway access frontage road, there is always a long line of people turning right from Paramount to it and from it to Paramount. This makes is more difficult to cross	
both Paramount BI and Somerset Ranch Rd. Would it be safer to have a pedestrian-activated signal and high visibility crosswalk at Lincoln (or would it be	
less safe)? Is there a way to make it safer to cross	
both streets?	
Pearle/Paramount Intersection – consider	Insert photo (optional)
adding signalized crossing (its currently unsafe due to speed of traffic and amount of cross traffic coming to/from Pearle). Need for ped x-ing will increase when WSAB stations open.	
Paramount Pathway Trees - City is	
developing a tree plan with Tree People; calls for removing large ficus trees on Paramount (damage to sidewalks, catch basins) and will replace with smaller species.	
<ul> <li>Direct Pathway to Station – Resident suggested ped path idea possibly from Paramount Blvd in center of I-105 fwy to reach future C-Line &amp; WSAB Stations.</li> </ul>	
<ul> <li>Intersection of Industrial Ave/Main St/Arizona Way, suggestion for a roundabout to calm traffic and ease the confusion</li> </ul>	

I-105 C Li	ne - Questions/Comments	
	ndustrial Ave, upgrade the east/west	
	rosswalk leading into the park; faded	
	triping, pot hole in the road, and no access	
	amp on the west side.	
	ndustrial Ave and Lincoln Ave, potential for	Review Hollydale Parks Master Plan
	n east/west crosswalk for access for	(2017)
	outhern access to the new park.	
	ccess ramps needed at Industrial and	
	larding Ave's	
	Vill crosswalks be included in or needed for	
	he planned station parking?	
	ndustrial Ave – In fill shade trees, will trees	
	e planted with the new parking facilities?	
	ntersection of Industrial Ave and Century Bl	
	omments:	
	Online its. Or Add a stop sign because cars hit that	
	curve fast	
	<ul> <li>How are people supposed to access</li> </ul>	
	the ped bridge if it is opened again?	
	High visibility crosswalk needed	
	<ul> <li>Add lighting across the existing ped</li> </ul>	
	bridge. It looks scary to cross at	
	night	
• C	entury Blvd comments	
- 0	<ul> <li>Add landscaped medians</li> </ul>	
	<ul> <li>Consider traffic calming measures</li> </ul>	
	with an influx of cars to station	
	parking	
	<ul> <li>Add mid-block crossing @ Florine</li> </ul>	
	Ave	
	<ul> <li>Add access ramps at Center St,</li> </ul>	
	Florine Ave, Fairlock Ave, Racine Ave	
	on North side of street	
	o Group witnessed an elderly man	
	with a walker cross diagonally from	
	Arco AM/PM station to Racine Ave	
	as a "short-cut"	
• G	arfield Ave comments	
	<ul> <li>Upgrade access ramps at Century</li> </ul>	
	Blvd to dual access ramps	
	<ul> <li>Garfield is comfortable to walk but</li> </ul>	
	could use more trees	
• N	1ain St	
	<ul> <li>Comfortable sidewalks but need</li> </ul>	
	more trees	
	<ul> <li>Wide roadway and no stop signs, so</li> </ul>	
	motorists tend to drive fast, even	
	though it is a single-family	
	neighborhood.	
	-	

1105 Chine Overtions/Comments	
I-105 C Line - Questions/Comments	
<ul> <li>Between Center St and Industrial</li> <li>Aug. store sizes and high visibility</li> </ul>	
Ave, stops signs and high visibility	
<mark>crosswalks needed</mark>	
<ul> <li>It is on the City's bicycle master plan</li> <li>to be attrined with Clease II leaves. That</li> </ul>	
to be striped with Class II lanes. That	
would make it safer for bicyclists	
and scooters and might slow down traffic.	
<ul> <li>Need traffic calming: stop signs, speed bumps, signage</li> </ul>	
<ul> <li>Need all-way stop at Main and</li> </ul>	
Arizona and all-way stop/striped	
crosswalks at Main and Hoover.	
Crosswalk is marked but stops signs	
on Arizona Av only, giving a false	
sense of safety.	
• Walkway portion of sidewalk is only	
4' wide while the parkway is 11'	
wide, which is good for the trees,	
but a few more feet of walkway	
would be better. Perhaps 6' wide	
walkway and 8' wide parkway (may	
have to reduce that directly	
adjacent to existing trees).	
<ul> <li>Florine Ave – Narrow sidewalks, consider</li> </ul>	
curb extensions where possible.	
<ul> <li>Florine Ave/Century Blvd – add high visibility crosswalk</li> </ul>	
<ul> <li>Florine Ave – add pedestrian lighting</li> <li>Florine Ave – consider Bike lanes if possible</li> </ul>	
<ul> <li>Florine Ave – add landscape/shade trees if</li> </ul>	
· · · ·	
possible	
<ul> <li>Florine Ave – consider waste bins; high trach (dog waste</li> </ul>	
<ul> <li>trash/dog waste</li> <li>South &amp; North Somerset Ranch Rd. People</li> </ul>	
• South & North Somerset Ranch Rd. People walk along the edge of S. Somerset Ranch Rd	
(there is no sidewalk) between Garfield Av	
to Paramount Bl. Add a multi-use path	
either adjacent to the existing curb (which	
may require some retaining walls) or in	
combination with narrowing the roadway,	
which currently is 32' wide with a 13' wide	
lane and 19' wide lane, by 6', so people and	
walk and cycle between the two streets.	
Freeway Overpass/Façade Ave:	
<ul> <li>Uncomfortable for walking/biking</li> </ul>	
<ul> <li>Needs shade structure</li> </ul>	
<ul> <li>Widen narrow sidewalks</li> </ul>	

I-105 C Line - Questions/Comments	
<ul> <li>Add signage and travel lane striping on</li> </ul>	
street: no street striping which is confusing	
and drivers might be more reckless	
<ul> <li>Overpass improvements: add sound barrier</li> </ul>	
along I-105 freeway, safety fencing/railing	
between cars and sidewalk, pedestrian lights	
<ul> <li>Drainage improvements: Suggested that a</li> </ul>	
grate be added to a very high, very wide	
storm drain at the northwest corner of	
Façade Ave and Mendy St. It feels unsafe	
and litter should be kept from going in the	
drain	
<ul> <li>Add shade trees and landscape.</li> </ul>	
Mendy St :	
<ul> <li>Add pedestrian lighting</li> </ul>	
<ul> <li>Add traffic calming</li> </ul>	
<ul> <li>Add shade trees and landscape</li> </ul>	
<ul> <li>Add high visibility crosswalks</li> </ul>	
Garfield Ave:	
<ul> <li>Add pedestrian lights</li> </ul>	
<ul> <li>Add landscape and shade trees in median</li> </ul>	
<ul> <li>Bus stop improvements at Garfield Ave: need</li> </ul>	
bus shelter	
<ul> <li>Consider protected bike lanes: Bicyclists ride on</li> </ul>	
sidewalk near on-ramp, on overpass and	
throughout all areas on Garfield Ave where the	
traffic is moving too fast.	
<ul> <li>Garfield Ave/I-105 Fwy on-ramp/frontage rd:</li> </ul>	
Add traffic calming	
Garfield Ave/I-105 Fwy On-Ramp Frontage Rd:	
<ul> <li>Curb extension and intersection improvements:</li> </ul>	
Cars and enormous trucks turn the corner much	
too fast at the corner of Garfield Ave and the	
east on-ramp. (Apparently, a car once went so	
fast it broke through the overpass railing and	
landed on the freeway). Both northbound and	
southbound traffic move quickly and edge in on	
each other trying to get on the on-ramp first.	
Signalization needs to be improved. This corner	
needs to be analyzed to ensure pedestrian safety. Very, very dangerous.	
<ul> <li>Opportunity Improvement/new cut through</li> </ul>	
path new sidewalk: Many commuters walk along	
the 105 FWY, east bound frontage road to get to	
the C Line. Is there way to create a safe walking	
path at the top level of this ROW (level Garfield	
and the overpass)? This seems to be a pressing	
need.	

I-105 C Line - Questions/Comments	
<ul> <li>There are homeless encampments on Garfield Ave at the corners where the 105 FWY on- ramps.</li> </ul>	
<ul> <li>Garfield Ave/Century Blvd intersection:</li> <li>High visibility crosswalk, intersection improvements: The intersection of Garfield Ave and Century Blvd needs a scrambled crosswalk to make crossing more efficient for pedestrians especially those who are disabled.</li> </ul>	

### 2. General Project Questions

• CWD Pathway Map (Correction) – Note that Industrial Ave bridge is closed, is currently locked. Reopening ped bridge will require agreement by cities.

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Slauson/A Line - Questions/Comments	
<ul> <li>Slauson/Compton Intersection – Needs trash cans, safer intersection design, RR tracks removed along Slauson, better signage, consider cameras here, traffic calming, cyclist and peds in danger around intersection, need slower speed limits here.</li> </ul>	Insert photo (optional)
<ul> <li>Slauson Bus Stops – Should be cleaner, add trash can/shade, adjacent landscape overgrown, graffiti removal, broken meter box.</li> </ul>	
<ul> <li>Slauson Pathway – Uneven sidewalks, holes and oil coming up at meter covers, slippery where properties overwater, high vehicle speeds and no buffer.</li> <li>A Line Station – Need x-walk across Slauson to connect north- south sides.</li> </ul>	
<ul> <li>Compton Ave – Parkway planting is missing or unmaintained, refuse, A.Hawkins Park edge needs maintenance, OK that park has only one entrance for security, path is unsafe for teens/kids near homeless and RVs, sidewalks blocked by parked cars, feels to dark at night per resident.</li> </ul>	
<ul> <li>Compton Ave Bus Stops – Need shade, more security.</li> <li>55<sup>th</sup>/Compton Crossing – Faded crosswalks, no dual access ramps, ped button broken. Consider bi- lingual audible crossing equipment.</li> <li>56<sup>th</sup>/Compton Intersection – Uncontrolled crossing doesn't feel safe, add directional access ramps &amp; tactile warning strips at crossings.</li> </ul>	
<u></u>	

•	57 <sup>th</sup> /Compton Intersection - Need
	stop sign and better marked x-
	walks.
٠	Scooters/Bikes - Most all were
	riding on the sidewalk due to
	unsafe feel of Slauson and
	Compton pathways.
•	Dog Waste Station – Need
	bag/waste containers.
ompt	on Ave:
•	Add shade trees: Sidewalks on
	Compton Ave are wide enough,
	but we need more trees. The
	parkway and trees in front of
	Augustus Hawkins Park show
	what a difference trees can make.
•	Need dog waste stations since
	there is a lot of dog waste outside
	the Augustus Hawkins Compton
	Ave entrance.
•	Slauson Ave/Compton Ave: curb
	extensions or intersection safety
	upgrade if possible, cars driving
	very fast at corner of Slauson Ave
	and Compton Ave including right
	turns. How can we make this
	intersection safer for
	pedestrians?
•	Add high visibility crosswalk at
	Slauson Ave/Compton Ave, needs
	continental striping.
•	Bus stop improvements or
	relocation: Bus stops on Slauson
	Ave are uncomfortable and scary
	because they are located close to
	the curb and cars are speeding.
	Can they be moved to the back of
	the sidewalk?
•	Bicyclists ride on sidewalk
	because the traffic moves too
	<mark>fast.</mark>
•	Speed limit signs says 30 MPH,
	but traffic is moving much faster.
	Need a traffic speed feedback
	sign and enforcement of the
	speed limit.
•	Opportunity Improvement: curb
	extension or dedicated zone for

l a	uson/A Line - Questions/Comments
	street vendors if possible.
	Vendors block the sidewalk
	walking path at various locations
	along Compton Ave.
	<ul> <li>Wayfinding/signage, ADA access</li> </ul>
	ramps, high visibility crosswalks
	at alleys: A number of alleys and
	driveways that cross the sidewalk
	are wide and feel unsafe to
	pedestrians.
	<ul> <li>Add street furniture/waste bins:</li> </ul>
	There's a fair amount of litter. We
	need trash cans.
58	<sup>th</sup> Dr/Compton Ave:
•	Add high visibility crosswalk with
	signalized crossing at 58 <sup>th</sup> Dr.
	Recommend a marked crosswalk with
	traffic control at 58 <sup>th</sup> Dr.
•	Add shade trees/landscape
•	Curb extension or opportunity
	improvements: zoning/dedicated
	area for vendors. Several storefronts
	are not friendly. Several vendors are
	blocking the ROW.
60	<sup>th</sup> St/Compton Ave:
•	Add bus stop improvements at
	Compton Ave: Need for bus stop
	shelter over bench on west side of
	Compton Ave.
•	Add bus stop improvements at
	Compton Ave: Need a bus stop bench
	and shelter on the east side.
•	Add ADA access ramps: Need
	truncated dome on curb ramps at
	intersection.
60	<sup>th</sup> St/Miramonte Blvd:
•	Add high visibility crosswalks, curb
	extensions for traffic calming:
	Sometimes cars will drive fast and
	deliberately make donuts at the
	roundabout. The roundabout slows
	cars that tend to drive through stop
	signs. Adding high visibility crosswalks
	at the roundabout would make a
	safer crossing.
•	Add traffic calming speed bumps on
	60 <sup>th</sup> St and on Miramonte Blvd.

	Signalized crossing improvements:
	Stop signs at roundabout need to be
	more visible.
Mi	ramonte Blvd:
•	Add high visibility crosswalks at
	Miramonte Blvd/Slauson Ave
•	Add curb extensions/widen sidewalk:
	Walkway portion of the sidewalk on
	Miramonte Blvd needs to be at least
	1-2' wider. Parkway is good.
•	Add bike lane: Miramonte is very
	wide street. Replace the center turn
	lane, which is not needed on a low-
	density residential street and is
	currently used for parking, with bike
	lanes from Slauson to Florence.
•	Miramonte is a good walking street.
•	Add landscape/shade trees: consider
	shade trees to be mixed with palm
	trees.
5.8 <sup>t</sup>	<sup>th</sup> St/Miramonte Blvd
•	Add high visibility crosswalk and
•	signalized crossing (stop signs): there
	is a curb extension here (on southside
	of the T-intersection), but the
	crosswalk isn't striped. Add a marked
	crosswalk and perhaps stop signs to
	make it safe to cross and slow the
	traffic down.
•	Infill shade trees: There is ample
	space in empty planting areas.
•	Add shade trees and landscape
	parkways: like the block just south of
	Slauson Ave on Miramonte Blvd)
	would be ideal along all of Miramonte
	Blvd and all throughout this route.
Sla	uson Ave:
•	Traffic calming or add mid-block
	signalized crossing to slow high traffic
	speeds on Slauson Ave; Cars drive
	very fast on Slauson Ave in the curb
	lane (there is no curbside parking), so
	it feels/is unsafe to walk on the half
	of the sidewalk next to the curb.
	Slauson Ave is very uncomfortable
	with very, dangerous fast-moving

Jiai	uson/A Line - Questions/Comments
	traffic. It's very dangerous for those
	trying to cross and get to the station
	without a crosswalk with traffic light.
•	Add landscape parkways with shade
	trees and widen sidewalks on Slauson
	Ave: need buffer next to traffic and
	shade. Many people coming from the
	west and north will walk on the new
	multi-use path on the north side, but
	people coming from the south will
	<mark>still walk on the south side of Slauson</mark>
	Ave. Adjacent to the LADWP facility,
	there is a 10' wide sidewalk and a 4'
	landscaped setback. It would be
	great to flip them, so there is a 6'
	parkway with trees next to the traffic
	lane and an 8' wide walkway.
Slai	uso <mark>n Ave at A Line Station:</mark>
•	Add bus stop improvements: Need
	bus shelter at the stop near southside
	of station.
•	Add signalized crossing, high visibility
	crosswalk: Need to slow down traffic
	on Slauson. More traffic signals are
	needed. One pedestrian said he was
	almost hit not understanding that
	Long Beach St is an operational
	street. There is no yield or stop sign
	there at all.
•	Need a yield or stop sign at Long
	Beach St and Slauson Ave. and the
	intersection should be reconfigured
	to be a T intersection. Also, need a
	speed table crossing when the new
	signalized crossing is installed with
	<mark>Segment A of Rail to Rail.</mark>
•	There needs to be increased security
•	There needs to be increased security and more supervision at the A Line
•	
•	and more supervision at the A Line
•	and more supervision at the A Line station. It feels unsafe and empty.
•	and more supervision at the A Line station. It feels unsafe and empty. Traffic calming/signage: speed limit

- 2. General Project Questions
  - WSAB Alignment should go to Disneyland!

### Pioneer Station Community Walk Audit

Pioneer - Questions/Comments	
<ul> <li>187<sup>th</sup> St</li> <li>Midblock crossing needed in north/south direction from existing off street path to proposed station</li> </ul>	Insert photo (optional)
<ul> <li>Off Street Path         <ul> <li>Add temporary shade structures</li> <li>When complete add shade trees</li> </ul> </li> </ul>	
<ul> <li>186<sup>th</sup> St, update the crosswalks at Corby Ave</li> </ul>	
<ul> <li>Pioneer Blvd         <ul> <li>From in front of Maya Plaza to 183<sup>rd</sup>, the sidewalk on the west side of Pioneer Blvd narrows and community members worry that the grates over the tree wells are not safe for people to walk over</li> </ul> </li> </ul>	
<ul> <li>Intersection of 187<sup>th</sup> and Clarkdale Ave</li> </ul>	
crosswalk and access ramps needed	
<ul> <li>187<sup>th</sup> St/Clarkdale Ave:</li> <li>Need curb ramp in front of the church where 187<sup>th</sup> dead ends.</li> <li>This intersection is one of the busiest on Fridays, Saturdays, and Sundays. People from Artesia, Lakewood, and Cerritos walk and bike to church services held in a variety of languages throughout the day. Comfort and safety on 187<sup>th</sup> St and at this intersection is key.</li> <li>Pedestrian and bicycle activity is high during weekdays for those attending funerals, services, and the school (adjacent to church).</li> <li>Traffic calming on Clarkdale Ave is suggested.</li> </ul>	
<ul> <li>187<sup>th</sup> St:</li> <li>Sidewalks are fairly narrow considering the high volume of pedestrian use now and as an essential pathway to Pioneer station. Consider widening sidewalks.</li> <li>Add landscape/shade trees: more street trees where possible.</li> <li>Add bike facility: street is wide, yet quiet w/o much auto traffic. Perhaps, a good place for a bike route.</li> </ul>	

•	New or improved sidewalks: repair is	
	needed on 187 <sup>th</sup> St, between Arline Ave	
	and Pioneer Blvd.	
•	In addition to being an important route	
	for church and school attendance, 187 <sup>th</sup>	
	St opens up to shops and stores on	
	<mark>Pioneer Blvd so it is an</mark> important	
	<mark>walkway for residents.</mark>	
187 <sup>th</sup> S	St: Pioneer – Clarkdale	
•	Add shade trees.	
•	Add 4-way stop and marked crosswalks at	
	Arline Av.	
•	Lots of traffic to Holy Name Church and Our	
	Lady of Fatima School.	
	ale Av 187 <sup>th</sup> – South St	
•	Add stop signs and speed humps for Bike	
_	Friendly Street. Add big trees (36" box) in front yards since	
-	there is no parkway.	
•	Add sidewalk or path through park on east	
	side.	
South		
•	Add shade trees – <i>Moringa oleifera</i>	
	(Moringa), a drought-tolerant tropical tree.	
•	Add protected bike lanes – it looks like there	
	is enough room.	
•	If there is room for a 4' wide separation,	
	make it a planting area with shade trees (like	
	Rosemead Bl. in San Gabriel).	
•	Reduce traffic speed.	
•	Add artwork on utility boxes on sidewalk.	
South	St.: Clarkdale – Elaine North Side	
•	Add trees in park along back of sidewalk to	
	provide shade.	
•	Add shade and recycling cans (in the shape	
	of bottles and cans, etc) at bus stop.	
•	Fix holes in walkway at park entrance.	
•	Bigger signs at bus stop – or digital – too	
	small to read currently.	
South	St.: Elaine – Pioneer South Side	
•	Add shade trees either in setbacks.	
•	Extend the shared use path southeast from Pioneer to South St on the WSAB ROW	
	adjacent to tail tracks.	
•	Make the WSAB ROW from South St to	
	Cerritos/Don Knabe Park and Coyote Creek a	
	greenway: extend the shared use path and	
	<b>S , , , , , , , , , ,</b>	J

make the rest a park. It is 100' wide so that would be 17 acres of park land – bigger than Artesia Park!	
<ul> <li>Pioneer Blvd:</li> <li>The street has many amenities to provide safe and comfortable pedestrian conditions.</li> <li>Great pedestrian lighting.</li> <li>Suggest continental stripping at 187<sup>th</sup> + Pioneer Blvd.</li> </ul>	
<ul> <li>187<sup>th</sup> St/Alburtis Ave:</li> <li>Add ADA curb ramps and high visibility crosswalks: intersection needs curb ramps with truncated domes and crosswalks.</li> </ul>	
<ul> <li>187<sup>th</sup>/Jersey Ave:</li> <li>Add high visibility crosswalks: needed at this intersection.</li> </ul>	
<ul> <li>South St:</li> <li>Bike facility improvements: Upgrade bike lanes on South St. These lanes were last improved 17 years ago.</li> <li>Add roadway lighting: Suggest that the alley between Alburtis Ave and Corby Ave be lit and improved so it feels safer.</li> <li>Add shade trees: shade needed along South St.</li> </ul>	
<ul> <li>Corby Ave:</li> <li>Add signalized crossing (stop signs) and high visibility crosswalks at the 188<sup>th</sup> St/Corby Ave intersection.</li> <li>Add shade trees: More trees/shade needed.</li> <li>Widen sidewalks: Increase narrow sidewalks.</li> <li>Opportunity improvements: Drainage issues on Corby Ave, flooding on roadways and sidewalks.</li> </ul>	
<ul> <li>Plants growing into the sidewalk created some obstruction for pedestrians.</li> <li>High visibility crosswalks: upgrade crosswalk at Corby Ave/187<sup>th</sup> St</li> <li>General Project Questions</li> </ul>	

- 2. General Project Questions
  - o Can the project engage the Holy Family Catholic Church on Clarkdale Ave?
  - $\circ$   $\;$  Will the station include art that represents the history/culture of Artesia?
- Metro could work with employers to make free or subsidized passes available.

• Metro, Chamber of Commerce and businesses should work together to promote Downtown Artesia.

#### **Bellflower Station Community Walk Audit**

1. All input provided in app.

Bellflower – Questions/Comments		
Add to list	Insert photo (optional)	
•		
•		

2. General Project Questions



## **Appendix E – Pop-up Events**

Appendix E.1 – Pop-up Event Display Board Activity Results



Appendix E.1 – Pop-up Event Display Board Activity Results

### Artesia International Arts and Diversity Street Fair 10/07/2023

First-Last Mile Toolkit		
Improvement Number of Dots		
Bus Stop Improvements	10	
Street Lights	17	
Signalized Crossing	4	
High Visability Crosswalk	8	
Overpass Improvements	16	
Shade Structre	19	
Underpass improvements	7	
Plaza/Parklet	15	
Pedestrian and Bike Lights	11	
Multimodal Mobility Hub	11	
Opportunity Improvement	2	
Street Furniture	12	
Wayfinding Signage	4	
Landscape and Shade	13	
New or Improved Sidewalk	6	
Curb Ramps	16	
Traffic Calming	7	
Roundabout	2	
Curb Extension	1	
	442	

# Slauson A Line Pop-up 10/19/2023

First-Last Mile Toolkit		
Improvement	Number of Dots	
Bus Stop Improvements		52
Street Lights		50
Signalized Crossing		40
High Visability Crosswalk		31
Overpass Improvements		25
Shade Structre		23
Underpass improvements		23
Plaza/Parklet		20
Pedestrian and Bike Lights		20
Multimodal Mobility Hub		19
Opportunity Improvement		19
Street Furniture		19
Wayfinding Signage		19
Landscape and Shade		18
New or Improved Sidewalk		17
Curb Ramps		16
Traffic Calming		14
Roundabout		10
Curb Extension		7
		442

Slauson-A Line Pathway Network		
Primary Pathway		
Pathway	Number of Dots	
Slauson		37
Long Beach Av (East)		4
Randolph St.		3
Long Beach Av (West)		2
•		3 2

Secondary Pathway		
Pathway	Number of Dots	
Holmes Av		7
Compton Av		5
55th St		1
60th St		1

## Bellflower Bike Pop-up 10/21/2023

First-Last Mile Toolkit		
Improvement Number of Dots		
Bus Stop Improvements	0	
Street Lights	6	
Signalized Crossing	6	
High Visability Crosswalk	3	
Overpass Improvements	5	
Shade Structre	5	
Underpass improvements	6	
Plaza/Parklet	3	
Pedestrian and Bike Lights	6	
Multimodal Mobility Hub	1	
Opportunity Improvement	0	
Street Furniture	2	
Wayfinding Signage	0	
Landscape and Shade	3	
New or Improved Sidewalk	7	
Curb Ramps	1	
Traffic Calming	5	
Roundabout	2	
Curb Extension	3	
	64	

Bellflower	r Pathway Network	
Prin	nary Pathway	
Pathway	Number of Dots	
Bellflower Bike Trail		0
Bellflower Blvd		10
Secondary Pathway		
Pathway	Number of Dots	
Alondra Bl		3
Flora Vista		1
Flower St		0
Oak St		2

Bike Input		
Class	Number of Dots	
Class 1	4	
Class 2	0	
Class 3	1	
Class 4	14	

# Paramount HS Pop -up 10/27/2023

First-Last Mile Toolkit		
Improvement Number of Dots		
Bus Stop Improvements	32	
Street Lights	43	
Signalized Crossing	31	
High Visability Crosswalk	37	
Overpass Improvements	24	
Shade Structre	25	
Underpass improvements	22	
Plaza/Parklet	44	
Pedestrian and Bike Lights	20	
Multimodal Mobility Hub	32	
Opportunity Improvement	17	
Street Furniture	22	
Wayfinding Signage	17	
Landscape and Shade	30	
New or Improved Sidewalk	38	
Curb Ramps	24	
Traffic Calming	21	
Roundabout	20	
Curb Extension	15	
	514	

athway Network			
Primary Pathway			
Number of Dots			
20			
20			
ry Pathway			
Number of Dots			
1			
0			
0			

## Downey Dia De Los Muertos 10/29/2023

First-Last Mile Toolkit		
Improvement	Number of Dots	
Bus Stop Improvements		29
Street Lights		71
Signalized Crossing		16
High Visability Crosswalk		32
Overpass Improvements		17
Shade Structre		26
Underpass improvements		14
Plaza/Parklet		14
Pedestrian and Bike Lights		29
Multimodal Mobility Hub		17
Opportunity Improvement		3
Street Furniture		16
Wayfinding Signage		14
Landscape and Shade		29
New or Improved Sidewalk		26
Curb Ramps		15
Traffic Calming		15
Roundabout		4
Curb Extension		11
		398

Pathway Network Primary Pathway		
Pathway	Number of Dots	
Shared Use/Off Street Path (Class I)		
Prote4cted Bicycle Lane (Class IV)		
Bicycle Lane (Class II)	2	
Long Beach Av (Class III)	2	

Pathway Network (Gardena)	
Primary	Pathway
Pathway	Number of Dots
Gardendale St	1
Industrial Av	0
Pathway	Number of Dots
Garfield Av	1
Monroe Av	0

# Superior Grocery Pop-up 11/01/2023

First-Last Mile Toolkit		
Improvement	Number of Dots	
Bus Stop Improvements		6
Street Lights		6
Signalized Crossing		4
High Visability Crosswalk		7
Overpass Improvements		5
Shade Structre		6
Underpass improvements		4
Plaza/Parklet		5
Pedestrian and Bike Lights		6
Multimodal Mobility Hub		2
Opportunity Improvement		4
Street Furniture		4
Wayfinding Signage		4
Landscape and Shade		5
New or Improved Sidewalk		3
Curb Ramps		1
Traffic Calming		6
Roundabout		1
Curb Extension		0
		79

# Huntington Park Station Pop-up 11/03/2023

First-Last	Mile Toolkit	
Improvement	Number of Dots	
Street Lights		35
New or Improved Sidewalk		27
High Visability Crosswalk		26
Signalized Crossing		25
Bus Stop Improvements		23
Pedestrian and Bike Lights		21
Shade Structre		20
Landscape and Shade		19
Opportunity Improvement		18
Wayfinding Signage		15
Curb Ramps		15
Street Furniture		14
Traffic Calming		14
<b>Overpass Improvements</b>		13
Plaza/Parklet		12
Curb Extension		11
Underpass improvements		10
Multimodal Mobility Hub		6
Roundabout		5
		329

## Northgate Mall (Bell) Pop-up 11/10/2023

First-Last Mile Toolkit		
Improvement	Number of Dots	
Bus Stop Improvements		39
Street Lights		65
Signalized Crossing		45
High Visability Crosswalk		41
Overpass Improvements		28
Shade Structre		51
Underpass improvements		37
Plaza/Parklet		31
Pedestrian and Bike Lights		30
Multimodal Mobility Hub		18
Opportunity Improvement		21
Street Furniture		34
Wayfinding Signage		25
Landscape and Shade		36
New or Improved Sidewalk		27
Curb Ramps		17
Traffic Calming		24
Roundabout		11
Curb Extension		14
		594

	Pathway Network	
	Primary Pathway	
Pathway	Number of Dots	
Florence Av		21
Salt Lake Av		1
Secondary Pathway		
Pathway	Number of Dots	
Salt Lake Av (East)		1
Bear Av		0
Bell Av- Saturn Av		0
Bissell		0
California Av		2
Live Oak St		0



### **Appendix F – Community Workshops**

- Appendix F.1 Participation
- Appendix F.2 Art Activity (Community Workshop)
- Appendix F.3 Display Board Activity Results
- Appendix F.4 Art Activity (Zine Making)
- Appendix F.5 Notification
- Appendix F.6 Photos



Appendix F.1 – Participation

# Community Workshop Participation November 15th, 2023

Name	Organization	Email Address	Phone Number	Address
Georgina Arceo	MUSA			
Mary Herrera	Paramount			
Serena Liu				
Jose Loera	City of South Gate			
Maricela Parga				
Gabriela Ballesteros	Asm. Anthony Rendon			
Maria Olga Rojo	MUSA			
Loordes Lopez	MUSA			
Ryan Miller	Maersk			
Matt Paxson	Maersk			
Diana Oroza	DEA			
Lorelei Bailey				
Andrew Isip	Norwalk			
Brandon Flores				
Margarita Bector	MUSA			
John K	City of Paramount			
Tony Mendoza				
Belinda Mekdara				

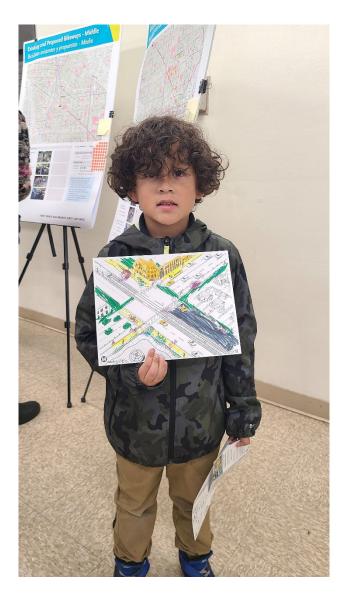
## Women's Workshop Paticipation November 17th, 2023

Name	Organization	Email Address	Phone Number	Address
Lorelei Bailey				
Connie Mendoza	Self Help Graphics			
Beatriz Guerrero De Vazquez	MUSA			
Abelina Carillo				
Daisy Loya	Community Member			
Sandy Brambila	CBE			
Dilia Ortega				
Nancy Sandez	CBE			
Esmeralda				
Maya Inigo-Anderson	CBE			
Maria A. Martinez	MUSA			
Nicole Vera	CBE			
Susan Honey Bizarro				
Erica Mareda				
Briana Villoverde				
Marcelene Pasta				

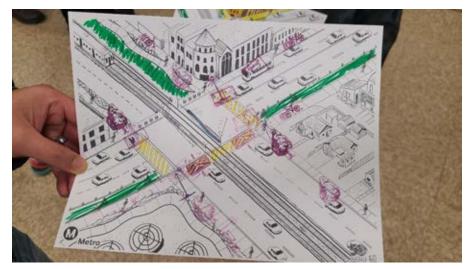


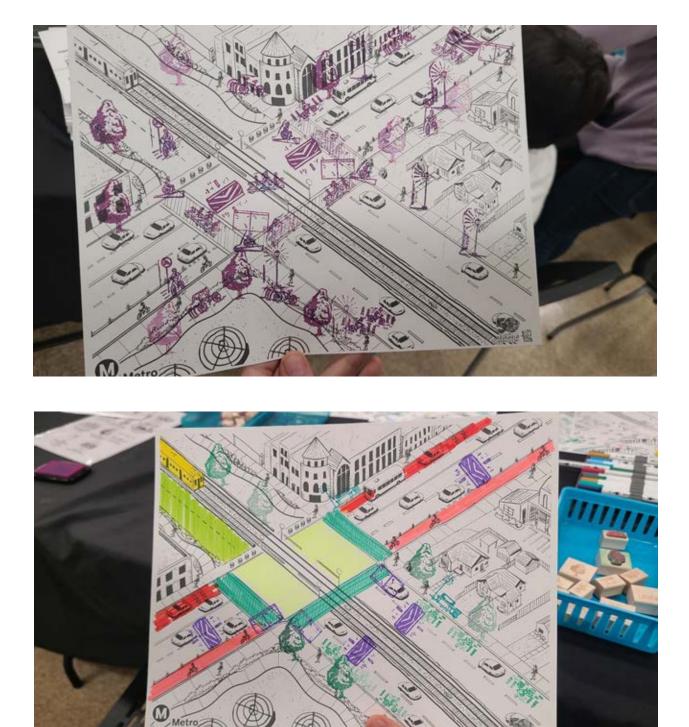
Appendix F.2 – Art Activity (Community Workshop)

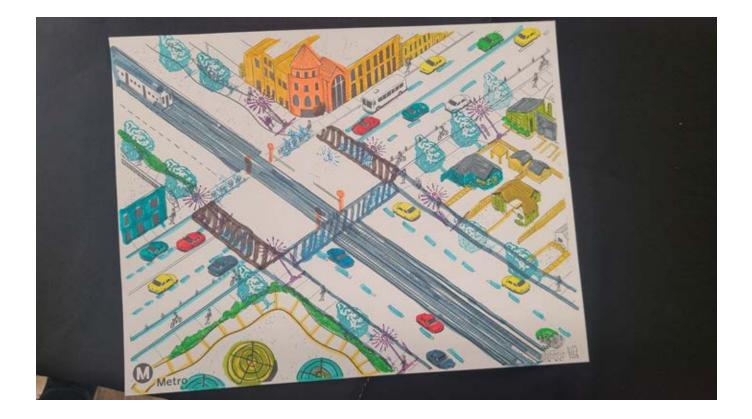
### Self Help Graphics Art Activity- Community Workshop November 15<sup>th</sup>, 2023

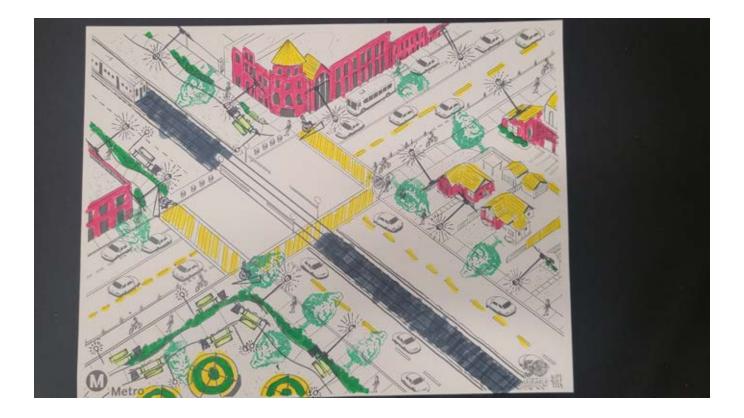




















Appendix F.3 – Display Board Activity Results

Slauson A Line- Community Workshop Activity Results November 15th, 2023

Slauson/A Line Pathway Network		
Primary Pathway		
Pathway	Number of Dots	
Long Beach Av (W of alignment)		1
Long Beach Av (E of alignment)		1
Randolph St		0
Slauson Av		1

Secondary Pathway		
Pathway	Number of Dots	
Compton Av	1	
Holmes Av	0	
55th St	0	
60th St	0	

Slauson/A Line Toolkit		
Pioneer Bl		
Improvement	Number of Dots	
Bus Stop Improvements	1	
High Visability Crosswalk	1	
Landscape and Shade	1	
New or Improved Sidewalk	1	
Curb Ramps	0	
Signalized Crossing	0	
Traffic Calming	0	

Randolph St		
Improvement	Number of Dots	
Traffic Calming	0	
New or Improved Sidewalk	0	
High Visability Crosswalk	0	
Landscape and Shade	0	

Long Beach Av		
Improvement	Number of Dots	
Curb Ramps	0	
High Visability Crosswalk	1	
Landscape and Shade	1	
New or Improved Sidewalk	1	

Holmes Av		
Improvement	Number of Dots	
Bus Stop Improvements	0	
High Visability Crosswalk	0	
Landscape and Shade	0	
New or Improved Sidewalk	0	
Curb Ramps	0	
Traffic Calming	0	

Slauson/A Line Toolkit 2		
Compton Av		
Improvement	Number of Dots	
Bus Stop Improvements	1	
Curb Ramps	0	
High Visibility Crosswalk	1	
Landscape and Shade	1	
New or Improved Sidewalk	1	
Short Term Bicycle Parking	0	
Street Furniture	0	
Traffic Calming	0	

55th St	
Improvement	Number of Dots
High Visability Crosswalk	0
Landscape and Shade	0
New or Improved Sidewalk	0
Curb Ramps	0
Bus Stop Improvements	0

60th Av	
Improvement	Number of Dots
New or Improved Sidewalk	0
High Visability Crosswalk	0
Landscape and Shade	0
Curb Ramps	0
Traffic Calming	0

### Firestone- Community Workshop Activity Results November 15th, 2023

Firestone Pathway Network		
Primary Pathway		
Pathway	Number of Dots	
Atlantic Av	1	
Firestone Bl	1	

Secondary Pathway		
Pathway	Number of Dots	
Mildreth Av	1	
Patata St- Wilcox Av	0	
Salt Lake Av	0	

Firestone Toolkit		
Bellflower Bl		
Improvement	Number of Dots	
Bus Stop Improvements	0	
Pedestrian and Bike Lights	3	
High Visability Crosswalk	0	
Landscape and Shade	0	
New or Improved Sidewalk	2	
Curb Ramps	0	
Signalized Crossing	0	
Traffic Calming	0	

Firestone Bl	
Improvement	Number of Dots
Bus Stop Improvements	1
New or Improved Sidewalks	1
High Visability Crosswalk	1
Landscape and Shade	2
Signalized Crossing	0
Curb Ramps	0

Salt Lake Ave	
Improvement	Number of Dots
High Visability Crosswalk	0
New or Improved Sidewalk	0
Traffic Calming	0

Patat St/Wilcox Av	
Improvement	Number of Dots
Bus Stop Improvements	0
New or Improved Sidewalk	0
Landscape and Shade	0

Hildreth Av	
Improvement	Number of Dots
Landscape and Shade	1

### Gardendale- Community Workshop Activity Results November 15th, 2023

Gardendale Pathway Network		
Primary Pathway		
Pathway	Number of Dots	
Gardendale St	1	
Industrial Av	1	

Secondary Pathway	
Pathway	Number of Dots
GarfieldAv	2
Monroe Av	1

Gardendale Toolkit		
Gardendale St		
Improvement	Number of Dots	
Plaza/Parklet	0	
High Visability Crosswalk	1	
Landscape and Shade	1	
New or Improved Sidewalk	0	
Curb Ramps	1	
Signalized Crossing	1	
Traffic Calming	0	

Garfield Av	
Improvement	Number of Dots
Bus Stop Improvements	1
New or Improved Sidewalks	3
High Visability Crosswalk	0
Landscape and Shade	3
Signalized Crossing	0
Traffic Calming	0
Curb Ramps	0

Industrial Av	
Improvement	Number of Dots
Curb Ramps	0
Landscape and Shade	1
Roundabout	1
High Visability Crosswalk	0
New or Improved Sidewalk	2
Traffic Calming	0

Monroe Av	
Improvement	Number of Dots
Curb Ramps	1

Pioneer- Community Workshop Activity Results November 15th, 2023

I 105 C Line Pathway Network		
Primary Pathway		
Pathway	Number of Dots	
Arthur Av	3	
Century Bl	4	
Industrial Av	3	

Secondary Pathway	
Pathway	Number of Dots
Florine Av/Facade Av/Mendy St	0
Garfield Av	4
Main St	1
Paramount Bl	3

### I 105 C Line Toolkit

Main St	
Improvement	Number of Dots
Bus Stop Improvements	3
Signalized Crossing	1
High Visability Crosswalk	3
Landscape and Shade	1
New or Improved Sidewalk	2
Curb Ramps	1
Traffic Calming	2

Paramount Bl	
Improvement	Number of Dots
Bus Stop Improvements	2
Signalized Crossing	4
High Visability Crosswalk	1
Landscape and Shade	3
New or Improved Sidewalk	2
Curb Ramps	1

Mendy St/Grove St/Florine Ave St	
Improvement	Number of Dots
Pedestrian and Bike Lights	2
Street Furniture	2
High Visability Crosswalk	2
Landscape and Shade	1
New or Improved Sidewalk	1
Curb Ramps	1
Traffic Calming	1

Arthur Av	
Improvement	Number of Dots
High Visibility Crosswalk	4

### I 105 C Line Toolkit 2 Industrial Av Improvement Number of Dots Pedestrian and Bike Lights Signalized Crossing High Visability Crosswalk

1

0

High Visability Crosswalk	0
Landscape and Shade	1
New or Improved Sidewalk	2
Curb Ramps	0
Traffic Calming	0

Century Bl	
Improvement	Number of Dots
Pedestrian and Bike Lights	3
Plaza/Parklet	1
High Visability Crosswalk	0
Landscape and Shade	1
New or Improved Sidewalk	0
Curb Ramps	1
Street Furniture	0
Traffic Calming	0

Garfield Av	
Improvement	Number of Dots
Pedestrian and Bike Lights	0
High Visability Crosswalk	0
Landscape and Shade	1
Curb Extension	0
Traffic Calming	0

### Paramount/Rosecrans- Community Workshop Activity Results November 15th, 2023

Paramount/Rosecrans Pathway Network		
Primary Pathway		
Pathway	Number of Dots	
Paramount Bl	3	
Rosecrans Av	3	

Secondary Pathway		
Pathway	Number of Dots	
Anderson St	2	
Merkel Av/Century Bl	1	
3rd St	1	

#### Paramount/Rosecrans Toolkit

Paramount Bl	
Improvement	Number of Dots
Bus Stop Improvements	2
New or Improved Sidewalks	1
High Visability Crosswalk	1
Landscape and Shade	2
Signalized Crossing	1
Pedestrian and Bike Lights	1
Traffic Calming	0
Curb Ramps	2

Rosecrans Av	
Improvement	Number of Dots
Bus Stop Improvements	2
New or Improved Sidewalks	2
High Visability Crosswalk	2
Landscape and Shade	2
Signalized Crossing	2
Plaza Parklet	3
Traffic Calming	1
Curb Ramps	2

Anderson St		
Improvement	Number of Dots	
Curb Ramps	1	
Landscape and Shade	0	
High Visability Crosswalk	1	
New or Improved Sidewalk	1	

Century Bl		
Improvement	Number of Dots	
Landscape and Shade	2	
High Visibility Crosswalk	2	

3rd St	
Improvement	Number of Dots
Landscape and Shade	2
New or Improved Side Walk	2

Bellflower- Community Workshop Activity Results November 15th, 2023

Bellflower Pathway Network	
Primary Pathway	
Pathway	Number of Dots
Bellflower Bike Trail	3
Bellflower Bl	5

Secondary Pathway	
Pathway	Number of Dots
Alondra Bl	1
Flora Vista St	1
Flower St	2
Oak St	3

# **Bellflower Toolkit**

Bellflower Bl	
Improvement	Number of Dots
Bus Stop Improvements	1
Shade Structure	0
High Visability Crosswalk	0
Landscape and Shade	1
New or Improved Sidewalk	3
Curb Ramps	1
Traffic Calming	1

### **Bellflower Bike Trail**

Improvement	Number of Dots
Improved Crossing at Intersections	1
PEdestrian and Bike Lights	3
High Visability Crosswalk	0
Landscape and Shade	3
Street Furniture	0
Curb Ramps	0

Oak St	
Improvement	Number of Dots
High Visability Crosswalk	0
New or Improved Sidewalk	0
Curb Ramps	0

Bellflower Toolkit 2	
Alondra St	
Improvement	Number of Dots
Bus Stop Improvements	1
Signalized Crossing	1
High Visability Crosswalk	0
Landscape and Shade	0
New or Improved Sidewalk	1
Curb Ramps	0
Traffic Calming	1

Flower St	
Improvement	Number of Dots
Pedestrian and Bike Lights	1
Signalized Crossing	0
High Visability Crosswalk	0
Landscape and Shade	0
New or Improved Sidewalk	0
Curb Ramps	0
Street Furniture	0
Traffic Calming	0

Eucalyptus Av	
Improvement	Number of Dots
Traffic Calming	1
New or Improved Sidewalk	1
Landscape and Shade	1

Pioneer- Community Workshop Activity Results November 15th, 2023

Pioneer Pathway Network		
Primary Pathway		
Pathway	Number of Dots	
Artesia Historic		
Distric/Recreational Trail		2
Pioneer Bl		3
187th St		2

Secondary Pathway	
Pathway	Number of Dots
Clarkdale Av	0
Corby Av	0
South St	3
183rd St	2

One additional dot with note, see board picture

### **Pioneer Toolkit**

Pioneer Bl	
Improvement	Number of Dots
Bus Stop Improvements	0
Wayfinding Signage	2
High Visability Crosswalk	0
Landscape and Shade	2
New or Improved Sidewalk	0
Curb Ramps	1
Pedestrian and Bike Lights	0
Traffic Calming	1

187th St	
Improvement	Number of Dots
Pedestrian and Bike Lights	1
Signalized Crossing	1
High Visability Crosswalk	0
Landscape and Shade	0
New or Improved Sidewalk	0
Traffic Calming	0
Curb Ramps	0

One additional dot with note: "187th St protected bike lane" see board picture

Corby Av	
Improvement	Number of Dots
Pedestrian and Bike Lights	2
High Visability Crosswalk	0
Landscape and Shade	0
New or Improved Sidewalk	0

Pioneer Toolkit 2	
Artesia Historic District Recreational Trail	
Improvement	Number of Dots
Better Lighting	1

Landscape and Shade	-
Street Furniture	

Clarkdale Av	
Improvement	Number of Dots
High Visability Crosswalk	0
Landscape and Shade	0
New or Improved Sidewalk	0
Curb Ramps	0
Traffic Calming	0

South St	
Improvement	Number of Dots
Wayfinding Signage	1
Bus Stop Improvements	0
New or Improved Sidewalk	1
Signalized Crossing	0
High Visability Crosswalk	0
Landscape and Shade	1
Curb Ramps	0
Traffic Calming	0

183rd St	
Improvement	Number of Dots
High Visability Crosswalk	1
Landscape and Shade	1
New or Improved Sidewalk	1
Curb Ramps	1

Bike- Community Workshop Activity Results November 15th, 2023

Existing and Proposed Bikeways South	
Wheel Facility	Number of Dots
Shared Use/Off Street Path (Class I)	2
Protected Bike Lane (Class IV)	6
Bicycle Lane (Class II)	2
Bicycle-Friendly Street (Class III)	2

Existing and Proposed Bikeways	
Wheel Facility	Number of Dots
Shared Use/Off Street Path (Class I)	2
Protected Bike Lane (Class IV)	2
Bicycle Lane (Class II)	1
Bicycle-Friendly Street (Class III)	1

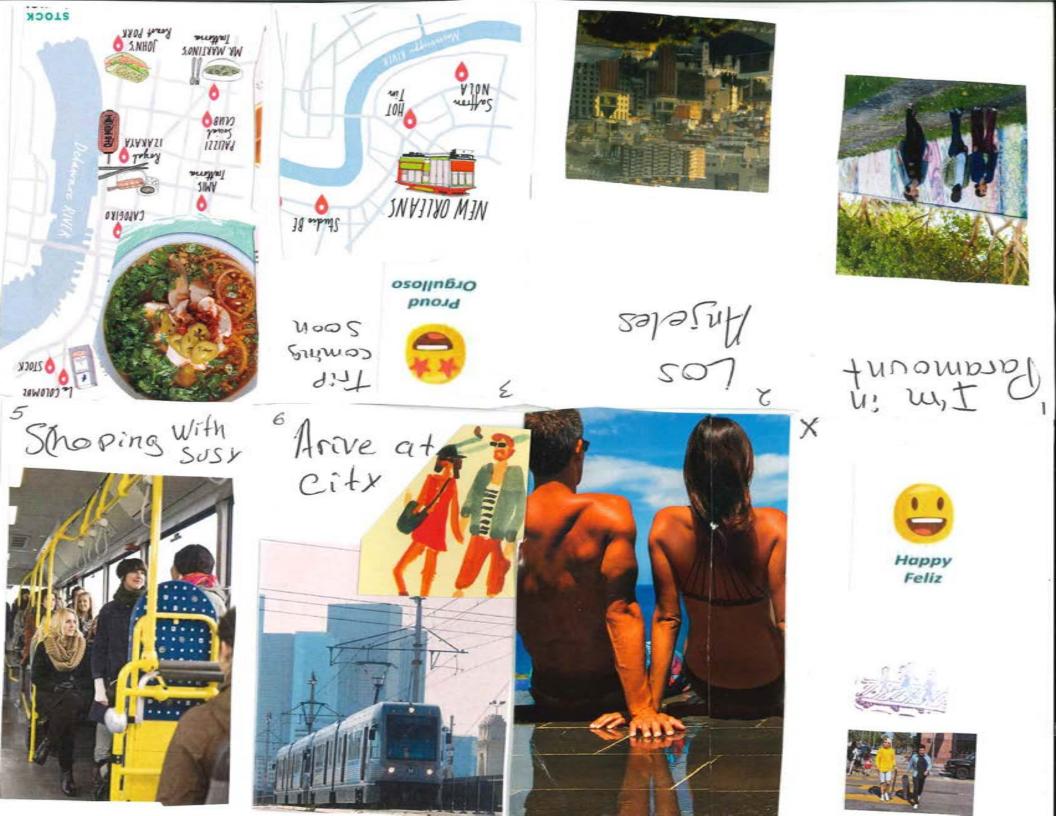
Existing and Proposed Bikeways North	
Wheel Facility	Number of Dots
Shared Use/Off Street Path (Class I)	2
Protected Bike Lane (Class IV)	3
Bicycle Lane (Class II)	1
Bicycle-Friendly Street (Class III)	0



Appendix F.4 – Art Activity (Zine Making)













It means something not to be lost in the face through it. Because how else did we move?







# "R U FKING WITH ME"

ALWAYS ON

so what did you do next?









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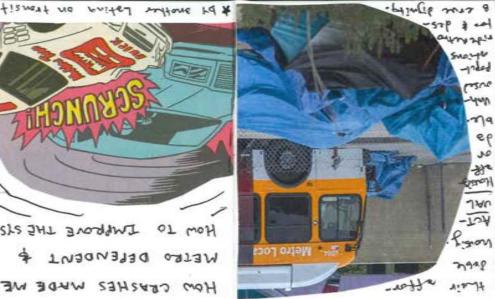












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Appendix F.5 – Notification



# Join us for a Community Workshop!

Metro's plan for better transit includes a new 14.5-mile light rail transit line that will connect Artesia, Cerritos, Bellflower, Paramount, Downey, South Gate, Cudahy, Bell, Huntington Park, Vernon, unincorporated Florence-Firestone and downtown Los Angeles. Metro is currently conducting First/Last Mile planning efforts to make it easier for riders to walk, bike or roll to and from their nearest station.

# What

With support from our community-based organization partners—Self Help Graphics (SHG), BikeLA, and Mujeres Unidas Sirviendo Activamente (MUSA)—Metro will host an open-house-style workshop to gather station-specific project feedback. The goal is to enhance future walk and wheel accessibility to these locations.

# When

Wednesday, November 15, 2023 - 5–7pm **T. Mayne Thompson Park – Multi-purpose room** 14001 Bellflower Bl, Bellflower, CA 90706 \*Interpretation in Spanish will be available



Please scan this QR code to visit the project website.







(MUSA) Mujeres Unidas Sirviendo Activamente





CONTACT US 213.922.6262 wsab@metro.net metro.net/wsab



# ¡Acompáñenos a un taller comunitario!

El plan de Metro para mejorar el tránsito incluye una nueva línea de tren ligero de 14.5 millas que conectará Artesia, Cerritos, Bellflower, Paramount, Downey, South Gate, Cudahy, Bell, Huntington Park, Vernon, la zona no incorporada de Florence-Firestone y el centro de Los Ángeles. Metro actualmente está llevando a cabo esfuerzos de planificación de la primera/ última milla para facilitar el desplazamiento de los usuarios que van a pie, en bicicleta o en carro hasta y desde su estación más cercana.

# Qué

Con el apoyo de nuestras organizaciones comunitarias colaboradoras, Self Help Graphics (SHG), BikeLA y Mujeres Unidas Sirviendo Activamente (MUSA), Metro organizará un taller de puertas abiertas para conocer opiniones sobre proyectos específicos de estaciones. El objetivo de mejorar la futura accesibilidad a pie y sobre ruedas a estos lugares.

# Cuando

Miércoles, 15 de noviembre de 2023 - 5–7pm T. Mayne Thompson Park – Multi-purpose room 14001 Bellflower Bl, Bellflower, CA 90706 \*Habrá interpretación en español



Escanee este código QR para visitar el sitio web del proyecto.







(MUSA) Mujeres nidas Sirviendo Activamente





# **CONTÁCTENOS**

213.922.6262 wsab@metro.net metro.net/wsab



# Join us for a Women/Women-Identifying Community Workshop!

Metro's plan for better transit includes a new 14.5-mile light rail transit line that will connect Artesia, Cerritos, Bellflower, Paramount, Downey, South Gate, Cudahy, Bell, Huntington Park, Vernon, unincorporated Florence-Firestone and downtown Los Angeles. Metro is currently conducting First/Last Mile planning efforts to make it easier for riders to walk, bike or roll to and from their nearest station.

# What

With support from our community-based organization partners—Self Help Graphics (SHG), BikeLA, and Mujeres Unidas Sirviendo Activamente (MUSA)—Metro will conduct an art-based workshop centered on the transit experience of women/women-identifying riders.

#### When

Friday, November 17, 2023 - 10am–1pm South Gate Girls Club House 4940 Southern Av, South Gate, CA 90280 Lunch will be provided \*Interpretation in Spanish will be available

# **Register Here**



Please register at bit.ly/wsabworkshop or by calling the project helpline at 213.922.6262. Registration is limited to 25 participants.



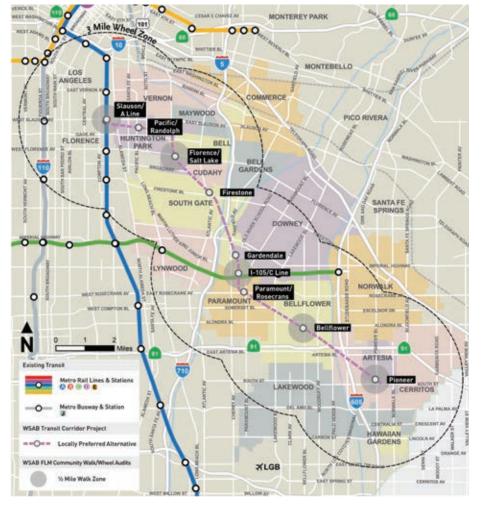


(MUSA) Mujeres Unidas Sirviendo Activamente





CONTACT US 213.922.6262 wsab@metro.net metro.net/wsab







# ¡Acompáñenos a un taller comunitario para mujeres y personas que se identifican como mujeres!

El plan de Metro para mejorar el tránsito incluye una nueva línea de tren ligero de 14.5 millas que conectará Artesia, Cerritos, Bellflower, Paramount, Downey, South Gate, Cudahy, Bell, Huntington Park, Vernon, la zona no incorporada de Florence-Firestone y el centro de Los Ángeles. Metro actualmente está llevando a cabo esfuerzos de planificación de la primera/ última milla para facilitar el desplazamiento de los usuarios que van a pie, en bicicleta o en carro hasta y desde su estación más cercana.

#### Qué

Con el apoyo de nuestros colaboradores de organizaciones de base comunitaria, Self Help Graphics (SHG) y Mujeres Unidas Sirviendo Activamente (MUSA), el equipo del proyecto llevará a cabo un taller basado en el arte y centrado en la experiencia de tránsito de usuarias mujeres/personas que se identifican como mujeres.

# Cuando

viernes, 17 de noviembre de 2023 - 10am–1pm **South Gate Girls Club House** 4940 Southern Av, South Gate, CA 90280 Se proveerá almuerzo *\*Habrá interpretación en español* 

# Regístrese aquí



Por favor, inscríbase en *bit.ly/ wsabworkshop* o llamando a la línea de asistencia del proyecto al 213.922.6262. Este evento está limitado a 25 participantes.





(MUSA) Mujeres Unidas Sirviendo Activamente





# CONTÁCTENOS

€ 213.922.6262
 ≥ wsab@metro.net
 € metro.net/wsab







Appendix F.6 – Photos

#### West Santa Ana Branch Transit Corridor

### Women's Workshop Photos- November 17<sup>th</sup>, 2023

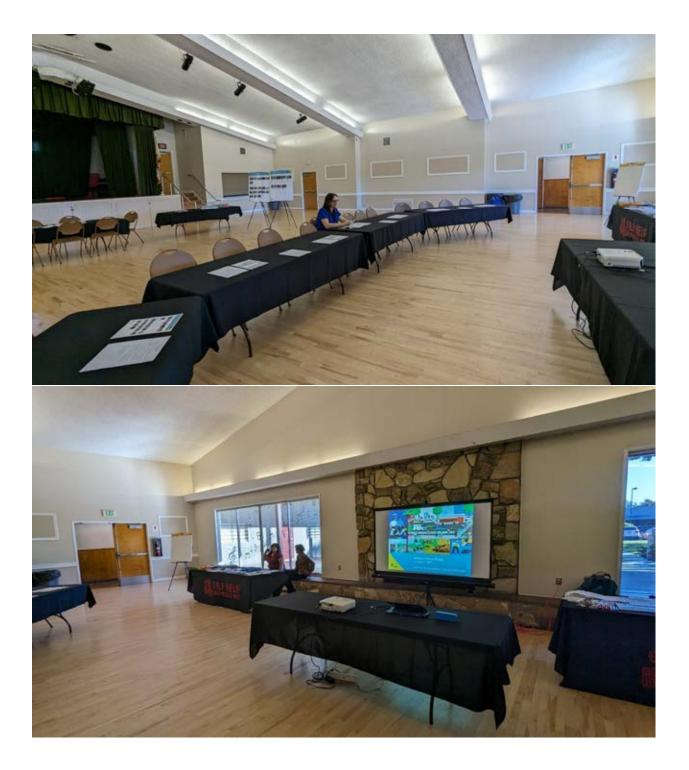


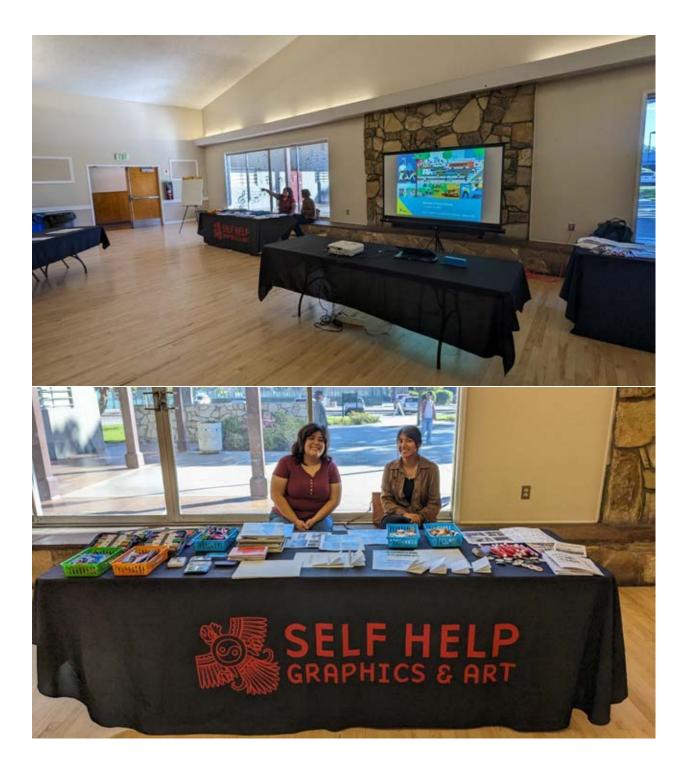








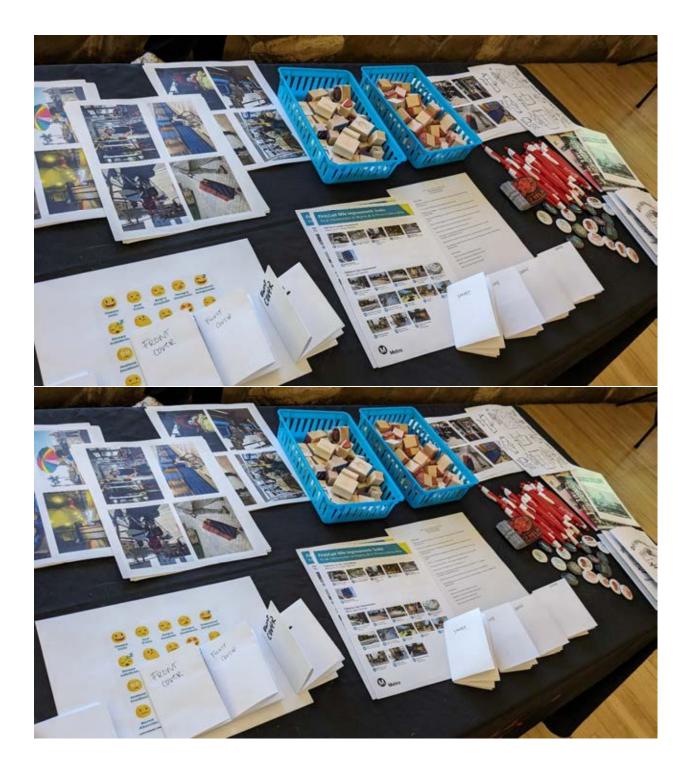


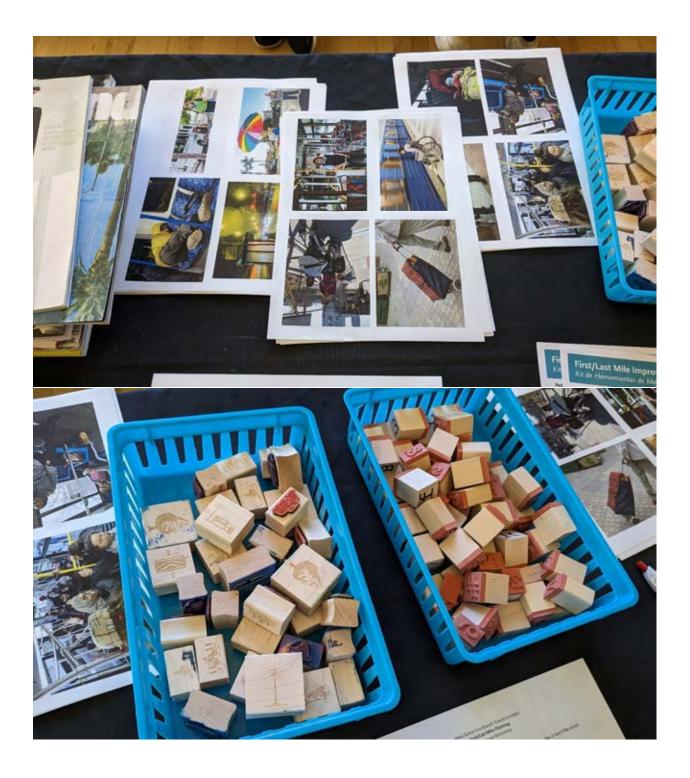








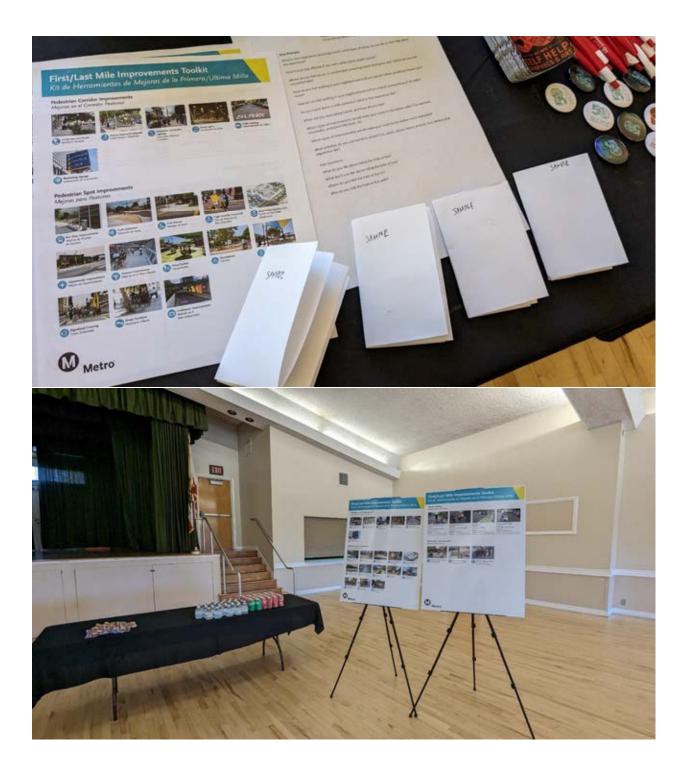




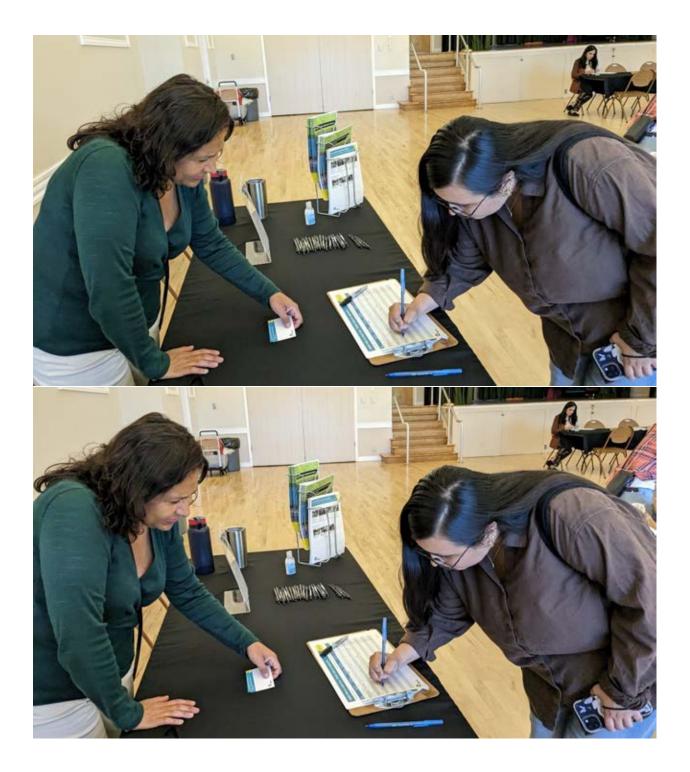






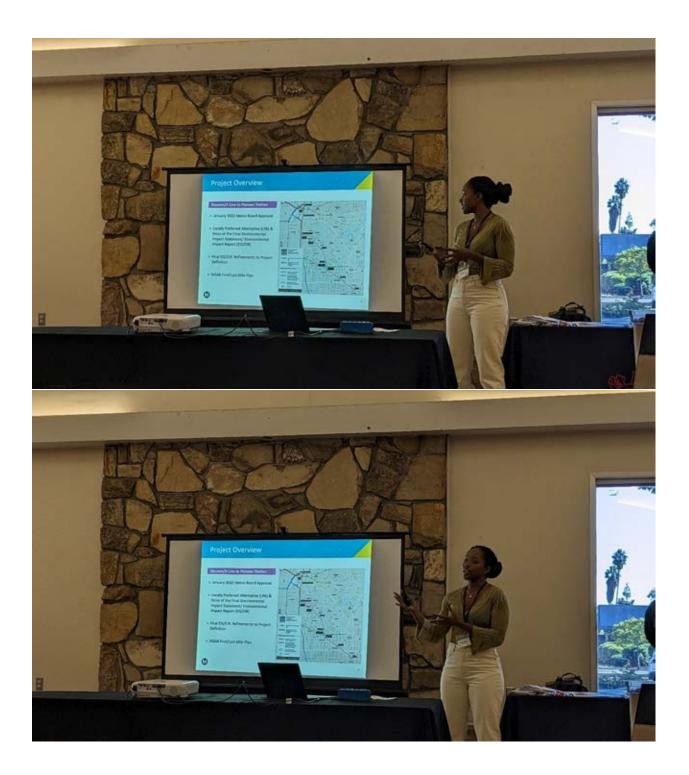






























# Appendix G – Survey

Appendix G.1 – Survey

Appendix G.2 – Survey Results



Appendix G.1 – Survey

### West Santa Ana Branch Transit Corridor First/Last Mile

### Take Our Survey / iTome nuestra encuesta!

Metro is developing a First/Last Mile Plan for the WSAB Transit Corridor to identify improvements that will make it safer and more enjoyable to walk, bike, and roll to stations. Metro needs your input to help identify First/Last Mile improvements at the future stations.

Metro está desarrollando un plan de primera/última milla del corredor de tránsito WSAB para identificar las mejoras que harán más seguro y agradable moverse a pie, en bicicleta o rodando hasta las estaciones. Metro necesita su opinión para ayudar a informar sobre las mejoras de primera/última milla en las futuras estaciones WSAB.

Scan the QR code or visit / Escanea el código QR o visita **bit.ly/wsabflmsurvey** 









Appendix G.2 – Survey Results

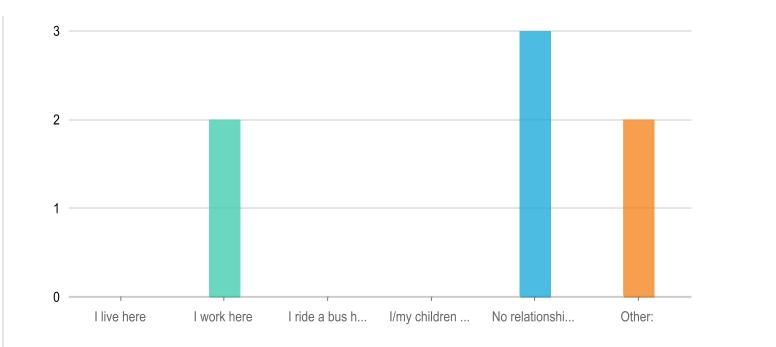
## West Santa Ana Branch FLM 2

introduction
o 📡
There are no answers to this question yet.
• Para tomar esta encuesta en español, haga clic en el icono del globo terráqueo en la parte superior de es
There are no answers to this question yet.
• A desktop computer or laptop are the best devices to take this survey on, however; the survey can be tak
There are no answers to this question yet.
o language_selection

	es <b>C</b>
Word	Count
en	46
es	3
	Answered: 49 Skipped: 0
son/A Line Station Questions	

There are no answers to this question yet.

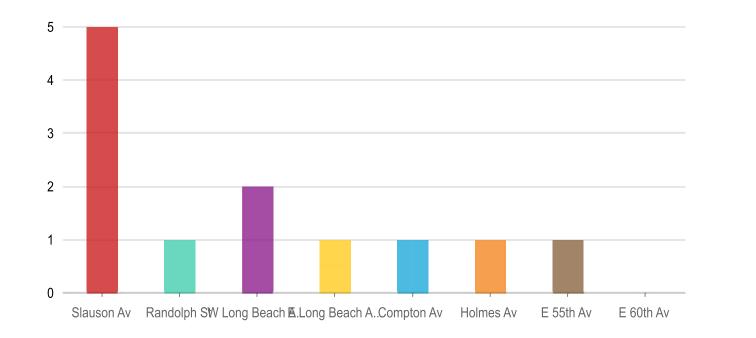
• What is your relationship to the Slauson/A Line station area?



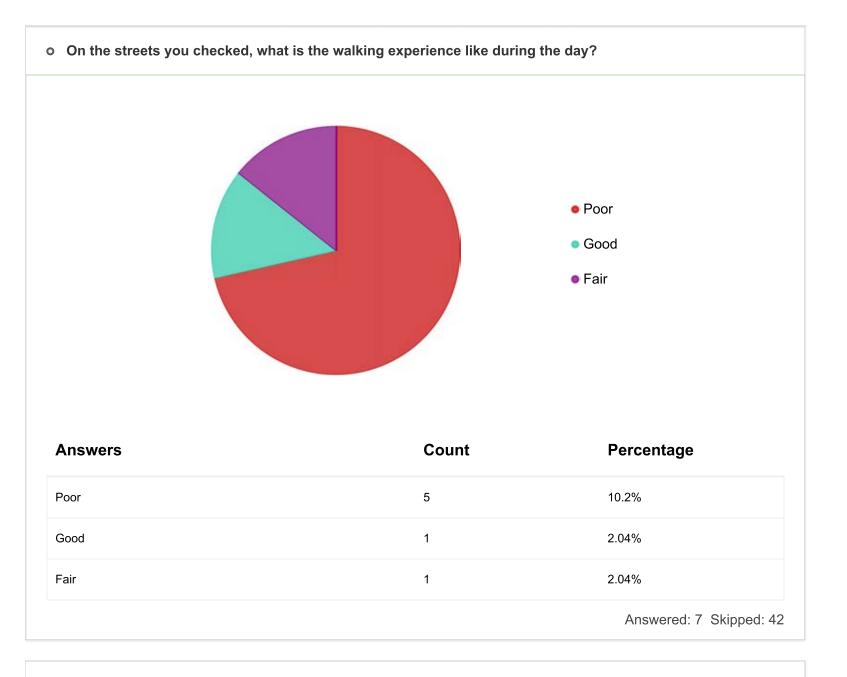
Answers	Count	Percentage
I live here	0	0%
I work here	2	4.08%
I ride a bus here	0	0%
I/my children go to school here	0	0%
No relationship	3	6.12%
Other:	2	4.08%
		Answered: 7 Skipped: 42
o Other:		

Nord	Count	
/isit	1	
amily	1	
<b>/</b> letro	1	
A-Line	1	
		Answered: 2 Skipped: 4
slauson_pathways		
There are no answers to this qu	stion yet.	

• Which three streets would you use to get to the station? (check all that apply)



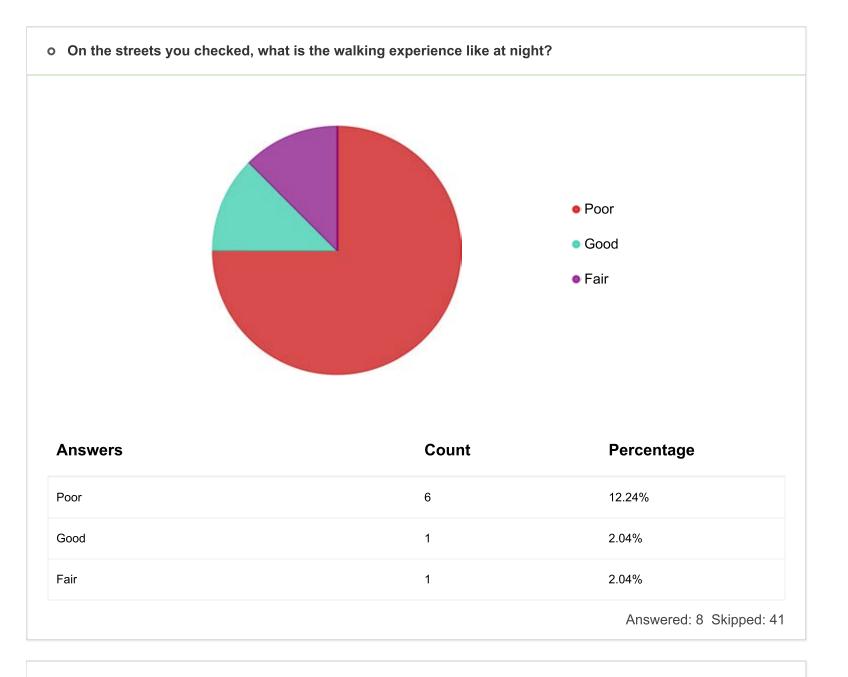
Answers	Count	Percentage
Slauson Av	5	10.2%
Randolph St	1	2.04%
W Long Beach Av	2	4.08%
E Long Beach Av	1	2.04%
Compton Av	1	2.04%
Holmes Av	1	2.04%
E 55th Av	1	2.04%
E 60th Av	0	0%
		Answered: 7 Skipped: 42



• Please explain why (fill in answer):

Word	Count
cars	2
unsafe	2
Loud	2
Slauson	1
poor	1
biking	1
walking	1
tho.	1
transferring	1
Blue	1
Line	1
(whose	1
station	1
design	1
determined)	1
Sidewalks	1

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wide.1zoming1makes1feel1pedestrian.1safe1area1safe1saf	maintained	1	
zooming1makes1feel1pedestrian.1safe1area1walk1traffic1set1set1shade1poluted1set1shade1set1shade1set1shade1set1shade1set1set1shade1set1set1shade1set1set1shade1set<	streets	1	
makes         1           feel         1           pedestrian.         1           safe         1           area         1           walk         1           traffic         1           set         1           feels         1           pedestrian.         1           traffic         1           set         1           pedestrian.         1	wide.	1	
fel         1           pedestrian.         1           safe         1           area         1           walk         1           traffic         1           set         1           fels         1           shade         1           polluted         1	zooming	1	
pedestrian.         1           safe         1           area         1           walk         1           traffic         1           set         1           set         1           feels         1           shade         1           polluted         1	makes	1	
safe 1 area 1 walk 1 traffic 1 set 1 feels 1 shade 1 polluted 1	feel	1	
area 1 wak 1 traffic 1 set 1 feels 1 shade 1 polluted 1	pedestrian.	1	
wak 1 traffic 1 set 1 feels 1 shade 1 polluted 1	safe	1	
traffic 1 set 1 feels 1 shade 1 polluted 1	area	1	
set 1 feels 1 shade 1	walk	1	
feels1shade1polluted1	traffic	1	
shade 1 polluted 1	set	1	
polluted 1	feels	1	
	shade	1	
Answered: 5 Skipped: 44	polluted	1	
			Answered: 5 Skipped: 44



#### • Please explain why (fill in answer):

Station1design1provided1lighting1improved1Slauson1	
provided 1 lighting 1 improved 1	
lighting1improved1	
improved 1	
Slauson 1	
& 1	
WSAB 1	
tation 1	
platform 1	
darker 1	
safe 1	
Loud 1	
narrow 1	
sidewalks 1	
polluted 1	

Barely	1	
street	1	
lighting.	1	
		Answered: 5 Skipped: 44

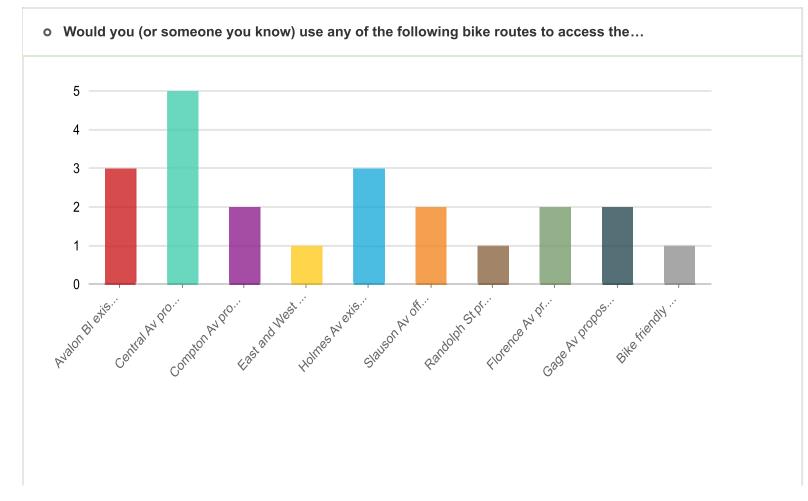
• Do you have any ideas that would improve safety and access for walking to the Slauson/A Li...

Word	Count
Sidewalks	3
bike	3
Wider	2
trees	2
protected	2
Station	2
Blue	2
Line	2
&	2
shading	1

paths	1
Slauson	1
amazing.	1
traffic	1
calming	1
separate	1
lanes	1
shade	1
protect	1
sidewalk.	1
sides	1
entrance	1
north	1
side	1
street	1
place	1
Interline	1
WSAB	1

Union	1
(watch	1
headsigns)	1
Gold	1
interlining	1
routes	1
diverge	1
=	1
eliminate	1
change	1
trains	1
walking	1
all.	1
riders	1
transfer	1
walk	1
there.	1
friendly	1





Answers	Count	Percentage
Avalon BI existing bike lanes	3	6.12%
Central Av proposed protected bike lanes	5	10.2%
Compton Av proposed bike lanes south of Slauson Bl	2	4.08%
East and West Long Beach Av proposed bike lanes	1	2.04%
Holmes Av existing bike lanes/proposed protected bike lanes	3	6.12%
Slauson Av off-street path on north side of street (under constructi on)	2	4.08%
Randolph St proposed bike route	1	2.04%
Florence Av proposed bike lanes	2	4.08%
Gage Av proposed protected bike lanes	2	4.08%
Bike friendly streets (small residential streets with speed bumps, s tops signs, other measure to slow traffic to less than 25 mph)	1	2.04%
		Answered: 6 Skipped: 43

• Do you have any ideas that would improve safety and access for wheeling to the Slauson/A...

Word	Count
Wider	1
smoother	1
sidewalks.	1
Extend	1
curb	1
ramps.	1
Lay	1
Slauson	1
bikeway	1
crap;	1
MetroLink	1
MetroRail	1
line.	1
Free	1
bikes	1
community	1

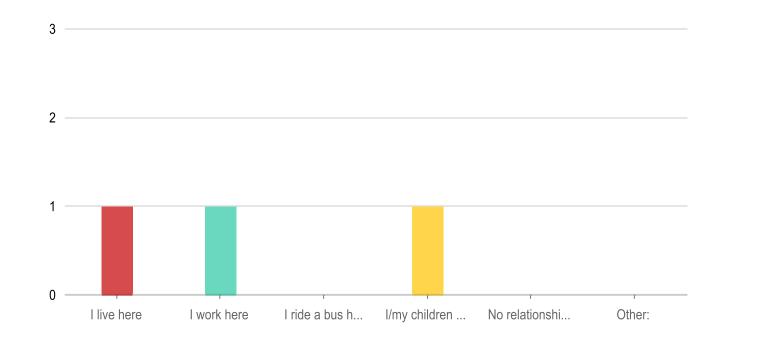
Access	1	
station	1	
north	1	
side	1	
street	1	
	Ans	wered: 4 Skipped: 45

# Pacific/Randolph Station Questions

• Zoom in to make pathway images larger

There are no answers to this question yet.

• What is your relationship to the Pacific/Randolph Station?



1	2.04%
1	2.04%
0	0%
1	2.04%
0	0%
0	0%
	Answered: 3 Skipped: 46
	1 0 1 0

There are no answers to this question yet.

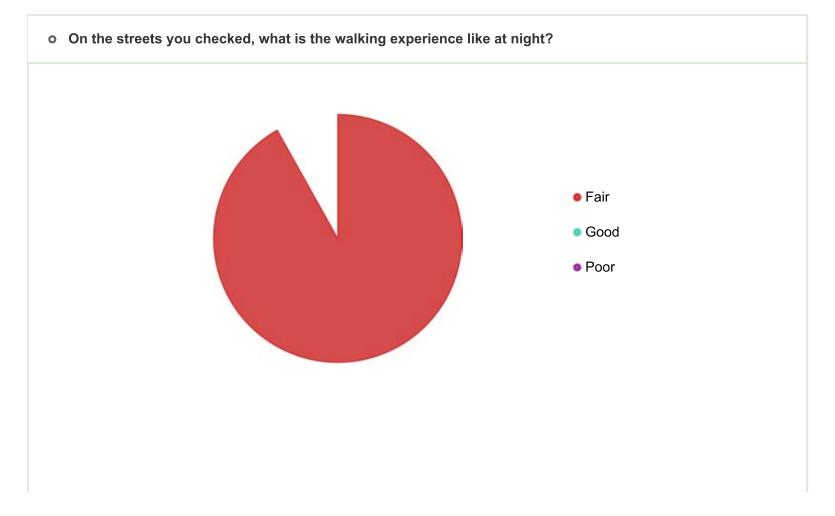
o pacific\_pathways

There are no answers to this question yet.



Malabar St	0	0%
Seville Av	1	2.04%
E Slauson Av	0	0%
E Gage Av	1	2.04%
Seville Av	0	0%
		Answered: 3 Skipped: 46
		• Fair • Good • Poor
Answers		• Good • Poor
<b>Answers</b> Fair		• Good • Poor

Good	0	0%
Poor	0	0%
		Answered: 2 Skipped: 47
• Please explain why (fill in answer):		
There are no answers to this question yet.		



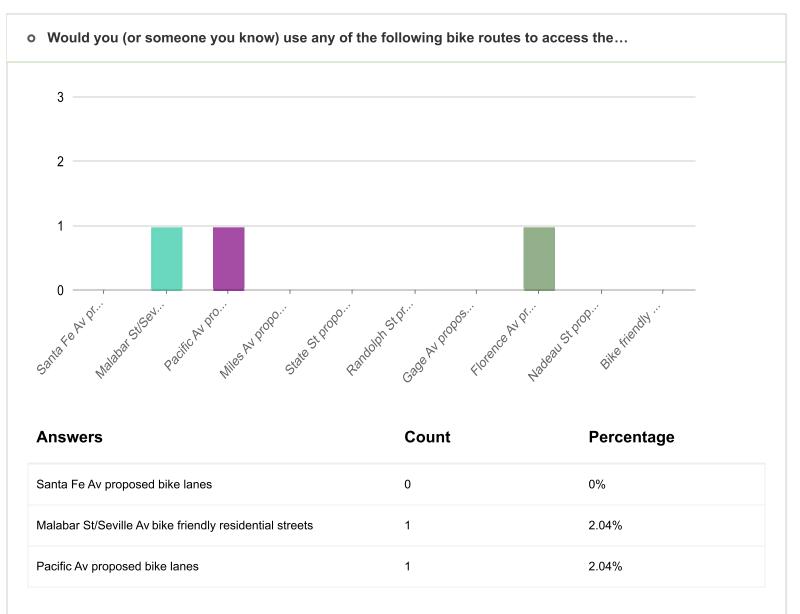
Count	Percentage
2	4.08%
0	0%
0	0%
	Answered: 2 Skipped: 47
	2 0

• Do you have any ideas that would improve safety and access for walking to the...

The word cloud requires at least 20 answers to show.

Word	Count
Brighter	1
Street	1
lights	1
	Answered: 1 Skipped: 48

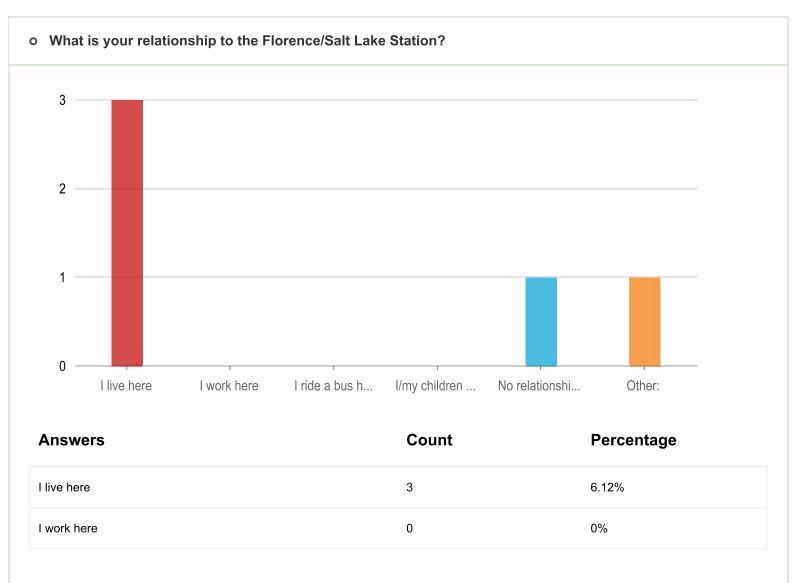




Miles Av proposed bike lanes	0	0%
State St proposed bike lanes	0	0%
Randolph St proposed bike route	0	0%
Gage Av proposed protected bike lanes	0	0%
Florence Av proposed bike lanes	1	2.04%
Nadeau St proposed bike lanes	0	0%
Bike friendly streets (small residential streets with speed bumps, s tops signs, other measure to slow traffic to less than 25 mph)	0	0%
		Answered: 2 Skipped: 47
Please describe any specific ideas you have to impro The word cloud requires at least 20 answers to show.	ove safety and access whee	
	ove safety and access whee Count	
The word cloud requires at least 20 answers to show.		
The word cloud requires at least 20 answers to show.	Count	
The word cloud requires at least 20 answers to show. Word Protected	<b>Count</b>	Answered: 2 Skipped: 47

# **Florence/Salt Lake Station Questions**

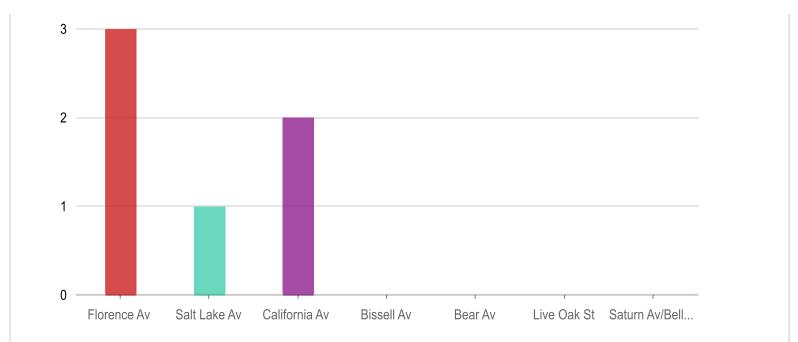




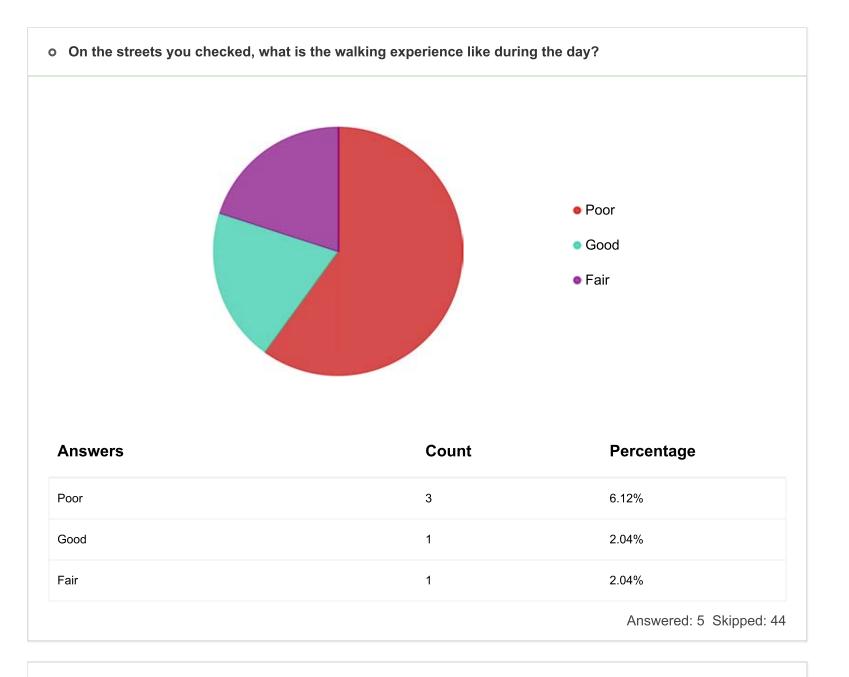
I ride a bus here	0	0%
I/my children go to school here	0	0%
No relationship	1	2.04%
Other:	1	2.04%
		Answered: 5 Skipped: 44
Other:		
• Other: The word cloud requires at least 20 answers Word	s to show. <b>Count</b>	
he word cloud requires at least 20 answers		
The word cloud requires at least 20 answers	Count	
The word cloud requires at least 20 answers <b>Word</b> Family	Count 1	

o florence_pathways	
There are no answers to this question yet.	

• Which three streets would you use to get to the station? (check all that apply)



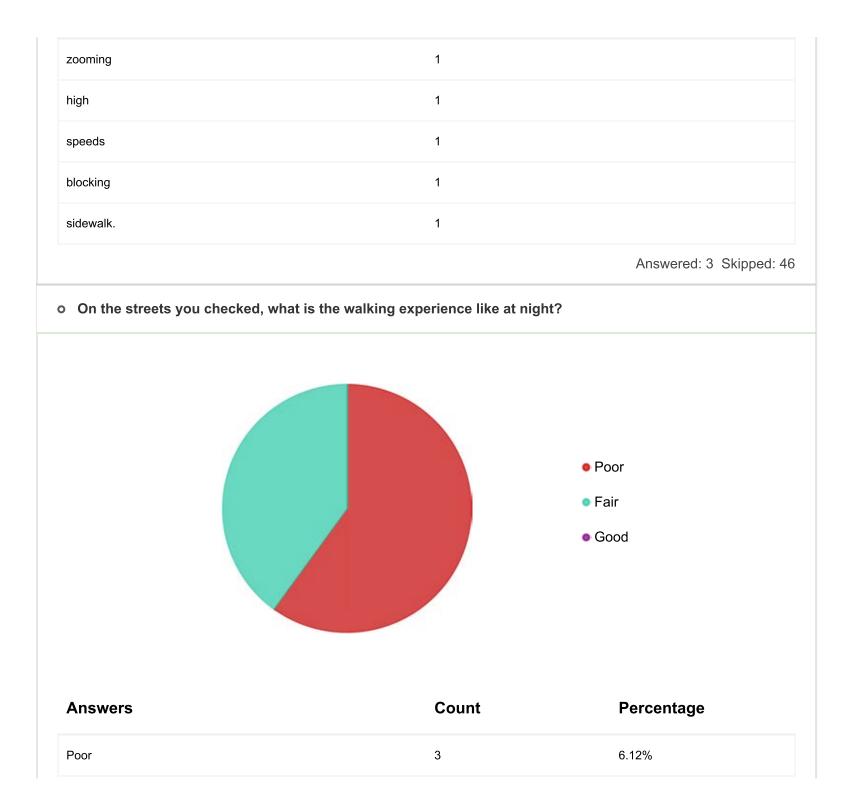
Answers	Count	Percentage
Florence Av	3	6.12%
Salt Lake Av	1	2.04%
California Av	2	4.08%
Bissell Av	0	0%
Bear Av	0	0%
Live Oak St	0	0%
Saturn Av/Bell Av	0	0%
		Answered: 5 Skipped: 44



### • Please explain why (fill in answer):

The word cloud requires at least 20 answers to show.

Word	Count
traffic	2
heavy	1
streets	1
empty.	1
Selected	1
"poor"	1
walk	1
anywhere.	1
Question	1
apply.	1
Low	1
foot	1
makes	1
feel	1
unsafe.	1
Cars	1

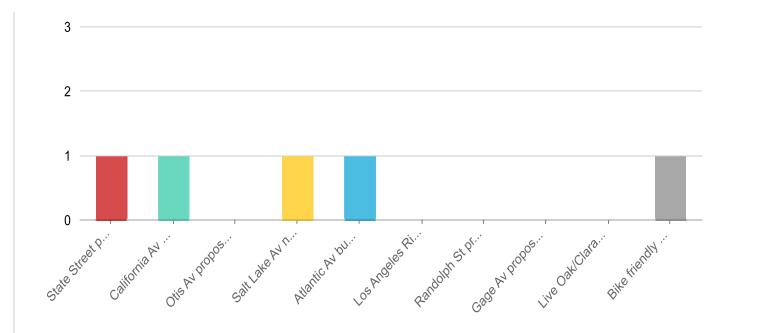


Fair	2	4.08%
Good	0	0%
		Answered: 5 Skipped: 44
o Please explain why (fill in answe	er):	
The word cloud requires at least 20 a	nswers to show.	
Word	Count	
Selected	1	
"poor"	1	
walk	1	
anywhere.	1	
Question	1	
apply.	1	
Lighting	1	
limited	1	
night	1	
activity	1	
ensure	1	

people	1
around.	1
Dark	1
lit	1
	Answered: 3 Skipped: 46
o Do you have any ideas that would improve safety a	nd access for walking to the Florence/Salt…
The word cloud requires at least 20 answers to show.	
Word	Count
Lighting	1
improvements	1
traffic	1
slow	1
downs.	1
crossings	1
needed	1
lot	1
people	1

jaywalk	1	
cross.	1	
Brighter	1	
street	1	
lights	1	
		Answered: 2 Skipped: 47
o florence_bikeways		
There are no answers to this question yet.		

• Would you (or someone you know) use any of the following bike routes to access the...



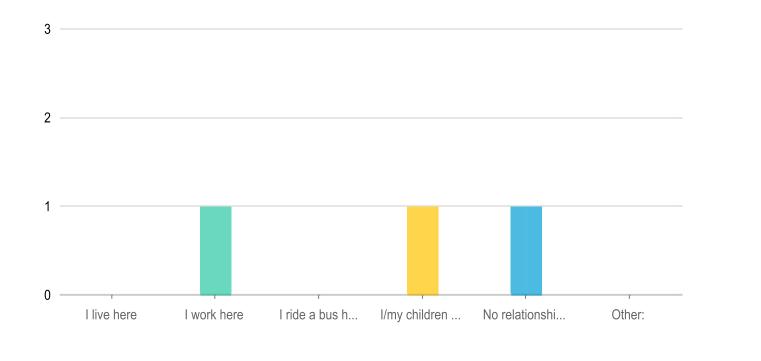
Answers	Count	Percentage
State Street proposed bike lanes	1	2.04%
California Av proposed bike lanes	1	2.04%
Otis Av proposed bike lanes	0	0%
Salt Lake Av north of Florence proposed off street path	1	2.04%
Atlantic Av buffered bike lanes (funded/to be installed by City of C udahy)	1	2.04%
Los Angeles River existing off-street path	0	0%
Randolph St proposed off-street path	0	0%
Gage Av proposed protected bike lanes	0	0%

Live Oak/Clara proposed bike lanes	0	0%
Bike friendly streets (small residential streets with speed bumps, s tops signs, other measure to slow traffic to less than 25 mph)	1	2.04%
		Answered: 3 Skipped: 46
o Do you have any location-specific ideas to improve s	safety and access wheeling	to the future WSAB…
There are no answers to this question yet.		
irestone Station Questions		

• Zoom in to make pathway images larger

There are no answers to this question yet.

• What is your relationship to the Firestone Station?

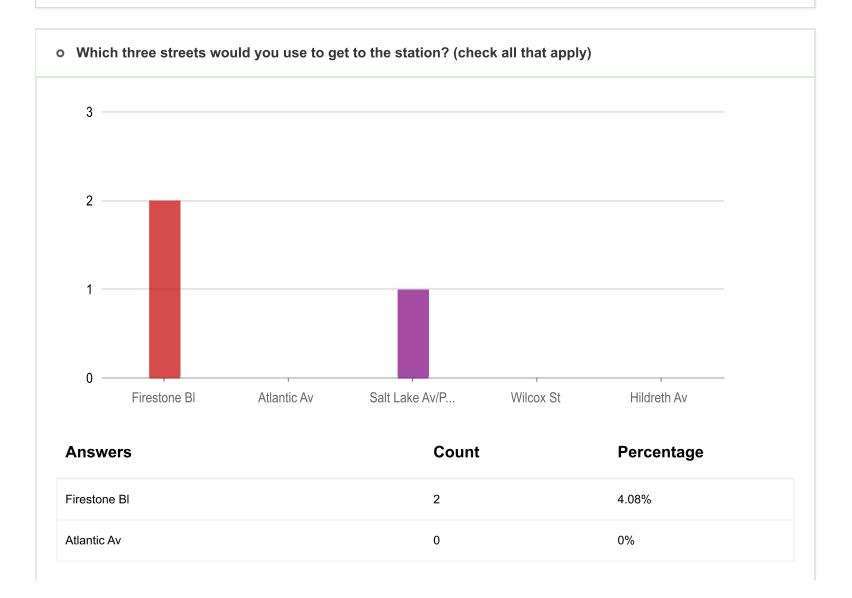


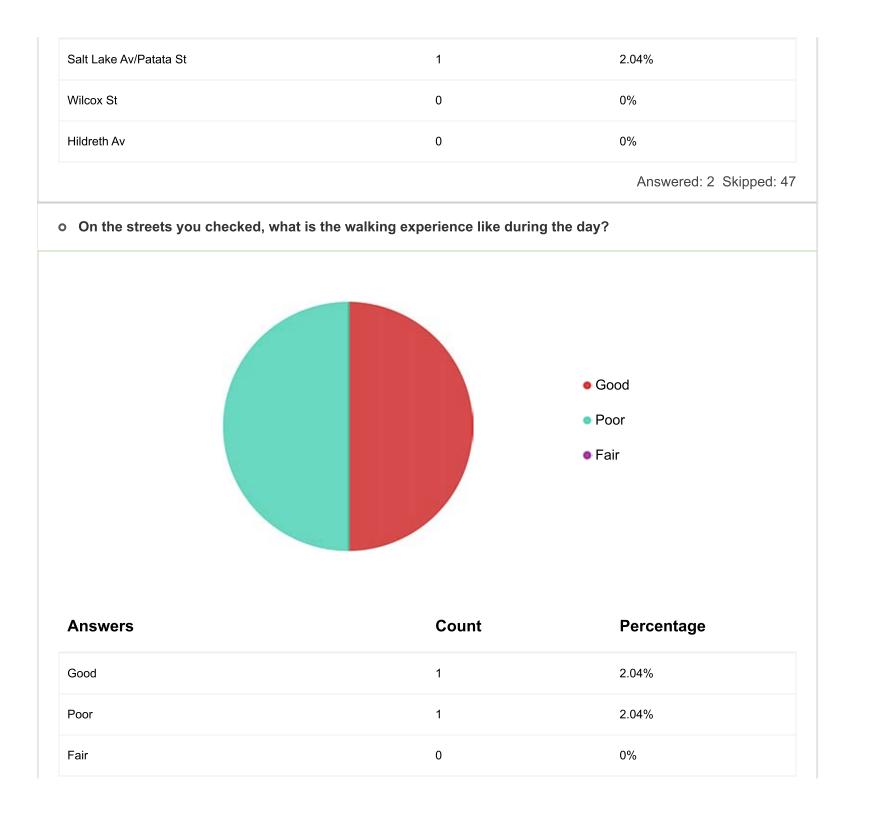
	Answers	Count	Percentage
I ride a bus here00%I/my children go to school here12.04%No relationship12.04%Other:00%Answered: 3 Skipp	l live here	0	0%
I/my children go to school here       1       2.04%         No relationship       1       2.04%         Other:       0       0%         Answered: 3 Skipp	I work here	1	2.04%
No relationship       1       2.04%         Other:       0       0%         Answered: 3 Skipp	l ride a bus here	0	0%
Other: 0 0% Answered: 3 Skipp	I/my children go to school here	1	2.04%
Answered: 3 Skipp	No relationship	1	2.04%
	Other:	0	0%
o Other:			Answered: 3 Skipped: 46
	o Other:		

There are no answers to this question yet.

## o firestone\_pathways

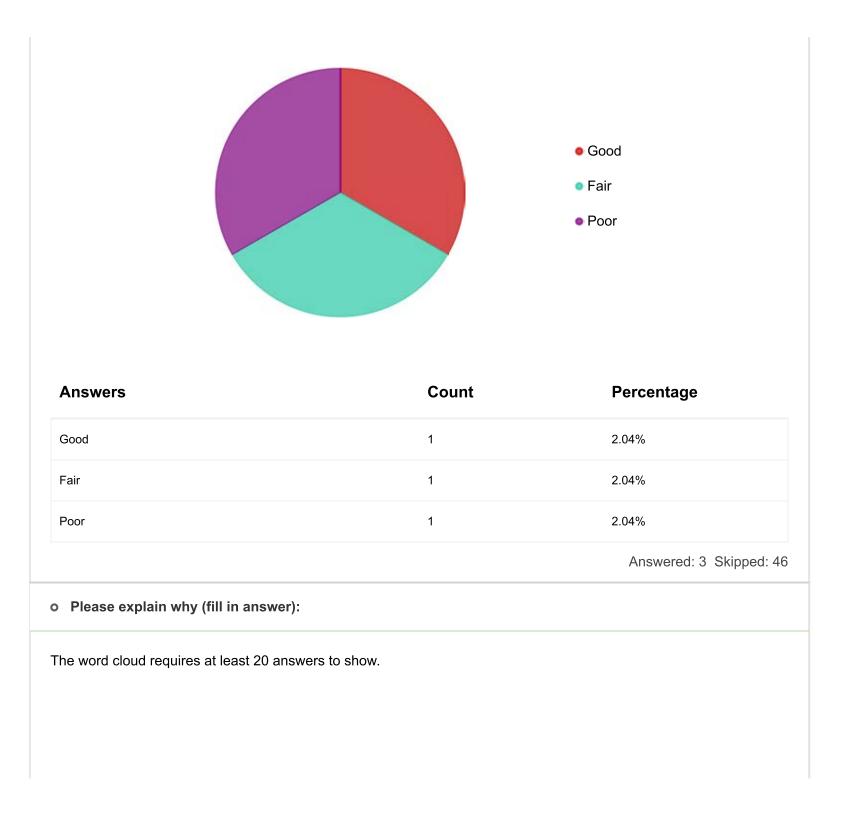
There are no answers to this question yet.





	Answered: 2 Skipped: 47
• Please explain why (fill in answer):	
The word cloud requires at least 20 answers to show.	
Word	Count
Selected	1
"poor"	1
walk	1
anywhere.	1
Question	1
apply.	1
	Answered: 1 Skipped: 48

• On the streets you checked, what is the walking experience like at night?



Word	Count	
Selected	1	
"poor"	1	
walk	1	
anywhere.	1	
Question	1	
apply.	1	
	Answered: 1 Skippe	d: 48
• Do you have any ideas that would impro	ove safety and access for walking to the Firestone station?	
There are no answers to this question yet.		

o firestone\_bikeways

There are no answers to this question yet.

• Would you (or someone you know) use any of the following bike routes to access the...



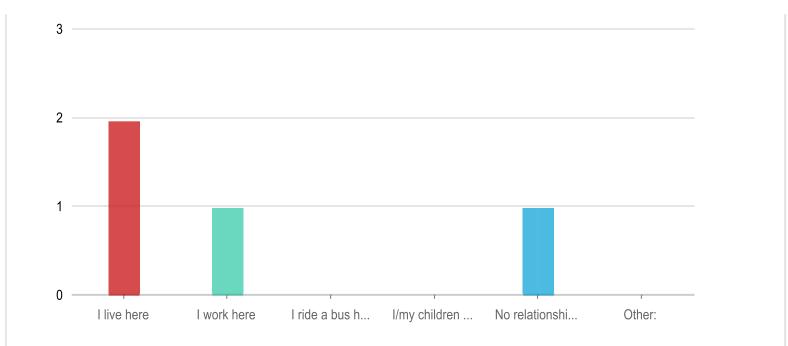
Alexander Av proposed bike lanes	0	0%
Atlantic Av buffered bike lanes north of Firestone (funded/to be ins talled by City of Cudahy)	0	0%
Los Angeles River existing off-street path	0	0%
Rio Hondo existing off-street path	0	0%
Garfield Av proposed bike lanes	0	0%
Eastern Av proposed protected bike lanes	0	0%
Independence/Ardmore proposed bike lanes	0	0%

There are no answers to this question yet.		
Do you have any location-specific ideas to improve s	safety and acce	ss wheeling to the future WSAB…
		Answered: 1 Skipped: 4
tops signs, other measure to slow traffic to less than 25 mph)		
Bike friendly streets (small residential streets with speed bumps, s	0	0%
Abbot Rd proposed bike lanes	1	2.04%
Tweedy Av proposed bike lanes	0	0%
Southern Av existing off-street path	0	0%

• Zoom in to make pathway images larger

There are no answers to this question yet.

• What is your relationship to the Gardendale Station?



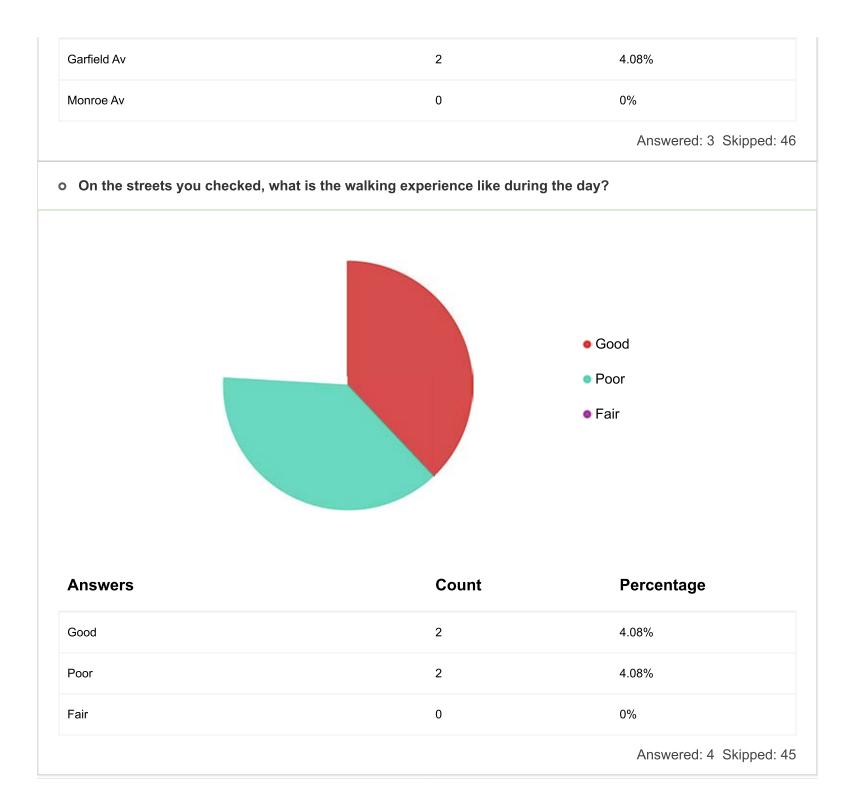
Answers	Count	Percentage
I live here	2	4.08%
I work here	1	2.04%
I ride a bus here	0	0%
I/my children go to school here	0	0%
No relationship	1	2.04%
Other:	0	0%
		Answered: 4 Skipped: 45
o Other:		

There are no answers to this question yet.

o gardendale\_pathways

There are no answers to this question yet.

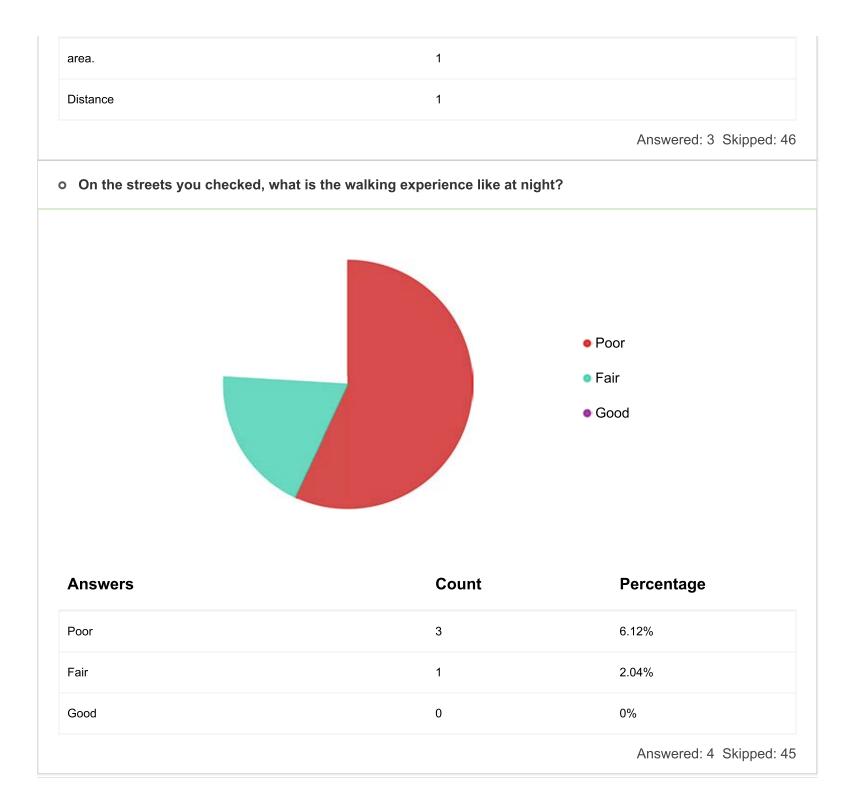




# Please explain why (fill in answer): The word cloud requires at least 20 answers to show.

Word	Count
sidewalks	2
walking	2
street	2
Narrow	1
fast	1
traffic.	1
factors	1
make	1
unsafe	1
unpleasant.	1
Hostile	1
experience.	1
Erickson	1
Ave	1

enter	1
Gardentale	1
Station.	1
live	1
Apollo	1
Park	1
closer.	1
quiet	1
industrial	1
area	1
cars	1
nice	1
long	1
walks	1
abandoned	1
Rancho	1
Los	1
Amigos	1

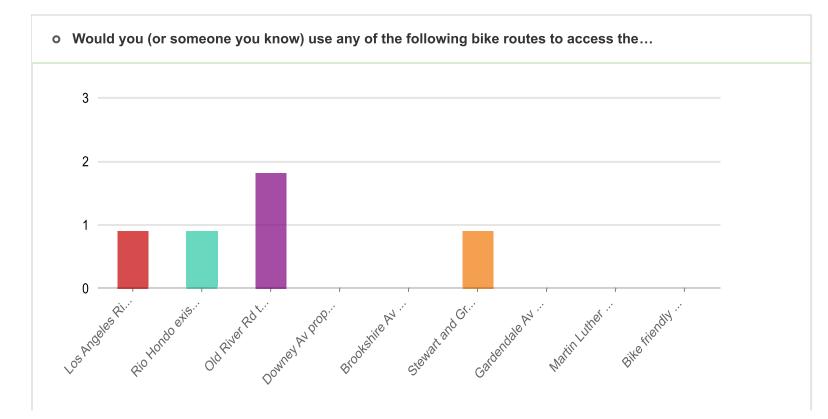


o Please explain why (fill in answer):		
The word cloud requires at least 20 answers to show.		
Word	Count	
abandoned	2	
street	1	
lighting	1	
fast	1	
traffic.	1	
Dangerous	1	
Los	1	
Amigos	1	
buildings	1	
residents	1	
coyotes	1	
(and	1	
believe)	1	
poor	1	

lighting.	1	
night.	1	
	Answered: 3 Skipped: 46	
o Do you have any ideas that would improve safety and access for walking to the Gardendale		
The word cloud requires at least 20 answers to show.		
Word	Count	
Lighting	2	
LA	2	
Security	1	
wider	1	
sidewalks	1	
trees	1	
pedestrian	1	
scale	1	
architecture	1	
Metro	1	
County	1	

(which	1
owns	1
properties	1
here)	1
&	1
Downey	1
city	1
modernize	1
street	1
(Erickson	1
Ave).	1
sidewalk	1
repairs	1
importantly	1
restoring	1
buildings	1
longer	1
abandoned	1

(great	1	
opportunity	1	
affordable	1	
housing)	1	
		Answered: 3 Skipped: 46
o gardendale_bikeways		Answered: 3 Skipped: 46



Answers	Count	Percentage
Los Angeles River existing off-street path	1	2.04%
Rio Hondo existing off-street path	1	2.04%
Old River Rd through Rancho Los Amigos proposed bike lanes	2	4.08%
Downey Av proposed bike lanes	0	0%
Brookshire Av proposed bike lanes	0	0%
Stewart and Gray Rd proposed bike lanes	1	2.04%
Gardendale Av existing bike lanes	0	0%
Martin Luther King Jr BI proposed bike lanes	0	0%
Bike friendly streets (small residential streets with speed bumps, s tops signs, other measure to slow traffic to less than 25 mph)	0	0%
		Answered: 4 Skipped: 45
Do you have any location-specific ideas to improve	safety and access wheeling	to the future…
The word cloud requires at least 20 answers to show.		
Word	Count	
station	2	
access	2	

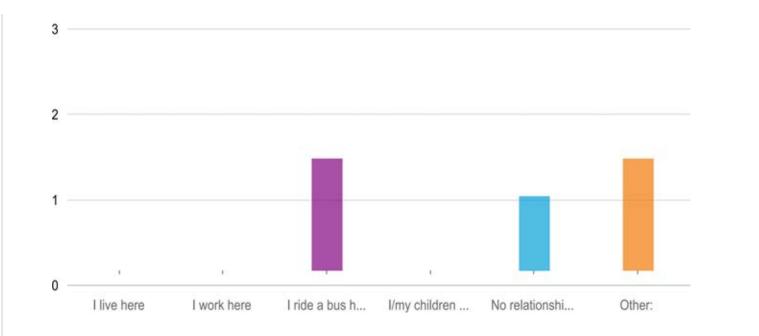
&	2	
Protected	1	
bike	1	
lanes.	1	
Sharrows	1	
work.	1	
site	1	
security	1	
easy	1	
Garfield	1	
Ave/Imperial	1	
Hwy	1	
easier	1	
needing	1	
Gardendale	1	
St.	1	
Erickson	1	
Ave.	1	

bus	1	
lines	1	
nearby	1	
serve	1	
(both	1	
LA	1	
Metro	1	
Downey	1	
Link	1	
buses).	1	
		Answered: 3 Skipped: 46

## **I105/C Line Station Questions**

• Zoom in to make pathway images larger There are no answers to this question yet.

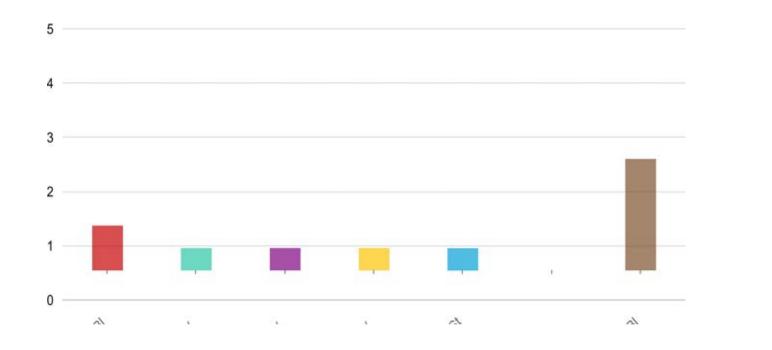
• What is your relationship to the I-105/C Line Station?



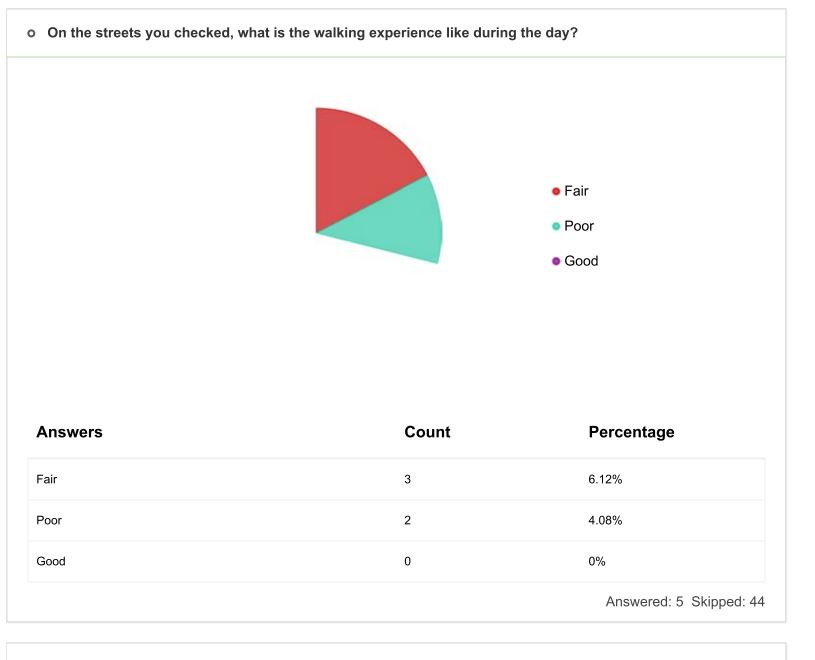
Answers	Count	Percentage
I live here	0	0%
I work here	0	0%
I ride a bus here	3	6.12%
I/my children go to school here	0	0%
No relationship	2	4.08%
Other:	3	6.12%
		Answered: 8 Skipped: 41
o Other:		

The word cloud requires at least 20 answers to show.	
Word	Count
Line	2
ride	1
Green	1
transfer.	1
football	1
games	1
LAX	1
	Answered: 3 Skipped: 46
o i105_pathways	
There are no answers to this question yet.	
	Answered: 3 Skipped: 46

• Which three streets would you use to get to the station? (check all that apply)



Answers	Count	Percentage
Century Bl	2	4.08%
Arthur Av	1	2.04%
Industrial Av	1	2.04%
Garfield Av	1	2.04%
Main St	1	2.04%
Mendy St/Grove St/Florine Av	0	0%
Paramount BI	5	10.2%
		Answered: 7 Skipped: 42



• Please explain why (fill in answer):

The word cloud requires at least 20 answers to show.

Word	Count
walking	3
heavy	2
105	1
ride	1
Green	1
Line	1
there;	1
levels	1
station.	1
Paramount	1
Blvd:	1
busy	1
street	1
FWY	1
entrances.	1
limit	1

area.	1
Main	1
St:	1
residential	1
area	1
good	1
sidewalks.	1
careful	1
Indrstrial	1
Ave	1
(with	1
industrial	1
buildings	1
area).	1
Loud	1
inhumane	1
walk	1
walked	1

traffic	1	
Dangerous	1	
		Answered: 7 Skipped: 42
o On the streets you checked, wh	nat is the walking experience like at nigl	ht?
		Poor
		<ul> <li>Fair</li> </ul>
		<ul> <li>Good</li> </ul>
Answers	Count	Percentage
Poor	5	10.2%
Fair	1	2.04%
Good	0	0%
		Answered: 6 Skipped: 43

## • Please explain why (fill in answer):

The word cloud requires at least 20 answers to show.

Word	Count
Paramount	2
walking	2
night	2
walked	2
bus	2
poor	1
lighting	1
Blvd:	1
careful	1
cars	1
coming	1
FWY	1
on/exit	1
ramps	1

Main1St:1time1(so1(mow).1Minize1station1night:1ourp1car1parking1(crime1magnett)1Itall1		
St1time1(so1know).1Mininze1station1night:1well-lit.1purp1car1parking1ingentli	Blvd.	1
time1(so1know).1Minnize1staton1nght:1vel-lit.1Dump1car1parking1(crime1magnett)1hall1magnetty1hall1 <th>Main</th> <td>1</td>	Main	1
(so         1           know).         1           Minimize         1           station         1           night;         1           vell-lit.         1           parpa         1           car         1           parking         1           (crime         1           magnett)         1           tatal         1	St:	1
know).1Minimize1station1night;1vell-lit.1Dump1car1parking1(crime1nagnett)1stall1	time	1
Minimize1station1night;1well-lit.1Dump1car1parking1(-crime1magnett)1Istall1	(so	1
station       1         night;       1         well-lit.       1         Dump       1         car       1         parking       1         (=crime       1         nagnet!)       1         Install       1	know).	1
night;         1           well-lit.         1           Dump         1           car         1           parking         1           (-crime         1           magnet!)         1           Itstall         1	Minimize	1
well-lit.1Dump1car1parking1(=crime1magnet!)1Install1	station	1
Dump1car1parking1(=crime1magnet!)1Install1	night;	1
car1parking1(=crime1magnet!)1Install1	well-lit.	1
parking1(=crime1magnet!)1Install1	Dump	1
(=crime       1         magnet!)       1         Install       1	car	1
magnet!) 1 Install 1	parking	1
Install 1	(=crime	1
	magnet!)	1
	Install	1
bays 1	bays	1
only 1	only	1

los       1         bariers       1         nearby       1         routes       1         Loud       1         inhumane       1         heard       1         Dangerous       1         Dangerous       1         Answered: 7 Skipped: 42         security       2         Word       Count         Security       2         WSAB       2         Green       2         Line       2         105       1		
nearby       1         routes       1         Loud       1         inhumane       1         heard       1         Dangerous       1         Answered: 7 Skipped: 42    O Do you have any ideas that would improve safety and access for walking to the 1105/C Line          Vord         Count         security       2         WSAB       2         Green       2         Line       2	lots	1
routes       1         Loud       1         inhumane       1         heard       1         Dangerous       1         Dangerous       1         Answered: 7 Skipped: 42         o Do you have any ideas that would improve safety access for walking to the 1105/C Line         Word       Count         security       2         wSAB       2         Green       2         Line       2	barriers	1
Loud       1         inhumane       1         heard       1         Dangerous       1         Dangerous       1         Answered: 7 Skipped: 42         o Do you have any ideas that would improve safety arcess for walking to the 1105/C Line         Yord         Vord       Count         security       2         VSAB       2         Green       2         Line       2	nearby	1
inhumane       1         heard       1         Dangerous       1         Answered: 7 Skipped: 42 <b>o Do you have any ideas that would improve safety and access for walking to the 1105/C Line Word Count</b> security       2         WSAB       2         Green       2         Line       2	routes	1
heard       1         Dangerous       1         Answered: 7 Skipped: 42         O Do you have any ideas that would improve safety access for walking to the I105/C Line         O Do you have any ideas that would improve safety access for walking to the I105/C Line         Vord         Count         security       2         WSAB       2         Green       2         Line       2	Loud	1
Dangerous       1         Answered: 7 Skipped: 42         O Do you have any ideas that would improve safety access for walking to the 1105/C Line         O Do you have any ideas that would improve safety access for walking to the 1105/C Line         Vord         Count         security       2         VSAB       2         Green       2         Line       2	inhumane	1
Answered: 7 Skipped: 42         o Do you have any ideas that would improve safety and access for walking to the I105/C Line         The word cloud requires at least 20 answers to show.         Word       Count         security       2         WSAB       2         Green       2         Line       2	heard	1
o       Do you have any ideas that would improve safety and access for walking to the 1105/C Line         The word cloud requires at least 20 answers to show.       Count         word       2         security       2         WSAB       2         Green       2         Line       2	Dangerous	1
Word Count   security 2   WSAB 2   Green 2   Line 2		Answered: 7 Skipped: 42
WordCountsecurity2WSAB2Green2Line2		
security2WSAB2Green2Line2	o Do you have any ideas that would improve safety a	and access for walking to the I105/C Line…
WSAB     2       Green     2       Line     2		and access for walking to the I105/C Line…
Green     2       Line     2	The word cloud requires at least 20 answers to show.	
Line 2	The word cloud requires at least 20 answers to show. <b>Word</b>	Count
	The word cloud requires at least 20 answers to show. Word security	Count 2
105 1	The word cloud requires at least 20 answers to show. Word security WSAB	<b>Count</b> 2 2
	The word cloud requires at least 20 answers to show. Word security WSAB Green	Count 2 2 2 2

transients	1
ride	1
sleep	1
rides	1
	1
Remove	1
site	1
security.	1
homeless	1
1.	1
interline;	1
S.E.	1
branch	1
route	1
(see	1
headsign)	1
EXPANDING	1
METRORAIL'S	1

NETWORK	1	
Santa	1	
Ana.	1	
\$Bils	1	
saved	1	
finish	1	
past	1	
I-105	1	
NORWALK	1	
SantaFe	1	
Sprgs'	1	
MetroLink	1	
platform.	1	
=	1	
WALKING!	1	
		Answered: 6 Skipped: 43
o i105_bikeways		

o Would you (or someone you know) use any of the	following bike routes to	access the I105/…	
4			
3			
2			
1			
0 Los Angeles Ri Garfield Av pr Gardendale Av			
Answers	Count	Percentage	
Answers Los Angeles River existing off-street path	<b>Count</b> 4	Percentage 8.16%	
Los Angeles River existing off-street path	4	8.16%	
Los Angeles River existing off-street path Garfield Av proposed bike lanes	4	8.16% 0%	

Bike friendly streets (small residential streets with spee tops signs, other measure to slow traffic to less than 25		6.12%
o Do you have any location-specific ideas to	o improve safety and acc	Answered: 6 Skipped: 43 ess wheeling to the future
The word cloud requires at least 20 answers to s	show.	
Word	Count	
riders	2	
access	2	
station	2	
site	1	
security.	1	
allowing	1	
Paramount	1	
Blvd	1	
Garfield	1	
Ave	1	
travel	1	

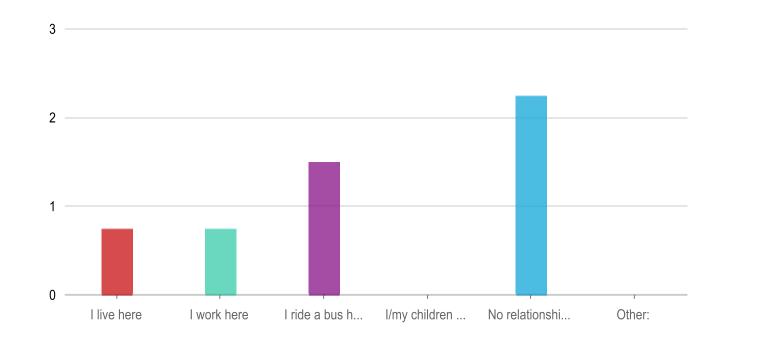
residential	1
areas	1
Main	1
St.	1
&	1
Century	1
Blvd.	1
avoids	1
adding	1
0.6-0.9	1
mile	1
detour	1
distance.	1
Ensure	1
easy	1
Bike	1
security	1
big	1

		Answered: 4 Skipped: 4
lo.	1	
vell-lit	1	
Keeping	1	
station.	1	
ine	1	
Green	1	
-105	1	
prob.	1	

• Zoom in to make pathway images larger

There are no answers to this question yet.

• What is your relationship to the Paramount Station?

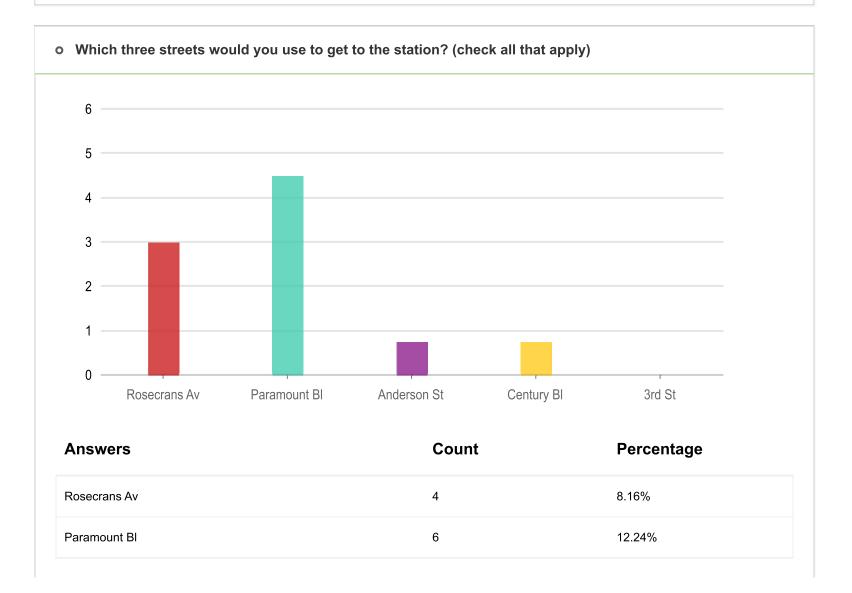


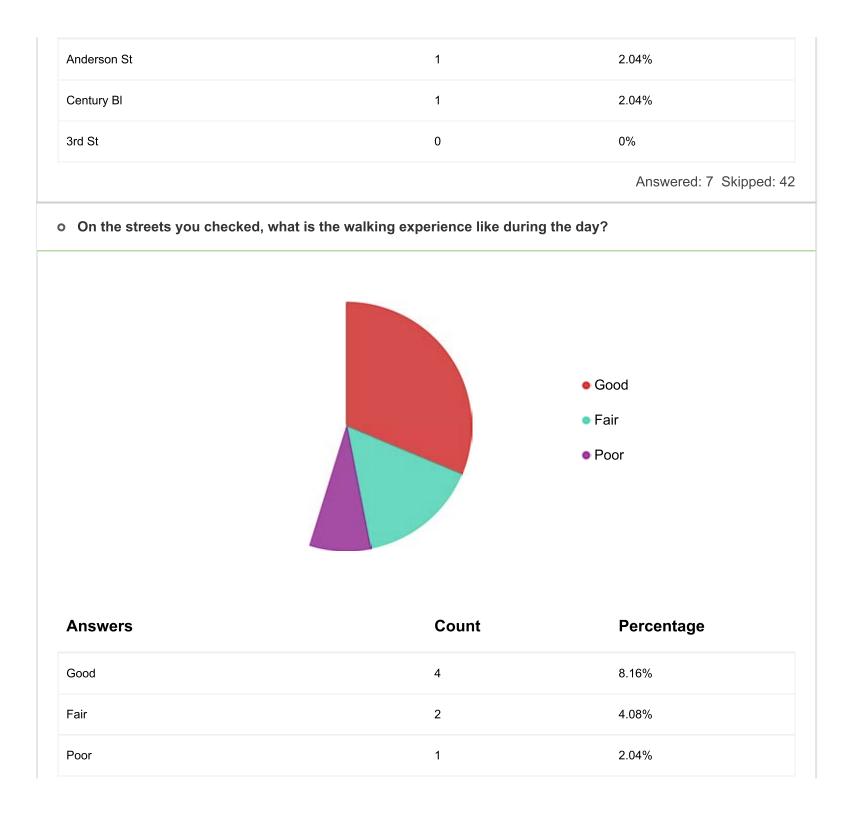
Answers	Count	Percentage
l live here	1	2.04%
I work here	1	2.04%
l ride a bus here	2	4.08%
I/my children go to school here	0	0%
No relationship	3	6.12%
Other:	0	0%
		Answered: 7 Skipped: 42
o Other:		

There are no answers to this question yet.

o paramount\_pathways

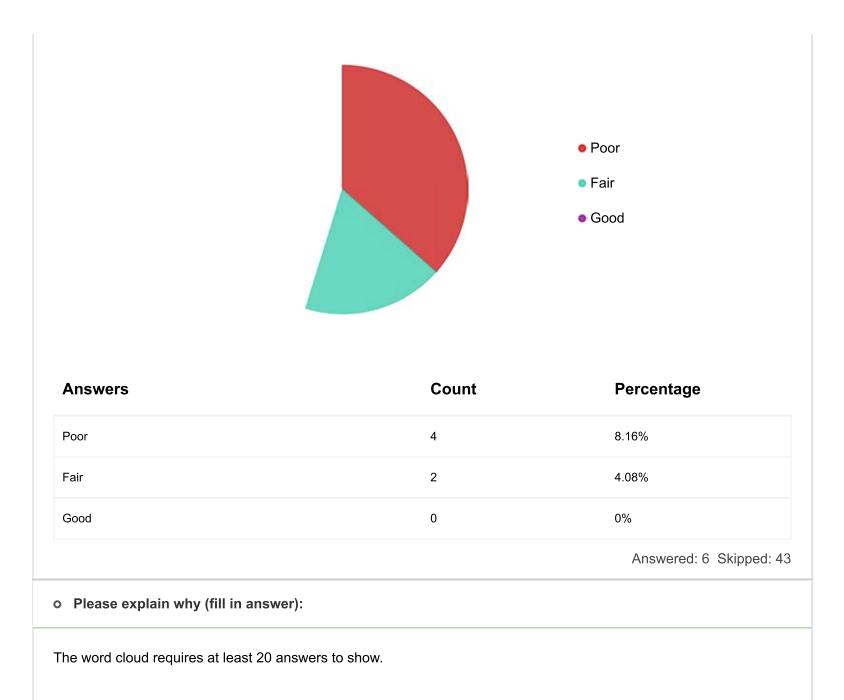
There are no answers to this question yet.





	Answered: 7 Skipped: 42
o Please explain why (fill in ans	۶r):
The word cloud requires at least 20	nswers to show.
Word	Count
traffic	2
nearby	2
Selected	1
"poor"	1
walk	1
anywhere.	1
Question	1
apply.	1
Los	1
foot	1
high	1
nice	1
green	1

area.		1		
park		1		
visited.		1		
businesses		1		
famous		1		
Paramount		1		
Swapmeet/Drive-In		1		
Theatres.		1		
> On the streets you c	hecked, what is the w	alking experience like at n	ight?	Answered: 5 Skipped: 44
On the streets you c	hecked, what is the w	alking experience like at n	iight?	Answered: 5 Skipped: 44

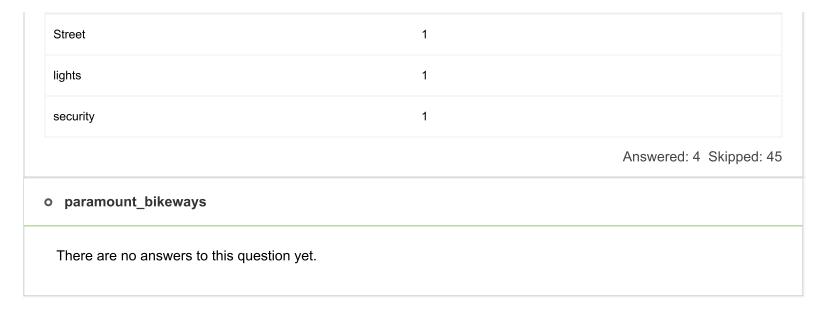


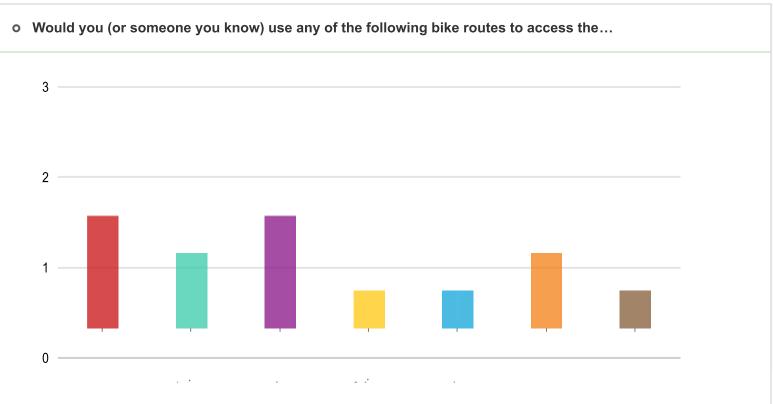
Word	Count	
Dark	2	
Selected	1	
"poor"	1	
walk	1	
anywhere.	1	
Question	1	
apply.	1	
light	1	
Lonely	1	
slightly	1	
safe	1	
night	1	
	Answered: 5 Skip	oped: 44

• Do you have any ideas that would improve safety and access for walking to the...

The word cloud requires at least 20 answers to show.

Lipt2make1train1stays1grade1spearatod.1busy1car1interesection1riders/cars/pedestrains1dailing1At-Grade1trains1trains1At-Grade1trains1tra	Word	Count
train1stays1grade1spearated.1busy1car1interesection1riders/cars/pedestrains1constantly1deling1ArGrade1tarsol1spearated.1s	Light	2
stays1grade1spearated.1busy1car1interesection1riders/cars/pedestrains1dating1At-Grade1tints1 <td>make</td> <td>1</td>	make	1
grade1sepearated.1busy1car1intersection1riders/cars/pedestrains1constantly1deling1At-Grade1trins1	train	1
sepearated.1busy1car1interesection1riders/cars/pedestrains1constantly1dealing1At-Grade1trins1	stays	1
busy1car1interesection1riders/cars/pedestrains1constantly1dealing1At-Grade1trains1	grade	1
car1interesection1riders/cars/pedestrains1constantly1dealing1At-Grade1trains1	sepearated.	1
interesection 1 riders/cars/pedestrains 1 constantly 1 dealing 1 At-Grade 1 trains 1	busy	1
riders/cars/pedestrains 1 constantly 1 dealing 1 At-Grade 1 trains 1	car	1
constantly1dealing1At-Grade1trains1	interesection	1
dealing1At-Grade1trains1	riders/cars/pedestrains	1
At-Grade1trains1	constantly	1
trains 1	dealing	1
	At-Grade	1
4-way 1	trains	1
	4-way	1
interection. 1	interection.	1



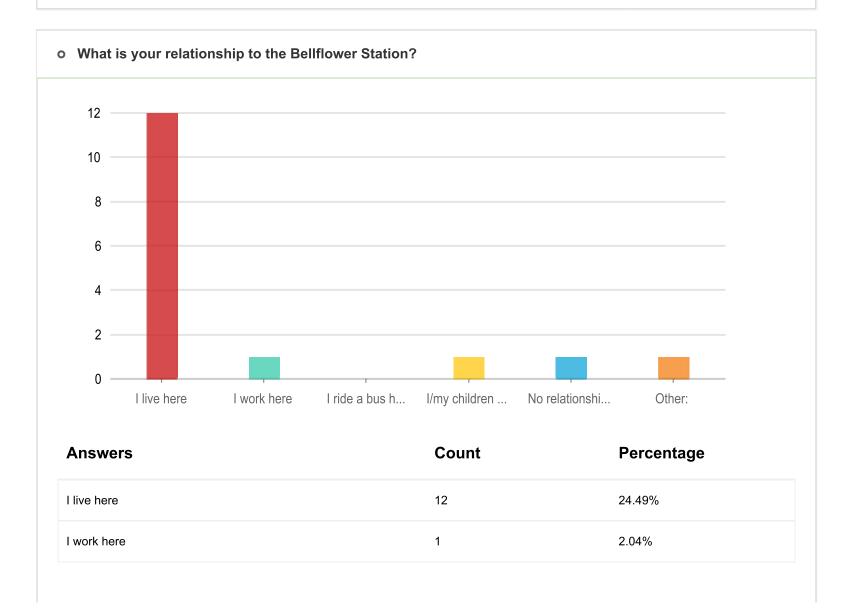


Answers	Count	Percentage		
WSAB existing/proposed off-street path from LA River to San Gab riel River	3	6.12%		
Los Angeles River existing off-street path	2	4.08%		
Paramount BI widen sidewalks to access local streets north and s outh	3	6.12%		
Transmission ROW west of Texaco St proposed off-street path	1	2.04%		
Somerset BI proposed standard & protected bike lanes	1	2.04%		
Jefferson/Orizaba proposed protected bike lanes	2	4.08%		
Bike friendly streets (small residential streets with speed bumps, s tops signs, other measure to slow traffic to less than 25 mph)	1	2.04%		
		Answered: 5 Skipped: 44		
o Do you have any location-specific ideas to improve safety and access wheeling to the future				
The word cloud requires at least 20 answers to show.				
Word	Count			
NA	1			
		Answered: 1 Skipped: 48		

## **Bellflower Station Questions**

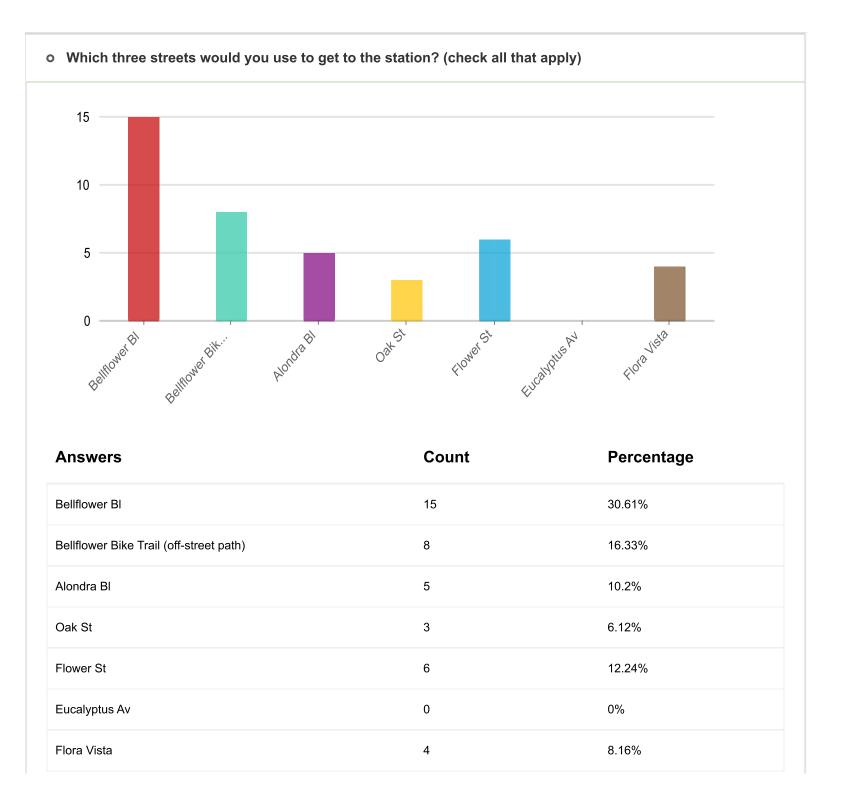
• Zoom in to make pathway images larger

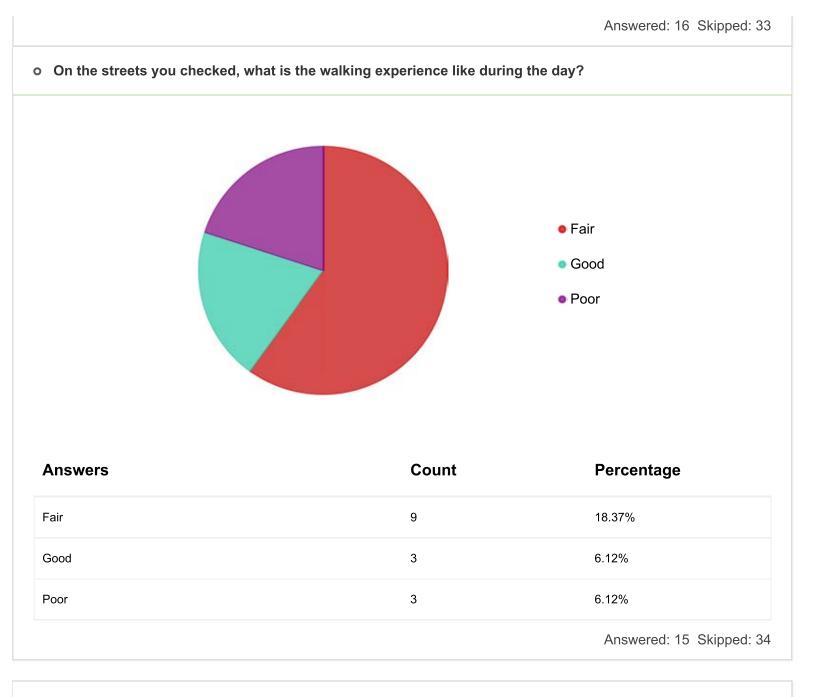
There are no answers to this question yet.



I ride a bus here	0	0%
I/my children go to school here	1	2.04%
No relationship	1	2.04%
Other:	1	2.04%
		Answered: 16 Skipped: 3
Other:		
he word cloud requires at least 20 answers to s	show. Count	
Word		
Word	Count	
	Count 1	
Word community frequent	<b>Count</b> 1 1	
Word community frequent food	Count 1 1 1	

There are no answers to this question yet.



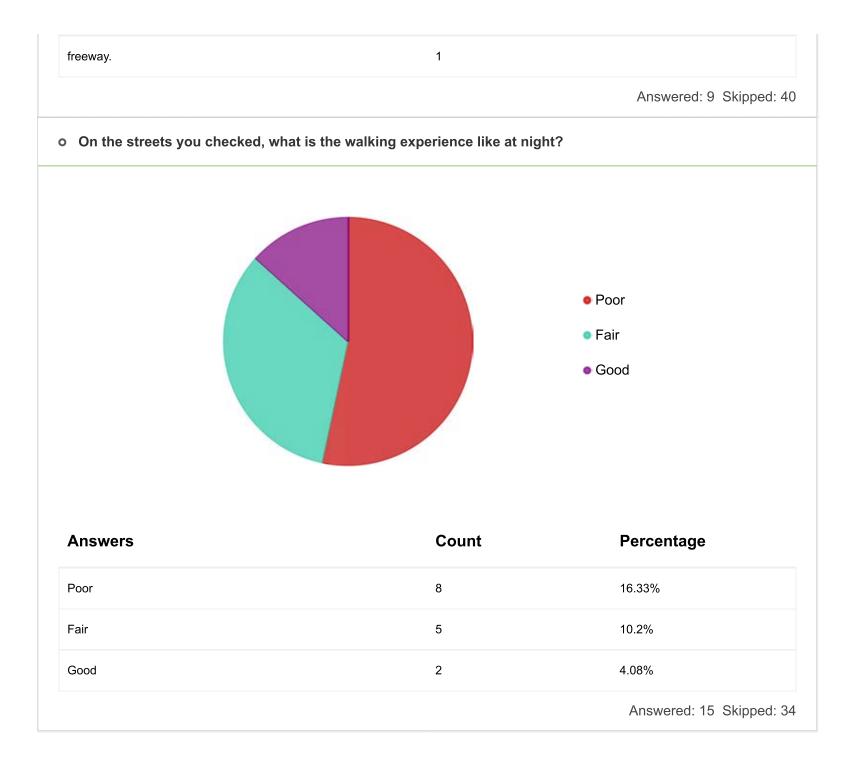


• Please explain why (fill in answer):

The word cloud requires at least 20 answers to show.		
Word	Count	
bike	3	
lot	3	
cars	3	
91	2	
intersection	2	
speed	2	
Bellflower	2	
flower	2	
poor	2	
busy	1	
friendly	1	
homeless	1	
closer	1	
freeway	1	
Skateboarding	1	

bicycle	1
sidewalks	1
run	1
pedestrians	1
lit	1
traffic.	1
unhoused	1
people.	1
frustrating	1
dangerous	1
crossing	1
trail	1
Woodruff.	1
roll	1
stops.	1
cross	1
order	1
stay	1

lane.	1
comfortable	1
them.	1
High	1
intersections	1
okay.	1
love	1
path	1
Artesia	1
Woodruff	1
utilize	1
walking	1
experience.	1
Broken	1
glass	1
trash	1
lighting	1
Blvd.	1

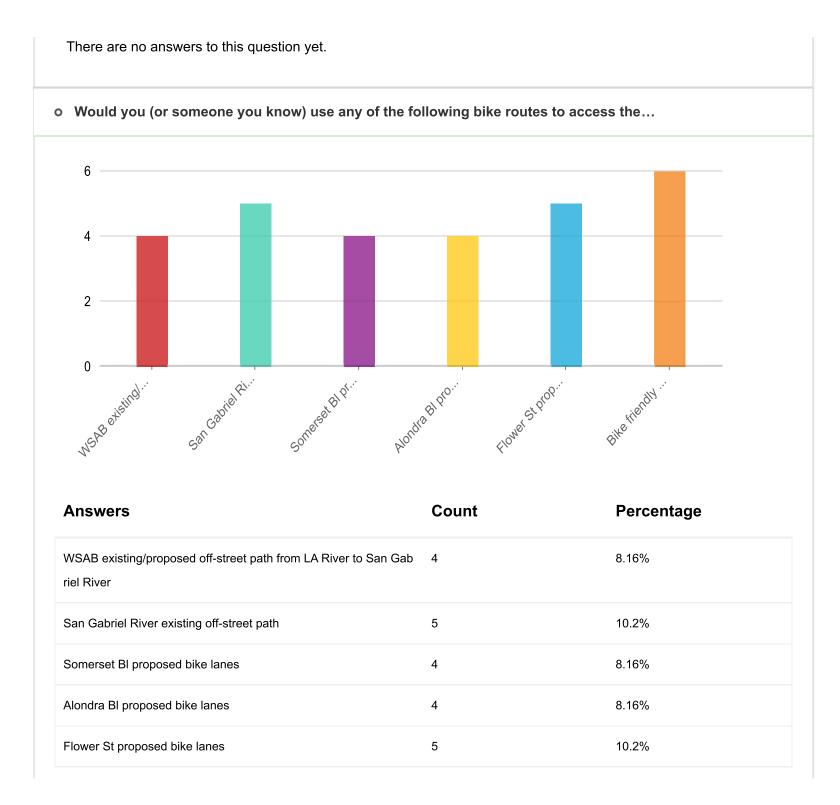


• Please explain why (fill in answer):		
The word cloud requires at least 20 answers to show.		
Word	Count	
Homeless	2	
lighting	2	
91	1	
closer	1	
freeway	1	
day	1	
worse	1	
lighting.	1	
Safety	1	
reasons	1	
streets	1	
dark	1	
issue	1	
unhoused.	1	

Mid       1         wak       1         night       1         there.       1         tend       1         aggressive       1         Familiarity:       1         Answered: 9 Skipped: 40         O Do you have any ideas that would improve safety and access for walking to the Bellflower         Nord       Count         Bike       3         Lighting       3         Put       1         protected       1         Iane       1			
night       1         there.       1         tend       1         aggressive       1         Familianity.       1         Answered: 9 Skipped: 40         O byou have any ideas that would improve safety and ccess for walking to the Bellflower         O byou have any ideas that would improve safety and ccess for walking to the Bellflower         Vord         Bike       3         Lighting       3         Put       1         protected       1	Mid	1	
there.       1         tend       1         aggressive       1         Familiarity.       1         Answered: 9 Skipped: 40         O boyou have any ideas that would improve safety access for walking to the Bellflower         O boyou have any ideas that would improve safety access for walking to the Bellflower         Word         Bike       3         Lighting       3         Put       1         protected       1	walk	1	
tend       1         aggressive       1         Familiarity.       1         Answered: 9 Skipped: 40         O Do you have any ideas that would improve safety and access for walking to the Bellflower         The word cloud requires at least 20 answers to show.         Count         Bike       3         Lighting       3         Put       1         protected       1	night	1	
aggressive       1         Familiarity.       1         Answered: 9 Skipped: 40         o Do you have any ideas that would improve safety and access for walking to the Bellflower         r         vord         Word         Bike         3         Lighting         Put         1         protected         1	there.	1	
Familiarity.       1         Answered: 9 Skipped: 40         O poy have any ideas that would improve safety and access for walking to the Bellflower         O by our have any ideas that would improve safety and access for walking to the Bellflower         The word cloud requires at least 20 answers to show.         Vord         Bike       3         Lighting       3         Put       1         protected       1	tend	1	
Answered: 9 Skipped: 40         o Do you have any ideas that would improve safety and access for walking to the Bellflower         The word cloud requires at least 20 answers to show.         Word       Count         Bike       3         Lighting       3         Put       1         protected       1	aggressive	1	
o       Do you have any ideas that would improve safety and access for walking to the Bellflower         The word cloud requires at least 20 answers to show.       Count         Bike       3         Lighting       3         Put       1         protected       1	Familiarity.	1	
Word       Count         Bike       3         Lighting       3         Put       1         protected       1			Answered: 9 Skipped: 40
Bike3Lighting3Put1protected1	O Do you have any ideas that would impro	we safety and access for walking to the Bellf	lower
Lighting3Put1protected1			lower
Put     1       protected     1	The word cloud requires at least 20 answers to	o show.	lower
protected 1	The word cloud requires at least 20 answers to <b>Word</b>	o show. Count	lower
	The word cloud requires at least 20 answers to Word Bike	o show. <b>Count</b> 3	lower
lane 1	The word cloud requires at least 20 answers to Word Bike Lighting	c show. Count 3 3	lower
	The word cloud requires at least 20 answers to Word Bike Lighting Put	c show. Count 3 3 1	lower
bellflower 1	The word cloud requires at least 20 answers to Word Bike Lighting Put protected	count         3         3         1         1	lower

Blvd	1
flower	1
street	1
gripe	1
Woodruff.	1
overpasses	1
broken	1
glass	1
sidewalk	1
year.	1
route	1
path	1
landcscaping	1
signalized	1
intersections	1
slower	1
speeds.	1
security.	1

law	1	
enforcement	1	
patrols.	1	
Enforce	1	
posted	1	
laws	1	
governing	1	
skateboarding	1	
bicycling	1	
sidewalks.	1	
lanes	1	
diagonal	1	
crosswalk.	1	
turns	1	
red.	1	
	Answered: 8 Skipped: 41	
o bellflower_bikeways		



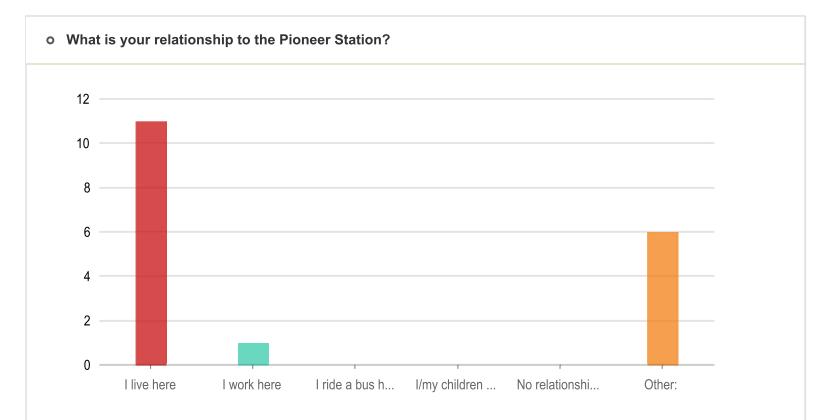
Bike friendly streets (small residential streets with speed bumps, s tops signs, other measure to slow traffic to less than 25 mph)	6 12.24%
	Answered: 12 Skipped: 37
o Do you have any location-specific ideas to improve	safety and access wheeling to the future…
The word cloud requires at least 20 answers to show.	
Word	Count
Bellflower	3
lane	2
Blvd	2
Lighting	2
Protected	1
bike	1
flower	1
st	1
law	1
enforcement	1
mutilple	1

bus	1
lines	1
stop	1
directly	1
WSAB	1
station	1
free	1
secured	1
parking	1
station.	1
Make	1
downtown	1
portion	1
direction	1
cars	1
2.	1
Raised	1
crossing	1

pedestrians	1	
security.	1	
		Answered: 4 Skipped: 45

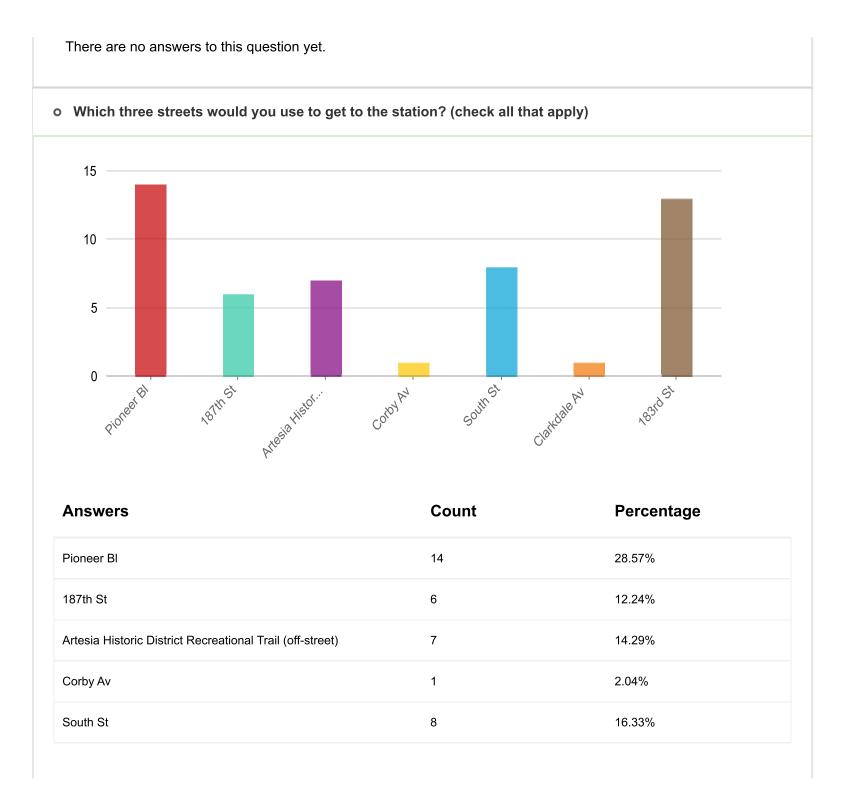
## **Pioneer Station Questions**

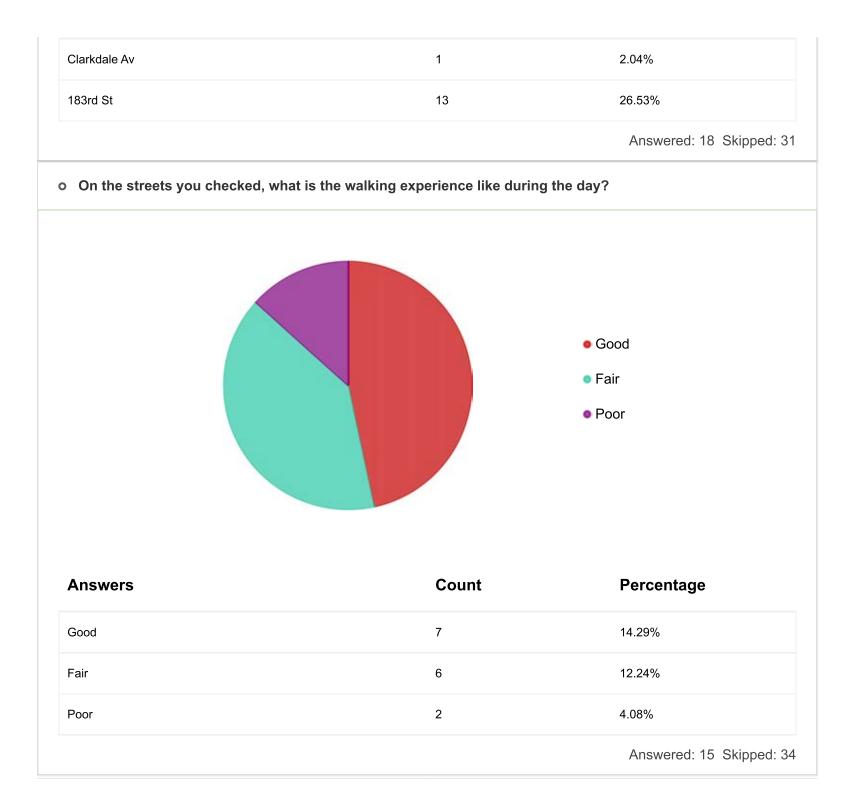
• Zoom in to make pathway images larger	
There are no answers to this question yet.	



Answers	Count	Percentage
I live here	11	22.45%
I work here	1	2.04%
l ride a bus here	0	0%
I/my children go to school here	0	0%
No relationship	0	0%
Other:	6	12.24%
		Answered: 18 Skipped: 31
• <b>Other:</b> The word cloud requires at least 20 answers	s to show.	Answered: 18 Skipped: 31
	s to show. <b>Count</b>	Answered: 18 Skipped: 31
he word cloud requires at least 20 answers		Answered: 18 Skipped: 31
he word cloud requires at least 20 answers	Count	Answered: 18 Skipped: 31
The word cloud requires at least 20 answers <b>Word</b> visit	Count 2	Answered: 18 Skipped: 31
The word cloud requires at least 20 answers Word visit closest	<b>Count</b> 2 2	Answered: 18 Skipped: 31

o pioneer_pathways		
		Answered: 5 Skipped: 44
restaurants	1	
eat	1	
hang	1	
here.	1	
shop	1	
live	1	
WSAB	1	
proposed	1	
station.	1	
path	1	
path/walking	1	
bike	1	
existing	1	
Allington	1	
walk	1	





## • Please explain why (fill in answer):

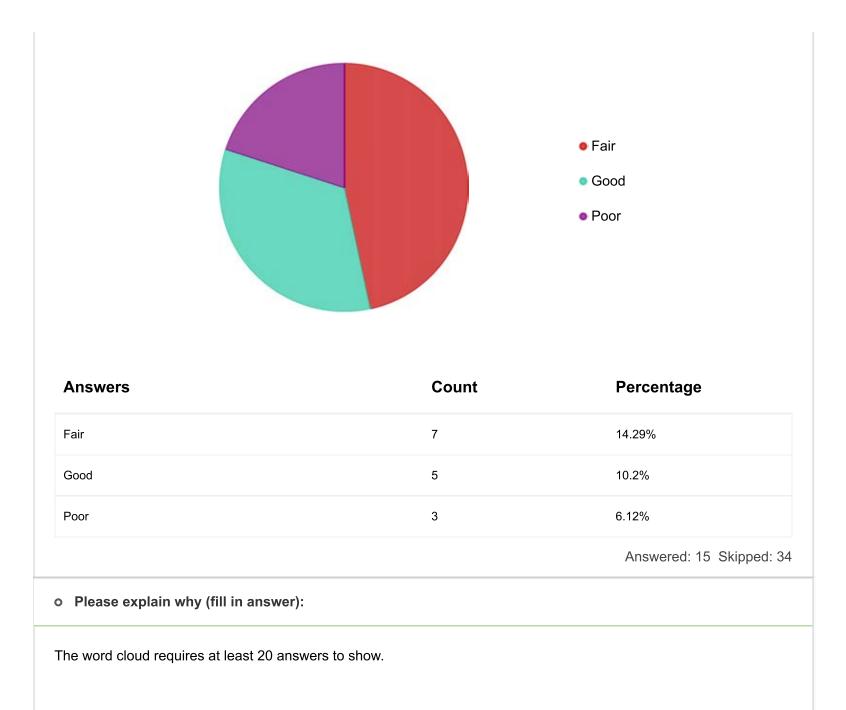
The word cloud requires at least 20 answers to show.

Word	Count
sidewalks	3
lighting	3
Cars	3
feel	3
sidewalk	3
speed	3
wide	2
street	2
walkers	2
Pioneer	2
South	2
people	2
walk	2
traffic	2

lights	2
traffic.	2
shade	2
decent	1
busy	1
dog	1
(so	1
safe).	1
Blvd	1
St.	1
wider	1
(especially	1
coming	1
station	1
Cerritos	1
Mall).	1
streets	1
ride	1

bike.	1
Love	1
183rd	1
feels	1
bolstered	1
street.	1
work	1
pretty	1
rough	1
spots	1
slow	1
bumps	1
area	1
good	1
amount	1
foot	1
safe.	1
narrow	1

weird	1	
signals	1	
Safe	1	
trail	1	
unsafe	1	
High	1	
noisy	1	
Ample	1	
large	1	
intersections.	1	
		Answered: 12 Skipped: 37
o On the streets you checked, what	is the walking experience like at night	?



Word	Count
lighting	4
lit	3
traffic.	2
street	2
clean	1
trees	1
growing	1
sidewalk	1
wouldnt	1
feel	1
safe.	1
cars	1
lots	1
vehicle/pedestrian/bike	1
traffic	1
calming	1

		Answered: 11 Skipped: 38
lighing	1	
Bad	1	
day.	1	
areas	1	
lights.	1	
Decently	1	
safer.	1	
Feels	1	
lighting.	1	
good	1	
time.	1	
decent	1	
open	1	
shops	1	
Pioneer	1	
Fairly	1	

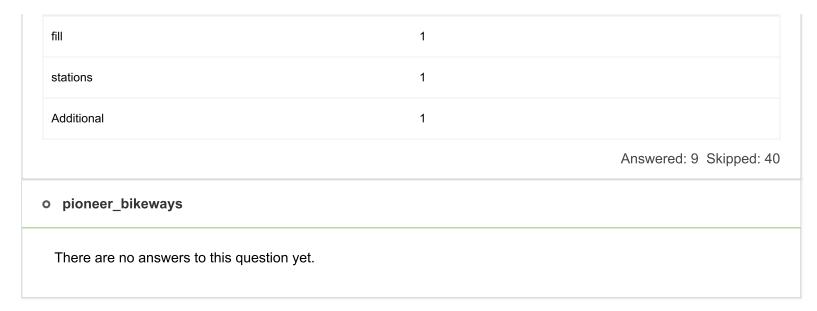
• Do you have any ideas that would improve safety and access for walking to the Pioneer...

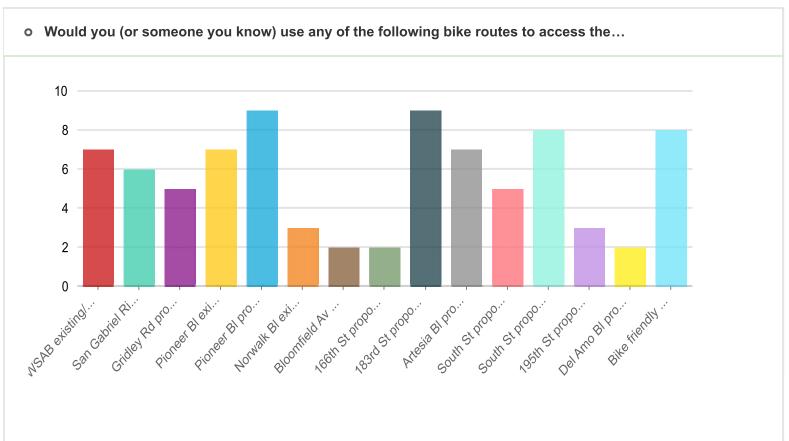
The word cloud requires at least 20 answers to show.

Word	Count
vehicle	2
traffic	2
landscaping	2
lighting	2
Pioneer	1
Blvd	1
slow	1
adding	1
station	1
create	1
lot	1
traffic.	1
infrastructure	1
bring	1

cars	1
help.	1
Protected	1
bike	1
lane	1
Studebaker	1
183rd	1
gridley	1
ans	1
artesa	1
Pedestrian	1
streets	1
amazing.	1
Neighboring	1
areas	1
trees	1
calming	1
measures	1

prettier	1
walk.	1
security	1
cleanliness.	1
higher	1
density	1
population	1
lights	1
upkeep	1
Emergency	1
call	1
buttons	1
college	1
campuses	1
dog	1
waste	1
bags	1
water	1





Answers	Count	Percentage
WSAB existing/proposed off-street path from San Gabriel River to Coyote Creek	7	14.29%
San Gabriel River existing off-street path	6	12.24%
Gridley Rd proposed protected bike lanes	5	10.2%
Pioneer BI existing/proposed bike lanes south of station	7	14.29%
Pioneer BI proposed protected bike lanes north of 183rd St	9	18.37%
Norwalk BI existing/proposed bike lanes	3	6.12%
Bloomfield Av proposed bike lanes	2	4.08%
166th St proposed protected bike lanes (to Cerritos College)	2	4.08%
183rd St proposed mix of standard/protected bike lanes	9	18.37%
Artesia BI proposed bike lanes	7	14.29%
South St proposed bike lanes	5	10.2%
South St proposed protected bike lanes	8	16.33%
195th St proposed protected bike lanes from San Gabriel River to Coyote Creek	3	6.12%
Del Amo BI proposed protected bike lanes	2	4.08%
Bike friendly streets (small residential streets with speed bumps, s tops signs, other measure to slow traffic to less than 25 mph)	8	16.33%

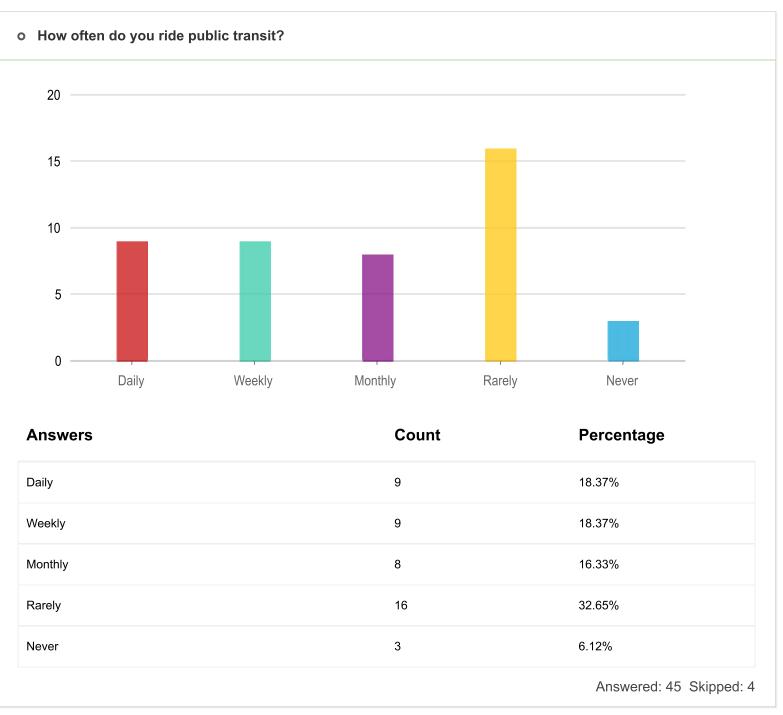
	Answered: 16 Skipped: 33	
o Do you have any location-specific ideas to improve safety and access wheeling to the future		
The word cloud requires at least 20 answers to show.		
Word	Count	
bike	5	
protected	4	
lanes	4	
station	3	
Gridley	2	
Pioneer	2	
street	2	
crossing	2	
major	2	
streets	2	
Cerritos	2	
center	2	
Remove	1	

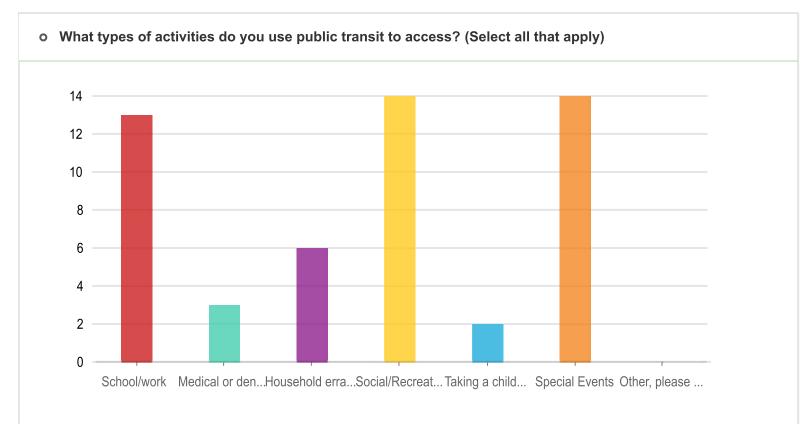
homeless	1
encampments.	1
lane	1
Artesia	1
Studebaker;	1
residential	1
areas	1
connect	1
blocks	1
well.	1
Make	1
riders	1
safely	1
access	1
sides	1
street.	1
people	1
busy	1

1-lane	1
reach	1
station.	1
recommend	1
passage	1
under/over	1
Pionner	1
Blvd.	1
closer	1
easy	1
access.	1
corridors	1
leading	1
to/from	1
(Pioneer	1
South)	1
wide	1
preferred.	1

curb	1	
ramp	1	
SE	1	
corner	1	
Gridley/183rd	1	
existing	1	
multi-use	1	
trail	1	
markings;	1	
hard	1	
curb.	1	
biking	1	
corridor/safe	1	
Towne	1	
Performing	1	
Arts	1	
great	1	
		Answered: 8 Skipped: 41

## **Additional Information**

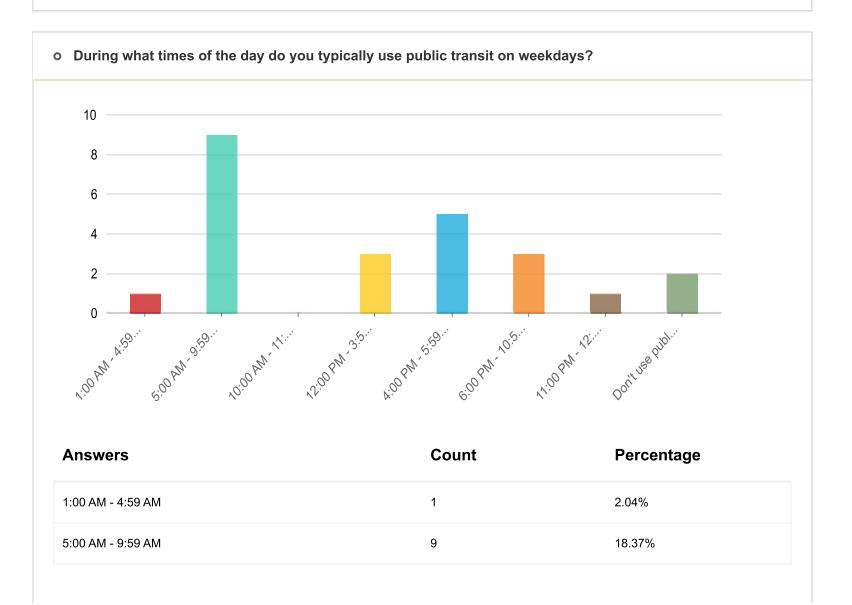




Answers	Count	Percentage
School/work	13	26.53%
Medical or dental appointments	3	6.12%
Household errands	6	12.24%
Social/Recreational activities	14	28.57%
Taking a child or family member to a destination	2	4.08%
Special Events	14	28.57%
Other, please explain	0	0%

• Please explain why (fill in answer):

There are no answers to this question yet.



12:00 PM - 3:59 PM	3	6.12%
4:00 PM - 5:59 PM	5	10.2%
6:00 PM - 10:59 PM	3	6.12%
11:00 PM - 12:59 AM	1	2.04%
Don't use public transit during the week	2	4.08%
		Answered: 24 Skipped:
10	Illy use public transit or	n weekends?
	ally use public transit or	n weekends?
8	Illy use public transit or	n weekends?
10 8 6	Illy use public transit or	n weekends?
10 8 6 4	Illy use public transit or	n weekends?
		n weekends?

Answers	Count	Percentage
1:00 AM - 4:59 AM	1	2.04%
5:00 AM - 9:59 AM	0	0%
10:00 AM - 11:59 AM	9	18.37%
12:00 PM - 3:59 PM	5	10.2%
4:00 PM - 5:59 PM	1	2.04%
6:00 PM - 10:59 PM	5	10.2%
11:00 PM - 12:59 AM	1	2.04%
Don't use public transit on the weekend	2	4.08%
		Answered: 24 Skipped: 25



# Walk Audit Summary Memo

Supporting documents with no effect on FLM plan recommendations, Metro intends to publish separately, and additional detail may be added following Metro Board adoption.

### MEMO

To Hannah Brunelle, Metro
 From Michael Nájera and Esmi Rennick, Cityworks Design
 Date December 11, 2023
 Re West Santa Ana Branch Transit Corridor
 First-Last Mile Planning – Walk Audit Summary

Metro West Santa Ana Branch Transit Corridor (WSAB) is in the final phase of environmental analysis culminating in an Environmental Impact Report/Statement (EIR/EIS) for the Locally Preferred Alternative (LPA) that will provide light rail transit service between Southeast Los Angeles County (Cities of Artesia, Cerritos) and the City of Los Angeles (Slauson/A Line Station) with rail, bus and bike transfers to Downtown Los Angeles, LA Union Station and the Rail to Rail Active Transportation Corridor now under construction.

The LPA consists of 9 stations that underwent two types of audits led by Metro's technical FLM consultants (Cityworks Design, WSP) in collaboration with community-based partners (MUSA, BikeLA) and Metro's outreach consultant (Arellano Associates). The station names and immediate surrounding cities listed north to south:

- Slauson A/Line, City of Los Angeles
- Pacific/Randolph Station, City of Huntington Park
- Florence Station, City of Huntington Park
- Firestone Station, City of South Gate
- Gardendale Station, City of Downey
- I-105/C Line Station, City of South Gate, City of Paramount
- Paramount Station, City of Paramount
- Bellflower Station, City of Bellflower
- Pioneer Station, City of Artesia, City of Cerritos

#### 1. CBO Participation

Partnering CBOs, Mujeres Unidas Sirviendo Activamente (MUSA) and BikeLA were integral in building community interest and support for the FLM project throughout the walk/wheel audit process. CBO roles and responsibilities evolved as the FLM Team planned and facilitated community walk audits, to embrace the strengths and capabilities of each CBO partner, in alignment with their respective mission statements:

MUSA strives towards the goal of empowering, motivating, and encouraging women to bring about productive, meaningful, and responsible civic, educational, and cultural engagement.

#### West Santa Ana Branch Transit Corridor First-Last Mile Planning - Walk Audit Summary Memo

BikeLA works to make all communities in LA County healthy, safe, and fun places to ride a bike through advocacy, education, and outreach.

The CBOs pursued outreach opportunities to connect and educate community members on the FLM Project, especially by reaching neighborhoods and local residents that would help broaden community participation in the walk/wheel audits. CBO partners distributed event flyers to their contact lists and canvased their familiar activity centers around station areas to help encourage a strong and diverse turnout, with a focus on connecting with women and bike riders. They also participated in planning meetings that helped determine the 5 stations chosen for the community walk/wheel audits; and provided significant guidance on the accessibility and language format for these outreach events. MUSA participated at every audit and provided bilingual translation of presentation materials and activities for Spanish-speaking attendees.

#### 2. Technical Walk Audits

All 9 stations listed above underwent technical walk audits by the consulting team and Metro staff in July 2023. The purpose of the technical walk audits was to 1) confirm pathways most suitable to focus the community walk/wheel audits along, understanding auditors may wish to modify the pathways if they feel an adjacent path is a more viable route; 2) test the WSAB FLM web-based app and identify potential modifications to its menu; and 3) build the technical team's understanding of key challenges to inform the community walk/wheel audits. The final WSAB FLM Plan can include this summary of walk audit findings as an appendix so a correlation can be made between the issues observed, suggested improvements to address them, and the final list of potential FLM projects that resulted. The technical walk audits included consideration of wheel routes/facilities on the primary and secondary walk paths within one-half mile.

#### 3. Community Walk/Wheel Audits

After Metro's community outreach consultant brought on board community-based organizations (CBOs) local to the project area (MUSA, Self Help Graphics, and BikeLA) a project charter was developed, and planning for the community walk/wheel audit events commenced. Two of the participating CBOs (MUSA and BikeLA) were available to participate in the planning of the community walk audits, and expressed their support for the 5 stations listed below. Each station underwent community walk/wheel audits, facilitated by Metro's outreach consultant and technical team, with the support of CBOs and Metro staff. These stations were selected because they represented a variety of conditions and geography along the alignment, including terminus and transfer stations.

- Pioneer Station (Artesia, Cerritos)
- Bellflower Station (Bellflower)
- I-105/C Line Station (Paramount, South Gate)
- Florence/Salt Lake (Bell, Huntington Park, Cudahy)
- Slauson/A Line Station (Huntington Park, Los Angeles)

#### West Santa Ana Branch Transit Corridor First-Last Mile Planning - Walk Audit Summary Memo

While the Slauson/A Line Station was included in the Blue Line First/Last Mile: A Community-Based Process and Plan (2018) it made sense to re-audit the station area in light of Metro's Rail to Rail (Segment A) Active Transportation Corridor (under construction) and the proposed WSAB aerial station.

The purpose of the community walk/wheel audits was to 1) familiarize participants to Metro's FLM planning process; 2) record community/stakeholder preferred station access routes and confirm each station's pathway network; 3) collect data on FLM barriers specific to each of the stations audited; and 4) identify preferred FLM toolkit improvements and wheel routes along the WSAB corridor. Using Metro's FLM app, written notes, and activity boards, technical team members captured observations by asking the CBO representatives and community members to identify their preferred routes to each station, prioritize proposed bikeways, and identify other potential improvements on a map (on a single large-scale map). A pathway network board accompanied wheel activity boards to help gather community input on priorities focused on pedestrian/wheel safety and access.

The need for wheel facilities was considered on primary and secondary paths that were included in the audit. In addition, maps of existing and proposed wheel facilities within the entire 3-mile wheel zone were available following the walk for review and comment. Participants were asked to identify which types of wheel facilities they would use and to identify specific proposed wheel facilities they would use and would like to see constructed.

The technical team discussed with BikeLA the viability of hosting wheel audits during an active group bike ride, but it was deemed infeasible due to logistics and safety (ability to conduct an active audit while riding, and ability to recruit local audit teams). Products that will be included in the WSAB FLM Plan include a wheel network of potential facilities needed, and a summary of input heard regarding preferred routes.

#### 4. Walk Audit Summary

The PowerPoint slides that follow provide a summary of observations collected during the technical and community walk audits. The walk audits were focused on recording existing conditions, including safety, connectivity, and access barriers along the draft Primary & Secondary Pathway network and within a half-mile station area. The consulting team used this data to develop a "Walkability Rating Map" for each station, rating the pedestrian experience and walkability of all routes within the pathway network. It is important to note that the ratings are very generalized and capture an average across the entire pathway; some segments may be better or worse than the rating shown. Generally, pathways that scored a 'fair' or 'poor' rating indicated segments where there could be a higher potential for FLM improvement projects, and pathways that scored 'good' exhibited a safe and comfortable pedestrian experience but could still benefit from some improvements. The 3-Mile Wheel Network maps highlight the proposed wheel facilities that were identified by participants as project ideas or as projects they would use or like to see constructed.

#### West Santa Ana Branch Transit Corridor First-Last Mile Planning - Walk Audit Summary Memo

Through a review of data collected using Metro's walk audit app, written notes and photography–the technical team drafted preliminary lists of project ideas to address pedestrian and bicycle safety, and/or enhance the routes connecting to stations. These project ideas would then be presented to community members at a public workshop to ascertain community/stakeholder priorities at each station. The draft list of project ideas will evolve through the remainder of the FLM planning process as Metro and the technical team coordinate with local jurisdictions to incorporate plans and projects relevant to FLM improvements and eligibility pertaining to the prioritization process. Metro's FLM Prioritization Methodology will be applied to all draft project lists integrated into the WSAB FLM Plan.

For more details on walk audit outreach communications, processes, logistics and summary of notifications and participation, please refer to Metro Outreach Consultant's "Outreach Plan Memo" and event summary.



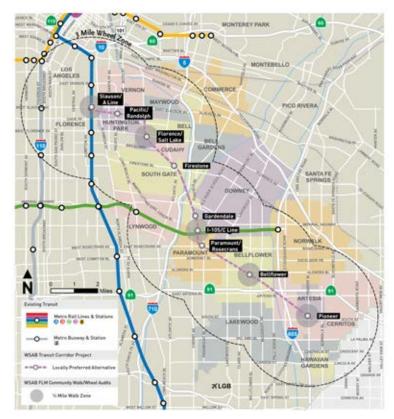
### First/Last Mile Planning

Walk Audit Summary December 2023 WEST SANTA ANA BRANCH TRANSIT CORRIDOR



### Outline

- > Technical Walk Audits
  - Draft Pathway Network
  - Summary of Barriers on Pathways
  - Walkability Rating
- > Community Walk Audits
  - Engagement Approach
  - Summary of Walk/Wheel Findings



Project Overview Map with 5 Community Walk Audit Stations

# **Technical Walk Audits**

Performed at 9 Locally Preferred Alternative (LPA) Stations (July 2023)

- > Focused on Primary & Secondary Pathways
- Recorded safety, connectivity and access barriers within a half-mile station area using Metro's App
- > Identified preliminary FLM walk/wheel improvements and ideas
- Technical Team rated walkability of pathways based on existing conditions; ratings represent an average of entire pathways (some segments could be better/worse)

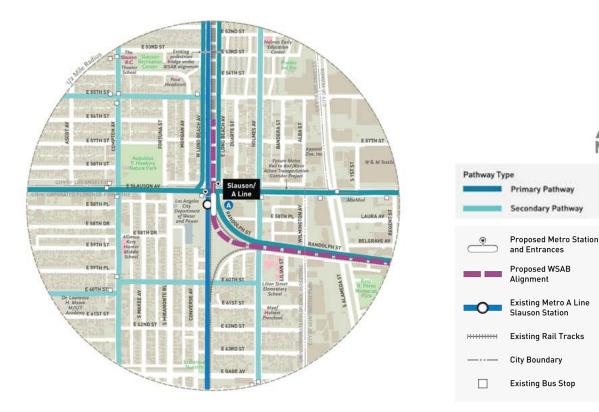




# Slauson A/Line Station – DRAFT Pathway Network

#### > Primary Pathways

- Slauson Ave
- Randolph St
- E Long Beach Ave
- W Long Beach Ave
- > Secondary Pathways
  - Compton Ave
  - Holmes Ave
  - E 55<sup>th</sup> St
  - E 60<sup>th</sup> St



N

# **Slauson A/Line Station – Primary Pathway Barriers**

- > Slauson Ave & Long Beach Ave Narrow sidewalks with limited/no ADA access, lack of shade trees, and poor bus stop conditions.
- > Slauson Ave High vehicular speeds with potential for traffic calming, high visibility crosswalks, widening sidewalks or adding parkway buffers for pedestrian safety.
- Randolph St Obstructions on sidewalks ranging from encampments to waste/dumped materials east of existing A Line Station entrance.







# **Slauson A/Line Station – Secondary Pathway Barriers**

- > Compton Ave & Holmes Ave Poor sidewalk conditions, lack of shade trees, missing parkway buffers, and high concentration of encampments near Augustus F. Hawkins Park and existing rail right-of-way.
- Compton Ave High vehicular speeds, unsafe pedestrian conditions at mid-block crossings and intersections.
- > Compton Ave Poor bus stop conditions with no shade structures



# **Slauson A/Line Station – Walkability Rating**

#### > Primary Pathways

- Slauson Ave (poor)
- Randolph St (poor)
- E Long Beach Ave (poor)
- W Long Beach Ave (fair)
- > Secondary Pathways
  - Compton Ave (fair)
  - Holmes Ave (fair)
  - E 55<sup>th</sup> St (fair)
  - E 60<sup>th</sup> St (fair)



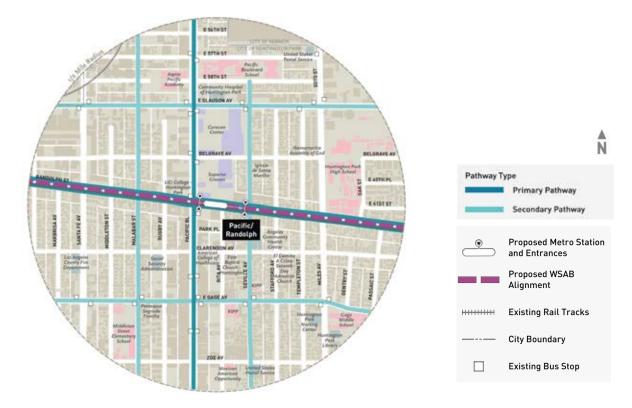


# **Pacific/Randolph Station – DRAFT Pathway Network**

#### > Primary Pathways

- Pacific Blvd
- Randolph St

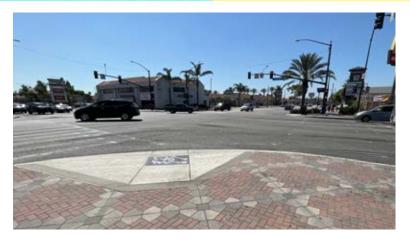
- Slauson Ave
- Gage Ave
- Malabar St
- Seville Ave

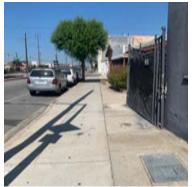


# **Pacific/Randolph Station – Primary Pathway Barriers**

> All Pathways

- Limited visibility at crosswalks and need for ADA access at intersections
- Lack of shade trees and parkways with landscaping
- > Pacific Blvd and Slauson Ave Intersection High vehicular speeds and collisions; wide intersections with long crossing distances and faded crosswalks
- Pacific Blvd Wide intersections with long crossing distances and faded crosswalks at 58<sup>th</sup>, 57<sup>th</sup> and 56<sup>th</sup> streets









# Pacific/Randolph Station – Secondary Pathway Barriers

#### > All Pathways

- Poor crossing conditions; potential for high visibility crosswalks and traffic calming
- Lack of shade tress and parkways with landscaping
- > Gage Ave High vehicular speeds, and high injury intersections near schools at Miles Ave and Middleton St



# Pacific/Randolph Station – Walkability Rating

#### > Primary Pathways

- Pacific Blvd (good)
- Randolph St (fair)

### > Secondary Pathways

- Slauson Ave (fair)
- Gage Ave (poor)
- Malabar St (good/fair)
- Seville Ave (fair)



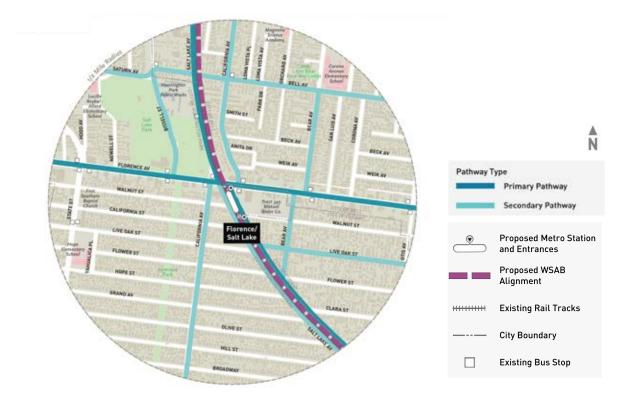
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# Florence/Salt Lake – DRAFT Pathway Network

#### > Primary Pathways

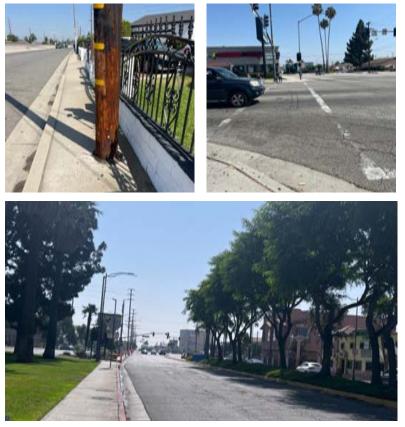
- Florence Ave
- Salt Lake Ave (North of Florence)
- Salt Lake Ave (South of Florence and east of ROW)

- Saturn/Bell Ave
- Bissell St
- Bear Ave
- California Ave
- Live Oak St



# Florence/Salt Lake Station – Primary Pathway Barriers

- > All Pathways
  - High speed traffic
  - Narrow sidewalks with no buffer from high traffic speeds
  - Poor street crossing conditions at intersections; low visibility crosswalks with high traffic speeds
  - Limited shade and landscaping
- > Florence Ave Poor crossing conditions at Salt Lake Ave, Metro ROW, and California Ave; intersections with faded crosswalks and narrow sidewalks



# Florence/Salt Lake Station – Secondary Pathway Barriers

#### > All Pathways

- Narrow sidewalk widths with no buffer from traffic
- Limited shade and landscaping
- Poor crossing conditions; low visibility at crosswalks and high vehicular speeds
- California Ave, Saturn Ave, Salt Lake Ave (south of Florence Ave and west of the Metro ROW) – High vehicular speeds
- Salt Lake Ave (south of Florence Ave and west of the Metro ROW), Live Oak Ave – Narrow
   sidewalks with obstructions



# Florence/Salt Lake – Walkability Rating

### > Primary Pathways

- Florence Ave (fair)
- Salt Lake Ave (North of Florence) (fair)
- Salt Lake Ave (South of Florence and east of ROW) (poor)

### > Secondary Pathways

- Saturn/Bell Ave (good)
- Bissell St (good)
- Bear Ave (good/ fair)
- California Ave (fair)
- Live Oak St (fair)



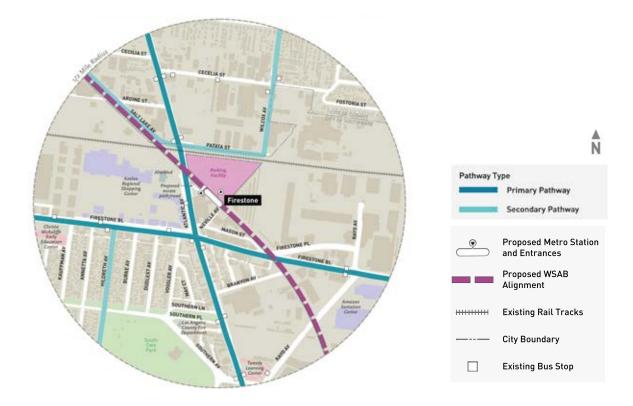
15

## **Firestone Station – DRAFT Pathway Network**

#### > Primary Pathways

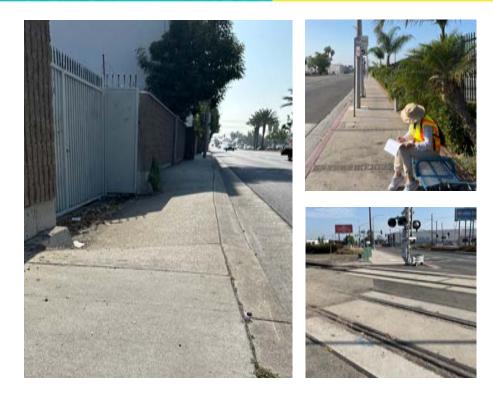
- Firestone Blvd
- Atlantic Ave

- Salt Lake Ave
- Patata St
- Wilcox Ave
- Hildreth Ave



## **Firestone Station – Primary Pathway Barriers**

- > All Pathways
  - High vehicular speeds
  - Long crosswalks
  - Limited shade and landscaping
  - Poor bus stop conditions
- > Firestone Blvd (east of Firestone PI) narrow sidewalks with steep driveway slopes, improvements needed for ADA access
- > Atlantic Ave Poor crossing conditions over existing rail lines, missing pedestrians crossing features





### Firestone Station – Secondary Pathway Barriers

- > All Pathways
  - Limited shade and landscaping
- Salt Lake Ave, Patata St, and Wilcox Ave High vehicular speeds, heavy semi-truck traffic, and narrow sidewalks
- > Hildreth Ave (south of Southern Ave) –
   limited or missing shade and landscaping
- > Wilcox Ave Poor bus stop conditions



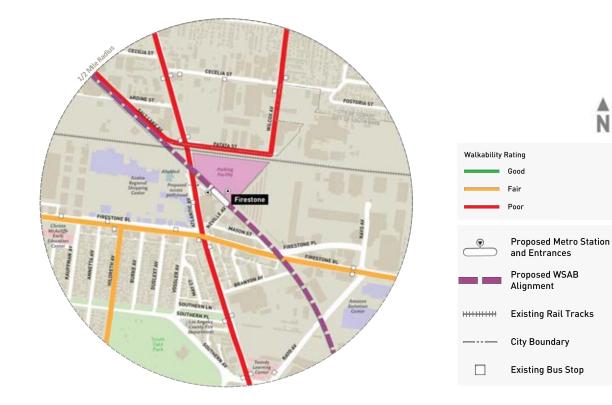


### **Firestone Station – Walkability Rating**

#### > Primary Pathways

- Firestone Blvd (fair)
- Atlantic Ave (poor)

- Salt Lake Ave (poor)
- Patata St (poor)
- Wilcox Ave (poor)
- Hildreth Ave (fair)

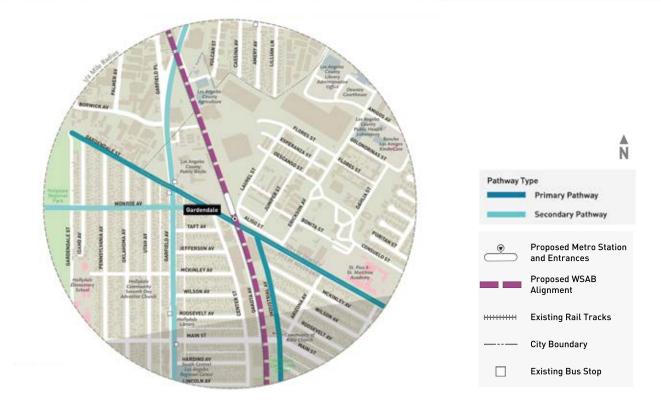


## **Gardendale Station – DRAFT Pathway Network**

#### > Primary Pathways

- Gardendale St
- Industrial Ave

- Garfield Ave
- Monroe Ave



### **Gardendale Station – Primary Pathway Barriers**

> All Pathways

- Poor sidewalk conditions and need for improved high visibility crosswalks and/or signalized crossings
- Limited shade and landscaping
- Gardendale St High vehicular speeds, poor sidewalk conditions near existing rail tracks with no pedestrian safety features (ADA access, fencing)
- Industrial Ave Unsafe intersection and crossing conditions, with limited visibility between pedestrians and vehicular traffic turning onto Gardendale St





## **Gardendale Station – Secondary Pathway Barriers**

- > Garfield Ave Long crosswalk distances with short crossing time and indirect paths at "Y" junction of Garfield PI
- > Garfield Ave Limited shade and landscaping
- > Garfield Ave Poor bus stop conditions with no shade or seating, and cars observed blocking pedestrians and buses from loading zone
- > Monroe Ave ADA Access ramps missing poor sidewalk conditinos



# **Gardendale Station – Walkability Rating**

#### > Primary Pathways

- Gardendale St
- Industrial Ave

- Garfield Ave
- Monroe Ave

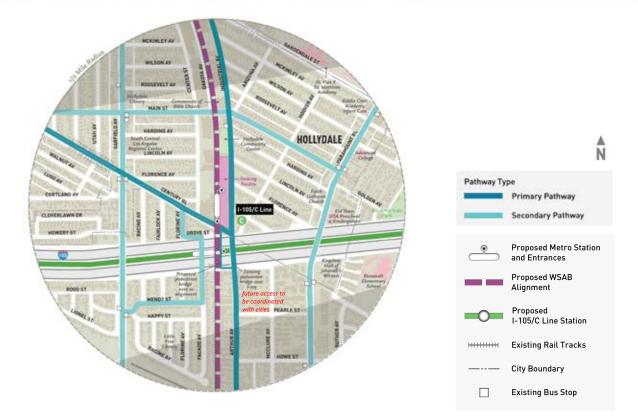


# I-105/C Line – DRAFT Pathway Network

#### > Primary Pathways

- Industrial Ave
- Arthur Ave
- Century Blvd

- Main St
- Garfield Ave
- Paramount Blvd
- Florine Ave/Grove St/ Mendy St



# I-105/C Line - Primary Pathway Barriers

#### > All Pathways

- Limited or missing shade and landscaping
- Poor crossing conditions
- Industrial Blvd Narrow sidewalks near Hollydale Community Center & Park and missing access ramps
- > Century Blvd High vehicular speeds
- Century Blvd Intersection with Florence Ave poor crossing conditions, missing access ramps, long intersection, and sidewalk obstructions



# I-105/C Line - Secondary Pathway Barriers

### > All Pathways

- Limited or missing shade and landscaping
- Fair to poor bus stop conditions
- > Garfield Ave, Main St and Paramount Blvd High vehicular speeds
- > Paramount Blvd At Wilson Ave poor crossing conditions, faded crosswalk and and no signals or flashers to slow motorists
- Main St Poor crossing conditions from Arizona Ave to Center St, faded crosswalks, and no traffic calming





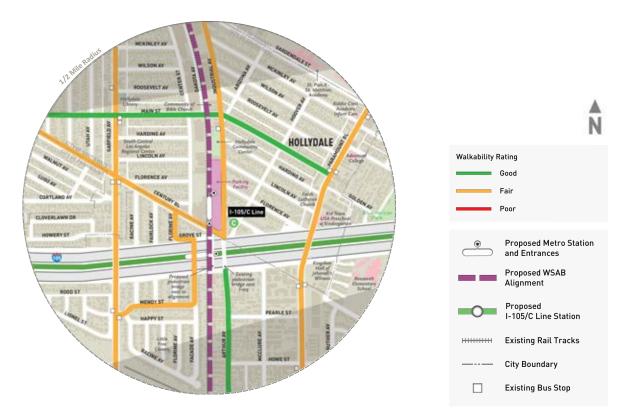


# I-105/C Line – Walkability Rating

#### > Primary Pathways

- Industrial Ave (fair)
- Arthur Ave (good)
- Century Blvd (fair)

- Main St (good)
- Garfield Ave (fair)
- Paramount Blvd (fair)
- Florine Ave/Grove St/ Mendy St (fair)



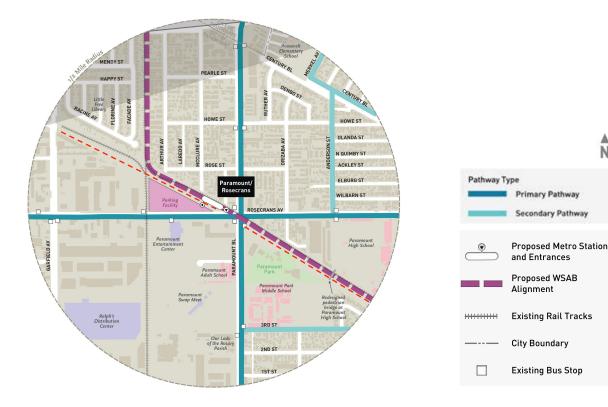
## Paramount/Rosecrans Station – DRAFT Pathway Network

#### > Primary Pathways

- Paramount Blvd ٠
- **Rosecrans** Ave ٠
- Future off-street path on ROW (to be added)

### > Secondary Pathways

- 3<sup>rd</sup> St
- Anderson St •
- Century Blvd
- Merkel Ave •



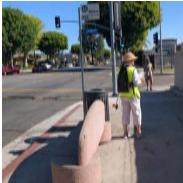
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## Paramount/Rosecrans Station – Primary Pathway Barriers

- > All Pathways
  - Poor crossing conditions
  - Poor bus stop conditions
  - Opportunities to infill shade trees and landscaping
- > Rosecrans Ave/Paramount Blvd intersection high injury/collisions, long crosswalks with short crossing times
- > Paramount Blvd/All American City Way intersection high visibility crosswalks







## Paramount/Rosecrans Station – Secondary Pathway Barriers

### > All Pathways

- Narrow sidewalks with obstructions
- Limited or missing shade and landscaping
- > Anderson St At Olanda St sidewalk obstructions like fire hydrants and stop signs
- > Anderson St Missing east to west crosswalk to access the safe north to south crossing at Century Blvd
- > 3<sup>rd</sup> St Missing north to south crosswalk to access the middle school

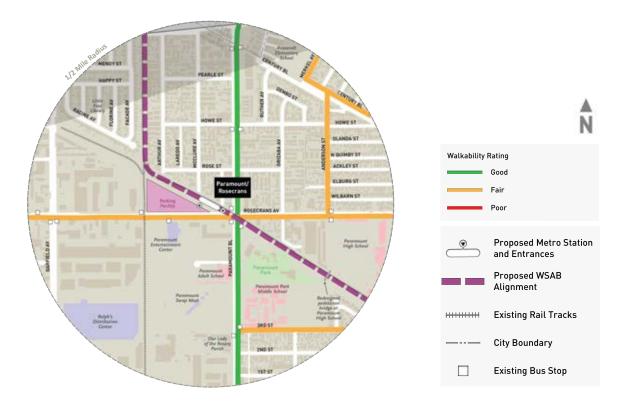


## **Paramount/Rosecrans Station – Walkability Rating**

#### > Primary Pathways

- Paramount Blvd (good)
- Rosecrans Ave (fair)

- 3<sup>rd</sup> St (fair)
- Anderson St (fair)
- Century Blvd (fair)
- Merkel Ave (fair)



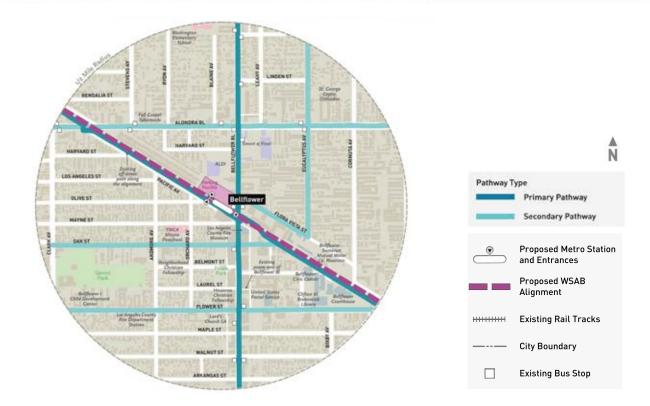
# **Bellflower Station – DRAFT Pathway Network**

## > Primary Pathways

- Bellflower Blvd
- Existing Off-Street Path on ROW

## > Secondary Pathways

- Alondra Blvd
- Oak St
- Flower St
- Eucalyptus Ave
- Flora Vista St



## **Bellflower Station – Primary Pathway Barriers**

> All Pathways

- Limited or missing shade and landscaping
- > Bellflower Blvd At Oak St and Flower St high injury intersections
- > Bellflower Blvd At Alondra Blvd high vehicular speeds and ADA access ramps in need of upgrades
- Existing Off-Street Path Limited pedestrian seating and landscape improvements between bike and pedestrian paths



# **Bellflower Station – Secondary Pathway Barriers**

> All Pathways

- Limited or missing shade and landscaping
- Poor sidewalk and crosswalk conditions
- > Alondra Blvd At Eucalyptus Ave high injury intersection, no shade and limited amenities at bus stops
- > Flora Vista St and Eucalyptus Ave No sidewalks, and high vehicular speeds
- > Flower St At Bixby Av need for signalized crossing



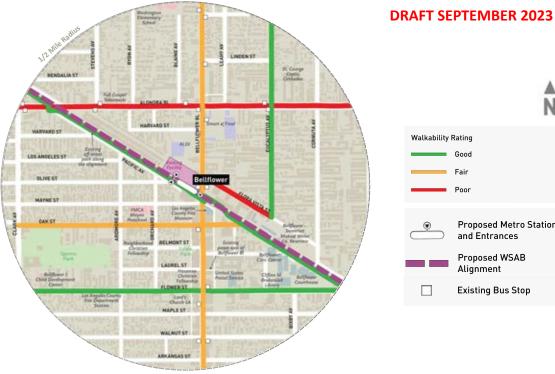
# **Bellflower Station – Walkability Rating**

## > Primary Pathways

- Bellflower Blvd (fair)
- Existing Off-Street Path (green)

## > Secondary Pathways

- Alondra Blvd (poor)
- Oak St (fair)
- Flower St (good)
- Eucalyptus Ave (good)
- Flora Vista St (poor)





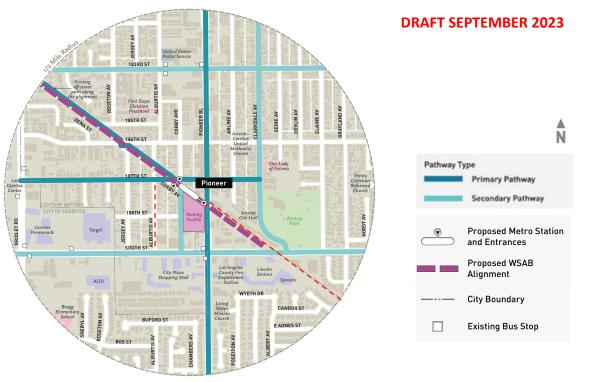
# **Pioneer Station – DRAFT Pathway Network**

## > Primary Pathways

- Pioneer Blvd
- 187<sup>th</sup> St
- Existing Off-Street Path
- Future Off-Street Path on ROW (to be added)

## > Secondary Pathways

- 183<sup>rd</sup> St
- South St
- Clarkdale Ave
- Corby Ave (or Alburtis Ave, tbc)





# **Pioneer Station – Primary Pathway Barriers**

## > All Pathways

- Limited or missing shade and landscaping
- Poor sidewalk conditions
- Poor crosswalk conditions
- Pioneer Blvd Limited or missing pedestrian lighting, sidewalk obstructions & missing shade/amenities at existing bus stops
- > 187<sup>th</sup> St Missing mid-block crossing for pedestrian/wheel access to Artesia Historic District Recreational Trail



## **Pioneer Station – Secondary Pathway Barriers**

## > All Pathways

- Limited or missing shade and landscaping
- Poor sidewalk conditions
- Poor crosswalk conditions
- Clarkdale Ave Safety features needed to address high injury/collisions at 183<sup>rd</sup> St intersection, drainage issues near Artesia City Hall
- > South St Poor bus stop conditions lacking shade
- > 183<sup>rd</sup> St Parked cars obstructing sidewalk, and missing ADA access ramps





# **Pioneer Station – Walkability Rating**

## > Primary Pathways

- Pioneer Blvd (fair)
- 187<sup>th</sup> St (fair)
- Existing Off-Street Path (good)

## > Secondary Pathways

- 183<sup>rd</sup> St (fair)
- South St (good/fair)
- Clarkdale Ave (good)
- Corby Ave (fair)





# **Community Engagement Approach**

- > Work with CBO partners to engage community members on First/Last Mile priorities through:
  - Community Walk Audits
  - Local 'quick hit' pop-up events
  - Community event pop-ups
  - Community Workshops\*
- > Develop a map-based interactive survey and activities to solicit feedback from communities near WSAB station areas

\*Community workshops will include one general workshop for all WSAB station area stakeholders and one women-focused workshop







# **Community Walk Audits**

Performed at 5 stations representing a geographic variety, both LPA terminus and transfer stations (Nov-Oct 2023):

- Pioneer Station (Artesia, Cerritos)
- Bellflower Station (Bellflower)
- I-105/C Line Station (Paramount, South Gate)
- Florence/Salt Lake (Bell, Huntington Park, Cudahy)
- Slauson/A Line Station (Huntington Park, Los Angeles)



# **Community Walk Audit Findings**

	215 Community Project Ideas identified for 5 Stations
Slauson/A Line Station	30% 70%
Florence/Salt Lake Station	57% 43%
I-105/C Line Station	49% 51%
<b>Bellflower Station</b>	55% 45%
Pioneer Station	40% 60%

#### Pathway Types

Primary Pathway Secondary Pathway

#### Top 3 Project Ideas by Pathway Type



Note: Top project ideas were not voted on, but suggested most frequently on a pathway by community members using the app

# **Proposed Wheel Routes With Community Support**

# Slauson/A Line Station to Firestone Station

## **On Primary Paths:**

- Slauson Bl
- Long Beach Av
- Randolph St
- Pacific Av
- Salt Lake Av (north of Florence Av)
- Firestone Bl

+ many on secondary pathways and other streets



43

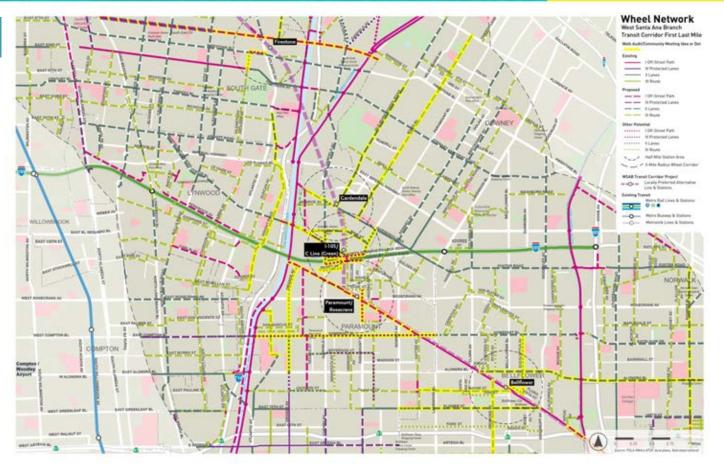
# **Proposed Wheel Routes With Community Support**

Firestone Station to Bellflower Station

## **On Primary Paths:**

- Gardendale St
- Century Bl
- WSAB ROW
- Paramount Bl

+ many on secondary pathways and other streets



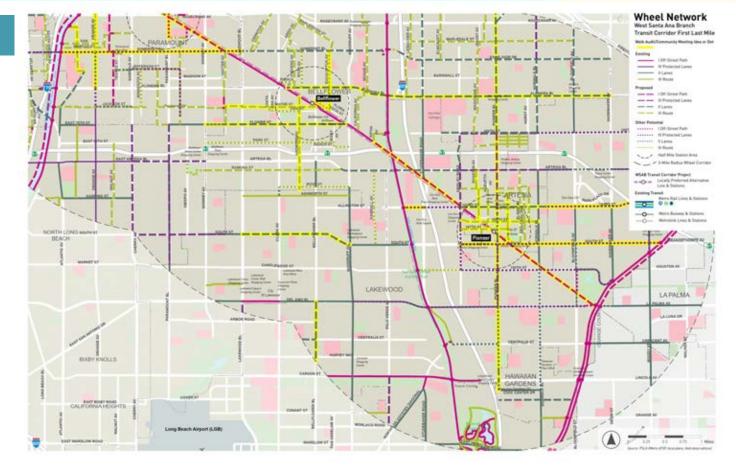
# **Proposed Wheel Routes With Community Support**

Bellflower Station to Pioneer Station

## **On Primary Paths:**

- WSAB ROW
- Pioneer Bl
- 187<sup>th</sup> St

+ many on secondary pathways and other streets



# 3.5

# Cost Estimating Methodology Memo

Supporting documents with no effect on FLM plan recommendations, Metro intends to publish separately, and additional detail may be added following Metro Board adoption.

# Cost Methodology Memorandum

### **INTRODUCTION**

The Locally Preferred Alternative (LPA) for the Los Angeles County Metropolitan Transportation Authority (Metro) Southeast Gateway Line (SGL) Transit Corridor Project is a 14.5-mile proposed light rail transit (LRT) alignment that connects the City of Artesia in southeast Los Angeles (LA) County to the unincorporated Florence-Firestone community of LA County. The project will provide much needed high quality transit for densely populated, low-income, and heavily transit-dependent communities with limited transit options. The LPA will consist of 9 LRT stations and approximately 2,800 parking spaces. Of the 9 LRT stations, 6 stations will be atgrade and 3 stations will be aerial. Additionally, the LPA will add one new infill station along the C Line at I-105 to allow transfers between the SGL alignment and the C Line.

The Southeast Gateway Line First/Last Mile Plan includes nine stations on the SGL LPA, specifically focused within a half-mile radius for potential pedestrian improvements and within a 3-mile radius for potential wheel improvements at each station area. The Plan includes projects that improve safety, access, and comfort of public streets and sidewalks for people walking, biking, and rolling to stations. The nine stations and their locations are:

- Slauson/A Line Station, Los Angeles County
- Pacific/Randolph Station, City of Huntington Park
- Florence/Salt Lake Station, City of Huntington Park
- Firestone Station, City of South Gate
- Gardendale Station, City of Downey
- I-105/C Line Station, City of South Gate
- Paramount/Rosecrans Station, City of Paramount
- Bellflower Station, City of Bellflower
- Pioneer Station, City of Artesia

The SGL FLM Plan proposes potential projects that develop and/or enhance first/last mile (FLM) connections to and from the planned stations and existing facilities in the station area, or destinations beyond. Typical projects include sidewalk enhancements, crosswalk improvements, and new bike lanes to create safe, dignified, and continuous pathways to transit for people of all ages and abilities. The SGL FLM Plan supports local jurisdictions in the development of future projects near stations - the majority of which are on public right-of-way (ROW). FLM projects identified in the prioritized project lists are generalized in scope. Rough-order magnitude costs have been included as a planning tool to support local jurisdictions in their next steps. Priority projects included in the adopted FLM Plan are eligible for cities to design and construct to receive credit toward the 3% local contribution. Following SGL FLM Plan adoption, and if local jurisdictions choose to advance priority FLM projects, Metro will work with the jurisdictions to refine scopes and cost estimates to formalize agreements to help meet the 3% local contribution requirements as described in the Metro Board adopted FLM Guidelines.

### **METHODOLOGY**

The SGL FLM Plan proposes potential projects near each of the station areas along the SGL corridor. Potential projects were developed through a robust engagement process with local stakeholders, jurisdictions, and community groups. Technical walk audits were conducted at each station area and existing conditions were considered in developing potential projects. Community support was identified for each potential project and projects were categorized based on need, vicinity to station areas, and feasibility. Once these elements were

considered, projects were prioritized according to Metro's FLM Prioritization Methodology to determine priority projects for the FLM Plan.

Rough order magnitude (ROM) cost estimates were developed for priority projects from Prioritization Methods 1, 2, and 3 as described in Metro's adopted FLM Prioritization Methodology. Through Prioritization Method 3 – Local Flexibility, local jurisdictions proposed projects to Metro for prioritization. Where there are priority projects on secondary pathways, these projects were proposed by jurisdictions through Prioritization Method 3. Please refer to Section 2 – Core Documents of the FLM Plan for additional details on prioritization methods and methodology. Appendix B of this memo identifies the specific costs associated with each prioritized project; please see this appendix for ROM cost estimates for each priority project.

The ROM cost estimates are intended to be used as a tool for planning to guide future decision-making processes. Since these projects are in the early planning stages of development and no design has been conducted, the Caltrans Contract Cost Data source was chosen as the main source for unit costs because the source is publicly available and generally is a conservative estimate for each unit cost. Cost information from the Caltrans Cost Data site is easily filtered for specific cost information within the same district as these prioritized projects. Awarded bid unit costs that were used for these ROM cost estimates potentially include contractor markups resulting in higher costs. Since the delivery methods for each of these projects are unknown at this stage, these conservative unit costs were preferred to avoid underestimating cost. As cities advance projects into design and a delivery method is determined, cost estimates will need to be refined to reflect the design, the current cost considerations, and selected delivery methods.

Projects recommended as part of the FLM Plan include the below information:

- Project ID
- Project Type/Improvement
- Location
- Cross Streets/Limits
- Class (Wheel Projects only)
- Prioritization Method (Walk Projects only)
- Notes
- Sidewalk/Roadway Width
- Project Origin
- Length (Wheel Projects only)
- Plan or Project Name
- Jurisdiction
- Lane Striping (Wheel Projects only)

ROM cost estimates were then developed for each priority project. Because design is not developed at this stage, general unit costs were developed for specific elements included in the FLM Plan. Unit costs were developed in three separate categories: spot improvements (e.g.: ADA curb ramp), corridor improvements (e.g.: shade trees), and typical project costs for wheel projects (Class III – Bike Friendly Street).

## Wheel Projects

Bike projects were categorized into 10 separate "typical project cost" categories within the traditional Class I through IV bike project classifications. Using these general assumptions, a unit cost was developed for each of

the 10 categories. Appendix A identifies the unit costs developed and provides additional details on these unit costs. The 10 categories are as follows:

- Class I Bike Path
- Class I Multi-Use Path
- Class II Striped Bike Lanes (Arterial with Center Turn Lane)
- Class II Striped Bike Lanes (Arterial with Raised Median)
- Class II Bike Lane (Striped Bike Lane Only)
- Class III Bike Friendly Street
- Class IV Protected Bike Lanes (K71 Bollards)
- Class IV Protected Bike Lanes (Raised Buffer)
- Class IV Protected Bike Lanes (Modify Curb Lanes Only)
- Class IV Protected Bike Lanes (Widen Sidewalk)

Each bike project proposed in the FLM Plan was then categorized within one of the above 10 categories and the unit cost was applied to the length of the applicable segment. In addition to these "typical project costs", spot and corridor improvement costs were developed on a per component or per mile basis to augment the "typical project costs" for each project. Elements such as speed humps, stop signs, and pedestrian activated signals are included in these costs. In development of the FLM Plan, specific elements were called out in addition to the general classification, and those unit costs were then added to the "typical project costs".

### Walk Projects

Pedestrian projects were categorized into 15 separate project types, but do not include overall project cost estimates per categorization. Unit costs were developed for both spot and corridor improvements for each of the pedestrian projects. Unit costs were developed on a per item or per mile basis, and lengths were calculated based on the cross streets/limits of each priority project included in the FLM Plan. Appendix A identifies the unit costs developed and provides additional details on whether unit costs are based on a spot or corridor improvement basis. The 15 categories are as follows:

- Bus Stop Improvements
- Curb Ramps
- High Visibility Crosswalks
- Traffic Calming
- Landscape and Shade
- Opportunity Improvement
- Signalized Crossing
- New or Improved Sidewalk
- Pedestrian and Bicycle Lighting
- Plaza/Parklet
- Curb Extension
- Roundabout
- Seating
- Shade Structures
- Wayfinding and Signage

Each pedestrian project proposed in the FLM Plan includes specific assumptions for each element assumed within the proposed project. Spot and corridor improvement costs were developed on a per unit or per mile basis. Elements such as shade trees, bus shelters, and curb extensions are included in these costs.

### **ASSUMPTIONS**

Once construction cost was estimated using the above methodology, a contingency was applied to each of the estimates to better estimate the full cost associated with each individual potential project. The following assumptions were used to develop the total construction estimates.

A contingency of 50% was used for each project based on consultation with Metro and consistent with the Caltrans Project Development and Procedures Manual for feasibility cost estimates. This contingency is a general estimate that is applied to project cost estimates in the initial stages of development. It is expected that as the projects continue to advance, this contingency can be lowered as additional cost considerations are added to the cost estimates.

No escalation is included at this stage since the project implementation schedules have yet to be developed. Project costs are presented in 2023 dollars and can be escalated to future year costs once implementation schedules are developed/assumed.

No additional soft costs (design, project management, legal fees, etc.) are included as this would vary by jurisdiction. These costs will need to be determined in future project funding projections and agreements.

Due to uncertainty over construction schedule for these FLM projects, cost estimates have been estimated in 2023 dollars. For any jurisdiction applying escalation to cost estimates as construction schedules become more defined, Metro recommends applying an 8% escalation per year factor. This is based on economic and industry trends as of 2023.

While some specific traffic calming measures are included at select locations in the overall FLM Plan (i.e.: curb extensions and/or high visibility crosswalks), traffic calming allowances are also included for each station along identified street segments near station areas. The traffic calming allowance is a cost assumption aimed at improving pedestrian safety by implementing measures to slow vehicular traffic but is not tied to specific identified improvements along these segments. Since these specific traffic calming measures are yet to be determined, a general per-mile ROM cost was developed for potential traffic calming measures at identified locations. This per-mile ROM cost includes the addition of signage, chicanes, and mini-roundabouts, and assumes these would be implemented along five blocks every mile. These assumptions were then used to calculate the allowance based on a per-mile cost and applied to segments near each station where a traffic calming recommendation was made.

Similar to the traffic calming allowance introduced above, each unit cost includes specific assumptions to arrive at a specific cost for each "typical project cost", spot improvement, and corridor improvement unit costs. A full listing of those assumptions is included in each of the individual unit cost details in Appendix A. A general description of unit cost development is also included below.

## **UNIT COSTS**

As discussed previously, "typical project costs", spot improvement costs, and corridor improvement costs were developed for the FLM Plan cost estimates. Because design is not developed at this stage, assumptions were made throughout the development of these unit costs to be consistent with similar projects. Multiple sources were used in the development of these unit costs, all sourced from publicly available information. Table 1 below identifies the three unit cost categories.

#### Table 1 Unit Cost Categories

Wheel Projects: Typical Project Costs per Mile	Walk/Wheel Projects: Spot Improvement Costs	Walk/Wheel Projects: Corridor Improvement Costs
I – Bike Path	Bike Phase Intersection	Bike Racks
I – Multi-Use Path	Metro Bike Hubs	Shade Tree
IV – Protected Bike Lanes (K71 Bollards)	Seating Bench	Landscaping
IV – Protected Bike Lanes (Raised Buffer)	Bus Stop Shelter	Demolition
IV – Protected Bike Lanes (Modify Curb Lanes Only)	Signage	Tree Grate
IV – Protected Bike Lanes (Widen Sidewalk)	Waste Receptacle	New Sidewalk
II – Striped Bike Lanes (Arterial with Raised Median)	Curb Extension	New Curb
II – Striped Bike Lanes (Arterial with Center Turn Lane)	ADA Curb Ramp	Sidewalk Repair
II – Bike Lane (Striped Bike Lane Only)	High Visibility Crosswalk	Sidewalk Demolition
III – Bike Friendly Street	Loop Detectors	Lighting
	Stop Signs	Traffic Calming
	Limit Lines	Signage
	Ped/Bike Bridge	Speed Hump
	Elevator	
	Large Roundabout	
	Ped Activated Signal	
	Wayfinding Signage	
	Plaza/Parklet	
	Tactile Warning Strips	
	Signal Timing Optimization	
	HAWK Signal	

Source: Metro, 2023 Notes: See Appendix A for additional information.

The main source used in development of unit costs for the FLM Plan cost estimates is the California Department of Transportation (Caltrans) Contract Cost Data. Since all projects would be constructed in the vicinity of the SGL Transit Corridor, cost data was used from winning bids within Caltrans District 7. District 7 is the district that contains Los Angeles County, so cost is expected to be most similar within the same district. Additionally, 2023 winning bid unit costs were used, as feasible, to get the most current cost information. If data was used from previous years, the unit costs was escalated to November 2023 values. Caltrans cost data was not available for all elements within the FLM Plan, so additional sources were used when Caltrans cost data was not available, and any prior year cost information was escalated to November 2023 values.

Appendix A identifies all unit costs that were developed for the ROM cost estimate and includes the assumptions made for each individual unit cost.

04.03.24

## CONCLUSION

Once the "typical project costs", spot improvement, corridor improvement, and contingency costs are summed, a total ROM construction cost is presented for each of the projects identified in the FLM Plan. Appendix B includes an itemized breakdown of costs for each prioritized project. Costs are presented in 2023 dollars and must be escalated to a future year of expenditure as the project schedule is developed. Additionally, as design is advanced as the projects continue to develop, contingency will decrease. Construction cost will generally increase as additional cost elements are scoped and cost considerations such as right-of-way and demolition cost are determined. The estimates provide a general idea for cost considerations for each project but will vary as design is advanced for each project. Metro will continue to coordinate with local jurisdictions as the SGL Transit Corridor is constructed and FLM projects are advanced.

A summary of total FLM project costs by station are shown below in Table 2.

Station	Number of Prioritized Walk Projects	Number of Prioritized Wheel Projects	ROM Construction Cost (\$2023)	Construction Contingency (50%)	Total Construction Cost (\$2023)
Slauson/A Line	33	12	\$15,654,000	\$7,827,000	\$23,484,000
Pacific/ Randolph	34	13	\$73,186,000	\$36,593,000	\$109,780,000
Florence/ Salt Lake	27	14	\$53,782,000	\$26,891,000	\$80,675,000
Firestone	21	17	\$72,093,000	\$36,046,000	\$108,136,000
Gardendale	24	25	\$14,295,000	\$7,147,000	\$21,443,000
I-105/C Line	32	10	\$51,808,000	\$25,904,000	\$77,712,000
Paramount/Rosecrans	14	23	\$44,719,000	\$22,359,000	\$67,078,000
Bellflower	12	16	\$15,556,000	\$7,777,000	\$23,333,000
Pioneer	29	23	\$31,575,000	\$15,636,000	\$47,210,000
Total	226	153	\$372,668,000	\$186,180,000	\$558,851,000

#### Table 2 Construction Cost Summary

Source: Metro, 2023

Notes:

ROM = rough order magnitude, rounded to the nearest \$1,000

Contingency based on Caltrans Project Development Procedures Manual for feasibility studies (Chapter 20)

See Appendix B for additional cost breakdowns.

# Appendix A - Unit Cost Index

# WALK AND WHEEL PROJECTS: SPOT AND CORRIDOR IMPROVEMENT COSTS

Category	Item	Item Cost Unit	Quantity	Quantity Cost Quantity Unit	Assumptions
Bike Hub	Metro Bike Hub Allowance	\$1,493,747.49 each	1.00	\$1,493,747.49 station	Average square footage (2,100 square f
Bike Phase Intersection	Bike Phase Intersection	\$557,118.64 each	1.00	\$557,118.64 intersection	Includes each direction, 1 each way
Bike Rack	Bike Rack Allowance	\$262.99 each	16.00	\$4,207.84 per mile	16 per mile
Bus Stop Improvements	Seating Bench	\$2,092.00 each	1.00	\$2,092.00 bus stop	
Bus Stop Improvements	Bus Stop Shelter	\$35,000.00 each	1.00	\$35,000.00 bus stop	
Bus Stop Improvements	Signage	\$495.74 each	4.00	\$1,982.96 bus stop	4 signs per bus stop
Bus Stop Improvements	Waste Receptacle	\$1,515.00 each	1.00	\$1,515.00 bus stop	
Curb Extension	Curb Extension	\$20,000.00 each	1.00	\$20,000.00 per extension	No drainage cost is included
Curb Ramps	ADA Curb Ramp	\$8,000.00 each	1.00	\$8,000.00 ramp	
High Visibility Crosswalks	High Visibility Crosswalk	\$5.41 square ft	192.00	\$1,038.72 crosswalk	48 foot length (4 traffic lanes), with 6 fo
High Visibility Crosswalks	Loop Detectors (standard intersection)	\$509.93 each	8.00	\$4,079.44 intersection	
High Visibility Crosswalks	Loop Detectors (t-intersection)	\$509.93 each	6.00	\$3,059.58 intersection	
High Visibility Crosswalks	Loop Detectors (mid-block intersection)	\$509.93 each	4.00	\$2,039.72 intersection	
High Visibility Crosswalks	Loop Detectors (single crosswalk)	\$509.93 each	2.00	\$1,019.86 intersection	
Landscape and Shade	Shade Tree Allowance	\$191.00 each	528.00	\$100,848.00 per mile	Both sides of street/path, additional 50
Landscape and Shade	Landscaping (beneath shade trees) Allowance	\$14.46 each	3520.00	\$50,899.20 per mile	Both sides of street/path, 10 small plan
Landscape and Shade	Demolition (tree well) Allowance	\$8.99 square ft	5632.00	\$50,631.68 per mile	Both sides of street/path, 4 foot by 4 fo
Landscape and Shade	Tree Grate Allowance	\$2,700.00 each	352.00	\$950,400.00 per mile	Both sides of street/path, 16 square for
Multiple	Stop signs	\$495.74 each	2.00	\$991.48 pair	Single post
Multiple	Limit Lines	\$5.41 square ft	20.00	\$108.20 each	10 foot by 2 foot limit lines
New or Improved Sidewalk	New Sidewalk Allowance	\$1,800.21 cubic yd	645.33	\$1,161,735.52 per mile	4 inch depth and 10 feet wide
New or Improved Sidewalk	New Curb Allowance	\$38.87 linear ft	5280.00	\$205,233.60 per mile	No drainage cost is included
New or Improved Sidewalk	Sidewalk Repair Allowance	\$1,800.21 cubic yd	32.27	\$58,086.78 per mile	5% of sidewalks require reconstruction
New or Improved Sidewalk	Sidewalk Demolition Allowance	\$112.60 square yd	96.80	\$10,899.68 per mile	5% of sidewalks require reconstruction
Opportunity Improvement	Standard Ped/Bike Bridge	\$477.38 square ft	1.00	\$477.38 square ft	Cast in Place Box Girder, encompasses
Opportunity Improvement	Landmark Ped/Bike Bridge	\$3,165.78 square ft	1.00	\$3,165.78 square ft	Assumes architecturally significant brid
Opportunity Improvement	Elevator	\$1,231,000.00 each	1.00	\$1,231,000.00 elevator	
Pedestrian and Bicycle Lighting	Lighting Allowance	\$4,000.00 each	176.00	\$704,000.00 per mile	Both sides of street/path, every 60 feet
Plaza/Parklet	Plaza/Parklet Allowance	\$250,000.00 each	1.00	\$250,000.00 each	Cost highly variable based on scope and
Roundabout	Large Roundabout	\$250,000.00 each	1.00	\$250,000.00 each	
Signalized Crossing	Ped Activated Signal (4-way)	\$26,692.16 signal	4.00	\$106,768.64 each	
Signalized Crossing	Ped Activated Signal (3-way)	\$26,692.16 signal	4.00	\$106,768.64 each	
Signalized Crossing	Ped Activated Signal (2-way)	\$26,692.16 signal	2.00	\$53,384.32 each	
Signalized Crossing	Ped Activated Signal	\$26,692.16 signal	1.00	\$26,692.16 each	
Traffic Calming	Wayfinding Signage	\$495.74 each	1.00	\$495.74 each	Single post
Traffic Calming	Traffic Calming Allowance	\$435,000.00 mile	1.00		Includes signage, chicanes, and mini-ro
Traffic Calming	Tactile Warning Strips	\$50.00 square ft	20.00	•	Includes 2 tiles at each location. Tiles a
Traffic Calming	Signal Timing Optimization	\$4,569.00 each	1.00		Applied at signals along primary and se
Traffic Calming	HAWK Signal	\$197,720.00 each	1.00		
Traffic Calming	Signage Allowance	\$495.74 each	20.00		4 signs per bus stop
Traffic Calming	Speed Hump Allowance	\$456.46 ton	98.00	·	1 speed hump per 400 feet, or 12 per n width of 40 feet. 145 pounds per cubic

e feet) and construction cost of existing Metro bike hubs

foot x 2 foot marks with 1 foot spacing between each

50% cost for irrigation and mulch, every 30 feet lants at each tree well, every 30 feet l foot demolition required at each tree well foot tree grate, cast iron material

on, 4 inch depth and 10 feet wide on, 4 inch depth and 10 feet wide es total bridge cost ridge, encompasses total bridge cost

et ind conditions

roundabouts. 5 blocks per mile are 2 foot x 5 foot secondary pathways within 0.5-mile of station area

mile. 16 foot traversible profile, 1:25 ramp slopes, roadway ic foot of asphalt

# WHEEL PROJECTS: TYPICAL PROJECT COSTS PER MILE

I - Bike Path				
Item Cost Unit	Quantity	Quantity Cost Quantity Unit	Assumptions	
\$8.99 square ft	63360.00	\$569,606.40 per mile	12 foot width	
\$19,863.70 acre	1.45	\$28,892.65 per mile	12 foot width	
\$225.00 cubic yard	586.67	\$132,000.00 per mile	12 foot width and 3 inch depth	
\$124.00 cubic yard	1173.33	\$145,493.33 per mile	12 foot width and 6 inch depth	
\$133.62 square yd	7040.00	\$940,684.80 per mile	12 foot width	
\$4,000.00 each	176.00	\$704,000.00 per mile	12-15 foot poles, both sides of path, every 60 feet	
\$191.00 each	528.00	\$100,848.00 per mile	Both sides of street/path, additional 50% cost for irrigation and	
\$1.83 linear ft	15840.00	\$28,987.20 per mile	3 trips for center and edge lines	
		\$2,650,512.39 per mile		
	\$8.99 square ft \$19,863.70 acre \$225.00 cubic yard \$124.00 cubic yard \$133.62 square yd \$4,000.00 each \$191.00 each	\$8.99 square ft         63360.00           \$19,863.70 acre         1.45           \$225.00 cubic yard         586.67           \$124.00 cubic yard         1173.33           \$133.62 square yd         7040.00           \$4,000.00 each         176.00           \$191.00 each         528.00	Item CostUnitQuantityQuantity CostQuantity Unit\$8.99 square ft63360.00\$569,606.40 per mile\$19,863.70 acre1.45\$28,892.65 per mile\$225.00 cubic yard586.67\$132,000.00 per mile\$124.00 cubic yard1173.33\$145,493.33 per mile\$133.62 square yd7040.00\$940,684.80 per mile\$4,000.00 each176.00\$704,000.00 per mile\$191.00 each528.00\$100,848.00 per mile\$1.83 linear ft15840.00\$28,987.20 per mile	

	I - Multi-Use Path						
Item	Item Cost Unit	Quantity	Quantity Cost Quantity Unit	Assumptions			
Demolition	\$8.99 square ft	95040.00	\$854,409.60 per mile	18 foot width			
Clearing and Grubbing	\$19,863.70 acre	2.18	\$43,338.98 per mile	18 foot width			
Gravel base	\$225.00 cubic yard	880.00	\$198,000.00 per mile	18 foot width and 3 inch depth			
Grading	\$124.00 cubic yard	1760.00	\$218,240.00 per mile	18 foot width and 6 inch depth			
Asphalt Section	\$133.62 square yd	10560.00	\$1,411,027.20 per mile	18 foot width			
Lighting	\$4,000.00 each	176.00	\$704,000.00 per mile	12-15 foot poles, both sides of path, every 60 feet			
Shade Tree	\$191.00 each	528.00	\$100,848.00 per mile	Both sides of street/path, additional 50% cost for irrigation and			
Striping	\$1.83 linear ft	15840.00	\$28,987.20 per mile	3 trips for center and edge lines			
Total			\$3,558,850.98 per mile				

		IV - Protected Bike Lanes (K71 Bollards)							
Item	Item Cost Unit	Quantity	Quantity Cost Quantity Unit	Assumptions					
Remove Striping	\$3.79 linear ft	31680.00	\$120,067.20 per mile	6 trips across all lanes					
Bike Path Striping	\$1.83 linear ft	21120.00	\$38,649.60 per mile	4 trips for edges of bike path each direction					
Street Striping	\$1.99 linear ft	21120.00	\$42,028.80 per mile	4 lanes					
Parking Striping	\$1.99 linear ft	21120.00	\$42,028.80 per mile	Buffer (two strips) for each direction					
Bike Path Marker	\$5.41 square ft	3840.00	\$20,774.40 per mile	12 square feet per marking (MUTCD A24C). 8 markers per 0.05-					
Bollards	\$91.25 each	440.00	\$40,150.00 per mile	Both sides of path, every 24 feet					
Traffic Signal Modifications	\$557,118.64 each	2.00	\$1,114,237.28 per mile	Includes each direction, 1 each way					
Total			\$1,417,936.08 per mile						

nd mulch, every 30 feet
nd mulch, every 30 feet
5-mile (160 per mile) per direction.

		IV - Pr	rotected Bike Lanes	s (Raised Buffer)
Item	Item Cost Unit	Quantity	Quantity Cost Quantity Unit	Assumptions
Remove Striping	\$3.79 linear ft	31680.00	\$120,067.20 per mile	6 trips across all lanes
Bike Path Striping	\$1.83 linear ft	21120.00	\$38,649.60 per mile	4 trips for edges of bike path each direction
Street Striping	\$1.99 linear ft	21120.00	\$42,028.80 per mile	4 lanes
Parking Striping	\$1.99 linear ft	21120.00	\$42,028.80 per mile	Buffer (two strips) for each direction
Bike Path Marker	\$5.41 square ft	3840.00	\$20,774.40 per mile	12 square feet per marking (MUTCD A24C). 8 markers per 0.05-
Raised Median	\$500.00 linear ft	7920.00	\$3,960,000.00 per mile	Both sides of path, 3 foot width and 6 inch curb. Assumes 75% of
Traffic Signal Modifications	\$557,118.64 each	2.00	) \$1,114,237.28 per mile	Includes each direction, 1 each way
Total			\$5,337,786.08 per mile	

	IV - Protected Bike Lanes (Modify Curb Lanes Only)							
Item	Item Cost	Unit	Quantity	Quantity Cost	Quantity Unit	Assumptions		
Remove Striping	\$3.	79 linear ft	10560.00	\$40,022.4	0 per mile	2 trips across two lanes		
Bike Path Striping	\$1.5	33 linear ft	21120.00	\$38,649.6	0 per mile	4 trips for edges of bike path each direction		
Bike Path Marker	\$5. <sub>'</sub>	41 square ft	3840.00	\$20,774.4	0 per mile	12 square feet per marking (MUTCD A24C). 8 markers per 0.05-		
Bollards	\$91.	25 each	440.00	\$40,150.0	0 per mile	Both sides of path, every 24 feet		
Traffic Signal Modifications	\$557,118.0	64 each	2.00	\$1,114,237.2	8 per mile	Includes each direction, 1 each way		
Total				\$1,253,833.6	8 per mile			

	IV - Protected Bike Lanes (Widen Sidewalk)						
Item	Item Cost Unit	Quantity	Quantity Cost Quantity Unit	Assumptions			
Remove Striping	\$3.79 linear ft	31680.00	\$120,067.20 per mile	6 trips across all lanes			
Bike Path Striping	\$1.83 linear ft	21120.00	\$38,649.60 per mile	4 trips for edges of bike path each direction			
Street Striping	\$1.99 linear ft	21120.00	\$42,028.80 per mile	4 lanes			
Parking Striping	\$1.99 linear ft	21120.00	\$42,028.80 per mile	Buffer (two strips) for each direction			
Bike Path Marker	\$5.41 square ft	3840.00	\$20,774.40 per mile	12 square feet per marking (MUTCD A24C). 8 markers per 0.05-			
				1 foot depth of regrading and 4 foot width (half lane) for sawcu			
Regrade Street	\$3,510.98 cubic yd	1564.44	\$5,492,733.16 per mile	regraded in this scenario.			
Widened Sidewalk	\$1,800.21 cubic yd	1466.67	\$2,640,308.00 per mile	6 inch curb and 5 foot sidewalk extension in both directions			
Traffic Signal Modifications	\$557,118.64 each	2.00	\$1,114,237.28 per mile	Includes each direction, 1 each way			
Total			\$9,510,827.24 per mile				

	II - Striped Bike Lanes (Arterial with Raised Median)								
Item	Item Cost Unit	Quantity	Quantity Cost Quantity Unit	Assumptions					
Remove Striping	\$3.79 linear ft	21120.00	\$80,044.80 per mile	4 trips across all lanes					
Bike Path Striping	\$1.83 linear ft	21120.00	\$38,649.60 per mile	4 trips for edges of bike path each direction					
Street Striping	\$1.99 linear ft	10560.00	\$21,014.40 per mile	2 lines across all lanes					
Bike Path Marker	\$5.41 square ft	3840.00	\$20,774.40 per mile	12 square feet per marking (MUTCD A24C). 8 markers per 0.05					
Total			\$160,483.20 per mile						

05-mile (160 per mile) per direction. % of section includes raised median.

5-mile (160 per mile) per direction.

05-mile (160 per mile) per direction. cut limit. Only a portion of the street will be

05-mile (160 per mile) per direction.

		II - St	riped B	ike Lanes	(Arterial w	vith Center Turn Lane)
Item	Item Cost	Unit	Quantity	Quantity Cost	Quantity Unit	Assumptions
Remove Striping	\$3.7	79 linear ft	31680.00	\$120,067.2	0 per mile	6 trips across all lanes
Bike Path Striping	\$1.8	33 linear ft	21120.00	\$38,649.6	0 per mile	4 trips for edges of bike path each direction
Street Striping	\$1.9	99 linear ft	21120.00	\$42,028.8	0 per mile	4 lines across all lanes
Bike Path Marker	\$5.4	11 square ft	3840.00	\$20,774.4	0 per mile	12 square feet per marking (MUTCD A24C). 8 markers per 0.05-
Total				\$221,520.0	0 per mile	

	II - Bike Lane (Striped Bike Lane Only)									
Item	Item Cost Unit	Quantity	Quantity Cost Quantity Unit	Assumptions						
Remove Striping	\$3.79 linear ft	10560.00	\$40,022.40 per mile	2 trips across all lanes						
Bike Path Striping	\$1.83 linear ft	21120.00	\$38,649.60 per mile	4 trips for edges of bike path each direction						
Bike Path Marker	\$5.41 square ft	3840.00	\$20,774.40 per mile	12 square feet per marking (MUTCD A24C). 8 markers per 0.05-						
Total			\$99,446.40 per mile							

			III - Bike	e Friendly	v Street
Item	Item Cost Unit	Quantity	Quantity Cost	Quantity Unit	Assumptions
					1 speed hump per 400 feet, or 12 per mile. 16 foot traversible p
Speed Humps	\$456.46 ton	98.00	\$44,731.62	per mile	of 40 feet. 145 pounds per cubic foot of asphalt
Stop signs	\$495.74 each	8.80	\$4,362.51	per mile	Signs are every 1,200 feet in both directions
Signage	\$495.74 each	26.40	\$13,087.54	per mile	Signage at each speed hump in both directions
Bike Path Marker	\$5.41 square ft	3840.00	\$20,774.40	per mile	12 square feet per marking (MUTCD A24C). 8 markers per 0.05-
Total			\$82,956.07	per mile	

5-mile (160 per mile) per direction.

5-mile (160 per mile) per direction.

e profile, 1:25 ramp slopes, roadway width

05-mile (160 per mile) per direction.

Source	Unit Cost(s)
Caltrans Contract Cost Data	Demolition, Clearing and Grubbing, Gravel Base, Grading, Asphalt Section, Loop Detectors, Shade Tree, Striping, Remove Striping, Bike Path Striping, Street Striping, Parking Striping, Bike Path Marker, Traffic Signal Modifications, Regrade Street, Widened Sidewalk, Speed Hump, Stop Signs, Signage, Bike Phase, Landscaping, Limit Lines, New Sidewalk, New Curb, High Visibility Crosswalk, Wayfinding Signage
Los Angeles Metro	Metro Bike Hub
SGL EIS/EIR Cost Estimate	Elevators
Federal Highway Administration	Raised Median, Floating Bus Stop, Curb Extension, Traffic Calming, Large Roundabout
Caltrans Comparative Bridge Cost	Bike/Pedestrian Bridge, Widen Undercrossing
City of Cerritos Recommendation (Feb. 2024)	ADA Curb Ramp
Cost Analysis of Bicycle Facilities: Cases from cities in the Portland, OR region	Pedestrian Activated Signal, HAWK, Bike Loops, Mini Roundabout
Intelligent Transportation Systems Joint Program Office	Signal Timing Optimization
TacticalUrbanismGuide.org	Bollards, Armadillos
GotItWholesale.com	Lighting, Fixture
Reliance-Foundry.com	Tree Grate
TruncatedDomesDepot.com	Tactile Warning Strips
Other First/Last Mile Projects	Seating Bench, Bus Stop Shelter, Waste Receptacle
Other Bridge Projects	Landmark Bike/Pedestrian Bridge (LA Kretz Equestrian Bridge & Taylor Yard Bridge)

# Appendix B - Itemized Cost List

# Prioritized Wheel Projects

Station	Number of Prioritized Wheel Projects	ROM Construction Cost (\$2023)	Construction Contingency (50%)	Total Construction Cost (\$2023)
Slauson/A Line	12	\$8,488,000	\$4,244,000	\$12,735,000
Pacific/Randolph	13	\$49,964,000	\$24,982,000	\$74,948,000
Florence/Salt Lake	14	\$39,843,000	\$19,922,000	\$59,767,000
Firestone	17	\$65,123,000	\$32,561,000	\$97,683,000
Gardendale	25	\$8,742,000	\$4,371,000	\$13,115,000
I-105/C Line	10	\$47,294,000	\$23,647,000	\$70,941,000
Paramount/Rosecrans	23	\$40,569,000	\$20,284,000	\$60,851,000
Bellflower	16	\$13,581,000	\$6,790,000	\$20,371,000
Pioneer	23	\$26,886,000	\$13,292,000	\$40,181,000
Total	153	\$300,490,000	\$150,093,000	\$450,592,000
Notes: ROM = rough order of magnit	ude, rounded to nearest \$1,000			

Contingency based on Caltrans PDPM for feasibility studies (Ch 20)

See memo for additional details regarding cost assumptions Cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

Totals may vary slightly due to rounding

	SLAUSON /A LINE STATION											
	Slauson Avenue/AT&SF ROW Shared-Use Path											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments			
I - Multi-Use Path												
	\$2,649,680.38 \$1,324,840.19 \$3,975,000.00											

Long Beach Avenue East and West Bike Lanes										
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments	
II - Bike Lane (Stripe Bike Lane Only)	2A	IIC Unit Cost	\$99,446.40	MI	2.11	\$209,968.13	\$104,984.06	\$315,000.00		
II - Bike Lane (Stripe Bike Lane Only)	2B	IIC Unit Cost	\$99,446.40	MI	2.15	\$213,792.75	\$106,896.37	\$321,000.00		
						\$423,760.87	\$211,880.44	\$636,000.00		

	Miramonte Boulevard Bike Lanes/Maie Avenue Bike Friendly Street										
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
		IIC Unit Cost	\$99,446.40	MI	1.00	\$99,874.72	\$49,937.36	\$150,000.00			
II - Bike Lane (Stripe Bike Lane Only)	3A	Stop Signs	\$495.74	EA	8.00	\$3,965.92	\$1,982.96	\$6,000.00			
		Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00	Bike phase intersecti		
III - Bike Friendly Street	3B	III Unit Cost	\$82,956.07	MI	1.55	\$128,581.90	\$64,290.95	\$193,000.00	Unit cost includes sig		
iii - bike i i lendiy Stillet	JD	Pedestrian Activated Signal	\$53,384.32	EA	2.00	\$106,768.64	\$53,384.32	\$160,000.00			
-						\$896,309.83	\$448,154.91	\$1,345,000.00			

		Compton Avenue Bike Lanes										
	Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
	II - Bike Lane (Stripe Bike Lane Only)	5A	IIC Unit Cost	\$99,446.40	MI	1.00	\$99,446.40	\$49,723.20	\$149,000.00			
	II - Bike Lane (Stripe Bike Lane Only)	5B	IIC Unit Cost	\$99,446.40	MI	0.77	\$76,573.73	\$38,286.86	\$115,000.00	Unit cost includes sig		
-							\$176,020.13	\$88,010.06	\$264,000.00			

	Holmes Avenue Protected Bike Lanes										
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
IV - Protected Bike Lanes (Curb Lanes Only)	7-8	IVC Unit Cost	\$1,253,833.68	MI	1.00	\$1,253,833.68	\$626,916.84	\$1,881,000.00	Includes approximate		
IV - FIOLECIEU DIKE Lalles (Cuib Lalles Olly)	7-0	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00	Bike phase intersecti		
						\$1,810,952.32	\$905,476.16	\$2,717,000.00			

		Randolph Street Bike Lanes										
	Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
	II - Bike Lane (Raised Median)	13	IIB Unit Cost	\$160,483.20	MI	0.32	\$51,354.62	\$25,677.31	\$77,000.00			
_							\$51,354.62	\$25,677.31	\$77,000.00			

		Long Beach Avenue/Metro A Line ROW Bike Path									
	Project Type Project ID(s) Description Unit Cost Unit Quantity Total Construction Cost Contingency Total Cost Comments										
	I - Bike Path	114	IA Unit Cost	\$2,650,512.39	MI	0.31	\$821,658.84	\$410,829.42	\$1,232,000.00		
_							\$821,658.84	\$410,829.42	\$1,232,000.00		

						Nor	n-Linear Wheel Projects			
	Project Type Project ID(s)		Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
	Signal Timing Optimization	120	TSP Unit Cost	\$4,568.51	EA	28.00	\$127,918.28	\$63,959.14	\$192,000.00	
	Bicycle and Scooter Parking	121	Bike Hub Allowance	\$1,493,747.49	EA	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00	assumes full service
	Bicycle and Scooler Parking	121	Parking Unit Cost	\$4,207.84	MI	8.80	\$37,028.99	\$18,514.50	\$56,000.00	
-							\$1,658,694.76	\$829,347.38	\$2,489,000.00	

#### TOTAL SUM: \$12,735,000.00

Note: totals may vary slightly due to rounding

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

ction required for this segment not included in unit cost signage, speed humps, and stop signs

signage, speed humps, and stop signs

ately 2 bike phase intersections in unit cost ction required for this segment not included in unit cost

ice bike hub

	PACIFIC/RANDOLPH STATION												
Randolph Street Bikeway (Rail to River Segment B/Randolph Corridor Active Transportation Grant)													
Project Type		Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comm			
Bike Path (TBD)		1A	IA Unit Cost	\$2,650,512.39	MI	1.66	\$4,399,850.56	\$2,199,925.28	\$6,600,000.00				
IV - Protected Bike Lanes (Raised Buffe		1B	IVB Unit Cost	\$5,337,786.08	MI	2.48	\$13,212,692.47	\$6,606,346.24	\$19,819,000.00	Includes			
IV - FIOLECIEU DIKE Lalles (Kalsed Bulle	ii )	IB	Bike Phase Intersection	\$557,118.64	EA	-2.00	-\$1,114,237.28	-\$557,118.64	-\$1,671,000.00	Bike pha			
							\$16,498,305.75	\$8,249,152.88	\$24,748,000.00				

	Randolph Street Bikeway Bridges													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comm					
New Bridge	10	Landmark Bike/Ped Bridge	\$3,165.78	SF	6600.00	\$20,894,115.00	\$10,447,057.50	\$31,341,000.00	Assume					
New Bridge	10	Standard Bike/Ped Bridge	\$477.38	SF	2400.00	\$1,145,712.00	\$572,856.00	\$1,719,000.00	Assume					
						\$22,039,827.00	\$11,019,913.50	\$33,060,000.00						

Randolph Street Bikeway East of I-710 (Randolph Corridor Active Transportation Grant)												
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comn			
	1D	IVA Unit Cost	\$1,417,936.08	MI	0.25	\$354,484.02	\$177,242.01	\$532,000.00				
IV - Protected Bike Lanes (K71 Bollards)		IVA Unit Cost	\$1,417,936.08	MI	1.07	\$1,517,191.61	\$758,595.80	\$2,276,000.00	Include			
		Bike Phase Intersection	\$557,118.64	EA	-1.00	-\$557,118.64	-\$278,559.32	-\$836,000.00	Bike ph			
						\$1,314,556.99	\$657,278.49	\$1,972,000.00				

			Pacific Bo	uleva	rd/Long Bea	ach Boulevard Bike Lanes			
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comm
IV - Protected Bike Lanes (Curb Lanes Only)	2A	IVC Unit Cost	\$1,253,833.68	MI	0.78	\$977,356.66	\$488,678.33	\$1,466,000.00	Includes
II - Striped Bike Lanes - (Arterial with Raised Median)		IIB Unit Cost	\$160,483.20	MI	0.47	\$75,750.85	\$37,875.43	\$114,000.00	
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2B	IIA Unit Cost	\$221,520.00	MI	0.27	\$58,889.39	\$29,444.70	\$88,000.00	
In - Striped bike Lanes - (Arterial with Center Full Lane)		IIA Unit Cost	\$221,520.00	MI	0.78	\$171,912.47	\$85,956.24	\$258,000.00	
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.54	\$677,070.19	\$338,535.09	\$1,016,000.00	Includes
IV - FIOLECIEU DIKE Lalles (Culib Lalles Ofly)		Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00	Bike ph
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2C	IIA Unit Cost	\$221,520.00	MI	0.54	\$119,620.80	\$59,810.40	\$179,000.00	Alterna
IV - Protected Bike Lanes (Curb Lanes Only)	2D	IVC Unit Cost	\$1,253,833.68	MI	1.54	\$1,930,903.87	\$965,451.93	\$2,896,000.00	Includes
IV - FIOLECIEU DIKE Lalles (Cul D Lalles Ofly)	20	Bike Phase Intersection	\$557,118.64	EA	7.00	\$3,899,830.48	\$1,949,915.24	\$5,850,000.00	Bike ph
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2D	IIA Unit Cost	\$221,520.00	MI	1.54	\$341,140.80	\$170,570.40	\$512,000.00	Alterna
						\$8,348,832.55	\$4,174,416.28	\$12,524,000.00	

	Non-Linear Wheel Projects													
	Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comn				
	Signal Timing Optimization	37	TSP Unit Cost	\$4,568.51	EA	48.00	\$219,288.48	\$109,644.24	\$329,000.00					
	Bicycle and Scooter Parking	38	Bike Hub Allowance	\$1,493,747.49	EA	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00	assume				
	Bicycle and Scooler Parking		Parking Unit Cost	\$4,207.84	MI	11.70	\$49,231.73	\$24,615.86	\$74,000.00					
-							\$1,762,267.70	\$881,133.85	\$2,644,000.00					

TOTAL SUM: \$74,948,000.00

Note: totals may vary slightly due to rounding

#### ments

les approximately 5 bike phase intersections in unit cost hase intersections not required for this segment included in unit cost

#### nments

mes 12 foot width mes 12 foot width

#### nments

des approximately 2 bike phase intersections in unit cost phase intersections not required for this segment included in unit cost

#### ments

des approximately 2 bike phase intersections in unit cost

des approximately 1 bike phase intersection in unit cost

phase intersection required for this segment not included in unit cost

ate low-cost project for above project. Not included in total cost estimate.

des approximately 3 bike phase intersections in unit cost

phase intersections required for this segment not included in unit cost

ate low-cost project for above project. Not included in total cost estimate.

#### nments

mes full service bike hub

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

		FLORENCE/SALT L	NCE/SALT LAKE STATION						
			Avenue/SGL ROW/Maywood Avenue/UPRR ROW Bikeways						
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
IV - Protected Bike Lanes (K71 Bollards)	1A	IVA Unit Cost	\$1,417,936.08	MI	0.55	\$784,406.36	\$392,203.18	\$1,177,000.00	
II - Bike Lane (Stripe Bike Lane Only)	1B	IIC Unit Cost	\$99,446.40	MI	0.21	\$20,621.20	\$10,310.60	\$31,000.00	
III - Bike Friendly Street	1B	III Unit Cost	\$82,956.07	MI	0.21	\$17,201.76	\$8,600.88	\$26,000.00	Unit cost includes signage, speed humps, and stop signs. A
I - Multi-Use Path	1C	IB Unit Cost	\$3,558,850.98	MI	1.74	\$6,192,400.71	\$3,096,200.35	\$9,289,000.00	
						\$6,997,428.27	\$3,498,714.13	\$10,497,000.00	

	Salt Lake Avenue/SGL ROW Bikeways												
Project Type	Project ID(s)	Description	Unit Cost	Unit (	Quantity	Total Construction Cost	Contingency	al Cost Comments					
IV - Protected Bike Lanes (Raised Cycle Track)	2	IVD Unit Cost	\$9,510,827.24	MI	0.10	\$951,082.72	\$475,541.36	7,000.00 Assumes more conservative cost consideration					
TV - FIOLECIEU DIKE Lalles (Kalsed Cycle Hack)	Ζ.	IVD Unit Cost	\$9,510,827.24	MI	1.37	\$13,029,833.31	\$6,514,916.66	15,000.00 Assumes more conservative cost consideration					
IV - Protected Bike Lanes (Raised Cycle Track)	3	IVD Unit Cost	\$9,510,827.24	MI	0.83	\$7,858,681.54	\$3,929,340.77	38,000.00 Assumes more conservative cost consideration					
						\$21,839,597.58	\$10,919,798.79	50,000.00					

						Florence Avenue	Bike Lanes		
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	4A	IIA Unit Cost	\$221,520.00	MI	2.24	\$495,927.68	\$247,963.84	\$744,000.00	
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	4B	IIA Unit Cost	\$221,520.00	MI	0.84	\$185,534.55	\$92,767.28	\$278,000.00	
IV - Protected Bike Lanes (K71 Bollards)	4C	IVA Unit Cost	\$1,417,936.08	MI	1.80	\$2,552,284.94	\$1,276,142.47	\$3,828,000.00	Includes approximately 4 bike phase intersections in unit
IV - FIOLECIEU DIKE Lalles (K/T Dollal us)	40	Bike Phase Intersection	\$557,118.64	EA	4.00	\$2,228,474.56	\$1,114,237.28	\$3,343,000.00	Bike phase intersections required for this segment not in
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	4C	IIA Unit Cost	\$221,520.00	MI	1.80	\$398,736.00	\$199,368.00	\$598,000.00	Alternate low-cost project for above project. Not include
		New Sidewalk	\$1,093,575.30	MI	0.16	\$174,972.05	\$87,486.02	\$262,000.00	assumes 80% of unit cost required - 8 foot sidewalk
		Pedestrian Lights	\$704,000.00	MI	0.16	\$112,640.00	\$56,320.00	\$169,000.00	assumes new streetlights as conservative estimate
New Sidewalk	4D	New Sidewalk	\$820,181.47	MI	0.09	\$73,816.33	\$36,908.17	\$111,000.00	assumes 80% of unit cost required - 8 foot sidewalk
	40	Pedestrian Lights	\$704,000.00	MI	0.09	\$63,360.00	\$31,680.00	\$95,000.00	assumes new streetlights as conservative estimate
		New Sidewalk	\$820,181.47	MI	0.30	\$246,054.44	\$123,027.22	\$369,000.00	assumes 80% of unit cost required - 8 foot sidewalk
		Ped-Activated Signals (2-way)	\$53,384.32	EA	8.00	\$427,074.56	\$213,537.28	\$641,000.00	
IV - Protected Bike Lanes (Curb Lanes Only)	4 E	IVC Unit Cost	\$1,253,833.68	MI	0.85	\$1,065,758.63	\$532,879.31	\$1,599,000.00	Includes approximately 2 bike phase intersections in unit
IV - FIOLECIEU DIKE Lalles (Curb Lalles Ofly)	4L	Bike Phase Intersection	\$557,118.64	EA	3.00	\$1,671,355.92	\$835,677.96	\$2,507,000.00	Bike phase intersections required for this segment not in
						\$9,297,253.67	\$4,648,626.83	\$13,946,000.00	

		Non-Linear Wheel Projects												
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments					
Signal Timing Optimization	94	TSP Unit Cost	\$4,568.51	EA	37.00	\$169,034.87	\$84,517.44	\$254,000.00						
Bicycle and Scooter Parking	95	Bike Hub Allowance	\$1,493,747.49	EA	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00	assumes full service bike hub					
bicycle and scooler Farking		Parking Unit Cost	\$4,207.84	MI	11.00	\$46,286.24	\$23,143.12	\$69,000.00						
						\$1,709,068.60	\$854,534.30	\$2,564,000.00						

TOTAL SUM: \$59,767,000.00

Note: totals may vary slightly due to rounding

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

Alternate low-cost project for above project. Not included in total cost estimate

t cost
ncluded in unit cost
ed in total cost estimate.
t cost
ncluded in unit cost

	FIRESTONE STATION												
Atlantic Avenue Corridor Bike Lanes													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comm				
II - Bike Lane (Stripe Bike Lane Only)	1A	IIC Unit Cost	\$99,446.40	MI	1.05	\$104,059.53	\$52,029.76	\$156,000.00					
IV - Protected Bike Lanes (Curb Lanes Only)	1B	IVC Unit Cost	\$1,253,833.68	MI	1.08	\$1,350,391.26	\$675,195.63	\$2,026,000.00	Includes				
IV - Protected blke Laries (Curb Laries Orliy)		Bike Phase Intersection	\$557,118.64	EA	2.00	\$1,114,237.28	\$557,118.64	\$1,671,000.00	Bike pha				
IV - Protected Bike Lanes (Curb Lanes Only)	1C	IVC Unit Cost	\$1,253,833.68	MI	0.46	\$576,763.49	\$288,381.75	\$865,000.00	Includes				
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	1C	IIA Unit Cost	\$221,520.00	MI	0.46	\$101,899.20	\$50,949.60	\$153,000.00	Alternate				
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	1C	IIA Unit Cost	\$221,520.00	MI	0.20	\$44,304.00	\$22,152.00	\$66,000.00					
III - Bike Friendly Street	1D	III Unit Cost	\$82,956.07	MI	1.04	\$86,513.82	\$43,256.91	\$130,000.00	Unit cost				
						\$3,276,269.37	\$1,638,134.69	\$4,914,000.00					

				Firest	one Boule	/ard Bike Lanes			
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comm
II - Striped Bike Lanes - (Arterial with Raised Median)	2A	IIB Unit Cost	\$160,483.20	MI	3.00	\$481,449.60	\$240,724.80	\$722,000.00	
		IIB Unit Cost	\$160,483.20	MI	0.91	\$146,039.71	\$73,019.86	\$219,000.00	
		Standard Bike/Ped Bridge	\$477.38	SF	5100.00	\$2,434,638.00	\$1,217,319.00	\$3,652,000.00	Assumes
		IIB Unit Cost \$160,483.20 MI 0.32 \$51,354.62	\$51,354.62	\$25,677.31	\$77,000.00	Guardra			
II - Striped Bike Lanes - (Arterial with Raised Median)	2B	Pedestrian Activated Signal	\$53,384.32	EA	4.00	\$213,537.28	\$106,768.64	\$320,000.00	
		High Visibility Crosswalk	\$1,038.72	EA	2.00	\$2,077.44	\$1,038.72	\$3,000.00	
		Standard Bike/Ped Bridge	\$477.38	SF	5700.00	\$2,721,066.00	\$1,360,533.00	\$4,082,000.00	Assumes
		Standard Bike/Ped Bridge	\$477.38	SF	2748.00	\$1,311,840.24	\$655,920.12	\$1,968,000.00	Assumes
						\$7,362,002.90	\$3,681,001.45	\$11,043,000.00	
II - Striped Bike Lanes - (Arterial with Raised Median)	2B	IIB Unit Cost Pedestrian Activated Signal High Visibility Crosswalk Standard Bike/Ped Bridge	\$160,483.20 \$53,384.32 \$1,038.72 \$477.38	MI EA EA SF	0.32 4.00 2.00 5700.00	\$51,354.62 \$213,537.28 \$2,077.44 \$2,721,066.00 \$1,311,840.24	\$25,677.31 \$106,768.64 \$1,038.72 \$1,360,533.00 \$655,920.12	\$77,000.00 \$320,000.00 \$3,000.00 \$4,082,000.00 \$1,968,000.00	Guaro Assur Assur

				Patat	a Av I	Extension/L	JPRR ROW Bike Path			
	Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comm
[	I - Bike Path	5B	IA Unit Cost	\$2,650,512.39	MI	0.62	\$1,643,317.68	\$821,658.84	\$2,465,000.00	
		5C	IA Unit Cost	\$2,650,512.39	MI	1.00	\$2,650,512.39	\$1,325,256.19	\$3,976,000.00	
	I - Bike Path		Landmark Bike/Ped Bridge	\$3,165.78	SF	6600.00	\$20,894,115.00	\$10,447,057.50	\$31,341,000.00	Assumes
			Standard Bike/Ped Bridge	\$477.38	SF	3000.00	\$1,432,140.00	\$716,070.00	\$2,148,000.00	Assumes
-							\$26,620,085.07	\$13,310,042.53	\$39,930,000.00	

			Southern /	Avenu	e/Stewart a	and Gray Road Bike Lanes			
Project Type	Project ID(s)	Description L		Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comme
II - Bike Lane (Stripe Bike Lane Only)	13A	IIC Unit Cost	\$99,446.40	MI	0.66	\$65,634.62	\$32,817.31	\$98,000.00	
I - Bike Path		IA Unit Cost	\$2,650,512.39	MI	0.26	\$701,995.04	\$350,997.52	\$1,053,000.00	
	13B	Landmark Bike/Ped Bridge	\$3,165.78	SF	6600.00	\$20,894,115.00	\$10,447,057.50	\$31,341,000.00	Assumes
		Standard Bike/Ped Bridge	\$477.38	SF	3000.00	\$1,432,140.00	\$716,070.00	\$2,148,000.00	Assumes
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	15B	IIA Unit Cost	\$221,520.00	MI	0.21	\$46,519.20	\$23,259.60	\$70,000.00	
II - Striped Bike Lanes - (Arterial with Center Turn Lane)		IIA Unit Cost	\$221,520.00	MI	0.93	\$207,113.42	\$103,556.71	\$311,000.00	
IV - Protected Bike Lanes (K71 Bollards)	7	IVA Unit Cost	\$1,417,936.08	MI	1.22	\$1,736,621.38	\$868,310.69	\$2,605,000.00	Includes
TV - TTOLECTED DIKE Lanes (K7 T Dollar US)		Bike Phase Intersection	\$557,118.64	EA	2.00	\$1,114,237.28	\$557,118.64	\$1,671,000.00	Bike phas
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	7	IIA Unit Cost	\$221,520.00	MI	1.22	\$271,307.27	\$135,653.64	\$407,000.00	Alternate
						\$26,198,375.94	\$13,099,187.97	\$39,297,000.00	

				No	n-Linear W	heel Projects			
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comm
Signal Timing Optimization	68	TSP Unit Cost	\$4,568.51	EA	28.00	\$127,918.28	\$63,959.14	\$192,000.00	
Bicycle and Scooter Parking	69	Bike Hub Allowance	\$1,493,747.49	EA	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00	assumes
Dicycle and Scooler Parking	07	Parking Unit Cost	\$4,207.84	MI	10.50	\$44,182.32	\$22,091.16	\$66,000.00	
						\$1,665,848.09	\$832,924.05	\$2,499,000.00	

#### TOTAL SUM: \$97,683,000.00

Note: totals may vary slightly due to rounding

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

#### ments

es approximately 2 bike phase intersections in unit cost hase intersections required for this segment not included in unit cost es approximately 1 bike phase intersection in unit cost

ate low-cost project for above project. Not included in total cost estimate.

ost includes signage, speed humps, and stop signs

#### ments

mes 425 foot length and 12 foot width drail cost included in contingency

mes 475 foot length and 12 foot width mes 229 foot length and 12 foot width

#### ments

mes 550 foot length and 12 foot length mes 250 foot length and 12 foot width

#### ments

nes 550 foot length and 12 foot length nes 250 foot length and 12 foot width

es approximately 2 bike phase intersections in unit cost hase intersections required for this segment not included in unit cost ate low-cost project for above project. Not included in total cost estimate

#### ments

mes full service bike hub

GARDENDALE STATION									
	Gardendale Street/Foster Road Bike Lanes								
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
I - Bike Path	1A	IA Unit Cost	\$2,650,512.39	MI	0.15	\$391,286.51	\$195,643.25	\$587,000.00	
	1B	IIA Unit Cost	\$221,520.00	MI	0.31	\$68,245.26	\$34,122.63	\$102,000.00	
III - Striped Bike Lanes - (Arterial with Center Turn Lane)		Stop Signs	\$495.74	EA	4.00	\$1,982.96	\$991.48	\$3,000.00	Not included in unit cost
III - Striped bike Laries - (Arterial with Center Turr Larie)	IB	Speed Humps	\$44,731.62	MI	0.31	\$13,780.79	\$6,890.40	\$21,000.00	Not included in unit cost
		Signage	\$9,914.80	MI	0.31	\$3,054.52	\$1,527.26	\$5,000.00	Not included in unit cost
II - Bike Lane (Stripe Bike Lane Only)	1C	IIC Unit Cost	\$99,446.40	MI	0.09	\$9,177.82	\$4,588.91	\$14,000.00	
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	1D	IIA Unit Cost	\$221,520.00	MI	0.24	\$53,408.60	\$26,704.30	\$80,000.00	
IV - Protected Bike Lanes (K71 Bollards)	ID	IVA Unit Cost	\$1,417,936.08	MI	1.63	\$2,317,819.76	\$1,158,909.88	\$3,477,000.00	Includes approximately 3 bike phase intersections in unit cost
II - Striped Bike Lanes - (Arterial with Center Turn Lane)		IIA Unit Cost	\$221,520.00	MI	1.63	\$362,106.19	\$181,053.10	\$543,000.00	Alternate low-cost project for above project. Not included in total cost estimate.
						\$2,858,756.23	\$1,429,378.12	\$4,289,000.00	

	Downey Avenue Bike Lanes							
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost Comments
II - Striped Bike Lanes - (Arterial with Raised Median)	11A	IIB Unit Cost	\$160,483.20	MI	1.41	\$226,281.31	\$113,140.66	\$339,000.00
IV - Protected Bike Lanes (Curb Lanes Only)	11B	IVC Unit Cost	\$1,253,833.68	MI	0.63	\$789,915.22	\$394,957.61	\$1,185,000.00 Includes approximately 1 bike phase intersection in unit cost
IN - I TOTECTED DIKE Lattes (Cull b Lattes Ofly)	TID	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00 Bike phase intersection required for this segment not included in unit cost
IV - Protected Bike Lanes (Curb Lanes Only)	11B	IIB Unit Cost	\$160,483.20	MI	0.63	\$101,104.42	\$50,552.21	\$152,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
III - Bike Friendly Street	10	III Unit Cost	\$82,956.07	MI	0.30	\$24,832.66	\$12,416.33	\$37,000.00 Unit cost includes signage, speed humps, and stop signs
IV - Protected Bike Lanes (Curb Lanes Only)	28	IVC Unit Cost	\$1,253,833.68	MI	0.52	\$651,257.48	\$325,628.74	\$977,000.00
II - Striped Bike Lanes - (Arterial with Raised Median)	28	IIB Unit Cost	\$160,483.20	MI	0.52	\$83,357.06	\$41,678.53	\$125,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
						\$2,249,405.30	\$1,124,702.65	\$3,374,000.00

Garfield Avenue and Connecting Bikeways Project Type Project ID(s) Description Unit Cost Unit Quantity Total Construction Cost Contingency Total Cost Comments II - Striped Bike Lanes - (Arterial with Center Turn Lane) IIA Unit Cost \$221,520.00 MI 1.98 \$439,604.23 \$219,802.11 \$659,000.00 12 IIB Unit Cost \$160,483.20 MI 0.24 \$38,515.97 \$19,257.98 \$58,000.00 II - Striped Bike Lanes - (Arterial with Raised Median) \$18,000.00 assumes only one s IIB Unit Cost \$12,036.24 \$160,483.20 MI 0.08 \$6,018.12 II - Bike Lane (Stripe Bike Lane Only) 14 IIC Unit Cost \$99,446.40 MI 0.23 \$23,003.63 \$11,501.81 \$35,000.00 48 0.34 III - Bike Friendly Street III Unit Cost \$82,956.07 MI \$28,195.62 \$14,097.81 \$42,000.00 Unit cost includes III - Bike Friendly Street 50 III Unit Cost \$82,956.07 MI 0.36 \$30,201.04 \$15,100.52 \$45,000.00 Unit cost includes III - Bike Friendly Street \$82,956.07 MI 56 III Unit Cost 0.42 \$34,664.63 \$17,332.32 \$52,000.00 Unit cost includes \$909,000.00 \$606,221.35 \$303,110.68

			Hollyd	dale Are	a Access I	mprovement Projects		
Project Type	Project ID(s)	Description	Unit Cost	Unit (	Quantity	Total Construction Cost	Contingency	Total Cost Comments
III - Bike Friendly Street	7A	III Unit Cost	\$82,956.07	MI	0.18	\$15,118.33	\$7,559.16	\$23,000.00 Unit cost includes signage, speed humps, and stop signs
		IIC Unit Cost	\$99,446.40	MI	0.61	\$60,662.30	\$30,331.15	\$91,000.00
- Bike Lane (Stripe Bike Lane Only)	7B	Stop Signs	\$495.74	EA	8.00	\$3,965.92	\$1,982.96	\$6,000.00 Not included in unit cost
II - Dike Larie (Stripe Dike Larie Orliy)	70	Speed Humps	\$44,731.62	MI	0.61	\$27,286.29	\$13,643.14	\$41,000.00 Not included in unit cost
		Signage	\$9,914.80	MI	0.61	\$6,048.03	\$3,024.01	\$9,000.00 Not included in unit cost
III - Bike Friendly Street	51	III Unit Cost	\$82,956.07	MI	0.47	\$39,045.52	\$19,522.76	\$59,000.00 Unit cost includes signage, speed humps, and stop signs
III - Bike Friendly Street	52	III Unit Cost	\$82,956.07	MI	0.62	\$51,432.76	\$25,716.38	\$77,000.00 Unit cost includes signage, speed humps, and stop signs
III - Bike Friendly Street	53	III Unit Cost	\$82,956.07	MI	0.56	\$46,455.40	\$23,227.70	\$70,000.00 Unit cost includes signage, speed humps, and stop signs
III - Dike i Hendiy Street		Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00 Bike phase intersection required for this segment not included in unit cost
III - Bike Friendly Street	54	III Unit Cost	\$82,956.07	MI	0.17	\$14,102.53	\$7,051.27	\$21,000.00 Unit cost includes signage, speed humps, and stop signs
III - DIKE I HEIRIN STIEEL	54	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00 Bike phase intersection required for this segment not included in unit cost
III - Bike Friendly Street	56	III Unit Cost	\$82,956.07	MI	0.33	\$27,375.50	\$13,687.75	\$41,000.00 Unit cost includes signage, speed humps, and stop signs
						\$1,405,729,86	\$702,864.93	\$2,110,000,00

Non-Linear Wheel Projects									
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
Signal Timing Optimization	57	TSP Unit Cost	\$4,568.51	EA	17.00	\$77,664.67	\$38,832.34	\$116,000.00	
Bicycle and Scooter Parking	58	Bike Hub Allowance	\$1,493,747.49	EA	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00	assumes full service
Bicycle and Scooler Farking		Parking Unit Cost	\$4,207.84	MI	12.00	\$50,494.08	\$25,247.04	\$76,000.00	
						\$1,621,906.24	\$810,953.12	\$2,433,000.00	

#### TOTAL SUM: \$13,115,000.00

Note: totals may vary slightly due to rounding

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

side of street needs bike lane						
signage, speed humps, and stop signs						
signage, speed humps, and stop signs						
signage, speed humps, and stop signs						

ce bike hub

				1-1	05/C LIN	E STATION						
		Ce	entury Boulev	/ard/N	Martin Luth	er King Jr. Boulevard Bike L	anes					
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments			
II - Bike Lane (Stripe Bike Lane Only)	1A	IIC Unit Cost	\$99,446.40	MI	0.54	\$53,539.25	\$26,769.63	\$80,000.00				
III - Bike Friendly Street	1B	III Unit Cost	\$82,956.07	MI	0.30	\$24,626.61	\$12,313.30	\$37,000.00	Unit cost includes			
New Bridge	1C	Landmark Bike/Ped Bridge	\$3,165.78	SF	12000.00	\$37,989,300.00	\$18,994,650.00	\$56,984,000.00	Assumes 1,000 fo			
IV - Protected Bike Lanes (K71 Bollards)	1D	IVA Unit Cost	\$1,417,936.08	MI	0.48	\$680,609.32	\$340,304.66	\$1,021,000.00	Includes approxin			
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	1D	IIA Unit Cost	\$221,520.00	MI	0.48	\$106,329.60	\$53,164.80	\$159,000.00	Alternate low-cos			
IV - Protected Bike Lanes (K71 Bollards)	1D	IVA Unit Cost	\$1,417,936.08	MI	1.57	\$2,226,159.65	\$1,113,079.82	\$3,339,000.00	Includes approxin			
IV - FIOLECTED DIRE Laties (R7 I Bolial US)	ID	Bike Phase Intersection	\$557,118.64	EA	3.00	\$1,671,355.92	\$835,677.96	\$2,507,000.00	Bike phase interse			
II - Bike Lane (Stripe Bike Lane Only)	1D	IIC Unit Cost	\$99,446.40	MI	1.57	\$156,130.85	\$78,065.42	\$234,000.00	Alternate low-cos			
						\$42,645,590.75	\$21,322,795.37	\$63,968,000.00				

Arthur Avenue Bicycle Friendly Street													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments				
New Bridge	2A	Standard Bike/Ped Bridge	\$477.38	SF	6300.00	\$3,007,494.00	\$1,503,747.00	\$4,511,000.00	Assumes 450				
III - Bike Friendly Street	2B	III Unit Cost	\$82,956.07	MI	0.37	\$30,693.74	\$15,346.87	\$46,000.00	Unit cost incl				
						\$3,038,187.74	\$1,519,093.87	\$4,557,000.00					
	New Bridge	New Bridge 2A	New Bridge 2A Standard Bike/Ped Bridge	Project TypeProject ID(s)DescriptionUnit CostNew Bridge2AStandard Bike/Ped Bridge\$477.38	Project TypeProject ID(s)DescriptionUnit CostUnitNew Bridge2AStandard Bike/Ped Bridge\$477.38SF	Project TypeProject ID(s)DescriptionUnit CostUnitQuantityNew Bridge2AStandard Bike/Ped Bridge\$477.38SF6300.00	Project TypeProject ID(s)DescriptionUnit CostUnitQuantityTotal Construction CostNew Bridge2AStandard Bike/Ped Bridge\$477.38SF6300.00\$3,007,494.00III - Bike Friendly Street2BIII Unit Cost\$82,956.07MI0.37\$30,693.74	Project TypeProject ID(s)DescriptionUnit CostUnitQuantityTotal Construction CostContingencyNew Bridge2AStandard Bike/Ped Bridge\$477.38SF6300.00\$3,007,494.00\$1,503,747.00III - Bike Friendly Street2BIII Unit Cost\$82,956.07MI0.37\$30,693.74\$15,346.87	Project TypeProject ID(s)DescriptionUnit CostUnitQuantityTotal Construction CostContingencyTotal CostNew Bridge2AStandard Bike/Ped Bridge\$477.38SF6300.00\$3,007,494.00\$1,503,747.00\$4,511,000.00III - Bike Friendly Street2BIII Unit Cost\$82,956.07MI0.37\$30,693.74\$15,346.87\$46,000.00				

	Industrial Avenue Bicycle Friendly Street													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comment					
III - Bike Friendly Street	2	III Unit Cost	\$82,956.07	MI	0.62	\$51,187.39	\$25,593.70	\$77,000.00	Unit cost inc					
III - Dike Menaly Street	5	Stop Signs	\$495.74	EA	24.00	\$11,897.76	\$5,948.88	\$18,000.00	Additional st					
						\$63,085.15	\$31,542.58	\$95,000.00						

	Non-Linear Wheel Projects												
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments				
Signal Timing Optimization	10	TSP Unit Cost	\$4,568.51	EA	8.00	\$36,548.08	\$18,274.04	\$55,000.00					
Bicycle and Scooter Parking	11	Bike Hub Allowance	\$1,493,747.49	EA	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00	assumes full s				
Dicycle and Scooler Farking	11	Parking Unit Cost	\$4,207.84	MI	4.00	\$16,831.36	\$8,415.68	\$25,000.00					
						\$1,547,126.93	\$773,563.47	\$2,321,000.00					

#### TOTAL SUM: \$70,941,000.00

Note: totals may vary slightly due to rounding

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

cludes signage, speed humps, and stop signs 000 foot length and 12 foot width

opproximately 1 bike phase intersections in unit cost

ow-cost project for above project. Not included in total cost estimate

pproximately 3 bike phase intersections in unit cost

intersections required for this segment not included in unit cost

w-cost project for above project. Not included in total cost estimate.

nts

50 foot length and 14 foot width

ncludes signage, speed humps, and stop signs

nts

includes signage, speed humps, and stop signs

I stop signs required for this segment

#### nts

Ill service bike hub

PARAMOUNT/ROSECRANS STATION														
SGL ROW Bike Path														
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments					
I - Multi-Use Path	1A	IB Unit Cost	\$3,558,850.98	MI	0.91	\$3,238,554.39	\$1,619,277.20	\$4,858,000.00						
I - Multi-Use Path	1B	IB Unit Cost	\$3,558,850.98	MI	1.07	\$3,807,970.55	\$1,903,985.27	\$5,712,000.00						
						\$7,046,524.94	\$3,523,262.47	\$10,570,000.00						

			F	Param	ount Boule	vard Bike Lanes		
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost Comments
IV - Protected Bike Lanes (Curb Lanes Only)	2B	IVC Unit Cost	\$1,253,833.68	MI	0.37	\$463,918.46	\$231,959.23	\$696,000.00 Includes approximately 1 bike phase intersections in unit cost
I - Striped Bike Lanes - (Arterial with Center Turn Lane)	2B	IIA Unit Cost	\$221,520.00	MI	0.37	\$81,962.40	\$40,981.20	\$123,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2B	IVC Unit Cost	\$1,253,833.68	MI	0.15	\$188,075.05	\$94,037.53	\$282,000.00 Includes approximately 0 bike phase intersections in unit cost
TV - FTOTECTED DIKE Laries (Curb Laries Offiy)	20	Bike Phase Intersection	\$557,118.64	EA	2.00	\$1,114,237.28	\$557,118.64	\$1,671,000.00 Additional bike phase intersections required for this segment
II - Bike Lane (Stripe Bike Lane Only)	2B	IIC Unit Cost	\$99,446.40	MI	0.15	\$14,916.96	\$7,458.48	\$22,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.34	\$426,303.45	\$213,151.73	\$639,000.00 Includes approximately 1 bike phase intersections in unit cost
II - Bike Lane (Stripe Bike Lane Only)	2C	IIC Unit Cost	\$99,446.40	MI	0.34	\$33,811.78	\$16,905.89	\$51,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.13	\$162,998.38	\$81,499.19	\$244,000.00 Includes approximately 0 bike phase intersections in unit cost
IV - FIOLECTED DIRE Laties (Curb Laties Ofly)	20	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00 Additional bike phase intersection required for this segment
II - Bike Lane (Stripe Bike Lane Only)	2C	IIC Unit Cost	\$99,446.40	MI	0.13	\$12,928.03	\$6,464.02	\$19,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.87	\$1,090,835.30	\$545,417.65	\$1,636,000.00 Includes approximately 2 bike phase intersections in unit cost
IV - FIOLECIEU DIKE LAITES (CUI D'LAITES OTILY)	20	Bike Phase Intersection	\$557,118.64	EA	3.00	\$1,671,355.92	\$835,677.96	\$2,507,000.00 Additional bike phase intersections required for this segment
II - Bike Lane (Stripe Bike Lane Only)	2C	IIC Unit Cost	\$99,446.40	MI	0.87	\$86,518.37	\$43,259.18	\$130,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.12	\$150,460.04	\$75,230.02	\$226,000.00
II - Bike Lane (Stripe Bike Lane Only)	2C	IIC Unit Cost	\$99,446.40	MI	0.12	\$11,933.57	\$5,966.78	\$18,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.39	\$488,995.14	\$244,497.57	\$733,000.00 Includes approximately 1 bike phase intersection in unit cost
IV - FIOLECIEU DIKE LAITES (CUI D'LAITES OTILY)	20	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00 Additional bike phase intersection required for this segment
- Striped Bike Lanes - (Arterial with Center Turn Lane)	2C	IIA Unit Cost	\$221,520.00	MI	0.39	\$86,392.80	\$43,196.40	\$130,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.61	\$764,838.54	\$382,419.27	\$1,147,000.00 Includes approximately 1 bike phase intersection in unit cost
II - Bike Lane (Stripe Bike Lane Only)	2C	IIC Unit Cost	\$99,446.40	MI	0.61	\$60,662.30	\$30,331.15	\$91,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2D	IVC Unit Cost	\$1,253,833.68	MI	1.90	\$2,387,495.39	\$1,193,747.70	\$3,581,000.00 Includes approximately 4 bike phase intersections in unit cost
IV - FIOLECIEU DIKE LAHES (CUID LAHES ONLY)	20	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00 Additional bike phase intersection required for this segment
						\$10,580,868.88	\$5,290,434.44	\$15,870,000.00

				Rose	crans Aver	iue Bike Lanes			
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
New Sidewalk	3	New Sidewalk	\$1,366,969.12	MI	0.12	\$167,582.96	\$83,791.48	\$251,000.00 I	Includes new curb cost
New Sidewalk	5	New Sidewalk	\$1,366,969.12	MI	0.12	\$167,582.96	\$83,791.48	\$251,000.00 I	Includes new curb cost
II - Bike Lane (Stripe Bike Lane Only)	4A	IIC Unit Cost	\$99,446.40	MI	0.97	\$96,904.53	\$48,452.27	\$145,000.00	
II - Bike Lane (Stripe Bike Lane Only)	4B	IIC Unit Cost	\$99,446.40	MI	0.54	\$53,701.06	\$26,850.53	\$81,000.00	
		New Sidewalk	\$1,093,575.30	MI	0.33	\$360,879.85	\$180,439.92	\$541,000.00 a	assumes 80% of unit cost required - 8 foot sidewalk
Widen Sidewalk		Guardrail	\$0.00	MI	0.33	\$0.00	\$0.00	\$0.00 I	Included in contingency
WIden Sidewalk	4C	Ped-Activated Signals (2-way)	\$53,384.32	EA	4.00	\$213,537.28	\$106,768.64	\$320,000.00	
		High Visibility Crosswalk	\$1,038.72	EA	8.00	\$8,309.76	\$4,154.88	\$12,000.00	
Guardrail		Guardrail	\$0.00	MI	0.10	\$0.00	\$0.00	\$0.00 I	Included in contingency
IV - Protected Bike Lanes (Curb Lanes Only)		IVC Unit Cost	\$1,253,833.68	MI	0.71	\$890,221.91	\$445,110.96	\$1,335,000.00 I	Includes approximately 1 bike phase intersection in unit cost
IV - Protected Bike Lanes (Raised Buffer)	4D	IVB Unit Cost	\$5,337,786.08	MI	1.50	\$8,006,679.12	\$4,003,339.56	\$12,010,000.00 I	Includes approximately 3 bike phase intersections in unit cost
		Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00 A	Additional bike phase intersection required for this segment
IV - Protected Bike Lanes (K71 Bollards)	45	IVA Unit Cost	\$1,417,936.08	MI	2.00	\$2,835,872.16	\$1,417,936.08	\$4,254,000.00 I	Includes approximately 4 bike phase intersections in unit cost
TV - FTOLECTED DIRE Lattes (R/T Dollal ds)	4L	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00 A	Additional bike phase intersection required for this segment
						\$13,915,508.87	\$6,957,754.44	\$20,872,000.00	

			SCE ROW Shared-Use Path													
Project Type Project ID(s) Description Unit Cost Unit Quantity Total Construction Cost Contingency Total Cost Comments																
I - Multi-Use Path	30	IB Unit Cost	\$3,558,850.98	MI	1.72	\$6,130,710.23	\$3,065,355.11	\$9,196,000.00								
1 - Matt-Ose Fatti	50	Bike Phase Intersection	\$557,118.64	EA	2.00	\$1,114,237.28	\$557,118.64	\$1,671,000.00	Additional bike phase intersections required for this segment							
						\$7,244,947.51	\$3,622,473.75	\$10,867,000.00								

				Noi	n-Linear Wl	heel Projects			
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
Signal Timing Optimization	79	TSP Unit Cost	\$4,568.51	EA	49.00	\$223,856.99	\$111,928.50	\$336,000.00	
Bicycle and Scooter Parking	80	Bike Hub Allowance	\$1,493,747.49	EA	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00	assumes full service bike hub
Bicycle and Scooler Parking	80	Parking Unit Cost	\$4,207.84	MI	15.00	\$63,117.60	\$31,558.80	\$95,000.00	
						\$1,780,722.08	\$890,361.04	\$2,672,000.00	

TOTAL SUM: \$60,851,000.00

Note: totals may vary slightly due to rounding



	BELLFLOWER STATION													
	Bellflower Boulevard Bike Lanes													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments					
IV - Protected Bike Lanes (Curb Lanes Only)	1A	IVC Unit Cost	\$1,253,833.68	MI	1.60	\$2,006,133.89	\$1,003,066.94	\$3,009,000.00	Includes approxim					
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	1A	IIA Unit Cost	\$221,520.00	MI	1.60	\$354,432.00	\$177,216.00	\$532,000.00	Alternate low-cost					
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	1B	IIA Unit Cost	\$221,520.00	MI	0.80	\$177,216.00	\$88,608.00	\$266,000.00						
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	1C	IIA Unit Cost	\$221,520.00	MI	1.56	\$346,069.10	\$173,034.55	\$519,000.00						
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	1D	IVC Unit Cost	\$1,253,833.68	MI	0.82	\$1,022,886.77	\$511,443.38	\$1,534,000.00						
						\$3,552,305.76	\$1,776,152.88	\$5,328,000.00						

Alondra Boulevard Bike Lanes													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments				
		IVC Unit Cost	\$1,253,833.68	MI	0.85	\$1,065,758.63	\$532,879.31	\$1,599,000.00	Includes approximately 2 bike phase intersections in unit cost				
		Bike Phase Intersection	\$557,118.64	EA	2.00	\$1,114,237.28	\$557,118.64	\$1,671,000.00	Additional bike phase intersections required for this segment				
IV - Protected Bike Lanes (Curb Lanes Only)	2A	IVC Unit Cost	\$1,253,833.68	MI	0.35	\$438,841.79	\$219,420.89	\$658,000.00	Includes approximately 1 bike phase intersections in unit cost				
		Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00	Additional bike phase intersection required for this segment				
		IVC Unit Cost	\$1,253,833.68	MI	0.21	\$263,305.07	\$131,652.54	\$395,000.00					
IV - Protected Bike Lanes (Curb Lanes Only)	2B	IVC Unit Cost	\$1,253,833.68	MI	0.30	\$376,150.10	\$188,075.05	\$564,000.00					
W - Hoteeted bike Earles (earlb Earles Only)	20	Ped-Activated Signals (2-way)	\$53,384.32	EA	4.00	\$213,537.28	\$106,768.64	\$320,000.00					
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2B	IIA Unit Cost	\$221,520.00	MI	0.30	\$66,456.00	\$33,228.00		Alternate low-cost project for above project. Not included in total cost estimate.				
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.15	\$188,075.05	\$94,037.53		Includes approximately 0 bike phase intersections in unit cost				
W - Hoteeted bike Earles (earlb Earles Only)	20	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00	Additional bike phase intersection required for this segment				
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2C	IIA Unit Cost	\$221,520.00	MI	0.15	\$33,228.00	\$16,614.00	\$50,000.00	Alternate low-cost project for above project. Not included in total cost estimate.				
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.50	\$626,916.84	\$313,458.42	\$940,000.00	Includes approximately 1 bike phase intersections in unit cost				
W - Hoteeted bike Earles (earlb Earles Only)	20	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00	Additional bike phase intersection required for this segment				
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2C	IIA Unit Cost	\$221,520.00	MI	0.50	\$110,760.00	\$55,380.00	\$166,000.00	Alternate low-cost project for above project. Not included in total cost estimate.				
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.25	\$313,458.42	\$156,729.21	\$470,000.00	Includes approximately 0 bike phase intersections in unit cost				
IV - I TOLECTED DIKE Laties (Curb Laties Only)	20	Bike Phase Intersection	\$557,118.64	EA	1.00	\$557,118.64	\$278,559.32	\$836,000.00	Additional bike phase intersection required for this segment				
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2C	IIA Unit Cost	\$221,520.00	MI	0.25	\$55,380.00	\$27,690.00	\$83,000.00	Alternate low-cost project for above project. Not included in total cost estimate.				
IV - Protected Bike Lanes (Curb Lanes Only)	2C	IVC Unit Cost	\$1,253,833.68	MI	0.80	\$1,003,066.94	\$501,533.47	\$1,505,000.00	Includes approximately 2 bike phase intersections in unit cost				
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2C	IIA Unit Cost	\$221,520.00	MI	0.80	\$177,216.00	\$88,608.00	\$266,000.00	Alternate low-cost project for above project. Not included in total cost estimate.				
						\$7,831,821.97	\$3,915,910.98	\$11,748,000.00					

	Flower Street Bike Lanes													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comment					
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	3A	IIA Unit Cost	\$221,520.00	MI	1.66	\$367,191.98	\$183,595.99	\$551,000.00						
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	3B	IIA Unit Cost	\$221,520.00	MI	0.25	\$55,446.70	\$27,723.35	\$83,000.00						
						\$422,638.68	\$211,319.34	\$634,000.00						

				No	n-Linear Wł	neel Projects			
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Commen
Signal Timing Optimization	44	TSP Unit Cost	\$4,568.51	EA	52.00	\$237,562.52	\$118,781.26	\$356,000.00	
Bicycle and Scooter Parking	45	Bike Hub Allowance	\$1,493,747.49	EA	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00	assumes fu
bicycle and scooler Parking	45	Parking Unit Cost	\$4,207.84	MI	10.20	\$42,919.97	\$21,459.98	\$64,000.00	
						\$1,774,229.98	\$887,114.99	\$2,661,000.00	

TOTAL SUM: \$20,371,000.00

Note: totals may vary slightly due to rounding Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

ximately 3 bike phase intersections in unit cost ost project for above project. Not included in total cost estimate.

full service bike hub

						PIONEERS	STATION						
SGL ROW Multi-Use Path													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments				
I - Multi-Use Path	10	IB Unit Cost	\$3,558,850.98	MI	0.68	\$2,420,018.67	\$1,210,009.33	\$3,630,000.00					
I - Multi-Ose Path	1A	Ped-Activated Signals (2-way)	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00					
I - Multi-Use Path	1B	IB Unit Cost	\$3,558,850.98	MI	0.12	\$420,451.04	\$210,225.52	\$631,000.00					
I - Multi-Use Path	1C	IB Unit Cost	\$3,558,850.98	MI	1.62	\$5,768,364.06	\$2,884,182.03	\$8,653,000.00					
I - Multi-Ose Path	ic ic	Ped-Activated Signals (2-way)	\$53,384.32	EA	2.00	\$106,768.64	\$53,384.32	\$160,000.00					
I - Multi-Use Path	1D	IB Unit Cost	\$3,558,850.98	MI	0.50	\$1,779,425.49	\$889,712.75	\$2,669,000.00					
I - Multi-Ose Palli	ID	Ped-Activated Signals (2-way)	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00					
						\$10,601,796.53	\$5,300,898.27	\$15,903,000.00					

						Pioneer Bouleva	ard Bike Lanes	
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost Comments
IV - Protected Bike Lanes (Curb Lanes Only)	24	IVC Unit Cost	\$1,253,833.68	MI	1.50	\$1,880,750.52	\$940,375.26	\$2,821,000.00 Includes approximately 3 bike phase intersections in unit cost
IV - FIOLECIEU DIRE Lalles (Curb Lalles Ofly)	28	Bike Phase Intersection	\$557,118.64	EA	4.00	\$2,228,474.56	\$1,114,237.28	\$3,343,000.00 Additional bike phase intersections required for this segment
II - Bike Lane - Stripe Bike Lane Only	2A	IIC Unit Cost	\$99,446.40	MI	1.50	\$149,169.60	\$74,584.80	\$224,000.00 Includes approximately 3 bike phase intersections in unit cost. Alternate low-cost project for above project. Not included in total cost estimate.
		IVC Unit Cost	\$1,253,833.68	MI	1.10	\$1,376,675.56	\$688,337.78	\$2,065,000.00 Includes approximately 2 bike phase intersections in unit cost
IV - Protected Bike Lanes (Curb Lanes Only)	2B	Bike Phase Intersection	\$557,118.64	EA	4.00	\$2,228,474.56	\$1,114,237.28	\$3,343,000.00 Additional bike phase intersections required for this segment
		Ped-Activated Signals (2-way)	\$53,384.32	EA	4.00	\$213,537.28	\$106,768.64	\$320,000.00
II - Bike Lane (Stripe Bike Lane Only)	2C	IIC Unit Cost	\$99,446.40	MI	0.29	\$29,105.65	\$14,552.82	\$44,000.00
IV - Protected Bike Lanes (Curb Lanes Only)	20	IVC Unit Cost	\$1,253,833.68	MI	0.12	\$150,460.04	\$75,230.02	\$226,000.00 Includes approximately 0 bike phase intersections in unit cost
IV - Protected bike Laries (Curb Laries Offy)	20	Bike Phase Intersection	\$557,118.64	EA	2.00	\$1,114,237.28	\$557,118.64	\$1,671,000.00 Additional bike phase intersections required for this segment
II - Striped Bike Lanes - Arterial with Center Turn Lane	2D	IIA Unit Cost	\$221,520.00	MI	0.12	\$26,582.40	\$13,291.20	\$40,000.00 Alternate low-cost project for above project. Not included in total cost estimate.
IV - Protected Bike Lanes (Curb Lanes Only)	2D	IVC Unit Cost	\$1,253,833.68	MI	0.17	\$209,154.61	\$104,577.30	\$314,000.00
IV - Protected Bike Lanes (Curb Lanes Only)	2E	IVC Unit Cost	\$1,253,833.68	MI	0.69	\$861,776.91	\$430,888.46	\$1,293,000.00
II - Striped Bike Lanes - (Arterial with Center Turn Lane)	2F	IIA Unit Cost	\$221,520.00	MI	0.83	\$184,388.73	\$92,194.36	\$277,000.00
II - Striped Bike Lanes - (Arterial with Raised Median)	2G	IIB Unit Cost	\$160,483.20	MI	0.17	\$27,477.18	\$13,738.59	\$41,000.00
II - Striped Bike Lanes - (Arterial with Raised Median)	2H	IIB Unit Cost	\$160,483.20	MI	0.14	\$22,467.65	\$11,233.82	\$34,000.00
						\$10,526,980.52	\$5,263,490.26	\$15,792,000.00

	183rd Street Bike Lanes														
Project Type	Project ID(s)	Description	Unit Cost	Unit Quantit	/ Total Construction Cost	Contingency	Total Cost Comments								
IV - Protected Bike Lanes (Curb Lanes Only)	3A	IVC Unit Cost	\$1,253,833.68	MI 0.27	\$341,679.79	\$170,839.89	\$513,000.00 Assumes more conservative cost consideration								
II - Striped Bike Lanes - (Arterial with Raised Median)	3A	IIB Unit Cost	\$160,483.20	MI 0.27	\$43,732.97	\$21,866.48	\$66,000.00 Alternate low-cost project for above project. Not included in total cost estimate.								
IV - Protected Bike Lanes (Curb Lanes Only)	3A	IVC Unit Cost	\$1,253,833.68	MI 0.50	\$626,899.75	\$313,449.88	\$940,000.00								
II - Bike Lane (Stripe Bike Lane Only)	3B	IIC Unit Cost	\$99,446.40	MI 1.19	\$118,415.78	\$59,207.89	\$178,000.00								
IV - Protected Bike Lanes (Curb Lanes Only)	3C	IVC Unit Cost	\$1,253,833.68	MI 1.89	\$2,369,990.84	\$1,184,995.42	\$3,555,000.00 Assumes more conservative cost consideration								
II - Striped Bike Lanes - (Arterial with Raised Median)	3C	IIB Unit Cost	\$160,483.20	MI 1.89	\$303,313.25	\$151,656.62	\$455,000.00 Alternate low-cost project for above project. Not included in total cost estimate.								
					\$3,456,986.16	\$1,728,493.08	\$5,186,000.00								

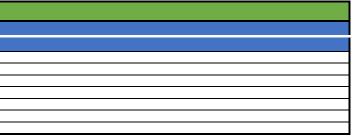
	166th Street Bike Lanes													
Project Type	Project Type Project ID(s) Description Unit Cost Unit Quantity Total Construction Cost Contingency Total Cost Comments													
II - Bike Lane (Stripe Bike Lane Only)	II - Bike Lane (Stripe Bike Lane Only) 83 IIC Unit Cost \$302,508.00 EA 1.00 \$302,508.00 \$0.00 \$303,000.00 City of Artesia provided cost information for this project which is now complete.													
						\$302,508.00	\$0.00	\$303,000.00						

						Bike Friendly Stree	ets Near Station							
Project Type	Project Type Project ID(s) Description Unit Cost Unit Quantity Total Construction Cost Contingency Total Cost Comments													
III - Bike Friendly Street	5	III Unit Cost	\$82,956.07	MI	0.65	\$53,555.89	\$26,777.94	\$80,000.00 Unit cost includes signage, speed humps, and stop signs						
III - Bike Friendly Street	6	III Unit Cost	\$82,956.07	MI	1.07	\$88,689.68	\$44,344.84	\$133,000.00 Unit cost includes signage, speed humps, and stop signs						
III - Bike Friendly Street	32	III Unit Cost	\$82,956.07	MI	0.20	\$16,572.83	\$8,286.42	\$25,000.00 Unit cost includes signage, speed humps, and stop signs						
	\$158,818,40 \$79,409.20 \$238,000.00													

						Non-Linear Wh	neel Projects						
Project Type	Project Type Project ID(s) Description Unit Cost Unit Quantity Total Construction Cost Contingency Total Cost Comments												
Signal Timing Optimization	84	TSP Unit Cost	\$4,568.51	EA 63	53.00	\$287,816.13	\$143,908.07	\$432,000.00					
Bicycle and Scooter Parking	95	Bike Hub Allowance	\$1,493,747.49	EA 1	1.00	\$1,493,747.49	\$746,873.75	\$2,241,000.00 assumes full service bike hub					
Bicycle and Scooler Farking	65	Parking Unit Cost	\$4,207.84	MI 13	13.70	\$57,647.41	\$28,823.70	\$86,000.00					
						\$1,839,211.03	\$919,605.51	\$2,759,000.00					

TOTAL SUM: \$40,181,000.00

Note: totals may vary slightly due to rounding



# Prioritized Walk Projects

Station	Number of Prioritized Walk Projects	ROM Construction Cost (\$2023)	Construction Contingency (50%)	Total Construction Cost (\$2023)
Slauson/A Line	33	\$7,166,000	\$3,583,000	\$10,749,000
Pacific/Randolph	34	\$23,222,000	\$11,611,000	\$34,832,000
Florence/Salt Lake	27	\$13,939,000	\$6,969,000	\$20,908,000
Firestone	21	\$6,970,000	\$3,485,000	\$10,453,000
Gardendale	24	\$5,553,000	\$2,776,000	\$8,328,000
I-105/C Line	32	\$4,514,000	\$2,257,000	\$6,771,000
Paramount/Rosecrans	14	\$4,150,000	\$2,075,000	\$6,227,000
Bellflower	12	\$1,975,000	\$987,000	\$2,962,000
Pioneer	29	\$4,689,000	\$2,344,000	\$7,029,000
Total	226	\$72,178,000	\$36,087,000	\$108,259,000
Notes: ROM = rough order of magni				

Contingency based on Caltrans PDPM for feasibility studies (Ch 20)

See memo for additional details regarding cost assumptions Cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

Totals may vary slightly due to rounding

						SLAUSON / A LI			
					Slau	son Avenue - Primary (Hoo	per Avenue to F	Regent Street	)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
Bus Stop Improvements	1.7	Shade Structure	\$35,000.00	EA	6.00	\$210,000.00	\$105,000.00	\$315,000.00	
Bus stop improvements	1,7	Trash Cans	\$1,515.00	EA	4.00	\$6,060.00	\$3,030.00	\$9,000.00	
Curb Ramps	2	ADA Curb Ramp	\$8,000.00	EA	6.00	\$48,000.00	\$24,000.00	\$72,000.00	Assumes dual curb ramps
High Visibility Crosswalks	2	High Visibility Crosswalk	\$1,038.72	EA	10.00	\$10,387.20	\$5,193.60	\$16,000.00	
	5	Loop Detectors	\$509.93	EA	20.00	\$10,198.60	\$5,099.30	\$15,000.00	Assumes 2 t-intersections and 1 standard in
Traffic Calming	4	Traffic Calming	\$435,000.00	MI	1.00	\$435,000.00	\$217,500.00	\$653,000.00	Allowance (includes signage, chicanes, mini
		Shade Tree	\$100,848.00	MI	0.50	\$50,424.00	\$25,212.00	\$76,000.00	Assumes only along south side of street (50
Landscape and Shade	Б	Landscaping	\$50,899.20	MI	0.50	\$25,449.60	\$12,724.80	\$38,000.00	Assumes only along south side of street (50
Lanuscape and Shade	5	Demolition	\$50,631.68	MI	0.50	\$25,315.84	\$12,657.92	\$38,000.00	Assumes only along south side of street (50
		Tree Grate	\$950,400.00	MI	0.50	\$475,200.00	\$237,600.00	\$713,000.00	Assumes only along south side of street (50
Signalized Crossing	6	Ped Activated Signal (2-way)	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00	
Signalized Crossing	6	High Visibility Crosswalk	\$1,038.72	EA	1.00	\$1,038.72	\$519.36	\$2,000.00	
New or Improved Sidewalk	8	New Sidewalk	\$58,086.78	MI	1.00	\$58,086.78	\$29,043.39	\$87,000.00	Assumes 5% of sidewalks require reconstru
New or improved sidewark	0	Sidewalk Demolition	\$10,899.68	MI	1.00	\$10,899.68	\$5,449.84	\$16,000.00	Assumes 5% of sidewalks require reconstru
Pedestrian and Bicycle Lighting	9	Lighting (12-15' poles)	\$704,000.00	MI	0.57	\$401,280.00	\$200,640.00	\$602,000.00	Approximately 0.5 mile to the west (south of
Signalized Crossing	9A	Traffic Signal Optimization	\$4,569.00	EA	14.00	\$63,966.00	\$31,983.00	\$96,000.00	
						\$1,884,690.74	\$942,345.37	\$2,828,000.00	

					Long Beach	Avenue (West) - Primary (E	East 52nd Stree	t to Slauson A	Avenue)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Structure	\$35,000.00	EA	2.00	\$70,000.00	\$35,000.00	\$105,000.00	
Bus Stop Improvements	11	Seating Bench	\$2,092.00	EA	2.00	\$4,184.00	\$2,092.00	\$6,000.00	
		Trash Cans	\$1,515.00	EA	2.00	\$3,030.00	\$1,515.00	\$5,000.00	
High Visibility Crosswalks	12	High Visibility Crosswalk	\$1,038.72	EA	6.00	\$6,232.32	\$3,116.16	\$9,000.00	1 additional included in the SGL EIR Project
	12	Loop Detectors	\$509.93	EA	12.00	\$6,119.16	\$3,059.58	\$9,000.00	Assumes 2 t-intersections loops
		Shade Tree	\$100,848.00	MI	0.45	\$45,381.60	\$22,690.80	\$68,000.00	Assumes both sides of street
Landscape and Shade	13	Landscaping	\$50,899.20	MI	0.45	\$22,904.64	\$11,452.32	\$34,000.00	Assumes both sides of street
Landscape and Shade	15	Demolition	\$50,631.68	MI	0.45	\$22,784.26	\$11,392.13	\$34,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.45	\$427,680.00	\$213,840.00	\$642,000.00	Assumes both sides of street
Curb Ramps	14	ADA Curb Ramp	\$8,000.00	EA	2.00	\$16,000.00	\$8,000.00	\$24,000.00	Assumes dual curb ramps
						\$624,315.98	\$312,157.99	\$936,000.00	

					Long Beach	n Avenue (East) - Primary (E	ast 52nd Street	to Slauson A	venue)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	0.45	\$45,381.60	\$22,690.80	\$68,000.00	Assumes both sides of street
Landscape and Shade	15	Landscaping	\$50,899.20	MI	0.45	\$22,904.64	\$11,452.32	\$34,000.00	Assumes both sides of street
Landscape and Shade	15	Demolition	\$50,631.68	MI	0.45	\$22,784.26	\$11,392.13	\$34,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.45	\$427,680.00	\$213,840.00	\$642,000.00	Assumes both sides of street
New or Improved Sidewalk	16	Sidewalk Demolition	\$10,899.68	MI	0.22	\$2,397.93	\$1,198.96	\$4,000.00	Assumes 5% of sidewalks require reconstru
New of Improved Sidewark	10	New Sidewalk	\$58,086.78	MI	0.22	\$12,779.09	\$6,389.55	\$19,000.00	Assumes 5% of sidewalks require reconstru
		Shade Structure	\$35,000.00	EA	1.00	\$35,000.00	\$17,500.00	\$53,000.00	
Bus Stop Improvements	16A	Seating Bench	\$2,092.00	EA	1.00	\$2,092.00	\$1,046.00	\$3,000.00	
		Trash Cans	\$1,515.00	EA	1.00	\$1,515.00	\$757.50	\$2,000.00	
						\$572,534.52	\$286,267.26	\$859,000.00	

ect (no cost included)

truction, assumes both sides of street truction, assumes both sides of street

Randolph Street - Primary (Slauson Avenue to Regent Street)										
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments	
		Shade Tree	\$100,848.00	MI	0.56	\$56,474.88	\$28,237.44	\$85,000.00	Assumes both sides of street	
Landscape and Shade	17	Landscaping	\$50,899.20	MI	0.56	\$28,503.55	\$14,251.78	\$43,000.00	Assumes both sides of street	
Landscape and Shade	17	Demolition	\$50,631.68	MI	0.56	\$28,353.74	\$14,176.87	\$43,000.00	Assumes both sides of street	
		Tree Grate	\$950,400.00	MI	0.56	\$532,224.00	\$266,112.00	\$798,000.00	Assumes both sides of street	
High Visibility Crosswalks	18	High Visibility Crosswalk	\$1,038.72	EA	13.00	\$13,503.36	\$6,751.68	\$20,000.00	8 additional included in the SGL EIR Project	
	10	Loop Detectors	\$509.93	EA	26.00	\$13,258.18	\$6,629.09	\$20,000.00	Assumes 4 t-intersections and 1 single cross	
New or Improved Sidewalk	19	New Sidewalk	\$58,086.78	MI	0.64	\$37,175.54	\$18,587.77	\$56,000.00	Assumes 5% of sidewalks require reconstru	
	17	Sidewalk Demolition	\$10,899.68	MI	0.64	\$6,975.80	\$3,487.90	\$10,000.00	Assumes 5% of sidewalks require reconstru	
Curb Ramps	20	New Curb Ramps	_	EA	10.00	-	-	-	SGL EIR Project (no cost included)	
						\$716 469 04	\$358 234 52	\$1,075,000,00		

\$716,469.04 \$358,234.52 \$1,075,000.00

		Holmes Avenue - Secondary (52nd Street to Gage Avenue)									
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
New or Improved Sidewalk	21	New Sidewalk	\$58,086.78	MI	1.84	\$106,879.67	\$53,439.83	\$160,000.00	Assumes 5% of sidewalks require reconstruct		
New of improved Sidewalk	21	Sidewalk Demolition	\$10,899.68	MI	1.84	\$20,055.41	\$10,027.71	\$30,000.00	Assumes 5% of sidewalks require reconstruct		
High Visibility Crosswalks	22	High Visibility Crosswalk	\$1,038.72	EA	17.00	\$17,658.24	\$8,829.12	\$26,000.00			
	22	Loop Detectors	\$509.93	EA	28.00	\$14,278.04	\$7,139.02	\$21,000.00	Assumes 2 std intersections loops, 2 T inters		
		Shade Structure	\$35,000.00	EA	6.00	\$210,000.00	\$105,000.00	\$315,000.00			
Bus Stop Improvements	23	Seating Bench	\$2,092.00	EA	6.00	\$12,552.00	\$6,276.00	\$19,000.00			
		Trash Cans	\$1,515.00	EA	6.00	\$9,090.00	\$4,545.00	\$14,000.00			
		Shade Tree	\$100,848.00	MI	0.92	\$92,780.16	\$46,390.08	\$139,000.00	Assumes both sides of street		
Landscape and Shade	24	Landscaping	\$50,899.20	MI	0.92	\$46,827.26	\$23,413.63	\$70,000.00	Assumes both sides of street		
Lanuscape and Shade	24	Demolition	\$50,631.68	MI	0.92	\$46,581.15	\$23,290.57	\$70,000.00	Assumes both sides of street		
		Tree Grate	\$950,400.00	MI	0.92	\$874,368.00	\$437,184.00	\$1,312,000.00	Assumes both sides of street		
Curb Extension	24A	Curb Extension	\$20,000.00	EA	6.00	\$120,000.00	\$60,000.00	\$180,000.00			
						\$1,571,069.93	\$785,534.96	\$2,356,000.00			

Compton Avenue - Secondary (53rd Street to Gage Avenue)										
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments	
High Visibility Crosswalks	20	High Visibility Crosswalk	\$1,038.72	EA	24.00	\$24,929.28	\$12,464.64	\$37,000.00		
High Visibility Crosswalks	27	Loop Detectors	\$509.93	EA	18.00	\$9,178.74	\$4,589.37	\$14,000.00	Assumes 1 standard intersection, 1 t-interse	
Bus Stop Improvements	31	Shade Structure	\$35,000.00	EA	8.00	\$280,000.00	\$140,000.00	\$420,000.00		
		Install Hawks	\$197,720.00	EA	2.00	\$395,440.00	\$197,720.00	\$593,000.00		
Signalized Crossing	33	High Visibility Crosswalk	\$1,038.72	EA	2.00	\$2,077.44	\$1,038.72	\$3,000.00		
		Ped Activated Signal	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00		
Traffic Calming	35	Traffic Calming	\$435,000.00	MI	0.88	\$382,800.00	\$191,400.00	\$574,000.00	Allowance (includes signage, chicanes, mini-	
						\$1,147,809,78	\$573,904,89	\$1,721,000.00		

ſ			Wilmington Avenue - Secondary (Slauson Avenue to Gage Avenue)										
	Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments			
	High Visibility Crosswalks	41	High Visibility Crosswalk	\$1,038.72	EA	4.00	\$4,154.88	\$2,077.44	\$6,000.00				
	Landscape and Shade		Shade Tree	\$100,848.00	MI	0.50	\$50,424.00	\$25,212.00	\$76,000.00	Assumes both sides of street			
		12	Landscaping	\$50,899.20	MI	0.50	\$25,449.60	\$12,724.80	\$38,000.00	Assumes both sides of street			
	Landscape and Shade	42	Demolition	\$50,631.68	MI	0.50	\$25,315.84	\$12,657.92	\$38,000.00	Assumes both sides of street			
			Tree Grate	\$950,400.00	MI	0.50	\$475,200.00	\$237,600.00	\$713,000.00	Assumes both sides of street			
	New or Improved Sidewalk	12	New Sidewalk	\$58,086.78	MI	1.00	\$58,086.78	\$29,043.39	\$87,000.00	Assumes 5% of sidewalks require reconstru			
	New of improved sidewark	43	Sidewalk Demolition	\$10,899.68	MI	1.00	\$10,899.68	\$5,449.84	\$16,000.00	Assumes 5% of sidewalks require reconstru			
							\$649,530.78	\$324,765.39	\$974,000.00				

TOTAL SUM: \$10,749,000.00

Note: totals may vary slightly due to rounding

st (no cost included)
sswalk loops
uction, assumes both sides of street
uction, assumes both sides of street

uction, assumes both sides of street	
uction, assumes both sides of street	
rsection loops for signalized intersections.	

ection, and 1-midblock intersection
-roundabouts (assumes 5 blocks per mile)

ruction, assumes both sides of street	
uction, assumes both sides of street	

	PACIFIC/RANDOLPH STATION										
	Pacific Boulevard - Primary (56th Street to Zoe Avenue)										
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
High Visibility Crosswalks	1	High Visibility Crosswalk	\$1,038.72	EA	28.00	\$29,084.16	\$14,542.08	\$44,000.00	4 additional included in the SGL EIR Project (no		
	I	Loop Detectors	\$509.93	EA	56.00	\$28,556.08	\$14,278.04	\$43,000.00	Assumes 1 t-intersection, 6 standard intersecti		
	2	Shade Tree	\$100,848.00	MI	0.88	\$88,746.24	\$44,373.12	\$133,000.00	Assumes both sides of street		
Landscape and Shade		Landscaping	\$50,899.20	MI	0.88	\$44,791.30	\$22,395.65	\$67,000.00	Assumes both sides of street		
Landscape and Shade	2	Demolition	\$50,631.68	MI	0.88	\$44,555.88	\$22,277.94	\$67,000.00	Assumes both sides of street		
		Tree Grate	\$950,400.00	MI	0.88	\$836,352.00	\$418,176.00	\$1,255,000.00	Assumes both sides of street		
Traffic Calming	3	Traffic Calming	\$435,000.00	MI	0.88	\$382,800.00	\$191,400.00	\$574,000.00	Allowance (includes signage, chicanes, mini-ro		
Curb Ramps	4	ADA Curb Ramp	\$8,000.00	EA	56.00	\$448,000.00	\$224,000.00	\$672,000.00	Assumes dual curb ramps		
Signalized Crossing	4A	Traffic Signal Optimization	\$4,569.00	EA	36.00	\$164,484.00	\$82,242.00	\$247,000.00			
						\$2,067,369.65	\$1,033,684.83	\$3,102,000.00			

					Ra	ndolph Street - Primary (Al	bany Street to	Arbutus Aven	ue)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
High Visibility Crosswalks	5	High Visibility Crosswalk	\$1,038.72	EA	28.00	\$29,084.16	\$14,542.08	\$44,000.00	18 additional included in the SGL EIR Project (no cost i
		Loop Detectors	\$509.93	EA	56.00	\$28,556.08	\$14,278.04	\$43,000.00	Assumes 6 t-intersection and 10 single crosswalk loop
Curb Ramps	6	ADA Curb Ramp	\$8,000.00	EA	32.00	\$256,000.00	\$128,000.00	\$384,000.00	Assumes dual curb ramps, 20 additional included in th
		Shade Tree	\$100,848.00	MI	1.02	\$102,864.96	\$51,432.48	\$154,000.00	Assumes both sides of street
Landscape and Shade	7	Landscaping	\$50,899.20	MI	1.02	\$51,917.18	\$25,958.59	\$78,000.00	Assumes both sides of street
Landscape and Shade		Demolition	\$50,631.68	MI	1.02	\$51,644.31	\$25,822.16	\$77,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	1.02	\$969,408.00	\$484,704.00	\$1,454,000.00	Assumes both sides of street
New or Improved Sidewalk	8	New Sidewalk	\$58,086.78	MI	2.04	\$118,497.02	\$59,248.51	\$178,000.00	Assumes 5% of sidewalks require reconstruction, assu
New of improved sidewark	0	Sidewalk Demolition	\$10,899.68	MI	2.04	\$22,235.35	\$11,117.67	\$33,000.00	Assumes 5% of sidewalks require reconstruction, assu
Traffic Calming	9	ADA Curb Ramp	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps, curb ramp radii adjusted in
Opportunity Improvement	10A	Standard Bike/Ped Bridge	\$477.38	SF	20000.00	\$9,547,600.00	\$4,773,800.00	\$14,321,000.00	Assumes 10,000 SF per bridge (including ramps)
opportunity improvement	IUA	Elevator	\$1,231,000.00	EA	4.00	\$4,924,000.00	\$2,462,000.00	\$7,386,000.00	Includes elevator at each end of bridge
Pedestrian and Bicycle Lighting	10B	Lighting (12-15' poles)	\$704,000.00	MI	0.51	\$359,040.00	\$179,520.00	\$539,000.00	Assumes both sides of street, assumes 50% infill
						\$16,524,847.07	\$8,262,423.53	\$24,787,000.00	

Seville Avenue - Secondary (58th Street to Zoe Avenue)											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
		High Visibility Crosswalk	\$1,038.72	EA	15.00	\$15,580.80	\$7,790.40	\$23,000.00			
High Visibility Crosswalks	12	ADA Ramp	\$8,000.00	EA	2.00	\$16,000.00	\$8,000.00	\$24,000.00	Assumes unidirectional ramps		
		Curb Extension	\$20,000.00	EA	2.00	\$40,000.00	\$20,000.00	\$60,000.00	Curb extension at driveway extents		
Curb Ramps	12A	ADA Curb Ramp	\$8,000.00	EA	30.00	\$240,000.00	\$120,000.00	\$360,000.00	Assumes dual ramps where applicable		
Pedestrian and Bicycle Lighting	12B	Lighting (12-15' poles)	\$704,000.00	MI	0.38	\$264,000.00	\$132,000.00	\$396,000.00	Assumes both sides of street, assumes 50% inf		
						\$575,580.80	\$287,790.40	\$863,000.00			

	Malabar Street- Secondary (56th Street to Zoe Avenue)											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments			
High Visibility Crosswalks	15	High Visibility Crosswalk	\$1,038.72	EA	16.00	\$16,619.52	\$8,309.76	\$25,000.00				
	15	Loop Detectors	\$509.93	EA	16.00	\$8,158.88	\$4,079.44	\$12,000.00	Assumes 2 standard intersection loops			
Curb Ramps	15A	ADA Curb Ramp	\$8,000.00	EA	16.00	\$128,000.00	\$64,000.00	\$192,000.00	Assumes dual ramps			
Pedestrian and Bicycle Lighting	15B	Lighting (12-15' poles)	\$704,000.00	MI	0.44	\$309,760.00	\$154,880.00	\$465,000.00	Assumes both sides of street, assumes 50% infi			
						\$462,538.40	\$231,269.20	\$694,000.00				

(no cost included) ections, and 1 single crosswalk loops

roundabouts (assumes 5 blocks per mile)

ect (no cost included) isswalk loops included in the SGL EIR Project (no cost included) uction, assumes both sides of street uction, assumes both sides of street i adjusted in the SGL EIR Project (no cost included) amps)

infill

infill		

					SI	auson Avenue- Secondary (	Regent Street t	o Bickett Stre	eet)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Structure	\$35,000.00	EA	7.00	\$245,000.00	\$122,500.00	\$368,000.00	
Bus Stop Improvements	17	Seating Bench	\$2,092.00	EA	7.00	\$14,644.00	\$7,322.00	\$22,000.00	
		Trash Cans	\$1,515.00	EA	7.00	\$10,605.00	\$5,302.50	\$16,000.00	
		Shade Tree	\$100,848.00	MI	1.08	\$108,915.84	\$54,457.92	\$163,000.00	Assumes both sides of street
Landscape and Shade	18	Landscaping	\$50,899.20	MI	1.08	\$54,971.14	\$27,485.57	\$82,000.00	Assumes both sides of street
Lanuscape and Shade		Demolition	\$50,631.68	MI	1.08	\$54,682.21	\$27,341.11	\$82,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	1.08	\$1,026,432.00	\$513,216.00		Assumes both sides of street
New or Improved Sidewalk	19	New Sidewalk	\$58,086.78	MI	2.16	\$125,467.44	\$62,733.72	\$188,000.00	Assumes 5% of sidewalks require reconstruction
New of improved sidewalk	17	Sidewalk Demolition	\$10,899.68	MI	2.16	\$23,543.31	\$11,771.65	\$35,000.00	Assumes 5% of sidewalks require reconstruction
High Visibility Crosswalks	20	High Visibility Crosswalk	\$1,038.72	EA	14.00	\$14,542.08	\$7,271.04	\$22,000.00	
	20	Loop Detectors	\$509.93	EA	28.00	\$14,278.04	\$7,139.02	\$21,000.00	Assumes 3 standard intersections and 1 mid-blo
						\$1,693,081.06	\$846,540.53	\$2,539,000.00	

					East	Gage Avenue- Secondary (0	Cottage Street t	o Arbutus Av	enue)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
High Visibility Crosswalks	22	High Visibility Crosswalk	\$1,038.72	EA	38.00	\$39,471.36	\$19,735.68	\$59,000.00	
	22	Loop Detectors	\$509.93	EA	38.00	\$19,377.34	\$9,688.67	\$29,000.00	Assumes 4 standard intersections and 1 t-inter
Curb Ramps	23	ADA Curb Ramp	\$8,000.00	EA	24.00	\$192,000.00	\$96,000.00	\$288,000.00	Assumes dual curb ramps
		Ped Activated Signal	\$26,692.16	EA	1.00	\$26,692.16	\$13,346.08	\$40,000.00	
Signalized Crossing	24	High Visibility Crosswalk	\$1,038.72	EA	4.00	\$4,154.88	\$2,077.44	\$6,000.00	
		Rapid Flash Beacon	\$106,768.64	EA	1.00	\$106,768.64	\$53,384.32	\$160,000.00	
New or Improved Sidewalk	25	New Sidewalk	\$58,086.78	MI	1.68	\$97,585.78	\$48,792.89	\$146,000.00	Assumes 5% of sidewalks require reconstruction
New of Improved Sidewalk	25	Sidewalk Demolition	\$10,899.68	MI	1.68	\$18,311.46	\$9,155.73	\$27,000.00	Assumes 5% of sidewalks require reconstruction
Traffic Calming	26A	Traffic Calming	\$435,000.00	MI	1.10	\$478,500.00	\$239,250.00	\$718,000.00	Allowance (includes signage, chicanes, mini-ro
Pedestrian and Bicycle Lighting	26B	Lighting (12-15' poles)	\$704,000.00	MI	0.55	\$387,200.00	\$193,600.00	\$581,000.00	Assumes both sides of street, assumes 50% int
						\$1,370,061.63	\$685,030.81	\$2,054,000.00	

	Middleton Street- Secondary (Belgrave Avenue to Zoe Avenue)											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments			
Curb Ramps	27	ADA Curb Ramp	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps			
						\$64,000.00	\$32,000.00	\$96,000.00				

	Rugby Avenue- Secondary (Belgrave Avenue to Zoe Avenue)														
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments						
		ADA Curb Ramp	\$8,000.00	EA	16.00	\$128,000.00	\$64,000.00	\$192,000.00	Assumes dual ramps						
Curb Ramps	28	Waste Receptacle	\$1,515.00	EA	2.00	\$3,030.00	\$1,515.00	\$5,000.00							
		Ped Lighting	\$4,000.00	EA	1.00	\$4,000.00	\$2,000.00	\$6,000.00	Assumes one electrolier						
High Visibility Crosswalks	29	High Visibility Crosswalk	\$1,038.72	EA	8.00	\$8,309.76	\$4,154.88	\$12,000.00							
Pedestrian and Bicycle Lighting	30	Lighting (12-15' poles)	\$704,000.00	MI	0.28	\$193,600.00	\$96,800.00	\$290,000.00	Assumes both sides of street, assumes 50% infill						
						\$336,939.76	\$168,469.88	\$505,000.00							

	Rita Avenue- Secondary (Randolph Street to Zoe Avenue)												
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments				
Curb Ramps	31	ADA Curb Ramp	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps				
						\$64,000.00	\$32,000.00	\$96,000.00					

	Templeton Street- Secondary (Slauson Avenue to Zoe Avenue)											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments			
Curb Ramps	32	ADA Curb Ramp	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps			
						\$64,000.00	\$32,000.00	\$96,000.00				

#### TOTAL SUM: \$34,832,000.00

Note: totals may vary slightly due to rounding

on, assumes both sides of street	
on, assumes both sides of street	
lock intersection loops	

rersection loops
tion, assumes both sides of street
tion, assumes both sides of street
roundabouts (assumes 5 blocks per mile)
nfill

						FLOREN	ICE/SALT LA	KE STATIO	N
						Florence Avenue	- Primary (State	e Street to Oti	is Avenue)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
High Visibility Crosswalks	1	High Visibility Crosswalk	\$1,038.72	EA	14.00	\$14,542.08	\$7,271.04		4 additional included in the SGL EIR Project (no cost included)
right visibility crosswalks	I	Loop Detectors	\$509.93	EA	28.00	\$14,278.04	\$7,139.02	\$21,000.00	Assumes 2 standard intersection, 1 mid-block intersection, and 4 single crosswalk loops
		New Sidewalk	\$58,086.78	MI	1.82	\$105,717.93	\$52,858.97	\$159,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street
New or Improved Sidewalk	2, 3	Sidewalk Demolition	\$10,899.68	MI	1.82	\$19,837.42	\$9,918.71	\$30,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street
New of improved sidewark	2, 5	New Sidewalk	\$1,161,735.52	MI	0.25	\$290,433.88	\$145,216.94	\$436,000.00	Assumes 100% new sidewalk
		New Curb	\$205,233.60	MI	0.25	\$51,308.40	\$25,654.20	\$77,000.00	
Signalized Crossing	4	Ped Activated Signal (2-way)	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00	
Signalized Grossing	7	Curb Extension	\$20,000.00	EA	2.00	\$40,000.00	\$20,000.00	\$60,000.00	
Bus Stop Improvements	5	Shade Structure	\$35,000.00	EA	2.00	\$70,000.00	\$35,000.00	\$105,000.00	
		Shade Tree	\$100,848.00	MI	0.91	\$91,771.68	\$45,885.84	\$138,000.00	Assumes both sides of street
Landscape and Shade	6	Landscaping	\$50,899.20	MI	0.91	\$46,318.27	\$23,159.14	\$69,000.00	Assumes both sides of street
Lanuscape and snade	0	Demolition	\$50,631.68	MI	0.91	\$46,074.83	\$23,037.41	\$69,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.91	\$864,864.00	\$432,432.00	\$1,297,000.00	Assumes both sides of street
Pedestrian and Bicycle Lighting	7	Lighting (12-15' poles)	\$704,000.00	MI	0.46	\$320,320.00	\$160,160.00	\$480,000.00	Assumes both sides of street, assumes 50% infill
Traffic Calming	8	Traffic Calming	\$435,000.00	MI	0.91	\$395,850.00	\$197,925.00	\$594,000.00	Allowance (includes signage, chicanes, mini-roundabouts (assumes 5 blocks per mile)
Curb Ramps	9	Curb Ramps	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps. 7 additional included in the SGL EIR Project (no cost included)
Signalized Crossing	9A	Traffic Signal Optimization	\$4,569.00	EA	9.00	\$41,121.00	\$20,560.50	\$62,000.00	
Opportunity Improvement	9B	Standard Bike/Ped Bridge	\$477.38	SF	11000.00	\$5,251,180.00	\$2,625,590.00	\$7,877,000.00	Assumes 11,000 SF for bridge (including ramps)
opportunity improvement	7D	Elevator	\$1,231,000.00	EA	2.00	\$2,462,000.00	\$1,231,000.00	\$3,693,000.00	Includes elevator at each end of bridge
						\$10,243,001.85	\$5,121,500.93	\$15,365,000.00	

					Salt Lak	e Avenue - Primary (North	of Florence Ave	enue - Gage A	Avenue to Florence Avenue)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
High Visibility Crosswalks	11	High Visibility Crosswalk	\$1,038.72	EA	6.00	\$6,232.32	\$3,116.16	\$9,000.00	3 additional included in the SGL EIR Project (no cost included)
		Loop Detectors	\$509.93	EA	12.00	\$6,119.16	\$3,059.58	\$9,000.00	Assumes 2 t-intersection loops
New or Improved Sidewalk	12	New Sidewalk	\$58,086.78	MI	1.10	\$63,895.45	\$31,947.73	\$96,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street
New of Improved Sidewark	12	Sidewalk Demolition	\$10,899.68	MI	1.10	\$11,989.65	\$5,994.82	\$18,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street
		Shade Tree	\$100,848.00	MI	0.55	\$55,466.40	\$27,733.20	\$83,000.00	Assumes both sides of street
Landscape and Shade	13	Landscaping	\$50,899.20	MI	0.55	\$27,994.56	\$13,997.28	\$42,000.00	Assumes both sides of street
Landscape and Shade	15	Demolition	\$50,631.68	MI	0.55	\$27,847.42	\$13,923.71	\$42,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.55	\$522,720.00	\$261,360.00	\$784,000.00	Assumes both sides of street
Pedestrian and Bicycle Lighting	14	Lighting (12-15' poles)	\$704,000.00	MI	0.28	\$193,600.00	\$96,800.00	\$290,000.00	Assumes west side only (50%), assumes 100% infill
Traffic Calming	15	Traffic Calming	\$435,000.00	MI	0.55	\$239,250.00	\$119,625.00	\$359,000.00	Allowance (includes signage, chicanes, mini-roundabouts (assumes 5 blocks per mile)
						\$1,155,114.97	\$577,557.48	\$1,732,000.00	

				Sal	It Lake Aver	nue (East Side) - Primary (Sc	outh of Florence	e Avenue - Flo	rence Avenue to Elizabeth Street)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
High Visibility Crosswalks	16	High Visibility Crosswalk	\$1,038.72	EA	7.00	\$7,271.04	\$3,635.52	\$11,000.00	
	10	Loop Detectors	\$509.93	EA	14.00	\$7,139.02	\$3,569.51	\$11,000.00	assumes 7 single crosswalk loops
Curb Ramps	17	ADA Curb Ramp	\$8,000.00	EA	14.00	\$112,000.00	\$56,000.00	\$168,000.00	Assumes dual curb ramps at two leg crossings and unidirectional at single, 1 additional
		New Sidewalk	\$58,086.78	MI	1.34	\$77,836.28	\$38,918.14	\$117,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street
New or Improved Sidewalk	18	Sidewalk Demolition	\$10,899.68	MI	1.34	\$14,605.57	\$7,302.79	\$22,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street
		New Sidewalk (Widening)	\$1,161,735.52	MI	0.34	\$389,181.40	\$194,590.70	\$584,000.00	Assumes 5 feet of widening
		Shade Tree	\$100,848.00	MI	0.67	\$67,568.16	\$33,784.08	\$101,000.00	Assumes both sides of street
Landscape and Shade	19	Landscaping	\$50,899.20	MI	0.67	\$34,102.46	\$17,051.23	\$51,000.00	Assumes both sides of street
Lanuscape and snade		Demolition	\$50,631.68	MI	0.67	\$33,923.23	\$16,961.61	\$51,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.67	\$636,768.00	\$318,384.00	\$955,000.00	Assumes both sides of street
Traffic Calming	20	Traffic Calming	\$435,000.00	MI	0.67	\$291,450.00	\$145,725.00	\$437,000.00	Allowance (includes signage, chicanes, mini-roundabouts (assumes 5 blocks per mile)
Curb Extension	21	ADA Curb Ramp	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps
Curb Extension	21	Curb Extension	\$20,000.00	EA	4.00	\$80,000.00	\$40,000.00	\$120,000.00	
Pedestrian and Bicycle Lighting	21B	Lighting (12-15' poles)	\$704,000.00	MI	0.34	\$235,840.00	\$117,920.00	\$354,000.00	Assumes west side only (50%), assumes 100% infill
Seating	21C	Benches	\$2,092.00	EA	2.00	\$4,184.00	\$2,092.00	\$6,000.00	
		Shade Structure	\$35,000.00	EA	1.00	\$35,000.00	\$17,500.00	\$53,000.00	
Bus Stop Improvements	21D	Seating Bench	\$2,092.00	EA	1.00	\$2,092.00	\$1,046.00	\$3,000.00	
		Trash Cans	\$1,515.00	EA	1.00	\$1,515.00	\$757.50	\$2,000.00	
						\$2,094,476.16	\$1,047,238.08	\$3,142,000.00	

	California Avenue - Secondary (Gage Avenue to Broadway)											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments			
High Visibility Crosswalks	34	High Visibility Crosswalk	\$1,038.72	EA	29.00	\$30,122.88	\$15,061.44	\$45,000.00				
Curb Ramps	36A	ADA Curb Ramp	\$8,000.00	EA	52.00	\$416,000.00	\$208,000.00	\$624,000.00	Assumes dual curb ramps where applicable.			
						\$446,122,88	\$223.061.44	\$669,000.00				

TOTAL SUM: \$20,908,000.00

al included in the SGL EIR Project (no cost included)
1



Note: totals may vary slightly due to rounding

						FIRESTONE ST	ATION		
					Atlantic Av	venue - Primary (Santa Ana	Street to South	nern Avenue)	
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		High Visibility Crosswalk	\$1,038.72	EA	16.00	\$16,619.52	\$8,309.76	\$25,000.00	
High Visibility Crosswalks	1	Loop Detectors	\$509.93	EA	32.00	\$16,317.76	\$8,158.88	\$24,000.00	Assumes 1 standard intersection, 2 t-i
		ADA Curb Ramp	\$8,000.00	EA	1.00	\$8,000.00	\$4,000.00	\$12,000.00	
		Ped Activated Signal (4-way)	\$106,768.64	EA	1.00	\$106,768.64	\$53,384.32	\$160,000.00	1 traffic signal included in the SGL EIR
		ADA Curb Ramp	\$8,000.00	EA	10.00	\$80,000.00	\$40,000.00	\$120,000.00	Assumes dual curb ramps, 4 additiona
Signalized Crossing	2, 9, 10	High Visibility Crosswalk	\$1,038.72	EA	4.00	\$4,154.88	\$2,077.44	\$6,000.00	4 additional included in the SGL EIR Pr
Signalized Crossing		Loop Detectors	\$509.93	EA	8.00	\$4,079.44	\$2,039.72	\$6,000.00	Assumes 1 standard intersection loop
		Curb Extension	\$20,000.00	EA	2.00	\$40,000.00	\$20,000.00	\$60,000.00	
		Traffic Signal Optimization	\$4,569.00	EA	10.00	\$45,690.00	\$22,845.00	\$69,000.00	
		New Sidewalk	\$58,086.78	MI	2.08	\$120,820.49	\$60,410.25	\$181,000.00	Assumes 5% of sidewalks require reco
New or Improved Sidewalk	3	Sidewalk Demolition	\$10,899.68	MI	2.08	\$22,671.33	\$11,335.67	\$34,000.00	Assumes 5% of sidewalks require reco
		New Sidewalk	\$1,161,735.52	MI	0.17	\$197,495.04	\$98,747.52	\$296,000.00	Assumes 100% new sidewalk, no curb
Bus Stop Improvements	4	Shade Structure	\$35,000.00	EA	10.00	\$350,000.00	\$175,000.00	\$525,000.00	
Curb Bamps	5	Tactile Warning Strips	\$1,000.00	EA	17.00	\$17,000.00	\$8,500.00	\$26,000.00	
Curb Ramps	Э	ADA Curb Ramp	\$8,000.00	EA	5.00	\$40,000.00	\$20,000.00	\$60,000.00	Assumes unidirectional ramps
Pedestrian and Bicycle Lighting	6	Lighting (12-15' poles)	\$704,000.00	MI	0.52	\$366,080.00	\$183,040.00	\$549,000.00	Assumes both sides of street, assume
		Shade Tree	\$100,848.00	MI	1.04	\$104,881.92	\$52,440.96	\$157,000.00	Assumes both sides of street
Landsonna and Shada	7	Landscaping	\$50,899.20	MI	1.04	\$52,935.17	\$26,467.58	\$79,000.00	Assumes both sides of street
Landscape and Shade	/	Demolition	\$50,631.68	MI	1.04	\$52,656.95	\$26,328.47	\$79,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	1.04	\$988,416.00	\$494,208.00	\$1,483,000.00	Assumes both sides of street
Traffic Calming	8	Traffic Calming	\$435,000.00	MI	1.04	\$452,400.00	\$226,200.00	\$679,000.00	Allowance (includes signage, chicanes,
						\$3,086,987.14	\$1,543,493.57	\$4,630,000.00	

			Fireston	e Bou	levard - Pri	mary (Alexander Avenue to	I-710 Freeway	Southbound	On/Off Ramps)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	1.23	\$124,043.04	\$62,021.52	\$186,000.00	Assumes both sides of street
Landscape and Shade	11	Landscaping	\$50,899.20	MI	1.23	\$62,606.02	\$31,303.01	\$94,000.00	Assumes both sides of street
Lanuscape and Shade		Demolition	\$50,631.68	MI	1.23	\$62,276.97	\$31,138.48	\$93,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	1.23	\$1,168,992.00	\$584,496.00	\$1,753,000.00	Assumes both sides of street
		Shade Structure	\$35,000.00	EA	6.00	\$210,000.00	\$105,000.00	\$315,000.00	
Bus Stop Improvements	12	Seating Bench	\$2,092.00	EA	6.00	\$12,552.00	\$6,276.00	\$19,000.00	
		Trash Cans	\$1,515.00	EA	6.00	\$9,090.00	\$4,545.00	\$14,000.00	
High Visibility Crosswalks	14	High Visibility Crosswalk	\$1,038.72	EA	23.00	\$23,890.56	\$11,945.28	\$36,000.00	
High visibility crosswarks	14	Loop Detectors	\$509.93	EA	30.00	\$15,297.90	\$7,648.95	\$23,000.00	Assumes 3 t-intersection, 2 standard,
New or Improved Sidewalk	15	New Sidewalk	\$58,086.78	MI	2.46	\$142,893.47	\$71,446.73	\$214,000.00	Assumes 5% of sidewalks require reco
New of Improved Sidewark	15	Sidewalk Demolition	\$10,899.68	MI	2.46	\$26,813.21	\$13,406.61	\$40,000.00	Assumes 5% of sidewalks require reco
Curb Extension	16	Curb Extension	\$20,000.00	EA	1.00	\$20,000.00	\$10,000.00	\$30,000.00	
CUID EXTENSION	10	ADA Curb Ramp	\$8,000.00	EA	1.00	\$8,000.00	\$4,000.00	\$12,000.00	Assumes unidirectional ramp
Curb Ramps	17	ADA Curb Ramp	\$8,000.00	EA	54.00	\$432,000.00	\$216,000.00	\$648,000.00	Assumes dual ramps where applicable
Traffic Calming	18	Traffic Calming	\$435,000.00	MI	1.23	\$535,050.00	\$267,525.00	\$803,000.00	Allowance (includes signage, chicanes,
Pedestrian and Cyclist Lighting	18A	Lighting (12-15' poles)	\$704,000.00	MI	0.64	\$450,560.00	\$225,280.00	\$676,000.00	Assumes both sides of street, assumes
Signalized Crossing	18B	Ped Activated Signals (RFB)	\$106,768.64	EA	1.00	\$106,768.64	\$53,384.32	\$160,000.00	
Wayfinding and Signage	19	Wayfinding Signage Allowance	\$495.74	EA	10.00	\$4,957.40	\$2,478.70	\$7,000.00	Assumes 10 signs for approach directi
						\$3,415,791.20	\$1,707,895.60	\$5,123,000.00	

	Salt Lake Avenue/Patata Street - Secondary (Cecilia Street to Wilcox Avenue)													
Project Type Project ID(s) Description Unit Cost Unit Quantity Total Construction Cost Contingency Total Cost Comments								Comments						
		New Sidewalk	\$58,086.78	MI	1.30	\$75,512.81	\$37,756.40	\$113,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street					
New or Improved Sidewalk	21	Sidewalk Demolition	\$10,899.68	MI	1.30	\$14,169.58	\$7,084.79	\$21,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street					
		New Sidewalk	\$1,161,735.52	MI	0.33	\$377,564.04	\$188,782.02	\$566,000.00	Assumes 100% new sidewalk for 5 ft widening					
						\$467,246.44	\$233,623.22	\$700,000.00						

#### TOTAL SUM: \$10,453,000.00

Note: totals may vary slightly due to rounding

-intersection, and 6 single crosswalk loops
R Project (no cost included)
al included in the SGL EIR Project (no cost included)
Project (no cost included)
DS
onstruction, assumes both sides of street
onstruction, assumes both sides of street
b reconstruction required
es 50% infill
s, mini-roundabouts (assumes 5 blocks per mile)

, and 2 single crosswalk loops
onstruction, assumes both sides of street
onstruction, assumes both sides of street
le. 2 additional included in the SGL EIR Project (no cost included)
s, mini-roundabouts (assumes 5 blocks per mile)
es 50% infill
tions

						GARDENDALE STA	TION		
			(	Garde	ndale Stree	t - Primary (Hollydale Regio	onal Park to Ho	over Avenue	
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	1.10	\$110,932.80	\$55,466.40	\$166,000.00	Assumes both sides of street
Landscape and Shade	1	Landscaping	\$50,899.20	MI	1.10	\$55,989.12	\$27,994.56	\$84,000.00	Assumes both sides of street
Lanuscape and snade	I.	Demolition	\$50,631.68	MI	1.10	\$55,694.85	\$27,847.42	\$84,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	1.10	\$1,045,440.00	\$522,720.00	\$1,568,000.00	Assumes both sides of street
New or Improved Sidewalk	2	New Sidewalk	\$58,086.78	MI	0.31	\$18,006.90	\$9,003.45	\$27,000.00	Assumes 5% of sidewalks require reconstruction, assumes north side only
New of improved sidewark	2	Sidewalk Demolition	\$10,899.68	MI	0.31	\$3,378.90	\$1,689.45	\$5,000.00	Assumes 5% of sidewalks require reconstruction, assumes north side only
High Visibility Crosswalks	2	High Visibility Crosswalk	\$1,038.72	EA	11.00	\$11,425.92	\$5,712.96	\$17,000.00	6 additional included in the SGL EIR Project (no cost included)
Flight Visibility Closswarks	5	Loop Detectors	\$509.93	EA	22.00	\$11,218.46	\$5,609.23	\$17,000.00	Assumes 1 standard intersection and 7 single crosswalk loops
		ADA Curb Ramp	\$8,000.00	EA	6.00	\$48,000.00	\$24,000.00	\$72,000.00	Assumes dual curb ramps
Traffic Calming	4	High Visibility Crosswalk	\$1,038.72	EA	4.00	\$4,154.88	\$2,077.44	\$6,000.00	
Traffic Califfing	4	Loop Detectors	\$509.93	EA	2.00	\$1,019.86	\$509.93	\$2,000.00	Assumes 1 single crosswalk loops
		Curb Extension	\$20,000.00	EA	1.00	\$20,000.00	\$10,000.00	\$30,000.00	
Curb Ramps	5	ADA Curb Ramp	\$8,000.00	EA	24.00	\$192,000.00	\$96,000.00	\$288,000.00	Assumes dual curb ramps, 6 additional included in the SGL EIR Project (no
Curb Extension	6	Curb Extension	\$20,000.00	EA	1.00	\$20,000.00	\$10,000.00	\$30,000.00	
CUIDEXTENSION	0	ADA Curb Ramp	\$8,000.00	EA	3.00	\$24,000.00	\$12,000.00	\$36,000.00	Assumes unidirectional ramps
Signalized Crossing	7	RRFB signals	\$53,384.32	EA	2.00	\$106,768.64	\$53,384.32	\$160,000.00	2 traffic signals included in the SGL EIR Project (no cost included)
Signalized Crossing	7A	Traffic Signal Optimization	\$4,569.00	EA	4.00	\$18,276.00	\$9,138.00	\$27,000.00	
Wayfinding Signage	9	Signage Allowance	\$9,914.80	MI	1.10	\$10,906.28	\$5,453.14	\$16,000.00	
						\$1,757,212.61	\$878,606.30	\$2,635,000.00	

				In	dustrial Ave	enue - Primary (Gardendale	e Street to Maii	n Street)	
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
Traffic Calming	10	Traffic Calming	\$435,000.00	MI	0.30	\$130,500.00	\$65,250.00	\$196,000.00	Allowance (includes signage, chicanes, mini-roundabouts (assumes 5 blocks per mile)
High Visibility Crosswalks 11	11	High Visibility Crosswalk	\$1,038.72	EA	3.00	\$3,116.16	\$1,558.08	\$5,000.00	
	11	Loop Detectors	\$509.93	EA	4.00	\$2,039.72	\$1,019.86	\$3,000.00	Assumes 2 single crosswalk loops
		Shade Tree	\$100,848.00	MI	0.30	\$30,254.40	\$15,127.20	\$45,000.00	Assumes both sides of street
Landscape and Shade	10	Landscaping	\$50,899.20	MI	0.30	\$15,269.76	\$7,634.88	\$23,000.00	Assumes both sides of street
Lanuscape and snade	12	Demolition	\$50,631.68	MI	0.30	\$15,189.50	\$7,594.75	\$23,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.30	\$285,120.00	\$142,560.00	\$428,000.00	Assumes both sides of street
						\$481,489.54	\$240,744.77	\$723,000.00	

				(	Garland Ave	enue - Primary (Imperial Hi	ghway to Mair	n Street)	
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	0.90	\$90,763.20	\$45,381.60	\$136,000.00	Assumes both sides of street
Landscape and Shade	13	Landscaping	\$50,899.20	MI	0.90	\$45,809.28	\$22,904.64	\$69,000.00	Assumes both sides of street
Lanuscape and Shade	15	Demolition	\$50,631.68	MI	0.90	\$45,568.51	\$22,784.26	\$68,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.90	\$855,360.00	\$427,680.00	\$1,283,000.00	Assumes both sides of street
High Visibility Crosswalks	14	High Visibility Crosswalk	\$1,038.72	EA	13.00	\$13,503.36	\$6,751.68	\$20,000.00	
	14	Loop Detectors	\$509.93	EA	18.00	\$9,178.74	\$4,589.37	\$14,000.00	Assumes 2 standard intersections and 1 single crosswalk intersection for loops
New or Improved Sidewalk	16	New Sidewalk	\$58,086.78	MI	1.80	\$104,556.20	\$52,278.10	\$157,000.00	Assumes 5% of sidewalks require reconstruction, assumes north side only
	-	Sidewalk Demolition	\$10,899.68	MI	1.80	\$19,619.42	\$9,809.71	\$29,000.00	Assumes 5% of sidewalks require reconstruction, assumes north side only
Traffic Calming	17	Traffic Calming	\$435,000.00	MI	0.90	\$391,500.00	\$195,750.00	\$587,000.00	Allowance (includes signage, chicanes, mini-roundabouts (assumes 5 blocks per mile)
		Shade Structure	\$35,000.00	EA	3.00	\$105,000.00	\$52,500.00	\$158,000.00	
Bus Stop Improvements	18	Seating Bench	\$2,092.00	EA	3.00	\$6,276.00	\$3,138.00	\$9,000.00	
		Trash Cans	\$1,515.00	EA	3.00	\$4,545.00	\$2,272.50	\$7,000.00	
Signalized Crossing	19A	RRFB signals	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00	Assumes single Rapid Flash Beacon for each direction
Signalized crossing	177	High Visibility Crosswalk	\$1,038.72	EA	2.00	\$2,077.44	\$1,038.72	\$3,000.00	
Seating	19B	Seating Bench	\$2,092.00	EA	5.00	\$10,460.00	\$5,230.00	\$16,000.00	
Curb Ramps	19C	ADA Curb Ramp	\$8,000.00	EA	21.00	\$168,000.00	\$84,000.00	\$252,000.00	Assumes unidirectional ramps
Signalized Crossing	19D	RRFB signals	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00	Assumes single Rapid Flash Beacon for each direction
Pedestrian and Cyclist Lighting	19E	Lighting (12-15' poles)	\$704,000.00	MI	0.45	\$316,800.00	\$158,400.00	\$475,000.00	Assumes both sides of street, assumes 50% infill
						\$2,295,785.79	\$1,147,892.90	\$3,443,000.00	

	Dakota Avenue - Secondary (Gardendale Street to Main Street)								
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
Pedestrian and Cyclist Lighting	22	Lighting (12-15' poles)	\$704,000.00	MI	0.17	\$116,160.00	\$58,080.00	\$174,000.00	Assumes both sides of street, assumes 50% infill
New or Improved Sidewalk	22	New Sidewalk	\$1,161,735.52	MI	0.66	\$766,745.44	\$383,372.72	\$1,150,000.00	
New of Improved Sidewalk	25	New Curb	\$205,233.60	MI	0.66	\$135,454.18	\$67,727.09	\$203,000.00	Assumes both sides of street
						\$1,018,359.62	\$509,179.81	\$1,527,000.00	

TOTAL SUM: \$8,328,000.00

Note: totals may vary slightly due to rounding

ly	
ly	
no cost included)	

	I-105/C LINE STATION										
Arthur Avenue - Primary (Denver Street to Howe Street)											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
High Visibility Crosswalks	1	High Visibility Crosswalk	\$1,038.72	EA	1.00	\$1,038.72	\$519.36	\$2,000.00			
	I	Loop Detectors	\$509.93	EA	2.00	\$1,019.86	\$509.93	\$2,000.00	Assumes 1 single crosswalk loops		
		Shade Tree	\$100,848.00	MI	0.25	\$25,212.00	\$12,606.00	\$38,000.00	Assumes both sides of street		
Landscape and Shade	2	Landscaping	\$50,899.20	MI	0.25	\$12,724.80	\$6,362.40	\$19,000.00	Assumes both sides of street		
Lanuscape and Shade	2	Demolition	\$50,631.68	MI	0.25	\$12,657.92	\$6,328.96	\$19,000.00	Assumes both sides of street		
		Tree Grate	\$950,400.00	MI	0.25	\$237,600.00	\$118,800.00	\$356,000.00	Assumes both sides of street		
						\$290,253.30	\$145,126.65	\$436,000.00			

					Industr	ial Avenue - Primary (Main	Street to Cent	ury Boulevar	rd)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Traffic Calming	\$435,000.00	MI	0.32	\$139,200.00	\$69,600.00	\$209,000.00	Allowance (includes signage, chicanes, mini
		ADA Curb Ramp	\$8,000.00	EA	2.00	\$16,000.00	\$8,000.00	\$24,000.00	Assumes dual curb ramps
		High Visibility Crosswalk	\$1,038.72	EA	2.00	\$2,077.44	\$1,038.72	\$3,000.00	
		Loop Detectors	\$509.93	EA	4.00	\$2,039.72	\$1,019.86	\$3,000.00	Assumes 2 single crosswalk loops
Traffic Calming	3, 8, 11	Stop Signs	\$495.74	EA	4.00	\$1,982.96	\$991.48	\$3,000.00	
		Limit Lines	\$108.20	EA	4.00	\$432.80	\$216.40	\$1,000.00	
		New Sidewalk	\$1,161,735.52	MI	0.04	\$46,469.42	\$23,234.71	\$70,000.00	Assumes 100% new sidewalk
		New Curb	\$205,233.60	MI	0.04	\$8,209.34	\$4,104.67	\$12,000.00	
		Curb Extension	\$20,000.00	EA	1.00	\$20,000.00	\$10,000.00	\$30,000.00	
		Shade Tree	\$100,848.00	MI	0.32	\$32,271.36	\$16,135.68	\$48,000.00	Assumes both sides of street
Landscape and Shade	1	Landscaping	\$50,899.20	MI	0.32	\$16,287.74	\$8,143.87	\$24,000.00	Assumes both sides of street
Landscape and Shade	7	Demolition	\$50,631.68	MI	0.32	\$16,202.14	\$8,101.07	\$24,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.32	\$304,128.00	\$152,064.00	\$456,000.00	Assumes both sides of street
		New Sidewalk	\$58,086.78	MI	0.14	\$8,132.15	\$4,066.07	\$12,000.00	Assumes 5% of sidewalks require reconstru
New or Improved Sidewalk	5,9	Sidewalk Demolition	\$10,899.68	MI	0.14	\$1,525.96	\$762.98	\$2,000.00	Assumes 5% of sidewalks require reconstru
New of improved Sidewalk	J, 7	New Sidewalk	\$1,161,735.52	MI	0.15	\$174,260.33	\$87,130.16	\$261,000.00	Assumes 100% new sidewalk
		New Curb	\$205,233.60	MI	0.15	\$30,785.04	\$15,392.52	\$46,000.00	
Roundabout	6	Large Roundabout	\$250,000.00	EA	1.00	\$250,000.00	\$125,000.00	\$375,000.00	Allowance
Curb Ramps	7	ADA Curb Ramp	\$8,000.00	EA	20.00	\$160,000.00	\$80,000.00	\$240,000.00	Assumes dual curb ramps where feasible
Culb Ramps	7	Tactile Warning Strips	\$1,000.00	EA	10.00	\$10,000.00	\$5,000.00	\$15,000.00	
High Visibility Crosswalks	10	High Visibility Crosswalk	\$1,038.72	EA	12.00	\$12,464.64	\$6,232.32	\$19,000.00	
						\$1,252,469.04	\$626,234.52	\$1,877,000.00	

				(	Century Boi	ulevard - Primary (Pennsylv	ania Avenue to	Industrial A	venue)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Traffic Calming	\$435,000.00	MI	1.08	\$469,800.00	\$234,900.00	\$705,000.00	Allowance (includes signage, chicanes, mini
		High Visibility Crosswalk	\$1,038.72	EA	3.00	\$3,116.16	\$1,558.08	\$5,000.00	
Traffic Calming	13, 17	Loop Detectors	\$509.93	EA	6.00	\$3,059.58	\$1,529.79	\$5,000.00	Assumes 1 t-intersection crosswalk loops
		Stop Signs	\$495.74	EA	4.00	\$1,982.96	\$991.48	\$3,000.00	
		Limit Lines	\$108.20	EA	4.00	\$432.80	\$216.40	\$1,000.00	
Curb Ramps	14	ADA Curb Ramp	\$8,000.00	EA	36.00	\$288,000.00	\$144,000.00	\$432,000.00	Assumes dual curb ramps where applicable
High Visibility Crosswalks	15	High Visibility Crosswalk	\$1,038.72	EA	14.00	\$14,542.08	\$7,271.04	\$22,000.00	1 additional included in the SGL EIR Project
High visibility crosswarks	10	Loop Detectors	\$509.93	EA	28.00	\$14,278.04	\$7,139.02	\$21,000.00	Assumes 1 standard intersection, 1 mid-blo
Seating	16	Seating Bench	\$2,092.00	EA	2.00	\$4,184.00	\$2,092.00	\$6,000.00	
New or Improved Sidewalk	10 10	ADA Curb Ramp	\$8,000.00	EA	4.00	\$32,000.00	\$16,000.00	\$48,000.00	Assumes dual curb ramps
New of improved Sidewalk	18, 19	New Sidewalk	\$1,161,735.52	MI	0.05	\$58,086.78	\$29,043.39	\$87,000.00	Assumes 100% new sidewalk
						\$889,482.40	\$444,741.20	\$1,335,000.00	

i-roundabouts (assumes 5 blocks per mile)
uction, both sides of street
uction, both sides of street

nini-roundabouts (assumes 5 blocks per mile)

ble, 2 additional included in the SGL EIR Project (no cost included) ect (no cost included) block intersection and 8 single crosswalk loops

					G	arfield Ave - Primary (Main	Street to Meno	dy Street)	
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	0.54	\$54,457.92	\$27,228.96	\$82,000.00	Assumes both sides of street
Landscape and Shade	22	Landscaping	\$50,899.20	MI	0.54	\$27,485.57	\$13,742.78	\$41,000.00	Assumes both sides of street
Lanuscape and Shade	22	Demolition	\$50,631.68	MI	0.54	\$27,341.11	\$13,670.55	\$41,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.54	\$513,216.00	\$256,608.00	\$770,000.00	Assumes both sides of street
Pedestrian and Bicycle Lighting	23	Lighting (12-15' poles)	\$704,000.00	MI	0.27	\$190,080.00	\$95,040.00	\$285,000.00	Assumes both sides of street, assumes 50%
Curb Extension	24	Curb Extension	\$20,000.00	EA	4.00	\$80,000.00	\$40,000.00	\$120,000.00	
Curb Extension	24	ADA Curb Ramp	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps
Traffic Calming	25	Traffic Calming	\$435,000.00	MI	0.54	\$234,900.00	\$117,450.00	\$352,000.00	Allowance (includes signage, chicanes, mini-
	26	Shade Structure	\$35,000.00	EA	3.00	\$105,000.00	\$52,500.00	\$158,000.00	
Bus Stop Improvements		Seating Bench	\$2,092.00	EA	3.00	\$6,276.00	\$3,138.00	\$9,000.00	
		Trash Cans	\$1,515.00	EA	3.00	\$4,545.00	\$2,272.50	\$7,000.00	
High Visibility Crosswalks	27	High Visibility Crosswalk	\$1,038.72	EA	16.00	\$16,619.52	\$8,309.76	\$25,000.00	
	21	Loop Detectors	\$509.93	EA	22.00	\$11,218.46	\$5,609.23	\$17,000.00	Assumes 1 standard intersection, 1 t-interse
Signalized Crossing	27A	RRFB signals	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00	Assumes single Rapid Flash Beacon for each
Signalized Crossing	278	High Visibility Crosswalk	\$1,038.72	EA	1.00	\$1,038.72	\$519.36	\$2,000.00	
Signalized Crossing	27B	Traffic Signal Optimization	\$4,569.00	EA	8.00	\$36,552.00	\$18,276.00	\$55,000.00	
Signalized Crossing	27C	RRFB signals	\$53,384.32	EA	1.00	\$53,384.32	\$26,692.16	\$80,000.00	Assumes single Rapid Flash Beacon for each
Curb Ramps	27D	ADA Curb Ramp	\$8,000.00	EA	24.00	\$192,000.00	\$96,000.00	\$288,000.00	Assumes dual curb ramps where applicable
New or Improved Sidewalk	27E	New Sidewalk	\$58,086.78	MI	1.06	\$61,571.98	\$30,785.99	\$92,000.00	Assumes 5% of sidewalks require reconstruc
New of Improved Sidewark	275	Sidewalk Demolition	\$10,899.68	MI	1.06	\$11,553.66	\$5,776.83	\$17,000.00	Assumes 5% of sidewalks require reconstruct
Seating	27F	Seating Bench	\$2,092.00	EA	11.00	\$23,012.00	\$11,506.00	\$35,000.00	
						\$1,767,636.58	\$883,818.29	\$2,652,000.00	

Main Street - Secondary (Pennsylvania Avenue to Paramount Boulevard)											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
High Visibility Crosswalks	29	High Visibility Crosswalk	\$1,038.72	EA	18.00	\$18,696.96	\$9,348.48	\$28,000.00	Assumes dual curb ramps where applicable,		
		Loop Detectors	\$509.93	EA	14.00	\$7,139.02	\$3,569.51	\$11,000.00	Assumes 1 T and 1 standard intersection loc		
Curb Ramps	30	ADA Curb Ramp	\$8,000.00	EA	36.00	\$288,000.00	\$144,000.00	\$432,000.00	Assumes dual curb ramps where applicable,		
						\$313,835.98	\$156,917.99	\$471,000.00			

#### TOTAL SUM: \$6,771,000.00

Note: totals may vary slightly due to rounding

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

% infill

ni-roundabouts (assumes 5 blocks per mile)

section, and 2 midblock intersection loops ch direction

ch direction ruction, both sides of street

ruction, both sides of street

ble, 1 additional included in the SGL EIR Project (no cost included) loops ble, 2 additional included in the SGL EIR Project (no cost included)

						PARAMOUNT/ROSEC	RANS STATI	ON			
Paramount Boulevard - Primary (South Somerset Ranch Road to Somerset Boulevard)											
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments		
		Shade Tree	\$100,848.00	MI	1.03	\$103,873.44	\$51,936.72	\$156,000.00	Assumes both sides of street		
Landscape and Shade	1	Landscaping	\$50,899.20	MI	1.03	\$52,426.18	\$26,213.09	\$79,000.00	Assumes both sides of street		
Lanuscape and Shade	1	Demolition	\$50,631.68	MI	1.03	\$52,150.63	\$26,075.32	\$78,000.00	Assumes both sides of street		
		Tree Grate	\$950,400.00	MI	1.03	\$978,912.00	\$489,456.00	\$1,468,000.00	Assumes both sides of street		
Pedestrian and Cyclist Lighting	2	Lighting (12-15' poles)	\$704,000.00	MI	0.52	\$362,560.00	\$181,280.00	\$544,000.00	Assumes both sides of street, assumes		
High Visibility Crosswalks	3	High Visibility Crosswalk	\$1,038.72	EA	10.00	\$10,387.20	\$5,193.60	\$16,000.00	4 additional included in the SGL EIR Pro		
	5	Loop Detectors	\$509.93	EA	20.00	\$10,198.60	\$5,099.30	\$15,000.00	Assumes 1 standard intersection, 1 t-in		
Curb Ramps	4	ADA Curb Ramp	\$8,000.00	EA	6.00	\$48,000.00	\$24,000.00	\$72,000.00	Assumes dual curb ramps, 6 additional		
New or Improved Sidewalk	Б	New Sidewalk	\$58,086.78	MI	0.18	\$10,455.62	\$5,227.81	\$16,000.00	Assumes 5% of sidewalks require recor		
New of Improved Sidewark	5	Sidewalk Demolition	\$10,899.68	MI	0.18	\$1,961.94	\$980.97	\$3,000.00	Assumes 5% of sidewalks require recor		
Bus Stop Improvements	6	Shade Structure	\$35,000.00	EA	9.00	\$315,000.00	\$157,500.00	\$473,000.00			
		High Visibility Crosswalk	\$1,038.72	EA	6.00	\$6,232.32	\$3,116.16	\$9,000.00			
Signalized Crossing	7	Loop Detectors	\$509.93	EA	12.00	\$6,119.16	\$3,059.58	\$9,000.00	Assumes 1 standard intersection and 1		
		Ped Activated Signal (2-way)	\$53,384.32	EA	2.00	\$106,768.64	\$53,384.32	\$160,000.00			
Signalized Crossing	7A	Traffic Signal Optimization	\$4,569.00	EA	10.00	\$45,690.00	\$22,845.00	\$69,000.00			
						\$2,110,735.73	\$1,055,367.86	\$3,167,000.00			

					Rosecrans	Avenue - Primary (Garfield	Avenue to Dov	vney Avenue	e)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	1.00	\$100,848.00	\$50,424.00	\$151,000.00	Assumes both sides of street
Landscape and Shade	10	Landscaping	\$50,899.20	MI	1.00	\$50,899.20	\$25,449.60	\$76,000.00	Assumes both sides of street
Lanuscape and Shade		Demolition	\$50,631.68	MI	1.00	\$50,631.68	\$25,315.84	\$76,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	1.00	\$950,400.00	\$475,200.00	\$1,426,000.00	Assumes both sides of street
Curb Ramps	11	ADA Curb Ramp	\$8,000.00	EA	26.00	\$208,000.00	\$104,000.00	\$312,000.00	Assumes dual curb ramps where applic
New or Improved Sidewalk	12	New Sidewalk	\$58,086.78	MI	2.00	\$116,173.55	\$58,086.78	\$174,000.00	Assumes 5% of sidewalks require recor
New of Improved Sidewark	12	Sidewalk Demolition	\$10,899.68	MI	2.00	\$21,799.36	\$10,899.68	\$33,000.00	Assumes 5% of sidewalks require recor
		Shade Structure	\$35,000.00	EA	7.00	\$245,000.00	\$122,500.00	\$368,000.00	
Bus Stop Improvements	13	Seating Bench	\$2,092.00	EA	7.00	\$14,644.00	\$7,322.00	\$22,000.00	
		Trash Cans	\$1,515.00	EA	7.00	\$10,605.00	\$5,302.50	\$16,000.00	
High Visibility Crosswalks	14	High Visibility Crosswalk	\$1,038.72	EA	10.00	\$10,387.20	\$5,193.60	\$16,000.00	
	14	Loop Detectors	\$509.93	EA	20.00	\$10,198.60	\$5,099.30	\$15,000.00	Assumes 1 standard intersection and 3
Landscape and Shade	15	Plaza	\$250,000.00	EA	1.00	\$250,000.00	\$125,000.00	\$375,000.00	Assumes allowance
						\$2,039,586.59	\$1,019,793.30	\$3,060,000.00	

TOTAL SUM: \$6,227,000.00

Note: totals may vary slightly due to rounding

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

es 50% infill
Project (no cost included)
intersection, 1 mid-block intersection and 1 single crosswalk loops
al included in the SGL EIR Project (no cost included)
onstruction, assumes both sides of street
onstruction, assumes both sides of street
1 mid-block intersection crosswalk loops

olicable construction, assumes both sides of street construction, assumes both sides of street

3 mid-block intersection loops

						BELLFLOWE	R STATION						
	Bellflower Boulevard - Primary (Jefferson Street to Arkansas Street)												
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments				
		Shade Tree	\$100,848.00	MI	0.94	\$94,797.12	\$47,398.56	\$142,000.00	Assumes both sides of street				
Landscape and Shade	1	Landscaping	\$50,899.20	MI	0.94	\$47,845.25	\$23,922.62	\$72,000.00	Assumes both sides of street				
Lanuscape and Shade	I	Demolition	\$50,631.68	MI	0.94	\$47,593.78	\$23,796.89	\$71,000.00	Assumes both sides of street				
		Tree Grate	\$950,400.00	MI	0.94	\$893,376.00	\$446,688.00	\$1,340,000.00	Assumes both sides of street				
High Visibility Crosswalks	2	High Visibility Crosswalk	\$1,038.72	EA	16.00	\$16,619.52	\$8,309.76	\$25,000.00					
	Z	Loop Detectors	\$509.93	EA	32.00	\$16,317.76	\$8,158.88	\$24,000.00	Assumes 4 standard intersection loops				
Curb Ramps	3	ADA Curb Ramp	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps				
Shade Structures	4	Shade Structure	\$35,000.00	EA	2.00	\$70,000.00	\$35,000.00	\$105,000.00					
Bus Stop Improvements	5	Shade Structure	\$35,000.00	EA	5.00	\$175,000.00	\$87,500.00	\$263,000.00					
Signalized Crossing	5A	Traffic Signal Optimization	\$4,569.00	EA	20.00	\$91,380.00	\$45,690.00	\$137,000.00					
						\$1,516,929.43	\$758,464.71	\$2,275,000.00					

			Be	ellflow	er Bike Trai	il (Existing Off-Street Path) -	Primary (Alono	dra Boulevar	rd to Flower Street)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	0.50	\$50,424.00	\$25,212.00	\$76,000.00	Assumes both sides of path, bike path realign
Landscape and Shade	7	Landscaping	\$50,899.20	MI	0.50	\$25,449.60	\$12,724.80	\$38,000.00	Assumes both sides of path, bike path realign
		Demolition	\$50,631.68	MI	0.50	\$25,315.84	\$12,657.92	\$38,000.00	Assumes both sides of path, bike path realign
New or Improved Sidewalk	8	New Sidewalk	\$1,161,735.52	MI	0.02	\$23,234.71	\$11,617.36	\$35,000.00	Assumes 100% new sidewalk, bike path conne
Curb Ramps	9	ADA Curb Ramp	\$8,000.00	EA	2.00	\$16,000.00	\$8,000.00	\$24,000.00	Assumes dual curb ramps, 5 additional include
High Visibility Crosswalks	10	High Visibility Crosswalk	\$1,038.72	EA	2.00	\$2,077.44	\$1,038.72	\$3,000.00	3 additional included in the SGL EIR Project (n
	10	Loop Detectors	\$509.93	EA	4.00	\$2,039.72	\$1,019.86	\$3,000.00	Assumes 1 mid-block intersection loops
Shade Structures	11	Shade Structure	\$35,000.00	EA	8.00	\$280,000.00	\$140,000.00	\$420,000.00	
Seating	12	Seating Bench	\$2,092.00	EA	16.00	\$33,472.00	\$16,736.00	\$50,000.00	
						\$458,013.31	\$229,006.66	\$687,000.00	

TOTAL SUM: \$2,962,000.00

Note: totals may vary slightly due to rounding

Note: cost estimates are intended to be used as a tool for planning to guide future decision-making processes.

ignment included in the SGL EIR Project (no cost included) ignment included in the SGL EIR Project (no cost included) ignment included in the SGL EIR Project (no cost included) nnection included in the SGL EIR Project (no cost included) luded in the SGL EIR Project (no cost included) (no cost included)

						PIONEER	STATION		
					Pion	eer Boulevard - Primary (As	shworth Street	to 195th Str	eet)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	1.05	\$105,890.40	\$52,945.20	\$159,000.00	Assumes both sides of street
Landscape and Shade	1	Landscaping	\$50,899.20	MI	1.05	\$53,444.16	\$26,722.08	\$80,000.00	Assumes both sides of street
Lanuscape and Shade	I	Demolition	\$50,631.68	MI	1.05	\$53,163.26	\$26,581.63	\$80,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	1.05	\$997,920.00	\$498,960.00	\$1,497,000.00	Assumes both sides of street
Pedestrian and Cyclist Lighting	2	Lighting (12-15' poles)	\$704,000.00	MI	0.23	\$158,400.00	\$79,200.00	\$238,000.00	Assumes both sides of street, assumes 50% infill
		New Sidewalk	\$58,086.78	MI	1.05	\$60,991.11	\$30,495.56	\$91,000.00	Assumes 5% of sidewalks require reconstruction, as
New or Improved Sidewalk	3, 8	Sidewalk Demolition	\$10,899.68	MI	1.05	\$11,444.66	\$5,722.33	\$17,000.00	Assumes 5% of sidewalks require reconstruction, as
New of improved Sidewark	3, 0	New Sidewalk	\$1,161,735.52	MI	0.22	\$255,581.81	\$127,790.91	\$383,000.00	Assumes 100% new sidewalk
		New Curb	\$205,233.60	MI	0.22	\$45,151.39	\$22,575.70	\$68,000.00	
		Shade Structure	\$35,000.00	EA	1.00	\$35,000.00	\$17,500.00	\$53,000.00	
Bus Stop Improvements	4	Seating Bench	\$2,092.00	EA	1.00	\$2,092.00	\$1,046.00	\$3,000.00	
		Trash Cans	\$1,515.00	EA	1.00	\$1,515.00	\$757.50	\$2,000.00	
Curb Ramps	5	ADA Curb Ramp	\$8,000.00	EA	34.00	\$272,000.00	\$136,000.00	\$408,000.00	Assumes dual curb ramps
High Visibility Crosswalks	6	High Visibility Crosswalk	\$1,038.72	EA	27.00	\$28,045.44	\$14,022.72	\$42,000.00	
	0	Loop Detectors	\$509.93	EA	54.00	\$27,536.22	\$13,768.11	\$41,000.00	Assumes 6 standard intersection, 1 mid-block inters
Traffic Calming	7, 9	Curb Extension	\$20,000.00	EA	1.00	\$20,000.00	\$10,000.00	\$30,000.00	
Traffic Califfing	1,7	Traffic Calming	\$435,000.00	MI	1.05	\$456,750.00	\$228,375.00	\$685,000.00	Allowance (includes signage, chicanes, mini-rounda
Signalized Crossing	10	Signalized Intersection	-	EA	1.00	-	-	-	Signalized intersection, crosswalks, and curb ramps
Signalized Crossing	10A	Traffic Signal Optimization	\$4,569.00	EA	20.00	\$91,380.00	\$45,690.00	\$137,000.00	
						\$2,676,305.47	\$1,338,152.73	\$4,014,000.00	

									·
					18	7th Street - Primary (Gridle	ey Road to Clarl	kdale Avenue	e)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	0.64	\$64,542.72	\$32,271.36	\$97,000.00	Assumes both sides of street
Landscape and Shade	12	Landscaping	\$50,899.20	MI	0.64	\$32,575.49	\$16,287.74	\$49,000.00	Assumes both sides of street
Landscape and Shade	12	Demolition	\$50,631.68	MI	0.64	\$32,404.28	\$16,202.14	\$49,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.64	\$608,256.00	\$304,128.00	\$912,000.00	Assumes both sides of street
		Traffic Calming	\$435,000.00	MI	0.64	\$278,400.00	\$139,200.00	\$418,000.00	Allowance (includes signage, chicanes, mini-rou
		ADA Curb Ramp	\$8,000.00	EA	8.00	\$64,000.00	\$32,000.00	\$96,000.00	Assumes dual curb ramps
	13, 15, 16	High Visibility Crosswalk	\$1,038.72	EA	8.00	\$8,309.76	\$4,154.88	\$12,000.00	
Traffic Calming		Loop Detectors	\$509.93	EA	16.00	\$8,158.88	\$4,079.44	\$12,000.00	Assumes 2 standard intersection crosswalk loop
Traffic Califfing		Stop Signs	\$495.74	EA	4.00	\$1,982.96	\$991.48	\$3,000.00	
		Limit Lines	\$108.20	EA	4.00	\$432.80	\$216.40	\$1,000.00	
		New Sidewalk	\$1,161,735.52	MI	0.02	\$23,234.71	\$11,617.36	\$35,000.00	Assumes 100% new sidewalk
		New Curb	\$205,233.60	MI	0.02	\$4,104.67	\$2,052.34	\$6,000.00	
High Visibility Crosswalks	14	High Visibility Crosswalk	\$1,038.72	EA	10.00	\$10,387.20	\$5,193.60	\$16,000.00	
High visibility crosswarks	14	Loop Detectors	\$509.93	EA	20.00	\$10,198.60	\$5,099.30	\$15,000.00	Assumes 1 standard intersection, 1 t-intersection
Curb Ramps	17	ADA Curb Ramp	\$8,000.00	EA	2.00	\$16,000.00	\$8,000.00	\$24,000.00	Assumes dual curb ramps
						\$1,162,988.07	\$581,494.03	\$1,745,000.00	

			Artesia Histo	oric Dis	strict Recre	ational Trail (Existing Off-St	reet Path) - Prii	mary (183rd	Street to Pioneer Boulevard)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	0.61	\$61,517.28	\$30,758.64	\$92,000.00	Assumes both sides of path
Landscape and Shade	19	Landscaping	\$50,899.20	MI	0.61	\$31,048.51	\$15,524.26	\$47,000.00	Assumes both sides of path
		Demolition	\$50,631.68	MI	0.61	\$30,885.32	\$15,442.66	\$46,000.00	Assumes both sides of path
New or Improved Sidewalk	20	New Sidewalk	\$1,161,735.52	MI	0.01	\$11,617.36	\$5,808.68	\$17,000.00	Assumes 100% new sidewalk
Shade Structure	21	Shade Structure	\$35,000.00	EA	4.00	\$140,000.00	\$70,000.00	\$210,000.00	
Seating	22	Seating Bench	\$2,092.00	EA	8.00	\$16,736.00	\$8,368.00	\$25,000.00	
High Visibility Crosswalks	24	High Visibility Crosswalk	\$1,038.72	EA	0.00	\$0.00	\$0.00	\$0.00	No cost. SGL improvement
						\$291,804.47	\$145,902.24	\$437,000.00	

ion,	assumes east side only	
ion,	assumes east side only	

intersection, and 1 single crosswalk loops

roundabouts (assumes 5 blocks per mile) ramps by SGL EIR at Solana St and Pioneer Blvd (no cost included)

oundabouts (assumes 5 blocks per mile)
ops
ion, 1 mid-block intersection, and 1 single crosswalk loops

					A	lburtis Avenue - Primary (1	87th Street to S	South Street	
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments
		Shade Tree	\$100,848.00	MI	0.20	\$20,169.60	\$10,084.80	\$30,000.00	Assumes both sides of street
Landscape and Shade	25	Landscaping	\$50,899.20	MI	0.20	\$10,179.84	\$5,089.92	\$15,000.00	Assumes both sides of street
Landscape and Shade	25	Demolition	\$50,631.68	MI	0.20	\$10,126.34	\$5,063.17	\$15,000.00	Assumes both sides of street
		Tree Grate	\$950,400.00	MI	0.20	\$190,080.00	\$95,040.00	\$285,000.00	Assumes both sides of street
New or Improved Sidewalk	26	New Sidewalk	\$58,086.78	MI	0.20	\$11,617.36	\$5,808.68	\$17,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street
New of Improved Sidewark	20	Sidewalk Demolition	\$10,899.68	MI	0.20	\$2,179.94	\$1,089.97	\$3,000.00	Assumes 5% of sidewalks require reconstruction, assumes both sides of street
High Visibility Crosswalks	27	High Visibility Crosswalk	\$1,038.72	EA	8.00	\$8,309.76	\$4,154.88	\$12,000.00	
High Visibility Crosswalks	27	Loop Detectors	\$509.93	EA	8.00	\$4,079.44	\$2,039.72	\$6,000.00	Assumes 1 standard intersection loops
						\$256,742.27	\$128,371.13	\$383,000.00	

	South Street - Secondary (Gridley Road to Grayland Avenue)														
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost Comments							
High Visibility Crosswalks	30	High Visibility Crosswalk	\$1,038.72	EA	17.00	\$17,658.24	\$8,829.12	\$26,000.00							
	50	Loop Detectors	\$509.93	EA	32.00	\$16,317.76	\$8,158.88	\$24,000.00 Assumes 2 standard intersection, 1 t-intersection and 2 single crossing loops							
		Shade Structure	\$35,000.00	EA	6.00	\$210,000.00	\$105,000.00	\$315,000.00							
Bus Stop Improvements	34	Seating Bench	\$2,092.00	EA	6.00	\$12,552.00	\$6,276.00	\$19,000.00							
		Trash Cans	\$1,515.00	EA	6.00	\$9,090.00	\$4,545.00	\$14,000.00							
						\$265,618.00	\$132,809.00	\$398,000.00							

	183rd Street - Secondary (Gridley Road to Elaine Avenue)													
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost	Comments					
High Visibility Crosswalks	27	High Visibility Crosswalk	\$1,038.72	EA	18.00	\$18,696.96	\$9,348.48	\$28,000.00						
	37	Loop Detectors	\$509.93	EA	16.00	\$8,158.88	\$4,079.44	\$12,000.00	Assumes 2 standard intersection loops					
						\$26,855.84	\$13,427.92	\$40,000.00						

					Clarke	dale Avenue - Secondary (A	shworth Street	to South Street)
Project Type	Project ID(s)	Description	Unit Cost	Unit	Quantity	Total Construction Cost	Contingency	Total Cost Comments
High Visibility Crosswalks	39	High Visibility Crosswalk	\$1,038.72	EA	8.00	\$8,309.76	\$4,154.88	\$12,000.00
						\$8,309.76	\$4,154.88	\$12,000.00

TOTAL SUM: \$7,029,000.00

Note: totals may vary slightly due to rounding



# **Gender Analysis Tool**

Supporting documents with no effect on FLM plan recommendations, Metro intends to publish separately, and additional detail may be added following Metro Board adoption.

#### **3.6 GENDER ANALYSIS TOOL**

Project Name: Southeast Gateway Line (SGL) First/Last Mile (FLM) Planning

**Team Members:** Metro First/Last Mile Planning, Arellano Associates, Cityworks Design, WSP, and partnering CBO's Mujeres Unidas Sirviendo Activamente (MUSA), Shelf Help Graphics, and BikeLA

#### IDENTIFYING GENDER-SPECIFIC NEEDS AND IMPACTS

The term "women" is used to signify people whose gender identity is that of female, regardless of their sex assigned at birth. This terminology recognizes that trans women are women, not simply "people who identify as women."

## 1. How did the current/proposed action identify the different needs and interests of different genders?

The FLM technical team collected and analyzed gender-disaggregated quantitative and qualitative data during the outreach phase of the project. Project partner community-based organizations (CBOs) MUSA, Self Help Graphics, and BikeLA, helped develop outreach activities to encourage women's attendance at events. The main outreach activities were an online survey and a women's community workshop. Other outreach activities included community walk audits, pop-ups, and a community workshop.

2. Has the project team collected and analyzed gender-disaggregated data or research to inform the current/proposed action?

The team reviewed and summarized gender-based studies and plans, which informed the project's outreach efforts. They served as a guide to collecting gender-disaggregated data via an online survey and a targeted focus group workshop. Below is a summary of the gender-based studies and plans that were reviewed and the outreach efforts.

#### **Relevant Gender-Based Studies and Plans**

<u>Metro's Equity Platform Framework (2018)</u> – Metro developed an Equity platform to address the historic access disparities felt among cities in Los Angeles County. The framework consists of four pillars that guide the incorporation of equity into every aspect of the agency's business, projects, investments, and new initiatives. The four pillars of the equity framework include Define and Measure, Listen and Learn, Focus and Deliver, Train and Grow.

<u>Metro's Understanding How Women Travel Study (2019)</u> – This study was recommended by Metro's Women and Girls Governing Council as an initiative to gather and analyze Metro-specific and County-specific data to identify the unmet needs of women riders. Data reviewed for the plan included quantitative and qualitative sources. The findings are categorized into five themes: Travel Behavior Trends, Safety, Access, Reliability, Convenience, and Comfort. Recommendations included actionable items for each of the five themes, including creating a Gender Action Plan.

<u>The World Bank's Handbook for Gender-Inclusive Urban Planning Design (2020)</u> – A handbook that identifies practical approaches, activities, and design guidelines for incorporating gender inclusion into urban planning and design. Successful case studies of gender-inclusive projects and sample participatory design activities showcase how simple design measures can dramatically increase safety and access for marginalized groups.

LADOT's Changing Lanes: A Gender Equity Transportation Study (2021) – Commissioned by the Los Angeles Department of Transportation (LADOT) to study, prioritize, and advance gender equity in transportation planning and design. The study team identified that the only means of achieving gender equity in transportation planning and design is to focus on directly serving low-income BIPOC women and communities at every stage of the planning and implementation process. The findings and recommendations are organized into four categories: Closing the Data Gap, Inclusive Infrastructure, Services, and Programs.

<u>Metro's Gender Action Plan (2022)</u> – The GAP builds on the Understanding How Women Travel Study and outlines a framework and implementation plan to incorporate gender-focused perspectives into Metro's policies, projects, programs, and services. The primary goals of the GAP are to:

- Raise awareness of the gender differences in travel
- Ensure diverse gender perspectives are considered
- Address gender gaps in Metro's policies, programs, etc.
- Improve the quality and accessibility of Metro's services for women
- Create measurable progress to the GAP goals.

Lastly, the GAP includes the Gender Analysis Tool (GAT), a standardized tool to help advance the GAP's goals in Metro plans, projects, and policies.

#### **Online Survey**

An online survey was designed to identify the barriers riders face when accessing transit and their priority FLM improvements. By incorporating demographic-based questions, the data could be further analyzed based on age, gender, ethnicity, and income, thus allowing the team to identify the improvements and priorities specific to women across multiple equity factors.

The survey launched in November 2023 and remained open for one month. During that time, 39 participants completed the survey. The team analyzed the results of the following questions to reflect community support for the prioritized projects in the FLM plan: *What would help you feel safer while walking or wheeling to a Metro station? and What would help you feel more comfortable walking or wheeling to a metro station?* The answers to these questions allowed the team to deduce which toolkit improvements were a priority to riders. The data analysis showed that, given the sample size of participants, there wasn't a significant difference in FLM toolkit priorities chosen by all participants compared to those selected by women. The following table summarizes those findings.

FLM TOOLKIT IMPROVEMENTS	TOTAL	VOI	res	TOTAL VOTES FROM WOMEN			
Safety and Access				2			
Curb Extension	19			9			
Curb Ramps	19			10			
High Visibility Crosswalks	23			12			
New or Improved Sidewalk	24			12			
Pedestrian & Bike Lights	29	58	Combined Roadway and Pedestrian lights	12	25	Combined Roadway and Pedestrian lights	
Roundabout	13			3			
Signalized Crossing	23			12			
Traffic Calming	20			10			
Landscape & Shade Trees	21	49	Combined Landscape	8	24	Combined Landscape	
Shade Structure	28	49	and Shade Structure	16	24	and Shade Structure	
Street Furniture	20			10			
Other Amenities							
Bus Stop Improvements	21			10			
Multimodal Mobility Hub	19			8			
Opportunity Improvement	12			4			
Plaza/Parklet	22			10			
Street/Roadway Lights	29		Combined Roadway and Pedestrian lights	13		Combined Roadway and Pedestrian lights	
Wayfinding Signage	27			15			
Underpass Improvements	19			8			
Overpass Improvements	17			9			

When asked, "What will help you feel safer or more comfortable walking or wheeling to a Metro station?" participants responded as follows.

Total Votes	405	191
Average Votes	21	10

#### Women's Community Workshop

The technical team, Self Help Graphics, MUSA, and Arellano Associates organized an arts-based workshop and discussion focused on women's transit experiences. The workshop involved targeted outreach to marginalized genders, including women, women-identifying individuals, and non-binary and gender non-conforming people. The three-hour workshop, which drew inspiration from the World Bank's Handbook for Gender-Inclusive Urban Planning Design, was designed to explore the ripple effects felt throughout the day when access to transit is delayed or disrupted due to FLM barriers. Participants created a "Day in the Life" zine to document their experiences. As a group, they prioritized their top eight FLM toolkit improvements, which were reflected in the plan using the acronym "WWS" in the "Project Origin" column of the prioritized project lists. The following images include a one-page summary shared with the participants summarizing the workshop findings and sample images of the zine's participants created and shared with the group.

#### Women's Community Workshop Summary



West Santa Ana Branch Transit Corridor First/Last Mile

#### Thank you for attending Metro's Women's Community Workshop!

Your participation in the zine-making and discussion helped the team better understand women's challenges when accessing transit. Your input helped us identify the most meaningful projects that could be implemented at the nine West Santa Ana Branch Transit Corridor stations. The following notes are a summary of what we heard pertaining to First/Last Mile planning.

Lighting was frequently mentioned as an improvement that would make women feel safe when walking to and from stations or bus stops at night.

Wayfinding and Signage are needed to help people orient themselves to bus stops or stations if they are in a new area, lost, or the routes change.

Community Care is needed for unhoused riders. How can Metro support all riders without stigmatizing certain groups?

Bus Stops need real-time route information. Adding a north arrow would help those who are lost or new to an area.

Security could be improved by having more community eyes at stations and on trains. Stations and stops should be located near busy streets or mixed-use developments. The ambassador program has been a great help.

Terminus Stations should be evaluated for safety measures differently than other stations. At the end of the line, there is no way to hide from an aggressor. Consider installing emergency phones, better lighting, and ambassadors. Bicyclists would benefit from lighting and protected bike lanes or alternate routes to access the stations.

Priority First/Last Mile Improvements As a group, you decided on the following list of priority improvements.

Pedestrian and Bicyclist Lighting
 Bus Stop Improvements (real-time information, maps, route info, north arrow)
 Opportunity Improvement - Emergency Telephones
 Wayfinding Signage
 Landscape and Shade
 Access Ramps
 Traffic Calming

Buffered Bicycle Lanes (Class II)

We also heard feedback about system-wide improvements, such as an alert system for disabled riders when routes change, the implementation of women/children-only train cars, reliable Wi-Fi at stations/stops, and the cleanliness of trains and buses. Those comments will be recorded in the final outreach report and shared with other Metro departments.

We still want to hear from you if you could not participate in the discussion. Please submit all edits, stories, comments, and complete/incomplete zines to the team via email by Friday, December 8.

Thank you again for participating!



DRAFT 11.28.23

Women's Community Workshop Zines







3 First/Last Mile Plan Supporting Documents

3. In addition to gender, have other equity factors been considered in order to address intersecting identities and needs (e.g., race, age, and income)? Does the current/proposed action pose a risk or burden to these intersectional identities? Are there potential unintended consequences? If so, explain. The technical team analyzed Metro's Equity Focused Communities (EFC) data in proximity to the project area and crafted a survey to gather information based on ethnicity, age, income, and gender. The FLM guidelines, toolkit, and prioritization methodology provide a fair and unbiased approach to identifying priority projects. The current/proposed action will not pose any risks or burdens to intersecting identities.

#### 4. Will the current/proposed action create specific benefits for women? Please explain.

With support from our partner CBO MUSA, the community walk audits were well attended by participants of different genders and ethnicities. The findings from this process directly formulated the final project list in the plan, so the current proposed actions will specifically benefit women.

The FLM planning process is designed to address safety and security issues at each station via an impartial process that would benefit all transit riders, including women. Specific and effective improvements that were not part of the FLM toolkit were proposed during outreach. These suggestions were related to transit safety and would create specific benefits for women. However, they were not included in the final FLM plan due to the complexities of coordinating with jurisdictions. There should be a more flexible framework within the FLM guidelines or a more robust planning process to ensure the consideration and incorporation of safety measures that are outside of the FLM toolkit.

## 5. How does the current/proposed action support Metro's gender equity goals? Identify which goals the action supports and why.

The FLM plan supports Metro's gender equity goal of ensuring diverse gender perspectives via outreach. The project team developed a creative and interactive women's workshop and survey that allowed data to be analyzed by gender. Women varying in age and ethnicity participated in the workshop and shared their experiences accessing transit and prioritized improvements from the FLM toolkit. These findings are reflected in the final plan to be used by local jurisdictions as evidence of community support for elevating projects to the priority list.

The project's technical walk audits, community walk audits, online survey, and women's workshop all had diverse participants in terms of gender, age, ethnicity, and income level. Ensuring that all outreach events had a majority level of female participation, the project's proposed actions will certainly improve the quality and accessibility of Metro services for women.

#### SUPPORT AND ENGAGE WITH WOMEN

1. Has the current/proposed action undertaken gender-specific outreach? Did the outreach itself take care to ensure diverse gender attendance (e.g., childcare available at meetings, dates/times for variety of attendee schedules, outreach to specific community-based organizations)?

Additional details will be included in this analysis post Plan adoption. Metro intends to publish this report separately following Metro Board adoption.

2. Does the current/proposed action need to be revised to reflect gender-related input and feedback? Please describe.

The FLM plan does not need to be revised to reflect gender-related input. The technical team tracked the priority toolkit improvements based on gender from the survey and women's community workshop in the plan. Projects that were identified as a priority for women were identified with the acronym "WWS" in the "Project Origin" column of the prioritized project lists. This information is intended to help jurisdictions identify non-prioritized projects that could be elevated based on community support during their review period.

3. What partnerships internal to Metro (e.g., other Metro departments) are part of the current/proposed action that would maximize progress towards gender equity goals? List the partnerships and their potential contributions.

Additional details will be included in this analysis post Plan adoption. Metro intends to publish this report separately following Metro Board adoption.

4. What partnerships external to Metro (e.g., stakeholders, organizations, other agencies, etc.) are or could be part of the current/proposed action that would maximize progress toward gender equity goals? List the partnerships and their potential contributions.

Additional details will be included in this analysis post Plan adoption. Metro intends to publish this report separately following Metro Board adoption.

#### IMPLEMENTATION AND ACCOUNTABILITY

1. Are there any variables that could prevent the current/proposed action from achieving gender equity goals (e.g., schedule, budget, review time)? If so, describe.

An accelerated project schedule and established FLM guidelines could prevent future FLM plans from achieving gender equity. The project schedule was accelerated in the Spring of 2023 to meet the EIR submittal to Metro's board in the Spring of 2024. Unfortunately, this change resulted in less planning and preparation time for outreach events, a reduced time frame for the survey to remain live, and shorter review/feedback periods from communities and jurisdictions.

Given the shortened window of time for community members to participate in the survey, the input from 39 participants was insufficient to determine strong FLM trends based on gender. A longer time for survey input and stronger efforts to encourage survey participation would help ensure that the team receives enough information to determine transit priorities by gender. During the women's workshop, the team gained a more accurate and deeper understanding of gender-specific needs and

priorities. However, the technical team could only facilitate one women's workshop, whereas two to three, with follow-up meetings, would have allowed the team to gather more robust feedback.

The FLM guidelines and methodology facilitate an impartial process for identifying priority improvements; however, the framework would benefit from being more adaptable and flexible to incorporate project specific and women specific input. For example, during the women's community workshop, participants brought to the team's attention how terminus stations feel much less safe than other stations and suggested enhanced security measures, such as installing emergency telephones. This project idea was not included in the priority project lists, but instead only noted in the plan narrative as a community priority. There should be a formal process for documenting and incorporating project ideas that were suggested but outside the FLM toolkit to provide transparency and accountability to community members who participated in the process. Resulting in a more robust evaluation of women's needs and the advancement of gender equity.

### 2. How can the current/proposed action be measured and evaluated relative to Metro's gender equity goals?

The plan can be measured and evaluated by the following:

- If jurisdictions used the community support column as a determining factor to elevate projects or if they are only elevating projects that align with their existing plans and projects to reach the 3% match.
- The number of projects identified by women that were elevated for inclusion in the prioritized project list.
- The number of projects identified by women that were not originally included in the FLM toolkit that were elevated for inclusion in the prioritized project list.
- The amount of outreach events and follow up events geared toward women, two at the least
- Follow up outreach events or a survey could be distributed up to one year post project completion to see if women riders feel safe accessing the new stations.

### *3. How can the current/proposed action further communicate and engage with stakeholders during and after implementation?*

The FLM team could review the FLM toolkit to ensure that the ped and wheel infrastructure improvements meet women's safety and security concerns by holding women-centered focus groups and conducting technical walk audits. If the FLM team decided to have one last community outreach event, they could display and distribute copies of the zines created during the women's workshop, provide information on the process, and describe how the concerns of women were included in the final plan.

### 4. Will there be updates to the current/proposed action that would further promote gender equity goals? If so, describe these opportunities.

There may be an opportunity for jurisdictions to revisit the project elevation process after submittal to the Metro board in April 2024. If so, that would be a suitable time to remind those jurisdictions to review the project list and elevate ideas supported by women for implementation. Lastly, Metro's 3% match policy could be amended to specify that projects identified by women as a priority would also count towards the jurisdiction's total match.



*Supporting documents with no effect on FLM plan recommendations, Metro intends to publish separately, and additional detail may be added following Metro Board adoption.* 

### **3.7 SAFETY ANALYSIS TOOL SUMMARY**

#### Introduction

The following is a summary of 3.8A First/Last Mile Bicycle Safety Analysis (June 2023), in which the technical team addressed the following questions posed in the Metro's FLM Wheel Safety Analysis Tool:

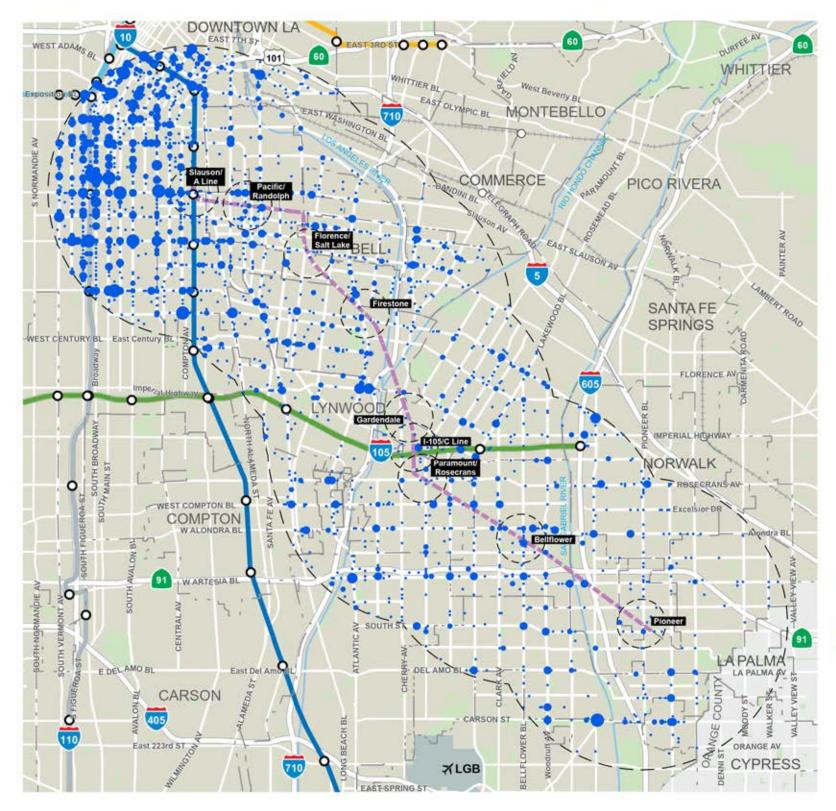
- Which corridors have the highest number of collisions involving bicyclists?
- Which corridors have the highest number of severe injury or fatal collisions involving bicyclists?
- Which intersections have the highest number of collisions involving bicyclists?
- Which intersections have the highest number of severe injury or fatal collisions involving bicyclists?
- Which Midblock Locations have the highest number of collisions involving bicyclists?
- Which Midblock Locations have the highest number of severe injuries and fatal collisions involving bicyclists?

All findings apply to the six-year period from January 1, 2016 through December 31, 2021 for the 110-square mile WSAB three-mile radius wheel corridor.

### **Key Findings**

- All Bicycle/Vehicle Collisions. Figure 1 shows all motor vehicle/bicycle collisions on all streets that experienced more than one such collision per mile.
- All Bicycle/Vehicle Collisions per Mile of Street and Hot Spots. Figure 2 shows motor vehicle/bicycle collisions per mile, along with hotspot locations at which 4 or more collisions occurred with a distance of 200 feet of one another.
  - Seventeen of the top 18 streets are in the 3-mile Slauson/A-Line station area. Tweedy Avenue is in the 3-mile Firestone station area.
  - Figueroa Street had the highest number of collisions per mile at 21.5.
  - Manchester Avenue, Broadway, Jefferson Boulevard, Central Avenue, Main Street, and 14<sup>th</sup> Place each had more than 15 collisions per mile.
- All Fatal or Severe Injury Bicycle/Vehicle Collisions. Figure 3 shows the location of all bicycle/vehicle collisions that resulted in bicyclist fatalities (35) and severe injuries (245).
  - Imperial Highway had three fatalities. Each of the following streets had two fatalities: Broadway, Atlantic Avenue, Washington Boulevard and Compton Boulevard. One fatality occurred on each of the other streets.
  - Florence Avenue had the highest number of severe injuries at 13 (1.3 per mile), followed by Central Avenue at 11 (1.8 per mile) However, Nadeau Street had the highest number of severe injuries per mile at 2.7, followed by Manchester Boulevard at 1.8.

- **Bicycle/Vehicle Collisions at Intersections.** Figure 4 maps all motor vehicle/bicycle collisions that occurred at intersections and shows the number of collisions at each.
  - 43% of all bicycle/auto collisions and 47% of fatalities occurred at intersections. However, only 34% of severe injuries occurred at intersections.
  - The highest number of collisions (eight) occurred at San Pedro Street and Slauson Avenue. None of them resulted in a death or severe injury.
  - Five intersections experienced five collisions each. Of those, Main Street/Manchester Avenue had a fatality. Flower Street/Florence Avenue had two severe injuries and Avalon Boulevard/Florence Avenue had one.
  - Fourteen intersections each had four collisions. Of those, Flower Street/Jefferson Boulevard had one fatality and one severe injury. Santa Fe Avenue/Florence Avenue and Downey Avenue/Firestone Boulevard each had one severe injury.
- **Bicycle/Vehicle Collisions at Midblock Locations.** Figure 5 maps all midblock motor vehicle/bicycle collisions.
  - Overall, 57% of all bicycle/auto collisions and 53% of fatal collisions occurred at midblock locations.
     However, 66% of severe injuries occurred at midblock locations.
  - Figueroa Street had the highest number of midblock collisions per mile at 13.5.
  - Manchester Boulevard, Central Avenue, 38<sup>th</sup> Street, Vernon Avenue, Main Street, Broadway, Florence Avenue, and Martin Luther King Boulevard each had more than 7 midblock collisions per mile.
  - There were eight midblock collisions in each of the following street segments:
    - Slauson Boulevard between Central Avenue and Hooper Avenue
    - 92<sup>nd</sup> Street between Compton Avenue and Graham Avenue
    - Imperial Highway between Atlantic Avenue and the 710 Freeway
    - Manchester Boulevard between Figueroa Street and main Street.
- Streets that Appear as Safety Hot Spots in Multiple Analyses. Table 1 shows streets that appear as safety hot spots in multiple analyses. It also indicates whether there is an existing or proposed wheel facility (bikeway) on the street. Of the 21 streets listed, all have proposed wheel facilities on the FLM Wheel Network except Alameda St West, Imperial Hwy, and Vernon Av.
- Half-Mile Station Areas. Table 2 summarizes bicycle/auto collisions in the nine half-mile station areas. Of all the auto/bicycle collisions that occurred in the nine half-mile station areas, almost half (48%) occurred at the Slauson/A Line and Pacific/Randolph Stations. There were no bicyclists killed. There were nine severe injury collisions.

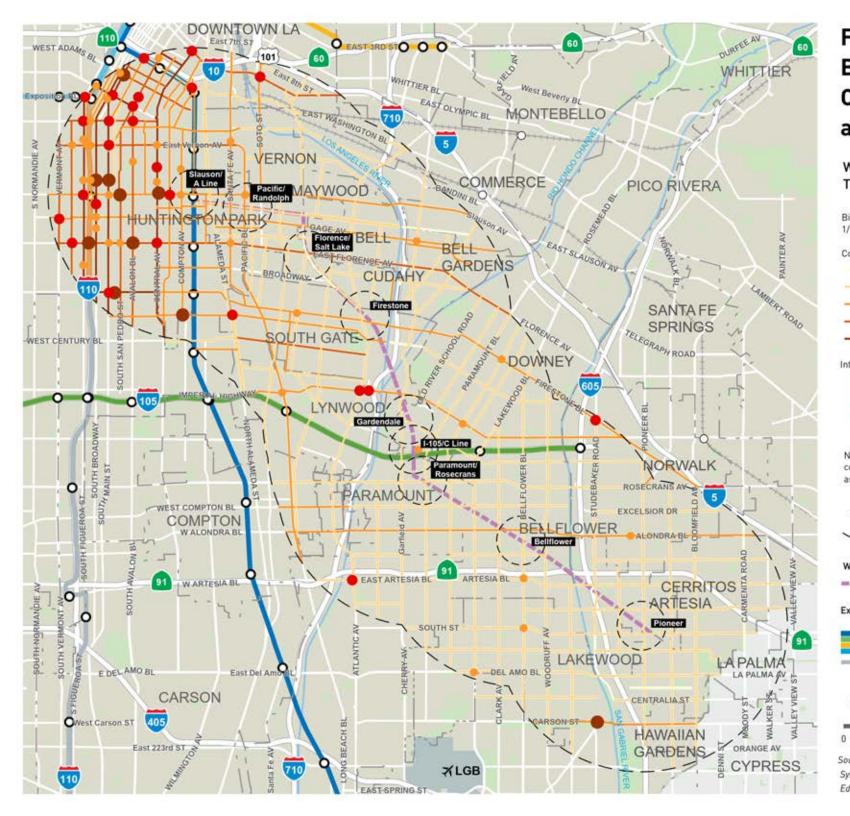


### Figure 1 All Bicycle/ Vehicle Collisions

West Santa Ana Branch Transit Corridor First Last Mile



Source: PSLA (Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)



### Figure 2 Bicycle/Vehicle Collisions Per Mile and Hot Spots

West Santa Ana Branch Transit Corridor First Last Mile

Bicycle/Vehicle Collisions 1/1/2016 - 12/31/2021

Collisions Per Mile by Street

0 - 1 1.1 - 5 5.1 - 10 10.1 - 15 15.1 - 21.5 Intersection Collision Hotspots 4 5 - 6 7 - 8

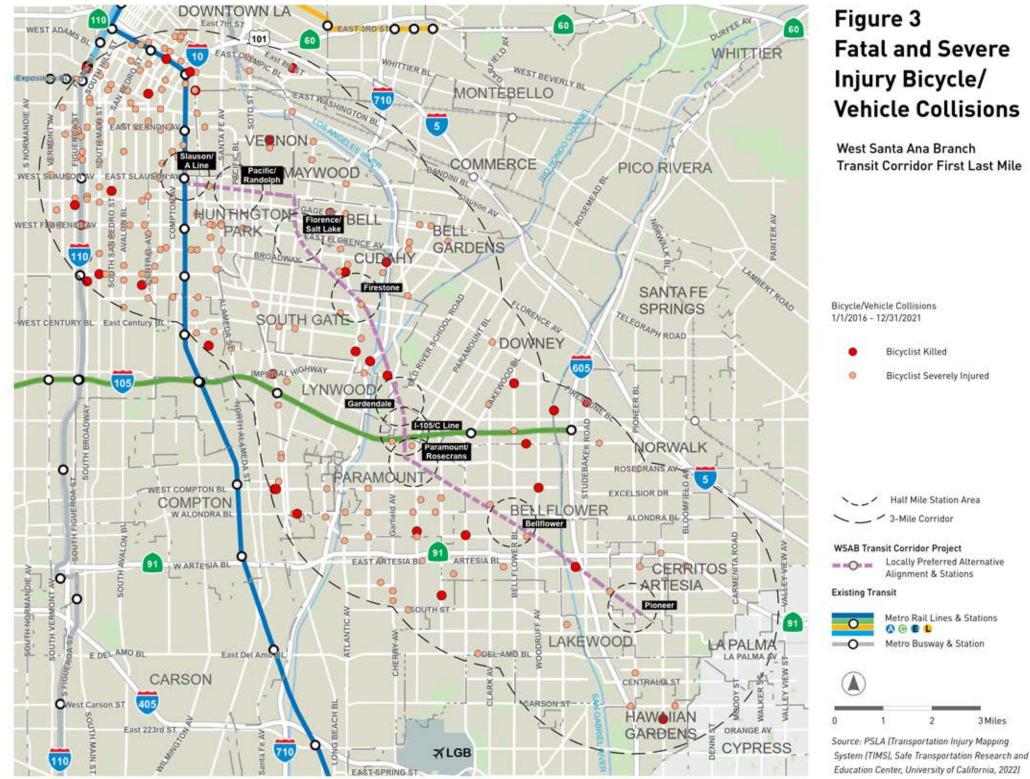
Note: For per mile count, intersection collisions are counted once; they are assigned to one of the two cross streets.

Half Mile Station Area 3-Mile Corridor WSAB Transit Corridor Project Locally Preferred Alternative Alignment & Stations Existing Transit Metro Rail Lines & Stations Metro Busway & Station Metro Busway & Station

Source: PSLA (Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)

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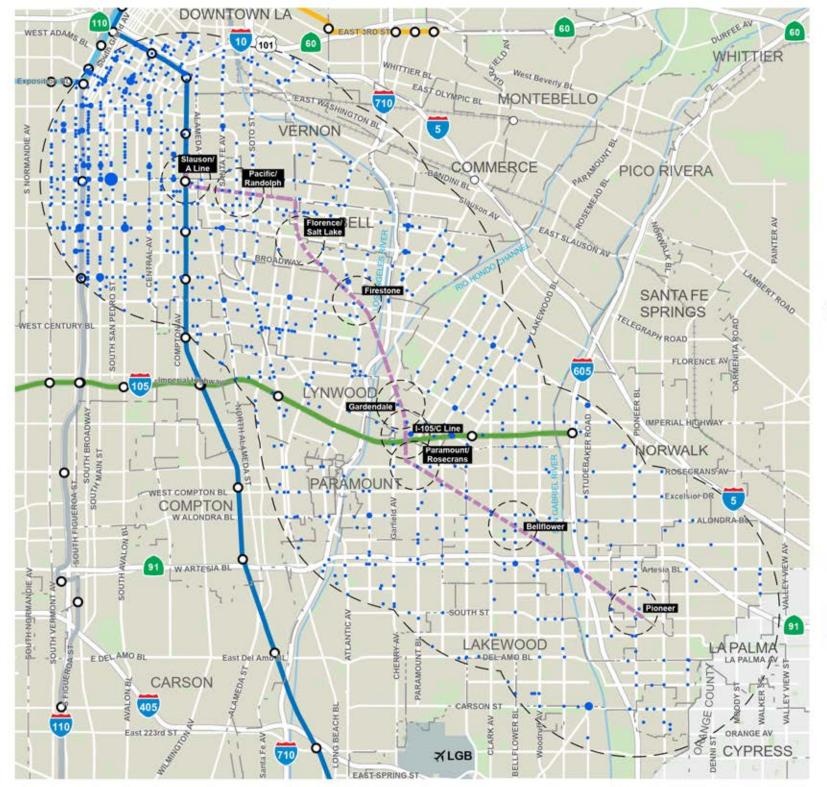
3 Miles



**Fatal and Severe** Injury Bicycle/ **Vehicle Collisions** 

**Transit Corridor First Last Mile** 

3 Miles



### Figure 4 Intersection Bicycle/Vehicle Collisions

West Santa Ana Branch Transit Corridor First Last Mile

Bicycle/Vehicle Collisions 1/1/2016 - 12/31/2021:

1 - 2

3-4

5-6

7-8

.



0 1 2 3 Miles

Source: PSLA (Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)

### Table 1 Streets That Are Safety Hot Spots Based on Multiple Metrics

Type of Collision:All Range:Fatal 10+/miSevere 1 to 3All* 4+All 6+/miExistingProposedAdams BlvdIto 33+/mi4+6+/miIII </th <th>Location:</th>	Location:
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BroadwayImage: Constraint of the second of the	Alondra Blvd
Central AveImage: Central AveImage: Central AveImage: Central AveFigueroa StImage: Central AveImage: Central AveImage: Central AveFlower St (LA)Image: Central AveImage: Central AveImage: Central AveGage AveImage: Central AveImage: Central AveImage: Central AveImage: Image: Central AveImage: Central AveImage: Central AveImage: Central AveJefferson BlvdImage: Central AveImage: Central AveImage: Central AveImage: Central AveImage: Central AveImage: Central AveImage: Central AveJefferson BlvdImage: Central AveImage: Central AveImage: Central Ave	Avalon Blvd
Figueroa StIIIIFlorence AveIIIIIFlower St (LA)IIIIIGage AveIIIIIImperial HwyIIIIIJefferson BlvdIIIII	Broadway
Florence Ave Image: Ave   Gage Ave Image: Ave   Imperial Hwy Image: Ave   Jefferson Blvd Image: Ave	Central Ave
Flower St (LA)     Image: Ave       Gage Ave     Image: Ave       Imperial Hwy     Image: Ave       Jefferson Blvd     Image: Ave	Figueroa St
Gage AveImperial HwyImperial HwyImperial HwyJefferson BlvdImperial HwyImperial HwyImperial Hwy	Florence Ave
Imperial Hwy     Imperial Hwy       Jefferson Blvd     Imperial Hwy	Flower St (LA)
Jefferson Blvd $\blacksquare$ $\bigcirc$ O	Gage Ave
	Imperial Hwy
Maln St (LA)	Jefferson Blvd
	Maln St (LA)
Manchester Blvd	Manchester Blvd
Martin Luther King Blvd (LA)	artin Luther King Blvd (LA)
Nadeau St 🖉 🗖 🖸	Nadeau St
Olympic Blvd 🔳 🖬	Olympic Blvd
San Pedro St	San Pedro St
Slauson Ave	Slauson Ave
Vermont Ave	Vermont Ave
Vernon Ave	Vernon Ave
Washington Blvd	Washington Blvd

\* Primary Street

\*\* On a segment of the street; not necessarily where collision occurred.

#### Table 2 Bicycle/Vehicle Collisions in Half-Mile Station Areas

Station	All Auto/ Bicycle Collision:	% of All Half-Mile Auto/ Bike Collisions	Severe Injury	Intersection		n Streets with Station Area Co	
Slauson/A Line	49	23%	3	21	Compton Av Slauson Av	10 8	20% 17%
Pacific/Randolph	54	25%	1	14	Slauson Av Pacific Av Gage Av	12 9 8	22% 17% 15%
Florence Salt Lake	19	9%	0	4	Florence Av	7	37%
Firestone	21	10%	2	11	Firestone Bl Atlantic Av	8 6	38% 29%
Gardendale	2	1%	0	1	Gardendale St Garfield Av	1 1	50% 50%
I-105/C-Line	10	5%	2	4	Paramount Bl	3	30%
Paramount/Rosecrans	12	6%	0	4	Paramount Bl Rosecrans Av	6 5	51% 40%
Bellflower	33	16%	1	11	Alondra Bl	17	52%
Pioneer	12	6%	0	7	South St	6	50%
Total	212	100%	9	77			

### 3.7A First Last Mile Bicycle Safety Analysis: Safety Hotspots, Contributing Factors, and Equity (Age and Gender)

June 29, 2023

This analysis of 1) bicycle safety hotspots, 2) factors that may contribute to their occurrence, 3) age and gender of bicycle/vehicle collision victims, and 4) distribution of collisions by jurisdiction in the WSAB three-mile radius wheel responds to questions listed in Metro's *First/Last Mile Safety Analysis Tool*. The analysis first considers the three-mile radius corridor. It then focuses on the area with one-half mile of each planned station.

The questions asked by the *First/Last Mile Safety Analysis Tool* are grouped by project phase, specifically:

- Identify Safety Hotspots during the Existing Conditions Analysis.
- Determine Collision Contributing Factors during Pathway Network & Project Idea Development.
- Propose Targeted Pathway Network Improvements during Project Prioritization & Selection.
- The phases at which Equity Factors and Local Plans/Initiatives should be addressed are not specified. Proposed bikeways on hotspot streets and at hotspot intersections are included in this memorandum, as are Age and Gender of collision victims. Local vision zero or similar initiatives regarding streets with high injury/fatality rates will be addressed during Pathway Network & Project Idea Development.

This analysis uses:

- Data provided by the Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley (2022) for the six-year period from January 1, 2016 through December 31, 2021. TIMS maps data collected by law enforcement personnel and compiled by the California Highway Patrol in the Statewide Integrated Traffic Records System (SWITRS).
- Existing and proposed bicycle facilities documented in the WSAB FLM Existing Conditions memo.
- Arterial street speed limits documented in the WSAB FLM Existing Conditions memo.
- Field and aerial/street view Google Map observation of lane width, signalization, posted speeds.

All findings apply to the six-year period from January 1, 2016 through December 31, 2021 for the 107-square mile WSAB three-mile radius wheel corridor.

### **THREE-MILE RADIUS CORRIDOR SAFETY HOTSPOTS**

#### 1. CORRIDOR COLLISIONS

#### Which Corridors Have the Highest Number of Collisions Involving Bicyclists?

#### **Bicycle/Vehicle Collisions Per Mile by Street**

Figure 1 shows all bicycle/vehicle collisions. Bicycle/vehicle collision data by street for all streets that experienced more than one collision per mile were analyzed in order to compare corridors. The dataset includes 123 streets on which 2,394 or 85% of all bicycle/vehicle collisions in the WSAB three-mile radius wheel corridor occurred. The 123 streets were sorted by number of collisions per mile from highest to lowest. Figure 2 shows collisions per mile on the 123 streets in the dataset, along with hotspot locations at which 4 or more collisions occurred within 200 feet of one another. Table 1 lists the 18 streets that experienced more than 10 bicycle/vehicle collisions per mile.

#### Key Findings

- 37% of the collisions in the dataset were located on the 18 streets in Table 1, which comprise only 15% of the total length of the all the streets in the dataset.
- The average for these 18 streets was 13.9 collisions per mile compared with 5.7 collisions per mile for all the streets in the dataset.
- Similarly, there were 1.2 severe injuries per mile on the top 18 streets, compared with 0.4 severe injuries per mile on all streets in the dataset.
- Seventeen of the top 18 streets are in the 3-mile Slauson/A-Line station area. Tweedy Avenue is in the 3-mile Firestone station area.
- Of all the streets with more than one collision per mile, only Florence Avenue is in a half-mile station area. It is also one of the 18 high-collision streets.
- Eleven of the top 18 streets have existing bikeways on a portion of their length.
- Sixteen of the top 18 streets have proposed bikeways on a portion of their length.

#### Which Corridors Have the Highest Number of Fatal and Severe Injury Collisions Involving Bicyclists?

Figure 3 shows the location of all bicycle/vehicle collisions that resulted in bicyclist fatalities (35) and severe injuries (245). Table 2A lists the 28 streets on which the 35 bicyclists were killed. Imperial Highway had three fatalities. Each of the following streets had two fatalities: Broadway, Atlantic Avenue, Washington Boulevard and Compton Boulevard. One fatality occurred on each of the other streets. Table 2B lists fatalities individually, including cross street, violation, collision type, lighting, control devices and jurisdiction.

Table 3 lists 22 streets with three or more severe injuries each. These 22 streets account for 46% of all severe injuries. Florence Avenue had the highest number of severe injuries at 13 (1.3 per mile), followed by Central Avenue at 11 (1.8 per mile). However, Nadeau Street had the highest number of severe injuries per mile at 2.7, followed by Manchester Boulevard at 1.8.

#### 2. INTERSECTION COLLISIONS

#### Which Intersections Have the Highest Number of Collisions Involving Bicyclists?

#### **Intersection Hot Spots**

Figure 4 maps all intersection collisions and shows the number of collisions at each. Table 4 lists intersections at which four or more bicycle/vehicle collisions occurred in the six-year period. There 20 intersection hot spots listed.

#### **Key Findings**

- 43% of all bicycle/auto collisions and 47% of fatalities occurred at intersections. However, only 34% of severe injuries occurred at intersections.
- There were 89 collisions or 7% of all intersection collisions at the 20 hotspot intersections.
- None of the hotspot intersections is located within one-half mile of a proposed WSAB station.
- Seventeen of the hotspot intersections (85%) are located in the 3-mile Slauson/A-Line station area.
- The highest number of collisions (eight) occurred at San Pedro Street and Slauson Avenue. None of them resulted in a death or severe injury.
- Five intersections experienced five collisions each. Of those, Main Street/Manchester Avenue had a fatality. Flower Street/Florence Avenue had two severe injuries and Avalon Boulevard/Florence Avenue had one.
- The remaining 14 intersections each had four collisions. Flower Street/Jefferson Boulevard had one fatality and one severe injury. Santa Fe Avenue/Florence Avenue and Downey Avenue/Firestone Boulevard each had one severe injury.
- Unsafe speed was listed as the cause of three collisions. More common causes listed were wrong-way cycling and auto right-of-way, i.e., bicyclist at fault.
- The following streets had multiple intersections with four or more collisions: five on Florence Avenue, three on 54th Street, and two each on Slauson Avenue, Main Street, Flower Street, Washington Boulevard, and Broadway.
- All of the intersections include at least one arterial street with four or more through lanes.
- The speed limit is typically 35 miles per hour (mph) on at least one of the two intersecting streets.
- Of the 20 intersections, 18 have traffic signals, one has a four-way stop, and one stops signs on the collector street and no traffic control on the arterial street.
- Three of the intersections have existing bicycle facilities. At two of them the bikeways were added during the reporting period.
  - There were five collisions at Avalon Boulevard and Florence Avenue prior to the installation of protected (Class IV) bike lanes on Avalon Boulevard in 2020, of which two resulted in severe injuries; no collisions were reported in the 18 months following the installation.
  - There were four collisions at Hoover Street and Vernon Avenue where bike lanes were added on Hoover north of the intersection in mid-2028.
  - There were five collisions at Carson Street and Los Coyotes Diagonal.
- Bikeways are proposed on at least one street at all of the other intersections.

- Six of the intersections are located near schools; three are located along at-grade Metro rail lines.
- Fourteen of the top 20 intersections include one of the 18 top collision corridors in Table 1.

#### Which intersections Have the Highest Number of Severe Injury or Fatal Collisions Involving Bicyclists?

Figure 5 maps all fatal and severe injury bicycle collisions at intersections. Table 5 lists all intersections (16) at which fatalities occurred. Of all 245 severe injuries, 82 or 34% occurred at intersections.

There are no intersections at which more than one fatality occurred.

There are two intersections at which two severe injuries occurred:

- Avalon Boulevard and Florence Avenue
- Florence Avenue and Ajax Avenue

There are two intersections at which a fatality and a severe injury occurred:

- Flower Street and Jefferson Boulevard
- Main Street and Manchester Boulevard

#### 3. MIDBLOCK COLLISIONS

#### Which Midblock Locations Have the Highest Number of Collisions Involving Bicyclists?

A total of 1,620 midblock bicycle/vehicle collisions occurred in the six-year period. Figure 6 shows all midblock bicycle vehicle collisions. Figure 7 shows midblock bicycle/vehicle collisions per mile. Table 6 lists midblock collisions per mile by street for 19 streets with six or more midblock collisions per mile, using the same dataset as was used for Table 1. (The dataset includes 123 streets on which 2,394 (85%) of all the bicycle/vehicle collisions in the WSAB three-mile radius wheel corridor occurred.) Eleven of the 19 streets with six or more midblock collisions per mile are also included in Table 1 (streets with more than 10 bicycle/vehicle collisions per mile). Table 7 lists the 13 midblock collision hotspots.

#### **Key Findings**

#### Midblock Collisions Per Mile by Street

- Overall, 57% of all bicycle/auto collisions and 53% of fatal collisions occurred at midblock locations. However, 66% of severe injuries occurred at midblock locations.
- 32% of the midblock collisions in the dataset were located on the 19 streets in Table 6, which comprise only 13% of the total length of the all the streets in the dataset.
- The average for these 18 streets was 8.0 midblock collisions per mile compared with 3.2 collisions per mile for all the streets in the dataset.
- However, the number of severe injuries resulting from midblock collisions per mile was almost the same for the top 19 streets (.09 per mile) as for the entire dataset (.08 per mile).
- Fifteen of the top 19 streets are located in the 3-mile Slauson/A-Line station area.
- Two of the 19 streets Florence Avenue and Wilmington Boulevard are located in a half-mile station area.
- Figueroa Street had the highest number of midblock collisions per mile at 13.5.

- In addition, Manchester Boulevard, Central Avenue, 38<sup>th</sup> Street, Vernon Avenue, Main Street, Broadway, Florence Avenue, and Martin Luther King Boulevard each had more than 7 midblock collisions per mile.
- Eight (8) of the 19 streets with six (6) or more midblock collisions per mile have existing bikeways on a portion of the street, while 13 have proposed bikeways on a portion of the street.

#### Midblock Collisions Hotspots

- There were 79 collisions on the 13 midblock collisions hotspot segments. There were no fatalities and 11 severe injury collisions.
- None of the 13 midblock collision hotspots mile is located in the half-mile station areas.
- All but two of the hotspot intersections are located in the 3-mile Slauson/A-Line station area.
- There were eight (8) collisions in each of the following street segments:
  - Slauson Boulevard between Central Avenue and Hooper Avenue
  - o 92<sup>nd</sup> Street between Compton Avenue and Graham Avenue
  - $\circ$   $\;$  Imperial Highway between Atlantic Avenue and the 710 Freeway
  - $\circ$   $\,$  Manchester Boulevard between Figueroa Street and main Street.
- Common causes listed were wrong-way cycling and auto right-of-way, and improper turn. Speeding and DUI were not listed.
- All but two of the hotspot street segments have four or more through lanes.
- The speed limit is 35 mph on all but two street segments.
- Four (4) hotspot street segments are near schools; two are at freeway ramps.
- Eight (8) hotspot street segments are on the 18 top collision corridors in Table 1.
- Only one (1) the 13 midblock collision hotspots has existing bike lanes. Six (6) of the 13 midblock collision hotspots have proposed bikeways.

#### Which Midblock Locations Have the Highest Number of Severe Injury and Fatal Collisions Involving Bicyclists?

Figure 8 shows midblock collisions that resulted in a fatality or severe injury. Table 8 lists all the midblock locations (17) at which fatalities occurred.

#### 4. OTHER COLLISION HOTSPOTS

## Which Combined Intersection/Midblock Locations Have the Highest Number of Severe Injury and Fatal Collisions Involving Bicyclists?

Figure 9 shows locations in which four or more collisions (both at intersections and midblock) occurred within a 200-foot square area. The majority of these clusters are captured in the analyses of collisions per mile or by the intersection and midblock hot spot analyses above. Locations that experienced more than four (4) collisions in a 200-foot square area that are not included in the other three analyses are:

- Firestone Boulevard/Studebaker Road (6) an elementary school, middle school and park are nearby.
- Alondra Boulevard/Maidstone Avenue (6) an elementary school and shopping center are located at the intersection and Cerritos Community College is nearby.
- Compton Avenue/51<sup>st</sup> Street (5)

#### Which streets have Multiple Safety Hotspots?

The following streets occur on all five collision hotspot lists (corridors per mile, intersections, midblock hotspots, severe injury and fatal):

- Florence Avenue
- Central Avenue
- Figueroa Street

The following streets occur on four of the five collision hotspot lists:

- Broadway
- Manchester Boulevard
- Main Street
- Vernon Avenue

Imperial Highway is only on two lists (it tops the fatality list and is also on the severe injury list). It is also has a 40 mph speed limit.

#### 5. POTENTIAL CONTRIBUTING FACTORS

Potential factors contributing to the intersections and midblock hotspots are included in Table 4 and Table 7. Table 9 provides the distribution of violations cited in all collisions included on TIMS.

**Number of Lanes**. All but one of the 28 intersection hotspot include at least one street with four through lanes and all but one of the 13 midblock hotspot street has at least four through lanes. Most of the corridors with fatalities and with three or more severe injuries have at least four through lanes.

**Traffic Speed**. All but two of the intersection hotspots have at least one street with a speed limit of 35 mph or greater. All but one of the midblock hotspots have a speed limit of 35 mph or greater.

Signalization. All but two hotspot intersections are signalized in all directions.

Activity Centers. Seven of the 20 hotspot intersections are adjacent to or near a school.

Existing Bikeways. Only three of the hotspot intersections have bikeways on one or both streets:

- Avalon Boulevard's bike lanes at Florence Avenue were added in mid-2020
- Hoover Street's bike lanes north of Vernon Avenue were added in mid-2019
- Carson Street has a shared sidewalk on its south side. Los Coyotes Diagonal has a shared sidewalk on its west side south of Carson Street. The intersection is signalized and crosswalks are striped, but there is no restriction against turning right on a red light.

Unsafe Speed. While unsafe speed was listed in 5.2% of all collisions, it was listed for 14% of fatalities.

**No Street Lights at Night**. No street lights at night was rarely listed. However, it was listed for two of the 34 fatalities (6%).

**Alcohol/Drugs**. Driving or bicycling under the influence of alcohol or drugs was listed in only 0.6% of all collisions.

**Other Violations**. Wrong side of the road was listed in 22.2 % of all collisions, while Automobile Right of Way was listed in 33.9% for a total of over 50% attributing the cause to the bicyclist. In addition, most of the other violations could be attributed to either the bicyclist or the motorist.

**Summary.** In summary, four or more through lanes, a speed limit of 35 mph or greater, and lacking a Class II or higher quality bikeway are the most common characteristics associated with fatalities, severe and multiple collisions. Proximity to schools is a less common characteristic, occurring at 35% of hotspot locations. Inadequate street lighting is rarely cited; however, lack of lighting at night was listed in 2 of the 34 fatalities (6%).

#### 6. EQUITY FACTORS (AGE AND GENDER)

- Collision victims under 18 comprise 14% of the collision victims, compared with 26% of the entire population in the three-mile radius corridor.
- Collision victims over 64 comprise 6% of the collision victims, compared with 10% of the entire population in the three-mile radius corridor.
- Women and girls comprise 16% of the collision victims, compared with approximately 50% of the entire population in the three-mile radius corridor. However, this percentage is consistent with the percentage of all cyclists who are female, according to 2019 pedestrian/ bicycle count BY the City of Los Angeles(in which 43.4% of all bicycle/vehicle collisions occurred), in which 17% of cyclists counted were female.

#### 7. BICYCLE/VEHICLE COLLISIONS BY JURISDICTION

Table 10 lists the number and percentage of bicycle/vehicle collision in the three-mile radius wheel corridor in each jurisdiction. As noted above, 43.4% occurred in the City of Los Angeles.

### HALF-MILE STATION AREA SAFETY HOTSPOTS

There were no fatalities resulting from bicycle/vehicle collisions within a half mile of any station location. Primary causes of collisions listed were wrong side and auto right-of-way, both attributable to cyclists.

#### 1. PIONEER STATION

- Of the 12 bicycle/vehicle collisions that occurred within a half mile of the Pioneer station, none resulted in severe injury.
- Seven were at intersections.
- Intersections with multiple collisions are:
  - Two at Gridley Road and 187<sup>th</sup> Street, which is signalized with striped crosswalks on three of four legs. The southern leg across Girdley Road is not striped. !87<sup>th</sup> Street widens at the intersection from 40 feet (one lane each way) to 60 feet (two westbound through/right lanes and one left lane and one eastbound lane.
  - Two at Pioneer Boulevard and South Street, which is signalized with striped crosswalks. Both streets are arterials with two through lanes each way, left-turn lanes and unstriped right-turn lanes. There are Class II bicycle lanes on Pioneer Boulevard south of South Street.
- A total of six, or half of all bicycle/vehicle collisions occurred on South Street.
- Factors that may contribute to the high collision volume on South Street:
  - Two through lanes each way with left-turn lanes and unstripped right-turn lanes.
  - 605 Freeway ramps are located less than a quarter mile west with three travel lanes each way west of Gridley Road.
  - A posted 40 mph speed limit and average daily traffic (ADT) volumes of 16,500 to 19,400 (23,300 west of Gridley Avenue) (Cerritos, 2018). These volumes are relatively low for a four- to six-lane street, which typically results in high traffic speeds.
  - Multiple retail destinations are located along South Street, including Los Cerritos Center and other shopping malls, with numerous restaurants and shops.
  - Four of the six were located where bicycle lane striping stops:
    - > A cyclist was hit broadside just past Clarkdale Avenue, where the westbound bicycle lane in Artesia ends at the boundary with Cerritos.
    - > A cyclist was hit at Pioneer Boulevard and another 15 feet west, where the bike lanes are again striped in the City of Artesia.
    - > A cyclist was hit just west of Jersey Avenue, just before the westbound bicycle lane ends.
- The City of Artesia shows Class II bike lanes on Pioneer Boulevard between South Street and the WSAB alignment and 187<sup>th</sup> Street as a Class III Bicycle Friendly Street in its Active Transportation Plan.

#### 2. BELLFLOWER STATION

- Of the 33 bicycle/vehicle collisions within a half mile of the Bellflower station, one resulted severe injury.
- Eleven were at intersections.
- The severe injury crash occurred on Flower Street approximately 15 feet east of Bixby Avenue. Flower Street is 56 feet wide with four travel lanes and, in this location, curbside parking, with a posted speed of 30 mph.

SWITRS data indicates the cyclist had the right-of-way. The cyclist could have been hit by a car in the travel lane or a car pulling in or out of a parking space or by a car door. Incidentally, there are striped crosswalks across Flower Street at Bixby Avenue, but no traffic control. (There is a stop sign on Bixby Avenue.)

- Intersections with multiple collisions area:
  - Two at Alondra Boulevard and Eucalyptus Avenue and another two were located within 100 feet of that intersection. The intersection is signalized. Curb extensions to reduce crossing width and increase pedestrian visibility were added in the second half of 2019. The two collisions at the intersection occurred before the curb extensions were installed. Those curb extensions also eliminated the informal right-turn lanes and, therefore, may reduce the likelihood of both pedestrian/vehicle collisions and bicycle/vehicle collisions.
  - Three at Bellflower Boulevard and Oak Street, which is signalized. Bellflower Boulevard has two through lanes each way with a left-turn/through phase in each direction to accommodate left turns.
  - A total of 17, or slightly more than half of all bicycle/vehicle collisions occurred on Alondra Boulevard.
- Possible contributing factors to the high volume of bicycle/vehicle collisions on Alondra Boulevard include:
- blah

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- Roadway width of 74 feet with four through lanes, left-turn lanes, and, on two corners, unstripped right-turn lanes.
- Posted speed of 40 mph and traffic volumes of 18,800 to 21,000 ADT in 1997, projected to be 21,000 to 23,400 ADT in 2015 (Bellflower Circulation Update). These volumes are relatively low for a four-lane street, which typically results in high traffic speeds.
- A 21 to 23 feet wide curb lane on each side (23 feet is wide enough to accommodate Class II bike lanes), providing more space between parked cars and moving vehicles than on many streets and, therefore, may attract cyclists.
- Numerous shops and restaurants that may be destinations for cyclists, but also result in a higher volume of vehicles cross the path of cyclists.
- There were intersection collisions on Ardmore Avenue: at Flower St and Oak Street
- Bellflower show Flower Street and Alondra Boulevard as potential Class II bikeways and Ardmore Avenue as a Class III Bicycle Friendly Street.

#### 3. PARAMOUNT/ROSECRANS STATION

- Of the 12 bicycle/vehicle collisions that occurred within a half mile of the Paramount/ Rosecrans station, none resulted in severe injury.
- Four were at intersections all along Rosecrans Avenue.
- There were two bicycle/vehicle collisions at the intersection of Rosecrans Avenue and Garfield Avenue, which is signalized. Both streets have two through lanes each way, left-turn lanes, and striped right-turn lanes and 40 mph posted speed limits.
- There were three bicycle/vehicle collisions on Paramount Boulevard approaching its intersections with Howe Street. The intersection is signalized. There are two through lanes each way and left-turn lanes on Paramount Boulevard and one lane each way on Howe Street.
- A total of six or half the bicycle/vehicle collisions occurred on Paramount Boulevard. Five (one-third of all collisions) occurred on Rosecrans Avenue.
- Possible contributing factors to the high volume of bicycle/vehicle collisions on Paramount Boulevard and Rosecrans Avenue include:
  - Roadway width of 80 to 82 feet with four through lanes, left-turn lanes, and unstripped right-turn lanes.
  - Posted speed of 40 mph.

- Destinations, including Paramount High School, movie theaters, swap meet, and other restaurants and shops.
- The City of Paramount shows Howe Street as a Class III Bicycle Friendly Street in its active Transportation Plan. The Paramount North Gateway Specific Plan suggests options to provide bicycle access on Paramount Boulevard from the intersection of Rosecrans Avenue to Rose Street.

#### 4. I-105/C LINE STATION

- Of the 10 bicycle/vehicle collisions that occurred within a half mile of the I-105/C Line station, two resulted severe injury.
- Four were at intersections.
- A severe injury crash occurred on Pearle Street 30 feet east of McClure Avenue. Both are two-lane local streets (25 mph speed limit) with a four-way stop at their intersection.
- A severe injury crash occurred on Garfield Avenue at Somerset Ranch Road, while a crash resulting in visual injury occurred at Century Boulevard.
- Possible contributing factors to the intersection collisions on Garfield Avenue include:
  - 35 mph posted speed limit and two through travel lanes each way, two southbound left-turn lanes, and a northbound right turn lane on Garfield.
  - 40 mph speed limit Somerset Ranch Road, which is a one-way eastbound freeway frontage road with two through lanes and a right-turn lane.
  - There are Class II bicycle lanes in the southbound direction between Century Boulevard and Howery Street, but not in the northbound direction.
- There were three bicycle/vehicle collisions on Paramount Boulevard.
- Possible contributing factors to the high volume of bicycle/vehicle collisions on Paramount Boulevard include:
  - Roadway width of 80 to 82 feet with four through lanes, left-turn lanes, and unstripped right-turn lanes.
  - Posted speed of 40 mph.

#### 5. GARDENDALE STATION

- Of the two bicycle/vehicle collisions that occurred within a half mile of the Gardendale station, none resulted severe injury or death.
- One was at an intersection, specifically at Gardendale Street and Monroe Avenue, where there are Class II bicycle lanes on Gardendale Street, but neither a traffic control device or a break in the center turn lane.
- The other was on Garfield Boulevard approaching McKinley Avenue. The intersection is unsignalized. There are stop signs on McKinley Avenue.
- The City of South Gate identifies both Gardendale Avenue and Monroe Avenue between Hollydale Park/San Gabriel River Trail as potential Class III Bicycle Friendly Streets. On Gardendale Avenue, a Class II lane would have to be added on the southside between Monroe Avenue and Garfield Avenue and traffic calming (speed humps) west of Garfield Avenue where it is a local street with one lane each way. Monroe Avenue is a local street with one lane each way and provides a more direct connection to the San Gabriel River Trail. It could be improved as a Bike Friendly Street by adding traffic control (a signal) at Garfield Avenue and traffic calming (speed humps).

#### 6. FIRESTONE STATION

- Of the 21 bicycle/vehicle collisions that occurred within a half mile of the Firestone station, two resulted severe injury.
- Eleven (just over 50%) were at or approaching intersections.
- There were multiple collisions at or approaching the following intersections:
  - Three at the intersection of Atlantic Avenue and westbound Cecilia Street, which is signalized.
  - Two at the intersection of Atlantic Avenue and Mason Street/Azalea Shopping Center entrance, which is signalized.
  - Two approaching the intersection of Atlantic Avenue and Firestone Boulevard, which is signalized.
  - Two at the intersection of Salt Lake Avenue and Ardine Street, which is signalized.
  - Two at the intersection of Southern Avenue, Southern Place and Vossler Avenue, which is adjacent to South Gate Park and has a four-way stop and a pork chop island with a slip lane on eastbound Southern that cyclists have to cross if they are going north on Vossler or straight on Southern Place
- Eight bicycle/vehicle collisions occurred on Firestone Boulevard and six on Atlantic Avenue for a total of 14 or two-thirds of all collisions on the two major arterials serving the station.
- Possible factors that may contribute to the high collision volume on Firestone:
  - Three through lanes each way, including the curb lane (no curbside parking), single or double left-turn lanes and unstripped right-turn lanes.
  - A posted 35 mph speed limit.
  - High traffic volumes.
- Possible factors that may contribute to the high collision volume on Atlantic Avenue:
  - $\circ$   $\;$  Two to three through lanes each way with left-turn and right-turn lanes.
  - A posted 35 mph speed limit.
  - High traffic volumes.

#### 7. FLORENCE/SALT LAKE STATION

- Of the 19 bicycle/vehicle collisions that occurred within a half mile of the Florence Salt Lake station, none resulted severe injury.
- Four were at or approaching intersections.
- There was one each at State Street and Hope Street (signalized), Live Oak Street and Otis Avenue (signalized), Bell Avenue and Bear Avenue (four-way stop), and Bell Avenue and Orchard Street (four-way stop).
- Seven bicycle/vehicle collisions occurred on Florence Avenue and three on State Street for a total of 10 or just over half of all collisions on arterial streets.
- Possible factors that may contribute to the high collision volume on Florence Avenue:
  - Two through lanes each way, left-turn lanes and unstripped right-turn lanes.
  - Curb lanes east of Salt Lake Avenue are 23 feet, wide enough for stripped bicycle lanes. Curb lanes west of Salt Lake Avenue are only 19 feet wide.
  - A posted 35 mph speed limit.
  - High traffic volumes.

- Possible factors that may contribute to the high collision volume on State Street:
  - Two through lanes each way, left-turn lanes at Florence Avenue only, and unstripped right-turn lanes.
  - A posted 35 mph speed limit south of Florence Avenue where the collisions occurred.
  - High traffic volumes.

#### 8. PACIFIC/RANDOLPH STATION

- The Pacific/Randolph half-mile station area had the highest number of bicycle/vehicle collisions of all the WSAB station areas.
- Of the 54 bicycle/vehicle collisions that occurred within a half mile of the station, one resulted severe injury.
- Fourteen (26%) were at or approaching intersections.
- There were multiple collisions at the following intersections:
  - Four at Slauson Avenue and Pacific Boulevard
  - o Three at Miles Avenue/State Street and Randolph Street
  - Three at Gage Avenue and Rugby Avenue
  - Two each at Randolph Street and Rita Avenue, Pacific Avenue and Clarendon Avenue, and Gage Avenue and Stafford Avenue.
- Twelve bicycle/vehicle collisions occurred on Slauson Avenue, nine on Pacific Avenue, eight on Gage Avenue, and four on Randolph Street for a total of 33 or 61% of all collisions on streets with two through lanes each way.
- Possible factors that may contribute to the high collision volumes on the above streets are:
  - Two through lanes each way, left-turn lanes and, in some locations unstripped right-turn lanes.
  - High traffic volumes.
- Possible factors that may contribute to the high collision volumes in the station area in general are:
  - Pacific Boulevard is an active commercial street with restaurants, shops and other destinations.
  - This area has a higher population density, more streets with two through lanes each way, and higher traffic volumes than station areas to the south.

#### 9. SLAUSON/A LINE STATION

- The Slauson/A Line half-mile station area had almost as many bicycle/vehicle collisions as the half-mile Pacific/Randolph station area.
- Of the 49 bicycle/vehicle collisions that occurred within a half mile of the Slauson/A Line station, three resulted severe injury.
- Twenty-one bicycle/vehicle collisions (43%) were at or approaching intersections.
- There were multiple collisions at the following intersections:
  - Four at Hooper Avenue and Slauson Avenue (at the western edge of the station area)
  - Three at Slauson Avenue and Compton Avenue
  - Two at Holmes Avenue and 55th Street
  - Two at East 58<sup>th</sup> Place and Compton Avenue, which is unsignalized and very close to the entrance to Augustus Hawkins Park
  - Two at Converse Avenue and Gage Avenue
- Ten bicycle/vehicle collisions occurred on Compton Avenue and eight on Slauson Avenue for a total of 18 or 37% of all collisions on streets with two through lanes each way.

- Possible factors that may contribute to the high collision volume on Slauson Avenue are:
  - Two through lanes each way, left-turn lanes and unstripped right-turn lanes.
  - o A posted 35 mph speed limit on Slauson Avenue. Slauson Avenue has no curbside parking
  - High traffic volumes.

#### 10. POTENTIAL SAFETY IMPROVEMENTS BASED ON HALF-MILE ANALYSIS

#### South Street

South Street has existing Class II lanes or is identified for potential Class II lanes in all segments except between the San Gabriel River and Jersey Avenue in Cerritos. The Gateway Cities COG and Metro identifies it as a priority regional bikeway.

City of Cerritos counts in 2018 show 16,500 to 19,000 ADT between Pioneer Boulevard and Gridley Road and 23,800 ADT between Gridley Road and the Cerritos Shopping Center access to the west. These traffic volumes indicate that no more than two lanes in each direction are required, suggesting that the curb lanes could be converted to Class IV protected bicycle lanes. Note: Traffic counts should be taken farther west to determine the volumes between the shopping center and the 605 Freeway.

However, the 605 Freeway ramps are a major obstacle. Even if the curb lanes were converted to protected bicycle lanes, the four multi-lane free-flowing ramps would remain unsafe for cyclists.

Given that South Street is identified as a priority reginal bikeway, a potential alternative to to avoid the 605 ramps would be to add Class IV protected lanes on Gridley Road between South Street and 195<sup>th</sup> Street, where it is currently two lanes each way with 9,300 ADT, and Class III Bicycle Friendly Street improvements on 195<sup>th</sup> Street between Gridley Road and the San Gabriel River Trail, which would connect back to South Street and would require a traffic control device at that location. Note: Gridley Road's traffic volumes north of South Street (14,500 to 15,100 between South Street and 183<sup>rd</sup> Street and 10,600 between 183<sup>rd</sup> Street and Artesia Boulevard) would similarly accommodate Class IV protected lanes. Those segments are shown in Artesia's ATP as Class IV between 187<sup>th</sup> Street and Aclare Street (north of Artesia Boulevard).

#### 187<sup>th</sup> Street and Its Intersection with Gridley Road

187<sup>th</sup> Street provides a short walk or ride from the Pioneer Station to the Cerritos Shopping Center on a relatively quiet residential street. Shade trees and speed humps would enhance 187<sup>th</sup> Street for both walking and wheels. Its intersection with Gridley Road, where two bicycle collisions occurred could be improved by add continental crosswalk striping on all four legs, converting a portion of the 18-foot westbound curb lane into a green bike lane. Converting the travel portion of that into a right-only lane could also be considered.

#### Alondra Boulevard

Bellflower and Norwalk shows Alondra Boulevard as a potential Class II bikeway. There are existing Class II bike lanes in Compton.

In Norwalk, Alondra Boulevard has a 34.5 to 35-foot wide roadway on either side of the existing raised median. From the Marquardt Avenue (just west of the I-5) to Studebaker Road, there is a 23-foot wide curb lane and an 11.5 to 12-foot wide travel lane with no curbside parking, except for 900 feet adjacent to Cerritos College, short segments of the eastbound curb lane are divided into a travel lane and right-turn lane to access the college parking lot. This segment could accommodate Class IV protected lanes, except adjacent to Cerritos College where the sidewalk could be widened to accommodate an off-street path to avoid conflicts with the right-turn lanes.

From Studebaker Road west to Hayford Street for a length of 4,000 feet in which 605 Freeway access ramps are located, Alondra Boulevard is striped with three lanes in each direction and the roadway width varies. Bike lanes cannot be accommodated unless a lane is eliminated in each direction.

In Bellflower, from Hayforth Road to Woodruff there is a 23-foot wide curb lane and an 11 to 12-foot wide travel lane, with no curbside parking in Norwalk and with curbside parking in Bellflower.

In Paramount where wider medians reduce width on either side from 35 feet to 33 feet A width of 35 feet can accommodate a 23-foot curb lane with parking, a Class II bike lane and a travel lane and a 12-foot travel lane or a 10-foot protected bike lane and two 12.5-foot wide travel lanes.

Class IV bicycle lanes could be striped in Norwalk from the Marquardt Avenue (just west of the I-5) to Studebaker Road. Class III These segments would need to be evaluated to determine whether the third lane and right-turn lanes could be eliminated.

In most locations, adjacent uses are commercial or industrial with off-street parking or the backside of residential development without direct access to Alondra. Exceptions are:

Curbside parking appears to be more heavily used in Bellflower than in the other cities.

A combination of Class IV and Class II bike lanes with reduced traffic speed (from 40 to 35 or preferably 30).

#### **Paramount Boulevard**

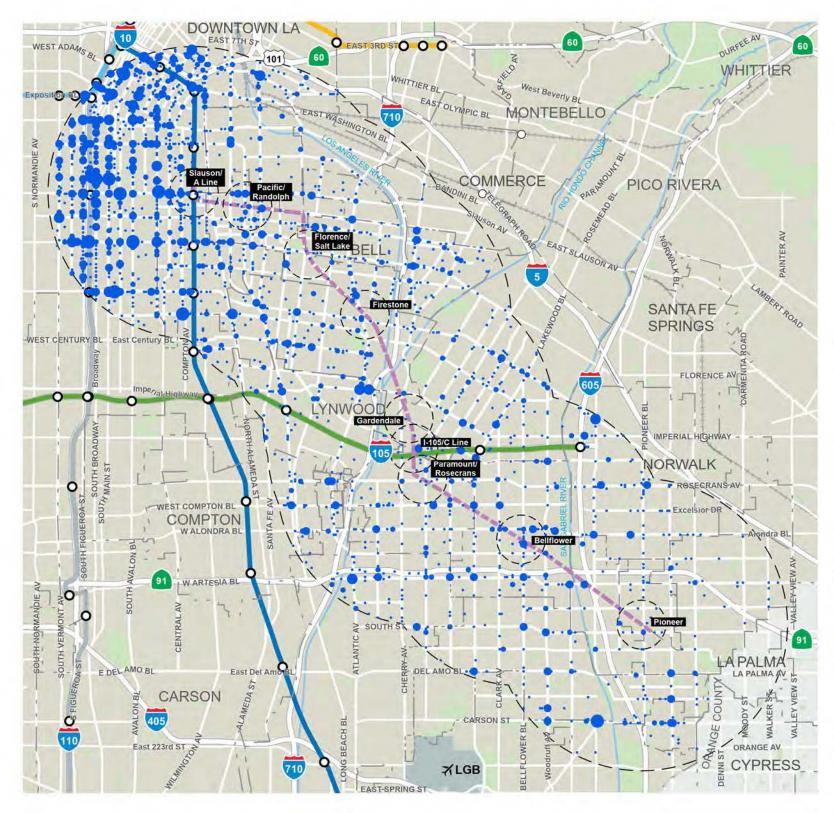
Getting to the Paramount/Rosecrans Station on a bicycle or other wheels is challenging. In general, the City's ATP proposes a network of collector and local bicycle friendly streets for bicycle circulation in the City. However, the station is not accessible by local streets due to freight rail tracks to the north and west. One option to provide access both north to Rose Street and south to 3<sup>rd</sup> Street is to widen sidewalks into setbacks to add a two-way path on one side or one-way path on each side.

Bicycle friendly street improvements would need to be added on Rose Street between McClure Avenue and Orizaba Avenue and on McClure Avenue between Rose Street and Howe Street.

South of Rosecrans Avenue sidewalks could be similarly widened into the street, requiring the

#### **Hooper Street**

Continue existing bike lanes north to the intersection. They currently end approximately 100 feet south of the south crosswalk strip.

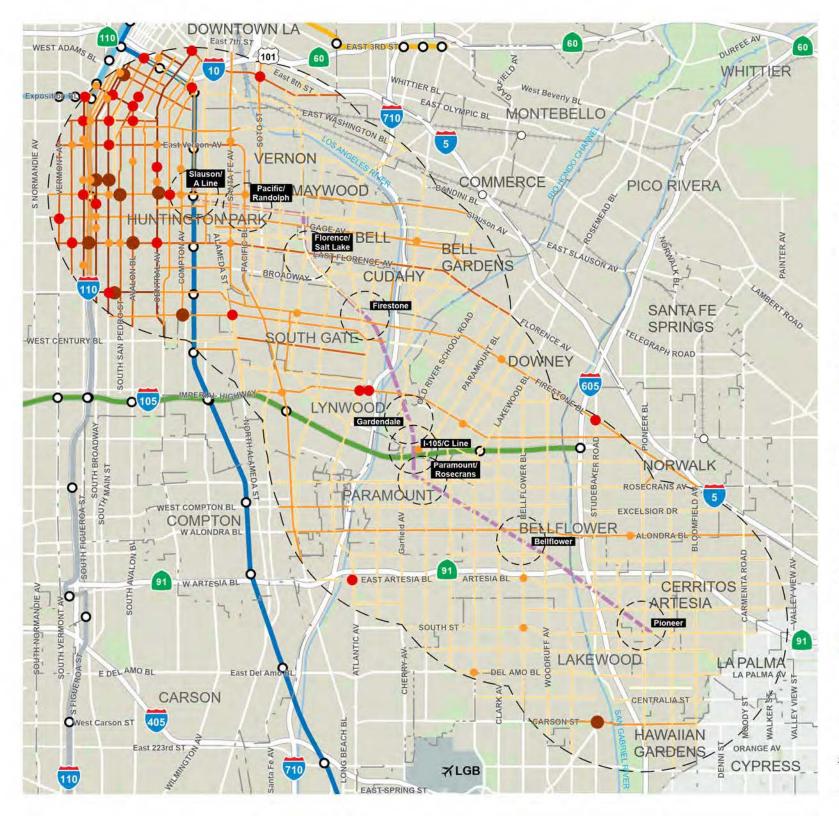


## Figure 1 All Bicycle/ Vehicle Collisions

West Santa Ana Branch Transit Corridor First Last Mile



Source: PSLA (Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)



### Figure 2 Bicycle/Vehicle Collisions Per Mile and Hot Spots

West Santa Ana Branch Transit Corridor First Last Mile

Bicycle/Vehicle Collisions 1/1/2016 - 12/31/2021

Collisions Per Mile by Street

0 - 1

1.1 - 5 5.1 - 10

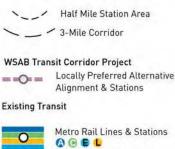
10.1 - 15

15.1 - 21.5

Intersection Collision Hotspots



Note: For per mile count, intersection collisions are counted once; they are assigned to one of the two cross streets.



O Metro Busway & Station

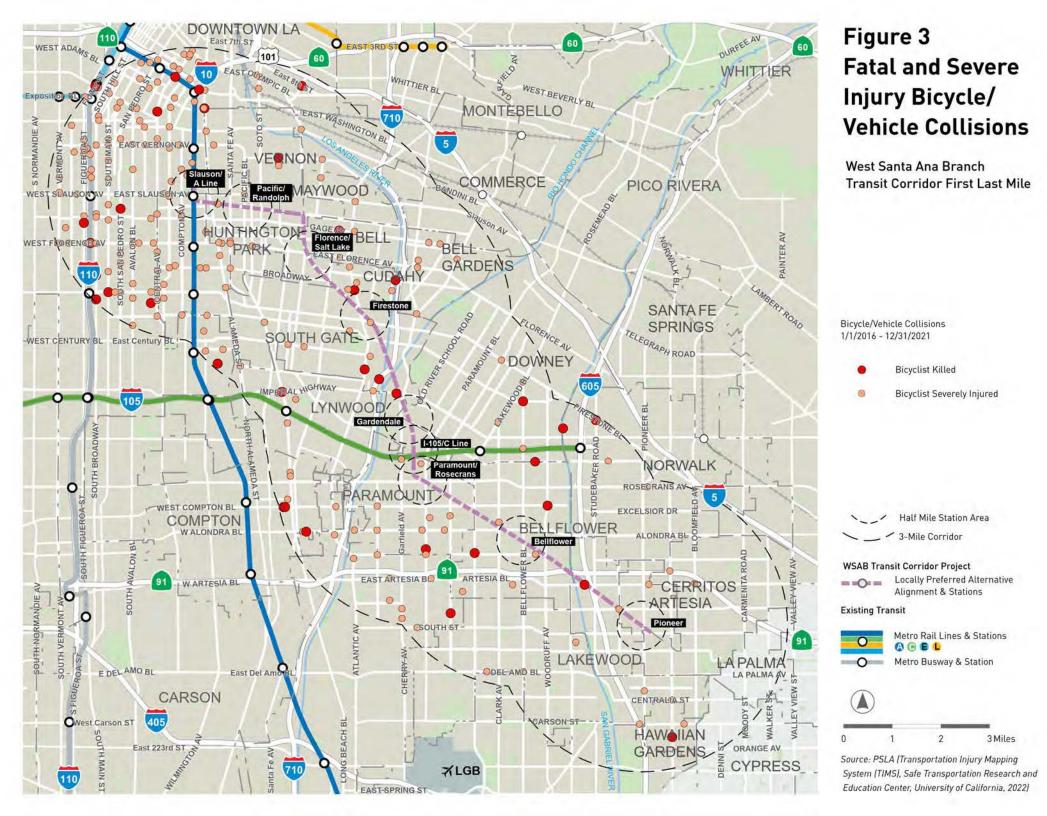


Source: PSLA (Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)

## Table 1 Bicycle/Vehicle Collisions Per Mile On Streets with More than Ten Collisions Per Mile1/1/1016 - 12/31/2021

Name	Length (Miles)	Total Collisions	Collisions Per Mile	Number Killed	Number Injured	Severe Injury	Existing Bikeway	Proposed Bikeway
Manchester Blvd	1.5	29	19.4	1	30	3	II Central- Alameda	IV 110- Central
Broadway (Los Angeles)	5.0	93	18.5	2	94	3	IV 89th- Manchester	ll 36th- Manchester
Jefferson Blvd	0.9	16	18.2	0	18	2	ll Main-San Pedro	II San Pedro- Central
Central Ave	6.2	108	17.3	1	112	11		IV Olympic- 99th
MaIn St (Los Angeles)	5.3	90	17.1	0	92	6		IV 22nd-90th
Avalon Blvd	4.5	66	14.6	0	66	8	II Jefferson- 95th	IV Jefferson- Florence
Vernon Ave	3.7	41	11.0	0	41	5		
Florence Ave	9.7	106	11.0	1	106	13		II Vermont- Alameda
Adams Blvd	1.7	19	10.9	0	24	1	II Broadway- Compton	II Broadway- Compton
Olympic Blvd	3.4	37	10.9	0	37	3	compton	II Central- Lorena
San Pedro St	5.8	62	10.8	1	62	6	II Jefferson- Main	IV Washington-
Tweedy Blvd	2.7	29	10.7	0	29	1	II Compton- Wilmington	II- Wilmington-
Vermont Ave	2.3	24	10.5	0	24	3	ll Gage-74th	IV 60th-74th II 43rd-60th
Martin Luther King Blvd (Los Angeles)	1.8	19	10.3	0	19	2	ll Broadway- Central	IV Hoover- Central
Hoover St	3.1	32	10.2	0	32	1		II MLK-Vernon

Note: GIS assigns collisions to the closest street and not necessarily based on primary street SWITRS designation. Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022



					Bicyclists			
	Length	Total	Collisions	Bicyclists	Severly	Bicyclists	Existing	Proposed
Name	(Miles)	Collisions	Per Mile	Killed	Injured	Injured	Bikeway	Bikeway
Imperial Hwy	8.2	49	6.0	3	3	47		
Broadway	5.0	93	18.5	2	3	94	IV Manchester- 89th	ll 36th- Manchester
Atlantic Ave	10.3	47	4.5	2	2	46	II Harding-Artesia	II LA River- Alondra
Washington Blvd	5.9	27	4.5	2	2	25		II Maple-LA River
Compton Blvd	1.4	10	6.9	2	1	9		
Central Ave	6.2	108	17.3	1	11	112		IV Olympic-99th
Florence Ave	9.7	106	11.0	1	13	106		II Vermont- Alameda
Figueroa St	4.0	86	21.5	1	6	87	II MLK-Exposition	
Gage Ave	9.2	75	8.1	1	4	75		
San Pedro St	5.8	62	10.8	1	6	62	II Jefferson-Main	IV Washington- 90th
Alondra Blvd	9.7	60	6.2	1	5	60		II WSAB- Shoemaker
Artesia Ave	9.6	36	3.7	1	1	36	II Shoemaker- Edwards; Norwalk-	IV Norwalk- Gridley; Gridley-
							Bloomfield	Woodruff
Paramount Blvd	7.4	36	4.8	1	1	35		
Downey Ave	7.5	35	4.7	1	2	34		
Lakewood Blvd (Rt. 19)	7.1	29	4.1	1	2	28		
Manchester Blvd	1.5	29	19.4	1	3	30	II Central-Alameda	IV 110-Central
Flower St (Los Angeles)	4.2	26	6.3	1	4	26		II Jefferson-37th
Woodruff Ave	7.2	22	3.1	1	0	22	II Harco-Rose	II Foster- Firestone
Norwalk Blvd	5.8	20	3.5	1	0	19	II Artesia-WSAB	II/IV 166th- Rosecrans
Studebaker Rd	4.5	15	3.3	1	0	14	II Artesia-Alondra	
Clara St	3.1	12	3.9	1	0	11		II WB River- WSAB
Stewart and Gray Rd	3.2	9	2.8	1	0	9		ll 710-Woodruff
Leonis Blvd	2.5	6	2.4	1	1	5		
Foster Rd	1.6	5	3.1	1	0	4	I/II San Gabriel R- Pioneer	II San Gabriel R- Lakewood
Wadsworth Av	1.9	4	2.1	1	0	3		
Alamenda St East	1.8	3	1.7	1	0	3		I/IV Florence-105
Lorena St	0.7	3	4.3	1	0	2		II E 7th-S Grande Vista
107th St	0.5	2	4.0	1	0	1		III Anzac-Mona

#### Table 2A Bicyclist Fatalities by Street 1/1/1016 - 12/31/2021

Note: GIS assigns collisions to the closest street and not necessarily based on primary street SWITRS designation.

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022

#### Table 2B Bicyclist Fatalities 1/1/1016 - 12/31/2021

PRIMARY RD	SECONDARY RD	INTER- SECTION	VIOLATION CATEGORY	COLLISION TYPE	LIGHT- ING	JURISDICITON
107TH ST	LOU DILLON AV	N	05	A	C	LOS ANGELES
ALONDRA BL	BRADFIELD AV	N	03	G	c	COMPTON
ARTESIA BL	DUMONT AV	Ŷ	03	C	Ā	CERRITOS
ATLANTIC AV	SANTA ANA ST	Ŷ	17	Ă	A	CUDAHY
ATLANTIC AV	TENAYA AV	N	00	G	C	SOUTH GATE
BELLFLOWER BL	STEWART & GRAY	Y	12	D	С	DOWNEY
BOYLE AV	LEONIS BL	Y	08	Н	A	VERNON
BROADWAY	87TH PL	Y	03	D	С	LOS ANGELES
CENTRAL AV	33RD ST	Y	09	D	С	LOS ANGELES
CLARA ST	RIVER RD	Ν	05	Н	D	CUDAHY
COMPTON BL	SLOAN AV	Ν	05	А	А	COMPTON
COMPTON BL	SLOAN AV	Y	09	D	А	COMPTON
DEL RIO CT	IMPERIAL HWY	Ν	22	В	D	NORWALK
DOWNEY AV	HEDDA ST	Ν	07	А	А	LONG BEACH
E MANCHESTER AV	S MAIN ST	Y	09	Н	С	LOS ANGELES
FIGUEROA ST	65TH ST	Y	10	А	А	LOS ANGELES
FIRESTONE BL	STUDEBAKER RD	Y	12	А	С	NORWALK
FLORENCE AV	GRAND AV	Y	17	D	С	LOS ANGELES
FOSTER RD	DUNROBIN AV	Y	00	Н	В	DOWNEY
GAGE AV	FISHBURN AV	Ν	05	Н	А	BELL
IMPERIAL HWY	RUCHTI RD	Ν	05	D	С	SOUTH GATE
IMPERIAL HWY	LONG BEACH BL	Y	05	D	А	LYNWOOD
LORENA ST	8TH ST	Y	07	Н	С	LOS ANGELES
NORWALK BL	221ST ST	Y	12	D	В	HAWAIIAN
						GARDENS
PARAMOUNT BL	HARRISON ST	Ν	05	D	А	PARAMOUNT
LAKEWOOD BL (RT 19)	FLOWER ST	N	05	С	С	BELLFLOWER
S ALAMEDA ST	E 25TH ST	N	12	D	С	LOS ANGELES
S BROADWAY	W 82ND ST	Y	03	D	С	LOS ANGELES
SAN PEDRO ST	59TH PL	N	08	D	С	LOS ANGELES
STAUNTON AV	WASHINGTON BL	Y	09		А	LOS ANGELES
W JEFFERSON BL	S FLOWER ST	Y	12	Н	С	LOS ANGELES
WADSWORTH AV	88TH PL	Ν	03	В	С	LOS ANGELES
WASHINGTON BL	CENTRAL AV	Ν	04	С	А	LOS ANGELES
WOODRUFF AV	SOMERSET AV	N	12	D	-	BELLFLOWER
	Violation Categories:		Collision Types:		Lighting:	
	03 - Unsafe Speed		A - Head-On		A - Daylig	ht
	04 - Following Too Closely	,	B - Sideswipe		B - Dusk -	
	05 - Wrong Side of Road		C - Rear End			Street Lights
	55 Wrong Side of Rodu					

- C Dark Street Lights
- D Dark No Street Lights

- 07 Unsafe Lane Change 08 - Improper Turning
- 09 Automobile Right of Way
- 12 Traffic Signals and Signs
- 17 Other Hazardous Violation
- 22 Other Improper Driving

- C Rear End
- D Broadside
- E Hit Object
- F Overturned
- G Vehicle/Pedestrian
- H Other

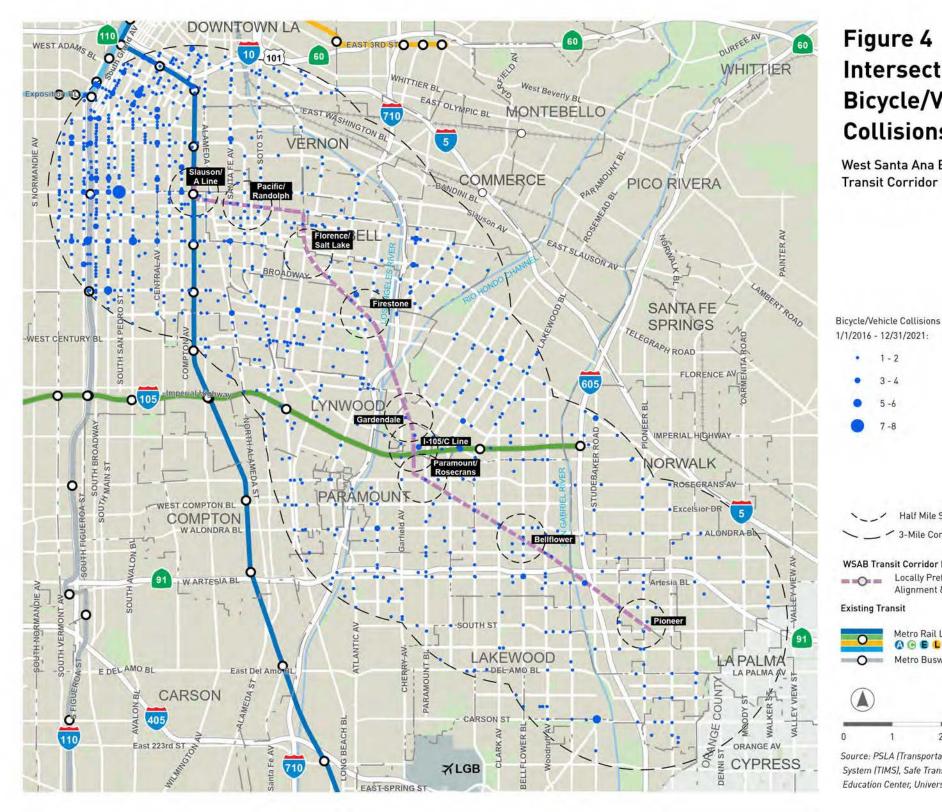
Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022

# Table 3 Bicyclists Severely Injuried by Street on Streets with 3 or More Severely Injured Bicycleists1/1/1016 - 12/31/2021

Name	Length (Miles)	Total Collisions	Collisions Per Mile	Bicyclists Killed	Bicyclists Severely Injured	Severely Injured Per Mile	Bicyclists Injured	Existing Bikeway	Proposed Bikeway
Florence Ave	9.7	106	11.0	1	13	1.3	106		II Vermont- Alameda
Central Ave	6.2	108	17.3	1	11	1.8	112		IV Olympic- 99th
Avalon Blvd	4.5	66	14.6	0	8	1.8	66	II 95th- Jefferson	IV Jefferson- Florence
Hooper Av	5.7	49	8.6	0	7	1.2	49		
Maln St (Los Angeles)	5.3	90	17.1	0	6	1.1	92		IV 22rd- 90th
Figueroa St	4.0	86	21.5	1	6	1.5	87	II MLK- Exposition	II MLK- Exposition
San Pedro St	5.8	62	10.8	1	6	1.0	62	II Main- Jefferson	IV/II Pico - 90th
Alondra Blvd	9.7	60	6.2	1	5	0.5	60		II WSAB- Shoemaker
Slauson Ave	8.7	55	6.3	0	5	0.6	56		I Budlong- Santa Fe
Vernon Ave	3.7	41	11.0	0	5	1.3	41		
Gage Ave	9.2	75	8.1	1	4	0.4	75		
Long Beach Blvd	5.8	33	5.6	0	4	0.7	34		II Slauson- Washington
Alameda St West	7.2	32	4.4	0	4	0.6	32		
Flower St (Los Angeles	4.2	26	6.3	1	4	1.0	26	ll Downey- Paramount	
Nadeau St	1.5	14	9.3	0	4	2.7	14		II Central- State
Broadway (Los Angeles)	5.0	93	18.5	2	3	0.6	94	IV 89th- Manchester	II 36th- Manchester
Imperial Hwy	8.2	49	6.0	3	3	0.4	47		
Olympic Blvd	3.4	37	10.9	0	3	0.9	37		II Central- Lorena
Grand Av	4.6	31	6.8	0	3	0.7	32	ll 28th- 39th	
Manchester Blvd	1.5	29	19.4	1	3	2.0	30	II Central-	IV 110-
Vermont Ave	2.3	24	10.5	0	3	1.3	24	ll Gage- 74th	IV 60th- 74th
Maple Av	1.5	14	9.3	0	3	2.0	14		III MLK- Washington

Note: GIS assigns collisions to the closest street and not necessarily based on primary street SWITRS designation.

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022



### Figure 4 Intersection **Bicycle/Vehicle** Collisions

West Santa Ana Branch **Transit Corridor First Last Mile** 

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System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)

#### Table 4 Bicycle/Auto Collision Intersection Hot Spots 1/1/2016 - 12/31/2021

Hot Spots are intersections at which four or more bicycle/vehicle collisions occurred in the 6-year period.

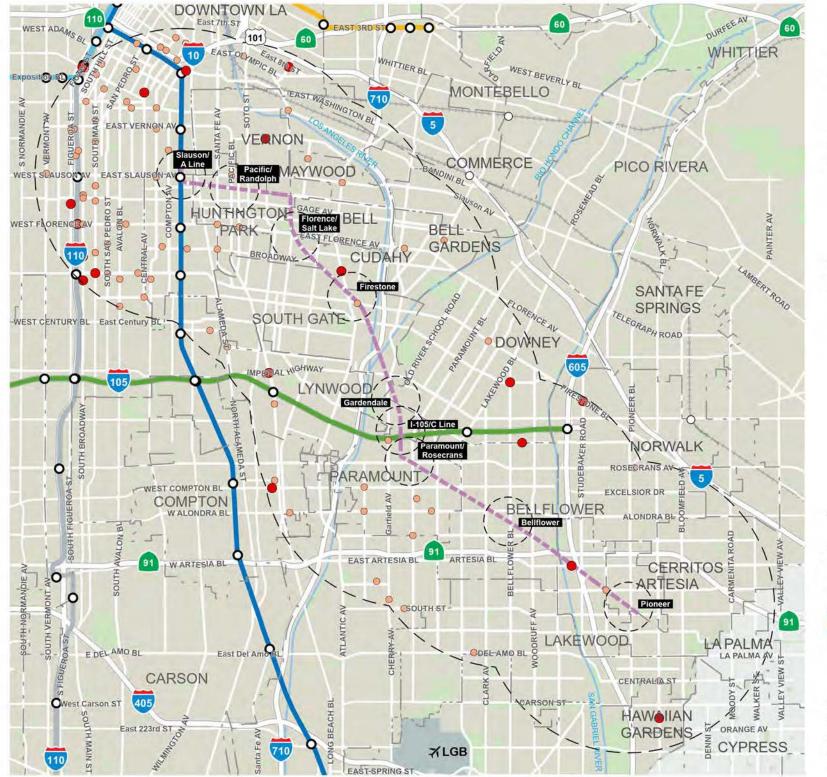
This table includes only collisions that occurred at intersections according to SWITRS data.

The number after street name indicates which number of times that street was listed as the primary street in SWITERS data.

North-South	East-West	Colli	-	Sev	erit	у		Speed	Traffic	Through	Total	Existing	Proposed	Land	Activity	
Street	Street	sion	1	2	3	4	Causes	Limit	Control	Lanes	Lanes	Bikeway	Bikeway	Use*	Centers	Jurisdiction
San Pedro St5	Slauson Av3	8			4	4	1 wrong side	25x35	Signal	2x4	2/3x5	No	I Slauson	Ind.		Los Angeles
San Pedro St2	30th St3	5			2	3	2 wrong side	35x25	Signal		4x2	No	III 30th	Ind.		Los Angeles
Main St-3	Manchester Av- 2	5	1		3	1	2 auto ROW	30x35	Signal	4x4(6)	5x5(7)	No	IV Main IV Manchester	Com.		Los Angeles
Flower St	Florence Av-5	5		1		4	2 wrong side	25x35	Signal	1x4(6)	3/1x5(7	No	Il Florence	Ind.		Los Angeles
Avalon BI-5	Florence Av	5		2	3		1 unsafe speed 1 auto ROW	30/35x 35	Signal	2x4(6)	3x5(7)	IV Avalon 7/2020	II Florence	Ind.		Los Angeles
Carson St-3	Los Coyotes Diagonal-2	5			3	2	1 wrong side 2 auto ROW	40x40	Signal	4x4	6x6	l Carson l Los		Com.		Carson
Maple St	Washinton BI-4	4				4	1 wrong side 1 auto ROW	25x35	Signal	2x4	3x5	No	II (no.)/III (so.) Maple	Com./ Ind.	SLAHS: A Line	Los Angeles
Compton Av-2	Washington Bl- 2	4				4	1 wong way	25x35	2-way stop	2x4/5	2x4/5	No		Ind.	A Line Sta.	Los Angeles
Flower St-2	Jefferson BI-2	4	1	1	2		4 signal	?x?	Signal	3/4x4	4/2x5	No	ll (so.) Flower	USC	USC; E Line	Los Angeles
Hoover St	Vernon Av-4	4			2	2	1 unsafe speed 2 auto ROW	25x25	Signal	3/2x2(4)	5/4x3(5 )	ll (no.) Hoover		Com.		Los Angeles
Grand Av-1 (1-way NB)	54th St-3	4			2	2	3 wrong side 1 auto ROW	25x25	4-way stop	2x2	2x2	No	ll 54th	Res.	110 ramps	Los Angeles
Broadway-2	54th St-2	4			1	3	1 unsafe speed	35x25	Signal	4x2	4x2	No	II Broadway II 54th	Com./ Res.		Los Angeles
Main St-2	54th St-4	4			3	1		?x25	Signal	4x2	4x2	No	IV Main II 54th	Com./ Res.		Los Angeles
Boyle-1	Slauson Av-3	4				4	3 wrong side 1 auto ROW	?x35	Signal	4x4	5x5(7)	No	II (so.) Boyle	Ind.	HPHS	Huntington Park/Verno
Hoover St-1	Florence Av-3	4			3	1	3 auto ROW	?x35	Signal	4x4(6)	5x5(7)	No	II Florence	Res.	Rec. Ctr.	Los Angeles
Central Av-1	Florence Av-3	4			2	2		?x35	Signal	4x4	5x5	No	II Florence IV Central	Ind./Co m.	USPS dist.; ES	Los Angeles
Santa Fe Av-2	Florence Av-2	4		1	2	1	1 auto ROW	35x35	Signal	4x4	6/5x6	No	II Florence	Com./ Res.	MS; supermkt	Los Angeles
Broadway-2	67th St-2	4			3	1	1 auto ROW 2 signal	40x25	Signal	4x4	5x4		II Broadway	Ind./ Res.	MS	Los Angeles
Figueroa St-2	79th St-2	4			2	2	-	35x25	Signal	4x2	5x2	No	ll 79th St	Res.		Los Angeles
Downey Av-2	Firestone BI-2	4		1		3	2 wong way	25x35	Signal	2x6	5x7	No	II Downey	Com.		Downey

\* Table shows land use on the corridor within a block of the intersection; typically surrounding neighborhoods are residential.

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022



## Figure 5 Intersection Bicycle/Vehicle Collision Severity

West Santa Ana Branch Transit Corridor First Last Mile

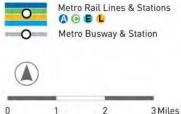
Intersection Bicycle/Vehicle Collision Fatalities and Severe Injuries 1/1/2016 - 12/31/2021



Half Mile Station Area

Locally Preferred Alternative Alignment & Stations

**Existing Transit** 



Source: PSLA (Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)

#### Table 5 Bicyclist Fatalities at Intersections 1/1/1016 - 12/31/2021

Primary Rd	Secondary Rd	Number Killed	Number Injured	Violation Cat.	Collision Type	Lighting	Control Device	City
ARTESIA BL	DUMONT AV	1	0	03	C	A	D	CERRITOS
ATLANTIC AV	SANTA ANA ST	1	0	17	А	А	А	CUDAHY
BELLFLOWER BL	STEWART	1	0	12	D	С	А	DOWNEY
BOYLE AV	LEONIS BL	1	0	08	Н	А	А	VERNON
BROADWAY	87TH PL	1	0	03	D	С	А	LOS ANGELES
CENTRAL AV	33RD ST	1	0	09	D	С	D	LOS ANGELES
COMPTON BL	SLOAN AV	1	1	09	D	А	А	COMPTON
E MANCHESTER AV	S MAIN ST	1	0	09	Н	С	А	LOS ANGELES
FIGUEROA ST	65TH ST	1	0	10	А	А	D	LOS ANGELES
FIRESTONE BL	STUDEBAKER RD	1	0	12	А	С	А	NORWALK
FLORENCE AV	GRAND AV	1	0	17	D	С	А	LOS ANGELES
FOSTER RD	DUNROBIN AV	1	0	00	Н	В	А	DOWNEY
IMPERIAL HWY	LONG BEACH BL	1	0	05	D	А	А	LYNWOOD
LORENA ST	8TH ST	1	0	07	Н	С	А	LOS ANGELES
								HAWAIIAN
NORWALK BL	221ST ST	1	0	12	D	В	А	GARDENS
S BROADWAY	W 82ND ST	1	1	03	D	С	-	LOS ANGELES
STAUNTON AV	WASHINGTON BL	1	0	09	D	А	А	LOS ANGELES
W JEFFERSON BL	S FLOWER ST	1	0	12	Н	С	А	LOS ANGELES

Violation Categories: 03 - Unsafe Speed

- 07 Unsafe Lane Change
- 08 Improper Turning
- 09 Automobile Right of Way

10 - Pedestrian Right of Way

12 - Traffic Signals and Signs

17 - Other Hazardous Violation

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022

Lighting:

A - Daylight

B - Dusk - Dawn

C - Dark - Street Lights

**Control Device:** 

A - Functioning

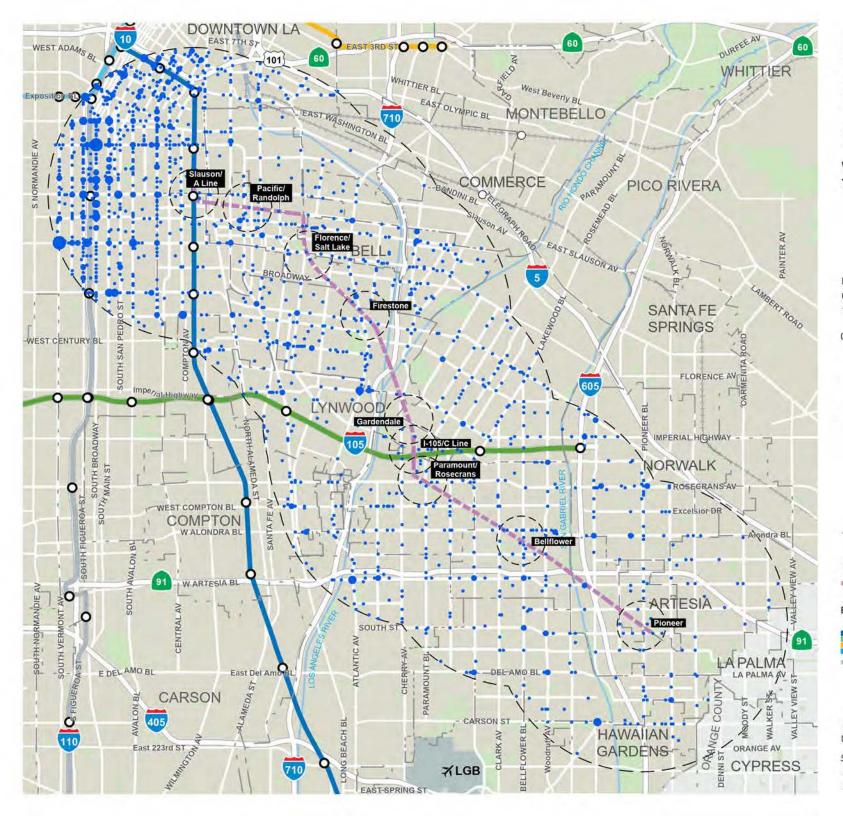
D - None

**Collision Types:** 

D - Broadside

A - Head-On

H - Other



## Figure 6 Midblock Bicycle/Vehicle Collisions

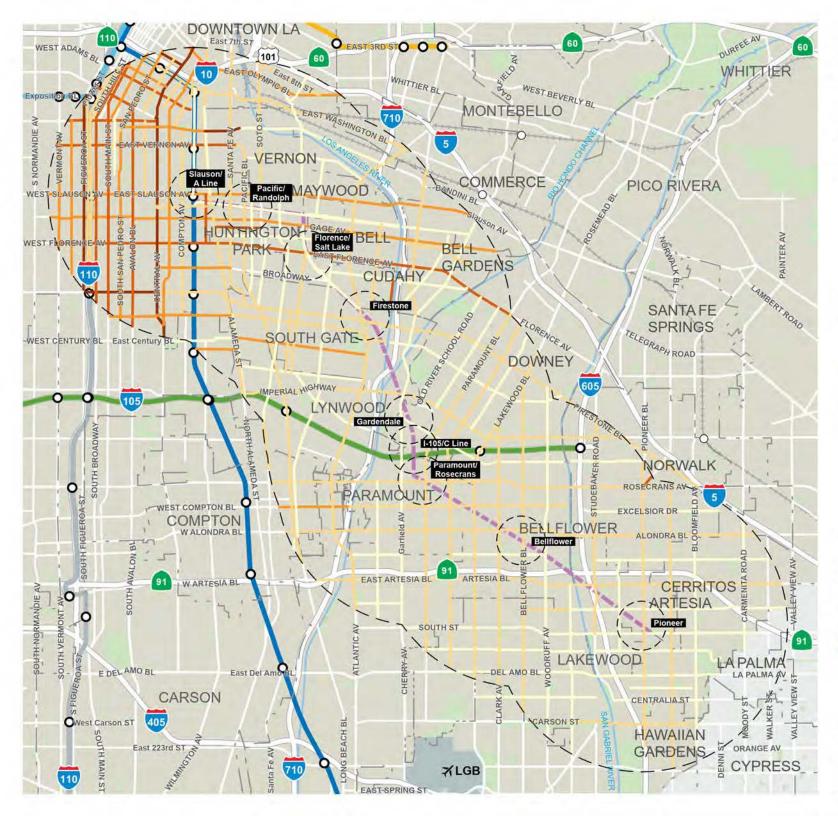
West Santa Ana Branch Transit Corridor First Last Mile

Intersection Bicycle/Vehicle Collision Fatalities and Severe Injuries 1/1/2016 - 12/31/2021





Source: PSLA (Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)



## Figure 7 Midblock Bicycle/ Vehicle Collisions Per Mile By Street

West Santa Ana Branch Transit Corridor First Last Mile

Bicycle/Vehicle Collisions 1/1/2016 - 12/31/2021 Collisions Per Mile by Street

- 0 2 2.1 - 4 4.1 - 6
- 6.1 8

8.1 - 13.26

Half Mile Station Area 3-Mile Corridor WSAB Transit Corridor Project Locally Preferred Alternative Alignment & Stations

**Existing Transit** 

0



1 2 3 Miles

Source: PSLA (Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)

# Table 6 Midblock Bicycle/Vehicle Collisions Per Mile On Streets with Six or More Collisions Per Mile1/1/1016 - 12/31/2021

Name	Length (Miles)	Total Collisions	Collisions Per Mile	Number Killed	Number Injured	Severe Injury	Existing Bikeway	Proposed Bikeway
Figueroa St	4.0	53	13.3	0	54	5	II MLK- Exposition	
Manchester Blvd	1.5	19	12.7	0	19	1	II Central- Alameda	IV 110- Central
Central Ave	6.2	63	10.1	0	63	7		IV Olympic- 99th
14th PI	0.5	4	8.4	0	5	0		
38th St (Vernon)	0.7	6	8.3	0	6	1		
Vernon Ave	3.7	27	7.3	0	27	5		
MaIn St (Los Angeles)	5.3	38	7.2	0	40	1		IV 22nd- 90th
Broadway (Los Angeles	5.0	36	7.2	0	36	1	IV 89th- Manchester-	II 36th- Manchester
Florence Ave	9.7	69	7.1	0	70	8		II Vermont- Alameda
Martin Luther King Blvd	1.8	13	7.1	0	13	0	II Broadway Central	IV Hoover- Central
Jefferson Blvd	0.9	6	6.8	0	6	0	II Main-San Pedro	II San Pedro- Central
San Antonio Rd Norwal	0.3	2	6.8	0	2	0		
Avalon Blvd	4.5	30	6.6	0	30	4	II Jefferson- 95th	IV Jefferson- Florence
Adams Blvd	1.7	11	6.3	0	16	0	II Broadway Compton	II Broadway- Compton
Zoe Av	1.0	6	6.3	0	6	0		III Alemda- Miles
River Rd	0.5	3	6.1	0	4	1		III Clara- Fostoria
Wilmington Av	1.0	6	6.0	0	6	1		
92nd St	2.5	15	6.0	0	17	2	II Compton- Miner	III Compton- Clovis
Nadeau St	1.5	9	6.0	0	9	2		II Central- State
	417	1314	3.2	4	1327	99 0.08		

Note: GIS assigns collisions to the closest street and not necessarily based on primary street SWITRS designation. Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022

#### Table 7 Bicycle/Vehcile Collision Midblock Hot Spots 1/1/2016 through 12/31/2021

#### Hot Spots are midblock segments in which four or more bicycle/vehicle collisions occurred in the 6-year period. This table includes only collisions that did not occur at intersections according to SWITRS data.

Street	From	То	Total	1	Sev 2	erity 3	4	Causes	Speed Limit	Through Lanes	Total Lanes	Existing Bikeway	Proposed Bikeway	Land Use*	Activity Centers	Jurisdiction
Slauson Bl	Central Av	Hooper Av	8		1	1	6	4 auto ROW 2 lane change	35	4	5	No	I	Ind.		Los Angeles & County
92nd St	Compton Av	Graham Av	8			5	3	3 wrong side 2 auto ROW		2	3	II		Res.	Park	Los Angeles
Imperial Hwy	Atlantic Av	710	8			4	4	2 auto ROW 1 improp. turn	40	4 to 6	5 to 6	No	No	Com.	710 EB-SB ramps	South Gate & Lynwood
Manchester Bl	Figueroa St	Main St	8			2	6	2 auto ROW 1 improp. turn	35	6	7	No	IV	Com.	110 ramps	Los Angeles
Central Av	Slauson Bl	58th St	7			4	3	3 wrong way 3 auto ROW 1 improp. turn	35	4	5	No	IV	Com.		Los Angeles
Carson St	Juan Av	Claretta Av	7		2	1	2	2 auto ROW 1 wrong side 1 improp. turn	40	4	5	No	No	Com.		Hawaiian Gardens
Washington Bl	Maple	San Pedro St	6			1	5	3 auto ROW 1 wrong side	35	4	4 + A Line	No	II	Com.	HS; A Line	Los Angeles
Olympic Bl	Boyle	Soto St	5			2	3	2 auto ROW 1 improp. turn 1 wrong side	35	4	5	No	II	Ind. Com.		Los Angeles
Florence Av	Vermont Av	Raymond Av	5		3	2		2 auto ROW	35	4 (6)	5 (7)	No	II	Res. Com.		Los Angeles
Vernon Av	Avalon Bl	Central Av	5		2	1	2	3 improp. turn 1 auto ROW 1 wrong side	30 25 school)	4	4	No	No	Res.	MS	Los Angeles
Vernon Av	Main St	San Pedro St	4		1	3		4 auto ROW 1 improp. turn	30	4	4	No	No	Res.		Los Angeles
Figueroa St	61st St	Gage Av	4		1	1	2	1 auto ROW 1 wrong side	35	4 (6)	5 (7)	No	No	Com.	ES	Los Angeles
Main St	52nd St	54th St	4		1	1	2	1 improp. turn 1 wrong side	30 25 school)	4	4	No	No	Com.	ES	Los Angeles

\* Table shows land use on the corridor within a block of the intersection; typically surrounding neighborhoods are residential.

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022

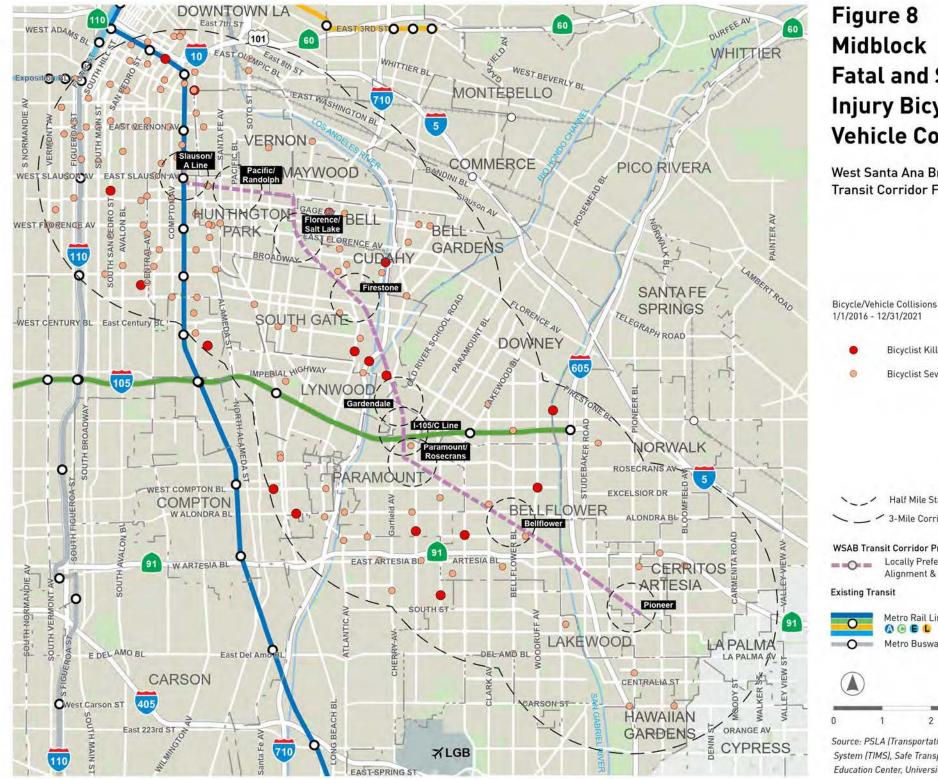


Figure 8 Midblock **Fatal and Severe** Injury Bicycle/ Vehicle Collisions

West Santa Ana Branch **Transit Corridor First Last Mile** 

1/1/2016 - 12/31/2021

**Bicyclist Killed** 

**Bicyclist Severely Injured** 

Half Mile Station Area 3-Mile Corridor WSAB Transit Corridor Project

Locally Preferred Alternative Alignment & Stations



2 3 Miles Source: PSLA (Transportation Injury Mapping

System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)

#### Table 8 Bicyclist Fatalities in Midblock Collisions 1/1/1016 - 12/31/2021

During on a Dal	Cocondon, Dd	Number	Number	Violation	Collision	Lighting	Control	City
Primary Rd	Secondary Rd	Killed	Injured	Cat.	Туре	Lighting	Device	City
WADSWORTH AV	88TH PL	1	2	03	В	С	D	LOS ANGELES
WOODRUFF AV	SOMERSET AV	1	0	12	D	-	А	BELLFLOWER
GAGE AV	FISHBURN AV	1	0	05	Н	А	D	BELL
S ALAMEDA ST	E 25TH ST	1	1	12	D	С	А	LOS ANGELES
CLARA ST	RIVER RD	1	0	05	Н	D	D	CUDAHY
COMPTON BL	SLOAN AV	1	0	05	А	А	D	COMPTON
ALONDRA BL	BRADFIELD AV	1	0	03	G	С	D	COMPTON
IMPERIAL HWY	RUCHTI RD	1	0	05	D	С	D	SOUTH GATE
WASHINGTON BL	CENTRAL AV	1	0	04	С	А	А	LOS ANGELES
PARAMOUNT BL	HARRISON ST	1	0	05	D	А	А	PARAMOUNT
ATLANTIC AV	TENAYA AV	1	0	00	G	С	D	SOUTH GATE
RT 19	FLOWER ST	1	0	05	С	С	D	BELLFLOWER
DOWNEY AV	HEDDA ST	1	0	07	A	А	D	LONG BEACH
107TH ST	LOU DILLON AV	1	0	05	А	С	D	LOS ANGELES
SAN PEDRO ST	59TH PL	1	0	08	D	С	D	LOS ANGELES
DEL RIO CT	IMPERIAL HWY	1	0	22	В	D	D	NORWALK

Excludes one fatality on 1-710 N/B Freeway ramp 1,400' from its intersection with Imperial Hwy.

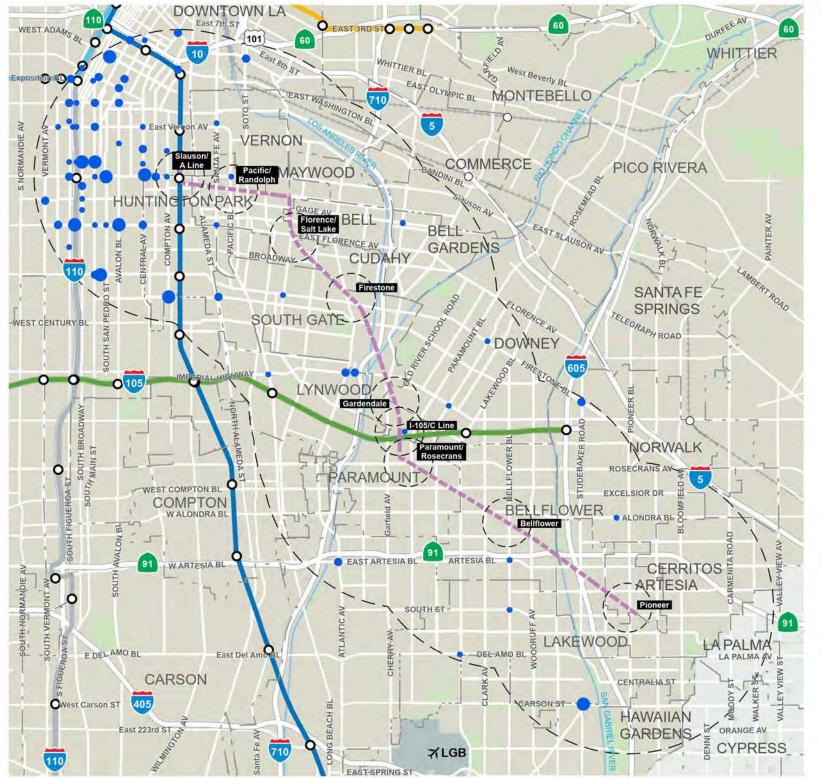
Violation Categories:	<b>Collision Types:</b>	Lighting:	<b>Control Device:</b>
03 - Unsafe Speed	A - Head-On	A - Daylight	A - Functioning
04 - Following Too Closely	D - Broadside	B - Dusk - Dawn	D - None
05 - Wrong Side of Road	H - Other	C - Dark - Street Lights	
07 - Unsafe Lane Change		D - Dark - No Street Lights	
08 - Improper Turning			
09 - Automobile Right of Way			
10 - Pedestrian Right of Way			

12 - Traffic Signals and Signs

17 - Other Hazardous Violation

22 - Other Improper Driving

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022



## Figure 9 4+ Bicycle/ Vehicle Collisions

West Santa Ana Branch Transit Corridor First Last Mile

Bicycle/Vehicle Collisions

1/1/2016 - 12/31/2021:

4

5-6

7 - 8



Source: PSLA [Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, 2022)

## Table 9 Violation Listed All Bicycle/Vehicle Collisions1/1/1016 - 12/31/2021

01 - Driving or Bicycling Under the Influence of Alcohol/Drug	0.6%
03 - Unsafe Speed	5.2%
04 - Following Too Closely	0.8%
05 - Wrong Side of Road	22.0%
06 - Improper Passing	1.2%
07 - Unsafe Lane Change	1.4%
08 - Improper Turning	2.2%
09 - Automobile Right of Way	33.9%
10 - Pedestrian Right of Way	3.3%
11 - Pedestrian Violation	1.4%
12 - Traffic Signals and Signs	13.4%
Other or not specified	14.7%

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022

#### Table 10 Bicycle/Vehicle Collisions by Jurisdiction

Jurisdiction	Percentage
Los Angeles	43.4%
Unicorporated County	7.8%
South Gate	5.8%
Downey	4.8%
Bellflower	4.6%
Huntington Park	3.8%
Lakewood	3.6%
Long Beach	3.6%
Norwalk	3.5%
Lynwood	2.8%
Paramount	2.8%
Bell Gardens	2.7%
Vernon	2.2%
Bell	2.0%
Cerritos	1.7%
Comption	1.6%
Cudahy	1.0%
Artesia	0.8%
Maywood	0.7%
Hawaiian Gardens	0.6%
Carosn	0.0%
Commerce	0.0%

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2022

Station	All Auto/ Bicycle Collision	% of All Half-Mile Auto/ Bike Collisions	Severe Injury	Intersection	High-Collisic and % of All		
Slauson/A Line	49	23%	3	21	Compton Av Slauson Av	10 8	20% 17%
Pacific/Randolph	54	25%	1	14	Slauson Av Pacific Av Gage Av	12 9 8	22% 17% 15%
Florence Salt Lake	19	9%	0	4	Florence Av	7	37%
Firestone	21	10%	2	11	Firestone Bl Atlantic Av	8 6	38% 29%
Gardendale	2	1%	0	1	Gardendale St Garfield Av	1 1	50% 50%
I-105/C-Line	10	5%	2	4	Paramount Bl	3	30%
Paramount/Rosecrans	12	6%	0	4	Paramount Bl Rosecrans Av	6 5	51% 40%
Bellflower	33	16%	1	11	Alondra Bl	17	52%
Pioneer	12	6%	0	7	South St	6	50%
Totals	212	100%	9	77			

#### Table 10 Bicycle/Vehicle Collisions in Half-Mile Station Areas



# Micromobility Planning Summary

Supporting documents with no effect on FLM plan recommendations, Metro intends to publish separately, and additional detail may be added following Metro Board adoption.

### **3.8 MICROMOBILITY PLANNING SUMMARY**

#### E-Scooter Use Along the Southeast Gateway Line (SGL)

Currently, dockless e-scooters are available in the City of Los Angeles, but not in the County or other cities along the SGL. Thus, the analysis of existing dockless e-scooter use is limited to the area around the Slauson/A Line Station in the City of Los Angeles. The FLM Technical Team did not observe any e-scooter use in the vicinity of the Slauson/A Line station on Community or Technical Walk Audits. E-scooter apps show scooters east of the 110 Freeway and just south of the 10 Freeway. For example, the Lime app shows activity in the vicinity of USC and the Uber app shows activity in the vicinity of USC and Downtown.

#### Metro's Micromobility Analysis Questions

- Identify "hot spots" where safe bikeways are needed to accommodate scooters.
- Identify e-scooter/pedestrian conflict areas where:
  - E-scooters might need to be restricted
  - Infrastructure changes could be made to reduce conflicts
- Identify potential locations for scooter parking

Given observed low dockless scooter use both visually and on scooter apps in the vicinity of the Slauson A-Line station, there are currently few, if any, conflicts between pedestrians, buses or other motor vehicles and scooters. However, it is possible to anticipate issues and potential solutions based on observations of e-scooter use near existing transit stations and other destinations/points of interest.

Hotspots Where Safe Bikeways are Need. There are typically concentrations of scooter use near:

- Transit stations,
- Public facilities, including colleges/universities, high schools, parks and civic centers,
- Shopping/dining districts
- High-density residential neighborhoods.

On streets that do not have safe bikeways, e-scooter users ride either in a travel lane or on the sidewalk (although riding an e-scooter on the sidewalk is illegal in California). On local (minor) streets with relatively low traffic volumes/speeds and traffic calming measures in place, if e-scooter users where helmets and comply with the motor vehicle code, including stopping at red lights and stop signs and remaining alert to motor vehicles and pedestrians, they can ride relatively safely, similar to a cyclist. On the other hand, riding an e-scooter in a travel lane on an arterial street, similar to riding a bicycle, is neither safe nor comfortable.

The provision of a network of safe bikeways would facilitate the use of both bicycles and e-scooters.

**Conflicts between E-Scooters and Pedestrians**. On streets without safe bikeways, e-scooter riders use either the travel lane closest to the curb, like bicycles, or ride on the sidewalk. In spite of the fact that e-scooters are not permitted on sidewalks, where there are high traffic volumes and speeds, e-scooter riders use the sidewalk. Where sidewalks are at least 15 to 20 feet wide, both e-scooters and pedestrians can be accommodated if the e-scooter riders move more slowly than they would on the street and both e-scooter riders and pedestrians are aware of their surroundings and considerate of one another. Where sidewalks are narrower, which more typical on streets near SGL stations, there will be conflicts.

**Locations Where E-Scooter Parking is Needed**. E-scooter parking, like bicycle parking, is needed at the destinations noted above, including:

- Transit stations;
- Public facilities, including colleges/universities, high schools, parks and civic centers;
- At various locations along a street with a concentration of shopping/dining, as well as in offstreet parking facilities;
- At various locations along a street with high-density residential development, as well as in offstreet parking facilities for that development.

#### Recommendations

- Provide a network of safe bikeways approaching each SGL stations from all directions, including Class IV or II bike lanes on arterial streets and high-volume collector streets and Class III bike friendly streets on low-volume, low-speed local (minor) streets. For each SGL station, proposed Priority Wheel Projects, which are primarily on arterial streets, or substitutes for them, combined with a network of Class III Bike Friendly Streets on lower-volume collector streets, should be implemented to provide access for e-scooters.
- Establish designated e-scooter parking adjacent to each station where e-scooters are available or anticipated to be available. E-scooter and bicycle parking demand should be monitored on a regular basis and expanded as demand increase.
- Establish designated e-scooter parking adjacent to destinations where e-scooters are available or anticipated to be available. E-scooter and bicycle parking demand should be monitored on a regular basis and expanded as demand increase. Along the SGL, such locations include:
  - o Trade Tech College
  - Cerritos College
  - o Exposition Park
  - o USC
  - o All high schools
  - o All civic centers
  - All community and regional parks
  - Shopping centers including Azalea, Cerritos Shopping Center and Cerritos Towne Center.
  - Community "Main Streets", including segments of Pioneer BI, Bellflower BI, Garfield BI, Firestone BI, Florence Av, and Pacific Av.

- Establish designated E-scooter parking locations within the public ROW, for example, an area within 4' of the curb or in a curbside parking space. More than 50 e-scooters can be accommodated in the space required for one car.
- Establish designated E-scooter parking locations in parking facilities near stations and destinations.
- E-scooter restricted zones should be added in the future only if there are observed conflicts between e-scooters and pedestrians after safe bikeways and adequate parking have been provided.



