

# West Santa Ana Branch Transit Corridor

Final Cumulative Impact Analysis Report



Metro®



# WEST SANTA ANA BRANCH TRANSIT CORRIDOR PROJECT

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## Final Cumulative Impact Analysis Report

*Prepared for:*



**Metro**<sup>®</sup>

Los Angeles County  
Metropolitan Transportation Authority

*Prepared by:*



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March 2024



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## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1-1</b>
1.1	Study Background .....	1-1
1.2	Alternatives Evaluation, Screening, and Selection Process.....	1-1
1.3	Draft Environmental Impact Statement/Environmental Impact Report .....	1-2
1.4	Report Purpose and Structure .....	1-4
1.5	General Background.....	1-4
1.6	Methodology .....	1-5
<b>2</b>	<b>PROJECT DESCRIPTION .....</b>	<b>2-1</b>
2.1	No Build Alternative .....	2-4
2.2	Locally Preferred Alternative .....	2-6
2.2.1	Refinements to the Locally Preferred Alternative .....	2-6
2.2.2	Alignment Configuration .....	2-8
2.2.3	Design Option – Close 186th Street.....	2-12
2.2.4	Maintenance and Storage Facility .....	2-14
<b>3</b>	<b>REGULATORY FRAMEWORK.....</b>	<b>3-1</b>
3.1	Federal.....	3-1
3.1.1	Council on Environmental Quality (40 CFR Section 1500 – 1508) .....	3-1
3.2	State .....	3-1
3.2.1	California Environmental Quality Act (Cal. Public Resources Code, Section 21000 et seq.) and CEQA Guidelines (14 Cal. Code Regs., Section 15000 et seq.) .....	3-1
<b>4</b>	<b>AFFECTED ENVIRONMENT/EXISTING CONDITIONS.....</b>	<b>4-1</b>
4.1	Affected Area .....	4-1
4.2	Forecasted Growth .....	4-3
<b>5</b>	<b>ENVIRONMENTAL CONSEQUENCES/ENVIRONMENTAL IMPACTS.....</b>	<b>5-1</b>
5.1	No Build Alternative .....	5-1
5.2	Locally Preferred Alternative, Design Option, MSF Site.....	5-1
5.2.1	Transportation.....	5-1
5.2.2	Land Use and Development .....	5-2
5.2.3	Communities and Neighborhoods .....	5-3
5.2.4	Acquisitions and Displacements.....	5-3
5.2.5	Visual Quality and Aesthetics .....	5-4
5.2.6	Air Quality.....	5-5
5.2.7	Greenhouse Gas Emissions.....	5-6
5.2.8	Noise and Vibration.....	5-7
5.2.9	Ecosystems and Biological Resources .....	5-8
5.2.10	Geotechnical/Subsurface/Seismic Hazards.....	5-8
5.2.11	Hazards and Hazardous Materials .....	5-9
5.2.12	Water Resources .....	5-9
5.2.13	Energy.....	5-10
5.2.14	Historic, Archaeological, and Paleontological Resources .....	5-10
5.2.15	Tribal Cultural Resources.....	5-11
5.2.16	Parklands and Community Facilities.....	5-11
5.2.17	Economic and Fiscal Impacts .....	5-12
5.2.18	Safety and Security.....	5-12

5.2.19	Environmental Justice .....	5-13
5.3	U.S. Army Corps of Engineers Facilities .....	5-13
5.4	California Department of Transportation Facilities .....	5-13
<b>6</b>	<b>CONSTRUCTION IMPACTS .....</b>	<b>6-1</b>
6.1	Construction Activities .....	6-1
6.2	Regulatory Background and Methodology .....	6-1
6.2.1	Regulatory Background .....	6-1
6.2.2	Methodology .....	6-1
6.3	No Build Alternative.....	6-1
6.4	Locally Preferred Alternative, Design Option, MSF Site .....	6-2
6.4.1	Transportation.....	6-2
6.4.2	Land Use and Development.....	6-2
6.4.3	Communities and Neighborhoods.....	6-2
6.4.4	Acquisitions and Displacements .....	6-3
6.4.5	Visual Quality and Aesthetics .....	6-3
6.4.6	Air Quality .....	6-4
6.4.7	Greenhouse Gas Emissions .....	6-5
6.4.8	Noise and Vibration .....	6-5
6.4.9	Ecosystems and Biological Resources.....	6-7
6.4.10	Geotechnical/Subsurface/Seismic Hazards .....	6-7
6.4.11	Hazards and Hazardous Materials.....	6-7
6.4.12	Water Resources .....	6-8
6.4.13	Energy .....	6-8
6.4.14	Historic, Archaeological, and Paleontological Resources .....	6-9
6.4.15	Tribal Cultural Resources .....	6-9
6.4.16	Parklands and Community Facilities .....	6-10
6.4.17	Economic and Fiscal Impacts.....	6-10
6.4.18	Safety and Security .....	6-10
6.4.19	Environmental Justice .....	6-11
6.5	U.S. Army Corps of Engineers Facilities .....	6-11
6.6	California Department of Transportation Facilities .....	6-11
<b>7</b>	<b>REFERENCES .....</b>	<b>7-1</b>

## Tables

Table 2.1.	No Build Alternative – Existing Transportation Network and Planned Improvements .....	2-4
Table 2.2.	Summary of LPA Components.....	2-8
Table 4.1.	Geographic Scope of Evaluation for Cumulative Impacts .....	4-1
Table 4.2.	SCAG Forecasted Growth (2012-2040) in Cities within the Affected Area.....	4-3

## Figures

Figure 1-1.	Draft EIS/EIR Build Alternatives.....	1-3
Figure 2-1.	Locally Preferred Alternative Alignment by Grade .....	2-2
Figure 2-2.	Existing Rail Right-of-Way Ownership.....	2-3
Figure 2-3.	Freeway Crossings .....	2-9
Figure 2-4.	Locally Preferred Alternative and Design Option: Close 186th Street.....	2-13
Figure 2-5.	Maintenance and Storage Facility Site .....	2-15

## ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AA	Alternatives Analysis
BMP	Best Management Practices
Caltrans	California Department of Transportation
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
EIR	environmental impact report
EIS	environmental impact statement
EJ	Environmental Justice
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	Geographic Information System
I-	Interstate
LA	Los Angeles
LPA	Locally Preferred Alternative
LRT	light rail transit
LRTP	Long Range Transportation Plan
LRV	light rail vehicle
Metro	Los Angeles County Metropolitan Transportation Authority
MSF	Maintenance and Storage Facility
NEPA	National Environmental Policy Act
NOP	Notice of Preparation
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
SCAQMD	South Coast Air Quality Management District
SWPPP	Stormwater Pollution Prevention Plan
TCE	temporary construction easement

Acronym	Definition
TPSS	traction power substation
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
VMT	vehicle miles traveled
WSAB	West Santa Ana Branch



# 1 INTRODUCTION

## 1.1 Study Background

The West Santa Ana Branch (WSAB) Transit Corridor (Project) is a proposed light rail transit (LRT) line. In January 2022, the Los Angeles County Metropolitan Transportation Authority (Metro) Board of Directors identified the Locally Preferred Alternative (LPA), which will extend approximately 14.5 miles from the northern terminus in the City of Los Angeles/Florence-Firestone community of Los Angeles (LA) County to the southern terminus in the City of Artesia, traversing densely populated, low-income, and heavily transit-dependent communities. The Project will provide reliable, fixed-guideway transit service that will increase mobility and connectivity for historically underserved, transit-dependent, and environmental justice communities; reduce travel times on local and regional transportation networks; and accommodate substantial future employment and population growth.

## 1.2 Alternatives Evaluation, Screening, and Selection Process

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

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

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

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

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

Metro issued a Notice of Preparation (NOP) on May 25, 2017, with a revised NOP issued on June 14, 2017, extending the comment period to 60 days. In June 2017, Metro held public scoping meetings in the Cities of Bellflower, Los Angeles, South Gate, and Huntington Park. Metro provided project updates and information to stakeholders with the intent to receive comments and questions through a comment period that ended in August 2017. A total of 1,122 comments were received during the public scoping period from May through August 2017. The comments focused on concerns regarding the Northern Alignment options, with specific concerns related to potential impacts to Alameda Street with an aerial alignment. Given potential visual and construction issues raised through public scoping, additional Northern Alignment concepts were evaluated.

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

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

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

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

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

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

- Paramount MSF site option
- Bellflower MSF site option

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

Figure 1-1. Draft EIS/EIR Build Alternatives



Source: Metro 2020

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

During the 60-day public review period, Metro hosted four virtual public hearings, four virtual community information sessions, and over 19 pop-up booths for in-person engagement at locations throughout the project corridor. In addition, Metro held approximately 20 briefings to key stakeholders, elected officials, corridor cities, and other agencies. In total, approximately 450 submissions were received during the public review and comment period. In January 2022, the Metro Board of Directors identified Alternative 3 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 Artesia for a total of 14.5 miles. With identification of the LPA, the Metro Board also identified the MSF site option located in the City of Bellflower as a component of the LPA.

### 1.4 Report Purpose and Structure

This Impact Analysis Report examines the environmental effects of the Project as it relates to cumulative impacts. The report is organized into seven sections:

- Section 1 – Introduction
- Section 2 – Project Description
- Section 3 – Regulatory Framework
- Section 4 – Affected Environment/Existing Conditions
- Section 5 – Environmental Impacts/Environmental Consequences
- Section 6 – Construction Impacts
- Section 7 – References

### 1.5 General Background

The Council on Environmental Quality (CEQ) regulations that implement the procedural provisions of NEPA define cumulative effects as:

*“the impact of the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions” (40 Code of Federal Regulations (CFR) Section 1508.7)*

CEQA Section 15355 defines cumulative impacts as “two or more individual impacts which, when considered together, are considerable or that compound or increase other environmental impacts.” The cumulative impact of several projects is the change in the environment that results from the incremental impact of the Project when added to other, closely related past, present, or reasonably foreseeable, probable future projects.

## 1.6 Methodology

To satisfy NEPA requirements, the degree of the effects of the action are analyzed to assess the likelihood of effects that are later in time or farther removed in distance. To satisfy CEQA requirements, the methodology follows CEQA Guidelines Section 15130. CEQA Guidelines indicate that the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the Project's incremental effects are cumulatively considerable. CEQA Guidelines Section 15130(b) states that the cumulative impacts can be based on a "summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect."

Following circulation of the Draft EIS/EIR, the AltAir/World Energy Project, located adjacent to the LPA alignment between Downey Avenue and Somerset Boulevard, is also considered in this cumulative analysis as it relates to transportation, air quality, and noise and vibration. These potential cumulative transportation, air quality, and noise and vibration impacts are discussed in Section 5.2.1, Section 5.2.6, and Section 5.2.8 of this impact report, respectively.



## 2 PROJECT DESCRIPTION

This section describes the No Build Alternative and the LPA studied in the WSAB Transit Corridor Final EIS/EIR, including station locations, and the MSF. The LPA was developed through a comprehensive alternatives analysis process and meets the purpose and need of the Project.

The No Build Alternative and LPA are generally defined as follows:

- **No Build Alternative:** Reflects the transportation network in the 2042 horizon year without the LPA. The No Build Alternative includes the existing transportation network along with planned transportation improvements that have been committed to and identified in the constrained *Metro 2009 Long Range Transportation Plan (2009 LRTP)* (Metro 2009) and SCAG's *2016-2040 RTP/SCS (SCAG 2016)*, as well as additional projects funded by Measure M that would be completed by 2042.
- **LPA:** The LPA consists of a 14.5-mile LRT line that will extend from the northern terminus in the City of Los Angeles/Florence-Firestone community of LA County to a southern terminus in the City of Artesia.

Figure 2-1 illustrates the LPA. The northern terminus of the LPA will be located just south of the intersection of Long Beach Avenue and Slauson Avenue, connecting to the current Slauson/A Line Station. South of Slauson Avenue, the LPA will follow the UPRR-owned La Habra Branch<sup>2</sup> 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. Figure 2-2 depicts the alignment sections that will require freight track relocation. The LPA will be grade separated where warranted, as indicated on Figure 2-1.

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<sup>2</sup> The La Habra Branch may also be referred to as the La Habra Subdivision. La Habra Branch is used within this document.

Figure 2-1. Locally Preferred Alternative Alignment by Grade



Source: WSP and TAHA 2023

Figure 2-2. Existing Rail Right-of-Way Ownership



Source: WSP and TAHA 2023

## 2.1 No Build Alternative

For the NEPA evaluation, the No Build Alternative is evaluated in the context of the existing transportation facilities in the project corridor (the corridor extends approximately 2 miles from each side of the four alternatives evaluated in the Draft EIS/EIR) and other capital transportation improvements and/or transit and highway operational enhancements that are reasonably foreseeable. Because the No Build Alternative provides the background transportation network against which the LPA’s impacts are identified and evaluated, the No Build Alternative does not include the Project.

The No Build Alternative reflects the transportation network in 2042 and includes the existing transportation network along with planned transportation improvements that have been committed to and identified in the constrained Metro 2009 LRTP and the SCAG 2016 RTP/SCS, as well as additional projects funded by Measure M, a sales tax initiative approved by voters in November 2016. The No Build Alternative includes Measure M projects that are scheduled to be completed by 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.

Table 2.1 lists the existing transportation network and planned improvements included as part of the No Build Alternative based on the Metro 2009 LRTP and SCAG 2016 RTP/SCS.

**Table 2.1. No Build Alternative – Existing Transportation Network and Planned Improvements**

Project	To / From	Location Relative to Study Area
<b>Rail (Existing)</b>		
Metro Rail System (LRT and Heavy Rail Transit)	Various locations	Within Study Area
Metrolink (Southern California Regional Rail Authority) System	Various locations	Within Study Area
<b>Rail (Under Construction/Planned)<sup>1</sup></b>		
Metro Westside D Line Extension	Wilshire/Western to Westwood/VA Hospital	Outside Study Area
Metro C Line Extension <sup>2</sup> to Torrance	96th Street Station to Torrance	Outside Study Area
Metro C Line Extension	Norwalk to Expo/Crenshaw	Outside Study Area
Metro East-West Line/Regional Connector/Eastside Phase 2	Santa Monica to Lambert Road Santa Monica to Peck Road	Within Study Area
Metro North-South Line/Regional Connector/Foothill Extension to Claremont Phase 2B	Long Beach to Claremont	Within Study Area
Metro Sepulveda Transit Corridor	Metro G Line to Metro E Line	Outside Study Area

Project	To / From	Location Relative to Study Area
Metro East San Fernando Valley Transit Corridor	Sylmar to Metro G Line	Outside Study Area
Los Angeles World Airport Automated People Mover	96th Street Station to LAX Terminals	Outside Study Area
Metrolink Capital Improvement Projects	Various projects	Within Study Area
California High-Speed Rail	Burbank to LA LA to Anaheim	Within Study Area
Link US <sup>3</sup>	LAUS	Within Study Area
<b>Bus (Existing)</b>		
Metro Bus System (including BRT, Express, and local)	Various locations	Within Study Area
Municipality Bus System <sup>4</sup>	Various locations	Within Study Area
<b>Bus (Under Construction/Planned)</b>		
Metro G Line (BRT)	Del Mar (Pasadena) to Chatsworth Del Mar (Pasadena) to Canoga Canoga to Chatsworth	Outside Study Area
Vermont Transit Corridor (BRT)	120th Street to Sunset Boulevard	Outside Study Area
North San Fernando Valley BRT	Chatsworth to North Hollywood	Outside Study Area
North Hollywood to Pasadena	North Hollywood to Pasadena	Outside Study Area
<b>Highway (Existing)</b>		
Highway System	Various locations	Within Study Area
<b>Highway (Under Construction/Planned)</b>		
High Desert Multi-Purpose Corridor	SR-14 to SR-18	Outside Study Area
I-5 North Capacity Enhancements	SR-14 to Lake Hughes Road	Outside Study Area
SR-71 Gap Closure	I-10 to Rio Rancho Road	Outside Study Area
Sepulveda Pass Express Lane	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 (Phases 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: Metro 2018, WSP 2019

Notes: <sup>1</sup> 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.

<sup>2</sup> The Metro C Line extension to Torrance includes new construction from Redondo Beach to Torrance; however, the line will operate from Torrance to 96th Street.

<sup>3</sup> Link US rail walk times included only.

<sup>4</sup> 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 the Orange County Transportation Authority.

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

## 2.2 Locally Preferred Alternative

### 2.2.1 Refinements to the Locally Preferred Alternative

The LPA evaluated in this report is Alternative 3 from the Draft EIS/EIR with refinements to address stakeholder coordination and comments on the Draft EIS/EIR. Refinements to the LPA include the following:

- 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 A Line station and street level.
- Swap the location of the freight and LRT tracks within the La Habra Branch 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 an existing industrial track on the north side of the ROW.
- 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.
- 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.
- Close the private at-grade crossing at Miller Way. The private business will be displaced by the Project.
- Extend the LRT viaduct north of Imperial Highway to avoid impacts to a spur track and full acquisition of a property.
- 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.
- 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).
- 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.
- Realign the MSF site entrance on Somerset Boulevard to align with Bayou Avenue to allow for a signalized pedestrian crossing of Somerset Boulevard.
- Add protected left turn and a traffic signal on Clark Avenue at Los Angeles Street to accommodate dedicated turning movements to the community.

- 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.
- Redesign retaining walls on the southeast side of the 183rd Street/Gridley Road crossing from retained fill to columns.
- Incorporate the Artesia Historic District Recreation Trails as an existing, rather than future, condition in the Final EIS/EIR plan set.
- Add a design option that will close 186th Street but keep 187th Street open to traffic in the City of Artesia, and turn Corby Avenue into a cul-de-sac with an access driveway for the existing business.
- 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.
- 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.
- 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 Measure NOI PM-1 and NOI PM-2 in the Final EIS/EIR to be implemented as part of the LPA.
- 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.
- 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.
- 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 Los Angeles 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.

Refinements also included the following modifications to construction laydown/staging areas:

- Relocate the construction laydown area near State Street and Randolph Street to east of State Street in the railroad ROW.
- 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.
- Locate a construction laydown/staging area on the east side of the ROW between Rayo Avenue and Southern Avenue.

Additionally, refinements included changes to traction power substations (TPSS) site locations:

- Relocate TPSS Site 14 from the northwest corner of Randolph Street and State Street to the east within railroad ROW.
- Eliminate optional TPSS Sites 16E and 12E in the 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.
- Relocate the proposed TPSS Site 2 from the northwest side of the intersection of 183rd Street/Gridley Road to the southeast side.

**2.2.2 Alignment Configuration**

This section summarizes the LPA alignment. The general characteristics of the LPA are summarized in Table 2.2. Figure 2-3 illustrates the freeway crossings along the alignment. Additionally, the LPA will require relocation of existing freight rail tracks within the ROW to maintain existing operations where freight tracks will be in a shared corridor with the LRT tracks. Figure 2-2 depicts the alignment sections that will require freight track relocation.

**Table 2.2. Summary of LPA Components**

Component	Quantity
Alignment length	14.5 miles
Length of at-grade and aerial	12.1 miles at-grade; 2.4 miles aerial <sup>1</sup>
Station configurations	9 along WSAB alignment, 1 at-grade infill station along C Line 3 aerial; 6 at-grade
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 <sup>2</sup> at I-710, I-605, SR 91)
Freight realignment	8.7 miles
River crossings	3 (Rio Hondo, Los Angeles River, and San Gabriel)
TPSS facilities	17
Maintenance and Storage Facility site	1 (City of Bellflower)

Source: WSP 2023

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

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

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

Figure 2-3. Freeway Crossings



Source: WSP 2023

The total alignment length of the LPA will be approximately 14.5 miles, consisting of approximately 12.1 miles of at-grade and 2.4 miles of aerial alignment. The LPA will include nine new LRT stations along the WSAB alignment, of which six will be at-grade and three will be aerial. Additionally, the Project will add one new infill station along the C Line at I-105 to allow transfers between the WSAB alignment and the C Line. Five of the stations will include parking facilities, providing a total of approximately 2,800 dedicated transit parking spaces. Four of the parking facilities will be surface lots and the fifth will be a parking structure. The alignment will include 30 at-grade crossings, 4 freeway crossings (3 freeway undercrossings and 1 aerial freeway crossing), 3 river crossings, 15 aerial road crossings, and 6 freight crossings. The following further describes the LPA along the alignment.

**Northern terminus (City of Los Angeles/Florence-Firestone community of LA County):** 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 tracks<sup>3</sup> accommodating layover storage for a three-car train will extend approximately 1,000 feet north from the station.

**La Habra Branch ROW<sup>4</sup> (City of Huntington Park):** South of the Slauson/A Line Station, the alignment will turn east along the existing UPRR owned La Habra Branch ROW in the median of Randolph Street. The alignment will be on the south side of the La Habra Branch ROW, and the freight tracks will be realigned but remain in the northern portion of the ROW. The alignment will transition to an at-grade configuration west of Alameda Street and will proceed east along the Randolph Street median. Wilmington Avenue, Regent Street, and Malabar Street will be closed to traffic crossing the ROW, altering the intersection design to a right-in, right-out configuration. The Pacific/Randolph Station will be located just east of Pacific Boulevard. From the Pacific/Randolph Station, the alignment will continue east at-grade. Arbutus Avenue and Rita Avenue will be closed to traffic crossing the ROW, altering the intersection design to a right-in, right-out configuration.

**San Pedro Subdivision ROW (Cities of Huntington Park, Bell, Cudahy, South Gate, Downey, and Paramount):** At the San Pedro Subdivision ROW, the alignment will transition to an aerial configuration and turn south to cross over Randolph Street and the freight tracks, returning to an at-grade configuration north of Gage Avenue. The alignment will be located on the east side of the existing San Pedro Subdivision ROW freight tracks, and the existing track(s) will be relocated to the west side of the ROW. The alignment will continue at-grade within the San Pedro Subdivision ROW to the at-grade Florence/Salt Lake Station south of Florence Avenue.

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<sup>3</sup> 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.

<sup>4</sup> The La Habra Branch may also be referred to as the La Habra Subdivision. La Habra Branch is used within this document.

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

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

From the Gardendale Station, the alignment will continue south in an at-grade configuration, crossing Gardendale Street and Main Street to serve the I-105/C Line Station, which will be located at-grade north of Century Boulevard. 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. The alignment will continue at-grade, crossing Century Boulevard, then will cross over the I-105 freeway in an aerial configuration within the existing San Pedro Subdivision ROW bridge footprint. A new Metro C Line Station will be constructed in the median of the I-105 freeway. The I-105/C Line Station will be connected to the new infill C Line Station in the middle of the freeway via a pedestrian walkway on the new LRT bridge. Vertical pedestrian access will be provided from the LRT bridge to the new 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.

**PEROW (Cities of Paramount, Bellflower, Cerritos, and Artesia):** South of the I-105 freeway, the alignment will continue at-grade within the San Pedro Subdivision ROW. In order to maintain freight operations and allow for freight train crossings, the alignment will transition to an aerial configuration as it turns southeast and enter the PEROW. The existing freight track will cross beneath the aerial alignment and align on the north side of the PEROW east of the San Pedro Subdivision ROW. The Paramount/Rosecrans Station will be located in an aerial configuration west of Paramount Boulevard and north of Rosecrans Avenue. The existing freight track will be relocated to the northeast side of the alignment adjacent to the 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.

The alignment will continue southeast in an aerial configuration over the Paramount Boulevard/Rosecrans Avenue intersection and descend to an at-grade configuration. The alignment will return to an aerial configuration to cross over Downey Avenue descending back to an at-grade configuration north of Somerset Boulevard. The 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. 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 alignment will continue at-grade crossing Lakewood Boulevard, Clark Avenue, and Alondra Boulevard. The at-grade Bellflower Station will be located west of Bellflower Boulevard. The Bellflower Station will include a dedicated transit parking facility providing 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 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 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 cross over the San Gabriel River on a new bridge, replacing the existing abandoned freight bridge. South of the San Gabriel River, the alignment will transition back to an at-grade configuration before crossing Artesia Boulevard at-grade.

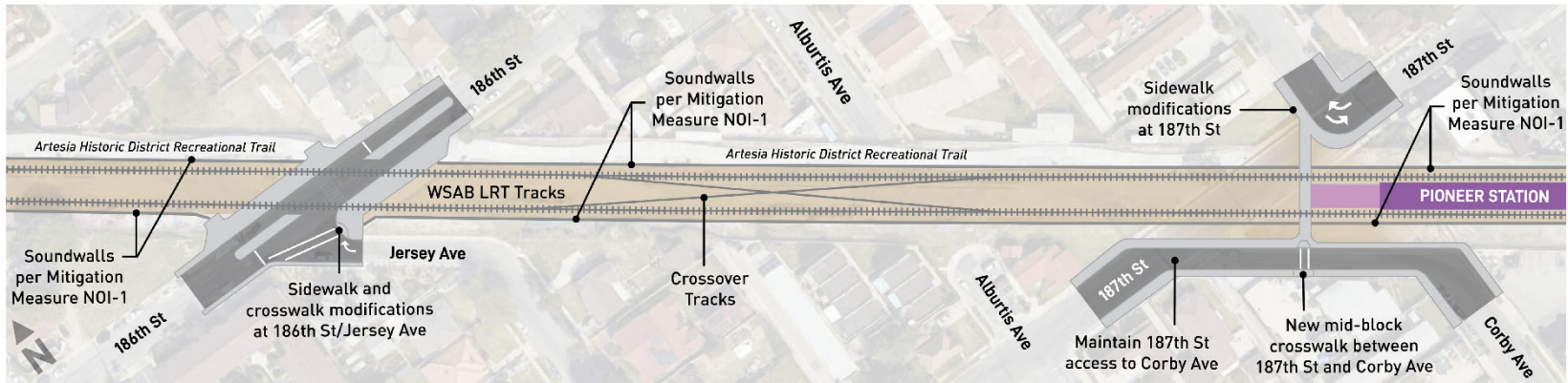
East of Artesia Boulevard, the alignment will cross beneath the I-605 freeway in an existing underpass. Southeast of the underpass, the alignment will continue at-grade, crossing Studebaker Road. North of Gridley Road, the alignment will transition to an aerial configuration to cross over 183rd Street and Gridley Road. The alignment will return to an at-grade configuration and cross 186th Street and 187th Street at-grade. The alignment will then pass through the Pioneer Station on the north side of Pioneer Boulevard at-grade. The Pioneer Station will include a dedicated transit parking facility providing approximately 1,100 parking spaces. Tail tracks accommodating layover storage for a three-car train will extend approximately 1,000 feet south from the station, crossing Pioneer Boulevard and terminating north of South Street.

### 2.2.3 Design Option – Close 186th Street

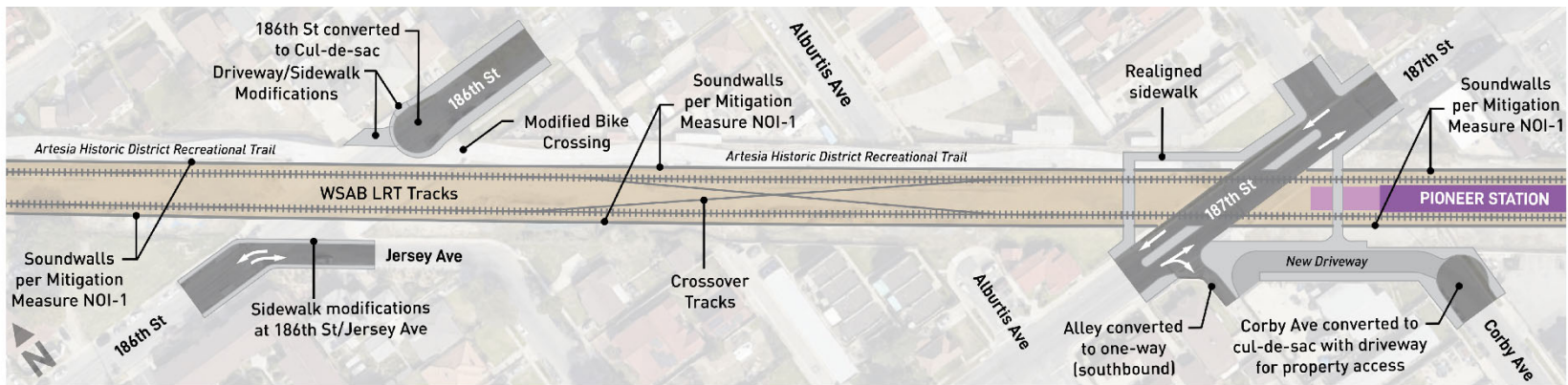
The LPA includes one design option:

- **Design Option:** Close 186th Street – The design option would close 186th Street but keep 187th Street open to traffic in the City of Artesia. Corby Avenue would become a cul-de-sac with an access driveway for the existing business (Figure 2-4).

Figure 2-4. Locally Preferred Alternative and Design Option: Close 186th Street



Locally Preferred Alternative



Design Option 1: Close 186th Street

Source: Cityworks Design and WSP 2023

### 2.2.4 Maintenance and Storage Facility

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

In January 2022, the Metro Board identified the Bellflower MSF as the WSAB Project's MSF site. The MSF site is located in the City of Bellflower and 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. Access to the site will be via a signalized driveway at Somerset Boulevard and Bayou Avenue (Figure 2-5). In total, the MSF site is approximately 21 acres and could accommodate up to 80 LRVs to serve the Project's operations plan.

The MSF will have storage tracks, each with sufficient length to store three-car train sets and a maintenance-of-way vehicle storage. The facility 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 2-5. Maintenance and Storage Facility Site



Source: WSP and TAHA 2023



## 3 REGULATORY FRAMEWORK

This section identifies applicable plans and regulations related to cumulative effects. The following presents a list of applicable plans and laws.

### Federal

- Council on Environmental Quality (40 CFR Section 1500 – 1508)

### State

- California Environmental Quality Act

### Regional

There are no applicable regional plans, policies, or regulations in regard to cumulative effects.

### Local

There are no applicable regional plans, policies, or regulations in regard to cumulative effects.

## 3.1 Federal

### 3.1.1 Council on Environmental Quality (40 CFR Section 1500 – 1508)

The CEQ regulations (40 CFR Section 1500 – 1508) define cumulative effects as “effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”

## 3.2 State

### 3.2.1 California Environmental Quality Act (Cal. Public Resources Code, Section 21000 et seq.) and CEQA Guidelines (14 Cal. Code Regs., Section 15000 et seq.)

CEQA requires an EIR to evaluate cumulative impacts of a project when the project’s incremental effect is cumulatively considerable. If the project’s incremental effect is not cumulatively considerable, the effect need not be considered as significant, but the basis for concluding that the incremental effect is not cumulatively considerable must be briefly described. “‘Cumulatively considerable’ means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects” (CEQA Guidelines, Section 15064(h)(1)).



## 4 AFFECTED ENVIRONMENT/EXISTING CONDITIONS

### 4.1 Affected Area

For purposes of the cumulative analysis, the general geographic area that could be affected by the LPA in combination with projected growth varies depending on the environmental resource. For instance, cumulative visual quality and aesthetics or noise impacts are more localized; whereas, cumulative air quality and climate change impacts occur on a broader regional or global scale. The geographic area of the cumulative impact analysis for each environmental topic is summarized in Table 4.1.

**Table 4.1. Geographic Scope of Evaluation for Cumulative Impacts**

Topic	Geographic Extent
Study Area	2-mile buffer from the project alignments evaluated in the Draft EIS/EIR
Transportation	Traffic Operations: key intersections identified that could be affected by the LPA Transit: 2-mile buffer from the LPA alignment Active transportation: Within 100 feet of the LPA Parking: 0.25 mile around each station and along streets immediately adjacent to the alignment and other project features, and off-street parking lots where permanent easements or acquisitions are required for the LPA Freight: Within 100 feet of the LPA
Land Use and Development	Within 50 feet of the LPA; to provide an overall context, land uses within 0.25 mile of the alignment and MSF and within 0.5 mile of the station are also presented
Community and Neighborhoods	Within 0.25 mile of the LPA alignment, parking facilities, and MSF site, and 0.5 mile around the proposed station areas
Displacements and Acquisitions	Displacement area: privately held residential, commercial, and industrial properties directly affected by the LPA Replacement area: cities affected by the LPA and other nearby cities that may provide replacement site options
Visual Quality and Aesthetics	Localized viewsheds for the LPA, including adjacent street ROWs that parallel, intersect, or face the LPA
Air Quality	South Coast Air Basin
Greenhouse Gas Emissions	South Coast Air Basin
Noise and Vibration	Immediate vicinity
Ecosystems and Biological Resources	Within 100 feet of the LPA
Geotechnical/Subsurface/Seismic	Within 250 feet of the LPA
Hazards and Hazardous Materials	Within 200 feet of the LPA; 0.25 mile for schools and landfills

#### 4 Affected Environment/Existing Conditions

Topic	Geographic Extent
Water Resources	Within 500 feet of the construction footprint
Energy	SCAG region and service areas for electricity and natural gas suppliers
Electromagnetic Fields	1,000 feet from the project alignment for land uses that could have highly EMI-sensitive medical or scientific equipment
Historic Resources	The architectural APE for the Project was delineated prior to release of the Draft EIS/EIR, which was also prior to the identification of the LPA. The architectural APE includes areas that may be subject to potential direct and indirect effects, including visual, noise, vibration, and/or ground settlement, that may result from construction or implementation of an alternative. Where an alternative would be underground or aerial, the architectural APE generally includes a one-parcel buffer extending out from the direct APE. Where the alternative would be at-grade, the architectural APE generally encompasses the same area as the direct APE described below. Refer to Section 4.14 for additional information on the architectural APE.
Archaeological Resources	The direct APE for the Project was delineated prior to release of the Draft EIS/EIR, prior to the Identification of the LPA. The direct APE encompasses the alignment ROWs, as well as all associated elements where construction will occur, including stations, laydown yards, maintenance facility, and parking lots. Where an alternative would be at-grade, the direct APE generally includes the width of the existing railroad ROW. Where the alternative would be aerial, the direct APE encompasses the width of the proposed ROW. The direct APE also encompasses the construction footprint for roadway modifications and small-scale, low-lying modifications (e.g., sidewalk realignment) on parcels adjacent to road ROW. In areas with potential direct ground disturbance, the vertical extent of the direct APE extends approximately 150 feet below the existing ground surface and approximately 90 feet above the existing ground surface. Refer to Section 4.14 for additional information on the direct APE.
Paleontological Resources	The ground surface and subsurface within the LPA alignment, stations, MSF site, TPSS sites, and parking facilities where ground disturbance associated with the Project may occur
Tribal Cultural Resources	Within the direct APE established for the Project, as described above for “Archaeological Resources”
Parklands and Community Facilities	Within 0.25 mile of the LPA
Economic and Fiscal Impacts	Within 0.25 mile of the LPA alignment, parking facilities, and MSF site, and 0.5 mile around station areas
Safety and Security	Within 100 feet of the LPA and within the 2-mile buffer from the LPA alignment for emergency services
Environmental Justice	Within 0.25 mile of the LPA alignment, parking facilities, and MSF site, and 0.5 mile of the station areas

Source: TAHA and WSP, 2023

Notes: APE = Area of Potential Effect; EIS/EIR = environmental impact statement/environmental impact report; EMI = electromagnetic interference; LPA = Locally Preferred Alternative; MSF = maintenance and storage facility; ROW = right-of-way; SCAG = Southern California Association of Governments; TPSS = traction power substations

## 4.2 Forecasted Growth

The SCAG 2016-2040 RTP/SCS (SCAG 2016) was the adopted population, housing, and employment forecast for Southern California inclusive of the LPA at the time of release of the Project's NOP and Notice of Intent in May 2017. The forecasted growth projections in Table 4.2 reflect the 2016-2040 RTP/SCS, which envisions change associated with the development of high-quality transit areas, livable corridors, and neighborhood mobility areas. The forecast has been adopted in close coordination with cities and jurisdictions throughout the SCAG region. This forecast process fundamentally assumes proposed land use changes at the local level.

Changes within jurisdictions along the LPA are expected to take the form of new development, expansion of existing development, redevelopment/demolition, and intensification of land use densities. Over the forecast period of 28 years (2012 to 2040) demolition, modification of existing buildings and infrastructure, and new residential and non-residential construction is expected. In most jurisdictions, these changes have been anticipated and are incorporated into local planning processes, including the initiation and/or adoption of specific plans or transit-oriented communities anticipating the LPA, among other changes. As such, these changes will likely result in overlapping construction and associated activities in areas near or adjacent to the LPA, particularly station vicinities. Table 4.2 shows the projected 2012-2040 net growth for projected future projects within the jurisdictions that intersect the LPA. It illustrates the magnitude of future changes that could combine for cumulative effects, particularly during construction of transportation, development projects, and associated infrastructure. Projected growth forecasts also include the transportation projects identified in Table 2.1.

**Table 4.2. SCAG Forecasted Growth (2012-2040) in Cities within the Affected Area**

Jurisdiction	2012 – 2040 Net Growth		
	Population	Housing	Employment
City of Los Angeles – Southeast Los Angeles <sup>1</sup>	19.9%	27.5%	27.9%
Vernon	200.0%	100.0%	6.7%
Huntington Park	15.2%	19.2%	19.2%
Bell	3.4%	3.4%	10.5%
Cudahy	0.0%	0.0%	0.0%
South Gate	18.1%	22.0%	17.6%
Downey	8.2%	10.0%	39.1%
Paramount	6.4%	6.5%	13.8%
Bellflower	3.2%	3.0%	8.1%
Artesia	8.4%	11.1%	16.0%
Cerritos	3.2%	3.2%	10.9%

Source: California Department of Finance 2012; California Department of Finance 2021; U.S. Census Bureau 2019; SCAG 2016; Metro 2024a.

Notes:<sup>1</sup> City of Los Angeles Southeast Los Angeles neighborhoods within 0.25 mile from the alignment and 0.5-mile from the station areas include Downtown Los Angeles, South Central, and Central Alameda.

SCAG = Southern California Association of Governments



## 5 ENVIRONMENTAL CONSEQUENCES/ENVIRONMENTAL IMPACTS

### 5.1 No Build Alternative

The No Build Alternative includes projects identified in Metro's 2009 LRTP, SCAG 2016-2040 RTP/SCS, and Measure M. Under the No Build Alternative, the LPA would not be developed, and effects related to the LPA would not occur. However, other infrastructure and transportation-related projects located within the Affected Area would continue to be implemented and built to relieve potential future congestion on roadways and transportation infrastructure, as described in Table 2.1. Similarly, the AltAir/World Energy Project would also be built. These projects would undergo project-specific environmental clearance and would implement project-specific mitigation measures, as necessary, so that potential adverse effects are reduced or avoided to the greatest extent feasible. As the LPA would not be constructed under the No Build scenario and no related adverse effects would occur, the No Build Alternative would not result in adverse cumulative effects.

### 5.2 Locally Preferred Alternative, Design Option, MSF Site

A detailed analysis of the adverse effects to environmental resources are provided in the impact analysis reports prepared for the Project. The MSF is a support facility to serve the LPA, and the design option would not occur without implementation of the LPA; therefore, for the purposes of the cumulative analysis, the design option and MSF are analyzed together with the LPA.

#### 5.2.1 Transportation

The traffic analysis considered traffic impacts for the horizon year 2042 for the No Build Alternative and the LPA. The traffic volumes used for the No Build Alternative were derived using growth rates obtained from the Metro Travel Demand Model, which includes planned growth in population and employment in the LA County region. As a result, the traffic volumes used for the No Build Alternative represents the cumulative future condition based on the effects of regional growth on the transportation system. The traffic analysis evaluates cumulative future impacts and is presented in the *West Santa Ana Branch Transit Corridor Project Final Transportation Impact Analysis Report* (Metro 2024l).

In the vicinity of Façade Avenue and Paramount Boulevard/Rosecrans Avenue, increased freight frequency may occur in the future as a result of the AltAir/World Energy Project at the Paramount Refinery facility. The AltAir/World Energy Project is independent of the WSAB Project and would include an increase in frequency of rail traffic from one train to two trains per day along the one-mile-long railroad connection between the refinery and UPRR ROW. Freight trains currently operate through some existing at-grade crossings; however, these trains were not incorporated into the traffic analysis due to their infrequent occurrence. The LPA will not affect the operation of rail freight, including when increased service is considered. Per the AltAir/World Energy Project Final Supplemental EIR, rail freight deliveries and pick-ups will be limited to non-peak traffic periods (between 10:00 a.m. and 6:00 p.m.). Therefore, because the increased rail freight activity associated with the AltAir/World Energy Project will not coincide with the peak traffic period as analyzed for the WSAB Project, there will not be an additional cumulative impact to the LOS presented in Chapter 3 of this Final EIS/EIR under

NEPA. Based on the transportation analysis, the LPA, in combination with the projected growth in the region, will cause significant cumulative transportation effects specific to traffic under NEPA, and the LPA's incremental contribution to this cumulatively significant impact will be cumulatively considerable under NEPA but not under CEQA (see CEQA Guidelines, § 15064.3, subdivisions (a), (b)(2)).

### 5.2.2 Land Use and Development

The geographic scope for the cumulative land use and development analysis includes the area in the immediate vicinity of the LPA and the land use Affected Area. Generally, existing development within the Affected Area for land use and development has been built around the rail ROWs, which physically separate the neighborhoods and communities within the Affected Area. The LPA will not introduce components that will create physical barriers or generate permanent access disruptions to existing land uses on either side of the alignment, and access to the surrounding land uses will remain available. Street closures and turning restrictions will occur; however, such changes will not divide the existing communities because access to these streets and surrounding properties will be maintained through the re-routing of traffic to adjacent local streets. Projected growth could consist of new development or infrastructure, redevelopment, or expansions. In addition, as the cities are generally highly developed, it is unlikely that projected growth in the region will result in activities that will physically divide existing communities within the Affected Area. Potential future development opportunities are likely to occur within existing parcels as urban infill and are not expected to physically divide an established community. Therefore, the LPA in relation to projected growth and future development opportunities near the LPA, will not cause a significant cumulative impact related to the division of an established community.

The LPA and projected growth in the region will provide future development opportunities that may result in a more densely developed urban environment in the Affected Area. Similar development opportunities provided by other projects could also result in a more densely developed urban environment by creating better transportation connections in communities. The LPA and projected future growth will be required to comply with applicable land use plans, policies, and regulations of the affected jurisdictions and future growth will be subject to independent review, including land use conformity analyses. Related transit projects in the region, including the LPA, will provide opportunities for implementing SCAG and local land use policies or local planning objectives. Therefore, the LPA in combination with projected future projects will not result in significant cumulative effects associated land use compatibility issues.

The LPA and projected future projects will be generally consistent with applicable goals, objectives, and policies related to alternative transportation, public transportation, and future growth in transit identified in the general plans, community plans, specific plans, master plans, and bicycle master plans of the affected local jurisdictions. Therefore, cumulative land use impacts will generally not be cumulatively significant.

However, the LPA could preempt future development and implementation of Class I bicycle paths identified in the General Plan or bicycle master plan of the Cities of Huntington Park, Bell, Cudahy, South Gate, Paramount, and Bellflower. While planned, the bike facilities are unfunded and not scheduled for implementation. Mitigation Measure LU-1 (Consistency with Bike Plans) (see *West Santa Ana Branch Transit Corridor Project Final Land Use Impact Analysis Report* [Metro 2024a]) will be implemented to minimize

preemption of future development and maintain consistency with existing bike paths. Metro will continue to coordinate with jurisdictions and local agencies and will support preparation of amended language for each affected bicycle plan consistent with the city's mobility and connectivity goals. However, because the process to amend general plans and bike plans is a local process, including public participation, the ultimate outcome and resolution of plan elements cannot be predicted. Even with the adoption of Mitigation Measure LU-1 (Consistency with Bike Plans), the LPA may preempt future development and implementation of planned bike paths and an adverse effect and significant and unavoidable impact will occur. Therefore, the LPA in relation to the projected future growth in the land use Affected Area will cause significant cumulative land use effects with respect to planned Class I bicycle paths and the LPA's incremental contribution to this cumulatively significant impact will be cumulatively considerable.

### 5.2.3 Communities and Neighborhoods

The geographic scope for the communities and neighborhoods analysis is described in Table 4.1. Generally, existing development along the alignment has been built around the existing rail ROWs, which physically separate the neighborhoods and communities within the Affected Area. The LPA will not impede community access and mobility; and property displacement and acquisition, street closures, turning restrictions, and changes in noise levels, visual character, land use, and demographics are not expected to isolate or change the character and cohesion of communities.

The LPA and projected growth in the community and neighborhood Affected Area will be in highly urbanized areas. The LPA will enhance circulation and connectivity with the greater region and improve connections with transit stations and other pedestrian and bike facilities. Future projects could consist of new development, redevelopments, or infrastructure projects. The projected future projects may also help communities and neighborhoods within the Affected Area remain cohesive. Projected future projects would be solely at the discretion and approval of the affected city and would be subject to all applicable requirements and regulations of local jurisdictions. In this context, it is anticipated that any potential adverse effects associated with community character will be addressed and mitigated by restrictions imposed by local jurisdictions. Therefore, the LPA and projected future projects will not result in significant cumulative effects associated with access and mobility, community stability, and community character and cohesion.

The LPA is intended to increase the overall accessibility and mobility of persons within the Affected Area and will not directly result in population growth within surrounding communities. However, the LPA could indirectly affect population, housing, and employment growth as a result of, and in combination with, projected future projects in the region. Changes in demographics associated with new development opportunities are anticipated to be consistent with the SCAG-adopted growth projections since these growth projections are based on the General Plan land use designations of local jurisdictions. Therefore, the LPA in combination with projected future projects will not result in significant cumulative impacts associated with SCAG-adopted growth projections.

### 5.2.4 Acquisitions and Displacements

In general, effects associated with acquisitions and displacements are site-specific, and adverse effects are largely localized and located in a highly urbanized geographical area. The LPA will result in property acquisitions and displacements required to accommodate project

features, including, but not limited to, the alignment, stations, TPSS sites, and parking facilities. The displacement of properties is not expected to displace a substantial number of people that will necessitate the construction of replacement housing elsewhere. Adequate replacement housing is available in the affected communities and surrounding areas based on the Project's gap analysis of the housing and business market as of June/July 2023. Metro, public agencies, and developers are required to provide relocation assistance and compensation for identified eligible displaced businesses as required under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (for federally funded projects) and the California Relocation Act. Metro will provide relocation assistance and compensation for identified eligible displaced businesses and residences as required under the Uniform Act and California Relocation Act.

Similarly, projected future projects will also be required to comply with the Uniform Act, California Relocation Act, and other applicable relocation policies and procedures for any potentially displaced businesses and residences. Therefore, the LPA in combination with projected future projects will not result in adverse effects related to property acquisitions and displacements and a significant cumulative impact will not result.

### 5.2.5 Visual Quality and Aesthetics

Projected growth and future projects could alter the visual environment in the Affected Area and in neighboring jurisdictions. In general, visual resource effects of projected future projects are site-specific and will not combine with other projects in separate viewsheds to create a cumulative impact. The geographic area of the LPA and projected future projects in the visual quality and aesthetics Affected Area is characterized as predominantly developed with varied heights and massing in the visual environment. The LPA and projected future projects will not obstruct views of or alter the visual character and quality of scenic resources. No scenic vistas or scenic highways are located in the visual quality and aesthetics Affected Area. Therefore, the LPA and projected future projects will not have potential to contribute to cumulative effects associated with scenic vistas and scenic highways.

The LPA will be consistent with and will not permanently degrade the existing visual character and quality of the Affected Area. At Somerset Boulevard, the existing landscaping and decorative wall on the south side of the World Energy storage tracks (east of the proposed LRT tracks) could be removed, which will make the refinery storage tank cars more visible to sensitive viewers (residents) and visually incompatible with the surrounding residential area without mitigation. Mitigation Measure VA-1 (Screening at Somerset Boulevard) will be implemented to minimize impacts to the visual character at Somerset Boulevard, and no adverse effects will occur.

The "Belle" public art cow statue has aesthetic value to the City of Bellflower and will be removed. Implementation of Mitigation Measure VA-2 (Relocation of "Belle") will result in the relocation of the public art statue and, therefore, will minimize impacts to the visual character; no adverse effect will occur.

The LPA and projected future projects could provide future development opportunities around station areas that may result in a more densely developed urban environment in the Affected Area, which could affect visual character and quality in the vicinity of these projects. These development opportunities would be required to comply with local jurisdictional regulations in which the development opportunities would be located and would require mitigation measures to reduce visual impacts, if any. The LPA will be consistent with and will not permanently

degrade the existing visual character and quality of the Affected Area with the implementation of Mitigation Measures VA-1 (Screening at Somerset Boulevard) and VA-2 (Relocation of “Belle”) (see *West Santa Ana Branch Transit Corridor Project Final Visual and Aesthetic Impact Analysis Report* [Metro 2024m]). Therefore, the LPA in combination with projected future projects will not result in a significant cumulative impact on visual character and quality.

The LPA and projected future projects could also provide opportunities for development around the station areas or improvements to connect with existing pedestrian and bicycle facilities, which may result in an increase in daytime glare and ambient nighttime lighting. These development opportunities would be required to adhere to lighting regulations of the affected jurisdictions. The LPA and projected future projects are located in a highly developed and well-lit area and will not represent a substantial change in the lighting environment of the area to the extent that nighttime views that are currently available will become unavailable. The LPA will not result in adverse impacts on light and glare as lighting will incorporate standard practices that will reduce potential lighting and glare effects (i.e., exterior lighting shielded and directed downward, low-reflective surfaces). It is expected that projected future projects would also incorporate similar practices in their lighting and structure design to minimize excessive adverse lighting and glare effects. Therefore, the LPA and projected future projects will not result in significant cumulative impacts on light and glare.

### 5.2.6 Air Quality

California is divided geographically into 15 air basins for the purpose of managing the state’s air resources at a regional level. Each air basin generally has similar meteorological and geographic conditions throughout. Each local district is responsible for preparing the portion of the State Implementation Plan applicable within their boundaries. The South Coast Air Basin is the Affected Area for evaluation of cumulative impacts for air quality. The South Coast Air Basin is currently designated as in nonattainment of the federal and state ambient air quality standards for ozone and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Therefore, there is an ongoing cumulative effect associated with these air pollutants.

The South Coast Air Quality Management District (SCAQMD) has responsibility for managing the South Coast Air Basin’s air resources and is responsible for bringing the South Coast Air Basin into attainment for federal and state air quality standards. The SCAQMD prepares the Air Quality Management Plan to evaluate contemporary South Coast Air Basin air quality and the emissions inventory and forecast control strategies to ultimately bring the South Coast Air Basin into attainment of the ambient air quality standards. To achieve this goal, the SCAQMD prepares/updates the Basin’s Air Quality Management Plan every four years. The Air Quality Management Plan emissions budgets are developed partially based on the 2016-2040 RTP/SCS, and the two planning documents are typically developed in conjunction with one another. The Project is included in the 2016-2040 RTP/SCS under Project ID 1TR1011, which demonstrates that the regional transportation and emissions modeling budget in the Air Quality Management Plan accounts for implementation of the Project. The RTP entry for the LPA was within the Draft Amendment #3 to the 2020–2045 RTP/SCS, with changes comprising an update of the opening year from 2028 to 2035 and a decrease to the project cost associated with the length of the LPA alignment relative to other alternatives assessed in the Draft EIS/EIR. Amendment #3 was approved in June 2023. Therefore, implementation of the LPA will not contribute in a significant way to cumulative effects related to projections built into the Air Quality Management Plan.

In 2003, the SCAQMD published a white paper on cumulative impacts and potential control strategies, which contains considerations for evaluating cumulative air quality impacts under CEQA. Projects that exceed the project-specific thresholds are considered by the SCAQMD to be cumulatively considerable, and, conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant. The LPA represents a public transit project that will reduce regional vehicle miles traveled (VMT). Associated air pollutant emissions and operation of the LPA will result in less than significant air quality impacts when compared to the project-specific SCAQMD thresholds.

The AltAir/World Energy Project is independent of the WSAB Project and would produce daily emissions in excess of the SCAQMD regional thresholds. The AltAir/World Energy Project Final Supplemental EIR evaluated and identified mitigation to air quality impacts as feasible and is responsible for implementation of such mitigation. Operation of the LPA will not independently generate emissions exceeding the applicable SCAQMD thresholds at regional or localized scales. The LPA will reduce regional emissions of most criterial pollutants. Furthermore, the majority of the emissions generated by operation of the LPA will not occur near the AltAir/World Energy facility or the City of Paramount; the MSF site will be located within the City of Bellflower, and emissions associated with its operation will not be generated within the area of localized impacts identified in the AltAir/World Energy Project Final Supplemental EIR. Air quality impacts for the LPA will remain less than significant. Therefore, operation of the LPA will not result in a cumulatively considerable impact for any South Coast Air Basin nonattainment pollutant.

### 5.2.7 Greenhouse Gas Emissions

The State of California, through Assembly Bill 32, has acknowledged that greenhouse gas (GHG) emissions are a statewide impact. Emissions generated by the LPA combined with projected future projects will contribute to this impact. The CEQA Guidelines emphasize that the effects of GHG emissions are cumulative in nature and should be analyzed in the context of CEQA's existing cumulative impacts analysis. The Office of Planning and Research acknowledges that although climate change is cumulative in nature, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment. CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means of avoiding or substantially reducing the cumulative impact of a project. The following analysis assesses the LPA for potential cumulative impacts related to GHG emissions in the context of projected future projects.

As compared to the No Build Alternative, the LPA will result in fewer GHG emissions with reductions related to the reduction of regional VMT for passenger vehicles associated with increased transit ridership. The LPA will be consistent with applicable GHG plans, policies, and regulations. There are no state, regional, or local GHG reduction plans that promote increased passenger vehicles on the roadway network. The LPA will be consistent with the 2016-2040 RTP/SCS, the 2020-2045 RTP/SCS, Energy Conservation Management Plan, City of Los Angeles Zero Emission 2028 Roadmap, and other conservation plans for local jurisdictions. GHG emissions that will be generated are not considered significant as mass transit and reduced VMT is a key component of relevant GHG reduction plans. There is no potential for the LPA to interfere with state and regional GHG reduction targets. Consequently, the LPA will not incrementally contribute to cumulatively significant GHG effects.

## 5.2.8 Noise and Vibration

### 5.2.8.1 Noise

Noise is a localized phenomenon that is significantly reduced in magnitude as distance from the source increases. Operational noise related to LRT pass-by is only assessed within 350 feet of the tracks. The noise environment in the vicinity of the LPA alignment can be primarily defined by traffic on adjacent roadways, freight trains, and the existing Metro A) Line. The Metro A (Blue) Line was accounted for in noise measurements and is included in the analysis for the LPA. In addition, housing and job opportunities are expected to grow in the cities located in the vicinity of the LPA. Based on each city's built-out character, the cities are forecasted to have a steady growth, with the exception of Vernon and Cudahy. As such, increases in roadway traffic volumes over time can be expected due to cumulative growth and development and would concurrently increase ambient noise levels in the area. However, future increases in roadway noise are expected to be minimal along the LPA alignment due to limited roadway capacity and existing freight train noise.

The AltAir/World Energy Project at the Paramount Refinery facility in the vicinity of Façade Avenue and Paramount Boulevard/Rosecrans Avenue will increase freight frequency in the future. The AltAir/World Energy Project is independent of the WSAB Project and will include both new operational sources of industrial noise and an increase in frequency of rail traffic from one train to two trains per day along the one-mile-long railroad connection between the refinery and UPRR ROW. This increase in rail frequency will be in the same rail ROW as the LPA. The AltAir/World Energy Project Final Subsequent EIR concluded that operational stationary noise related to the refinery will be less than significant with mitigation incorporated, while the increased rail operations will result in a significant and unavoidable impact related to operational noise (City of Paramount 2022). However, the relocated freight track analysis conducted for the WSAB Project conservatively considered a higher freight train frequency than the existing frequency of one train per day. Therefore, the analysis presented captured the noise increase associated with an increase in freight train frequency and cumulative noise impacts would not be more severe than identified in the Draft EIS/EIR.

The LPA will result in moderate or severe operational noise effects at sensitive receptors along the LPA alignment (see *West Santa Ana Branch Transit Corridor Project Final Noise and Vibration Impact Analysis Report* [Metro 2024i]). Implementation of Mitigation Measures NOI-1 (Soundwalls) through NOI-5 (Freight Track Relocation Soundwalls), which include soundwalls, low impact frogs, TPSS noise reduction, and wheel squeal noise monitoring, will reduce adverse effects related to noise; however, due to physical constraints along the alignment not all noise impacts will be fully mitigated, and adverse effects and significant and unavoidable impacts will remain. Therefore, the LPA in combination with noise generated by projected future projects, will result in a significant cumulative noise impact to sensitive receptors along the alignment; the LPA's contribution to this significant cumulative impact will be cumulatively considerable.

### 5.2.8.2 Vibration

Permanent vibration effects are typically localized and instantaneous events. The geographic scope for the cumulative vibration analysis is the immediate vicinity (within 25 feet) of the LPA where project-generated vibration could occur concurrently with vibration from other sources. The LPA will result in vibration impacts, and Mitigation Measures VIB-1 (Ballast

Mat or Resilient Rail Fasteners) and VIB-2 (Low Impact Frogs) will be implemented to reduce vibration impacts. The primary source of existing vibration along the LPA is from freight trains. Freight train vibration is generally intermittent, and, therefore, it is unlikely that LRT vibration and freight train vibration will combine to produce a cumulative vibration effect. As discussed in the AltAir/World Energy Project Final Supplemental EIR, operational vibration as a result of the AltAir/World Energy Project will result in a less than significant impact. Regardless of the existing vibration from infrequent freight trains, after implementation of Mitigation Measures VIB-1 (Ballast Mat or Resilient Rail Fasteners) and VIB-2 (Low Impact Frogs) adverse effects and significant and unavoidable impacts will remain at two locations for the LPA (see *West Santa Ana Branch Transit Corridor Project Final Noise and Vibration Impact Analysis Report* [Metro 2024i]). Therefore, the LPA, in combination with vibration generated by projected projects and existing freight, will result in a significant cumulative vibration impact. The LPA's contribution to this significant cumulative impact will be cumulatively considerable.

### 5.2.9 Ecosystems and Biological Resources

The geographic scope for ecosystems and biological resources is shown in Table 4.1. The LPA and projected future projects are located in a heavily developed/disturbed area and do not support any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the United States Fish and Wildlife Service. Additionally, the LPA and projected future projects will be unlikely to affect wildlife species if present. Most wildlife species that could be expected to be present in the Affected Area are species that have adapted to urban environments and disturbances caused by human-induced activities. Therefore, the LPA and projected future projects are unlikely to impact ecosystems and biological resources as the area is urbanized and heavily developed. Similar to the LPA, projected future projects would be required to comply with applicable regulations and include mitigation measures to minimize or avoid impacts to biological resources. Therefore, the LPA in combination with projected future projects will not result in significant cumulative ecosystems and biological resource effects.

### 5.2.10 Geotechnical/Subsurface/Seismic Hazards

The geographic scope for geologic, subsurface, and seismic hazards is described in Table 4.1 and effects are largely localized. The LPA and projected future projects are located in a seismically active region of Southern California. The LPA is not located in liquefaction zones and is not in an area with landslide risks. The LPA will implement Project Measure GEO PM-1 (Geotechnical Design [Operation]) that requires the LPA to be designed in accordance with design standards, including anticipated levels of seismic ground shaking, liquefaction, and seismic settlement, and will comply with all applicable state and local guidelines and mandatory design requirements (see *West Santa Ana Branch Transit Corridor Project Final Geotechnical Impact Analysis Report* [Metro 2024f]). Operation of the LPA will not result in adverse effects related to geologic, subsurface, and seismic hazards.

Similar to the LPA, projected future projects will be located in an area of LA County susceptible to geological hazards. Projected future projects would be required to comply with all prescribed building standards, requirements, and guidance related to geologic, subsurface, and seismic hazards and are unlikely to contribute to cumulative effects. Therefore, the LPA in combination with projected future projects will not result in significant cumulative geologic, subsurface, and seismic hazards effects.

### 5.2.11 Hazards and Hazardous Materials

In general, effects associated with hazards and hazardous materials are site-specific and adverse effects are largely localized and located in a highly urbanized geographical area. The LPA will not result in adverse effects related to hazards and hazardous materials with the implementation of Project Measures HAZ PM-1 (Handling, Storage, and Transport of Hazardous Materials or Wastes [Operation]), HAZ PM-2 (Disposal of Groundwater [Operation]), and HAZ PM-3 (Contaminated Soil, Soil Vapor, and Groundwater [Operation]) (see *West Santa Ana Branch Transit Corridor Project Final Hazardous Materials Impact Report* [Metro 2024g]). The LPA will comply with all prescribed standards, requirements, and guidance related to hazards and hazardous materials. Similarly, it is anticipated that operation of projected future projects would result in minimal adverse effects with the implementation of project-specific project and mitigation measures, as necessary, and would also comply with all prescribed standards, requirements, and guidance related to hazards and hazardous materials. Therefore, the LPA in combination with projected future projects will not result in significant cumulative hazard and hazardous materials effects.

### 5.2.12 Water Resources

The geographic scope for the cumulative water resources analysis is described in Table 4.1. Operation of the LPA will result in a modification to the local drain systems, increase impervious area, and affect water quality through pollutant runoff from rail operations. The LPA will comply and be subject to post-construction and hydromodification requirements of the LA County National Pollutant Discharge Elimination System municipal separate storm sewer system permit and implement project design features to minimize water quality impacts. Impacts related to these resources will not be adverse. The LPA will also cross three major flood control channels, each with Federal Emergency Management Agency established floodplains: the Los Angeles River, the Rio Hondo channel, and the San Gabriel River. The LPA will be designed in accordance with Executive Orders 11988 and 13690 and impacts to floodplains will not be adverse. The LPA will also affect groundwater resources, but these impacts will be minimized through design features that will include low impact development treatment controls (i.e., landscaping) to help offset the loss of permeable surfaces. The LPA will implement the design features identified in Sections 5.1.1 and 5.1.2 of the *West Santa Ana Branch Transit Corridor Project Final Water Resources Impact Analysis Report* (Metro 2024n) to avoid, minimize, or reduce the potential for impacts on water resources.

Similarly, projected future projects may result in modifications to the local drain systems, increase impervious areas, and increase pollutant runoff that could result in adverse effects. However, as with the LPA, projected future projects will be subject to state and regional water quality permit requirements and will be designed in compliance with all existing regulations and requirements regarding water quality and water resources. Therefore, the LPA in combination with projected future projects will be required to adhere to similar applicable permit requirements and will not result in significant cumulative water resources effects.

### 5.2.13 Energy

The LPA will consume less energy as a result of energy reductions due to reduced regional VMT for passenger vehicles associated with increased transit ridership. The energy reductions associated with the VMT decrease overrides energy increases associated with operation of the MSF and energy used to power the LRT system. There are no state, regional, or local energy conservation plans that promote increased passenger vehicles on the roadway network. The LPA will be consistent with the applicable regional and local conservation plans. Energy used to operate the LPA is not considered a wasteful or inefficient use of energy as mass transit and reduced VMT are key components of relevant energy conservation plans. As with the LPA, projected future projects will be subject to compliance with applicable energy efficiency and management codes and regulations, including, but not limited to, the California Title 24 Energy Efficiency Standards, the CALGreen building standards code, and the Los Angeles Green Building Code, as well as other provisions of local planning initiatives from the Cities of Vernon, Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Artesia, and Cerritos. All new Metro projects will be implemented in accordance with the Metro *Green Construction Policy* and the *Energy Conservation and Management Plan* so that the expenditure of energy resources is controlled to the maximum extent feasible.

There is no present regional shortage of energy resources for land use and transportation development planning and implementation, and no foreseeable strains on existing resources have been identified. The LPA will not require new distribution infrastructure such as transmission lines from power facilities and transformers, although connections between TPSS units and existing electrical utility lines will be required to operate the LPA. Such activities will not be related to supply or capacity deficiencies and will be similar to routine utility improvements (e.g., construction of new underground conduits). There is no potential for operation of the LPA to conflict with energy conservation goals or interfere with the energy supply and distribution facilities. Consequently, the LPA in combination with projected future projects will not result in significant cumulative energy effects during operation.

### 5.2.14 Historic, Archaeological, and Paleontological Resources

The geographic scope of historic, archaeological, and paleontological effects is generally site-specific and localized and the Affected Area is generally characterized as urbanized and highly developed. No adverse effects will occur to historic properties, archaeological resources, or paleontological resources during operation of the LPA. Direct and indirect impacts to historic, archaeological, and paleontological resources due to ongoing maintenance and operations of the LPA will not occur because there is no, or minimal, ground disturbance associated with operation and maintenance of the LPA. Similarly, projected future projects would be located within existing public ROWs or in highly urbanized areas and could have limited ground disturbance during operation and maintenance. As all historic, archaeological, and paleontological resources are unique, projected future projects would be expected to comply with applicable federal, state, and local regulations to protect those resources. Therefore, the LPA in combination with projected future projects will not cause significant cumulative impacts to historic, archaeological, or paleontological resources during operation.

### 5.2.15 Tribal Cultural Resources

The geographic scope of tribal cultural resources is generally site-specific and localized and the Affected Area is generally characterized as urbanized and highly developed. No tribal cultural resources were identified within the Area of Potential Effect and no adverse effects would occur to tribal cultural resources during operation of the LPA. Direct and indirect impacts to tribal cultural resources due to ongoing maintenance and operations of the LPA will not occur because there is no ground disturbance associated with operation of the LPA. Similarly, projected future projects would be located within existing public ROWs or highly urbanized areas and could have limited ground disturbance during operation. As tribal cultural resources are unique, projected future projects would be expected to comply with applicable federal, state, and local regulations to protect tribal cultural resources. Similar to the LPA, projected future projects are not anticipated to cause adverse effects to tribal cultural resources during operation with compliance of all applicable regulations regarding the handling and care of such resources. Therefore, the LPA in combination with projected future projects will not result in significant cumulative tribal cultural resource effects.

### 5.2.16 Parklands and Community Facilities

Apart from potential impacts to the Class I bicycle path along Salt Lake Avenue and the Class I bicycle path north of Rayo Avenue and south of the Los Angeles River, the LPA will not result in adverse effects to parklands or community facilities, as the LRT will operate within the confines of the rail ROW and will not impede access to any parklands or community facility. The LPA will not directly increase the local residential population that would result in an increase in parklands and community facilities use.

The LPA and projected future projects are located in urban areas and will be located within existing public ROW or within infill parcels. Some projected future projects would improve the overall accessibility to the station areas, community facilities, and other modes of transportation. Projected future projects may also increase the number of businesses and residents in the area; however, population growth has been accounted for in the regional and local plans. The LPA in combination with projected future projects will not result in significant cumulative effects to parklands or community facilities.

Realignment of segments of the Paramount Bike Trail and Bellflower Bike Trail will not result in adverse physical effects or prevent access to the bike facilities. Mitigation Measure LU-1 (Consistency with Bike Plans) will be implemented to maintain connectivity (see *West Santa Ana Branch Transit Corridor Project Final Parklands and Community Facilities Impact Report* [Metro 2024j]). The LPA may preempt future development and implementation of the Class I bicycle path along Salt Lake Avenue and the Class I bicycle path north of Rayo Avenue and south of the Los Angeles River, identified in the *City of Huntington Park Bicycle Transportation Master Plan*, *City of Cudahy 2040 General Plan*, *South Gate Bicycle Transportation Plan*, and *City of Bell Bicycle Master Plan*. As part of this effort, Metro, as appropriate, will support preparation of amended language for each affected bicycle plan demonstrating that planned bicycle facilities could still achieve an individual city's mobility and connectivity goals. However, because the process to amend bike plans is a local process, including public participation, the ultimate outcome and resolution of plan elements cannot be predicted. The impacts related to consistency with land use plans is discussed in Section 5.2.2.

Overall, the LPA will not result in adverse effects to parklands or community facilities, as the LRT will operate within the confines of the rail ROW and will not impede access to any parklands or community facility. The LPA and projected future projects are located in urban areas and primarily will be located within existing public ROW or within infill parcels. Subsurface easements or partial acquisitions will not affect the function or result in a displacement of community facilities. Some projected future projects would improve the overall accessibility to station areas, community facilities, and other modes of transportation. Projected future projects may also increase the number of businesses and residents in the area; however, population growth has been accounted for in regional and local plans. Therefore, the LPA in combination with projected future projects will not result in significant cumulative effects to parklands or community facilities.

### 5.2.17 Economic and Fiscal Impacts

Operation of the LPA will have beneficial economic and fiscal impacts by improving transit accessibility and mobility, enhancing regional connectivity, and reducing travel time and costs in the region. Similarly, projected future projects may also introduce new business, residents, and jobs to the area; this growth has been accounted for in local and regional plans. Combined with the LPA, projected future projects would likely encourage greater economic activity and benefit surrounding businesses and commuting employees. The LPA and projected future projects may also result in an increase in employment and tax revenue that will benefit local and regional economies. Therefore, the LPA in combination with projected future projects will not result in significant cumulative economic and fiscal effects during operation.

### 5.2.18 Safety and Security

Adverse safety and security impacts are generally site-specific and localized. The LPA will operate in accordance with Metro system safety plans, policies, and procedures, including the *Metro System Safety Program Plan*, *Metro System Security Plan*, *Metro Standard and Emergency Operating Procedures*, and *Rail Operating Rulebook*, or equivalent. The LPA will comply with all applicable federal, state, and local safety codes and regulations. Metro will coordinate with emergency response services so that response times and emergency access will not be adversely affected during operation. Project Measures SAF PM-1 (Emergency Access) through SAF PM-8 (Fire/Life Safety Committee) and Mitigation Measure SAF-1 (Encroachment Detection) will be implemented and no adverse effects will occur (see *West Santa Ana Branch Transit Corridor Project Final Safety and Security Impact Analysis Report* [Metro 2024k]). Similarly, projected future projects would be required to be designed to safely standards and be subject to all applicable safety codes and regulations and comply with the requirements of local emergency services. In the event projected future projects result in an overall decrease in safety and security, each project would be required to implement project measures and mitigation measures, as necessary, to reduce impacts. Therefore, the LPA in combination with projected future projects will not result in significant cumulative safety and security effects during operation.

### 5.2.19 Environmental Justice

The LPA will not result in disproportionately high and adverse effects on minority and low-income populations. Similarly, projected future projects in the Affected Area may be located in Environmental Justice (EJ) communities. Additional environmental analyses would be required to determine if potential operational impacts are predominately borne on EJ populations or disproportionately affect EJ populations (see *West Santa Ana Branch Transit Corridor Project Final Environmental Justice Impact Analysis Report* [Metro 2024e]). Therefore, the LPA will not have the potential to contribute to significant cumulative impacts on EJ communities.

## 5.3 U.S. Army Corps of Engineers Facilities

The LPA alignment will cross three U.S. Army Corp of Engineers (USACE) facilities: the concrete-lined Los Angeles River and Rio Hondo channels just west and east, respectively, of I-710, and the concrete-lined San Gabriel River channel just west of I-605. The projected future projects, including any proposed projects related to USACE facilities, would be required to comply with applicable plans, policies, regulations, and requirements and would be subject to independent review to avoid and/or minimize potential adverse effects to the extent feasible. In addition, proposed future projects would implement similar project measures or mitigation measures, as necessary, to minimize adverse effects further.

The effects associated with operation of the LPA under each environmental topic is provided in Section 5.2. As discussed, the LPA in combination with projected future projects, will result in significant cumulative impacts associated with transportation effects, cumulative land use effects with respect to planned Class I bicycle paths, noise impacts to sensitive receptors, and vibration impacts. However, cumulative impacts for these topics are not applicable to operation of the LPA at USACE facilities. Traffic operations will not occur within the USACE channels, the USACE facilities are not sensitive to noise or vibration, and no adverse effects related to land use will occur during operation of the LPA at the USACE facilities.

Impacts of the LPA in combination with projected future projects, including projects related to USACE facilities, will not be cumulative considerable as they relate to land use compatibility issues and land use plan consistency; access and mobility, community stability, community character and cohesion, and growth projections; property acquisitions and displacements; scenic vistas and scenic highways, visual character and quality, and light and glare; Air Quality Management Plan and South Coast Air Basin nonattainment pollutants; GHG; ecosystems and biological resources; geologic, subsurface, and seismic hazards; hazard and hazardous materials; water resources; energy; historic, archaeological, or paleontological resources; tribal cultural resources; parklands or community facilities; economic and fiscal; safety and security; and significant cumulative impacts to EJ communities.

## 5.4 California Department of Transportation Facilities

The LPA alignment transects the following California Department of Transportation (Caltrans) facilities, from north to south: I-710, I-105, SR-91, and I-605. The projected future projects, including any proposed projects related to Caltrans facilities, would be required to comply with applicable plans, policies, regulations, and requirements and would be subject to independent review to avoid and/or minimize potential adverse effects to the extent feasible. In addition, proposed future projects would implement similar project measures or mitigation measures, as necessary, to minimize adverse effects further.

The effects associated with operation of the LPA under each environmental topic is provided in Section 5.2. As discussed, the LPA in combination with projected future projects, will result in significant cumulative impacts associated with transportation effects, cumulative land use effects with respect to planned Class I bicycle paths; noise impacts to sensitive receptors; and vibration impacts. However, operations deterioration at ramp terminal intersections at the freeway intersections due to at-grade train crossing activity is not anticipated, and no adverse effects related to traffic operations are anticipated to Caltrans facilities. Additionally, cumulative impacts for land use and noise and vibration are not applicable to operation of the LPA at Caltrans facilities. The Caltrans facilities are not sensitive to noise or vibration, and no adverse effects related to land use will occur during operation of the LPA at the Caltrans facilities.

The LPA in combination with projected future projects, including projects related to Caltrans facilities, will not be cumulative considerable as they relate to land use compatibility issues and land use plan consistency; access and mobility, community stability, community character and cohesion, and growth projections; property acquisitions and displacements; scenic vistas and scenic highways, visual character and quality, and light and glare; Air Quality Management Plan and South Coast Air Basin nonattainment pollutants; GHG; ecosystems and biological resources; geologic, subsurface, and seismic hazards; hazard and hazardous materials; water resources; energy; historic, archaeological, or paleontological resources; tribal cultural resource; parklands or community facilities; economic and fiscal; safety and security; and significant cumulative impacts to EJ communities.

## 6 CONSTRUCTION IMPACTS

### 6.1 Construction Activities

Construction activities associated with the West Santa Ana Branch Transit Corridor Project are detailed in the *West Santa Ana Branch Transit Corridor Project Construction Methods Report* (Metro 2024a).

### 6.2 Regulatory Background and Methodology

#### 6.2.1 Regulatory Background

All federal, state, regional, and local regulations and guidelines pertinent to the construction of the Project would be followed. For additional regulatory information, refer to the *West Santa Ana Branch Transit Corridor Project Construction Methods Report* (Metro 2024a).

#### 6.2.2 Methodology

To satisfy NEPA requirements, the methodology used for this analysis follows the CEQ's guidance *Considering Cumulative Effects Under the National Environmental Policy Act*. The cumulative impact discussion for each specific discipline assessed in the Draft EIS/EIR reflects the potential severity of the impacts and the likelihood of occurrence.

To satisfy CEQA requirements, the methodology follows CEQA Guidelines Section 15130. CEQA Guidelines indicate that the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the Project's incremental effects are cumulatively considerable.

In addition, the AltAir/World Energy Project, located adjacent to the LPA alignment between Downey Avenue and Somerset Boulevard, is considered in this cumulative analysis as it relates to air quality and noise and vibration. These potential cumulative air quality and noise and vibration impacts are discussed in Section 6.4.6 and Section 6.4.8 of this impact report, respectively.

### 6.3 No Build Alternative

Under the No Build Alternative, the LPA would not be developed, and adverse effects related to construction of the LPA would not occur. Under the No Build Alternative, adverse construction effects are not anticipated to occur as projects identified in the No Build Alternative would generally comply with applicable regulations, plans and policies to avoid potential adverse effects to the environment to the extent possible. In addition, projected future projects, including the AltAir/World Energy Project, would undergo project-specific environmental clearance and would implement project-specific mitigation measures, as necessary, so that potential adverse effects related to construction are reduced or avoided. As the No Build Alternative would not result in adverse construction effects or impacts, cumulative effects would not occur. As the No Build Alternative would not contribute to potential adverse cumulative construction effects and would not be cumulatively considerable.

## 6.4 Locally Preferred Alternative, Design Option, MSF Site

### 6.4.1 Transportation

Based on the transportation analysis in the *West Santa Ana Branch Transit Corridor Project Final Transportation Impact Analysis Report* (Metro 2024l), construction of the LPA temporary closures of streets and lanes. Additionally, on- and off-street parking will be temporarily removed during construction. Construction of other projects in the vicinity of the construction areas for the LPA may also require temporary closure of streets and lanes and loss of on- and off-street parking. Construction of the LPA in combination with construction of other projects will cause significant cumulative temporary transportation effects, and the Project's incremental contribution to this cumulatively significant impact will be cumulatively considerable.

### 6.4.2 Land Use and Development

Construction of the LPA will involve temporary construction activities, such as construction staging, materials stockpiling, hauling of dirt and materials, temporary street and lane closures, temporary construction easements (TCE) and permanent easements, and property acquisitions. Similar construction activities may also occur with projected future projects in the Affected Area. Although access to businesses and nearby neighborhoods may be detoured temporarily during construction, access will be maintained per implementation of Mitigation Measure COM-1 (Construction Outreach Plan) (see *West Santa Ana Branch Transit Corridor Project Final Communities and Neighborhoods Impact Report* [Metro 2024d]).

Similarly, projected future projects would result in temporary construction effects and are anticipated to also implement construction plans to minimize temporary construction impacts. Construction of the LPA in combination with projected future projects could affect nearby sensitive land uses. However, given the temporary nature of construction activities and the implementation of mitigation measures for noise, vibration, and traffic, construction of the LPA and projected future projects will not result in land use conflicts and will not conflict with applicable land use plans, policies, and regulations of local agencies. The LPA in combination with projected future projects will not result in significant cumulative effects related to land use during construction.

### 6.4.3 Communities and Neighborhoods

Construction of the LPA and projected future projects will involve temporary construction activities that could disrupt the community where the construction activities occur. The LPA will implement Mitigation Measure COM-1 (Construction Outreach Plan) (see *West Santa Ana Branch Transit Corridor Project Final Communities and Neighborhoods Impact Report* [Metro 2024d]) to minimize effects to communities and businesses. Mitigation Measures NOI-6 (Noise Control Plan), VIB-3 (Vibration Control Plan), VIB-4 (Minimize the Use of Impact Devices), VIB-5 (Drilling for Building Foundations), VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources), and VIB-7 (Construction Monitoring for Vibration Near Historic Properties/Historical Resources) (see *West Santa Ana Branch Transit Corridor Project Final Noise and Vibration Impact Report* [Metro 2024i]) Will be implemented, where applicable, during construction to reduce construction-related noise and vibration impacts to the extent feasible. However, adverse effects related to noise during construction will occur even with mitigation. Nonetheless, the indirect impacts associated with construction-related noise and vibrations will be temporary and will not permanently inhibit

the use of community facilities, change the community character, or affect community cohesion.

Similarly, projected future projects could result in temporary construction activities that could result in temporary adverse effects to the surrounding community and may also require mitigation measures to minimize potential effects. Metro will coordinate with other concurrent construction projects to minimize street and sidewalk closures, maintain access to businesses, and to minimize any other cumulative temporary community impacts. Therefore, the LPA in combination with projected future projects will not result in significant effects associated with communities and neighborhoods during construction.

#### 6.4.4 Acquisitions and Displacements

Construction of the LPA will require TCEs and full acquisitions of properties for construction laydown areas and construction support sites. Affected sites with TCEs will be returned to preconstruction conditions once construction is complete. TCEs will be temporary and are not expected to change the primary function of the existing site uses. Metro will provide compensation for identified eligible businesses and residents affected during construction as required under the Uniform Act and California Relocation Act. Furthermore, properties to be used as TCEs will be appraised to determine the fair market value of the portion that will be used temporarily during construction, and just compensation not less than the approved appraisal will be made to each property owner. Replacement sites for businesses and residences are available in the affected communities and surrounding areas.

Similarly, projected future projects may also require TCEs and full acquisitions for construction-related activities, which may result in a cumulative impact. As with the LPA, projected future projects would be required to comply with applicable regulations, including the Uniform Act (for federally funded projects) and the California Relocation Act, to provide compensation for eligible affected businesses and residents; impacts would not be adverse. Therefore, the LPA in combination with projected future projects will not result in significant cumulative effects regarding displacement and acquisitions during construction.

#### 6.4.5 Visual Quality and Aesthetics

No scenic vistas or scenic highways are located within the visual quality and aesthetics Affected Area or in the affected area of projected future projects. Therefore, construction of the LPA in combination with projected future projects will not have the potential to contribute to cumulative effects associated with scenic vistas and scenic highways.

The LPA and the projected future projects are located in highly urbanized areas with varied heights and massing in the visual environment. Construction activities of the LPA will temporarily alter the visual character and quality of the Affected Area, requiring the implementation of Mitigation Measure VA-3 (Construction Screening) (see *West Santa Ana Branch Transit Corridor Project Final Visual and Aesthetics Impact Report* [Metro 2024m]) to minimize potential temporary construction visual impacts. Similar temporary visual adverse effects will also be associated with construction of the related projects. Construction of projected future projects would be localized to the area where construction would occur and may require the implementation of mitigation measures to minimize potential construction-related adverse effects. Therefore, the LPA in combination with projected future projects will not result in significant cumulative effects on visual quality or character during construction.

Construction activities for the LPA will generally occur between 7:00 a.m. and 5:00 p.m. on weekdays and will not result in a substantial source of light or glare. Implementation of Mitigation Measure VA-4 (Construction Lighting) will minimize potential construction lighting adverse effects. Similar to the LPA, projected future projects would be required to comply with applicable policies and regulations regarding construction hours and light and glare and would need to implement project or mitigation measures to further minimize potential construction lighting effects. Therefore, the LPA in combination with construction of projected future projects will not result in significant cumulative effects related to light and glare during construction.

### 6.4.6 Air Quality

The South Coast Air Basin is currently designated as in nonattainment of the federal and state ambient air quality standards for ozone and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Therefore, there is an ongoing significant cumulative effect associated with these air pollutants. Emissions generated during construction of the LPA combined with construction of projected future projects could impede attainment efforts or result in locally significant pollutant concentrations. Therefore, the LPA in combination with projected future projects could result in significant cumulative air quality impacts.

The SCAQMD has not established separate quantitative cumulative thresholds for emissions of criteria pollutants. Rather, the SCAQMD established the same mass daily thresholds of significance for project-specific and cumulative impacts assessment because of the regional importance of project-specific emissions in the context of attaining the ambient air quality standards. Attainment designations are made at the county and geographic basin levels; therefore, there is a cumulative aspect to all project-level emissions in nonattainment areas. For both construction and operational activities, if a project exceeds the identified project-level significance thresholds, its emissions would be considered cumulatively significant, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Construction of the LPA will generate varying degrees of maximum daily air pollutant emissions due to differences in daily haul truck activity required to dispose of demolition debris and excavated soil and import fill materials. However, construction of the LPA will not produce emissions exceeding any regional mass daily threshold. The AltAir/World Energy Project is independent of the WSAB Project and would produce daily emissions in excess of the SCAQMD regional threshold. The AltAir/World Energy Project Final Supplemental EIR evaluated and identified mitigation to air quality impacts as feasible and is responsible for implementation of such mitigation. Construction of the LPA and MSF will not independently generate emissions exceeding the applicable SCAQMD thresholds at regional or localized scales. The majority of the emissions generated by construction of the LPA will not occur near the AltAir/World Energy facility or the City of Paramount. The MSF site will be located within the City of Bellflower, and emissions associated with its construction will not be generated within the area of localized impacts identified in the AltAir/World Energy Project Final Supplemental EIR. Air quality impacts for the LPA will remain less than significant. In accordance with SCAQMD guidance, construction of the LPA would not result in a cumulatively significant air quality impact because construction of the LPA would not generate emissions in excess of the identified project-level significance thresholds. Therefore, construction of the LPA will not result in a cumulatively considerable short-term contribution

to degradation of the region's air quality. Once operational, the LPA will reduce VMT, which will result in a net benefit to regional air quality.

Construction activities of the LPA will adhere to provisions of the Metro *Green Construction Policy* and employ Best Management Practices (BMPs) to prevent the occurrence of a nuisance odor or dust plume in accordance with SCAQMD Rule 402 (Nuisance). Projected future projects would also be required to employ similar BMPs. Therefore, a cumulatively significant impact related to odor is not anticipated. The LPA will not incrementally contribute to nuisance odor and dust effects.

#### 6.4.7 Greenhouse Gas Emissions

The LPA will result in fewer GHG emissions than both the Existing Condition and the No Build Alternative. The LPA will be consistent with applicable GHG plans, policies, and regulations. Standard construction procedures will be undertaken in accordance with the Metro Green Construction Policy and SCAQMD and California Air Resources Board regulations applicable to heavy duty construction equipment and diesel haul trucks. Adhering to requirements pertinent to equipment maintenance and inspections standards and emissions standards, as well as diesel fleet requirements related to idling restrictions, will prevent construction of the LPA from conflicting with GHG emissions-reductions efforts. Additionally, Metro selection criteria gives competitive preference to construction products and services that conserve natural resources (e.g., recycled materials).

No state, regional, or local GHG reduction plans promote increased passenger vehicles on the roadway network. The LPA will be consistent with the 2016-2040 RTP/SCS, the 2020-2045 RTP/SCS, Energy Conservation Management Plan, City of Los Angeles Zero Emission 2028 Roadmap, and other conservation plans for local jurisdictions. Although temporary GHG emissions will be generated during construction, no adverse impact will occur as the LPA is for mass transit and reduced VMT is a key component of relevant GHG reduction plans. There is no potential for the LPA to interfere with state and regional GHG reduction targets. Consequently, the LPA will not cause a cumulatively considerable incremental impact related to GHG emissions.

#### 6.4.8 Noise and Vibration

Noise is a localized phenomenon that is significantly reduced in magnitude as distance from the source increases. For construction impacts, only the immediate surroundings of the construction areas are included in the cumulative context, as it would be the most vulnerable to construction noise. This is typically within 500 feet of construction activity. Vibration is even more localized than noise and is generally not perceptible beyond 75 feet from construction equipment.

##### 6.4.8.1 Noise

The geographic scope for the cumulative noise analysis is the immediate vicinity (within 500 feet) of the LPA where construction-generated noise from the Project could be heard concurrently with noise from other sources. Construction of the LPA will require heavy-earth moving equipment, generators, cranes, pneumatic tools, and other similar machinery. The Construction noise levels for the LPA will exceed Federal Transit Administration (FTA) and local noise standards due to the intensive nature of LRT construction activities and the proximity of sensitive land uses to the corridor without mitigation measures. Implementation of Mitigation Measure NOI-6 (Noise Control Plan) (see *West Santa Ana*

*Branch Transit Corridor Project Final Noise and Vibration Impact Report* [Metro 2024i]) will reduce construction noise levels but will still likely exceed the FTA construction noise criteria and local standards resulting in temporary adverse effects related to construction noise.

Similar to the LPA, construction of projected future projects would likely include the use of heavy construction equipment that would generate elevated construction noise levels. Projected future projects would go through their own environmental clearance process and would include mitigation for construction noise to reduce impacts. Projected future projects within 500 feet of construction of the LPA could result in a cumulative construction noise impact at sensitive receptors. The AltAir/World Energy Project at the World Energy facility will be within 500 feet of the LPA. The AltAir/World Energy Project Supplemental EIR concluded that construction noise will be less than significant with mitigation incorporated. As such, if construction of the AltAir/World Energy Project and the LPA occur simultaneously, the cumulative impact would not be substantially more severe than that identified in the Draft EIS/EIR. Although it is not possible to predict which projected future projects would result in a cumulative construction noise scenario, the construction noise levels associated with the LPA could increase ambient noise levels. Therefore, when combined with noise generated by projected future projects, the LPA will result in cumulative noise effects during construction, and the LPA incremental contribution to this impact will be cumulatively considerable.

### 6.4.8.2 Vibration

The geographic scope for the cumulative construction vibration analysis is the immediate vicinity (within 75 feet) of the LPA where project-generated vibrations could occur concurrently with vibrations from other sources. Construction will require heavy-earth moving equipment, cranes, and other similar machinery. Vibration-generating activities associated with construction of the LPA will result in noticeable levels of vibration but these will largely occur within the rail ROWs or on sites acquired for the LPA. However, the LPA is unlikely to result in building damage as vibration attenuates quickly with distance. The LPA will implement Mitigation Measures VIB-3 (Vibration Control Plan), VIB-4 (Minimize the Use of Impact Devices), VIB-5 (Drilling for Building Foundations), VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources), and VIB-7 (Construction Monitoring for Vibration Near Historic Properties/Historical Resources), where applicable, to avoid construction vibration levels that would exceed the FTA construction impact criteria and no adverse effect will occur (see *West Santa Ana Branch Transit Corridor Project Final Noise and Vibration Impact Report* [Metro 2024i]).

The LPA in combination with projected future projects are not considered likely to result in the exposure of sensitive receivers to excessive vibration due to the localized nature of vibration impacts and the fact that not all construction will occur at the same time and at the same location. Only sensitive receivers located near each construction site will be potentially affected by each activity. For the combined vibration impact from concurrent construction projects to reach cumulatively significant levels, intense construction from these projects would have to occur simultaneously within 75 feet of any sensitive receiver. It is not anticipated that vibration-generating equipment from projected future projects, including the AltAir/World Energy Project, would operate at the same time and at the same location as equipment related to the LPA. Therefore, when combined with vibration generated by projected future projects, the LPA will not result in significant cumulative vibration effects during construction.

#### 6.4.9 Ecosystems and Biological Resources

The LPA and projected future projects will be constructed in dense urban environments. The LPA may adversely affect nesting birds and bats if initial ground disturbance and vegetation/tree trimming or removal are required during the nesting bird season. Construction-related noise and dust will also result in an adverse indirect effect on nesting birds. However, the LPA will comply with all required applicable regulations. Project construction will not result significant impacts related to invasive species, special-status species, jurisdictional waters, and protected trees with implementation of Project Measures BIO PM-1 (Invasive Plant Species Best Management Practices) and BIO PM-2 (Prohibition of Invasive Plant Species in Landscape Plans) and Mitigation Measures BIO-1 (Bats), BIO-2 (Nesting Birds), BIO-3 (Jurisdictional Resources), and BIO-4 (Protected Trees) (see *West Santa Ana Branch Transit Corridor Project Final Ecosystems and Biological Resources Impact Report* [Metro 2024c]). Similar to the LPA, projected future projects would comply with applicable regulations and ordinances and implement applicable mitigation so construction-related impacts to special-status species, jurisdictional waters, and protected trees are minimized or avoided. Therefore, construction of the LPA in combination with projected future projects will not result in cumulatively significant impacts to special-status species, jurisdictional waters, and protected trees.

#### 6.4.10 Geotechnical/Subsurface/Seismic Hazards

In general, geologic, subsurface, and seismic hazards are site-specific and adverse effects are largely localized. Construction of the LPA will not result in adverse effects related to geologic, subsurface, and seismic hazards and will comply with all prescribed standards, requirements, and guidance related to geologic, subsurface, and seismic hazards. In addition, the LPA will implement GEO PM-2 (Geotechnical Design [Construction]) that requires the incorporation of the geotechnical report recommendations and monitoring plans (see *West Santa Ana Branch Transit Corridor Project Final Geotechnical, Subsurface, and Seismic Impact Report* [Metro 2024f]). Similarly, projected future projects would be required to comply with all prescribed standards, requirements, and guidance related to geologic, subsurface, and seismic hazards. Therefore, the LPA in combination with projected future projects will not result in significant cumulative geologic, subsurface, and seismic hazards effects during construction.

#### 6.4.11 Hazards and Hazardous Materials

In general, impacts associated with hazards and hazardous materials are site-specific and adverse effects are largely localized. Construction of the LPA will not result in adverse effects related to hazards and hazardous materials. Construction of the LPA will comply with all regulatory requirements, and hazardous wastes would be properly handled. The LPA will implement Project Measures HAZ PM-4 (Handling, Storage, and Transport of Hazardous Materials or Wastes), HAZ PM-5 (Property Assessment – Phase I and II ESAs), HAZ PM-6 (Demolition Plans), HAZ PM-7 (Disposal of Groundwater), HAZ PM-8 (Oil Well Abandonment), and HAZ PM-9 (Contaminated Soil, Soil Vapor, and Groundwater) and Mitigation Measure HAZ-1 (Unidentified Oil and Gas Wells) to minimize potential impacts and reduce the risk of adverse health effects during construction; no adverse effect will occur (see *West Santa Ana Branch Transit Corridor Project Final Hazardous Materials Impact Report* [Metro 2024g]).

Similarly, construction of projected future projects would be required to comply with all prescribed standards, requirements, and guidance related to hazards and hazardous materials and implement project measures and mitigation measures to minimize potential hazards and hazardous materials impacts. Therefore, the LPA in combination with projected future projects will not result in significant cumulative hazard and hazardous materials effects during construction.

### 6.4.12 Water Resources

Construction of the LPA may lead to temporary changes in grades and drainage patterns, discharge of pollutants into surface waters, exposure of soils to stormwater and erosive conditions, and temporary dewatering may be required. These temporary impacts would be addressed via a stormwater pollution prevention plan (SWPPP) that complies with the General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). Construction of the LPA over the Los Angeles River, Rio Hondo channel, and San Gabriel River channels will not impact floodplains as construction activities will comply with all applicable federal and local floodplain regulations, including applicable National Flood Insurance Program regulations. Dewatering of the construction site will be subject to the requirements of the Construction Dewatering Permit and, therefore, will not cause construction-related impacts to surface or groundwater quality. The LPA will implement project design features to avoid, minimize, or reduce the potential for impacts on water resources (see *West Santa Ana Branch Transit Corridor Project Final Water Resources Impact Report* [Metro 2024n]). Similarly, projected future projects could result in similar water resource impacts during construction and would be required to comply with existing regulations, including SWPPPs, and to implement BMPs to reduce construction impacts on water resources. Therefore, the LPA in combination with projected future projects will not result in significant cumulative water resource effects during construction.

### 6.4.13 Energy

Diesel fuel for construction vehicles and equipment would be the primary end use of energy resources consumed throughout the course of construction of the LPA. There is no identified ongoing cumulatively significant condition related to energy resources that construction of the LPA will have the potential to exacerbate. Given the extensive network of fueling stations along the LPA alignment and the fact that construction will be temporary, no new or expanded sources of energy or infrastructure will be required to meet energy demands during construction of the LPA. In addition, construction activities will comply with the *Metro Green Construction Policy*, and construction equipment and vehicles will be maintained in accordance with manufacturers' specifications. The one-time expenditure of fuel is not considered a wasteful or inefficient use of non-renewable resources as the fuel is being used to construct a mass transit system, which has been identified by state and regional agencies as an efficient method of reducing permanent energy use. Similarly, projected future projects are not expected to place an undue burden on the availability of existing or future energy resources. Therefore, the LPA in combination with projected future projects will not result in significant cumulative energy effects during construction.

#### 6.4.14 Historic, Archaeological, and Paleontological Resources

Historic, archaeological, and paleontological impacts are generally site-specific and localized. There are no known archaeological resources in the Area of Potential Effects; therefore, the LPA will have no effect on known archaeological resources. Ground-disturbing construction activities could directly impact paleontological and unknown archaeological resources, if present. Implementation of Mitigation Measures CR-1 (Development of Cultural Resource Mitigation and Monitoring Program) through CR-4 (Treatment of Unanticipated Discoveries), and PR-1(a) (Paleontological Resources Mitigation and Monitoring Program) through PR-1(d) (Preparation and Curation of Recovered Fossils), will further reduce construction-related effects related to archaeological and paleontological resources (see *West Santa Ana Branch Transit Corridor Project Cultural Resources Effects Report* [Metro 2024q]).

Surface level activities may result in vibration impacts to historic structures from the operation of heavy equipment in close proximity; however, Mitigation Measures VIB-3 (Vibration Control Plan) and VIB-6 (Construction Vibration Limits Near Historic Properties/Historical Resources) will be implemented, ensuring that vibration levels do not exceed identified damage risk criteria. Visual impacts and construction easements related to construction will be temporary and will not result in any permanent change to historical resources. Therefore, construction of the LPA will have no adverse effect on built environment historic properties.

Similarly, projected future projects could require ground disturbance activities during construction and would be required to comply with all applicable regulations and would implement mitigation measures to reduce adverse effects. Therefore, the LPA when combined with projected future projects will not result in significant cumulative historic, archaeological, and paleontological resources effects during construction.

#### 6.4.15 Tribal Cultural Resources

Impacts to tribal cultural resources are generally site-specific and localized. The Affected Area is located within a previously disturbed developed area. Nonetheless, the potential exists for tribal cultural resources to be encountered due to the previous inhabitation of the Los Angeles Basin by various Native American tribes. However, should potential tribal cultural resources be discovered, Metro will comply with applicable federal, state, and local guidelines during construction activities, including those set forth in Public Resources Code Section 21083.2, State Health and Safety Code Section 7050.5, and Public Resources Code Section 5097.98 to ensure no adverse effects will occur. In addition, the LPA will implement Mitigation Measures TCR-1 (Native American Monitoring), TCR-2 (Unanticipated Discovery of Traditional Cultural Properties/Tribal Cultural Resources), and CR-1 (Development of Cultural Resources Monitoring and Discovery Program), and adverse effects will not occur (see *West Santa Ana Branch Transit Corridor Project Final Tribal Cultural Resources Impact Report* [Metro 2024p]).

Projected future projects would also be required to comply with applicable federal, state, and local guidelines. As with the LPA, projected future projects are not anticipated to cause adverse effects to tribal cultural resources during construction and would comply with all applicable regulations regarding the handling and care of such resources. Therefore, the LPA when combined with projected future projects will not result in significant cumulative tribal cultural resource effects during construction.

#### **6.4.16 Parklands and Community Facilities**

Construction activities of the LPA related to access, acquisitions, air quality, noise and vibration, and traffic and parking may temporarily affect parklands and community facilities. Indirect effects related to noise, vibration, and air quality will be temporary and are not anticipated to result in adverse effects to parklands and community facilities. The use of nearby streets may result in restricted street parking, sidewalk detours, and traffic detours. As a result, community disruption could occur during construction. The LPA will implement Mitigation Measure COM-1 (Construction Outreach Plan) to minimize effects to parklands, community facilities (including bike trails), and businesses. Mitigation Measures NOI-6 (Noise Control Plan), VIB-3 (Vibration Control Plan), VIB-4 (Minimize the Use of Impact Devices), and VIB-5 (Drilling for Building Foundations) will be implemented during construction to reduce construction-related noise and vibration impacts to the extent feasible (see *West Santa Ana Branch Transit Corridor Project Final Parklands and Community Facilities Report* [Metro 2024j]). However, adverse effects related to noise during construction will occur even with mitigation. Nonetheless, the indirect impacts associated with temporary construction-related noise and vibration will be temporary and will not permanently inhibit the use of parklands, recreational facilities, and community facilities.

Similarly, construction of proposed future projects could result in temporary indirect adverse effects related to noise, vibration, and air quality, and require temporary restrictions in street parking, sidewalk detours, and traffic detours that may require mitigation measures to minimize potential effects. Proposed future projects would also be required to coordinate with local jurisdictions to minimize construction impacts to surrounding parklands and community facilities through project-specific construction management plans that would maintain access to parklands and community facilities to the extent feasible. Therefore, the LPA combined with proposed future projects will not result in significant effects associated with parklands and community facilities during construction.

#### **6.4.17 Economic and Fiscal Impacts**

Construction of the LPA will have beneficial economic and fiscal impacts related to direct and indirect effects from construction spending. Construction effects on businesses and residences near the construction area would be temporary. The LPA will implement Mitigation Measures COM-1 (Construction Outreach Plan) and TRA-21 (Loss of Parking [Construction]) so that access to businesses is maintained and no adverse effects will occur (see *West Santa Ana Branch Transit Corridor Project Final Transportation Impact Report* [Metro 2024l]). Similarly, projected future projects would also bring beneficial economic and fiscal effects to the city in which the related project is located. In addition, it is anticipated that projected future projects would prepare a construction plan and mitigation measures as necessary to reduce potential temporary effects on businesses and residences. Therefore, the LPA when combined with projected future projects will result in beneficial cumulative economic and fiscal effects during construction.

#### **6.4.18 Safety and Security**

Adverse safety and security impacts are generally site-specific and localized. Project construction activities could temporarily affect the pedestrian and bicycle environment, motorist safety, and emergency response services. Temporary street closures may also result in impacts to emergency response services. The LPA will coordinate with police, medical, and fire services, develop construction staging plans, and comply with applicable regulations. The

LPA will implement Project Measures SAF PM-9 (Service Providers), SAF PM-10 (MRDC Compliance), and SAF PM-11 (Fire/Life Safety Committee [Construction]), Mitigation Measures SAF-2 (School District Coordination), SAF-3 (Construction Site Measures), and elements of COM-1 (Construction Outreach Plan) to avoid adverse effects to pedestrian, bicyclist, or motorist safety (see *West Santa Ana Branch Transit Corridor Project Final Safety and Security Impact Report* [Metro 2024k]). Similarly, projected future projects would be required to comply with all applicable regulations and implement migration measures and/or BMPs to reduce safety and security impacts. Therefore, the LPA when combined projected future projects will not result in significant cumulative safety and security effects during construction.

#### 6.4.19 Environmental Justice

The LPA will not result in disproportionately high and adverse effects on minority and low-income populations. Therefore, the LPA combined with projected future projects will not result in significant cumulative impacts on EJ communities.

### 6.5 U.S. Army Corps of Engineers Facilities

Construction of the LPA and its effects to each environmental topic is provided in Section 5.2. As discussed, construction of the LPA in combination with projected future projects, including projects related to the USACE facilities, will be cumulatively considerable for construction-related transportation effects and noise impacts to sensitive receptors. However, cumulative impacts for these topics are not applicable to construction of the LPA at USACE facilities. Traffic operations will not occur within the USACE channels and the USACE facilities are not sensitive to noise.

The projected future projects, including any proposed projects related to USACE facilities, would be required to comply with applicable plans, policies, regulations, and requirements and would be subject to independent review to avoid and/or minimize potential adverse effects during construction to the extent feasible. In addition, proposed future projects would implement similar project measures or mitigation measures, as necessary, to further minimize construction-related adverse effects.

Impacts of the LPA in combination with projected future projects, including projects related to USACE facilities, will not be cumulatively considerable as it they relate to land use; access and mobility, community stability, and community character and cohesion, and growth projections; property acquisitions and displacements; scenic vistas and scenic highways, visual character and quality, and light and glare; air quality; GHG; vibration; ecosystems and biological resources; geologic, subsurface, and seismic hazards; hazard and hazardous materials; water resources; energy; historic, archaeological, or paleontological resources; tribal cultural resources; parklands or community facilities; economic and fiscal; safety and security; and significant cumulative impacts to EJ communities.

### 6.6 California Department of Transportation Facilities

Construction of the LPA and its effects to each environmental topic is provided in Section 5.2. As discussed, construction of the LPA in combination with projected future projects, including projects related to the Caltrans facilities, will be cumulatively considerable for construction-related transportation effects and noise impacts to sensitive receptors. However, cumulative

impacts for noise are not applicable to construction of the LPA at Caltrans facilities, as the Caltrans facilities are not sensitive to noise.

The projected future projects, including any proposed projects related to Caltrans facilities, would be required to comply with applicable plans, policies, regulations, and requirements and would be subject to independent review to avoid and/or minimize potential adverse effects during construction to the extent feasible. In addition, proposed future projects would implement similar project measures or mitigation measures, as necessary, to further minimize construction-related adverse effects.

Impacts of the LPA in combination with projected future projects, including projects related to Caltrans facilities, will not be cumulatively considerable as they relate to land use; access and mobility, community stability, and community character and cohesion, and growth projections; property acquisitions and displacements; scenic vistas and scenic highways, visual character and quality, and light and glare; air quality; GHG; vibration impacts; ecosystems and biological resources; geologic, subsurface, and seismic hazards; hazard and hazardous materials; water resources; energy; historic, archaeological, or paleontological resources; tribal cultural resources; parklands or community facilities; economic and fiscal; safety and security; and significant cumulative impacts to EJ communities.

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