

West Santa Ana Branch Transit Corridor

Final EIS/EIR Chapter 2: Project Description / Alternatives Considered



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**Final EIS/EIR Chapter 2:
Project Description / Alternatives Considered**

Final Environmental Impact Statement/ Environmental Impact Report

LEAD AGENCIES: Federal Transit Administration of the U.S. Department of Transportation;
Los Angeles County Metropolitan Transportation Authority

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TITLE OF PROPOSED ACTION: West Santa Ana Branch Transit Corridor Project

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AA	Alternatives Analysis
ADA	Americans with Disabilities Act
CEQA	California Environmental Quality Act
EIR	environmental impact report
EIS	environmental impact statement
FTA	Federal Transit Administration
I-	Interstate
LA	Los Angeles
LAUS	Los Angeles Union Station
LPA	Locally Preferred Alternative
LRT	light rail transit
LRTP	Long Range Transportation Plan
LRV	light rail vehicle
Metro	Los Angeles County Metropolitan Transportation Authority
MOS	minimum operable segment
MSF	maintenance and storage facility
MWD	Metropolitan Water District
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NOP	Notice of Preparation
O&M	operations and maintenance
OCS	overhead catenary system
PEROW	Pacific Electric Right-of-Way
Project	West Santa Ana Branch Transit Corridor Project
ROW	right-of-way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SCAG	Southern California Association of Governments
TPSS	traction power substation
TRS	Technical Refinement Study
UPRR	Union Pacific Railroad
WSAB	West Santa Ana Branch

2 ALTERNATIVES CONSIDERED/PROJECT DESCRIPTION

This chapter describes the West Santa Ana Branch (WSAB) Transit Corridor Project (Project) analyzed in this Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR), including refinements made since the Draft EIS/EIR. The Federal Transit Administration (FTA) is the Lead Agency under the National Environmental Policy Act (NEPA) and the Los Angeles County Metropolitan Transportation Authority (Metro) is the Lead Agency under the California Environmental Quality Act (CEQA). The purpose of this Final EIS/EIR is to analyze and disclose the Project's potential effects on the natural and human environment and identify mitigation measures to avoid significant effects. The analysis presented in this Final EIS/EIR is in compliance with NEPA and FTA's environmental impact-related procedures (23 Code of Federal Regulations, Part 771) and CEQA and the *CEQA Guidelines* (14 Cal. Code. Regs., § 15000 et seq.).

This chapter has been updated since the Draft EIS/EIR to reflect identification of the Locally Preferred Alternative (LPA) (evaluated as Alternative 3 in the Draft EIS/EIR) by the Metro Board of Directors in January 2022 (Section 2.4.3.1), describe studies completed since the Draft EIS/EIR that informed information presented in this Final EIS/EIR (Section 2.4.1.3), and summarize refinements made to Alternative 3 from the Draft EIS/EIR (described in Section 2.4.3.2 and incorporated into the summary of the LPA in Section 2.5.2). This chapter also describes a design option identified in coordination with stakeholders since circulation of the Draft EIS/EIR (close 186th Street) (Section 2.5.2.3). Capital and operation and maintenance (O&M) cost estimates for the LPA are included in Section 2.5.2.8, along with a summary of updates to the cost estimates. This information was previously included in Chapter 6 of the Draft EIS/EIR.

2.1 Introduction

The Project is a proposed light rail transit (LRT) line that will extend from southeast Los Angeles (LA) County to a southern terminus in the City of Artesia, traversing densely populated and heavily transit-dependent communities. In January 2022, the Metro Board of Directors identified Alternative 3 from the Draft EIS/EIR as the LPA. 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 the City of Artesia for a total of 14.5 miles. The Metro Board also identified the MSF site option located in the City of Bellflower as a component of the LPA.

A range of possible alternatives that meets the Project's purpose and need were evaluated and determined through the screening and project refinement process as part of the Draft EIS/EIR process (see Section 2.4.1). The Draft EIS/EIR identified and evaluated four Build Alternatives (Alternatives 1, 2, 3, and 4) based on a criteria selection process, potential issues for each alternative, and input from interested parties, stakeholders, and communities. Alternative 3 was identified as the "staff preferred alternative" in the Draft EIS/EIR. Alternative 3 from the Draft EIS/EIR has been identified as the LPA. This Final EIS/EIR analyzes the refinements to Alternative 3 that were developed in response to coordination with stakeholders, including public agencies, and comments received during the Draft EIS/EIR comment period. These refinements are summarized in Section 2.4.3.2 and in Appendix E. A No Build Alternative is also included for comparison purposes. For CEQA purposes, the discussion and analysis of Alternatives 1, 2, and 4, including design options,

and the Paramount MSF set forth in the *West Santa Ana Branch Transit Corridor Project Draft Environmental Impact Statement/Environmental Impact Report* (Metro 2021a) are hereby incorporated by reference. The LPA includes one design option, (Close 186th Street), which was identified in coordination with stakeholders after circulation of the Draft EIS/EIR. The design option is described in Section 2.5.2.3.

On March 15, 2023, the Metro Board of Directors approved a motion that included a recommendation to rename the Project with more of a local context. Metro launched a renaming campaign in August 2023 to receive community input on names that are representative of the cultural and demographic communities along the alignment. Metro received over 1,200 submissions with over 900 unique name recommendations during the renaming contest. A panel selected the top 12 names for the public voting process, and over 4,500 votes were received. On January 22, 2024, Southeast Gateway Line was unveiled as the new name for the Project. The Southeast Gateway Line name will be used as the Project advances; however, the Project will continue to be referred to as WSAB throughout this Final EIS/EIR.

2.2 Goals and Objectives

The Project's overall goals are to provide mobility improvements, support local and regional land use plans and policies, minimize environmental impacts, improve cost effectiveness and financial feasibility, and improve equity.

The Project's overall objective is to provide high-quality reliable transit service to meet the future mobility needs of residents, employees, and visitors who travel within and through the corridor. This new transit service would increase mobility and connectivity for historically underserved and transit-dependent communities, improve travel times on local and regional transportation networks relative to not making this investment, and accommodate substantial future employment and population growth. More specifically, the Project's objectives are as follows:

- Establish a reliable transit service that will enhance the connectivity of the existing transit network and reduce transit travel times to local and regional destinations
- Accommodate future travel demand, including the high number of transit trips made by Study Area residents
- Improve access for the densely populated neighborhoods, major employment centers, and other key regional destinations where future growth is forecasted to occur within the Study Area
- Address mobility and access constraints faced by transit-dependent communities, thereby improving transit equity

Refer to Chapter 1, Purpose and Need, of this Final EIS/EIR for a full discussion of the purpose and need for the Project.

2.3 Study Area

The Study Area extends from the downtown Los Angeles area to the Gateway Cities subregion of LA County and encompasses an approximately 2-mile buffer from the four Build Alternative alignments evaluated in the Draft EIS/EIR in order to capture the adjacent cities and ridership area where effects could result from the Project. The greater 98-square-mile Study Area for the Project extends from Elysian Park in the north to the LA

County/Orange County line to the south, encompassing downtown Los Angeles, Southeast Los Angeles, and much of the Gateway Cities subregion. The Study Area includes 20 cities—Los Angeles, Vernon, Maywood, Huntington Park, Commerce, Bell, Cudahy, Bell Gardens, South Gate, Lynwood, Compton, Downey, Paramount, Bellflower, Long Beach, Lakewood, Norwalk, Artesia, Cerritos, and Hawaiian Gardens—as well as portions of unincorporated LA County, as shown in Figure 1-1 in Chapter 1, Purpose and Need, of this Final EIS/EIR. Of the 20 cities within the Study Area, the LPA will traverse through or be directly adjacent to the Cities of Los Angeles, Vernon, Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Cerritos, and Artesia, as well as the unincorporated community of Florence-Firestone of LA County.

2.4 Alternatives Screening and Selection Process

2.4.1 Alternatives Development and Screening Methodology

2.4.1.1 Screening Methodology

The screening and selection process for the Build Alternatives presented in the Draft EIS/EIR, included by reference to the Draft EIS/EIR in this Final EIS/EIR, is based on extensive outreach and workshops with key stakeholders, elected officials, advisory committee members, and communities in which the Project is projected to serve. Beginning in 2010, a number of technical studies and assessments were prepared to support the development of routes, alignments, and station locations evaluated in the Draft EIS/EIR. These studies analyzed transit mode (i.e., bus rapid transit, streetcar transit, LRT, and low speed magnetic levitation [maglev] transit), station locations, alignments, maintenance and storage facility (MSF) site options, and other ancillary facilities (e.g., radio antennas and substations). The vision of transportation improvements in the Study Area was guided by the following goals and objectives:

- Goal 1: Provide Mobility Improvements
- Goal 2: Support Local and Regional Land Use Plans and Policies
- Goal 3: Minimize Environmental Impacts
- Goal 4: Improve Cost Effectiveness and Financial Feasibility
- Goal 5: Improve Equity

The screening and identification process for the LPA presented in this Final EIS/EIR is also based on extensive outreach and workshops with key stakeholders, elected officials, advisory committee members, and communities in which the LPA is projected to serve. As further discussed in Section 2.4.3.1, the LPA was identified by the Metro Board of Directors in January 2022 to be advanced in the Final EIS/EIR. Refinements to the LPA are based on coordination with stakeholders, including public agencies, and comments received during the Draft EIS/EIR comment period; these refinements are summarized in Section 2.4.3.2 and Appendix E, Project Refinements since Circulation of the Draft EIS/EIR. Additional studies were also completed to address requests for additional analysis or design considerations and are discussed in further detail in Section 2.4.1.3.

2.4.1.2 Screening Reports and Refinement Studies

Several screening reports and refinement studies were prepared as part of the development of the Project and are summarized in Figure 2-1 and in the sections that follow. Refer to Appendix A, Alternatives Considered, of this Final EIS/EIR for a detailed discussion of each report and the development process for the Project, including the consideration and elimination of alternatives, alignments, and station locations.

Pacific Electric Right-of-Way/West Santa Ana Branch Corridor Alternatives Analysis

Finalized in 2012, the Southern California Association of Governments (SCAG) developed the *Pacific Electric Right-of-Way/West Santa Ana Branch Corridor Alternatives Analysis* (AA Report) (SCAG 2013), a collection of screening studies addressing the feasibility of implementing various modes and exploring opportunities for connecting LA and Orange Counties. The AA Report recommended the No Build, Transportation System Management, and two LRT alignments (one on the west side of the Los Angeles River and one on the east side of the river) for further study.

West Santa Ana Branch Technical Refinement Study

In 2015, Metro authorized the preparation of the *West Santa Ana Branch Technical Refinement Study* (TRS) (Metro 2015a), which further refined key technical concerns on the alternatives identified in the AA Report. The WSAB TRS also considered the feasibility of additional alignments connecting the Pacific Electric Right-of-Way (PEROW) to downtown Los Angeles given constraints and opportunities within the northern segment. The TRS recommended elimination of the rail alignment on the east side of the LA River and further study of four light rail alignments on the west side of the river (see Appendix A). In addition, the TRS recommended further study of two optional platform locations for the Los Angeles Union Station (LAUS) terminus, new stations in the Arts District, and further study of the Metro C (Green) Line Station and the Pioneer Station.

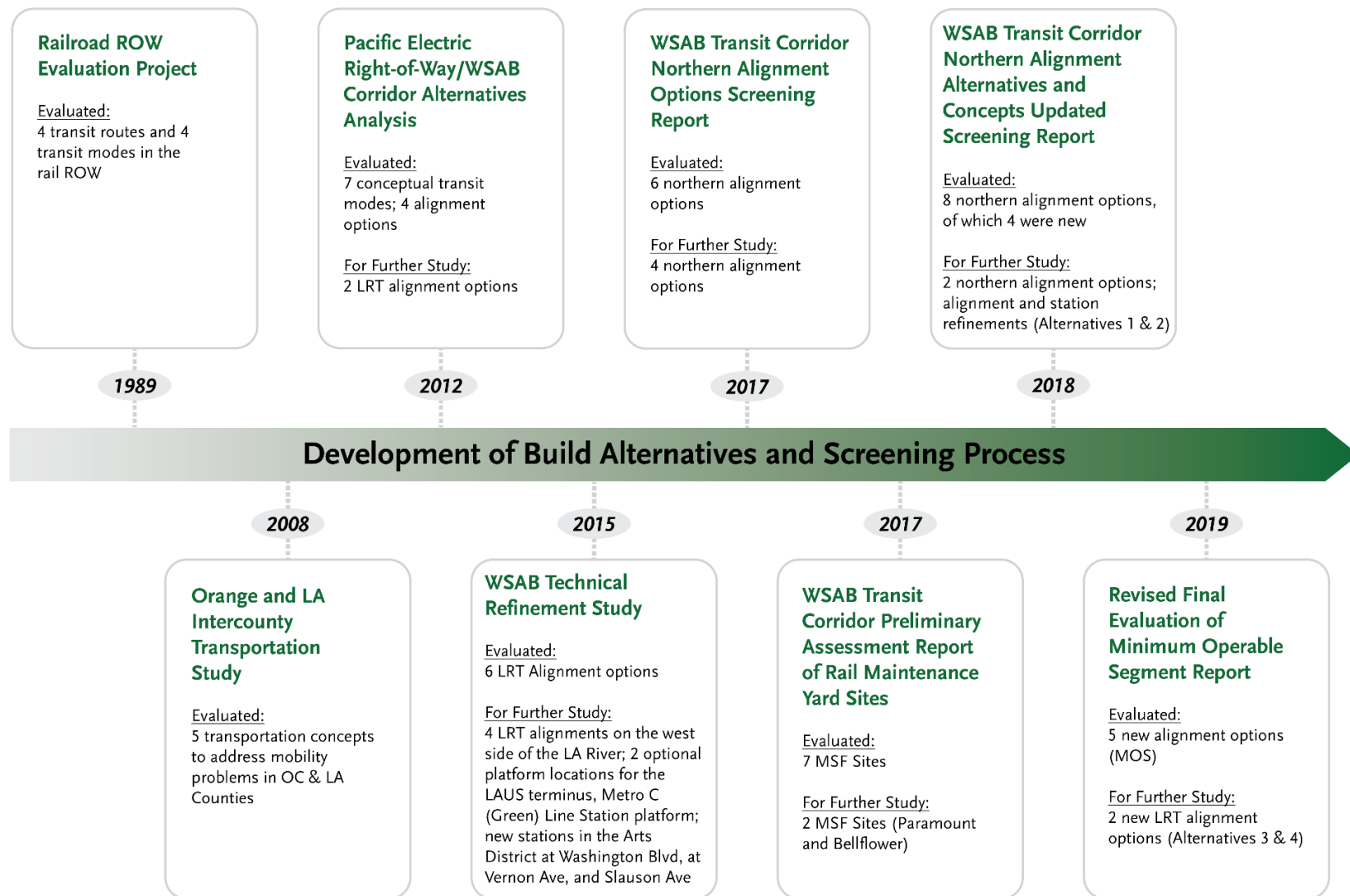
West Santa Ana Branch Transit Corridor Northern Alignment Options Screening Report

In 2017, the *West Santa Ana Branch Transit Corridor Northern Alignment Options Screening Report* (Northern Alignment Options Screening Report) (Metro 2017a) evaluated four potential rail alignments serving the LAUS terminus of the Project. The evaluation considered opportunities and constraints and included a greater level of engineering detail than prior studies. The Northern Alignment Options Screening Report recommended four light rail alignments to be carried forward into the environmental scoping process.

West Santa Ana Branch Transit Corridor Northern Alignment Alternatives and Concepts Updated Screening Report

In response to the issues raised during the public scoping period conducted in 2017, the northern alignments options were revisited in the *West Santa Ana Branch Transit Corridor Northern Alignment Alternatives and Concepts Updated Screening Report* (Metro 2018b). The updated effort included additional connection options in downtown LA and a rail alignment to serve the Arts District. Six alternatives were eliminated for a variety of technical feasibility and operational issues. In May 2018, the Metro Board authorized Alternative E and Alternative G to be carried forward into the Draft EIS/EIR. Alternatives E and G were referred to as Build Alternatives 1 and 2, respectively, in the Draft EIS/EIR.

Figure 2-1. Development of Build Alternatives and Screening Process for the Draft EIS/EIR



Source: Prepared on behalf of Metro in 2021

West Santa Ana Branch Transit Corridor Project

Revised Final Evaluation of Minimum Operable Segment Report

A minimum operable segment (MOS) is a segment of the project alignment that can function as a standalone project and not be dependent on other segments or phases to be constructed. The purpose of developing and evaluating MOS options is to identify a segment of Build Alternatives 1 or 2 that can provide a cost-effective solution with the greatest benefits for the Project. The *Revised Final Evaluation of Minimum Operable Segment Report* (MOS Report) (Metro 2019f) identified and evaluated five potential options to determine cost-effective solutions with the greatest benefits for the Project. Referred to as initial operating segments in the September 2019 Metro Board Report, the MOS Report recommended MOS 1: I-105/C Line Station to Pioneer Station and MOS 3: Slauson/A Line Station to Pioneer Station to be evaluated in the Draft EIS/EIR. They were referred to as Alternative 4 and Alternative 3, respectively, in the Draft EIS/EIR.

West Santa Ana Branch Transit Corridor Preliminary Assessment Report of Rail Maintenance Yard Sites

To determine MSF site options for the Project, the *West Santa Ana Branch Transit Corridor Preliminary Assessment Report of Rail Maintenance Yard Sites* (Metro 2017j) was completed in 2017. Initially 21 proposed sites were evaluated and screened, with two MSF site options selected to move forward for study into the Draft EIS/EIR based on their provision of mobility improvements, minimization of environmental impacts, financial feasibility, equity, and preliminary engineering design. The MSF site options are referred to as the Paramount MSF site option and the Bellflower MSF site option in the Draft EIS/EIR.

Refinements Included in the Draft EIS/EIR

Project refinements were made following comments received during the scoping period and outreach events and coordination efforts with key stakeholders and affected cities. The Metro Board accepted these project refinements and adopted the updated project definition at its November 2018 meeting. Table 2.1 summarizes the recommended project refinements per the November 2018 Metro Board meeting.

After scoping, Metro also considered three other refinements to reduce impacts or in response to coordination with stakeholders as design and analysis progressed in support of the Draft EIS/EIR. The first, reducing the width of the platform for the I-105/C Line infill station, was considered to minimize effects to a historic district. The second refinement was underground alignment concepts based on comments received during scoping. The third refinement considered alignment options that would avoid the Union Pacific Railroad right-of-way. These studies are described in Chapter 2, Section 2.4.4 of the Draft EIS/EIR.

Table 2.1. Summary of Project Refinements from the November 2018 Metro Board Meeting

Project Refinement	Reason for Refinement
Elimination of Washington Station and Vernon Station	- Low projected ridership at these stations, and duplicative service into downtown LA from the Metro A (Blue) Line - Eliminating the stations would improve travel time along the WSAB alignment
Elimination of 183rd/Gridley Station	Lack of community support, limited ridership potential, and proximity to the Pioneer Station in the City of Artesia
Elimination of Optional Bloomfield Station Extension	Lack of support from stakeholders for a future extension into Orange County
Elimination of Pershing Square Terminus Station Design Option	Provided less connectivity to the regional transit network; produced worse ridership and smaller reductions in vehicle miles traveled; impacted more historic properties; less light rail transit level-of-service compared to 7th St/Metro Center Station; and fewer passenger transfers from the Metro A (Blue) Line to the WSAB Line compared to the 7th St/Metro Center Station
Additional Grade Separations - Firestone Blvd - Imperial Highway/Garfield Ave - Downey Ave - Woodruff Ave/Flower St 183rd St/Gridley Rd	Additional grade separations, based on Metro's Grade Crossing Safety Policy for Light Rail Transit (Metro 2010a), were included. The key factors included traffic volumes, train frequency, safety considerations, and a variety of special circumstances (e.g., vertical engineering alignment considerations, effects on traffic operations, pedestrian activity, and adjacent land uses)
At-grade profile under the I-10 freeway changed to aerial grade-separated over I-10 freeway	Potential to result in traffic impacts to 15th St and 16th St

Source: Metro Board Report, November 14, 2018; File #2018-0404, Agenda Number:15, Attachment A.

2.4.1.3 Additional Studies Since the Completion of the Draft EIS/EIR

The Draft EIS/EIR was circulated for a 60-day public review and comment period from July 30, 2021 to September 28, 2021. Comments received prompted the preparation of additional studies to address requests for new or updated analysis or refinements to the LPA. The following summarizes the studies prepared to address the comments and the LPA refinements that have, in turn, shaped the Final EIS/EIR.

West Santa Ana Branch Transit Corridor Cut-and-Cover Analysis Memorandum

Comments received on the Draft EIS/EIR requested that Metro study an alternate configuration for aerial sections of the alignment. In response to these requests, in January 2022, the Metro Board directed staff to undertake an assessment of the sections of the LPA that were in an aerial configuration to determine if a cut-and-cover alignment could be constructed at a lower cost. Metro completed the *West Santa Ana Branch Transit Corridor Cut-and-Cover Analysis Memorandum* (Metro 2022a) that assessed sections of the LPA that were in an aerial configuration to determine if a cut-and-cover alignment could be constructed at a lower cost. Cut-and-cover was specified as it is the more appropriate construction method where short sections of an alignment are underground (in comparison to construction with a tunnel boring machine). Each section evaluated in the study has a length of less than 2 miles. Cut-and-cover construction is also generally less costly than construction

with a tunnel boring machine. The study concluded that each cut-and-cover section evaluated in the study would increase costs compared to the Draft EIS/EIR design. The approximate total cost difference when escalated to Year of Expenditure dollars would range from approximately \$3.469 billion to \$4.176 billion depending on whether a station at 183rd Street and Gridley Road is included in the cost.¹

West Santa Ana Branch Transit Corridor San Pedro Subdivision Additional Mainline Track Memorandum

The *West Santa Ana Branch Transit Corridor San Pedro Subdivision Additional Mainline Track Memorandum* (Metro 2022d) was prepared in response to coordination with the Port of Long Beach and Union Pacific Railroad (UPRR) that occurred in mid-2022. Specifically, these entities requested that Metro prepare concept and cost estimate to construct a future UPRR mainline track from roughly MP 5.0 to MP 11.1 along the San Pedro Subdivision (20-foot track centers from LRT and 15-foot track centers between UPRR tracks). In response to this coordination, the Metro team evaluated elevating the proposed LRT alignment throughout a majority of the San Pedro Subdivision to maximize the available at-grade right-of-way for the addition of the second mainline freight track. The study included consideration of two design options at I-105: one to reduce the height over I-105 and the other to reduce right-of-way impacts.

While the additional mainline track is feasible from a design standpoint, substantial cost increases would occur under both of the options considered compared to the Draft EIS/EIR cost estimate, ranging from an increase of approximately \$1.4 to \$1.5 billion in 2022 dollars. The LRT design would vary significantly from the design proposed in the Draft EIS/EIR, as the LRT would be aerial for nearly the entire length of the San Pedro Subdivision. Based on preliminary environmental review, an aerial LRT alignment and additional freight mainline track would result in visual and aesthetic effects, additional acquisitions and displacements, and effects to cultural resources.

The memorandum was provided to the Port of Long Beach, Port of Los Angeles, and UPRR in October 2022. In January 2023, representatives from the Port of Los Angeles, Port of Long Beach, and UPRR confirmed that they were agreeable to the at-grade LRT alignment.

West Santa Ana Branch Transit Corridor Project Regional Transportation Plan/Sustainable Communities Strategy Study

Comments received on the Draft EIS/EIR suggested updating the analysis in the Final EIS/EIR using the growth forecasts from Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS] [SCAG 2020]), which was adopted by SCAG on September 3, 2020, after the Draft EIS/EIR modeling and relevant analyses were completed. Metro completed the *West Santa Ana Branch Transit Corridor Project Final RTP/SCS Study* (Metro 2023c) that compared differences between the SCAG 2016-2040 RTP/SCS (SCAG 2016a) and the Connect SoCal regional forecast (e.g., population, housing, and employment). This comparison was used to determine whether differences in the growth forecasts would alter the planning and travel demand modeling assumptions included in the Draft EIS/EIR. A review was also performed of applicable Connect SoCal policies to determine whether there were major differences to those evaluated in the Draft EIS/EIR.

The study concluded that Connect SoCal's guiding policies are similar to those of the 2016-2040 RTP/SCS, and the underlying principles are still relevant for the Project as a proposed regional transit system. The comparison of the 2016-2040 RTP/SCS and Connect SoCal forecast data concluded that the difference in the forecasted growth for 2042 for population, housing, and employment for Los

¹ The design of the alignment in this Final EIS/EIR does not preclude a station at 183rd Street and Gridley Road; however, a station at that location is not proposed as part of the LPA.

Angeles County and the Study Area is 2 percent or less and that the assumptions presented in the Draft EIS/EIR are still applicable. Based on the conclusions presented in the study, updated analysis using Connect SoCal's growth forecast as baseline data was not conducted because the results and findings would not be substantially different than what was presented in the Draft EIS/EIR. Therefore, the base year and horizon year for the Final EIS/EIR remains unchanged from the Draft EIS/EIR.

West Santa Ana Branch Transit Corridor Transit Parking Study

Comments received on the Draft EIS/EIR requested that additional transit parking be considered, either increasing the supply at stations with proposed parking in the Draft EIS/EIR or adding dedicated transit parking at stations that did not have parking facilities. Metro completed the *West Santa Ana Branch Transit Corridor Project Revised Transit Parking Study* (Metro 2024bb) to determine whether transit stations without parking that were evaluated in the Draft EIS/EIR should include dedicated transit parking and whether the parking supply was sufficient at the transit parking facilities with proposed parking in the Draft EIS/EIR. The study concluded that given the sufficient capacity of the parking supply throughout the corridor to accommodate forecasted parking demand for the LPA and the additional acquisitions that would be required for new potential parking sites, the provision of more parking beyond what was proposed in the Draft EIS/EIR is not recommended.

2.4.1.4 Public Noticing

The following summarizes the public noticing efforts in support of the Draft EIS/EIR. Chapter 7, Public Outreach, Agency Consultation, and Coordination, of this Final EIS/EIR provides additional information regarding the outreach efforts, including coordination with stakeholders.

Draft EIS/EIR Scoping

FTA published the Notice of Intent (NOI) in the *Federal Register* on June 26, 2017, to initiate the EIS process for the Project. The NOI provided scoping meeting information, contact information, and project information.² Prior to *Federal Register* publication, Metro also issued a Notice of Preparation (NOP) pursuant to CEQA on May 25, 2017, informing the public of the intent to prepare a combined Draft EIS/EIR for the Project and notifying interested agencies and parties of public scoping meetings. A revised NOP was issued on June 14, 2017, to inform the public of the extension of the comment period from July 7, 2017, to August 4, 2017. A second revised NOP was issued on July 11, 2018, informing the public of the Metro Board decision to eliminate some of the northern alignment alternatives considered in the May 25, 2017 NOP and to carry forward two modified northern alignments—one to the Downtown Transit Core and the other to LAUS—into the Draft EIS/EIR process (see Appendix A, Alternatives Considered, of this Final EIS/EIR for details).

A series of public scoping meetings and agency, stakeholder, and community outreach were conducted since the May 2017 filing of the NOP through 2021. The scope of the Draft EIS/EIR, including the goals and objectives, project area, project description, and the environmental impacts to be evaluated, were presented at the public scoping meetings. All meetings were held in Americans with Disabilities Act (ADA)-compliant facilities, and language translation services (Spanish and Japanese) were provided.

Draft EIS/EIR Comment Period

On July 30, 2021, a Notice of Completion for the Draft EIS/EIR and supporting reports for the Project was filed with the California State Clearinghouse and distributed to 261 agencies, organizations,

² *Federal Register*. Vol. 82, No. 121, June 26, 2017.

elected officials, and other interested parties. The Notice of Availability was published in the Federal Register on July 30, 2021³. Metro conducted a comprehensive public outreach program that focused on maximizing public awareness and access to review and comment on the Draft EIS/EIR. The comment period was extended from the original 45 days to 60 days (until September 28, 2021).

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. The public hearings were held to receive public comments in writing and orally and were conducted via Zoom due to health and safety advisories during the COVID-19 pandemic.

In total, 452 formal comment submissions (e.g., comment cards, emails, and letters) were received that addressed a variety of topics. Refer to Section 7.7 of Chapter 7, Public Outreach, Agency Consultation, and Coordination, of this Final EIS/EIR for a summary of comments received on the Draft EIS/EIR. Comment submissions and responses are included in Appendix D, Responses to Comments Received on the Draft EIS/EIR.

2.4.2 Alternatives Considered in the Draft EIS/EIR

The Draft EIS/EIR analyzed four Build Alternatives (Alternatives 1, 2, 3, and 4), two design options (Design Options 1 and 2), and two MSF site options (Paramount MSF Site Option and Bellflower MSF Site Option). Alternatives 1, 2, and 4 are unchanged from the Draft EIS/EIR. Details of Alternatives 1, 2, and 4 and the related analyses are found in the *WSAB Draft EIS/EIR* (Metro 2021a). In January 2022, the Metro Board identified Alternative 3 from the Draft EIS/EIR as the LPA. The identification of the LPA and details of the LPA, including refinements subsequent to the Draft EIS/EIR, are discussed in further detail in Section 2.4.3 and Section 2.5.2 and Appendix E, Project Refinements since Circulation of the Draft EIS/EIR.

The following summarizes the alternatives, design options, and MSF site options evaluated in the Draft EIS/EIR:

Build Alternatives and Design Options:

- 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

Maintenance and Storage Facility Options:

Two optional MSF sites were considered in the Draft EIS/EIR:

- Paramount MSF site option
- Bellflower MSF site option

Table 2.2 summarizes the components for each Build Alternative considered in the Draft EIS/EIR.

³ *Federal Register*. Vol. 86, No. 144, July 30, 2021.

Table 2.2. Summary of Build Alternatives Considered in Draft EIS/EIR

Project Components Alternatives	Build Alternatives			
	Alternative 1	Alternative 2	Alternative 3 ¹	Alternative 4
Alignment length	19.3 miles	19.3 miles	14.8 miles ⁸	6.6 miles
Length of underground, at-grade, and aerial ²	2.3 miles underground; 12.3 miles at-grade; 4.7 miles aerial	2.3 miles underground; 12.3 miles at-grade; 4.7 miles aerial	12.2 miles at-grade; 2.6 miles aerial	5.6 miles at-grade; 1.0 mile aerial
Stations configurations	11 ³ 2 underground; 6 at-grade; 3 aerial	12 3 underground; 6 at-grade; 3 aerial	9 6 at-grade; 3 aerial	4 3 at-grade; 1 aerial
Parking facilities	5 (up to approximately 2,795 spaces)	5 (up to approximately 2,795 spaces)	5 (up to approximately 2,795 spaces)	4 (up to approximately 2,180 spaces)
At-grade crossings	31	31	31	11
Elevated street crossings	25	25	15	7
Freight crossings	10	10	9	2
Freeway crossings ⁴	6 (3 freeway undercrossings at I-710; I-605, SR-91)	6 (3 freeway undercrossings at I-710; I-605, SR-91)	4 (3 freeway undercrossings at I-710; I-605, SR-91)	3 (2 freeway undercrossings at I-605, SR-91)
River crossings	3	3	3	1
Radio towers	2	2	0	0
TPSS facilities	22 ³	23	17	7
MSF site options	2	2	2	2
Capital cost (2020\$) with MSF ^{5, 6, 7}	\$8.5 billion – \$8.8 billion	\$9.2 billion – \$9.5 billion	\$4.9 billion – \$5.1 billion	\$2.3 billion – \$2.6 billion
Annual O&M cost ⁵ (2020\$)	\$87 million	\$101 million	\$67 million	\$41 million

Source: Metro 2021a

Notes: ¹ Alternative 3 presented within this table is summarized from the Draft EIS/EIR and does not include refinements since the Draft EIS/EIR. Refer to Table 2.5 for information on the LPA.² Alignment configuration measurements count retained fill embankments as at-grade.³ Under Design Option 2 – Add Little Tokyo Station, an additional underground station and TPSS site would be added under Alternative 1.⁴ Freeway undercrossing is defined as light rail tracks crossing beneath freeway structures.⁵ 2020\$ refers to dollar values assumed in Fiscal Year 2020.⁶ Costs range from the low end (with the Bellflower MSF site option) to the high end (with the Paramount MSF site option).⁷ The capital cost estimates will be further refined as the Project advances through the project development process and more detailed engineering is undertaken.⁸ The length of Alternative 3 in the Draft EIS/EIR was incorrectly presented as 14.8 miles; the correct length was 14.5 miles. The alignment endpoints for the LPA are largely unchanged from the Draft EIS/EIR.

MSF = maintenance and storage facility; O&M = operation and maintenance; TPSS = traction power substation

Table 2.3 summarizes the station details for each Build Alternative considered in the Draft EIS/EIR. Figure 2-2 and Figure 2-3 detail the underground, at-grade, and aboveground alignments for the Build Alternatives considered in the Draft EIS/EIR as they traverse through affected and adjacent cities. Information provided in Table 2.2 and Table 2.3 is summarized directly from the Draft EIS/EIR and does not include refinements since the Draft EIS/EIR.

Table 2.3. Summary of Build Alternatives Stations Considered in the Draft EIS/EIR

Build Alternatives	Station Name and Location	Jurisdiction	Type of Station	Max No. of Parking Spaces
1	LAUS (Forecourt) LAUS Forecourt	Los Angeles	Underground	—
1	LAUS MWD (Design Option 1) East of LAUS and the MWD building, below the baggage area parking facility	Los Angeles	Underground	—
1	Little Tokyo (Design Option 2) Alameda St between 1st St/2nd St	Los Angeles	Underground	—
2	7th St/Metro Center 8th St between Figueroa St and Flower St; underground pedestrian connection to existing 7th St/Metro Center Station	Los Angeles	Underground	—
2	South Park/Fashion District 8th St between Main St/Santee St	Los Angeles	Underground	—
1, 2	Arts/Industrial District Alameda St between 6th St/Industrial St (Alternative 1) Alameda St between 7th St/Center St (Alternative 2)	Los Angeles	Underground	—
1, 2, 3	Slauson/A Line Long Beach Ave between Slauson Ave/57th St	Los Angeles; Unincorporated LA County	Aerial	—
1, 2, 3	Pacific/Randolph Randolph St between Pacific Ave/Seville Ave	Huntington Park	At-grade	—
1, 2, 3	Florence/Salt Lake Salt Lake Ave between Florence Ave/California St	Huntington Park; Cudahy	At-grade	—
1, 2, 3	Firestone (P) Between Atlantic Ave and Firestone Ave	South Gate	Aerial	600
1, 2, 3	Gardendale Gardendale St/Dakota Ave	Downey	At-grade	—

Build Alternatives	Station Name and Location	Jurisdiction	Type of Station	Max No. of Parking Spaces
1, 2, 3, 4	I-105/C Line (P) Between Century Blvd and Main St; I-105 Freeway/C (Green) Line (platforms on WSAB and Metro C (Green) Line)	South Gate; Paramount	At-grade	326
1, 2, 3, 4	Paramount/Rosecrans (P) Paramount Blvd/Rosecrans Ave	Paramount	Aerial	490
1, 2, 3, 4	Bellflower (P) Bellflower Blvd/Pacific Ave	Bellflower	At-grade	263
1, 2, 3, 4	Pioneer (P) Pioneer Blvd/187th St	Artesia	At-grade	1,100

Source: Metro 2021a

Notes: Alternative 3 presented here is summarized from the Draft EIS/EIR and does not include refinements since the Draft EIS/EIR.

(P) = station has parking facility

LA = Los Angeles; LAUS = Los Angeles Union Station; MWD = Metropolitan Water District; WSAB = West Santa Ana Branch

Figure 2-2. WSAB Transit Corridor Build Alternatives Considered in the Draft EIS/EIR



Source: Metro 2021a

Figure 2-3. Build Alternatives Alignment Type Considered in the Draft EIS/EIR



Source: Metro 2021a

2.4.2.1 Alternative 1

Alternative 1 would be a 19.3-mile alignment with a northern terminus located underground at LAUS Forecourt in the City of Los Angeles and a southern terminus located at Pioneer Station in the City of Artesia. Alternative 1 would operate in the communities of Los Angeles (including the Central City, Central City North, and Southeast Los Angeles Community Plan Areas), the unincorporated Florence-Firestone community of LA County, Vernon, Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Artesia, and Cerritos. Alternative 1 consisted of 11 station locations, of which 5 would have parking facilities with up to 2,780 parking spaces combined. Proposed stations under Alternative 1 included: LAUS (Forecourt) and Arts/Industrial District Station (all specific to Alternative 1), followed by 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, and Pioneer Station. Details of each station are provided in Table 2.3.

2.4.2.2 Alternative 2

Alternative 2 would be a 19.3-mile alignment with a northern terminus at a new 7th St/Metro Center Station, located underground at 8th Street between Figueroa and Flower Streets near the existing 7th St/Metro Center Station, and a southern terminus located at Pioneer Station in the City of Artesia. Alternative 2 would operate in the communities of Los Angeles (including the Central City, Central City North, and Southeast Los Angeles Community Plan Areas), the unincorporated Florence-Firestone community of LA County, Vernon, Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Artesia, and Cerritos. Alternative 2 consisted of 12 stations and 5 parking facilities (Firestone, I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer) totaling approximately 2,780 parking spaces. Proposed stations under Alternative 2 included: 7th St/Metro Center Station, South Park/Fashion District Station, and Arts/Industrial Station (all specific to Alternative 2), followed by 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, and Pioneer Station. Details of each station are provided in Table 2.3.

2.4.2.3 Alternative 3

Alternative 3 would be a 14.8-mile⁴ alignment with a northern terminus at the Slauson/A Line Station in the City of Los Angeles/Florence-Firestone unincorporated area of LA County, and a southern terminus located at the Pioneer Station in the City of Artesia. Alternative 3 would operate in the communities of Los Angeles (the Southeast Los Angeles Community Plan Area), the unincorporated Florence-Firestone community of LA County, Vernon, Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Artesia, and Cerritos. Alternative 3 consisted of 9 stations and 5 parking facilities (Firestone, I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer) totaling approximately 2,780 parking spaces. Proposed stations under Alternative 3 included: 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, and Pioneer Station. Details of each station are provided in Table 2.3. See Section 2.4.3 for an updated discussion of Alternative 3 as the LPA, inclusive of project refinements.

⁴The length of Alternative 3 in the Draft EIS/EIR was incorrectly presented as 14.8 miles; the correct length was 14.5 miles.

2.4.2.4 Alternative 4

Alternative 4 would be a 6.6-mile alignment with a northern terminus at the I-105/C Line Station in South Gate and a southern terminus at the Pioneer Station in the City of Artesia. Alternative 4 would operate in the communities of South Gate, Paramount, Bellflower, Artesia, and Cerritos. Alternative 4 consisted of 4 stations: I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer, each with parking facilities for a total of approximately 2,180 parking spaces. Details of each station are provided in Table 2.3.

2.4.2.5 Design Options

Two design options (Design Option 1: Los Angeles Union Station – MWD, and Design Option 2: Addition of Little Tokyo Station) were proposed for Alternative 1. No design options were proposed for Alternatives 2, 3, and 4 as evaluated in the Draft EIS/EIR.

Design Option 1: Los Angeles Union Station – MWD

Design Option 1 would be a design option for the LAUS station location and its alignment configuration. Design Option 1 (MWD) would commence with the tail tracks near the California Endowment Building, followed by an underground crossover with the underground station located east of the existing MWD building and below the LAUS passenger concourse. South of the station platform would be another underground crossover with the alignment continuing south crossing under the US-101 freeway and the Metro L Line. The station would be accessed through a single entrance within the existing LAUS building to the platform level. No parking facility was proposed at this station.

Design Option 2: Addition of Little Tokyo Station

Design Option 2 would add the underground Little Tokyo Station for Alternative 1 between the LAUS and Arts/Industrial District Stations in the Little Tokyo community of Los Angeles. The underground Little Tokyo Station would be located beneath Alameda Street between 1st Street and 2nd Street and would allow at-grade transfers to the Regional Connector Little Tokyo/Arts District Station and the Metro rail lines it serves. Station entrances would be located at the western side of Alameda Street and an existing retail store and at the southeastern corner of E. 2nd Street and Alameda Street. No parking facility was proposed at this station.

2.4.2.6 Maintenance and Storage Facility Site Options

Two MSF sites were evaluated in the Draft EIS/EIR, referred to as the Paramount and Bellflower MSF site options.

Paramount MSF Site Option

The Paramount MSF would be located on a 22-acre rectangular site in the City of Paramount. The site consists of the Paramount Swap Meet, Paramount Drive-in Theatre and its associated parking, and industrial properties. Vehicular access to the proposed site is currently provided from All American City Way. At full capacity, the MSF would be designed to store up to 80 light rail vehicles (LRVs) and provide over 200 parking spaces for MSF staff. Lead tracks to this MSF site option would enter the site along its western edge approximately 0.3 mile south of the Project's mainline track.

Bellflower MSF Site Option

The Bellflower MSF would be located on a 21-acre site in the City of Bellflower. The city-owned site is developed with a recreational commercial business (the Hollywood Sports Paintball and Airsoft Park & Bellflower BMX). Vehicular access to the proposed site is currently provided from Somerset Boulevard.

At full capacity, this MSF site option would be designed to store up to 80 LRVs and provide over 200 parking spaces. The site is adjacent to the project alignment, and lead tracks would be constructed within the Metro-owned PEROW.

2.4.3 Locally Preferred Alternative

2.4.3.1 Identification of the Locally Preferred Alternative

In January 2022, the Metro Board of Directors identified Alternative 3 from the Draft EIS/EIR as the LPA. During the January 2022 meeting, it was noted that the cost of the alignment from the southern terminus in the City of Artesia to Downtown Los Angeles increased from \$4.0 to \$8.6 billion, resulting in a funding gap to construct an alignment to downtown Los Angeles. Alternative 3 was also identified as the Environmentally Superior Alternative in the Draft EIS/EIR. It was recommended that Alternative 3 be identified as the LPA, consistent with FTA's preference to issue a Record of Decision for a project with a known timeline and local funding commitment. The LPA extends from a northern terminus at the Slauson/A Line Station in the City of Los Angeles/ Florence-Firestone unincorporated area of LA County to a southern terminus at Pioneer Station in the City of Artesia for a total of 14.5 miles⁵. The Board also identified the MSF site option in the City of Bellflower as a component of the LPA.

During the January 2022 meeting, the Metro Board also identified LAUS as the ultimate terminus for the corridor. By direction of the Metro Board of Directors and motion by Directors Hahn, Solis, Garcetti, Mitchell, and Dutra (File #2022-0023), Metro staff were directed to identify and evaluate a more cost-effective alignment between the Slauson/A Line Station and LAUS in light of the funding gap, and to re-engage the community to best define a transit solution, including alignment profile, station locations, and design, that meets the changing mobility needs of Little Tokyo, the Arts District, LAUS, and surrounding area residents, employees, and businesses. In response to the Board Motion, a standalone study, the *West Santa Ana Branch Transit Corridor Project Slauson/A Line to LA Union Station Segment Study*, is underway. This standalone study does not include discussion of the LPA. While Alternatives 1 and 2 identified in the Draft EIS/EIR remain under consideration, modifications to those alternatives made in response to the standalone study, or as a result of design refinements, would be the subject of a future environmental document.

2.4.3.2 Refinements Subsequent to the Draft EIS/EIR

The LPA evaluated in this Final EIS/EIR is Alternative 3 from the Draft EIS/EIR with refinements to address stakeholder coordination and comments on the Draft EIS/EIR. The following summarizes the refinements to the LPA, construction laydown/staging areas, traction power substation (TPSS) sites, identification of a new design option, and the MSF. See Appendix E, *Project Refinements since Circulation of the Draft EIS/EIR*, for additional details of the refinements to the LPA.

Refinements to the Locally Preferred Alternative

- Shift the Slauson/A Line aerial station platform south and add a second set of vertical circulation and pedestrian circulation elements between the Slauson/A Line Station and the existing A Line Station. Additionally, a set of stairs was added between the existing A Line station and street level (Unincorporated LA County).
- Swap the location of the freight and LRT tracks within the La Habra Branch right-of-way (ROW) compared to the Draft EIS/EIR design. Freight tracks will be located on the north side of the ROW and LRT tracks on the south side to accommodate potential freight connectivity to

⁵ The length of Alternative 3 in the Draft EIS/EIR was incorrectly presented as 14.8 miles; the correct length was 14.5 miles. The alignment endpoints for the LPA are largely unchanged from the Draft EIS/EIR.

an existing industrial track on the north side of the ROW (Unincorporated LA County and City of Huntington Park).

- Open or close at-grade crossings and implement left-turn restrictions over the LRT tracks in the City of Huntington Park:
 - Open crossings previously proposed for closure at Albany Street and Rugby Boulevard
 - Close crossings previously proposed to remain open at Malabar Street and Arbutus Avenue
 - Implement left-turn restrictions at Santa Fe Avenue, Pacific Boulevard, Miles Avenue, and State Street
- Modify roadway design at the southeast corner of Florence Avenue and California Avenue to avoid partial acquisition of infrastructure related to a water well (City of Huntington Park).
- Redesign a freight spur track connection north of Rayo Avenue on the west side of the freight tracks to avoid impacts to a spur track (City of South Gate).
- Close the private at-grade crossing at Miller Way (City of South Gate).
- Extend the LRT viaduct north of Imperial Highway to avoid impacts to a spur track and full acquisition of a property (City of South Gate).
- Reconfigure the I-105/C Line Station parking facility by removing dedicated transit parking on the west side of the freight tracks and expanding the parking facility on the east side of the freight tracks to the north; also add a new driveway entrance to the parking facility at Century Boulevard (City of South Gate).
- Eliminate demolition and reconstruction of the Arthur Avenue and Façade Avenue bridges; modify Façade Avenue to an emergency exit only from the I-105/C Line infill station (rather than a station entrance and exit) (City of Paramount).
- Modify the replacement freight bridge at I-105 to a four-span structure, consistent with the current bridge, rather than the previously proposed two-span structure.
- Replace the proposed pedestrian undercrossing with a pedestrian bridge at Paramount High School that will span the entire rail ROW (City of Paramount).
- Add a protected left turn and a traffic signal on Clark Avenue at Los Angeles Street to accommodate dedicated turning movements to the community (City of Bellflower).
- Modify alignment of the LRT tracks and soundwall at the Bellflower Mobile Home Park to minimize parking loss and provide replacement parking elsewhere on the property to maintain the existing number of parking spaces (City of Bellflower).
- Redesign retaining walls on the southeast side of the 183rd Street/Gridley Road crossing from retained fill to columns (City of Artesia).
- Incorporate the Artesia Historic District Recreation Trails as an existing, rather than future, condition in the Final EIS/EIR plan set (City of Artesia).
- Modify the entrance to the Pioneer Station parking structure to align with Solana Place and shift structure north to provide alley egress resulting in an additional level on the Pioneer parking structure to maintain the number of parking spaces identified in the Draft EIS/EIR (City of Artesia).
- Extend the median located north of the LRT tracks at the Pioneer Boulevard grade crossing to prohibit left turns from a shopping center driveway along the east side (City of Artesia).
- Incorporate Mitigation Measures NOI-4 (Crossing Signal Bell Shrouds) and NOI-5 (Gate-Down-Bell-Stop Variance)—recommended in the Draft EIS/EIR to further reduce noise at grade crossings—as Project Measures NOI PM-1 and NOI PM-2 in the Final EIS/EIR to be implemented as part of the LPA. These measures are described in Chapter 4, Section 4.7.4.1, Noise and Vibration, of this Final EIS/EIR.

- Add Project Measure VA PM-8 (Residential Screening for Aerial Structures), which requires privacy screening along portions of the aerial structure adjacent to the rear of residential properties in the Cities of Paramount, Bellflower, and Cerritos if the soundwall in those locations will not be sufficiently tall to provide similar privacy screening. This measure is described in Chapter 4, Section 4.4.4.1, Visual and Aesthetics, of this Final EIS/EIR.
- Add Project Measures BIO PM-1 (Invasive Plant Species Best Management Practices) and BIO PM-2 (Prohibition of Invasive Plant Species in Landscape Plans) to provide options to minimize the spread of invasive species during construction and prohibit the inclusion of invasive species in landscape plans; add Project Measure BIO PM-3 (LA Metro Tree Policy) to require adherence to LA Metro Tree Policy, adopted by Metro in October 2022. These measures are described in Chapter 4, Section 4.19.3.8 (Construction-related Ecosystems/Biological Resources Section) of this Final EIS/EIR.
- Add Project Measure CR PM-1 (Secretary of the Interior Standards Design Review), which requires review and approval of the design of the new LRT bridge and C Line station that will be constructed within the Century Freeway-Transitway Historic District and extension of the Union Pacific LA River Rail Bridge's existing concrete piers by a professional who meets the Secretary of the Interior's Professional Qualification Standards in architectural history, history, or architecture; the measure is described in Chapter 4, Section 4.14.4 (Historic, Archaeological, and Paleontological Section) of this Final EIS/EIR.

Construction Laydown/Staging Areas

- Relocate the construction laydown area near State Street and Randolph Street to east of State Street in the railroad ROW (City of Huntington Park).
- Relocate the laydown area at the southeast corner of Imperial Highway and Garfield Place to north of Imperial Highway within the San Pedro Subdivision ROW (City of South Gate).
- Locate a construction laydown/staging area on the east side of the ROW between Rayo Avenue and Southern Avenue (City of South Gate).

Traction Power Substations Site Locations

- Relocate TPSS Site 14 from the northwest corner of Randolph Street and State Street to the east within railroad ROW (City of Huntington Park).
- Eliminate optional TPSS Sites 16E and 12E (City of Huntington Park).
- Add Optional TPSS Site 7E within the reconfigured parking facility east of the tracks at the I-105/C Line Station parking facility (City of South Gate).
- Relocate the proposed TPSS Site 2 from the northwest side of the intersection of 183rd Street/Gridley Road to the southeast side (City of Cerritos and City of Artesia).

Design Option

- Add a design option that would close 186th Street but keep 187th Street open to traffic and turn Corby Avenue into a cul-de-sac with an access driveway for the existing business (City of Artesia).

Maintenance and Storage Facility

- Realign the MSF site entrance on Somerset Boulevard to align with Bayou Avenue to allow for a signalized pedestrian crossing of Somerset Boulevard (City of Bellflower).

2.5 Alternatives Evaluated in this Final EIS/EIR

The following sections summarize the alternatives evaluated in this Final EIS/EIR, including the No Build Alternative and the LPA consisting of a design option and MSF. The MSF is a component of the LPA and will not be implemented independently. Details of Alternatives 1, 2, and 4 and related analyses are unchanged from the Draft EIS/EIR and are found in the *West Santa Ana Branch Transit Corridor Project Draft EIS/EIR (Metro 2021a)* and corresponding technical studies.

2.5.1 No Build Alternative

The No Build Alternative analyzed in the Final EIS/EIR is identical to that analyzed in the Draft EIS/EIR and maintains the same baseline as the Draft EIS/EIR (2042). The required environmental baseline socioeconomic growth projections, including the reasonably foreseeable transportation network in 2042, were established in July 2017 when the preparation of the Draft EIS/EIR began. The SCAG 2016-2040 RTP/SCS was the adopted current regional growth forecast at the time the Draft EIS/EIR baseline was established. Specifically, the baseline year 2017 and future year 2042 population, housing, and employment are derived from the Transportation Analysis Zone-level estimates from the SCAG 2016-2040 RTP/SCS. The Metro planning and travel demand modeling process has assumed incremental growth in the WSAB Study Area (defined as 2 miles from the four Build Alternatives evaluated in the Draft EIS/EIR) and surrounding region consistent with this forecast. Refer to Section 2.4.1.3 under the heading “West Santa Ana Branch Transit Corridor Project Regional Transportation Plan/Sustainable Communities Strategy Study” for additional information on use of the 2016-2040 RTP/SCS and 2042 as a basis for the No Build Alternative.

The No Build Alternative provides the background transportation network, against which the LPA impacts are identified and evaluated under NEPA. The No Build Alternative does not include the LPA. Specifically, the No Build Alternative reflects the reasonably foreseeable transportation network in 2042 and includes the existing transportation network and planned transportation improvements that have been committed to and identified in the constrained Metro 2009 Long Range Transportation Plan (LRTP) (Metro 2009a) and SCAG 2016-2040 RTS/SCS (SCAG 2016a), as well as additional projects funded by Measure M, a sales tax initiative approved by voters in November 2016. The No Build Alternative transportation network is shown in Table 2.4, which is based on the Metro 2009 LRTP and SCAG 2016 RTP/SCS. Figure 1-5 and Figure 1-6 in Chapter 1, Purpose and Need, of this Final EIS/EIR show the existing bus, rail, and highway networks within the Study Area. Figure 2-4 shows the planned rail and highway improvements in or near the Study Area.

Table 2.4. No Build Alternative (2042) – Existing Transportation Network and Planned Improvements

Description	Project	To / From	Location Relative to Study Area
Rail (Existing)	Metro Rail System (LRT and Heavy Rail Transit)	Various locations	Within Study Area
	Metrolink System (Southern California Regional Rail Authority)	Various locations	Within Study Area
Rail (Under Construction/Planned)^{1, 5}	Metro Westside D (Purple) Line Extension Project	Wilshire/Western to Westwood/VA Hospital	Outside Study Area
	Metro C (Green) Line Extension Project ²	96th St Station to Torrance	Outside Study Area
	Metro C (Green) Line (aka Metro Crenshaw/LAX Transit Project)	Norwalk to Expo/Crenshaw ³	Outside Study Area
	Metro East-West Line/Regional Connector/Eastside Phase 2 (aka Metro Eastside Transit Corridor Phase 2)	Santa Monica to Lambert Santa Monica to Peck Rd	Within Study Area
	Metro North-South Line/Regional Connector/Foothill Extension to Claremont Phase 2B (aka Gold Line Foothill Extension 2B)	Long Beach to Claremont	Within Study Area
	Metro Sepulveda Transit Corridor Project	Metro G (Orange) Line to Metro E (Expo) Line	Outside Study Area
	Metro East San Fernando Valley Light Rail Transit Project	Sylmar to Metro G (Orange) Line	Outside Study Area
	Los Angeles World Airport Automated People Mover	96th St Station to LAX Terminals	Outside Study Area
	Metrolink Capital Improvement Projects	Various projects, including: ▪ Simi Valley Double Track ▪ Burbank Junction Speed Improvements ▪ Chatsworth Station Improvements ▪ Marengo Siding Extension Project	Within Study Area
	California High-Speed Rail	Burbank to LA LA to Anaheim	Within Study Area
	Link Union Station (Link US) Project ⁶	LAUS	Within Study Area

Description	Project	To / From	Location Relative to Study Area
Bus (Existing)	Metro Bus System (including BRT, Express, and local)	Various locations	Within Study Area
	Municipality Bus System ⁴	Various locations	Within Study Area
Bus Rapid Transit (Under Construction/Planned)⁵	Metro G (Orange) Line Bus Rapid Transit Improvement Project	Del Mar (Pasadena) to Chatsworth Del Mar (Pasadena) to Canoga Canoga to Chatsworth	Outside Study Area
	Metro Vermont Transit Corridor	120th St to Hollywood Boulevard	Outside Study Area
	Metro North San Fernando Valley Bus Rapid Transit Corridor Project (North San Fernando Valley BRT)	Chatsworth to North Hollywood	Outside Study Area
	Metro North Hollywood to Pasadena Bus Rapid Transit Corridor Project (NoHo to Pasadena BRT)	North Hollywood to Pasadena	Outside Study Area
Highway (Existing)	Highway System	Various locations	Within Study Area
Highway (Under Construction/Planned)⁵	High Desert Corridor Project	SR-14 to SR-18	Outside Study Area
	I-5 North Capacity Enhancements	SR-14 to Lake Hughes Rd	Outside Study Area
	SR-71 Gap Closure	I-10 to Rio Rancho Rd	Outside Study Area
	I-405 (Sepulveda Pass) Express Lanes Project	I-10 to US-101	Outside Study Area
	SR-57/SR-60 Interchange Improvements	SR-57/SR-60	Outside Study Area
	I-710 South Corridor Project Phase 1 and 2)	Ports of Long Beach and LA to SR-60	Within Study Area
	I-105 Express Lane	I-405 to I-605	Within Study Area
	I-5 Corridor Improvements	I-605 to I-710	Outside Study Area

Source: Prepared on behalf of Metro in 2021

Notes: ¹ Where extensions are proposed for existing Metro rail lines, the origin/destination is defined for the operating scheme of the entire rail line following completion of the proposed extensions and not just the extension itself.

² The Metro C (Green) Line extension to Torrance includes new construction from Redondo Beach to Torrance; however, the line will operate from Torrance to 96th Street.

³ The under construction Metro Crenshaw/LAX Line will operate as the Metro C (Green) Line.

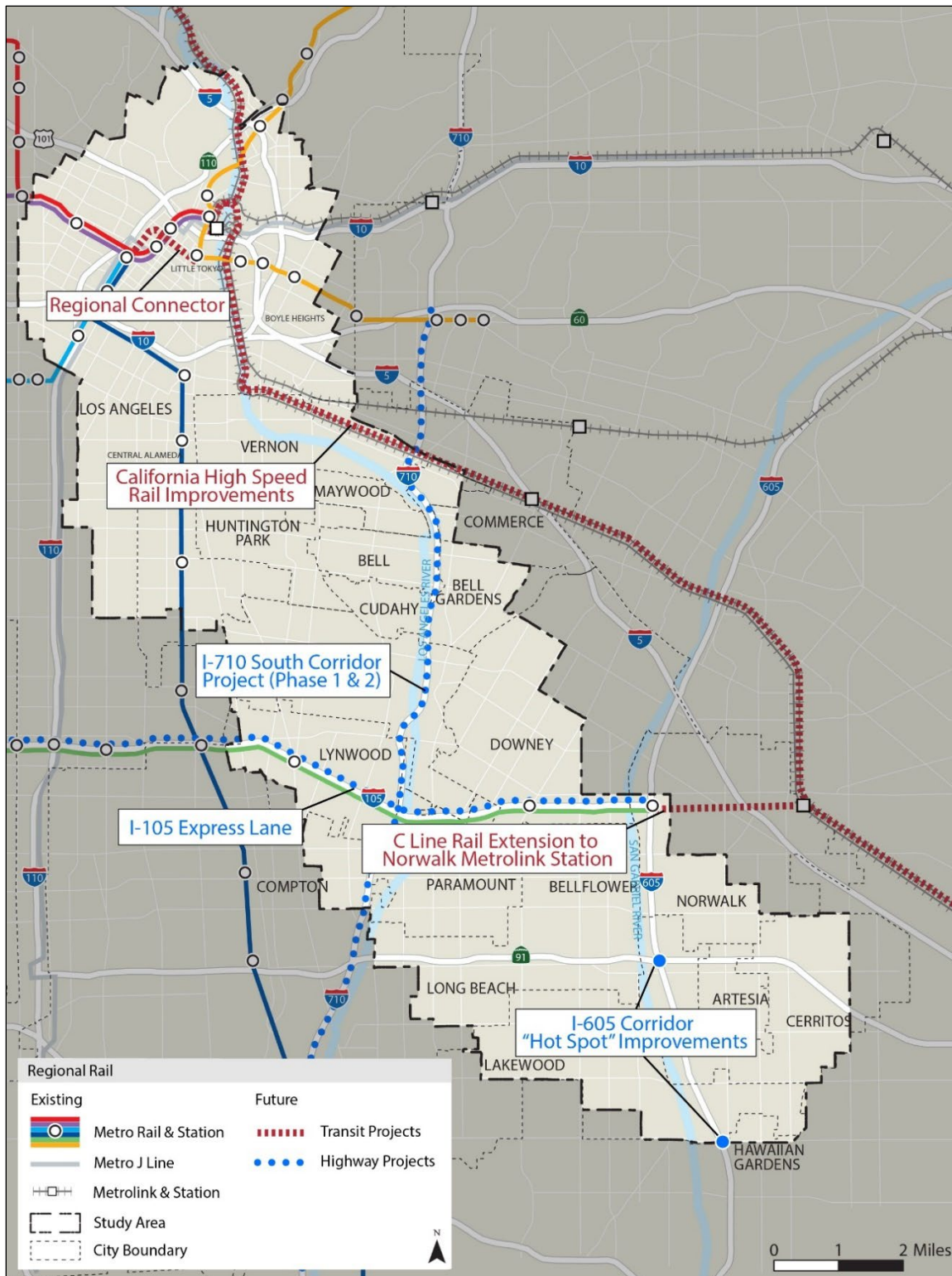
⁴ The municipality bus network system is based on service patterns for Bellflower Bus, Cerritos on Wheels, Cudahy Area Rapid Transit, Get Around Town Express, Huntington Park Express, La Campana, Long Beach Transit, Los Angeles Department of Transportation, Norwalk Transit System, and Orange County Transportation Authority.

⁵ Planned projects may be subject to change.

⁶ Link US rail walk times included only.

BRT = bus rapid transit; LA = Los Angeles; LAUS = Los Angeles Union Station; LAX = Los Angeles International Airport; LRT = light rail transit; VA = Veterans Affairs

Figure 2-4. Planned Rail and Highway Improvements in Study Area



Source: Prepared on behalf of Metro in 2021

2.5.2 Locally Preferred Alternative

The LPA is a 14.5-mile double track alignment with a northern terminus at the Slauson/A Line Station in the City of Los Angeles/Florence-Firestone community of LA County and a southern terminus at the Pioneer Station in the City of Artesia. The LPA will include approximately 12.1 miles of at-grade and 2.4 miles of aerial alignment. The northern terminus of the LPA will be located just south of the intersection of Long Beach Avenue and Slauson Avenue, connecting to the existing A Line Slauson Station. South of Slauson Avenue, the LPA will follow the UPRR-owned La Habra Branch⁶ 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 PEROW south of the I-105 freeway. The LPA will then follow the Metro-owned PEROW to the southern terminus at the Pioneer Station in Artesia.

The LPA will consist of 9 LRT stations (Slauson/A Line, Pacific/Randolph, Florence/Salt Lake, Firestone, Gardendale, I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer Station) and 5 parking facilities (Firestone, I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer) totaling approximately 2,800 parking spaces. Of the 9 LRT stations, 6 stations will be at-grade 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 WSAB alignment and the C Line.

The LPA will include 30 at-grade crossings, 15 elevated street crossings, 6 freight crossings, 4 freeway crossings (3 freeway undercrossings and 1 aerial freeway crossing), and 3 river crossings. Ancillary facilities and project components are detailed in Table 2.5 with additional information included in Appendix C, System Components and Ancillary Facilities, of this Final EIS/EIR. Figure 2-5 shows the LPA alignment, including alignment profile. Figure 2-6 illustrates the freeway crossings along the alignment. The LPA will be grade-separated where warranted, as shown in Figure 2-6. The following describes the LPA alignment and stations in detail.

⁶ The La Habra Branch may also be referred to as the La Habra Subdivision. La Habra Branch is used within this document.

Table 2.5. Summary of Locally Preferred Alternative Components

Component	Quantity
Alignment length	14.5 miles
Length of at-grade and aerial	12.1 miles at-grade; 2.4 miles aerial ¹
Station configurations	9 along WSAB alignment: 3 aerial and 6 at-grade 1 at-grade infill station along C Line
Parking facilities	5 total: 4 surface lots and 1 parking structure (approximately 2,800 spaces)
At-grade crossings	30
Elevated street crossings	15
Freight crossings	6
Freeway crossings	4 1 aerial/overcrossing at I-105 3 freeway undercrossings ² at I-710, I-605, SR 91
Freight realignment	8.7 miles
River crossings	3 (Rio Hondo, LA River, and San Gabriel)
TPSS facilities	17
Maintenance and Storage Facility	1 (City of Bellflower)

Source: WSP 2023

Notes: ¹ Alignment configuration measurements count retained fill embankments as at-grade.² The light rail tracks crossing beneath freeway structures.

LA = Los Angeles; TPSS = traction power substation; WSAB = West Santa Ana Branch

Figure 2-5. Locally Preferred Alternative Alignment by Grade



Source: Prepared by WSP and TAHA on behalf of Metro in 2023

Figure 2-6. Freeway Crossings



Source: Prepared by WSP and TAHA on behalf of Metro in 2023

2.5.2.1 Alignment

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.

From the Northern Terminus Slauson/A Line Station to Florence/Salt Lake Station

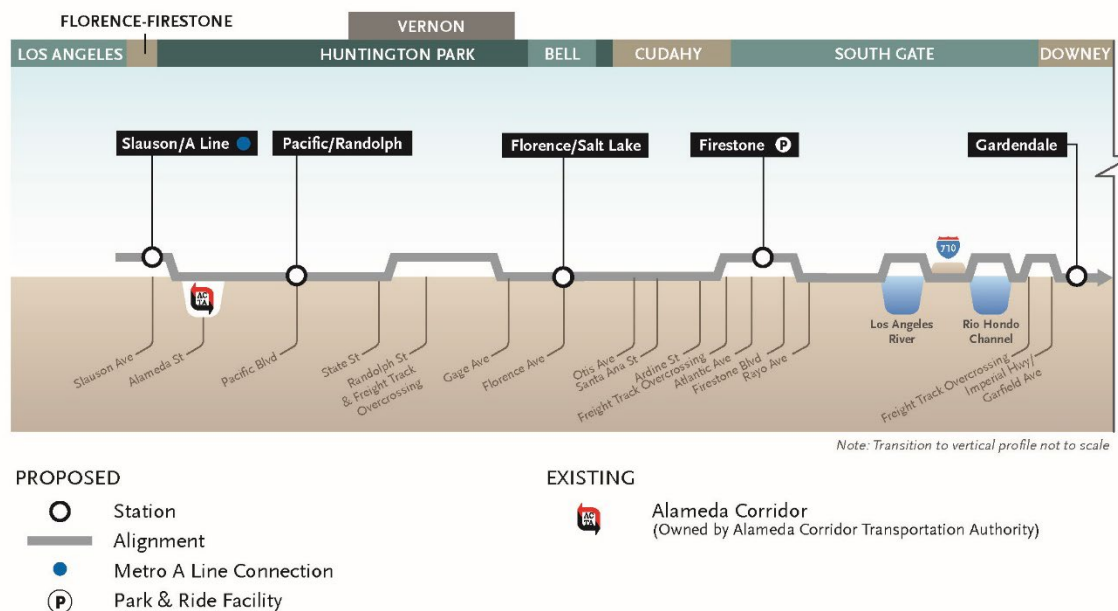
The northern terminus of the LPA will begin at the Slauson/A Line Station, which will serve as a transfer point to the Metro A Line. Transfers between the Slauson/A Line Station and the existing Metro A Line will be accommodated via two pedestrian bridges between the two station platforms. The pedestrian bridges will be located at the southern and northern ends of the platforms and will be accessed by stairs, escalators, and/or elevators. Stairs, escalators, and/or elevators will also connect with the street level on the north side of the station, while stairs will connect with the street level on the south side of the station. An additional set of stairs will be added to the existing A Line Station providing access to street level. Tail tracks⁷ accommodating layover storage for a three-car train will extend approximately 1,000 feet north from the station.

From the aerial Slauson/A Line Station, the aerial alignment will continue south and east along the existing UPRR-owned La Habra Branch ROW into the City of Huntington Park. The alignment will be located on the south side of the existing UPRR-owned La Habra Branch ROW in the median of Randolph Street and will require the relocation of existing freight tracks to the northern portion of the rail ROW with a minimum 20-foot clearance from the freight tracks. Overall, the railroad ROW will be widened by about 15 feet into the street/public ROW to accommodate the two LRT tracks and the relocated freight tracks. 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 at-grade alignment will continue along Randolph Street to the at-grade Pacific/Randolph Station located just east of Pacific Boulevard in the City of Huntington Park.

From the Pacific/Randolph Station, the alignment will continue east at-grade within the La Habra Branch ROW. Rita Avenue and Arbutus Avenue will be closed to traffic crossing the ROW, altering the intersection design to a right-in, right-out configuration. As the alignment approaches 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 at-grade 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 the Salt Lake Avenue/Florence Avenue intersections in Huntington Park. Figure 2-7 illustrates the alignment profile extending from the Slauson/A Line Station through this segment.

⁷ Tail tracks are additional tracks that extend beyond the end of the mainline tracks and can be used for temporarily parking, storing, or reversing the direction of trains. While the tracks are designed to allow for layover if needed, trains will not sit at the end of the line.

Figure 2-7. Alignment Profile from Slauson/A Line Station to Gardendale Station



Source: Prepared by Cityworks Design and WSP in 2023

From Florence/Salt Lake Station to the I-105/C Line Station

From the at-grade Florence/Salt Lake Station in the City of Huntington Park, the alignment will continue southeast at-grade within the San Pedro Subdivision ROW, crossing Otis Avenue, Santa Ana Street, and Ardine Street. The alignment will be located on the east side of the existing San Pedro Subdivision ROW freight tracks, and the existing freight tracks will be relocated to the west side of the ROW, with a minimum 20-foot clearance from the freight tracks. South of Ardine Street, the alignment will transition to an aerial structure to cross over the existing UPRR tracks and Atlantic Avenue to the aerial Firestone Station located on an aerial structure between Atlantic Avenue and Firestone Boulevard in the City of South Gate. The Firestone Station will include a dedicated transit parking facility providing approximately 600 parking spaces with a vehicle underpass under the freight tracks to access the parking facility.

From the aerial Firestone Station, the aerial 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 transitioning to an aerial configuration to cross over the LA River. The LRT bridge will be constructed northeast of the existing LA River truss bridge to cross the LA River, and the truss bridge will remain unaltered. South of the LA River, the alignment will transition to an at-grade configuration, transecting the I-710 freeway through a new box tunnel structure. The alignment will then transition to an aerial structure to cross over the Rio Hondo Channel. A new LRT bridge will be constructed northeast of the existing freight bridge that will remain unaltered. 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 from aerial to an at-grade configuration and continue to the Gardendale Station at the border of the Cities of Downey and South Gate. Figure 2-7 illustrates the alignment profile extending from the Slauson/A Line Station to the Gardendale Station.

From the Gardendale Station, the alignment will continue south in an at-grade configuration within the San Pedro Subdivision ROW, crossing Gardendale Street and Main Street to connect to the at-grade I-105/C Line Station, which will be located north of Century Boulevard in the City of South Gate. The I-105/C Line Station will include a dedicated transit parking facility providing approximately 340 to 360 parking spaces, depending on the location of the TPSS.

From I-105/C Line Station to Pioneer Station

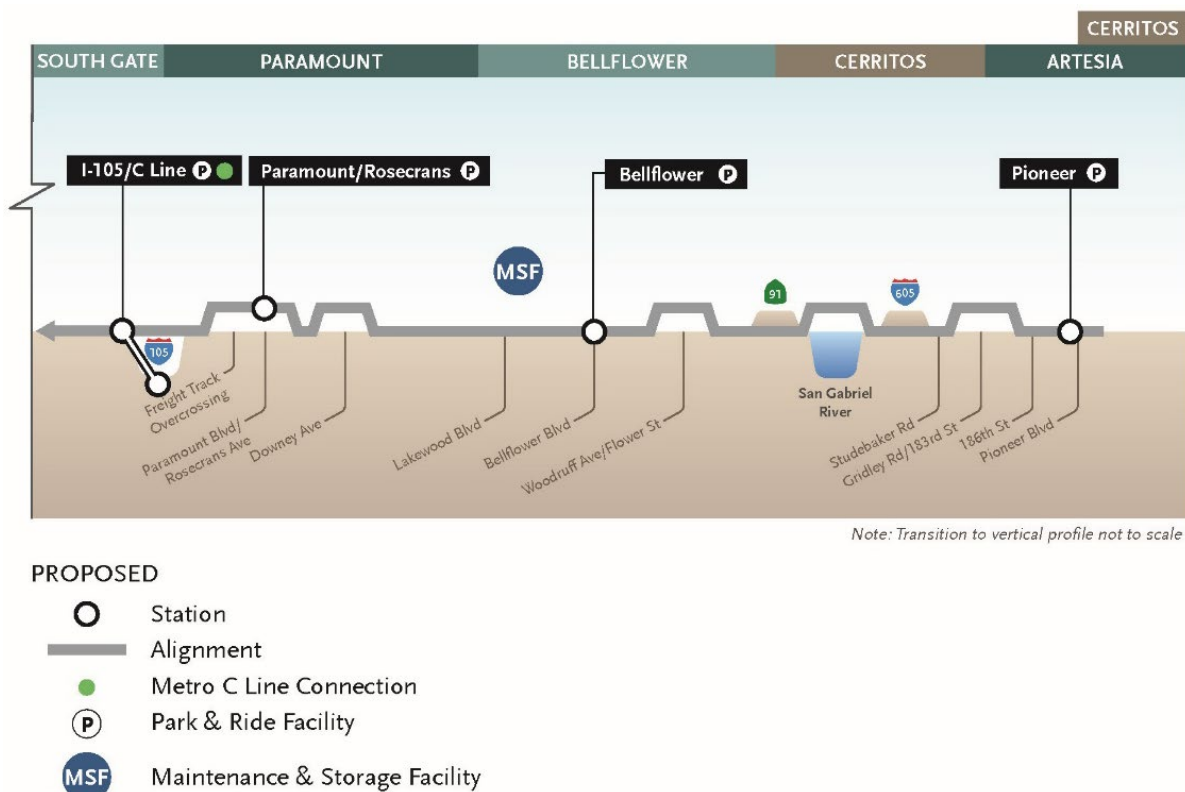
From the at-grade I-105/C Line Station platform located north of Century Boulevard, the alignment will cross Century Boulevard at-grade and then over the I-105 freeway in an aerial configuration within the existing San Pedro Subdivision ROW bridge footprint. A new infill Metro C Line Station will be 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 C Line Station platform via stairs, escalators, and/or elevators. Emergency egress from the C Line Station will also be provided at Façade Avenue via stairs and elevators. To accommodate 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.

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 enters 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. As illustrated in Figure 2-8, the alignment will continue in an aerial configuration to the aerial Paramount/Rosecrans Station located west of Paramount Boulevard and north of Rosecrans Avenue in the City of Paramount. The existing freight track will be relocated to the northeast side of the alignment beneath the station aerial viaduct structure. The Paramount/Rosecrans Station will include a dedicated transit parking facility providing approximately 490 parking spaces located south of the alignment between Los Angeles Department of Water and Power property and Rosecrans Avenue.

From the Paramount/Rosecrans Station, the alignment will continue southeast in an aerial configuration over the Paramount Boulevard/Rosecrans Avenue intersection and descend to an at-grade configuration. The existing Paramount High School pedestrian bridge will be reconstructed over the LPA and freight tracks to maintain the connection between Paramount High School and the athletics fields. The alignment will return to an aerial configuration to cross over Downey Avenue descending back to an at-grade configuration north of Somerset Boulevard. 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 (Somerset Boulevard).

The alignment will cross Somerset Boulevard at-grade. South of Somerset Boulevard, the at-grade alignment will parallel the existing Bellflower Bike Trail that is currently aligned on the south side of the PEROW. The Bellflower Bike Trail between Somerset Boulevard and Lakewood Boulevard will move from the south side to the north side of the PEROW. The alignment will continue at-grade within the PEROW, crossing Lakewood Boulevard, Clark Avenue, and Alondra Boulevard.

Figure 2-8. Alignment Profile from I-105/C Line Station to Pioneer Station



Source: Prepared by Cityworks Design and WSP in 2023

The at-grade Bellflower Station will be located west of Bellflower Boulevard in the City of Bellflower. The Bellflower Station will include a dedicated transit parking facility providing approximately 260 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 at-grade LRT alignment will continue southeast within the PEROW and transition to an aerial configuration near Cornuta Avenue, crossing over Flower Street and Woodruff Avenue. The aerial alignment will return to an at-grade configuration south of Woodruff Avenue. South of Woodruff Avenue, the Bellflower Bike Trail will be realigned along the north side of the PEROW. Continuing southeast, the LRT alignment will cross under the SR-91 freeway in an existing undercrossing. The alignment will then transition to an aerial configuration to cross over the San Gabriel River via a new bridge, which will replace the existing abandoned freight bridge. South of the San Gabriel River, the alignment will transition back to an at-grade configuration before crossing a private driveway and 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. West of Gridley Road, the alignment will transition to an aerial configuration to cross over 183rd Street and Gridley Road. The alignment will then descend to an at-grade configuration, and cross 186th Street at-grade. 187th Street will be closed to vehicular traffic with implementation of the LPA. The at-grade alignment will then pass through the southern terminus of Pioneer Station, located on the west side of

Pioneer Boulevard in the City of Artesia. Tail tracks⁸ 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.

2.5.2.2 Stations and Park-and-Ride Facilities

The LPA consists of 9 LRT stations, with 5 parking facilities totaling up to approximately 2,800 parking spaces. Of the 9 LRT stations along the WSAB alignment, 6 stations will be at-grade and 3 stations will be aerial. Additionally, the LPA will add one new, at-grade infill station along the C Line at I-105 to allow transfers between the WSAB alignment and the C Line. Table 2.6 summarizes the stations for the LPA, with additional information in the sections that follow.

Table 2.6. Summary of Stations for the Locally Preferred Alternative

Station Name and Location	Jurisdiction	Type of Station	Approximate No. of Parking Spaces
Slauson/A Line South of Slauson Ave at Long Beach Ave	Los Angeles; Unincorporated LA County	Aerial	—
Pacific/Randolph Randolph St between Pacific Ave/Seville Ave	Huntington Park	At-grade	—
Florence/Salt Lake Salt Lake Ave between Florence Ave/California St	Huntington Park; Cudahy	At-grade	—
Firestone (P) Between Atlantic Ave and Firestone Ave	South Gate	Aerial	600
Gardendale Gardendale St/Dakota Av	Downey	At-grade	—
I-105/C Line (P) Between Century Blvd and Main St; I-105 Freeway/C Line (platforms on WSAB and Metro C Line)	South Gate; Paramount	At-grade	340 to 360 ¹
Paramount/Rosecrans (P) Paramount Blvd/Rosecrans Ave	Paramount	Aerial	490
Bellflower (P) Bellflower Blvd/Pacific Ave	Bellflower	At-grade	260
Pioneer (P) Pioneer Blvd/187th St	Artesia	At-grade	1,100

Source: Prepared by WSP on behalf of Metro in 2023

Notes: ¹ The range of parking spaces is dependent on the location of the TPSS at the I-105/C Line Station.

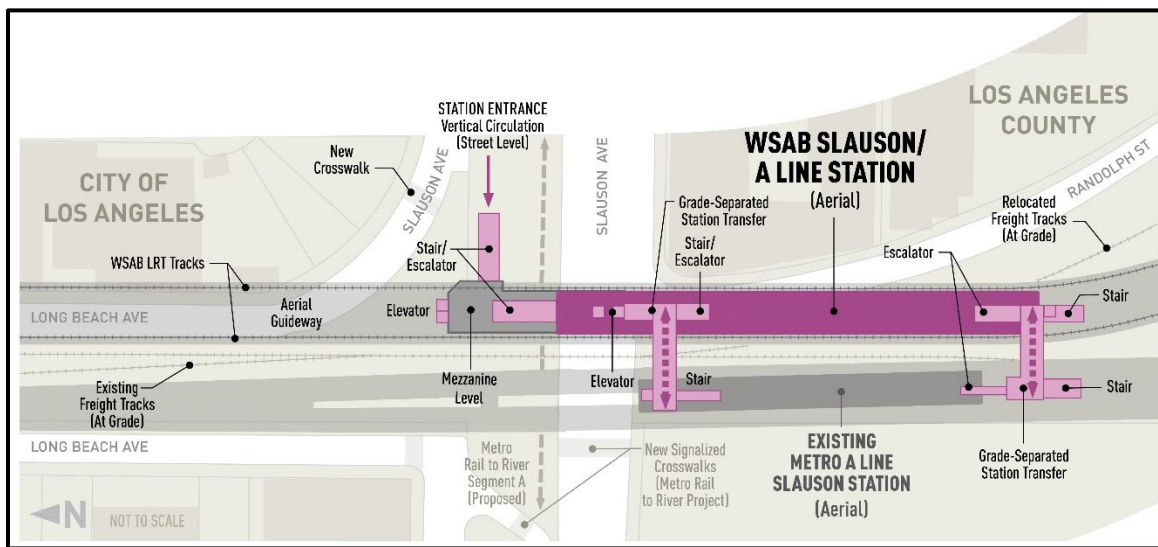
(P) = station has a dedicated transit parking facility

⁸ Typical train operations at the Pioneer Station will use the front-end cross over north of the station platform to change train directions. The usage of the back-end crossovers and tail track provides operational flexibility in the event of a service disruption or special service and is not regularly employed during normal operations.

Slauson/A Line Station

The Slauson/A Line Station will be a major transfer point to the Metro A Line. The Slauson/A Line Station will operate on a single platform and will be located parallel and east of the existing Metro A Line Slauson Station platform and above the Wilmington Branch ROW (Figure 2-9). Access to the station from the street will be via an entrance on the northeast and southeast corner of Long Beach Avenue and Slauson Avenue. To accommodate transfers, two pedestrian bridges will connect the WSAB station platform and the existing A Line platform via stairs, escalators, and/or elevators for vertical circulation. Additionally, pedestrian access from the street level will be provided beneath the station south of Slauson Avenue and at a pedestrian plaza north of Slauson Avenue connected by a mezzanine level to the platform. Pedestrian access to the existing Slauson A Line Station is currently unavailable from north of Slauson Avenue. Stairs, elevators, and escalators will be provided as vertical circulation for station access. No parking facility will be provided at this station.

Figure 2-9. Slauson/A Line Station

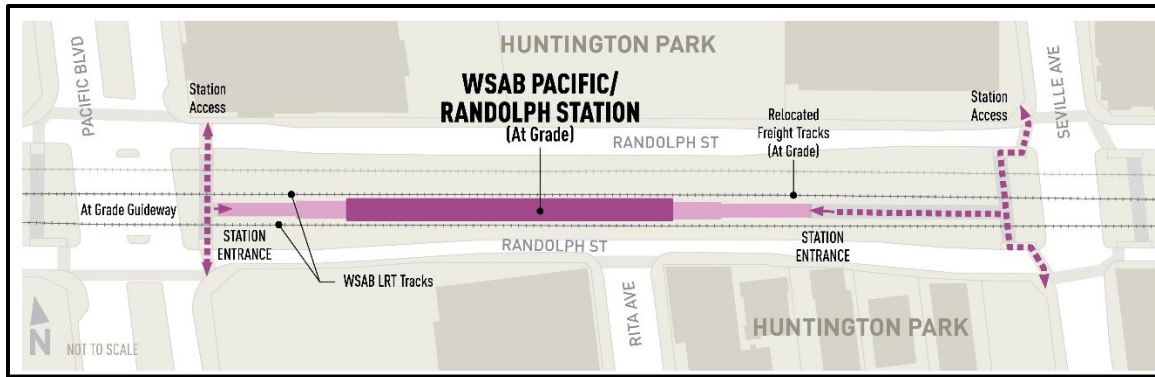


Source: Prepared by Cityworks Design and WSP in 2023

Pacific/Randolph Station

The Pacific/Randolph Station will be located at-grade within the La Habra Branch ROW along the Randolph Street median between Pacific Boulevard and Seville Avenue (Figure 2-10). Access to the station will be via pedestrian crossings from the north and south sides of Randolph Street east of Pacific Boulevard and the north and south sides of Randolph Street west of Seville Avenue. No parking facility will be provided at this station.

Figure 2-10. Pacific/Randolph Station

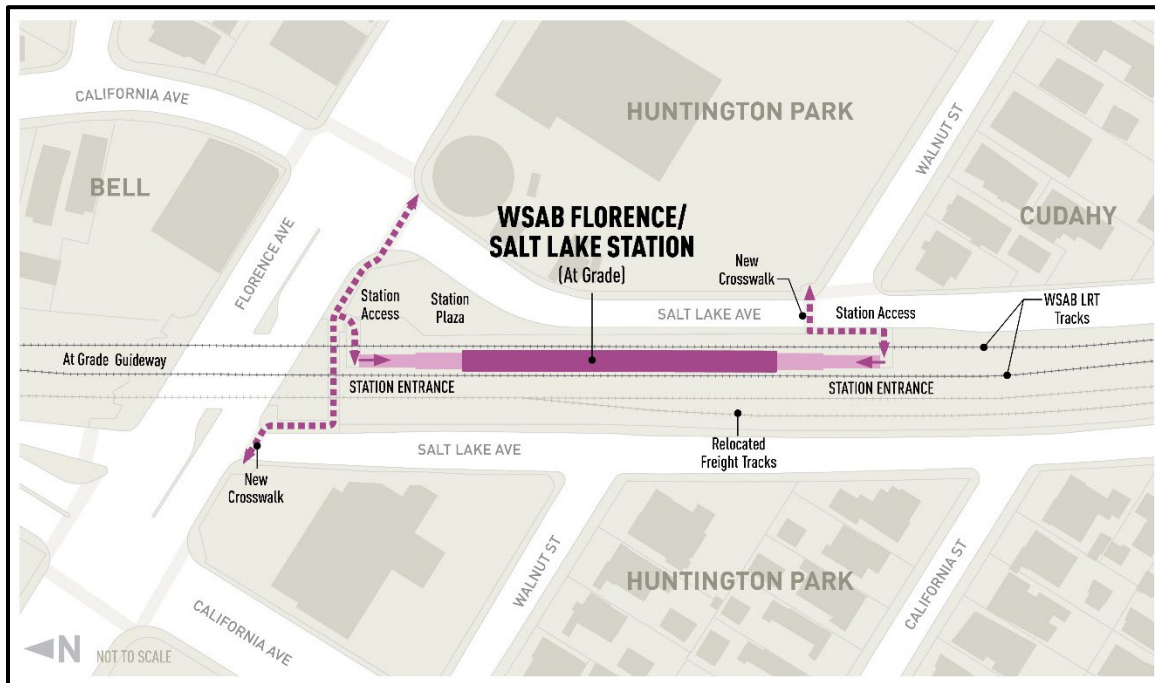


Source: Prepared by Cityworks Design and WSP in 2023

Florence/Salt Lake Station

The Florence/Salt Lake Station will be located at-grade within the San Pedro Subdivision ROW between Florence Avenue and California Street (Figure 2-11). Access to the station will be via a pedestrian walkway north and south of the station platform. The pedestrian walkway on the north side of the station platform will connect to a reconfigured sidewalk on the south side of the Florence Avenue and Salt Lake Avenue (east) intersection. The existing water well east of Salt Lake Avenue will remain and will not be relocated. Existing freight tracks within the San Pedro Subdivision ROW will be relocated to the west to accommodate the new station platform and tracks. No parking facility will be provided at this station.

Figure 2-11. Florence/Salt Lake Station

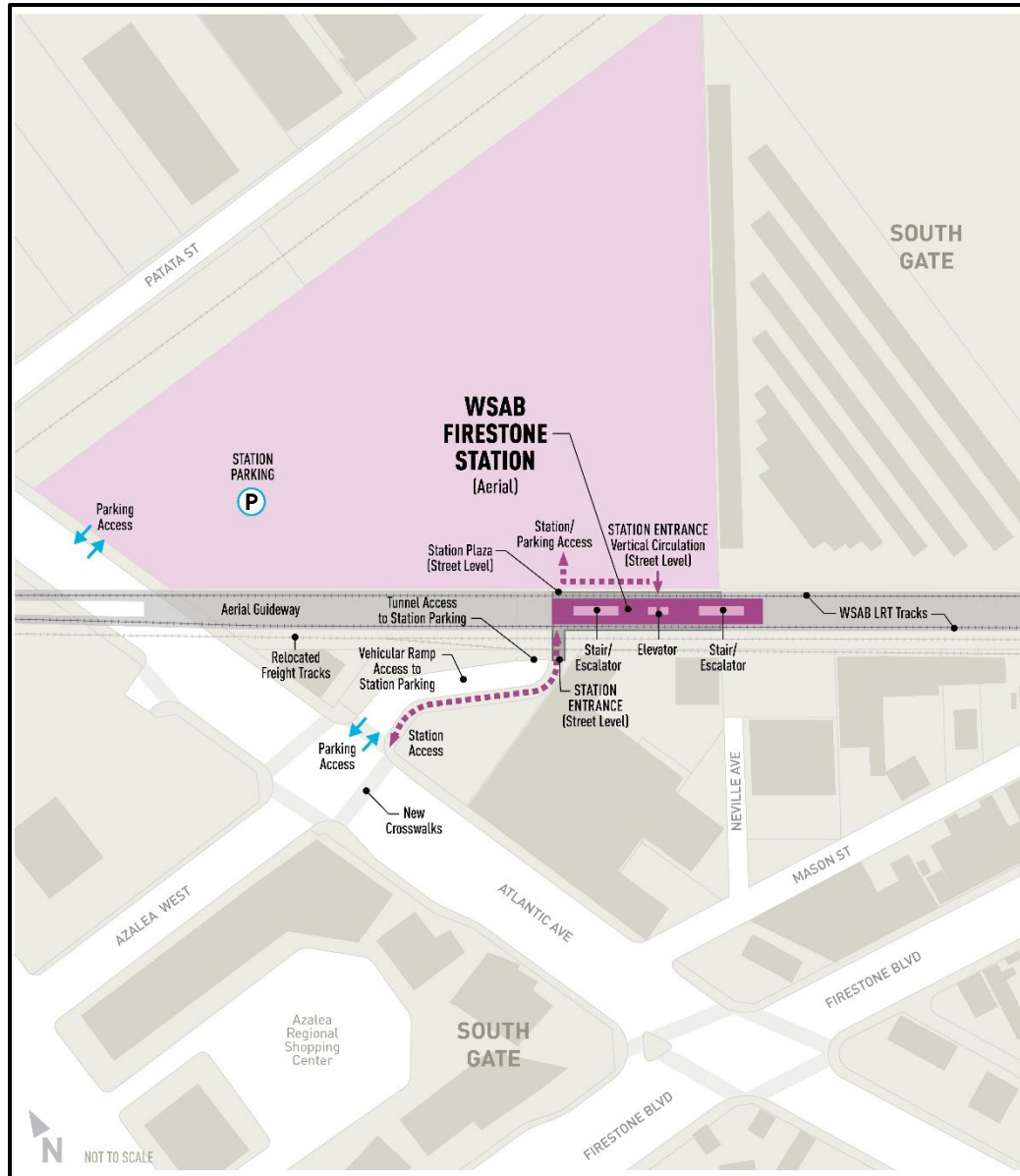


Source: Prepared by Cityworks Design and WSP in 2023

Firestone Station

The aerial Firestone Station will be located on an elevated structure within the existing San Pedro Subdivision ROW between Atlantic Avenue and Firestone Boulevard (Figure 2-12). Access to the station will be from the new park-and-ride lot and via a new pedestrian walkway from Atlantic Avenue to a pedestrian crossing across the at-grade freight tracks.

Figure 2-12. Firestone Station



Source: Prepared by Cityworks Design and WSP in 2023

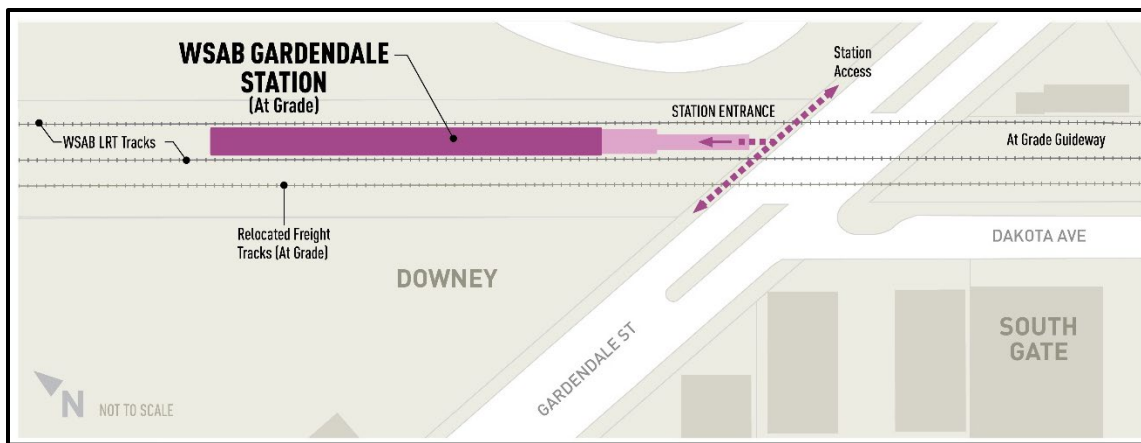
A 9.4-acre parking facility with up to approximately 600 parking spaces will be located at this station. Access to the parking facility will be via two driveways from Atlantic Avenue; the southernmost driveway will be accessed from Atlantic Avenue and will pass under the Firestone Station to the parking facility. Pedestrian access between the station platform and the parking facility will be via a new pedestrian walkway extending from Atlantic Avenue to a pedestrian crossing across the at-grade

freight tracks, north of the Firestone Station platform. The platform will be accessed via two sets of stairs, two sets of escalators, and two sets of elevators. Existing freight tracks within the San Pedro Subdivision ROW will be relocated to the west to accommodate the station platform and tracks.

Gardendale Station

The at-grade Gardendale Station will be located within the San Pedro Subdivision ROW, just north of Gardendale Street (Figure 2-13). Access to the station will be via a new pedestrian walkway on the south end of the platform that will connect to the sidewalk on the north side of Gardendale Street. Emergency egress will be provided on the north end of the platform. Within the San Pedro Subdivision ROW, existing freight tracks will be relocated to the west to accommodate the station platform and tracks. No parking facility is provided at this station.

Figure 2-13. Gardendale Station



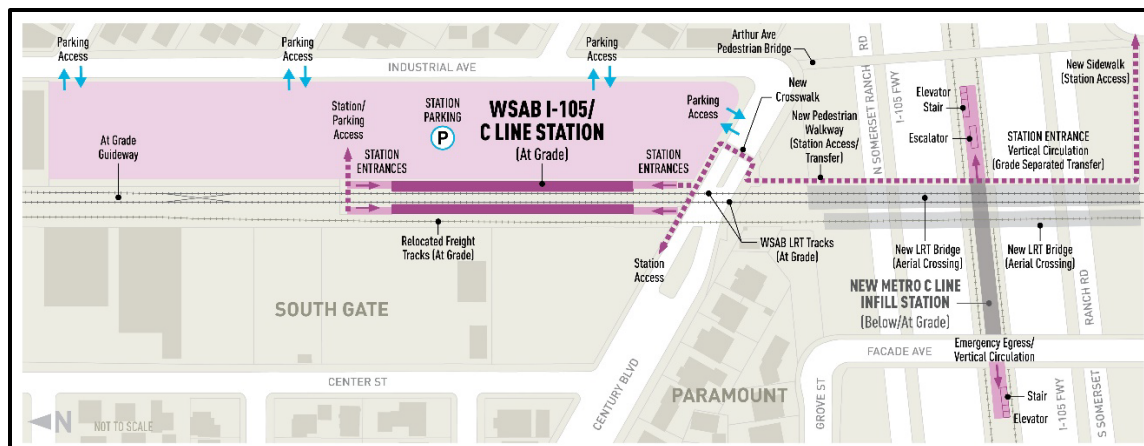
Source: Prepared by Cityworks Design and WSP in 2021

I-105/C Line Station

The I-105/C Line Station will provide a connection with the Metro C (Green) Line via a new station platform in the Metro C (Green) Line alignment within the I-105 freeway median. The I-105/C Line Station will be located at-grade within the rail ROW, north of Century Boulevard within the City of South Gate (Figure 2-14). This station will consist of two side platforms with access at the north and south ends of the station platform. A pedestrian crossing will be located at the northern end of the station platforms with access to the parking facility. Access from the southern end of the platform will be provided via a pedestrian walkway to Century Boulevard. To accommodate the station platforms, the existing freight track will be relocated to the west, which requires demolition of the existing freight bridge and construction of a new freight bridge.

A new station along the existing Metro C (Green) Line will be located within the median of the I-105 freeway within the City of Paramount. The Metro C (Green) Line tracks will be realigned to provide space for the new center platform. This station will be accessed via stairs, escalators, and elevators from a pedestrian walkway incorporated into the new LRT bridge on the eastern end of the station. The pedestrian walkway will be connected on the north side of the freeway to the walkway at Century Boulevard. On the south side of the freeway, the pedestrian walkway will connect to a pedestrian walkway between the San Pedro Subdivision ROW and Arthur Avenue to the east. On the west end of the platform, an emergency-only exit will be provided from the I-105/C Line infill station to the Façade Avenue overpass bridge, though design does not preclude an entrance.

Figure 2-14. I-105/C Line Station



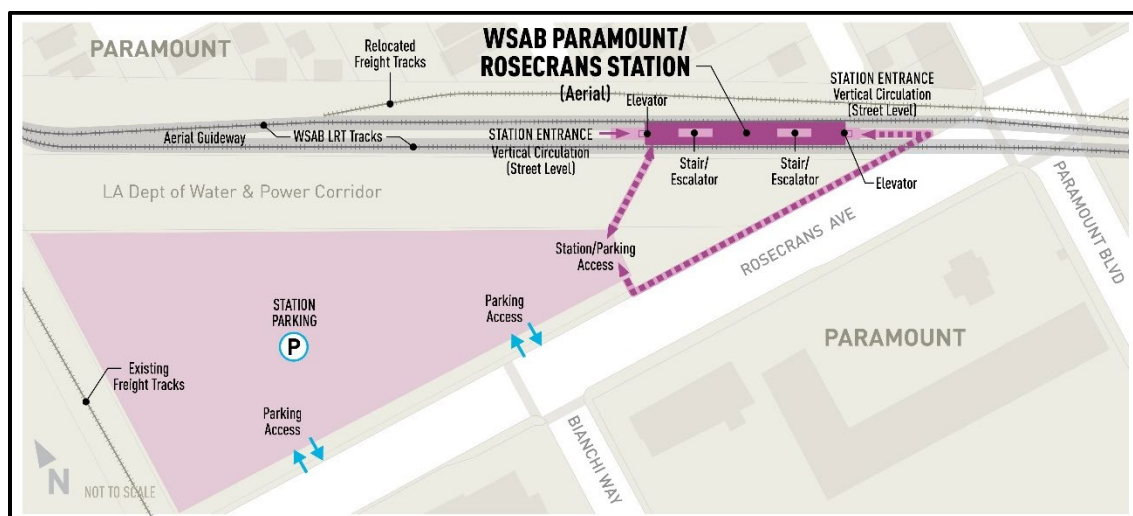
Source: Prepared by Cityworks Design and WSP in 2023

An approximately 3.4-acre parking facility will be located on the east side of the I-105/C Line Station platforms north of Century Boulevard with approximately 340 to 360 parking spaces. The range of parking spaces is dependent on the location of the TPSS at the I-105/C Line Station. Vehicle access to the parking facility is via a driveway entrance at Century Boulevard and via three separate driveways from Industrial Avenue. Pedestrian pathways between the parking facilities and the station platform will be provided from Century Boulevard and from the north end of the platform.

Paramount/Rosecrans Station

The aerial Paramount/Rosecrans Station will be within the PEROW northwest of the intersection of Paramount Boulevard and Rosecrans Avenue (Figure 2-15). Street-level access will be provided via a pedestrian walkway along the north side of Rosecrans Avenue to an at-grade plaza where two sets of stairs, two sets of escalators, and two sets of elevators will provide access to the boarding platform.

Figure 2-15. Paramount/Rosecrans Station



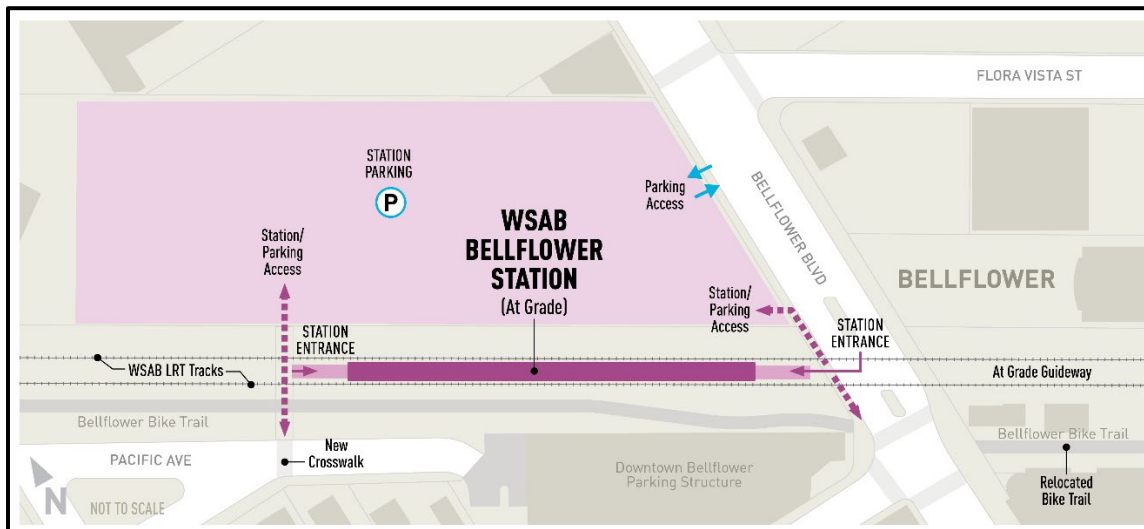
Source: Prepared by Cityworks Design and WSP in 2023

A 3.9-acre parking facility with up to approximately 490 parking spaces will be located southwest of the Paramount/Rosecrans Station adjacent to a utility property. Access to the parking facility will be via two separate driveways on Rosecrans Avenue. Pedestrian access between the parking facility and station platform will be via a pedestrian pathway connecting the northern end of the station platform to the eastern corner of the parking facility and the sidewalk along Rosecrans Avenue. The existing at-grade freight tracks will be realigned to the north within the PEROW to accommodate the station platform and provide access to the World Energy industrial facility farther south.

Bellflower Station

The at-grade Bellflower Station will be within the PEROW, west of Bellflower Boulevard (Figure 2-16). Access to the station will be via a pedestrian walkway on the southeast end of the platform, connecting to the sidewalk on Bellflower Boulevard. Pedestrian access will be provided from both ends of the station platform. On the northwest end of the station platform, pedestrian access will be provided by pedestrian crossings to Pacific Avenue or directly to the proposed parking facility north of the station. On the southeast end of the station platform, pedestrian access will be provided to Bellflower Boulevard. The Bellflower Bike Trail will be realigned within the PEROW to accommodate the station platform and tracks.

Figure 2-16. Bellflower Station



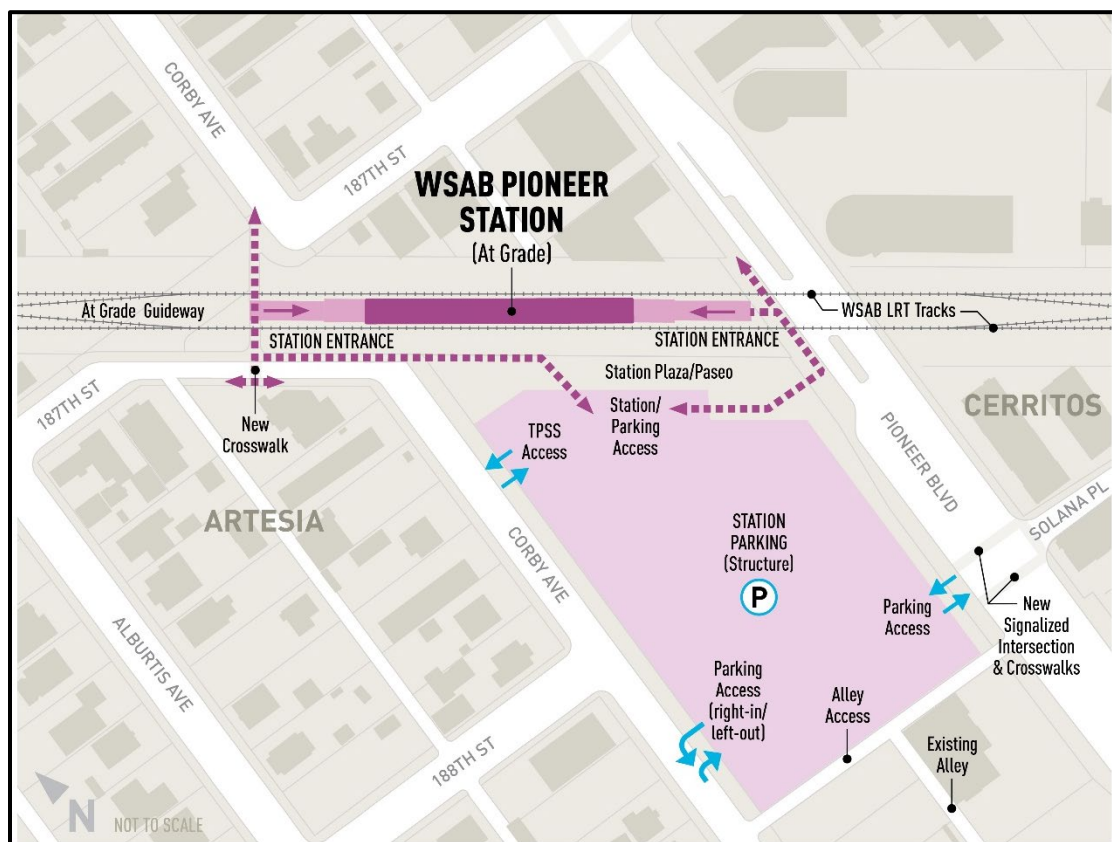
Source: Prepared by Cityworks Design and WSP in 2021

A 2.5-acre parking facility with up to approximately 260 parking spaces will be located on the north side of the Bellflower Station. The parking facility will be accessed via a driveway from Bellflower Boulevard. Pedestrian access from the parking facility to the station will be provided via a pedestrian pathway from Bellflower Boulevard.

Pioneer Station

The at-grade Pioneer Station will be the southern terminus for the LPA. Located near the southern boundary of Artesia, the Pioneer Station will be located west of Pioneer Boulevard and south of 187th Street (Figure 2-17). Access to the station will be via pedestrian walkways on both the northwest and southeast ends of the platform. The pedestrian walkway on the northwest will connect directly to 187th Street, and the walkway on the southeast will connect directly to Pioneer Boulevard. It is anticipated that bus bays along Pioneer Boulevard would be provided to accommodate future bus connections to the station. Bus bays will be determined during future stages of design based on a bus-rail interface study and in coordination with jurisdictions and transit service providers when potential changes or additions to bus service are known. The bus-rail interface study occurs closer to revenue service in order to ensure that adjustments to bus service reflect the population, employment, and ridership demand in the service area. The Pioneer Station will require the closure of 187th Street that will result in sidewalk modifications at 187th Street north of the station location and a new mid-block crosswalk between 187th Street and Corby Avenue. South of the station, 187th Street access to Corby Avenue will be maintained. 188th Street between Corby Avenue and Pioneer Boulevard will also be closed to accommodate the new parking structure.

Figure 2-17. Pioneer Station



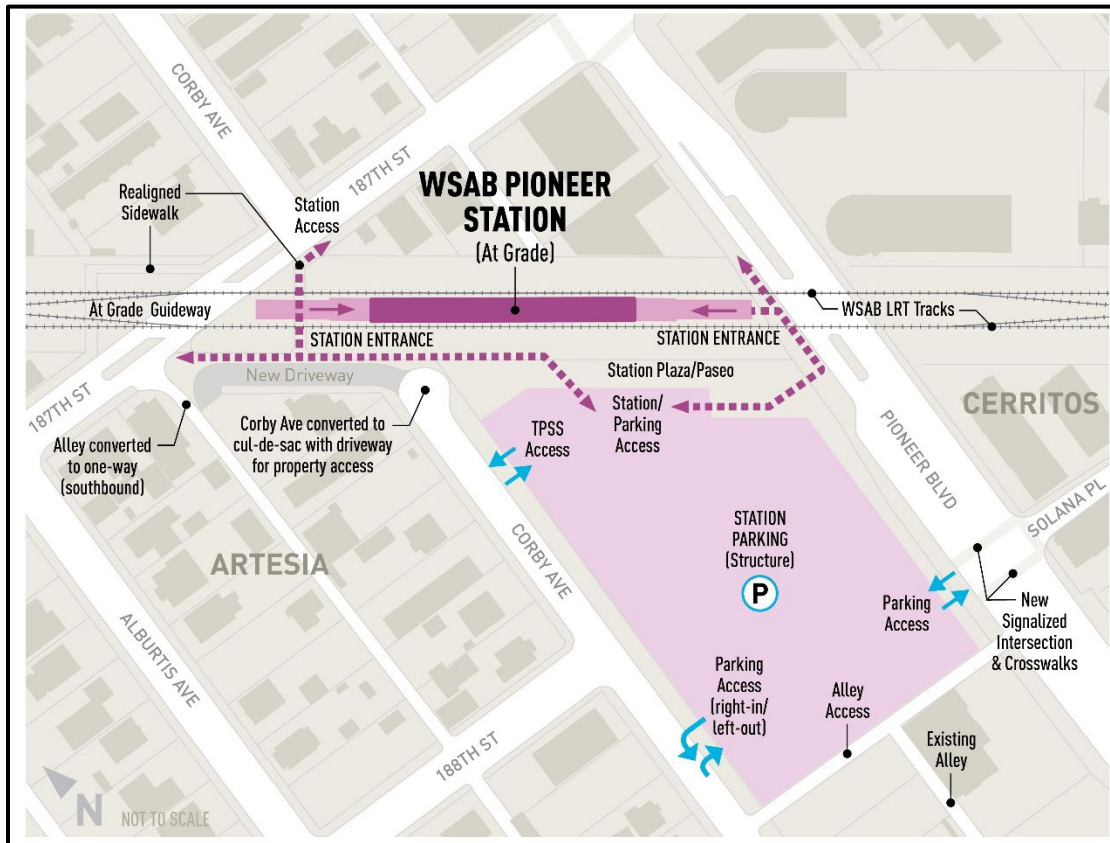
Source: Prepared by Cityworks Design and WSP in 2023

A 2.7-acre, five-story parking structure with approximately 1,100 parking spaces will be located south of the Pioneer Station. Access to the parking facility and station platform will be via Pioneer Boulevard and Corby Avenue. Pedestrian access from Pioneer Boulevard to the parking facility will be via Pioneer Boulevard from the southeast end of the station platform.

2.5.2.3 Design Option – Close 186th Street

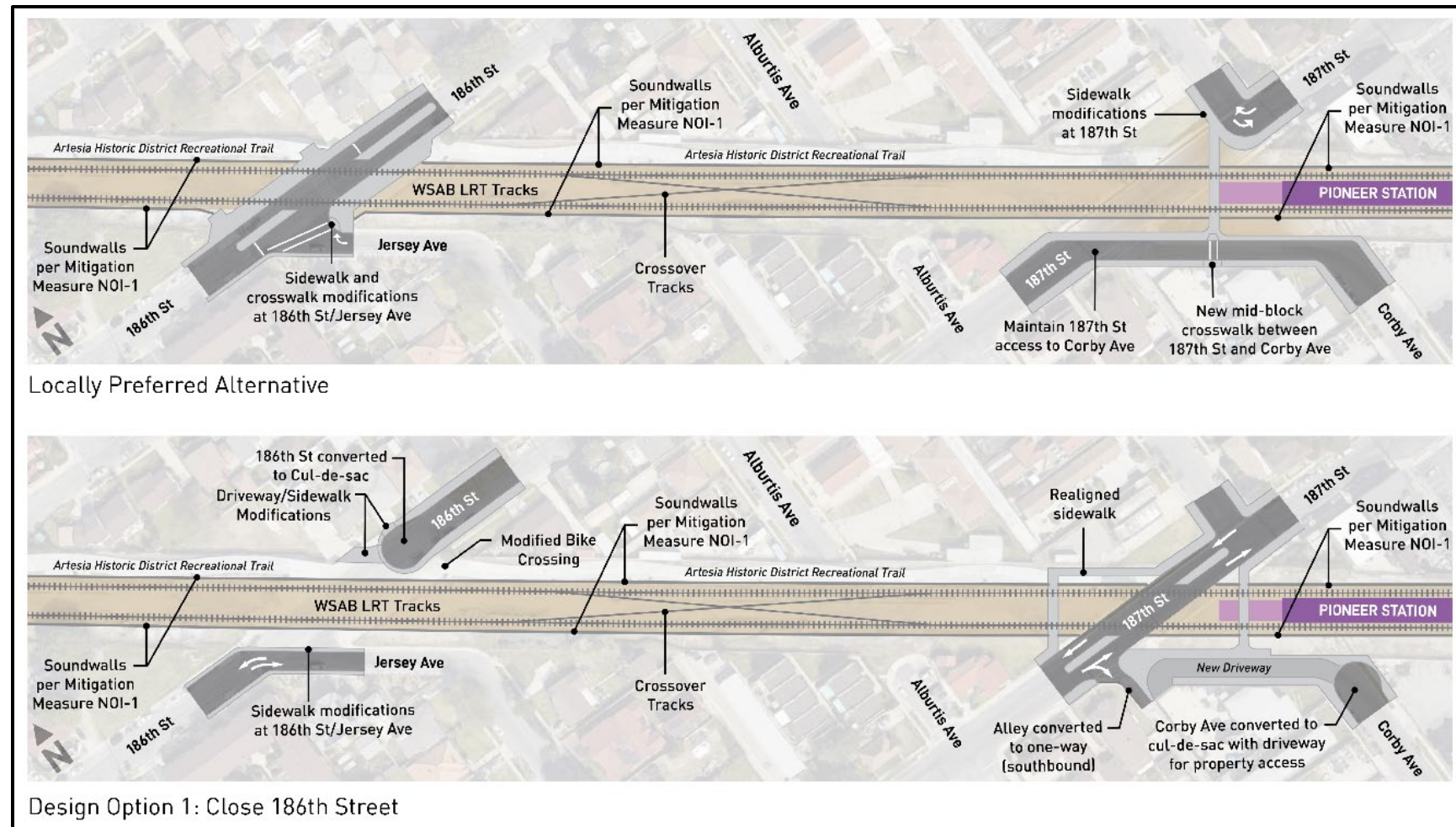
The LPA includes one design option. The design option would close 186th Street but keep 187th Street open to traffic in the City of Artesia. Under the design option, 186th Street would be converted into a cul-de-sac and 186th Street would connect into Jersey Avenue south of the alignment. Driveway and sidewalk modifications would be required to accommodate the new street configuration. A modified bike trail crossing would need to be constructed at the 186th Street cul-de-sac. 187th Street would remain open to traffic and Corby Avenue would become a cul-de-sac with an access driveway for the existing business. The alley between Alburdis Avenue and Corby Avenue would be converted to one-way southbound only. Sidewalk modifications would be required to accommodate the new street configuration. Access to the Pioneer Station and Pioneer Station parking facility would remain the same as described in Section 2.5.2.2 under the heading “Pioneer Station.” The Pioneer Station with the design option is shown in Figure 2-18. Figure 2-19 provides a comparison of the LPA with and without the design option.

Figure 2-18. Pioneer Station with the Design Option: Close 186th Street



Source: Prepared by Cityworks Design and WSP in 2023

Figure 2-19. Locally Preferred Alternative with and without the Design Option: Close 186th Street



Source: Prepared by Cityworks Design and WSP in 2023

2.5.2.4 Maintenance and Storage Facility

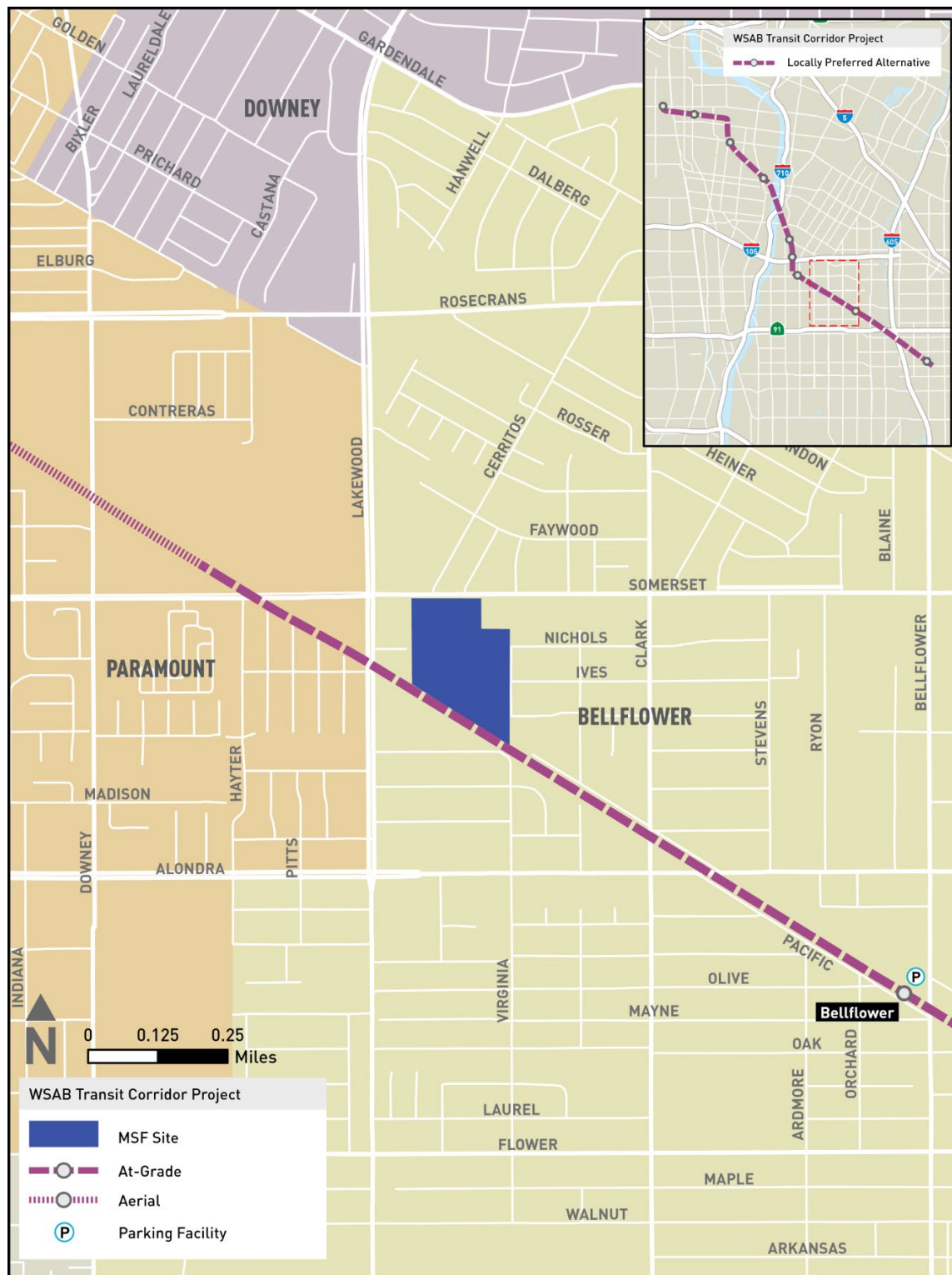
Generally, each LRT project requires an MSF facility to provide daily servicing and cleaning, inspection and repairs, and storage of LRVs. Activities may take place in the MSF throughout the day and night depending upon train schedules, workload, and maintenance requirements.

The MSF site is an approximately 21-acre site located in the City of Bellflower (Figure 2-20). The city-owned site is currently developed with a recreational commercial business (the Hollywood Sports Paintball & Airsoft Park and Bellflower BMX). The MSF site is bounded by a mobile home community and industrial facilities to the west, Somerset Boulevard and apartment complexes to the north, residential homes to the east, and the PEROW and Bellflower Bike Trail to the south.

The MSF will have storage tracks, each with sufficient length to store three-car train sets and a maintenance-of-way vehicle storage. The MSF will include a main shop building with administrative offices, a cleaning platform, a TPSS, employee parking, a vehicle wash facility, a paint and body shop, and other facilities as needed. The east and west yard leads (i.e., the tracks leading from the mainline to the facility) will have sufficient length for a three-car train set. Figure 2-21 shows the layout of the MSF site. Access to the site will be via a signalized driveway at Somerset Boulevard and Bayou Avenue. In total, the MSF could accommodate up to 80 LRVs to serve the Project's operations plan and provide over 200 parking spaces. The MSF site is adjacent to the LPA alignment, and lead tracks⁹ will be constructed within the Metro-owned PEROW.

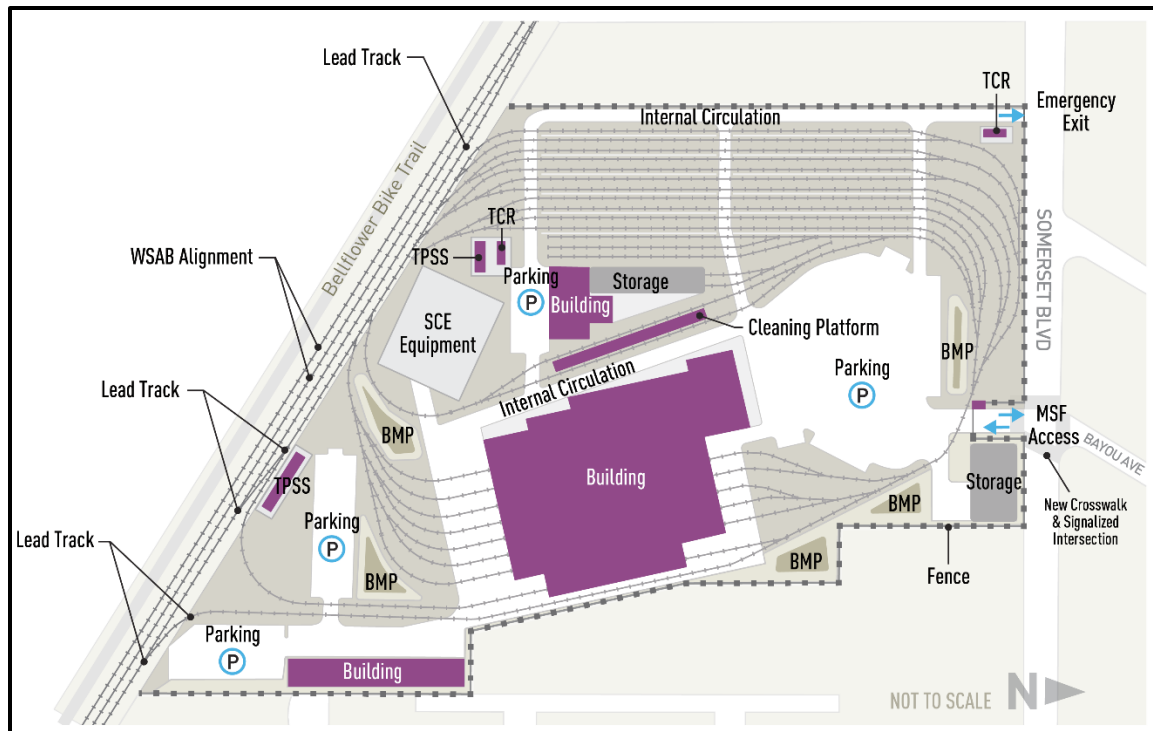
⁹ A lead track is a track that connects an MSF rail yard to the portion of the alignment that provides service to passengers. This track allows an LRV to transition between the alignment for passenger service and the MSF facility for maintenance and/or storage.

Figure 2-20. Maintenance and Storage Facility Site



Source: WSP 2023

Figure 2-21. Maintenance and Storage Facility Layout



Source: Prepared by Cityworks Design and WSP in 2023

Notes: BMP = Best Management Practice; MSF = Maintenance and Storage Facility; TCR = Train Control Room;

TPSS = Traction Power Substation

2.5.2.5 System Components and Ancillary Facilities

The LRT system components will adhere to the Metro Rail Design Criteria (Metro 2020h), or equivalent design criteria, and will use a similar design as existing Metro LRT lines, such as the Metro E (Expo) Line. The following summarizes the system components and ancillary facilities required for the Project (see Appendix B, *Final Advanced Conceptual Alignment Design*, and Appendix C, *System Components and Ancillary Facilities*, of this Final EIS/EIR for more detail).

LRT Guideways (at-grade and aerial). The distance between the at-grade LRT track centerlines will be a minimum of 14 feet, and the distance between the nearest realigned freight track centerline and LRT track centerline will be a minimum of 20 feet.

Aerial LRT guideways will be supported by retained fill embankments, columns, or straddle bents. Typical aerial structures will be approximately 35 feet wide with aerial structure columns placed in approximately 120-foot intervals and in varying intervals due to infrastructure constraints. The aerial guideway spanning over the UPRR ROW will have a minimum vertical clearance of 24 feet over freight and a minimum of 15 feet over roadways as measured between the bottom of the bridge and the top of the roadway surface.

Overhead Catenary System (OCS). The OCS electrically powers the LRT through a contact wire suspended approximately 20 feet above the track that is supported by poles spaced at an average interval of 150 feet. The catenary poles will be generally located in the center of the alignment or located on both sides of the tracks in some locations.

Tail Tracks. Tail tracks are additional tracks that extend beyond the end of the mainline tracks and can be used for temporarily parking, storing, or reversing the direction of trains. While the tracks are designed to allow for layovers if needed, trains will not sit at the end of the line.

Crossovers. A track crossover allows a train to reverse direction and use an adjacent track to continue operation.

Traction Power Substations. The TPSSs provide power to the OCS and are typically metal prefabricated buildings approximately 15 feet wide by 40 feet long by 15 feet high. Each TPSS site will require an area of approximately 80 feet by 45 feet or equivalent in different configurations. There are 17 TPSS facilities planned for the LPA. See Appendix C, *System Components and Ancillary Facilities*, of this Final EIS/EIR for a summary of TPSS locations.

Train Control House and Electric Power Switches. The train control house contains signal equipment and electric power switches (contained in metal box-like enclosures) that will transmit electric power from the electric grid to the traction power and other rail systems.

Radio Antennas. Radio antennas will be installed along the alignment to support communications between the transmitter and receiver. The radio antenna will be 35 to 60 feet high, measured from ground level, or alternatively two 35-foot-tall poles could be substituted. Four radio antennas are planned, dispersed along the alignment. These locations remain unchanged from the Draft EIS/EIR for Alternative 3. See Appendix C, *System Components and Ancillary Facilities*, of this Final EIS/EIR for a summary of the radio antenna locations.

Grade Crossings. A grade crossing can be either at-grade or a physical separation between the railroad tracks and a roadway and consists of roadway crossings, freeway crossings, railroad crossings, and waterway crossings. Typical at-grade crossings will include the following features, as applicable: roadway crossing gates, pedestrian crossing gates, new sidewalks, ADA-compliant ramps, sidewalks, bulb-outs, raised medians, and/or other intersection amenities. Grade separations for the LPA are summarized in Table 2.2. See Appendix C, *System Components and Ancillary Facilities*, of this Final EIS/EIR for a summary of the grade crossing locations.

The alignment will cross the following existing concrete-lined flood channels:

- **LA River Channel.** New LRT bridge to be constructed northeast of the existing LA River truss bridge to cross the LA River; existing truss bridge will remain unaltered.
- **Rio Hondo Channel.** New LRT bridge to be constructed northeast of the existing bridge; existing bridge will remain unaltered.
- **San Gabriel Channel.** New LRT bridge to be constructed in the same location as the existing abandoned freight bridge; existing abandoned freight bridge will be demolished.

Freight Track Realignment. The LPA will be located parallel to active freight track(s) in portions of the UPRR-owned Wilmington Branch ROW (between approximately East 55th Street along Long Beach Avenue to Slauson Avenue), UPRR-owned La Habra Branch ROW (between Slauson Avenue along Randolph Street to approximately Bissell Place), Ports of Los Angeles and Long Beach-owned San Pedro Subdivision ROW (between Randolph Street to approximately Paramount Boulevard), and the Metro-owned PEROW (between its intersection with the San Pedro Subdivision ROW from approximately Paramount Boulevard to Somerset

Street). Along the Wilmington Branch ROW, the LRT will be in an aerial viaduct that will overhang the ROW. The LPA will require the following realignments of freight track(s) to accommodate the alignment and maintain existing freight operations:

- Relocation below the LPA alignment within the Wilmington Branch ROW
- Relocation to the north of the LPA alignment within the La Habra Branch ROW
- Relocation to the west of the LPA alignment within the San Pedro Subdivision ROW
- Relocation to the north of the LPA alignment within Metro-owned PEROW

The LPA will provide a minimum 20-foot clearance between the track centerlines of the closest LRT and freight track. Table 2.7 details the length of freight relocation, and Figure 2-22 identifies where the freight relocations will occur.

Table 2.7. Freight Track Realignment

Rail ROW	Shared ROW with Freight (miles)	Freight Relocation (miles)
Wilmington Branch	0.3	0.1
La Habra Branch	2.3	2.3
San Pedro Subdivision	6.1	5.5
Metro-owned PEROW	1.2	0.8
Total	9.8	8.7

Source: Prepared by WSP on behalf of Metro in 2023

Notes: PEROW = Pacific Electric Right-of-Way; ROW = right-of-way



Pedestrian Facilities. Pedestrian facilities for the LPA include bridges and pedestrian access.

- Pedestrian Bridges
 - Two bridges at the Slauson/A Line Station to connect between the WSAB station and the Metro A Line platforms
- Pedestrian Access
 - Pedestrian walkway to provide access between the WSAB I-105/C Line Station and the new infill I-105/C Line Station via the WSAB LRT bridge over the freeway to vertical circulation elements connecting to the new infill station
 - New pedestrian bridge to replace the existing pedestrian bridge at Paramount High School to connect the Paramount High School east and west campuses

Bicycle Facilities. A portion of the existing Bellflower Bike Trail, a Class I bike path along the PEROW between Paramount Park and Somerset Boulevard in the City of Paramount, will be altered to accommodate the LPA. The existing bike trail between Somerset Boulevard and Lakewood Boulevard will be relocated from the south side to the north side of the ROW to accommodate the LRT alignment.

Bike hubs will be provided at station locations based on the demand. The bike hubs may include bicycle racks, lockers, and secure bike parking in addition to on-call mechanics and access to on-site Metro staff. Specific bike hub locations will be developed during future stages of design.

Metro Public Art. The Project will include integrated public art in accordance with the Metro Art Program Policy. Integrated site-specific artwork allows for elements of variability to promote a sense of place and connection with the surrounding community.

2.5.2.6 Rail Operating Characteristics

The operating hours and schedule assumptions for the LPA were developed based on typical Metro LRT operating characteristics. The LPA will operate approximately 22 hours daily, seven days per week, from about 4:00 a.m. to 2:00 a.m.

Table 2.8 summarizes the proposed headways for the LPA. The LPA will operate with weekday peak headways of approximately 5 minutes and will have headways of approximately 10-minutes during off-peak hours. Headways specified for other periods and weekends are modeled after the Metro A (Blue) Line schedule because it is the nearest, and partially parallel, LRT line to the LPA. Therefore, weekday early evening headways of approximately 10 minutes are set at the same headway as the base period, tapering to approximately 20 minutes during the late evening, night, and early morning. For weekends, the LPA will operate with approximate 10-minute headways during most of the day, tapering to approximately 20 minutes for the late evening, night, and early morning.

Table 2.8. Locally Preferred Alternative Headways by Time Period

Day of Week	Headway (in minutes)						
	Early	AM Peak ¹	Base	PM Peak	Early Eve	Late Eve	Night
Mon – Fri	15	5	10	5	10	20	20
Sat/Sun	20	10	10	10	10	20	20

Source: Prepared on behalf of Metro in 2023

Table 2.9 shows proposed train consists (cars per train) for the LPA. Three-car train consists are assumed for weekdays and two-car trains are assumed during late evening and night service. Two-car train consists are assumed for weekends and holidays.

Table 2.9. Locally Preferred Alternative Train Consist by Time Period

Day of Week	Train Consist ¹ (Cars per Train)						
	Early	AM Peak	Base	PM Peak	Early Eve	Late Eve	Night
Mon – Fri	3	3	3	3	3	2	2
Sat/Sun	2	2	2	2	2	2	2

Source: Prepared on behalf of Metro in 2023

Note: ¹ Consist refers to multiple train units of cars that are coupled into sets. Passengers can typically move between the consist of train cars.

2.5.2.7 Construction Activities

Major construction activities of the LPA will involve the following:

- Preparation and demolition of structures on construction work sites
- Freight rail line relocation
- Utility relocation
- At-grade and aerial guideway system construction, including rail systems components
- At-grade, and aerial station construction
- Street-modifications
- Demolition of existing rail, road, and/or pedestrian bridges and reconstruction of replacement bridges
- Construction of parking facilities
- Construction of an MSF

Construction activities will primarily be located within the public and/or rail ROW, or on private property that will be acquired for project components such as parking facilities, the MSF, or TPSS sites. Construction staging and laydown areas will also be located either within the public and/or rail ROW or on private property acquisitions.

There may be periods during which various components of the LPA are under construction concurrently throughout the 14.5-mile alignment. Additionally, some portions may be constructed in phases with activities occurring progressively from south to north along the alignment or vice versa. A construction plan will be developed during the final design phase of the LPA to further detail the construction durations, schedule, and sequencing. Working hours of construction will vary to meet the type of work being performed and to meet local

ordinance restrictions. Nighttime and weekend construction may be required to mitigate potential impacts to the commute period and traffic congestion, as well as to accommodate construction scheduling for specific work activities. Such nighttime and weekend construction activities may include, but are not limited to, construction within freeway ROW, trackwork construction, grade separation construction, and catenary wire installation.

Construction activities for the LPA are anticipated to commence in 2024 and continue through 2032, with system testing beginning in 2034 and revenue service beginning in 2035. Further information on construction means and methods and the locations of construction staging areas is provided in Chapter 4, Section 4.19, Construction Impacts, of this Final EIS/EIR.

2.5.2.8 Cost

The capital cost estimate for the LPA has been updated to reflect refinements to the LPA, escalation to 2023 dollars, modifications to contingencies based on FTA recommendations, and a recalibration of costs associated with professional services based on previous Metro projects. Additionally, the O&M cost estimate for the LPA has been updated to reflect a more recent baseline year for Metro expenditures as well as escalation to 2023 dollars. Refer to the *Locally Preferred Alternative Capital Cost Report* (Metro 2024x) and the *Final Operating and Maintenance Cost Report* (Metro 2024w) for additional details on these cost updates. Cost estimates include the cost for the Bellflower MSF as part of the LPA. Cost differences for the design option are negligible.

Table 2.10 presents the capital and O&M costs associated with the LPA, in 2023 dollars. The capital cost estimate is inclusive of stations, guideway and track elements, MSF, sitework, right-of-way, soft costs (professional services), vehicles, and unallocated contingency assumptions. The O&M cost estimate is inclusive of vehicle operations, vehicle maintenance, non-vehicle maintenance, and general administration.

Table 2.10. LPA Cost Estimates

Cost Type	Cost Estimate (\$2023)
Capital Cost	\$5.9 billion
Operating and Maintenance Cost	\$118 million per year

Source: Metro 2024x and Metro 2024w

A Year of Expenditure (YOE) cost estimate has also been calculated for the LPA based on the updated project schedule. The YOE cost estimate considers the effect of inflation on future expenditures given the Project's timeline extending from 2023 to its expected commencement of revenue service in 2035. The YOE cost estimate escalates the overall capital cost estimate to the estimated year of expenditure based on the project schedule. Considering the project schedule, the YOE cost estimate is estimated to be approximately \$7.2 billion.

Metro has committed funding for the Project through two separate voter-approved sales tax ordinances and has also been awarded state grant funding. In addition, Metro has allocated planned local, state, and federal funding for the LPA as part of its LRTP Financial Forecast and Measure M Expenditure Plan. These would be used to fund the costs identified in Table

2.10. See Appendix F, Funding and Financing for the West Santa Ana Branch Project, of this Final EIS/EIR for additional information regarding funding.

2.5.3 Anticipated Permits, Discretionary Actions, and Agency Approvals

The LPA will require various environmental permits and/or approvals, as summarized in Table 2.11.

Table 2.11. Permits and Approvals

Agency	Agency/Jurisdiction	Permit/Approval Required	Anticipated Phase
Federal Agencies	Federal Transit Administration	Approval of EIS as Lead Agency under NEPA	End of Environmental Phase
	United States Army Corps of Engineers	Section 404 of the Clean Water Act	Construction Phase; Final Design
		Section 14 of the Rivers and Harbors Act (Section 408) ¹	Construction Phase; Final Design
State Agencies	State Historic Preservation Officer	Section 106 consultation and concurrence	Environmental Phase; prior to Construction Phase
	California Department of Fish and Wildlife	1602 Streambed Alteration Agreement	Construction Phase; Final Design
	California Department of Transportation	Permits approvals for encroachment on several freeways: I-710, I-105, SR-91, I-605	Construction Phase; Final Design
	State Department of Toxic Substance Control	Hazardous materials cleanup	Construction Phase
	State Water Resources Control Board	NPDES Dewatering Permit	Construction Phase; Final Design
		LA County MS4 NPDES Package	Construction Phase; Final Design
		Industrial General Permit	Construction Phase; Final Design
		Construction General Permit and SWPPP	Construction Phase; Final Design
	California Public Utilities Commission	Grade Separations, Crossings, State Safety Oversight	Construction Phase; Final Design; End of Construction, Testing and Start Up

Agency	Agency/Jurisdiction	Permit/Approval Required	Anticipated Phase
Regional Jurisdiction	Los Angeles County Metropolitan Transportation Authority Board of Directors	Certification of the EIR, adoption of Findings and Statement of Overriding Considerations, adoption of the Mitigation Monitoring and Reporting Program as Lead Agency under CEQA	End of Environmental Phase
	Los Angeles Regional Water Quality Control Board	Clean Water Act Section 401	Construction Phase; Final Design
	South Coast Air Quality Management District	Consultation to identify best practices for construction emissions. Clean Air Act Title V permit (if required)	Construction Phase
	Ports of Long Beach and Los Angeles – San Pedro Subdivision	Real estate transaction; Approval of track relocations	Construction Phase; Final Design
	Union Pacific Railroad	Approval of track relocations; Real estate transaction	Construction Phase; Final Design
	Southern California Edison	Permits and real estate transaction	Construction Phase; Final Design
	Los Angeles County Flood Control District	Permits and real estate transaction	Construction Phase; Final Design
	Los Angeles County Department of Public Works	Permits	Construction Phase; Final Design

Agency	Agency/Jurisdiction	Permit/Approval Required	Anticipated Phase
Local Jurisdictions	Los Angeles Department of Transportation	Permits and/or discretionary actions required	Environmental Phase; prior to Construction Phase
	Los Angeles Department of Water and Power	Permits and real estate transaction	Construction Phase; Final Design
	Los Angeles Fire Department	Discretionary actions required	Environmental Phase; prior to Construction Phase
	City of Los Angeles County of Los Angeles City of Huntington Park City of Bell City of Cudahy City of Vernon City of South Gate City of Downey City of Paramount City of Bellflower City of Artesia City of Cerritos	Permits and/or discretionary actions required	Environmental Phase; prior to Construction Phase

Source: Prepared by WSP on behalf of Metro in 2023

Notes: ¹ Maintained by Los Angeles County Flood Control District

CEQA = California Environmental Quality Act; EIR = environmental impact report; EIS = environmental impact statement; MS4 = municipal separate storm sewer system; NEPA = National Environmental Policy Act; NPDES = National Pollutant Discharge Elimination System; SWPPP = Stormwater Pollution Prevention Plan

2.5.4 Intended Use

The Final EIS/EIR will be used to inform public agency decisionmakers and the general public of the adverse effects and impacts to the environment from the Project. This document will be used by the Metro Board of Directors to inform its decision to certify the Final EIR and for the preparation and adoption of the Mitigation Monitoring and Reporting Program, Finding of Facts and Statement of Overriding Considerations to satisfy CEQA requirements. This document will be used by FTA to inform its decision to issue the Record of Decision to satisfy NEPA requirements for the Project.