Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File #: 2024-0104, **File Type:** Project **Agenda Number:** 10.

PLANNING AND PROGRAMMING COMMITTEE
APRIL 17, 2024

SUBJECT: SOUTHEAST GATEWAY LINE (FORMERLY WEST SANTA ANA BRANCH) - PROJECT APPROVAL AND CERTIFICATION OF FINAL ENVIRONMENTAL IMPACT REPORT

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

CONSIDER:

A. APPROVING the board-identified Locally Preferred Alternative (LPA) as the Southeast Gateway Line (formerly West Santa Ana Branch) Light Rail Transit (LRT) Project (Project), which is a 14.5- miles LRT line with nine (9) stations and includes a new C Line infill station at the I-105 Freeway. The Project extends from its northern LPA terminus at the Slauson/A Line Station located in the City of Los Angeles/Florence-Firestone unincorporated area of Los Angeles (LA) County to its southern terminus at the Pioneer Station located in the City of Artesia and includes a new C Line infill station at the I-105 Freeway. Approval of the Project also provides for the inclusion of five (5) parking facilities, ancillary facilities and a Maintenance and Storage Facility (MSF) in the City of Bellflower;

B. CERTIFYING in accordance with the California Environmental Quality Act (CEQA) the Final Environmental Impact Report (EIR), which includes the design option that would close 186th Street but keep 187th Street open in the City of Artesia.

C. ADOPTING, in accordance with CEQA, the:

1. Findings of Fact and Statement of Overriding Considerations, and

2. Mitigation Monitoring and Reporting Plan (MMRP); and

D. AUTHORIZING the Chief Executive Officer to file a Notice of Determination with the Los Angeles County Clerk and the State of California Clearinghouse.

ISSUE

On March 29, 2024, the combined Final Environmental Impact Study/Environmental Impact Report

(Final EIS/R) for the Project was released for a 30-day public review period. The Final EIS/R has completed all necessary steps to be considered for Certification by the Board in accordance with CEQA. The Executive Summary is included in Attachment A. The Final EIR Certification also includes approval of the MMRP (Attachment B) and the Findings of Fact and Statement of Overriding Considerations (Attachment C). The Project is a Measure R and Measure M project that is contained in the 2009 Long Range Transportation Plan (LRTP) and the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

BACKGROUND

In January 2022, the Board selected the Project, a 14.5 miles LRT line with nine (9) stations from a northern LPA terminus at the Slauson/A Line Station located in the City of Los Angeles/Florence-Firestone unincorporated area of LA County to a southern terminus at the Pioneer Station located in the City of Artesia and a new C Line infill station at the I-105 Freeway.

This Project would connect the ten cities and communities of Artesia, Cerritos, Bellflower, Paramount, Downey, South Gate, Cudahy, Bell, Huntington Park, Vernon, unincorporated Florence-Firestone, and downtown Los Angeles. The project would also connect this area to Metro's emerging rail network, including the C Line to LAX, the A-Line to LA Union Station, Pasadena, and Azusa through the Regional Connector. The Project will provide alternatives to driving and create more access to regional opportunities. Approval of the Project's environmental document also includes five parking facilities and a Maintenance and Storage Facility (MSF) in the City of Bellflower.

The Board also selected Los Angeles Union Station (LAUS) as the northern terminus for the full corridor project. Staff is conducting a separate study to evaluate options for connecting from Slauson/A Line to Union Station.

The Project will serve an area that is home to 1.4 million residents and an industrial employment hub with approximately 618,500 jobs. Population and jobs are projected to grow to 1.6 million and 746,000, respectively, by 2042. Population and employment densities in areas around the Project are five times higher than the LA County average. There is a high concentration of minority communities residing in the Project study area, including a significant concentration of minority residents comprising 65 percent of the total study area population, with Hispanic/Latino groups alone accounting for 51 percent of the total population. In addition, 44 percent of study area residents live below the poverty level, which is higher than the county average of 33 percent.

The Project will provide residents with premium transit service to access employment, health, and educational opportunities, which otherwise would be difficult to reach. This project will also address greenhouse gas emissions (GHG) by reducing an anticipated 34 million vehicle miles traveled per year, the equivalent of 3.9 million gallons of gasoline, once in operation. The construction and operation of this project will create approximately 37,000 to 46,000 jobs and generate approximately $5 billion per year in economic activity for the region.

Additionally, Metro launched a renaming campaign in August 2023, including community input on a

new name that would represent the character, culture, and experience of the people who live, work, and play in the cities this new line will serve. The Southeast Gateway Line was selected as the project name. For consistency with the remainder of the environmental documents, the Final EIS/R continues to refer to the project as the West Santa Ana Branch.

Since initiating the Project, staff has conducted extensive outreach efforts to reach and hear from corridor communities and has continued to engage project stakeholders through a variety of forums, platforms, languages, and access methods, including special outreach efforts to people of color, low-income, and limited English proficiency populations, and persons with disabilities. This engagement has directly influenced project development. Metro staff will continue to inform communities as a part of completing the Final EIS/R.

Metro released the Final EIS/R for the Project on March 29, 2024, for a 30-day public review period.

The Executive Summary (Attachment A) provides a detailed description of the Project. The Final EIS/R can be accessed via the project website metro.net/sgl <https://www.metro.net/projects/southeastgateway/>. The Final EIS/R was also published in the Federal Register (<https://www.federalregister.gov/>) on March 29, 2024.

DISCUSSION

California Environmental Quality Act (CEQA)

Metro, as the CEQA lead agency and proponent for the Project, has, in coordination with the cities of Artesia, Bell, Bellflower, Cerritos, Cudahy, Downey, Huntington Park, Paramount, Los Angeles, South Gate, Vernon, as well as portions of unincorporated Los Angeles County, completed an environmental impact report (EIR) for the proposed
Project. If the Metro Board certifies the EIR and approves the proposed Project, thereby completing the CEQA environmental clearance, the Project will be eligible to commence right-of-way acquisition, utility relocation, and other construction activities.

CEQA requires that Metro balance, as applicable, the economic, social, technological, and other benefits of the Project against its unavoidable impacts when considering project approval and certification. CEQA Guidelines Section 15091(a) states that no public agency shall approve or carry out a project which identifies one or more significant environmental effects unless the public agency makes written findings for each of the identified significant effects, accompanied by a brief explanation of the rationale for each finding.

Section 21081.6 (Assembly Bill 3180) of the California Public Resources Code requires the Lead Agency, for each project that is subject to CEQA, monitor performance of the mitigation measures included in the environmental document to ensure that mitigation does, in fact, take place after a project is approved. Therefore, a Mitigation Monitoring and Reporting Program (MMRP) has been prepared to ensure compliance with the adopted mitigation measures. The purpose of the MMRP is to ensure that the mitigation measures identified in the Final EIS/R that mitigate the potentially significant environmental effects of the Project are properly carried out. Metro is responsible for assuring full compliance with the provisions of the MMRP (Attachment B).

Prior to approving the proposed Project, the Board must find that notwithstanding the disclosure of these significant and unavoidable impacts, there are specific overriding reasons for approving this Project and that these reasons serve to override and outweigh the Project's significant unavoidable effects. CEQA requires that support be provided, in writing, of the specific reasons for approving a project when significant impacts cannot be avoided or substantially lessened. These findings are included in the Project's Statement of Overriding Considerations (Attachment C).

Prior to the selection of the Project's LPA, Metro released the Draft EIS/R for a 60-day public review and comment period, which transpired between July and September 2021. Prior to releasing the Draft EIS/R, Metro conducted numerous outreach efforts to notify the public about the project, the public review period, and how to comment on the Project. Two virtual Stakeholder Working Group (SWG) meetings (one focused on downtown Los Angeles communities and one focused on communities located south of the I-10 freeway) were held in April 2021 to inform stakeholders along the corridor about the upcoming release of the Draft EIS/R. Metro also coordinated with cities and stakeholders in the run-up to the release of the Draft EIS/R to inform the public about the Project and the public review period. These efforts included distributing bilingual street banners to corridor cities, ads on corridor buses, Metro social media announcements, quadrilingual project eblast distributed to over 4,500 email database contacts, bilingual SMS (texts) distributed to over 450 cell phones, and door-to-door canvassing and printed materials distribution to over 2,800 properties at targeted locations along the project corridor. Additionally, briefings were held prior to the release of the Draft EIS/R:

- Eco-Rapid Board - July 14, 2021
- WSAB Cities Manager TAC - July 15, 2021
- Paramount City Council - July 20, 2021
- Little Tokyo Community Council - July 21, 2021
- LTCC Board Meeting - July 27, 2021
- Metro Board Staff Briefing - July 27, 2021
- Congresswoman Roybal-Allard Staff - July 28, 2021

Since the Board's identification of the LPA in January 2022, staff has been working with third parties, including various cities, Union Pacific Railroad (UPRR), the Ports of Los Angeles and Long Beach (Ports), and other agencies to respond and resolve the Draft EIS/R comments. A confirmed final project definition/design for the Final EIS/R and Advanced Conceptual Engineering (ACE) Plans were completed in April 2023. Of note, new design comments were received from UPRR and the Ports in June 2022, six months after the LPA selection.

Staff held 180+ meetings with corridor cities, UPRR, the Ports, CPUC, Caltrans, USACE, and other key stakeholders. Comments received - both during the formal commenting period as well as afterward - cover a wide range of topics, including additional traffic analysis and mitigation, parking capacity, noise/vibration analysis and mitigation, vertical profile, and other issues. Staff completed various studies to respond to comments and reflect design refinements including, but not limited to:

- San Pedro Subdivision aerial assessment
- CPUC and city road closures/openings assessments
- Updated noise analysis methodology, project measures, and mitigation
- Multiple visual simulations at various locations
- Parking effects in Huntington Park, Bell, South Gate, Cudahy, Paramount, Bellflower,

Cerritos, and Artesia

Responses to all comments received during the Project's 60-day Public Review and Comment period were drafted and are contained in Appendix D of the Final EIS/R.

A confirmed final project definition/design for the Final EIS/R and Advanced Conceptual Engineering (ACE) Plans were completed in April 2023. Five in-person and virtual community meetings were held in June 2023 in the cities of Paramount, Bell, and Artesia to inform the public of the project refinements. In addition, the project team attended 10 local community events to provide information.

National Environmental Protection Act (NEPA)
Metro has coordinated with the Federal Transit Administration (FTA), the lead agency for the NEPA clearance, including the Environmental Impact Statement and Record of Decision (ROD). The NEPA clearance is necessary to ensure the environmental document is inclusive of all information required to meet federal environmental guidelines and to allow the Project to be eligible for federal funding. Metro may seek financial assistance from FTA for the Project to carry out the Project's engineering and construction.

If FTA provides financial assistance for the final design and construction of the Project, FTA will require that Metro design and construct the Project as presented in the Final EIS/R and the ROD. Although no new federal funds have been identified yet for the Project, by working with the FTA to complete the NEPA portion of the environmental document, the Project should be positioned to compete for Federal funding opportunities that become available.

Community Outreach
For consistency with earlier environmental documents, the Final EIS/R continues to refer to the project as the West Santa Ana Branch. The Final EIS/R can be accessed via the project website (metro.net/sgl <https://www.metro.net/projects/southeastgateway/>). The Final EIR is also published on the Federal Register website (<https://www.federalregister.gov/>)

A digital copy of the Final EIS/R has been mailed to agencies, impacted property owners, and Draft EIS/R commentators. The printed copies of the Final EIS/R have been made available at the following library locations along the project corridor:

- Artesia Library, 18801 Elaine Ave, Artesia, CA 90701
- Arts District Business Improvement District, 1801 E 7th St, Los Angeles, CA 90021
- Clifton M. Brakensiek Library, 9945 Flower St, Bellflower, CA 90706
- Gateway Cities Council of Governments, 16401 Paramount Blvd, Paramount, CA 90723
- Hollydale Library, 12000 Garfield Ave, South Gate, CA 90280
- Huntington Park Library, 6518 Miles Ave, Huntington Park, CA 90255
- Little Tokyo Branch Library, 203 S Los Angeles St, Los Angeles, CA 90012
- Los Angeles Central Library, 630 W 5th St, Los Angeles, CA 90071
- Metro Dorothy Peyton Library, 15th Floor, 1 Gateway Plaza Los Angeles, CA 90012
- Paramount Park Community Center, 14400 Paramount Blvd, Paramount, CA 90723
- South Park Business Improvement District, 1150-B S Hope St, Los Angeles, CA 90015

Metro also issued social media announcements, newspaper ads, shared bilingual project eblasts to over 4,500 email database contacts and SMS (texts) to 450 cell phones as well as distributed 55,000 printed notices, including door-to-door to over 48,000 properties along the corridor, a mailed notice to over 5,000 stakeholders, and over 1,000 fliers at community events.

Project Cost

As presented at the September 2022 meeting , since entering the FTA New Starts program and Project Development phase, Metro staff had re-evaluated the forecasted Project cost presented in the 2021 Draft EIS/R. The re-evaluation was necessary to re-consider several potential future cost drivers, including unknown/unidentified future risks given the current (early) level of design completion, additional contingency factors aligning with anticipated FTA oversight procedures to maintain eligibility for federal New Starts funding programs, and escalation of cost estimates to year (s) of expenditure based on the project delivery schedule. Additionally, the cost was further updated to address design refinements resulting from comments received since the Draft EIS/R release. This resulted in a forecasted cost of $7.167B (2023$), which was (and remains) within the range presented to the Board previously in 2021.

Staff will continue to identify opportunities to control the project costs, including working with local stakeholders to:

- Streamline the permitting process with cities
- Exercise franchise agreements, and
- Identify cost-savings associated with scaling down the MSF facility (i.e., special trackwork to serve the LPA segment).

DETERMINATION OF SAFETY IMPACT

Recommended actions will not affect the safety of Metro customers and/or employees because this Project is in the planning phase and no construction or operational safety impacts result from this Board Action.

FINANCIAL IMPACT

With the Board's approval of the Project and certification of the Final EIR, Metro will file a Notice of Determination (NOD) with the State Clearinghouse to complete the CEQA process. It is anticipated that FTA staff will issue a Record of Decision in Q3 2024 which will conclude the environmental document and as such, additional budget is not required at this time.

Approval of the Project and certification of the Final EIR will allow staff to continue advancing the design, start the right-of-way acquisition and relocation process, and advance utility relocation work.

The Project has capital funding programmed in the Metro financial forecast. The funding includes a fixed allocation of Measure R and Measure M funds, as well as state grant funds that have been awarded to the Project.

EQUITY PLATFORM

Board certification of the Project is consistent with the goals and objectives outlined in the Metro Equity Platform Framework that identified that the Project traverses through Equity Focus Communities (EFCs) in Southeast Los Angeles County, where access to premium transit service is limited. The Project is also comprised largely of Environmental Justice (EJ) communities, which are defined from the demographic and socioeconomic data of the U.S. Census. Black, Indigenous, and other People of Color (BIPOC) are (65%) of the total study area population, and Hispanic/Latino groups alone account for 51 percent of the study area population. In addition, 44 percent of study area residents live below the poverty level, compared with the county average of 33 percent.

Overall, this Project will benefit communities through the addition of a new high-quality reliable transit service that will increase mobility and connectivity for the historically underserved communities in the corridor.
The Project helps to address mobility disparities and provide residents with increased access to employment, health, and education opportunities, which otherwise would be difficult to reach by transit.

Since initiating the Project, staff has conducted extensive outreach efforts to corridor communities, and has continued to engage project stakeholders through a variety of forums, platforms, languages, and access methods, including special outreach efforts to people of color, low-income, and limited English proficiency populations, and persons with disabilities. The Final EIS/R project refinements have been directly influenced by this engagement, as discussed above.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Project supports the following strategic plan goals identified in Vision 2028:

- Goal 1: Provide high-quality mobility options that enable people to spend less time traveling;
- Goal 3: Enhance communities and lives through mobility and access to opportunity and;
- Goal 5: Provide responsive, accountable, and trustworthy governance within the Metro organization.

ALTERNATIVES CONSIDERED

The Board could defer or not approve the Project, not certify the Final EIR, and/or not adopt the Findings and Statement of Overriding Considerations or the MMRP. However, this action is not recommended as it would jeopardize the Project schedule and delay progress toward revenue operations by 2035. The current schedule also has right-of-way acquisitions commencing after the Record of Decision and a Construction Manager/General Contractor (CMGC) contract for pre-construction activities being awarded in 2024. Delaying the Project would delay these efforts and likely add cost.

NEXT STEPS

Upon Board approval, Project staff will file the Notice of Determination (NOD) for the Project with the Los Angeles County Clerk and State of California Clearinghouse and will work with the FTA to ensure the timely issuance of a Record of Decision.

Staff will continue to make progress on the Slauson/A Line to LAUS segment by working with downtown stakeholders to explore possibilities for a cost-effective alignment.

ATTACHMENTS

Attachment A - Executive Summary
Attachment B - MMRP
Attachment C - Findings of Fact and Statement of Overriding Considerations

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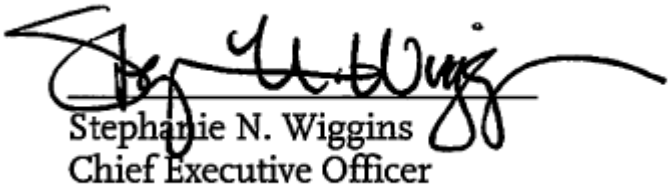

Stephanie N. Wiggins
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Los Angeles County
Metropolitan Transportation Authority

West Santa Ana Branch Transit Corridor

Final EIS/EIR: Executive Summary

Metro®

WEST SANTA ANA BRANCH TRANSIT CORRIDOR PROJECT

Final EIS/EIR: Executive Summary

March 2024

Final Environmental Impact Statement/ Environmental Impact Report

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

State Clearinghouse No.: 2017061007

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

Additional written comments and/or questions concerning this document should be directed to the following:

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
CEQA	California Environmental Quality Act
EIR	environmental impact report
EIS	environmental impact statement
FTA	Federal Transit Administration
LPA	Locally Preferred Alternative
Metro	Los Angeles County Metropolitan Transportation Authority
MSF	maintenance and storage facility
NEPA	National Environmental Policy Act
Project	West Santa Ana Branch Transit Corridor Project
WSAB	West Santa Ana Branch

S EXECUTIVE SUMMARY

The Federal Transit Administration (FTA) and the Los Angeles County Metropolitan Transportation Authority (Metro) are sponsoring a transit project along the historic West Santa Ana Branch (WSAB) corridor within Los Angeles County, known as the WSAB Transit Corridor Project (Project).

On March 15, 2023, the Metro Board of Directors approved a motion that included a recommendation to rename the Project with more of a local context, and launched a renaming campaign in August 2023 to receive community input on names. On January 22, 2024, the Southeast Gateway Line was unveiled as the new project name. The Southeast Gateway Line name will be used as the Project advances; however, the Project will continue to be referred to as WSAB throughout this Final EIS/EIR.

S.1 Project Purpose and Need

S.1.1 Purpose of the Project

The Project's overall purpose is to provide high-quality reliable transit service to meet the future mobility needs of residents, employees, and visitors who travel within and through the corridor. This new transit service will increase mobility and connectivity for historically underserved and transit-dependent communities, improve travel times on local and regional transportation networks relative to travel times without the Project, and accommodate substantial future employment and population growth.

S.1.2 Need for the Project

Located in southeastern Los Angeles County, the Study Area is approximately 98 square miles and incorporates 20 individual cities (Figure S-1). The Study Area is currently home to 1.4 million residents and 618,500 jobs, which are projected to increase to 1.6 million residents and 746,000 jobs by 2042. Most of the Study Area is served by buses that operate primarily along a heavily congested freeway and arterial network. As the population and employment within the Study Area are predicted to grow substantially over the next 20 years, the congestion of the roadway network is expected to worsen, resulting in the further decreased reliability of transit service.

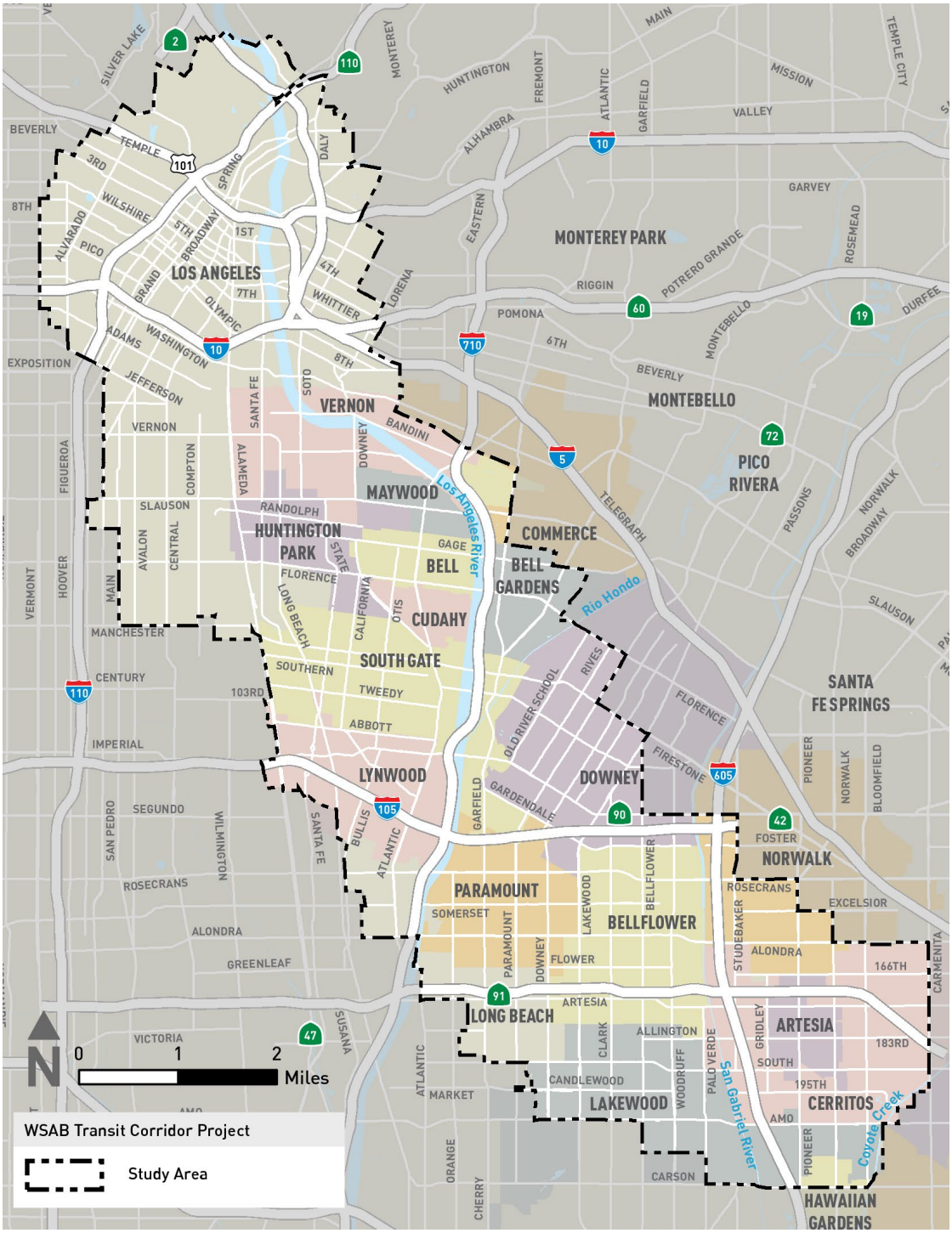
S.2 Alternatives Considered/Project Description

Metro considered four Build Alternatives, two design options, two maintenance and storage facility (MSF) site options, and a No Build Alternative in the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The Draft EIS/EIR was circulated for public review and comment from July 30, 2021, to September 28, 2021. In January 2022, based on the findings of the Draft EIS/EIR, and in consideration of funding availability, the Metro Board of Directors identified Alternative 3: Slauson A (Blue) Line to Pioneer Station from the Draft EIS/EIR as the Locally Preferred Alternative (LPA), which is the focus of this Final EIS/EIR. For CEQA purposes, the analysis of Alternatives 1, 2, and 4 and the Paramount MSF site option in the Draft EIS/EIR are incorporated here by reference. The No Build Alternative is included in this Final EIS/EIR for comparative purposes.

S.2.1 No Build Alternative

The No Build Alternative provides the background transportation network, against which the Build Alternatives' impacts are identified and evaluated pursuant to the National Environmental Policy Act (NEPA). The No Build Alternative does not include the LPA.

Figure S-1. WSAB Transit Corridor Study Area



Source: Prepared on behalf of Metro in 2023

S.2.2 Draft EIS/EIR Build Alternatives

The four Build Alternatives, two station design options, and two MSF site options evaluated in the Draft EIS/EIR and corresponding technical studies were as follows:

- 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 S-2 illustrates the Build Alternatives evaluated in the Draft EIS/EIR. Alternatives 1, 2, and 4 from the Draft EIS/EIR are included in this Final EIS/EIR by reference to *the West Santa Ana Branch Transit Corridor Project Draft Environmental Impact Statement/Environmental Impact Report* (Metro 2021a).

Figure S-2. Draft EIS/EIR Build Alternatives and Design Options

Source: Metro 2020

S.2.3 Locally Preferred Alternative

Alternative 3 in the Draft EIS/EIR, identified as the Staff Preferred Alternative, was identified as the LPA and is evaluated in this Final EIS/EIR. The LPA includes the Bellflower MSF site that was also evaluated in the Draft EIS/EIR.

The LPA evaluated in this Final EIS/EIR includes refinements to address stakeholder coordination and comments on the Draft EIS/EIR. Refinements to the LPA, construction laydown/staging areas, and traction power substation sites are summarized in Chapter 2, Section 2.4.3.2 of this Final EIS/EIR. See Appendix E, Project Refinements since Circulation of the Draft EIS/EIR, for additional information on the refinements to the LPA. As summarized in Section S.6, refinements to the LPA and associated analyses in Chapters 3 and 4 of this Final EIS/EIR have not identified any new significant adverse impacts that were not identified in the Draft EIS/EIR.

Table S.1 summarizes the components of the LPA, inclusive of refinements, and Figure S-3 shows the alignments and station locations.

Table S.1. Summary of Locally Preferred Alternative Components

Project Components Alternatives	Locally Preferred Alternative
Alignment length	14.5 miles
Station configurations	9 3 aerial; 6 at-grade 1 at-grade infill station along C Line
Parking facilities	5 total: 4 surface lots and 1 parking structure (approximately 2,800 spaces)
Length of alignment by type	12.1 miles at-grade; 2.4 miles aerial[1]
At-grade crossings	30
Elevated street crossings	15
Freight crossings	6
Freeway crossings	4 1 aerial/overcrossing at I-105 3 freeway undercrossings[2] at I-710, I-605, SR 91
River crossings	3 (Rio Hondo Channel, Los Angeles River, San Gabriel River)
Freight realignment	8.7 miles
TPSS facilities	17
MSF site	1 (City of Bellflower)

Source: WSP 2023
Notes:
[1] Alignment configuration measurements count retained fill embankments as at-grade.
[2] The light rail tracks crossing beneath freeway structures.
MSF = maintenance and storage facility; TPSS = traction power substation

Figure S-3. WSAB Transit Corridor Locally Preferred Alternative

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

The LPA includes one design option to close 186th Street. Under this design option, 186th Street would be closed but 187th Street would remain open.

The LPA will operate approximately 22 hours daily, seven days per week, from about 4:00 a.m. to 2:00 a.m.

Construction activities for the LPA are anticipated to occur over the course of approximately eight years. Construction is anticipated to begin in 2024 and continue through 2032, with system testing beginning in 2034 and revenue service beginning in 2035.

S.3 Transportation

Chapter 3 of this Final EIS/EIR discusses existing transportation conditions, effects, project measures, and mitigation measures (as applicable), and impacts after mitigation for operation and construction of the LPA. Project and/or mitigation measures have been identified to address impacts. Project measures are incorporated as part of the LPA and consist of design features, best management practices, or other measures required by law and/or permit approvals that avoid or minimize potential effects. These measures are requirements of the Project. Where relevant, the measures were included in the impact analyses. Mitigation measures are additional actions, not otherwise part of the LPA, that are designed to avoid, minimize, or compensate for adverse or significant impacts. These measures are required where significant or adverse impacts have been identified based on the impact analyses.

A summary of impacts to the transportation system is provided in Table S.2. The analysis includes impacts to streets and intersections, transit, bicycle and pedestrian facilities, parking, and vehicular and rail freight. Table S.2 also identifies mitigation to address adverse and/or significant impacts. The effects of the LPA with the design option to close 186th Street are generally the same as for the LPA without the design option and any substantive differences are identified in the following table. The adverse effects remaining after mitigation identified in the table are not applicable to U.S. Army Corps of Engineers (USACE) facilities.

Table S.2. Potential Transportation Impacts and Mitigation Measures

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Traffic Operations	Intersections where operations deteriorate because (1) tracks are through/adjacent to existing intersections and queues from mid-block rail crossings build up when gates are down, (2) vehicular traffic associated with proposed park-and-ride facilities, and (3) roadway modifications required to accommodate the LPA.	**NEPA**: The LPA will result in adverse impacts at 19 intersections during one or both peak periods.	Signalization strategies to minimize impacts of queues and intersection modifications, as described in Mitigation Measures TRA-1 through TRA-17, which are specific intersection modifications.	**NEPA**: After mitigation, the LPA will continue to have adverse impacts at 12 intersections during one or both peak periods.
Transit	The LPA will increase the percentage of trips within Los Angeles County that are taken on transit. This mode shift is reflected in the number of daily new transit trips taken.	**NEPA**: In 2042, the LPA will result in 9,206 daily new transit trips compared to the No Build Alternative.	None required	**NEPA**: None
Active Transportation	The LPA will affect active transportation (pedestrian and bicycle) facilities where it will remove or degrade a bike facility or sidewalk. Beneficial effects will occur where new facilities are added, or existing facilities are upgraded.	**NEPA**: The LPA will displace sections of the Paramount Bike Trail and Bellflower Bike Trail, which could result in an adverse effect if not realigned. Active transportation enhancements will include physical improvements (e.g., barriers and gates), channelization and signing, illumination, new sidewalks, and other design improvements.	Realign bike trails per Mitigation Measure LU-1 (Consistency with Bike Plans).	**NEPA**: With mitigation, these existing active transportation facilities will be realigned to maintain continuity under the LPA and there will not be adverse effects after mitigation.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Parking	The LPA will affect the supply of on- and off- street parking through the removal of parking to accommodate project components. The LPA will include the provision of dedicated transit parking at five stations but could contribute to spillover parking impacts in the vicinity of stations.	**NEPA**: The LPA will not result in adverse effects related to on- or off-street parking or spillover parking.	Mitigation Measures TRA-19 (Parking Monitoring and Community Outreach) and TRA-20 (Parking Mitigation Program [Permanent]).	**NEPA**: Parking patterns near future stations and in areas where existing parking is removed will change but will not result in adverse impacts.
Freight	Delay experienced by freight vehicles at intersections where traffic operations deteriorate. Operation and maintenance of rail freight at locations where rail freight tracks and/or spurs are in the vicinity of the LPA alignment.	**NEPA**: The LPA will not result in adverse effects related to vehicular or rail freight. Vehicular freight travel generally occurs outside of the peak traffic periods when there is less roadway congestion, and the LPA will not affect the designation of truck routes. Freight operations, maintenance, and access for existing rail customers will be accommodated by the LPA; if existing access cannot be maintained, a full acquisition of the parcel is proposed.	None required	**NEPA**: None
CEQA Determination—Operation	Threshold TRA-1: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	**CEQA**: The LPA will improve transit service, accessibility, and reliability. Active transportation networks will be modified to accommodate the LPA. The LPA could preempt the future development and implementation of planned bicycle paths.	Realign bike trails per Mitigation Measure LU-1 (Consistency with Bike Plans).	**CEQA**: Significant and unavoidable impacts due to inconsistencies with bicycle master plans.
	Threshold TRA-2: Would the Project conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b)?	**CEQA**: The LPA, in 2042 will reduce VMT by 71,800 miles relative to existing conditions and by 130,900 miles relative to the No Build Alternative in 2042.	None required	**CEQA**: Beneficial effects and less than significant impact.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold TRA-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	**CEQA**: At-grade crossings will be designed with safety measures. The LPA will operate adjacent to existing freight service along portions of the alignment that operate in shared right-of-way. There could be a potential for derailment, which could present a safety concern.	Mitigation Measure SAF-1 (Encroachment Detection) will further reduce effects.	**CEQA**: Less than significant.
	Threshold TRA-4: Would the Project result in inadequate emergency access?	**CEQA**: The LPA will not interfere with adopted emergency response or evacuation plans, emergency service providers, or otherwise increase the demand for emergency response services.	None required	**CEQA**: Less than significant.
Construction Phase	Construction will include track and station construction at-grade through and adjacent to local streets with live traffic, overhead/aerial track and station construction, at-grade station and parking construction, and street closure/turning movement restrictions.	**NEPA**: Workers and equipment accessing the construction site will increase traffic and require parking. Construction will require temporary street and lane closures, width reductions, and reductions in the number of lanes, which will affect vehicular traffic and transit services. Construction could also result in closure of bicycle and pedestrian facilities. Existing freight tracks will require relocation in some locations. On- and off-street parking will be removed.	TRA-18 (Transportation Management Plan(s)) and TRA-21 (Loss of Parking (Construction)).	**NEPA**: Temporary construction-related impacts will be minimized, but adverse effects will still occur after mitigation.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
CEQA Determination —Construction	Threshold TRA-CON-1: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, and bicycle and pedestrian facilities?	**CEQA**: Construction activities will not conflict with plans, policies, or ordinances associated with the transportation system.	TRA-18 (Transportation Management Plan(s)) will further reduce effects.	**CEQA**: Less than significant.
	Threshold TRA-CON-2: Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	**CEQA**: Construction activity will be localized to the work area and haul routes, and will not significantly change vehicle circulation in the Study Area as a whole.	None required	**CEQA**: Less than significant.
	Threshold TRA-CON-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	**CEQA**: Construction will require temporary modifications that will follow standard construction practices for temporary vehicle, freight, pedestrian, and bicycle handling that will preserve emergency access and minimize hazards.	TRA-18 (Transportation Management Plan(s)) will further reduce effects.	**CEQA**: Less than significant.
	Threshold TRA-CON-4: Would the Project result in inadequate emergency access?	**CEQA**: Construction activity will require temporary modification of existing transportation facilities. Coordination with emergency responders will occur to maintain emergency access and to minimize project-related delays in response times.	TRA-18 (Transportation Management Plan(s)) and COM-1 (Construction Outreach Plan).	**CEQA**: Less than significant after mitigation.

Source: Compiled on behalf of Metro in 2023
CEQA = California Environmental Quality Act; LPA = Locally Preferred Alternative; NEPA = National Environmental Policy Act; VMT = vehicle miles traveled

S.4 Affected Environment and Environmental Consequences

Chapter 4 of this Final EIS/EIR discusses the existing conditions, environmental effects, project measures, and mitigation measures (as applicable), and environmental impacts after mitigation for operation and construction of the LPA. Both a NEPA finding, considering context and intensity of effect, and a California Environmental Quality Act (CEQA) determination are included. The CEQA determination included for each element of the environment identifies the CEQA significance thresholds that are applicable to that topic and provides an evaluation of the Project's effects relative to the thresholds.

A summary of environmental impacts and required mitigation measures during operation of the LPA is provided in Table S.3. Construction-related impacts and mitigation measures are summarized in Table S.4. Growth, cumulative, and environmental justice impacts, and mitigation measures are summarized in Table S.5. The effects of the LPA with the design option to close 186th Street are generally the same as for the LPA without the design option and any substantive differences are identified in the following tables. The adverse effects remaining after mitigation are not applicable to USACE facilities.

Table S.3. Operational Environmental Impacts and Mitigation Measures

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Land Use	Project effects could relate to land use compatibility with surrounding land uses.	**NEPA**: The LPA will not conflict with surrounding uses, change the function of the rail ROWs as rail corridors, impede or change the function of the freight tracks and freight sidings that are used by nearby industrial uses, or physically divide an established community. The LPA will require the realignment of the Paramount Bike Trail segment between Somerset Boulevard and Lakewood Boulevard and the Bellflower Bike Trail segment east of Bellflower Boulevard. The LPA will also require the relocation of a bus stop to accommodate the Bellflower Station. The bike trails and bus stop will continue to be available for use by the community and access will not be affected.	Mitigation Measure LU-1 (Consistency with Bike Plans)	**NEPA**: With implementation of Mitigation Measure LU-1 (Consistency with Bike Plans), the LPA will maintain function of the bike trails and continuity with the Paramount Bike Trail and Bellflower Bike Trail. Therefore, after mitigation no adverse effects will remain.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Project effects could relate to consistency with applicable regional and local land use plans, policies, and regulations.	**NEPA**: The LPA is compatible with regional and local land use plans, policies, and regulations. However, it could preempt future development and implementation of planned bike paths identified in local plans. While planned, the bike paths are unfunded and not scheduled for implementation. The reclassification of the bike paths is an inconsistency with the current bike plans and an adverse effect will occur.	Mitigation Measure LU-1 (Consistency with Bike Plans)	**NEPA**: With implementation of Mitigation Measure LU-1 (Consistency with Bike Plans), the LPA may still preempt current plans for future development and implementation of bike paths and could result in inconsistencies with local plans. The process to amend bike plans is a local process, including public participation, and the ultimate outcome and resolution of plan elements cannot be predicted. Therefore, it is conservatively determined that after mitigation, adverse effects will remain.
	Threshold LU-1: Would the Project physically divide an established community?	**CEQA**: The LPA will not introduce physical barriers or generate permanent access disruptions to existing land uses on either side of the alignment, and access to the surrounding community will remain available.	None required	**CEQA**: Less than significant.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold LU-2: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	**CEQA**: The LPA will be consistent with applicable land use plans, goals, objectives, and policies of regional agencies and local jurisdictions. However, the LPA could preempt future development and implementation of planned bike paths identified for the Cites of Cudahy, Huntington Park, South Gate, and Bell, as the San Pedro Subdivision ROW and PEROW may not have sufficient space to accommodate a bike path, LRT tracks, and freight track. While planned, the bike paths are unfunded and not scheduled for implementation. Metro, as appropriate, will prepare and support adoption of amended language for each affected local plan consistent with each city's mobility and connectivity goals. However, the reclassification of the bike paths is an inconsistency with the current bike plans and an adverse effect will occur.	Mitigation Measure LU-1 (Consistency with Bike Plans)	**CEQA**: The process to amend bike plans is a local process, including public participation, and the ultimate outcome and resolution of plan elements cannot be predicted. Therefore, it is conservatively determined that the LPA will result in a significant and unavoidable impact related to consistency with bike plans.
Communities and Neighborhoods	Project effects could relate to access and mobility, community character and cohesion, and community stability.	**NEPA**: The LPA will improve and not adversely affect access and mobility; community character and cohesion will be maintained; and increased connections among communities will support community stability. The LPA will change access and mobility patterns, but surrounding access to the community and community resources will remain. Changes to the existing noise, traffic, visual character, land use, and expected population growth will occur but will not affect community character and cohesion.	Mitigation Measures TRA-1 through TRA-17, which are specific intersection improvements, VA-1 (Screening at Somerset Boulevard) and VA-2 (Relocation of "Belle"), and NOI-1 through NOI-5, which include soundwalls, low-impact frogs, wheel squeal noise monitoring, and TPSS noise reduction.	**NEPA**: No adverse effects.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold COM-1: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	**CEQA**: The LPA will not directly result in population growth within surrounding communities. Opportunities for TOD around stations is consistent with SCAG growth projections and local community plans. However, this development will be subject to approval by the city and to all applicable requirements and regulations of the affected city.	None required	**CEQA**: Less than significant.
Acquisitions and Displacements	Acquisitions will be required to accommodate the structures and columns for the aerial segments of the alignment, TPSS sites, parking facilities, grade crossings and separations, freight track relocation, and other ancillary facilities.	**NEPA**: The LPA with the MSF will require full and partial acquisition on approximately 206 parcels; the LPA with the design option would result in one less permanent impact compared to the LPA without the design option. With compliance with the Uniform Act, California Relocation Act, and other applicable regulations, no adverse effect will occur.	None required	**NEPA**: No adverse effect.
	Acquired properties will result in business displacements.	**NEPA**: The LPA with the MSF will displace approximately 59 businesses with an estimated 443 employees. Metro will provide relocation assistance and compensation for all eligible displaced businesses as required under the Uniform Act and California Relocation Act.	None required	**NEPA**: No adverse effect.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Acquired properties will result in residential displacements.	**NEPA**: The LPA will displace approximately 13 residential units with an estimated 47 occupants. Metro will provide relocation assistance and compensation for all eligible displaced residences as required under the Uniform Act and California Relocation Act.	None required	**NEPA**: No adverse effect.
	Threshold DIS-1: Displace substantial numbers of existing people, housing, or business, necessitating the construction of replacement housing or replacement business elsewhere?	**CEQA**: Displacements will occur as shown in prior rows of this table. This will not necessitate the construction of replacement housing or businesses. Metro will provide relocation assistance and compensation for all eligible displaced businesses as required under the Uniform Act and California Relocation Act.	None required	**CEQA**: Less than significant.
Visual and Aesthetics	The LPA could affect visual character and quality, scenic vistas, light, and glare.	**NEPA**: The LPA will introduce new visual elements to the surrounding area. The LPA will not change the natural topography of the Affected Area, and most changes will be neutral and compatible with the surrounding visual quality and visual character. The LPA will result in adverse visual effects with the removal of the "Belle" public art cow statue and the decorative wall and landscaping at Somerset Boulevard.	Mitigation Measures VA-1 (Screening at Somerset Boulevard) and VA-2 (Relocation of "Belle")	**NEPA**: No adverse effect after mitigation.
	Threshold VIS-1: Would the Project have a substantial adverse effect on a scenic vista?	**CEQA**: No scenic vistas are present in the Affected Area. Therefore, no scenic vistas will be affected.	None required	**CEQA**: No impact.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold VIS-2: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	**CEQA**: No state scenic highways are located within the Affected Area. Therefore, no scenic resources within a state scenic highway will be affected.	None required	**CEQA**: No impact.
	Threshold VIS-3: In nonurbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	**CEQA**: The Affected Area is urbanized. The LPA will remove the existing decorative wall and landscaping on the south side of the World Energy storage tracks (east of the LRT tracks) in the City of Paramount and will relocate the "Belle" public art cow statue in the City of Bellflower. These effects will conflict with the City of Paramount Municipal Code requirement to conceal views of open storage areas and the City of Bellflower's public arts program.	Mitigation Measures VA-1 (Screening at Somerset Boulevard) and VA-2 (Relocation of "Belle")	**CEQA**: Less than significant after mitigation.
	Threshold VIS-4: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	**CEQA**: The LPA will not result in substantial change to existing lighting and glare.	None required	**CEQA**: Less than significant.
Air Quality	The LPA could affect daily air pollutant emissions in the Affected Area.	**NEPA**: Aside from a minor increase in reactive organic gases associated with MSF operations, the LPA will reduce regional air pollutant emissions through changes in regional transportation patterns due to mode shift and increased transit ridership. The LPA will not result in adverse effects related to MSAT emissions.	None required	**NEPA**: No adverse effect.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold AQ-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	**CEQA**: The LPA will reduce daily VMT within the Affected Area resulting in reduced emissions from vehicle exhaust and road dust.	None required	**CEQA**: Less than significant.
	Threshold AQ-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant under an applicable federal or state ambient air quality standard?	**CEQA**: The Project is listed in the region's currently conforming 2020-2045 RTP/SCS. The LPA will not result in an incremental increase in daily emissions that will exceed any applicable SCAQMD threshold.	None required	**CEQA**: Less than significant.
	Threshold AQ-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?	**CEQA**: The LPA will not introduce a new land use development that will constitute a substantial direct source of air pollutant emissions to the Affected Area during operation.	None required	**CEQA**: Less than significant.
	Threshold AQ-4: Would the Project result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?	**CEQA**: The LPA will not generate a substantial source of operational odors or dust emissions.	None required	**CEQA**: Less than significant.
Greenhouse Gas Emissions	The LPA will reduce annual GHG emissions during operation.	**NEPA**: The LPA will reduce GHG emissions by approximately 8,202 $MTCO_2e$/year in 2042 relative to the No Build Alternative.	None required	**NEPA**: No adverse effect.
	Threshold GHG-1: Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	**CEQA**: The LPA will generate direct GHG emissions through operations at the MSF, and indirect GHG emissions will be generated through energy use; however, the LPA will result in a net reduction in GHG over time.	None required	**CEQA**: Less than significant.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold GHG-2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?	**CEQA**: The LPA is consistent with the 2016-2040 RTP/SCS and 2020-2045 RTP/SCS and relevant GHG reduction and conservation plans.	None required	**CEQA**: Less than significant.
Noise and Vibration	The LPA could cause noise impacts at sensitive land uses.	**NEPA**: The LPA will generate 97 moderate and 117 severe noise impacts from LRT pass-by. The LPA with the design option would result in 96 moderate and 118 severe impacts compared to the LPA without the design option. Relocated freight track noise will generate 61 moderate and 22 severe impacts. Ancillary facilities will generate 1 moderate and 2 severe impacts.	Mitigation Measures NOI-1 through NOI-5, which include soundwalls, low-impact frogs, wheel squeal noise monitoring, TPSS noise reduction, and soundwalls for freight track relocation.	**NEPA**: Mitigation will reduce the number of sensitive land uses experiencing noise impacts to 31 moderate and 4 severe LRT pass-by noise impacts for the LPA without the design option, and 33 moderate and 2 severe LRT pass-by impacts for the LPA with the design option. Relocated freight tracks would result in 38 moderate and 1 severe impact remaining. Ancillary facilities will result in 1 moderate and 2 severe impacts remaining. Effects will remain adverse at those locations.
	The LPA could cause vibration impacts at sensitive land uses.	**NEPA**: The LPA will generate groundborne vibration that will exceed FTA impact criteria at 88 sensitive land uses.	Mitigation Measures VIB-1 (Ballast Mat or Resilient Rail Fasteners) and VIB-2 (Low-Impact Frogs)	**NEPA**: Mitigation will reduce the number of sensitive land uses experiencing vibration impacts to 2. Effects will remain adverse at those 2 locations.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold NOI-1: Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established by FTA or in the local general plans or noise ordinances?	**CEQA**: Noise impacts will occur as identified in prior rows of this table.	Mitigation Measures NOI-1 through NOI-5, which include soundwalls, low-impact frogs, wheel squeal noise monitoring, TPSS noise reduction, and soundwalls for freight track relocation	**CEQA**: Significant and unavoidable after mitigation for the number of receptors identified in prior rows.
	Threshold NOI-2: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?	**CEQA**: Vibration impacts will occur as identified in prior rows of this table.	Mitigation Measures VIB-1 (Ballast Mat or Resilient Rail Fasteners) and VIB-2 (Low-Impact Frogs)	**CEQA**: Significant and unavoidable after mitigation for the number of receptors identified in prior rows of this table.
	Threshold NOI-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?	**CEQA**: No public airports or private airstrips are located within 2 miles of the project area.	None required	**CEQA**: No impact.
Ecosystems/ Biological Resources	The Affected Area for biological resources supports urban landscaping and ruderal/ornamental vegetation. Wildlife resources are limited to those species adapted to highly urbanized environments.	**NEPA**: The LPA will not adversely affect any candidate, sensitive, or special status plant species or protected trees. The LPA is unlikely to affect wildlife species if present. The LPA will not impact jurisdictional water resources or result in the spread of invasive species.	None required	**NEPA**: No adverse effect.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold BIO-1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	**CEQA**: Operation of the LPA will be unlikely to affect wildlife species and, therefore, impacts will be less than significant.	None required	**CEQA**: Less than significant.
	Threshold BIO-2: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	**CEQA**: The LPA will not result in impacts to riparian habitat or other sensitive natural communities.	None required	**CEQA**: No impact.
	Threshold BIO-3: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	**CEQA:** The LPA will not result in impacts to state or federally protected wetlands.	None required	**CEQA**: No impact.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold BIO-4: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	**CEQA**: The LPA will not interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. CDFW does not identify any mapped California Essential Habitat Connectivity areas within the Affected Area, nor does it contain any Missing Linkages, as identified by the South Coast Wildlands Network.	None required	**CEQA**: No impact.
	Threshold BIO-5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**CEQA**: The LPA will not conflict with any local policies or ordinances protecting biological resources.	None required	**CEQA**: No impact.
	Threshold BIO-6: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	**CEQA**: The LPA will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.	None required	**CEQA**: No impact.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Geotechnical, Subsurface, and Seismic	The Affected Area could be subject to seismic shaking and fault-induced ground rupture, liquefaction and seismically induced settlement, seismically induced inundation, expansive soils, ground settlement and collapsible soils, and naturally occurring oil and gas.	**NEPA**: No known active faults capable of ground rupture are mapped within the Affected Area. The LPA could subject people and structures to moderate to strong seismic ground shaking. In accordance with state and local seismic design criteria, structures will be designed and constructed to withstand the estimated seismic ground shaking and resulting ground loads and deformations.	None required	**NEPA**: No adverse effect.
		NEPA: The LPA could subject people and structures to the effects of liquefaction or seismically induced settlement. Adverse effects will be avoided with implementation of mandatory design requirements.	None required	**NEPA**: No adverse effect.
		NEPA: For the at-grade elements of the LPA, if seismically induced inundation occurred, the inundation would be short-lived and accommodated by drainage systems.	None required	**NEPA**: No adverse effect.
		NEPA: The LPA could subject people and structures to the effects of expansive soils, which could result in damage to structures. Adverse effects will be avoided with implementation of mandatory design requirements.	None required	**NEPA**: No adverse effect.
		NEPA: The LPA could subject people and structures to the effects of ground settlement, which could result in damage to structures. Adverse effects will be avoided with implementation of mandatory design requirements.	None required	**NEPA**: No adverse effect.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
		NEPA: The LPA is not in a Methane Hazard Zone, and there are no oil or gas fields in the Affected Area. Naturally occurring oil and gas hazards are not a concern during operation of the LPA.	None required	**NEPA**: No adverse effect.
	Threshold GEO-1: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	**CEQA**: The LPA is not underlain by a known active fault capable of ground rupture and not located within an Earthquake Fault Zone established by the State of California Alquist-Priolo Earthquake Fault Zoning Act.	None required	**CEQA**: No impact.
	Threshold GEO-2: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	**CEQA**: The LPA could be exposed to strong seismic ground shaking. Impacts related to seismic shaking will be less than significant with design and construction performed per applicable design criteria.	None required	**CEQA**: Less than significant.
	Threshold GEO-3: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	**CEQA**: The LPA could be exposed to seismic-related ground failure, including liquefaction, lateral spreading, and seismically induced settlement. Impacts will be less than significant with design and construction performed per applicable design criteria.	None required	**CEQA**: Less than significant.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold GEO-4: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	**CEQA**: Natural landslides are not a hazard to the LPA.	None required	**CEQA**: Less than significant.
	Threshold GEO-5: Would the Project result in substantial soil erosion or the loss of topsoil?	**CEQA**: The LPA is located in an urban setting, and the topsoil layer in most of the Affected Area has been disturbed or concealed by previous human activities.	None required	**CEQA**: Less than significant.
	Threshold GEO-6: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	**CEQA**: The LPA is in an area that may be prone to collapse or settlement. Impacts related to settlement or collapsible soil will be less than significant with design and construction performed per applicable design criteria.	None required	**CEQA**: Less than significant.
	Threshold GEO-7: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	**CEQA**: Clay-rich soils may exist locally within alluvial soils present in the Affected Area. The LPA could subject people and structures to the effects of expansive soils, which could result in damage to structures. Impacts related to expansive soil will be less than significant with design and construction performed per applicable design criteria.	None required	**CEQA**: Less than significant.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold GEO-8: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	**CEQA**: The LPA will not expose people or structures to significant impacts involving the adequacy of soils to support septic tanks or alternative waste disposal systems.	None required	**CEQA**: No impact.
	Threshold GEO-9: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**CEQA:** Refer to the assessment for Threshold PALEO-1.	N/A	N/A
Hazards and Hazardous Materials	The Affected Area contains sites of environmental concern.	**NEPA**: There are 307 known, potential, and historical environmental concern sites in the Affected Area for hazards and hazmat. Operation and maintenance of the LPA will not result in adverse effects related to environmental concern sites.	None required	**NEPA**: No adverse effect.
	Operation of the LPA could use or encounter hazardous materials.	**NEPA**: The LPA, independent of activities at the MSF, will not include the use of hazardous materials or wastes for maintenance and operational purposes. Operation of the MSF will not emit hazardous air emissions. Extremely hazardous substances will not be used in quantities that exceed thresholds.	None required	**NEPA**: No adverse effect.
	The Affected Area contains educational facilities and regulations require coordination with schools if the LPA will have hazardous air emissions or handle extremely hazardous substances in a quantity equal to or greater than the state threshold.	**NEPA**: There are 45 educational facilities located in the Affected Area for hazards and hazmat. Hazardous materials in quantities equal to or greater than the state threshold quantity will not be used during operation or maintenance of the LPA.	None required	**NEPA**: No adverse effect.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	The LPA could encounter oil and gas wells, oil fields, and hazardous subsurface gases.	**NEPA**: One abandoned oil well is in the Affected Area. Unidentified abandoned oil wells may be present. The LPA does not pass through abandoned oil fields and methane zones. If unidentified abandoned oil wells are present, they will be identified during construction and will not pose a risk during operation or maintenance of the LPA.	None required	**NEPA**: No adverse effect.
	Threshold HAZ-1: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	**CEQA**: The LPA will not result in the routine transport, use, or disposal of hazardous materials or wastes. Operation of the MSF could involve storage of hazardous materials and wastes for maintaining and repairing rail equipment. Impacts will be less than significant with the appropriate management of hazardous materials.	None required	**CEQA**: Less than significant.
	Threshold HAZ-2: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	**CEQA**: The LPA will not involve the transport, storage, use, or disposal of hazardous materials in quantities greater than needed to support standard operations, and impacts will not occur. Operation of the MSF could involve storage of hazardous materials and wastes for maintaining and repairing rail equipment. Impacts will be less than significant with the appropriate management of hazardous materials.	None required	**CEQA**: Less than significant.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold HAZ-3: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	**CEQA**: Operation of the LPA will not emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste during project operation. Operation of the MSF may use cleaners and greasers that could contain small amounts of hazardous or acutely hazardous materials, substances, or wastes during operation. Impacts will be less than significant with the appropriate management of hazardous materials.	None required	**CEQA**: Less than significant.
	Threshold HAZ-4: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	**CEQA**: The LPA will operate near or on regulatory-listed sites with hazardous material contamination. Operation will not disturb the soil, soil vapor, or groundwater.	None required	**CEQA**: Less than significant.
	Threshold HAZ-5: For a Project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	**CEQA**: No airports are located within 2 miles of the LPA.	None required	**CEQA**: No impact.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold HAZ-6: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**CEQA**: The LPA will not impair or interfere with adopted emergency response plans or evacuation plans because evacuation plans typically avoid crossing active rail corridors (U.S. Department of Health and Human Services 2003) and the at-grade portions are located within active rail corridors.	None required	**CEQA**: Less than significant.
	Threshold HAZ-7: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	**CEQA**: No wildlands are located in the vicinity of the LPA.	None required	**CEQA**: No impact.
Water Resources	The LPA will introduce new or modified features that could have direct and indirect impacts to existing rivers, including new structures over rivers and additional impervious area.	**NEPA**: The LPA will increase impervious area by approximately 37.3 acres.	None required	**NEPA**: No adverse effect.
	The LPA will cross FEMA-established floodplains.	**NEPA**: Tracks and structures associated with the LPA will be built above the existing river channel walls or levees. Hydraulic studies for new bridge piers indicate water surface elevation changes of less than one foot.	None required	**NEPA**: No adverse effect.
	The LPA could affect groundwater.	**NEPA**: The LPA is in a highly urbanized area; therefore, the net new impervious area will represent a negligible overall increase in total impervious area with respect to the watersheds and the corresponding groundwater recharge areas.	None required	**NEPA**: No adverse effect.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold WR-1: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	**CEQA**: LPA is subject to the LA County MS4 NPDES permit and IGP. The MS4 NPDES permit requires implementation of site design, source control, and treatment control BMPs to the maximum extent practical.	None required	**CEQA**: Less than significant.
	Threshold WR-2: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	**CEQA**: The LPA will result in approximately 37.3 acres of new impervious area. The increase in impervious surfaces within the Affected Area will be a negligible fraction of the 177,000-acre basin area. Should long-term contaminated groundwater dewatering be necessary, ongoing management or treatment will be required.	None required	**CEQA**: Less than significant.
	Threshold WR-3: Would the Project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would result in substantial erosion or siltation on-site or off-site?	**CEQA**: The LPA will not alter drainage patterns in a manner that will result in significant erosion or siltation on-site or off-site.	None required	**CEQA**: Less than significant.
	Threshold WR-4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would substantially increase the rate or amount of surface runoff or would result in flooding on- or off-site?	**CEQA**: The LPA will not substantially increase the rate or amount of runoff from the project site that could cause flooding on- or off-site.	None required	**CEQA**: Less than significant.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold WR-5: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	**CEQA**: The LPA will not adversely affect stormwater runoff.	None required	**CEQA**: Less than significant.
	Threshold WR-6: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through addition of impervious surfaces, in a manner which would impede or redirect flood flows?	**CEQA**: The LPA will not impede or redirect flood flows.	None required	**CEQA**: Less than significant.
	Threshold WR-7: Would the Project be subject to inundation by seiche, tsunami, or mudflow?	**CEQA**: The LPA will not result in significant impacts related to pollutant releases due to inundation. The Affected Area is not subject to seiche or tsunami risk.	None required	**CEQA**: Less than significant.
	Threshold WR-8: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	**CEQA**: The LPA will not obstruct implementation of a water quality control plan or sustainable groundwater management plan.	None required	**CEQA**: Less than significant.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Energy	Operation of the Project would require energy.	**NEPA**: The LPA will reduce operational energy consumption compared to the No Build Alternative by approximately 126,706 MMBTU/year in 2042 (0.015%).	None required	**NEPA**: No adverse effect.
	Threshold ENERGY-1: Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	**CEQA**: The LPA will not result in wasteful, inefficient, or unnecessary consumption of energy resources during operation. If the LPA had been operating in 2017, it would have reduced operational transportation energy consumption compared to exiting conditions by 32,613 MMBTU/year (0.004%).	None required	**CEQA**: Less than significant.
	Threshold ENERGY-2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	**CEQA**: The LPA is consistent with the applicable regional and local conservation plans.	None required	**CEQA**: Less than significant.
Electromagnetic Fields	Operation of the LPA will generate electromagnetic fields.	**NEPA/CEQA**: EMF levels produced by LRT vehicles will be below health safety criteria. There are no facilities with EMF-sensitive equipment in the Affected Area.	None required	**NEPA/CEQA**: No adverse effect/No impact.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Historic, Archaeological, and Paleontological Resources	The LPA could affect historic architectural (built environment) properties.	**NEPA**: The LPA will alter the Century Freeway-Transitway Historic District, the Union Pacific LA River Rail Bridge, and the LA River, Rio Hondo, and San Gabriel River channels in a manner that is not adverse. Operation of the LPA will not change the use or alter the historic characteristics of any of the extant built environment historic properties in a manner that will diminish their integrity of location, design, setting, materials, workmanship, feeling, or association. Therefore, the LPA will result in no adverse effect on historic properties.	None required	**NEPA**: No adverse effect.
	The LPA could affect archaeological resources.	**NEPA**: Operation of the LPA will not affect archaeological historic properties as there will be minimal, if any, ground disturbance.	None required	**NEPA**: No effect.
	The LPA could affect paleontological resources.	**NEPA:** Operation of the LPA will involve minimal, if any, ground disturbance; therefore, there will be no adverse effect to paleontological resources.	None required	**NEPA**: No adverse effect.
	Threshold HIS-1: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	**CEQA**: The LPA will alter the Century Freeway-Transitway Historic District, the Union Pacific LA River Rail Bridge, and the LA River, Rio Hondo, and San Gabriel River channels in a manner that is less than significant.	None required	**CEQA**: Less than significant.
	Threshold ARCH-1: Would the Project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	**CEQA**: Operation of the LPA will result in no effect to archaeological historic properties.	None required	**CEQA**: No impact.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold ARCH-2: Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?	**CEQA**: Operation of the LPA will have no impact to human remains.	None required	**CEQA**: No impact.
	Threshold PALEO-1: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**CEQA**: Operation of the LPA will have no impact to paleontological resources.	None required	**CEQA**: No impact.
Tribal Cultural Resources	Native American tribes were consulted in compliance with Section 106.	**NEPA**: No traditional cultural properties were identified within the Area of Potential Effect.	None required	**NEPA**: No adverse effect.
	Threshold TCR-1: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or b) A resource determined by the lead agency, in its discretion and supported by substantial	**CEQA**: No tribal cultural resources were identified within the Area of Potential Effect associated with the LPA.	None required	**CEQA**: No impact.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	evidence, to be significant pursuant to criteria set forth in subsection (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			
Parklands and Community Facilities	Parklands and community facilities are located within the Affected Area of the LPA.	**NEPA**: The LPA will require a partial property acquisition of a LADWP utility right-of-way located along the northern boundary of Paramount Park and a termination of the lease for the Metro-leased parking area within Paramount Park. Off-site parking located in the San Pedro Subdivision ROW and used by Salt Lake Park will be removed/relocated. The LPA will require the realignment of the Bellflower Bike Trail and Paramount Bike Trail.	Mitigation Measure LU-1 (Consistency with Bike Plans)	**NEPA**: With implementation of Mitigation Measure LU-1 (Consistency with Bike Plans), the LPA will maintain function of the bike trails and continuity with the Paramount Bike Trail and Bellflower Bike Trail resulting in no adverse effect.
	Threshold PARK-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable standards for any park or recreational facility?	**CEQA**: The LPA could preempt or obstruct future development and implementation of planned bike paths and limit access to bicycle facilities identified in adopted local plans.	Mitigation Measure LU-1 (Consistency with Bike Plans)	**CEQA**: Significant and unavoidable.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold PARK-2: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	**CEQA**: The LPA will improve accessibility to existing neighborhood parks, recreational facilities, and bike facilities by having a nearby transit station, which could result in increased use; however, the increased use is not expected to severely impact the infrastructure of the facilities.	None required	**CEQA**: Less than significant.
	Threshold PARK-3: Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	**CEQA**: The existing Paramount Bike Trail and Bellflower Bike Trail will be reconfigured to accommodate the Project, and access and connectivity will be maintained. The LPA could preempt or obstruct future development and implementation of the planned Class I bicycle paths along Salt Lake Avenue, north of Rayo Avenue, and south of the Los Angeles River. While planned, the bike paths are unfunded and not scheduled for implementation. In addition, the reclassification of the bike paths is an inconsistency with the current bike plans and an adverse effect will occur.	Mitigation Measure LU-1 (Consistency with Bike Plans)	**CEQA**: Significant and unavoidable.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Economic and Fiscal Impacts	The LPA could affect employment, property values, connectivity, and local tax bases.	**NEPA**: The LPA will directly generate $8.8 million in additional wages and salaries by creating approximately 250 new jobs. Overall effects on property values are anticipated to have a net benefit to the regional economy. Effects on local businesses will include lost parking and increased access by transit. Private property converted to right-of-way will decrease the local tax base; however, increased property values and new construction will increase tax revenue. The LPA will displace businesses, as identified under the heading "Acquisitions and Displacements" above, and associated jobs, which will likely be relocated.	None required	**NEPA**: No adverse effect.
	Threshold ECON-1: Would the Project result in substantial impacts to regional mobility and connectivity?	**CEQA**: 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.	None required	**CEQA**: Less than significant.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Safety and Security	Transit system safety focuses on identifying, eliminating, and/or controlling safety hazards.	**NEPA**: The LPA will be designed to provide for the safety and security of passengers and employees. Portions of the right-of-way will be shared with freight operations, which introduces a potential for derailment or collision.	Mitigation Measure SAF-1 (Encroachment Detection) to detect potential derailments that may occur on Metro right-of-way.	**NEPA**: No adverse effect.
	At-grade crossings would introduce the potential for collisions and potential hazards to motorist, pedestrian, and bicyclist safety.	**NEPA**: The LPA will comply with all applicable regulations. Traffic-control improvements and way-finding features will be implemented to provide safe passage and reduce potential conflicts between vehicles and pedestrians/bicyclists traveling between the parking facility and station entrances.	None required	**NEPA**: No adverse effect.
	The LPA could interfere with local jurisdictions' emergency response plans or delay emergency service providers.	**NEPA**: Metro will coordinate with the applicable fire and police departments in addressing fire/life safety and security for the facilities within their respective jurisdictions. Metro, in coordination with local jurisdictions, will develop traffic management plans to reduce delays in response times for emergency service providers.	None required	**NEPA**: No adverse effect.
	Security relates to protection of people from intentional acts that could result in injury or harm, and protection of property from deliberate acts.	**NEPA**: The LPA includes security features such as lighting, surveillance, CCTV, access control, and emergency call boxes to reduce the potential for crime and terrorist activity.	None required	**NEPA**: No adverse effect.

Topic	Description of Impact Considerations	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold SAF-1: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**CEQA**: The LPA will not impair or interfere with adopted emergency response plans or evacuation plans because evacuation plans will typically avoid crossing active rail corridors (U.S. Department of Health and Human Services 2003) and the at-grade portions are located within active rail corridors.	None required	**CEQA**: Less than significant.
	Threshold SAF-2: Would the Project result in substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain response times or other performance objectives for fire and police protection services?	**CEQA**: The LPA will not introduce the need for new or expanded facilities relative to emergency service providers.	None required	**CEQA**: No impact.
	Threshold SAF-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	**CEQA**: The LPA will introduce new grade crossings. The LRT operations will share ROW with freight operations and impacts will be significant.	Mitigation Measure SAF-1 (Encroachment Detection) to detect potential derailments that may occur on Metro right-of-way.	**CEQA**: Less than significant.

Source: Compiled on behalf of Metro in 2023

Notes: BMP = best management practices; CCTV= closed-circuit television; CDFW = California Department of Fish and Wildlife; CEQA = California Environmental Quality Act; EMF = electromagnetic fields; FEMA = Federal Emergency Management Agency; FTA = Federal Transit Administration; GHG = greenhouse gas; IGP = Industrial General Permit; LADWP = Los Angeles Department of Water and Power; LPA = Locally Preferred Alternative; LRT = light rail transit; MS4 = municipal separate storm sewer system; MMBTU = million British thermal units; MSAT = Mobile Source Air Toxics; MSF = maintenance and storage facility; MTCO2e = metric tons of carbon dioxide equivalent; NEPA = National Environmental Policy Act; NPDES = National Pollutant Discharge Elimination System; PEROW = Pacific Electric Right-of-Way; 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; TOD = transit-oriented development; TPSS = traction power substation; VMT = vehicle miles traveled

Table S.4. Construction Environmental Impacts and Mitigation Measures

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Land Use	Temporary construction impacts on land uses in the Affected Area could include barriers and fencing, parking, lane and active transportation detours, and air quality and noise.	**NEPA**: The temporary construction activities associated with the LPA will be primarily located within the public and/or rail ROW or on sites acquired for construction. Temporary barriers and fencing along the perimeter of construction areas and additional temporary parking for construction personnel at construction staging areas will be provided. Sensitive land uses could also experience adverse effects related to intermittent construction noise and vibration. The LPA will comply with applicable regulations to minimize these effects.	Mitigation Measures COM-1 (Construction Outreach Plan), NOI-6 (Noise Control Plan), and VIB-3 through and VIB-7, which include a vibration control plan and minimizing the use of impact devices, drilling for building foundations, construction vibration limits, and construction monitoring, where applicable	**NEPA**: No adverse effect.
	Threshold LU-CON-1: Would the Project physically divide an established community?	**CEQA**: Temporary construction impacts on land uses in the Affected Area could include barriers and fencing, parking, and lane and active transportation detours.	Mitigation Measure COM-1 (Construction Outreach Plan)	**CEQA**: Less than significant after mitigation.
	Threshold LU-CON-2: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	**CEQA**: Construction activities will be temporary and will not directly conflict with applicable regional and local land use plans, policies, and regulations.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Communities and Neighborhoods	Construction effects on communities and neighborhoods could include temporary impacts to access and mobility, community character and cohesion, and community stability.	**NEPA**: Construction activities for the LPA will be temporary and include barriers around construction activities and staging areas that will be removed upon completion of construction. Temporary street, lane, and bike path detours and closures will be returned to preconstruction conditions. However, based on the timing of temporary closures and the implementation of detour routes, adverse effects will occur. Construction activities will not permanently isolate or alter the physical layout and character of the communities and are not expected to cause residents to move out of their communities.	Mitigation Measure COM-1 (Construction Outreach Plan)	**NEPA**: No adverse effect after mitigation.
	Threshold COM-CON-1: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	**CEQA**: Construction will be temporary and will not directly or indirectly induce unplanned population growth in the area.	None required	**CEQA**: Less than significant.
Acquisitions and Displacements	Construction effects will include properties that are acquired for or affected by construction activities, and the affected businesses and residents.	**NEPA**: Construction of the LPA and MSF will require acquisition of or temporary easements from approximately 195 parcels. Construction of the LPA with the design option would result in one additional temporary impact. With compliance with the Uniform Act, California Relocation Act, and other applicable regulations, no adverse effect will occur.	None required	**NEPA**: No adverse effect.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold DIS-CON-1: Would the Project displace substantial numbers of existing people, housing or business, necessitating the construction of replacement housing or replacement business elsewhere?	**CEQA**: Acquisitions and easements will occur for construction. These acquisitions to support construction will not result in displacements that will necessitate the construction of replacement housing or business.	None required	**CEQA**: Less than significant.
Visual and Aesthetics	Temporary construction activities and staging areas would be visible and could temporarily alter visual quality.	**NEPA**: Construction activities could result in adverse effects related to visual quality. Construction will not affect any scenic views, but construction activities will be temporarily visible to sensitive viewers. If nighttime construction activities occur, sensitive viewers will also be highly sensitive to spillover lighting and glare that originate from construction areas.	Mitigation Measures VA-3 (Construction Screening), VA-4 (Construction Lighting), and NOI-6 (Noise Control Plan)	**NEPA**: No adverse effect after mitigation.
	Threshold VIS-CON-1: Would the Project have a substantial adverse effect on a scenic vista?	**CEQA**: No scenic vistas are within the Affected Area.	None required	**CEQA**: No impact.
	Threshold VIS-CON-2: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	**CEQA**: No state scenic highways are located within the Affected Area.	None required	**CEQA**: No impact.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold VIS-CON-3: In nonurbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	**CEQA**: Construction has the potential to temporarily alter the visual character and quality of the Affected Area.	Mitigation Measures VA-3 (Construction Screening), and NOI-6 (Noise Control Plan)	**CEQA**: Less than significant after mitigation.
	Threshold VIS-CON-4: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	**CEQA**: Nighttime construction work could increase nighttime light or glare in the Affected Area and temporarily affect visibility.	Mitigation Measure VA-4 (Construction Lighting)	**CEQA**: Less than significant after mitigation.
Air Quality	Construction effects would relate to criteria pollutant and ozone precursor emissions, and a nuisance of odor and dust.	**NEPA**: Construction will generate air pollution emissions, including earth moving, equipment and vehicle exhaust, and asphalt paving. Construction emissions will be less than SCAQMD regional mass daily thresholds.	None required	**NEPA**: No adverse effect.
	Threshold AQ-CON-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	**CEQA**: Construction emissions for the LPA will be less than SCAQMD regional mass daily thresholds.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold AQ-CON-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	**CEQA**: Construction of the LPA will not result in a significant air quality impact related to ozone precursors or particulate matter.	None required	**CEQA**: Less than significant.
	Threshold AQ-CON-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?	**CEQA**: Construction emissions for the LPA will be less than SCAQMD regional mass daily thresholds; therefore, neither regional nor localized emissions will expose sensitive receptors to substantial pollutant concentrations.	None required	**CEQA**: Less than significant.
	Threshold AQ-CON-4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	**CEQA**: Construction activities will not generate a substantial source of construction odors or visible dust plumes.	None required	**CEQA**: Less than significant.
Greenhouse Gas Emissions	Construction effects would relate to the generation of GHG emissions from construction activities, including equipment, worker travel, and construction methods.	**NEPA**: Temporary GHG emissions will be generated to construct an energy-efficient mass transit system that will reduce long-term regional GHG emissions through transportation mode shift.	None required	**NEPA**: No adverse effect.
	Threshold GHG-CON-1: Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	**CEQA**: Temporary GHG emissions will be generated to construct an energy-efficient mass transit system that will reduce long-term regional GHG emissions.	None required	**CEQA**: Less than significant.
	Threshold GHG-CON-2: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG?	**CEQA**: Construction will not interfere with GHG reduction plans, policies, or regulations.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Noise and Vibration	Temporary construction impacts could include measurable annoyance and stress due to construction noise, as well as vibration damage and annoyance.	**NEPA**: Construction noise levels could exceed impact criteria. Construction noise could increase community annoyance and the potential for stress-related diseases at affected sensitive uses. Construction vibration could cause less than significant short-term annoyance. Vibration is unlikely to result in building damage.	Mitigation Measures NOI-6 (Noise Control Plan) and VIB-3 through VIB-7, which include a vibration control plan, minimizing the use of impact devices, drilling for building foundations, construction vibration limits, and construction monitoring, where applicable	**NEPA**: Adverse noise effect after mitigation.
	Threshold NOI-CON-1: Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established by FTA or in the local general plans or noise ordinances?	**CEQA**: Construction will result in temporary and periodic increases in ambient noise levels that will exceed FTA criteria, and, where applicable, the standards established by local noise ordinances.	Mitigation Measure NOI-6 (Noise Control Plan)	**CEQA**: Significant and unavoidable after mitigation.
	Threshold NOI-CON-2: Would the Project result in generation of excessive ground-borne vibration or groundborne noise levels?	**CEQA**: Vibration is unlikely to result in building damage.	Mitigation Measures VIB-3 through VIB-7, which include a vibration control plan, minimizing the use of impact devices, drilling for building foundations, construction vibration limits, and construction monitoring, where applicable	**CEQA**: Less than significant after mitigation.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold NOI-CON-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?	**CEQA**: No public airports or private airstrips are located within 2 miles of the project area.	None required	**CEQA**: No impact.
Ecosystems/ Biological Resources	Construction could affect bats, nesting birds, jurisdictional waters, and protected trees.	**NEPA**: The LPA could adversely impact maternal roosting bats and their young and nesting birds. The LPA will cross three jurisdictional resources. The piers and debris walls related to construction will be permanent fill impacts to jurisdictional water resources. An estimated 85 trees could be affected by the LPA.	Mitigation Measures BIO-1 (Bats), BIO-2 (Nesting Birds), BIO-3 (Jurisdictional Resources), and BIO-4 (Protected Trees)	**NEPA**: No adverse effect after mitigation.
	Threshold BIO-CON-1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	**CEQA**: Impacts to roosting western mastiff bats and nesting birds may occur during project construction.	Mitigation Measures BIO-1 (Bats) and BIO-2 (Nesting Birds)	**CEQA**: Less than significant after mitigation.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold BIO-CON-2: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	**CEQA**: The LPA is located in a highly developed/urban area, and no quality habitat that supports native riparian plant or wildlife species is present. Impacts to sensitive natural communities will not occur.	None required	**CEQA**: No impact.
	Threshold BIO-CON-3: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	**CEQA**: Construction of the LPA will affect 1.31 acres, 0.47 acre, and 0.38 acre of the Los Angeles River, Rio Hondo Channel, and San Gabriel River crossings, respectively.	Mitigation Measure BIO-3 (Jurisdictional Resources)	**CEQA**: Less than significant after mitigation.
	Threshold BIO-CON-4: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	**CEQA**: The LPA will not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	None required	**CEQA**: No impact.
	Threshold BIO-CON-5: the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**CEQA**: Protected street trees in the Cities of Los Angeles, Huntington Park, Bell, South Gate, Downey, Bellflower, and Cerritos are present within the Affected Area. Construction could require pruning or removal of street trees.	Mitigation Measure BIO-4 (Protected Trees)	**CEQA**: Less than significant after mitigation.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold BIO-CON-6: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	**CEQA**: The LPA is not located in an area with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved Habitat Conservation Plan.	None required	**CEQA**: No impact.
Geotechnical, Subsurface, and Seismic	Construction could affect naturally occurring gas and unconsolidated/saturated alluvial soils.	**NEPA**: Construction of the LPA could result in an adverse effect related to unconsolidated/saturated alluvial soils if construction causes settlement resulting in distress to existing adjacent improvements.	None required	**NEPA**: No adverse effect.
	Threshold GEO-CON-1: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	**CEQA**: Construction will not have a significant impact on the faults in the Affected Area.	None required	**CEQA**: Less than significant.
	Threshold GEO-CON-2: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	**CEQA**: Construction will not have a significant impact on the seismic potential in the Affected Area.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold GEO-CON-3: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	**CEQA**: Construction will not have a significant impact on the geologic environment in the Affected Area.	None required	**CEQA**: Less than significant.
	Threshold GEO-CON-4: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?	**CEQA**: Construction will not have a significant impact on the unconsolidated/saturated alluvial soils in the Affected Area.	None required	**CEQA**: Less than significant.
	Threshold GEO-CON-5: Would the Project result in substantial soil erosion or the loss of topsoil?	**CEQA**: Construction will occur in an urban setting, and the topsoil layer in most of the Affected Area has been disturbed or concealed by previous human activities.	None required	**CEQA**: Less than significant.
	Threshold GEO-CON-6: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	**CEQA**: Construction will not exacerbate existing geologic conditions related to potential on- or off-site lateral spreading, subsidence, liquefaction or collapse, or seismic-related ground failure, including liquefaction.	None required	**CEQA**: Less than significant.
	Threshold GEO-CON-7: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	**CEQA**: Construction will not have a significant impact on the expansive potential of soils in the Affected Area.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold GEO-CON-8: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	**CEQA**: Construction will occur within highly urbanized areas served by existing municipal sewage systems.	None required	**CEQA**: No impact.
	Threshold GEO-CON-9: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**CEQA**: Refer to Threshold PALEO-CON-1.	N/A	N/A
Hazards and Hazardous Materials	Construction could affect known, potential, and historical concern sites; landfills; groundwater contamination; hazardous materials; oil and gas wells; and oil and gas fields.	**NEPA**: There are 307 known, potential, or historical environmental concern sites in the Affected Area of the LPA. LBP, asbestos/ACM, and PCBs will likely be encountered during demolition. The LPA may affect soil and/or groundwater by common railroad corridor contaminants and the relocation or disturbance of hazardous material pipelines. The disturbance of past agricultural locations may also result in adverse effects related to pesticides, arsenic, and lead. One abandoned oil and gas well is known to be within 200 feet of the LPA.	Mitigation Measure HAZ-1 (Unidentified Oil and Gas Wells)	**NEPA**: No adverse effect after mitigation.
	Threshold HAZ-CON-1: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	**CEQA**: Construction contractors may use hazardous materials. Hazardous materials will be managed appropriately.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold HAZ-CON-2: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	**CEQA**: Construction teams may use hazardous materials such as fuels, paints and coatings, solvents, and welding materials during construction. Contaminated soils may be disturbed.	Mitigation Measure HAZ-1 (Unidentified Oil and Gas Wells)	**CEQA**: Less than significant after mitigation.
	Threshold HAZ-CON-3: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	**CEQA**: Construction will not require emitting hazardous materials or handling of hazardous or acutely hazardous materials, substances, or wastes at greater than regulated quantities within 0.25 mile of an existing or proposed school.	None required	**CEQA**: Less than significant.
	Threshold HAZ-CON-4: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	**CEQA**: The LPA is located near three Government Code Section 65962.5 sites. Potential impacts from construction with regard to environmental concern sites include the potential exposure of construction workers or members of the public to chemical compounds in soils, soil gases, and groundwater. Appropriate management of hazardous materials, affected groundwater, and contaminated soil during construction is a project measure.	None required	**CEQA**: Less than significant.
	Threshold HAZ-CON-5: For a Project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	**CEQA**: No airports are located within 2 miles of the LPA.	None required	**CEQA**: No Impact.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold HAZ-CON-6: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**CEQA**: Refer to Threshold SAF-CON-1.		
	Threshold HAZ-CON-7: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	**CEQA**: No wildlands are located in the vicinity of the LPA.	None required	**CEQA**: No Impact.
Water Resources	Construction activities could adversely affect hydrology and surface water quality, floodplains, and groundwater.	**NEPA**: Construction activities could degrade water quality by increasing the risk of discharge of contaminants to surface water, and could adversely affect groundwater by dewatering or exposure to contamination. The LPA will cross three floodplains. Construction within the rivers could result in potential impacts. Implementation of the project design features and best practices will minimize potential impacts, and no adverse effect will occur.	None required	**NEPA**: No adverse effect.
	Threshold WR-CON-1: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	**CEQA**: Construction will involve ground disturbance that will expose bare soils to stormwater and could lead to erosion and sedimentation. Construction activities could result in temporary impacts to water quality. Compliance with permits will be mandatory.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold WR-CON-2: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	**CEQA**: Dewatering of the construction site, if needed, will be subject to the requirements of the Construction Dewatering Permit and other applicable permits.	None required	**CEQA**: Less than significant.
	Threshold WR-CON-3: Would the Project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would result in substantial erosion or siltation on-site or off-site?	**CEQA**: Construction may temporarily increase the impervious area within the Affected Area.	None required	**CEQA**: Less than significant.
	Threshold WR-CON-4: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	**CEQA**: Construction may temporarily increase the impervious area within the Affected Area. Construction will implement a SWPPP that complies with the CGP.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold WR-CON-5: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	**CEQA**: Construction may temporarily increase the impervious area within the Affected Area. Construction will implement a SWPPP that complies with the CGP.	None required	**CEQA**: Less than significant.
	Threshold WR-CON-6: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through addition of impervious surfaces, in a manner which would impede or redirect flood flows?	**CEQA**: Construction may temporarily increase the impervious area within the Affected Area. Where construction occurs in the LA River, the Rio Hondo Channel, or the San Gabriel River, activities will comply with all applicable federal and local floodplain regulations.	None required	**CEQA**: Less than significant.
	Threshold WR-CON-7: Be subject to inundation by seiche, tsunami, or mudflow?	**CEQA**: Implementation of the LPA will not alter the ability of the river channels to convey the 100-year flows. Construction activities will not release pollutants due to inundation. Construction will be located more than 20 miles from the ocean and, therefore, will not be within areas potentially affected by seiches or tsunamis.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold WR-CON-8: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	**CEQA**: Construction may result in temporary impacts on groundwater resources. Construction will implement a SWPPP that complies with the CGP. Construction site dewatering activities (if needed) will be permitted.	None required	**CEQA**: Less than significant.
Energy	Construction effects relate to energy consumption associated with construction activities.	**NEPA**: Construction of the LPA will consume 381,064 MMBTU of energy in the form of fuel.	None required	**NEPA**: No adverse effect.
	Threshold ENERGY-CON-1: Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	**CEQA**: Construction will not require new or expanded sources of energy or infrastructure to meet energy demands and will not result in the wasteful or inefficient use of energy.	None required	**CEQA**: Less than significant.
	Threshold ENERGY-CON-2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	**CEQA**: Construction will comply with state and local plans for energy efficiency in construction activities.	None required	**CEQA**: Less than significant.
	Threshold ENERGY-CON-3: Would the Project require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	**CEQA**: Construction will not require new or relocated distribution infrastructure such as transmission lines from power facilities and transformers.	None required	**CEQA**: Less than significant.
Electromagnetic Fields	Construction effects would relate to electromagnetic field levels generated by construction activities.	**NEPA/CEQA**: Construction activities will generate EMF levels similar to household appliances and will not cause adverse/significant levels of EMF.	None required	**NEPA/CEQA**: No adverse effect/Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Historic, Archaeological, and Paleontological Resources	Construction effects would relate to impacts to built environment historic properties.	**NEPA**: Construction will not significantly alter historic properties in the existing urban environment. The introduction of temporary construction-related visual elements to historic properties or their vicinity will not alter any of the characteristics of historic properties in the APE. Noise and vibration associated with construction will be temporary. Construction-related vibration will not result in physical damage to 17 of the 19 historic properties in the APE. Pursuant to NEPA, impacts could occur at two built historic properties during construction activities that generate high levels of vibration (e.g., compacting or using a large vibratory roller or compacter).	Mitigation Measures VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources) and, for precaution, VIB-7 (Construction Monitoring for Vibration Near Historic Properties/Historical Resources).	**NEPA**: No adverse effect, including after mitigation pursuant to NEPA at the two built historic properties.
	Construction effects would relate to impacts to archaeological historic properties.	**NEPA:** There are no known archaeological resources in the APE for the LPA. Construction will involve ground disturbance with the potential to alter buried archaeological deposits associated with unknown archaeological historic properties in the APE. Unanticipated archaeological historic properties may be encountered during ground-disturbing activities associated with construction of the LPA. Direct alteration of unanticipated archaeological historic properties will represent an adverse effect if present.	Mitigation Measures CR-1 (Development of Cultural Resources Monitoring and Discovery Program), CR-2 (Archaeological Worker Environmental Awareness Program), CR-3 (Archaeological Monitoring), and CR-4 (Treatment of Unanticipated Discoveries)	**NEPA**: No adverse effect after mitigation if unknown archaeological historic properties are encountered.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Construction effects would relate to impacts to paleontological resources.	**NEPA:** Construction will involve ground disturbance with the potential to discover paleontological resources. An adverse effect could occur if construction of the LPA results in the disturbance or destruction of paleontological resources if present.	Mitigation Measure PR-1, which includes a paleontological resources mitigation and monitoring program, a worker environmental awareness program, construction monitoring, and the preparation and curation of recovered fossils, will effectively reduce the Project's adverse effects to these resources.	**NEPA**: No adverse effect after mitigation if paleontological resources are present.
	Threshold HIS-CON-1: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	**CEQA**: Construction of the LPA will not physically alter 19 of the 22 built environment historical resources in the APE. Impacts could occur at three built historical resources during construction activities that generate high levels of vibration (i.e., compacting or using a large vibratory roller or compacter).	Mitigation Measures VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources) and, for precaution, Mitigation Measure VIB-7 (Construction Monitoring for Vibration Near Historic Properties/Historical Resources).	**CEQA**: Less than significant after mitigation at the three built historical resources.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold ARCH CON-1: Would the Project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	**CEQA**: Construction of the LPA will involve ground disturbance with the potential to physically impact unknown archaeological resources within the direct APE, if present. There are no known extant resources in the direct APE for the LPA.	Mitigation Measures CR-1 through CR-4, which includes the development of a cultural resources monitoring and discovery program, a worker environmental awareness program, archaeological monitoring, and treatment of unanticipated discoveries.	**CEQA**: Less than significant after mitigation if resources are present.
	Threshold ARCH CON-2: Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?	**CEQA**: No known human remains or cemeteries have been documented in the APE. Construction activities have the potential to physically alter, remove, or destroy buried human remains that may extend into the direct APE, if present. The LPA will adhere to existing state regulations concerning the discovery of human remains.	None required	**CEQA**: Less than significant if resources are present.
	Threshold PALEO-CON-1: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**CEQA**: Construction impacts to paleontological resources will be greatest for activities such as grading, excavation, trenching, and wide diameter- auguring that require displacement. Impacts could occur if resources are present.	Mitigation Measure PR-1, which includes a paleontological resources mitigation and monitoring program, a worker environmental awareness program, construction monitoring, and the preparation and curation of recovered fossils, will effectively reduce the Project's significant impacts to these resources.	**CEQA**: Less than significant after mitigation if resources are present.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Tribal Cultural Resources	Effects would relate to impacts to known traditional cultural properties during construction.	**NEPA**: No traditional cultural properties have been identified in the Affected Area for traditional cultural properties for the LPA. Therefore, construction will not result in effects to known traditional cultural properties. Construction could affect undocumented traditional cultural properties if present.	Mitigation Measures TCR-1 (Native American Monitoring), TCR-2 (Unanticipated Discovery of Traditional Cultural Properties/Tribal Cultural Resources), and CR-1 (Development of a Cultural Resources Monitoring and Discovery Program)	**NEPA**: No adverse effect after mitigation if traditional cultural properties are present.
	Threshold TCR-CON-1: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	**CEQA**: No tribal cultural resource has been identified in the Affected Area for tribal cultural resources for the LPA. Construction will not result in significant impacts to known tribal cultural resources. Construction could affect undocumented tribal cultural resources if present.	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)	**CEQA**: Less than significant after mitigation if tribal cultural resources are present.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subsection (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			
Parklands and Community Facilities	Construction activities would result in impacts to access and parking for parks and community facilities.	**NEPA**: Construction activities for the LPA will not permanently affect existing buildings or permanently disrupt parklands, recreation facilities, bike facilities, and community facilities, and no adverse effect will occur. Construction activities will not cause indirect air quality, noise, or vibration impacts to parklands or recreational facilities. Construction-related traffic, detours, lane closures, sidewalk detours, and bike facility detours could affect access and parking for parklands, recreational facilities, and community facilities, and could result in adverse effects.	Mitigation Measures COM-1 (Construction Outreach Plan), NOI-6 (Noise Control Plan), VIB-3 (Vibration Control Plan), VIB-4 (Minimize the Use of Impact Devices), VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources), and VIB-7 (Construction Monitoring for Vibration Near Historic Properties/Historical Resources), where applicable	**NEPA**: No adverse effect after mitigation.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold PARK-CON-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable standards for any park or recreational facility?	**CEQA**: Pedestrian and bicycle access routes in the construction area will be temporarily disrupted during construction. In addition, off-street parking that may be used by parkland, recreational facility, bike facility, and community facility visitors may be temporarily removed for the duration of construction.	Mitigation Measure COM-1 (Construction Outreach Plan)	**CEQA**: Less than significant after mitigation.
	Threshold PARK-CON-2: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	**CEQA**: Construction will not generate permanent residences that will increase the use of existing neighborhood and regional parks or other recreational facilities resulting in accelerated physical deterioration of the facilities.	None required	**CEQA**: Less than significant.
	Threshold PARK-CON-3: Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	**CEQA**: Construction will be temporary and will not include the construction of recreational facilities or require the expansion of existing recreational facilities.	None required	**CEQA**: No impact.
Economic and Fiscal Impacts	Construction effects would relate to regional economic construction impacts and localized project impacts.	**NEPA**: Construction will represent a substantial capital investment in the regional economy that will increase employment, earnings, and economic output during the construction period. Construction activities will likely result in access modifications and potential transportation delays that will result in temporary impacts to the surrounding communities.	Mitigation Measures COM-1 (Construction Outreach Plan) and TRA-21 (Loss of Parking [Construction])	**NEPA**: No adverse effect after mitigation.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold ECON-CON-1: Would the Project result in substantial impacts to regional mobility and connectivity?	**CEQA**: Construction activities will likely result in access modifications and potential transportation delays that will result in temporary impacts to the surrounding communities.	Mitigation Measures COM-1 (Construction Outreach Plan) and TRA-21 (Loss of Parking [Construction])	**CEQA**: Less than significant after mitigation.
	Threshold ECON-CON-2: Would the Project result in substantial construction-related impacts to businesses and residences that would result in physical deterioration of the existing environment?	**CEQA**: While the construction spending effects will be a positive for the overall regional economy, construction of the LPA will have potential impacts on businesses and residences near active construction areas. Construction will require additional right-of-way for the alignment, construction staging areas, and parking areas, resulting in displacements of businesses and residences.	Mitigation Measures COM-1 (Construction Outreach Plan) and TRA-21 (Loss of Parking [Construction])	**CEQA**: Less than significant after mitigation.
Safety and Security	Construction effects would relate to construction-related activities and conditions that could impact pedestrian, bicyclist, and motorist safety, emergency response services, and security and prevention of crime.	**NEPA**: The LPA will include advance notices, signage, barriers, and fencing to direct pedestrian, bicyclist, and motorist travel, and reduce the potential for temporary safety impacts. However, these methods may interfere with or potentially block Safe Routes to School, and an adverse effect could occur. The LPA will not have adverse impacts to emergency response services. Construction sites will include security features such as CCTV, on-site guards and security teams, and perimeter fencing to reduce potential impacts related to security and crime.	Mitigation Measures SAF-2 (School District Coordination), and SAF-3 (Construction Site Measures)	**NEPA**: No adverse effect after mitigation.
	Threshold SAF-CON-1: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**CEQA**: Construction-related impacts on emergency response plans or emergency evacuation plans could be caused by temporary construction activities.	None required	**CEQA**: Less than significant.

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	Threshold SAF-CON-2: Would the Project result in substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain response times or other performance objectives for fire and police protection services?	**CEQA**: There will be no construction-related activities associated with new or physically altered government facilities to maintain response times or other performance objectives for fire and police protection services.	None required	**CEQA**: No impact.
	Threshold SAF-CON-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	**CEQA**: Temporary construction-related activities and conditions could affect pedestrian, bicyclist, and motorist safety.	Mitigation Measures COM-1 (Construction Outreach Plan), SAF-2 (School District Coordination), and SAF-3 (Construction Site Measures)	**CEQA**: Less than significant after mitigation.

Source: Compiled on behalf of Metro in 2023

Notes: ACM = asbestos-containing materials; APE = Area of Potential Effect; CCTV= closed-circuit television; CEQA = California Environmental Quality Act; CGP = Construction General Permit; EMF = electromagnetic fields; FTA = Federal Transit Administration; GHG = greenhouse gas; LBP = lead-based paint; LPA = Locally Preferred Alternative; MMBTU = million British thermal units; MSF = maintenance and storage facility; NEPA = National Environmental Policy Act; PCB = polychlorinated biphenyls; ROW = right-of-way; SCAQMD = South Coast Air Quality Management District; SWPPP = Stormwater Pollution Prevention Plan

Table S.5. Growth, Cumulative, and Environmental Justice Impacts and Mitigation Measures

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
Growth	Could the Project foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.	**NEPA/CEQA**: Population, housing, and employment growth is anticipated along the project alignment with population and housing growth being closely related. The LPA is a transit infrastructure project proposed to serve forecasted population, housing, and employment growth. It will not result in growth-inducing impacts or unplanned growth beyond growth already anticipated.	None required	**NEPA/CEQA**: No adverse effect.
Cumulative Impacts	In combination with identified past, present, and reasonably foreseeable future projects would the Project have significant impacts?	**NEPA/CEQA**: The LPA will have cumulative effects to transportation, land use, and noise and vibration.	Mitigation Measures LU-1 (Consistency with Bike Plans); NOI-1 through NOI-6, which include soundwalls, low-impact frogs, wheel squeal noise monitoring, TPSS noise reduction, and a Noise Control Plan; VIB-3 through VIB-7, which includes a vibration control plan, minimizing the use of impact devices, drilling for building foundations, construction vibration limits, and construction monitoring where applicable; and TRA-21 (Loss of Parking [Construction]).	**NEPA**: During operation, transportation, land use, and noise and vibration will have significant cumulative impacts that would be cumulatively considerable. During construction, transportation and noise will have significant cumulative construction impacts that would be cumulatively considerable. **CEQA:** During operation, land use and noise and vibration will have significant cumulative impacts that would be cumulatively considerable. During construction, transportation and noise will have significant cumulative construction impacts that would be cumulatively considerable.
Environmental Justice	What is the potential for disproportionately high and adverse	**NEPA**: During operation, environmental justice communities will experience effects with regard to traffic operations and parking;	Mitigation Measures TRA-1 through TRA-17, which are specific intersection	**NEPA**: A disproportionately high and adverse effect will occur in the environmental

Topic	Description of Identified Impacts	Impact Before Mitigation	Mitigation Measures	Impact Remaining After Mitigation
	effects on environmental justice communities?	land use consistency; parklands and communities; displacements and acquisitions; visual quality; and noise and vibration levels. During construction, environmental justice communities will experience effects with regard to transportation, land use, displacements and acquisitions, communities and neighborhoods, noise and vibration, and parklands and community facilities. Adverse effects with regard to intersection improvements and traffic operations on the environmental justice community of Huntington Park will be appreciably more severe or greater in magnitude than the other affected communities along the LPA based on the concentration of affected intersections. This will result in a disproportionately high and adverse effect to the environmental justice community of Huntington Park. Adverse effects on other environmental justice communities will not be appreciably more severe or greater in magnitude than other affected communities along the LPA, all of which are environmental justice communities. The LPA will not cause a disproportionately high and adverse effect on other environmental justice communities. Where adverse effects would occur, mitigation measures will be provided and implemented equally throughout all environmental justice communities in the Affected Area.	improvements, TRA-18 (Transportation Management Plan(s)), TRA-19 (Parking Monitoring and Community Outreach), TRA-20 (Parking Mitigation Program [Permanent]), and TRA-21 (Loss of Parking [Construction]); LU-1 (Consistency with Bike Plans); VA-1 (Screening at Somerset Boulevard) and VA-2 (Relocation of "Belle"); NOI-1 through NOI-6, which include soundwalls, low-impact frogs, wheel squeal noise monitoring, TPSS noise reduction, and a noise control plan; VIB-1 through VIB-7, which include a ballast mat or resilient rail fasteners, low-impact frogs, a vibration control plan, minimizing the use of impact devices, drilling for building foundations, construction vibration limits, and construction monitoring, where applicable; COM-1 (Construction Outreach Plan).	justice community of Huntington Park with regard to intersection improvements and traffic operations after the implementation of Mitigation Measures TRA-1 through TRA-17. Mitigation Measures TRA-1 through TRA-17 will be implemented and sufficient to reduce adverse effects to the extent feasible. Nonetheless, adverse effects will remain. Taking into account the implementation of mitigation measures and the off-setting benefits, the LPA will not result in disproportionately high and adverse effects to environmental justice communities within the environmental justice Affected Area.

Source: Compiled on behalf of Metro in 2023
Notes: CEQA = California Environmental Quality Act; LPA = Locally Preferred Alternative; NEPA = National Environmental Policy Act; TPSS = traction power substation

S.5 Section 4(f) Evaluation

Section 4(f) of the U.S. Department of Transportation Act of 1966 provides special protection of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of a historic site of national, state, or local significance (as determined by the official(s) with jurisdiction over the park, area, refuge, or site) (49 United States Code Section 303). The FTA may not approve the non-*de minimis* use of Section 4(f) property unless the FTA determines that (1) there is no prudent or feasible alternative, and (2) the project includes all possible planning to minimize harm to these resources resulting from such use (23 Code of Federal Regulations 774.3).

Prior to making Section 4(f) approvals under Section 774.3(a), the draft Section 4(f) evaluation was provided for coordination and comment to the official(s) with jurisdiction over the Section 4(f) resource and to the Department of the Interior, and as appropriate to the Department of Agriculture and the Department of Housing and Urban Development (23 Code of Federal Regulations Section 774.5).

FTA has determined that the Project will have a *de minimis* impact on the activities, attributes, or features that qualify the Century Freeway-Transitway Historic District, 6101 Santa Fe Avenue, Huntington Park High School, Cudahy Substation, Los Angeles River Channel, Rio Hondo River Channel, and San Gabriel River Channel for protection under Section 4(f). The FTA also has made a determination that the Project will have a *de minimis* impact on Paramount Park.

The FTA also has determined that the temporary occupancy exception to Section 4(f) use applies to Paramount Park, the Los Angeles River Bike Path, the Rio Hondo Bike Path, and the San Gabriel River Mid-Trail.

The Project will have no use of other Section 4(f) properties. There will be no constructive use of any Section 4(f) properties. FTA determined that the Project will satisfy the requirements of Section 4(f) because the only impacts to Section 4(f) properties will be *de minimis* or meet the requirements of the temporary occupancy exception.

S.6 Evaluation of Alternatives

The information presented in Chapter 6 highlights the important trade-offs between the alternatives evaluated in the Draft and Final EIS/EIR. The Draft EIS/EIR described and evaluated in detail the environmental impacts of a range of alternatives. Based on that analysis, Alternative 3 was identified as the environmentally superior alternative pursuant to CEQA requirements and the Staff Preferred Alternative; it was subsequently identified by the Metro Board of Directors as the LPA in January 2022. Since completion of the Draft EIS/EIR and based on public comments received on the Draft EIS/EIR and stakeholder coordination, Metro has refined and continued the design of the LPA to reduce impacts, support mitigation design, incorporate stakeholder suggestions as to how to best integrate the LPA into the community, and provide detail required for interagency approvals. The refinements and associated analysis have not identified any new or substantially more severe significant adverse impacts than were identified in the Draft EIS/EIR. In several cases, the refinements reduce impacts compared to those identified in the Draft EIS/EIR.

S.7 Public Outreach, Agency Consultation, and Coordination

Metro initiated a comprehensive outreach program for the Project beginning in 2017. Metro has continued to keep elected officials, agency staff, community stakeholders, and the general public informed on the status of the Project, as well as progress of the environmental review process.

The FTA published the Notice of Intent pursuant to NEPA in the *Federal Register* on July 26, 2017. Metro issued a Notice of Preparation pursuant to CEQA on May 25, 2017, with supplemental publications on June 14, 2017 and July 11, 2018. Metro used the scoping process to seek agency and public feedback on the scope of the Draft EIS/EIR. Metro hosted one agency scoping meeting and eight public scoping meetings with the option to join a live webcast or access the video recording on the Project's website.

Metro communicated project information and provided opportunities for public and agency input during preparation of the Draft EIS/EIR. The notice of availability was published for the Draft EIS/EIR on July 30, 2021. Metro conducted community information sessions, public hearings, and an extended 60-day public comment period. In total, 452 formal comment submissions (e.g., comment cards, emails, and letters) were received containing approximately 2,255 individual comments during the public review period. Comments included general statements of support or opposition to the Project or the four Build Alternatives evaluated in the Draft EIS/EIR. Other comments offered suggestions on how to modify the Project through refinements, as well as requests for changes, clarification, and/or new or additional analysis and mitigation to the Draft EIS/EIR. Additionally, other comments expressed concern over environmental impacts and funding/cost-effectiveness. Individual comments and responses are included in Appendix D of this Final EIS/EIR.

Subsequent to the public comment period, Metro has continued to coordinate with the California Public Utilities Commission, the California Department of Transportation, the USACE, the Ports of Los Angeles and Long Beach in conjunction with the Union Pacific Railroad, and corridor cities. Through this process the USACE and the California Department of Transportation were identified as cooperating agencies. Likewise, Metro continued the Section 106 consultation process, which identified additional properties eligible for the National Register of Historic Places in the Area of Potential Effect, which concluded with a finding of No Adverse Effect for the LPA on March 12, 2024.

The release of the Final EIS/EIR will include an opportunity for public review and information on the anticipated next steps for the Metro Board's certification of the EIR and the FTA's issuance of the Record of Decision for the EIS.

S.8 Areas of Controversy and Issues to Be Resolved

The following areas of concern were raised in comments received on the Draft EIS/EIR:

- Funding availability for the ultimate extension of the Project beyond the north limit of the LPA, inclusive of a station in Little Tokyo
- Alignment configuration, with preferences stated for an underground alignment or avoidance of creating new at-grade crossings
- Parking strategies, including the provision of additional dedicated transit parking at stations, although some comments requested a reduction in dedicated transit parking to encourage non-vehicular transportation

The following design considerations will be addressed as planning and design of the Project proceeds:

- Determination whether to keep 186th Street open and close 187th Street (included as the basis of the LPA design) or close 186th Street and keep 187th Street open (included as the design option) at the PEROW within the City of Artesia.
- Selection of ultimate locations for several traction power substation locations that have optional sites identified. The ultimate locations selected will be determined as design progresses.

S.9 Next Steps and Intended Use

This Final EIS/EIR will be used to inform the Metro Board, FTA, responsible and trustee agencies, and the general public of the environmental effects resulting from the Project. Following circulation of the Final EIS/EIR for public review, the Metro Board will decide between the alternatives, including the design option, and consider certification of the Final EIR; adoption of Findings of Fact, a Mitigation and Monitoring Program, and a Statement of Overriding Considerations; and approval of the Project. The FTA, as NEPA lead agency for the Project, will make a final decision on a proposed action. FTA will issue the Record of Decision to satisfy NEPA requirements for the Project.

Los Angeles County
Metropolitan Transportation Authority

West Santa Ana Branch Transit Corridor

Draft Mitigation Monitoring and Reporting Program

Task No. 84.03a

Metro®

WEST SANTA ANA BRANCH TRANSIT CORRIDOR ENVIRONMENTAL STUDY

Contract No. AE5999300

Draft Mitigation Monitoring and Reporting Program

Task No. 84.03a

Review Copy		
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Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

February 1, 2024

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ACRONYMS AND ABBREVIATIONS

Acronyms	Definition
CalGEM	California Department of Conservation Geologic Energy Management Division
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CRHR	California Register of Historic Resources
CRMDP	Cultural Resources Monitoring and Discovery Program
EIS/EIR	environmental impact statement/environmental impact report
FTA	Federal Transit Authority
HVAC	heating, ventilation, and air conditioning
LPA	Locally Preferred Alternative
NRHP	National Register of Historic Places
Metro	Los Angeles County Metropolitan Transportation Authority
MMRP	Mitigation Monitoring and Reporting Program
NEPA	National Environmental Protection Act
PEROW	Pacific Electric Right-of-Way
PRMMP	Paleontological Resources Mitigation and Monitoring Program
SVP	Society of Vertebrate Paleontology
TMP	Transportation Management Plan(s)
TPSS	traction power substation
WSAB	West Santa Ana Branch

1 MITIGATION MONITORING AND REPORTING PROGRAM

1.1 Introduction

This Mitigation Monitoring and Reporting Program (MMRP) is for the West Santa Branch (WSAB) Transit Corridor Project[1]. The MMRP has been prepared in compliance with state and federal law and reflects the mitigation measures identified in the WSAB Transit Corridor Project Final Environmental Impact Statement and Environmental Impact Report (EIS/EIR). Mitigation measures are actions designed to avoid, minimize, or compensate for adverse or significant impacts.

The California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) regulations require an enforceable mitigation and monitoring program for projects. Section 21081.6 of the California Public Resources Code requires a Lead Agency to adopt a "reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment" (Section 15097 of the CEQA Guidelines provides additional direction on mitigation monitoring or reporting). Under the NEPA regulations, a monitoring and enforcement program shall be adopted and summarized where applicable to any mitigation (40 Code of Federal Regulations 1505.2(c) and 23 Code of Federal Regulations 771.27A). The Federal Transit Administration is the Lead Agency under NEPA and the Los Angeles County Metropolitan Transportation Authority (Metro) is the Lead Agency under CEQA.

Metro shall be responsible for administering and ensuring full compliance with the provisions of the MMRP.

1.2 Purpose

The primary purpose of the MMRP is to ensure that the mitigation measures identified in the Final EIS/EIR are implemented, effectively minimizing the identified environmental effects. Table 1 includes all mitigation measures identified in the Final EIS/EIR that would lessen or avoid potentially significant adverse environmental impacts resulting from implementation of the Project. Each mitigation measure is categorized by environmental topic and corresponding ID, with identification of:

- Monitoring Action/Procedure: A description of how compliance with the mitigation measures will be monitored or reviewed.
- Responsible Party for Implementation: The entity accountable for implementing the mitigation measures.
- Monitoring Responsibility and Implementation Phase: The agency responsible for overseeing the implementation of mitigation and the project phase or milestone when the measure is implemented.
- Outside Agency/Organization Coordination: The agencies or organizations that Metro will coordinate with for implementation of the measure, where applicable.

[1] As a result of a renaming campaign, the Southeast Gateway Line was unveiled as the new project name on January 22, 2024, to be used as the Project advances.

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
TRANSPORTATION				
TRA-1: Florence Avenue/California Avenue (East). Extend the northbound left-turn lane to 300 feet. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-2: Bell Avenue/Bissell Street. Add a westbound left-turn lane. Convert westbound left-through-right lane into a through-right lane. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bell).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bell
TRA-3: Gage Avenue/Salt Lake Avenue (West). Add eastbound right-turn lane with a 250-foot turn bay. Extend westbound left-turn lane with a 225-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bell).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bell
TRA-4: Gage Avenue/California Avenue. Extend eastbound left-turn lane with a 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bell).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bell
TRA-5: Randolph Street/State Street. Add a westbound left-turn lane with a 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-6: Randolph Street/Miles Avenue. Extend northbound left-turn lane to 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-7: Randolph Street/Seville Avenue. Add northbound and southbound left-turn lane with 150-foot left-turn bays. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
TRA-8: Randolph Street/Pacific Boulevard. Extend southbound left-turn lane to 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Pre-revenue Operation	City of Huntington Park
TRA-9: Randolph Street/Rugby Avenue. Add northbound and southbound left-turn lane with 100-foot turn bays. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-10: Randolph Street/Albany Street. Add northbound and southbound left-turn lane with 100-foot turn bays. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-11: Randolph Street/Alameda Street (West). Add northbound left-turn lane with 150-foot turn bay. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Huntington Park).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Huntington Park
TRA-12: Gardendale Street/Center Street. Convert the two-way stop-controlled intersection to a signalized intersection. Add a westbound through lane. Metro will implement this measure subject to approval of the applicable jurisdiction (City of South Gate and City of Downey).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of South Gate, City of Downey
TRA-13: Gardendale Street/ Industrial Avenue. Convert the two-way stop-controlled intersection to a signalized intersection. Add a westbound through lane, the length of which will continue through the grade crossing. Metro will implement this measure subject to approval of the applicable jurisdiction (City of South Gate and City of Downey).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of South Gate, City of Downey
TRA-14: Flora Vista Street/Clark Avenue. Convert the two-way stop-controlled intersection to a signalized intersection. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bellflower).	Review design plans for compliance; verify in the field.	Construction Contractor; Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bellflower
TRA-15: Alondra Boulevard/Clark Avenue. Extend eastbound left-turn lane to 150 feet. Extend westbound left-turn lane to 200 feet. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Bellflower).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Bellflower

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
TRA-16: Artesia Boulevard/Dumont Avenue. Add westbound through lane. Metro will implement this measure is subject to approval of the applicable jurisdiction (City of Cerritos).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Cerritos
TRA 17: Business Circle/ Studebaker Road. Convert the two-way stop-controlled intersection to a signalized intersection. Metro will implement this measure subject to approval of the applicable jurisdiction (City of Cerritos).	Review design plans for compliance; verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	City of Cerritos
TRA-18 Transportation Management Plan(s) (TMP): TMP(s) will be prepared to address construction impacts on transportation facilities as applicable under the jurisdiction of all involved cities and agencies. The TMP(s) will address potential impacts from construction activities on vehicular, transit, pedestrian, and bicycle access and mobility, including, but not limited to, temporary lane/roadway, sidewalk, bicycle facility, and freeway ramp closures; detours; increases in traffic volumes (including regular traffic and construction traffic, construction equipment, materials delivery vehicles, waste/haul vehicles, and employee commutes); construction parking; and emergency services (e.g., fire, police, ambulances). The development of the TMP will be coordinated with Metro, local jurisdictions (cities and the county), agencies, and other potentially affected parties (e.g., school bus and transit operators and police, fire, and emergency services providers). The TMP(s) will identify specific TMP strategies, the party/parties responsible for implementing those strategies, the agencies and parties the TMP strategies will be coordinated with, and implementation timing. The TMP will include specific strategies to address short term, project-related construction effects on traffic, bicyclists, pedestrians, and area residents and businesses. The following list, which is part of this mitigation measure, identifies the types of TMP strategies that will be applicable: • Public Information	Review and verify preparation of TMP(s) and submission to Metro. Verify in the field that TMP measures have been implemented.	Construction Contractor/ Metro	1. Metro 2. Final Design/Prior to Construction, During Construction, After Construction	City of Los Angeles, City of Vernon, City of Huntington Park, City of Bell, City of Cudahy, City of South Gate, City of Downey, City of Paramount, City of Bellflower, City of Cerritos, City of Artesia, Los Angeles County, local transportation agencies, California Department of Transportation, local emergency services providers, school districts, and local business owners

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
– Brochures and Mailers – Press Releases – Paid Advertising – Public Meetings/Speakers Bureau – Internet – Public Meeting Rooms • Motorist Information – Portable Changeable-Message Signs – Ground-mounted Signs • Incident Management – Traffic Management Team • Construction – Lane Closure Chart – Reduced Speed Zone – Incentives and Disincentives (e.g., early completion payments and late re-opening penalties for contractors) – Movable Barrier – Temporary Pedestrian Walkways and Detour The Resident Engineer will require the Construction Contractor to implement the strategies in the TMP prior to, during, and after construction activities, as required in the TMP. Pedestrian and Bicycle Facility Closures: When sidewalks, crosswalks, and/or bicycle facilities are temporarily closed during construction, pedestrian and bicycle detours will be developed and clearly signed prior to closing those facilities.				
TRA-19 Parking Monitoring and Community Outreach: • Within the one-half-mile area surrounding each WSAB station, an assessment would be conducted to monitor on-street and off-street parking activity resulting from project operation. The assessment would compare parking availability prior to the opening of service to the availability six months following the opening of service.	Develop and implement survey to monitor on-street and off-street parking activity and report conditions. Verify coordination efforts with local jurisdictions on development of parking	Metro	1. Metro 2. Prior to Operation and 6 months Post-revenue Operation	City of Los Angeles, Los Angeles County, City of Huntington Park, City of Vernon, City of Bell, City of Cudahy, City of South Gate, City of

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
Surveys would be conducted at each station area to identify where WSAB parking demand is at least 20 percent greater than the demand before opening of service (i.e., the new transit service has increased parking demand by 20 percent or more). • Metro will work with the appropriate local jurisdiction, business owners, and affected communities for that station area to assess the need for an appropriate on- and off-street parking management program, considering the nearby community's and each proposed station's parking needs. • Specific parking management strategies could include restriping, modifying parking restrictions, and adjusting the time limits for on-street parking. For off-street parking, signing and enforcement services could be included. • Another element could include implementing or enhancing a residential permit parking program for the affected neighborhoods. Metro would coordinate with and support jurisdictions in outreach meetings within the affected communities to gauge the interest of residents participating in a residential permit parking program (prior to the opening of the new light rail service), regardless of whether parking shortages have been identified. • Metro may implement a parking fee at the transit parking facilities, consistent with the Supportive Transit Parking Program Master Plan.	management strategies where applicable.			Downey, City of Paramount, City of Bellflower, City of Artesia, City of Cerritos; local business owners

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
TRA-20 Parking Mitigation Program (Permanent): Metro will coordinate with local jurisdictions to address the physical loss of public parking spaces resulting from implementation of the Locally Preferred Alternative. This could include, but not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, utilizing remnants of parcels acquired for the Project as off-street parking, and adjusting the time limits for on-street parking.	Verify coordination efforts with local jurisdictions where parking is physically removed. Verify development of parking management strategies. Verify in the field.	Metro	1. Metro 2. Final Design, Construction/Prior to Operation	City of Los Angeles, City of Vernon, City of Huntington Park, City of Bell, City of Cudahy, City of South Gate, City of Downey, City of Paramount, City of Bellflower, City of Cerritos, and City of Artesia, Los Angeles County
TRA-21 Loss of Parking (Construction): Metro will coordinate with local jurisdictions to address the loss of public parking spaces during construction. This could include, but not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, phasing construction activities in a way that minimizes parking disruption, and adjusting the time limits for on-street parking.	Verify coordination efforts with local jurisdictions where parking is physically removed temporarily during construction. Verify development and implementation of parking management strategies. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction	City of Los Angeles, City of Vernon, City of Huntington Park, City of Bell, City of Cudahy, City of South Gate, City of Downey, City of Paramount, City of Bellflower, City of Cerritos, and City of Artesia, Los Angeles County

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
LAND USE				
LU-1 Consistency with Bike Plans: During the planning process and prior to construction, Metro will prepare amended language for each affected bicycle plan demonstrating that existing, planned, and modified bicycle facilities will be connected during project operation. This language will be subject to the approval of the Cities of Huntington Park, South Gate, Bell, Paramount, and Bellflower, as applicable. Metro will modify the following bike trail segments into a Class II bikeway: ▪ Within the San Pedro Subdivision Right-of-Way between Ardmore Avenue to Century Boulevard (City of South Gate) ▪ Along Salt Lake Avenue from Gage Avenue to Florence Avenue (City of Bell) Metro will relocate the following bike trail segments: ▪ Paramount Bike Trail segments from Paramount Boulevard to Somerset Boulevard within the Metro-owned Pacific Electric Right-of-Way (PEROW) (City of Paramount) ▪ Bellflower Bike and Trail segment from Lakewood Boulevard to the maximum extent of Clark Avenue within the Metro-owned PEROW (City of Paramount and City of Bellflower)	Bike Plans: Review and verify preparation of amended language for each affected bicycle plan. Relocated Segments: Review design plans for relocated segments. Verify in field.	Bike Plans: Metro Relocated Segments: Construction Contractor/ Metro	1. Metro 2. Bike Plans: Prior to Pre-revenue Operations Relocated Segments: Final Design, Construction, Prior to Operations	City of Huntington Park, City of South Gate, City of Bell, City of Paramount, City of Bellflower
TRA-19 and **TRA-20**	Refer to TRA-19 and TRA-20	Refer to TRA-19 and TRA-20	Refer to TRA-19 and TRA-20	Refer to TRA-19 and TRA-20
COM-1 Construction Outreach Plan	Refer to COM-1	Refer to COM-1	Refer to COM-1	Refer to COM-1
NOI-6 Noise Control Plan	Refer to NOI-6	Refer to NOI-6	Refer to NOI-6	Refer to NOI-6
VIB-3 through **VIB-7**	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
COMMUNITIES AND NEIGHBORHOODS				
COM-1 Construction Outreach Plan: Metro will develop a Construction Outreach Plan as part of Metro's Construction Relation & Mitigation Programs in Community Relations in coordination with affected communities, community facilities, and businesses that will be implemented by Metro and its contractors during construction of the Project. The Construction Outreach Plan will include, but not be limited to, the following elements: ▪ Maintain access to community assets (including, but not limited to, schools and bike trails) and neighborhoods during construction as practicable ▪ Maintain access to businesses during the operating hours of the businesses as practicable ▪ Provide signage to direct pedestrians and motorists around construction areas; around sidewalk, street, and lane closures; to entrances of businesses and community assets; to maintain the flow of traffic around the construction area; and to notify pedestrians and motorists of any permanent closed streets prior to the closure of such streets ▪ Provide appropriate signage, barriers, and fencing for pedestrian and bicycle detour routes to prevent pedestrians and bicyclists from entering the construction zones ▪ Provide signage alerting potential customers that businesses are open during construction and clearly mark detours as appropriate ▪ Provide the public with updates, alerts, and schedules during construction and prior to the start of revenue service through informational meetings, the project website, and other forms of communication such as, but not limited to, mailings and flyers to businesses and residences with 0.25-mile of the construction zone	Verify development and implementation of Construction Outreach Plan. Verify coordination efforts with applicable parties.	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction, During Construction	City of Los Angeles, City of Vernon, City of Huntington Park, City of Bell, City of Cudahy, City of South Gate, City of Downey, City of Paramount, City of Bellflower, City of Cerritos, City of Artesia, and Los Angeles County; local agencies and organizations; local business owners

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
▪ Develop a mitigation plan to support businesses affected by construction to help reduce impacts to businesses during construction ▪ Coordinate construction activities with other capital improvement projects being carried out nearby to minimize construction impacts and competing needs for detour routes				
TRA-1 through **TRA-17**	Refer to TRA-1 and TRA-17	Refer to TRA-1 and TRA-17	Refer to TRA-1 and TRA-17	Refer to TRA-1 and TRA-17
VA-1 through **VA-3**	Refer to VA-1 and VA-3	Refer to VA-1 and VA-3	Refer to VA-1 and VA-3	Refer to VA-1 and VA-3
NOI-1 through **NOI-6**	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6
VIB-3 through **VIB-7**	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7
VISUAL AND AESTHETICS				
VA-1 Screening at Somerset Boulevard: The existing World Energy landscaping and decorative wall north of Somerset Boulevard and east of the light rail transit tracks will remain in place with the exception of a segment parallel to the storage tracks. If segments of the existing decorative screening wall and/or landscaping directly south of the World Energy storage tracks and east of the light rail transit tracks are removed, these screening elements will be replaced with a new screening wall and/or landscaping that are at least as decorative in terms of design, materials, and screening height as the existing wall and landscaping. A decorative screening wall and/or landscaping will be placed within the Pacific Electric Right-of-Way between the light rail transit tracks and storage tracks at a length and height capable of screening the refinery storage track from views on Somerset Boulevard.	Review design plans for compliance. Field verify.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
VA-2 Relocation of "Belle": Metro will provide relocation site alternatives to determine the best possible location to relocate the public art statue, "Belle," in its existing condition, subject to a condition assessment detailing the current physical condition of the artwork. The site will be subject to approval by the City of Bellflower.	Verify condition assessment. Verify identification of relocation site alternatives. Field verify relocation for the public art statue, "Belle."	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction at the location of the statue	City of Bellflower
VA-3 Construction Screening: During construction, the perimeter of construction staging areas and laydown areas will be screened to shield construction activities and laydown areas from adjacent visually sensitive land uses, including the following: ▪ Residential properties ▪ Salt Lake Park (City of Huntington Park) ▪ Hollydale Community Park (City of South Gate) ▪ Original Bellflower Pacific Electric Station (City of Bellflower) ▪ Artesia Historical Museum (City of Artesia) ▪ Old Station #30 (City of Artesia) The screening will be designed consistent with the Metro requirements and in coordination with cities and may incorporate artwork, Metro-branded design treatments, and/or community-relevant messaging.	Review construction plan for compliance. Verify in the field. Verify coordination efforts with local jurisdiction.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction; Construction	City of Huntington Park, City of South Gate, City of Bellflower, City of Artesia
VA-4 Construction Lighting: During construction, nighttime construction lighting will be directed toward the interior of the construction area and shielded with temporary construction screening approved by Metro to limit light spillover into adjacent areas.	Review construction plan for compliance. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Construction	Not Applicable.
NOI-1 through **NOI-6**	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6	Refer to NOI-1 through NOI-6

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<tr><td colspan="5">NOISE AND VIBRATION</td></tr>
<tr><td>NOI-1 Soundwalls:
Soundwalls will be placed at-grade or at the edge of aerial structures to reduce noise related to light rail transit vehicles at the identified sensitive receiver locations shown in the following table where moderate and severe impacts have been identified based on design completed to date. Height and length will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria. Where separate soundwalls are identified in close proximity and gaps are not required for access, they may be linked to form a continuous wall.

NOI-1 LRT Soundwall Locations
<table>
<tr><th>Civil Station</th><th>Location</th><th>Track Side</th><th>Placement</th><th>Height</th></tr>
<tr><td>653+04 to 657+60</td><td>Between 55th St and 57th St</td><td>Left</td><td>Aerial</td><td>4 Feet</td></tr>
<tr><td>698+30 to 702+25</td><td>Between Cottage St and Albany St</td><td>Right</td><td>At-grade</td><td>8 Feet</td></tr>
<tr><td>703+25 to 709+25</td><td>Between Albany St and Santa Fe Ave</td><td>Right</td><td>At-grade</td><td>8 Feet</td></tr>
<tr><td>711+00 to 719+50</td><td>Between Santa Fe Ave and Rugby Ave</td><td>Left</td><td>At-grade</td><td>8 Feet</td></tr>
<tr><td>710+15 to 720+90</td><td>Between Santa Fe Ave and Rugby Ave</td><td>Right</td><td>At-grade</td><td>8 Feet</td></tr>
<tr><td>721+50 to 724+50</td><td>Between Rugby Ave and Pacific Blvd</td><td>Right</td><td>At-grade</td><td>8 Feet</td></tr>
</table>
</td><td>Review design plans for compliance. Verify in the field.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Final Design, Construction, Prior to Operations</td><td>Not Applicable.</td></tr>
</table>

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
729+50 to 732+50	Between Rita Ave and Seville Ave	Right	At-grade	8 Feet				
733+75 to 743+00	Between Seville Ave and Miles Ave	Left	At-grade	8 Feet				
733+50 to 743+00	Between Seville Ave and Miles Ave	Right	At-grade	8 Feet				
744+00 to 762+80	Between Miles Ave and State St	Right	At-grade	8 Feet				
745+75 to 762+00	Between west of Oak St and State St	Left	At-grade	8 Feet				
764+00 to 769+75	Between State St. and Plaska Ave	Right	At-grade	12 feet				
769+75 to 779+00	Between Plaska Ave and Hollenbeck St	Right	At-grade	10 feet				
778+00 to 789+00	Between Hollenbeck St and Benedict Wy	Right	Aerial	6 Feet				
803+00 to 813+69	Between Gage Ave and Bell Ave	Left	At-grade	8 feet				
815+15 to 829+85	Between Bell Ave and Florence Ave	Left	At-grade	8 feet				
840+00 to 868+75	Between Live Oak St and Otis Ave	Right	At-grade	8 feet				
840+40 to 862+50	Between Live Oak St and Olive St	Left	At-grade	8 feet				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
870+50 to 878+00	Between Otis Ave and Santa Ana St	Right	At-grade	8 feet				
872+50 to 877+50	Between Otis Ave and Santa Ana St	Left	At-grade	8 feet				
881+20 to 893+50	Between Santa Ana St and Cecilia St	Left	At-grade	8 feet				
957+50 to 962+50	Between Southern Ave and Duncan Wy	Right	At-grade	8 feet				
962+50 to 973+00	Between Duncan Wy and center of Los Angeles River channel	Right	Aerial	6 feet				
971+00 to 983+00	Between center of Los Angeles River channel and Frontage Rd	Left	Aerial	8 feet				
1023+00 to 1029+75	Between Imperial Hwy and south of Garfield Ave	Left	Aerial	8 feet				
1089+50 to 1096+00	Between I-105 Fwy and Happy St	Right	At-grade	14 feet				
1096+00 to 1107+75	Between Happy St and Pacific Electric Right-of-Way (PEROW)	Right	At-grade	16 feet				
1089+50 to 1096+50	Between I-105 Fwy and Pearle St	Left	At-grade	12 feet				
1096+50 to 1104+00	Between Happy St and south of Howe St	Left	At-grade	16 feet				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
1104+00 to 1108+50	Between south of Howe St and PEROW	Left	At-grade	12 feet				
1108+50 to 1120+50	Between Union Pacific Right-of-Way and Colorado Ave	Left	At-grade	14 feet				
1096+50 to 1104+00	Between Happy St and south of Howe St	Left	Aerial	8 feet				
1096+50 to 1104+00	Between Happy St and south of Howe St	Right	Aerial	8 feet				
1104+00 to 1124+00	Between south of Howe St and Paramount Blvd	Left	Aerial	6 feet				
1104+00 to 1108+00	Between south of Howe St and PEROW	Right	Aerial	6 feet				
1124+00 to 1134+50	Between Paramount Blvd and approximately 350 feet east of 144th St	Left	Aerial	4 feet				
1141+00 to 1155+50	Between Paramount High School railroad pedestrian crossing and Downey Ave	Left	Aerial	8 feet				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
1140+00 to 1167+00	Between Paramount High School railroad pedestrian crossing and approximately 400 feet west Somerset Blvd	Right	Aerial	8 feet				
1167+00 to 1171+00	Between approximately 400 feet west of Somerset Blvd and Somerset Blvd	Right	At-grade	8 feet				
1173+00 to 1184+50	Between Somerset Blvd and Lakewood Blvd	Right	At-grade	12 feet				
1186+50 to 1216+00	Between Lakewood Blvd and approximately Clark Ave	Right	At-grade	12 feet				
1200+00 to 1215+70	Between approximately 50 feet west of Virginia Ave and Clark Ave	Left	At-grade	12 feet				
1217+00 to 1222+00	Between Clark Ave and Alondra Blvd	Left	At-grade	10 feet				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
1224+00 to 1245+50	Between Alondra Blvd and approximately 200 feet west of Bellflower Blvd	Right	At-grade	8 feet				
1226+50 to 1241+75	Between approximately 220 feet southeast of Alondra Blvd and Orchard Ave	Left	At-grade	8 feet				
1248+50 to 1256+50	Between Bellflower Blvd and approximately 120 feet northwest of Civic Center Dr	Left	At-grade	12 feet				
1250+00 to 1257+50	Between approximately 130 southeast of Bellflower Blvd and Civic Center Dr	Right	At-grade	12 feet				
1257+50 to 1261+50	Between Civic Center Dr and approximately 200 feet southeast of Civic Center Dr	Right	At-grade	8 feet				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
1261+00 to 1265+50	Between approximately 500 feet northwest of Cornuta Ave and approximately 130 feet northwest of Cornuta Ave	Left	Aerial	8 Feet				
1265+50 to 1275+50	Between approximately 130 feet northwest of Cornuta Ave and Woodruff Ave	Left	Aerial	4 feet				
1261+00 to 1276+50	Between approximately 200 feet southeast of Civic Center Dr and Woodruff Ave	Right	Aerial	4 Feet				
1275+50 to 1286+80	Between Woodruff Ave and Flora Vista St	Left	Aerial	8 feet				
1276+50 to 1286+50	Between Woodruff Ave and Flora Vista St	Right	Aerial	10 feet				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
1286+80 to 1300+00	Between Flora Vista St and approximately 300 feet southeast of Ripon Ave	Left	At-grade	10 feet				
1286+50 to 1303+00	Between California Ave and SR-91 Fwy	Right	At-grade	10 feet				
1309+00 to 1320+00	Between SR-91 Fwy and approximately 600 feet southeast of San Gabriel River channel	Right	At-grade/ Structure	10 feet				
1351+00 to 1360+00	Between approximately 230 feet northwest of Rosewood Park and approximately 450 feet northwest of Harvest Ave	Left	At-grade	12 feet				
1360+00 to 1372+00	Between approximately 450 feet northwest of Harvest Ave and Harvest Ave	Left	Aerial	12 feet				

Mitigation Measures					Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
1372+00 to 1389+00	Between Harvest Ave and approximately 300 feet northwest of 186th St	Left	Aerial	10 Feet				
1374+80 to 1389+00	Between Gridley Rd and approximately 300 feet northwest of 186th St	Right	Aerial	10 Feet				
1389+00 to 1392+50	Between approximately 300 feet northwest of 186th St and 186th St	Left	At-grade	10 feet				
1389+00 to 1392+00	Between approximately 300 feet northwest of 186th St and 186th St	Right	At-grade	10 feet				
1393+75 to 1397+00	Between 186th St and 187th St	Left	At-grade	10 feet				
1393+40 to 1397+00	Between 186th St and 187th St	Right	At-grade	10 feet				
1397+00 to 1405+50	Between Alburtis Ave and approximately 200 feet northwest of Pioneer Blvd	Left	At-grade	8 feet				

<table>
<tr><th colspan="5">Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>1397+00 to 1405+50</td><td>Between Alburtis Ave and approximately 200 feet northwest of Pioneer Blvd</td><td>Right</td><td>At-grade</td><td>8 feet</td><td rowspan="4"></td><td rowspan="4"></td><td rowspan="4"></td><td rowspan="4"></td></tr>
<tr><td>1409+50 to 1417+87</td><td>Between Pioneer Blvd and South St</td><td>Left</td><td>At-grade</td><td>8 feet</td></tr>
<tr><td>1409+20 to 1413+60</td><td>Between Pioneer Blvd and approximately 350 feet northwest of South St</td><td>Right</td><td>At-grade</td><td>8 feet</td></tr>
<tr><td colspan="5">NOI-2 Low Impact Frogs:
Low impact frogs (crossing point of two rails) will be installed at the identified locations shown in the following table to reduce crossover impact noise where necessary to reduce noise from light rail trains to below the FTA moderate impact criteria. Locations will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria.

NOI-2 Low Impact Frog Locations
<table><tr><th>Civil Station</th><th>Location</th><th>Noise Clusters</th><th>Vibration Clusters</th></tr><tr><td>657+14 to 662+34</td><td>Between 55th St and Slauson Ave</td><td>N40, N41, N42, N43, N44, N45, N46, N48, N49</td><td>V43</td></tr><tr><td>739+92 to 741+32</td><td>Between Templeton St and Miles Ave</td><td>N74, N75, N76, N77, N78, N79, N80, N81, N349</td><td>V63</td></tr></table></td><td>Review design plans for compliance. Verify in the field.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Final Design, Construction, Prior to Operation</td><td>Not Applicable</td></tr>
</table>

Mitigation Measures				Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
807+41 to 808+82	Between Gage Ave and Nevada St	N108, N109, N110, N11, N112, N113	V81				
873+15 to 874+56	Between Otis Ave and Santa Ana St	N162, N163, N164	V115 and V116				
1004+06 to 1005+47	Between Lincoln Ave and Florence Ave	N187	V153, V154, and V155				
1178+55 to 1179+96	Between Castana Ave and Olivia Ave	N227, N228, N229, N230	V172, V173, V174, and V175				
1188+00	Maintenance and storage facility access track switch east of Lakewood Boulevard	none	V234				
1228+76 to 1230+17	Between Alondra Blvd and Harvard St	N254, N255	V192, V193, and V194				
1289+49 to 1291+03 and 1294+09 to 1295+37	Between Flora Vista St and Park St	N285, N289, N290, N291, N293, N294, N295, N296, N360	V195, V196, V197, and V198				

<table>
<tr><th colspan="4">Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>1394+72 to 1399+92</td><td>Between 186th St and 187th St</td><td>N328, N330, N331, N332, N334, N336, N337, N338, N339, N340, N341, N342, N343</td><td>V217, V218, V221, V222, and V223</td><td></td><td></td><td></td><td></td></tr>
<tr><td>1409+62 to 1414+81</td><td>Between Pioneer Blvd and South Ave</td><td>N344, N345, N346</td><td>V230, V231 and V232</td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="4">NOI-3 Wheel Squeal Noise Monitoring:
Metro will conduct wheel squeal noise monitoring prior to the start of revenue operations to determine if excessive wheel squeal is occurring at the curves identified in the following table. If wheel squeal occurs, Metro will use wayside rail lubrication to lubricate rail surfaces as necessary with the objectives of minimizing wheel squeal and reducing noise from light rail trains to below the FTA moderate impact criteria.

NOI-3 Wheel Squeal Wayside Friction Applicator Locations
<table><tr><th>Civil Station</th><th>Curve</th></tr><tr><td>670+00</td><td>Curve from Randolph St to Long Beach Ave</td></tr><tr><td>788+00</td><td>Curve from San Pedro Subdivision Right-of-Way to Randolph St</td></tr><tr><td>1109+00</td><td>Curve from Pacific Electric Right-of-Way to San Pedro Subdivision Right-of-Way following Arthur Ave</td></tr></table></td><td>Verify wheel squeal noise monitoring is conducted at locations specified.

Confirm whether wheel squeal is excessive, and if so, verify implementation of wayside rail lubrication.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Prior to Operation</td><td>Not Applicable</td></tr>
</table>

<table>
<tr><th>Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>

NOI-4 TPSS Noise Reduction:

At the traction power substations (TPSS) locations identified in the following table, Metro will implement measures to reduce TPSS noise below the performance criteria shown in the table below. FTA impact criteria shown in the table are based on existing noise levels per FTA guidance. Measures to reduce TPSS noise may include, but are not limited to:

- Orient cooling fans and heating, ventilation, and air conditioning (HVAC) equipment away from sensitive receivers
- Utilize quieter cooling fans or HVAC equipment
- Provide a surrounding enclosure around the TPSS unit and HVAC equipment
- Install baffles on the exterior of the cooling fan
- Sound insulation of TPSS unit enclosure or mounting of sound isolation materials to minimize transformer hum

NOI-4 TPSS Locations

Civil Station	TPSS	Location	FTA Impact Criteria (dBA, Ldn)
737+75	15(e)	East of Stafford Ave and north of Randolph St within private property	59
1110+50	7(e2)	South of Rose Street and just west of Arthur Ave within Metro-owned property	59
1195+50	5(e)	North of Hegel St and south of the Bellflower Bike Trail within private property	54

Notes: dBA = A-weighted decibel; FTA = Federal Transit Administration; L_{dn} = day-night noise level; TPSS = traction power substation

</td><td>Review design plans for compliance.
Verify implementation of identified measures.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Final Design, Construction, Prior to Operation</td><td>Not Applicable</td></tr>
</table>

<table>
<tr><th>Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>NOI-5 Freight Track Relocation Soundwalls:
Soundwalls will be placed at the edge of the right-of-way at the locations identified in the following table to reduce freight and light rail transit noise related to the freight track relocation. Height and length will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria.

NOI-5 Freight Track Relocation Soundwalls
<table>
<tr><th>Civil Station</th><th>Location</th><th>Track Side</th><th>Placement</th><th>Height</th></tr>
<tr><td>764+00 to 769+75</td><td>Between State St. and Plaska Ave</td><td>Right</td><td>At-grade</td><td>12 feet</td></tr>
<tr><td>769+75 to 779+00</td><td>Between Plaska Ave and Hollenbeck St</td><td>Right</td><td>At-grade</td><td>10 feet</td></tr>
<tr><td>1089+50 to 1096+00</td><td>Between I-105 Fwy and Happy St</td><td>Right</td><td>At-grade</td><td>14 feet</td></tr>
<tr><td>1096+00 to 1107+75</td><td>Between Happy St and Pacific Electric Right-of-Way</td><td>Right</td><td>At-grade</td><td>16 feet</td></tr>
<tr><td>1089+50 to 1096+50</td><td>Between I-105 Fwy and Pearle St</td><td>Left</td><td>At-grade</td><td>12 feet</td></tr>
<tr><td>1096+50 to 1104+00</td><td>Between Happy St and south of Howe St</td><td>Left</td><td>At-grade</td><td>16 feet</td></tr>
<tr><td>1104+00 to 1108+50</td><td>Between south of Howe St and Pacific Electric Right-of-Way</td><td>Left</td><td>At-grade</td><td>12 feet</td></tr>
<tr><td>1108+50 to 1120+50</td><td>Between Union Pacific Right-of-Way and Colorado Ave</td><td>Left</td><td>At-grade</td><td>14 feet</td></tr>
</table></td><td>Review design plans for compliance.
Verify implementation of identified measures.</td><td>Construction Contractor/ Metro</td><td>1. Metro
2. Final Design, Construction, Prior to Operations</td><td>Not Applicable</td></tr>
</table>

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
NOI-6 Noise Control Plan: Metro's contractor will develop a Noise Control Plan demonstrating how noise criteria will be achieved during construction. The Noise Control Plan will be designed to follow Metro requirements, Construction Noise Control, and will include measurements of existing noise, a list of the major pieces of construction equipment that will be used, and predictions of the noise levels at the closest noise-sensitive receivers (residences, hotels, schools, churches, temples, and similar facilities). The Noise Control Plan will be approved by Metro prior to initiating construction. Where the construction cannot be performed in accordance with the FTA 1-hour Leq construction noise standards, the contractor will investigate alternative construction measures that will result in lower sound levels. The FTA 1-hour Leq construction noise standards are as follows: Residential daytime standard of 90 dBA Leq and nighttime standard of 80 dBA Leq, and Commercial and Industrial daytime standard of 100 dBA Leq and nighttime standard of 100 dBA Leq. The contractor will conduct noise monitoring to demonstrate compliance with contract noise limits. In addition, Metro will comply with local noise ordinances when applicable. Noise reducing methods that may be implemented by Metro include: ▪ If nighttime construction is planned, a noise variance may be prepared by the contractor, if required by the jurisdiction, that demonstrates the implementation of control measures to maintain noise levels below the applicable FTA standards. ▪ Where construction occurs near noise-sensitive land uses, specialty equipment with enclosed engines, acoustically attenuating shields, and/or high-performance mufflers may be used. ▪ Limit unnecessary idling of equipment. ▪ Install temporary noise barriers or noise control curtains, where feasible and desirable.	Verify development and implementation of Noise Control Plan.	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction, During Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
▪ Reroute construction-related truck traffic away from local residential streets and/or sensitive receivers. ▪ Limit impact pile driving where feasible and effective. ▪ Use electric instead of diesel-powered equipment and hydraulic instead of pneumatic tools where feasible. ▪ Minimize the use of impact devices such as jackhammers and hoe rams, using concrete crushers and pavement saws instead.				
VIB-1 Ballast Mat or Resilient Rail Fasteners: At the locations where vibration impacts will occur, Metro will isolate trackwork using ballast mats for ballast and tie track and resilient rail fasteners for direct fixation track or other comparable vibration isolation techniques. Locations where mitigation is necessary will be verified during final design, with the objective to reduce vibration levels to below the FTA groundborne vibration impact criteria for frequent events.	Review design plans for compliance. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	Not Applicable
VIB-2 Low Impact Frogs: Low impact frogs will be used at the turnout and crossover track locations where exceedance of the FTA impact thresholds has been identified. The locations of low impact frogs required to reduce vibration impacts are identified with Mitigation Measure NOI-2 (Low Impact Frogs). Locations where mitigation is necessary will be verified during final design with the objective to reduce vibration levels to below the FTA groundborne vibration impact criteria for frequent events.	Review design plans for compliance. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	Not Applicable
VIB-3 Vibration Control Plan: Metro's contractor will prepare a Vibration Control Plan demonstrating how the FTA building damage risk criteria and the FTA vibration annoyance criteria will be achieved. The Vibration Control Plan will include a list of the major pieces of construction equipment that will be used and predictions of the vibration levels at the closest sensitive receivers (residences, hotels, schools, churches, temples,	Verify development and implementation of Vibration Control Plan, inclusive of Vibration Monitoring Plan.	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction, During Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
historic properties, and similar facilities). The Vibration Control Plan must be approved by Metro prior to initiating construction. Where the construction cannot be performed to meet the FTA vibration damage criteria, the contractor will investigate and implement alternative means and methods of construction measures that will result in lower vibration levels. As part of the Vibration Control Plan, the contractor will prepare a Vibration Monitoring Plan that specifies construction activities requiring monitoring, monitoring locations, warning levels and limits at each location, equipment, procedures, schedule of measurements, and reporting methods to be used to ensure that the FTA damage criteria and the criteria specified in Mitigation Measure VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources) are not exceeded. Vibration levels will be monitored in real time. If limits are exceeded, the activity causing the exceedance must immediately be halted. Work on that activity will be suspended until such time as alternative construction methods can be used and additional abatement measures can be implemented as specified in the Vibration Control Plan. Vibration monitoring data will be submitted to the Project Engineer weekly.				
VIB-4 Minimize the Use of Impact Devices: Metro's contractor will avoid or minimize the use of impact devices such as jackhammers and hoe rams, using concrete crushers and pavement saws instead.	Confirm in construction specifications. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not Applicable
VIB-5 Drilling for Building Foundations: Where building foundation systems are needed, drilling instead of driven piles will be used.	Confirm construction specifications. Verify in the field.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not Applicable
VIB-6 Construction Vibration Limits for Historic Properties/Historical Resources: Historic structures will be held to the vibration damage criteria identified in the following table. Where possible, operation of the compactor/ballast tamper will be restricted	Verify and review construction restrictions in construction plan and/or Vibration Control Plan	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not Applicable

<table>
<tr><th>Mitigation Measures</th><th>Monitoring Action/Procedure</th><th>Responsible Party for Implementation</th><th>1. Monitoring Responsibility
2. Implementation Phase</th><th>Outside Agency/ Organization Coordination</th></tr>
<tr><td>to no closer than 40 feet, and other equipment, such as, and similar to, vibratory rollers, large bulldozers, caisson drills, and hoe rams no closer than 25 feet to a historic structure. Such equipment will not be used within 25 feet of the Bellflower Pacific Electric Railway Depot or the Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line towers or within 40 feet of the Frampton-Dantema House (81644 Alburtis Ave, Artesia).

VIB-6 Construction Restrictions near Historic Properties
<table><tr><th>APE Map No.</th><th>Property Location</th><th>Damage Risk Criteria - in/sec (PPV)</th><th>Predicted Vibration Level – in/sec (PPV) with Mitigation Measure VIB-6</th></tr><tr><td>17-005</td><td>Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line (1936)</td><td>0.50</td><td>0.21 to 0.43 at 25 feet (below damage risk criteria)</td></tr><tr><td>28-008</td><td>Bellflower Pacific Electric Railway Depot, 16336 Bellflower Boulevard, Bellflower</td><td>0.50</td><td>0.21 to 0.43 at 25 feet (below damage risk criteria)</td></tr><tr><td>32-021</td><td>81644 Alburtis Ave, Artesia</td><td>0.20</td><td>0.10 to 0.20 at 40 feet (below damage risk criteria)</td></tr></table>Note: in/sec = inches per second; PPV = peak particle velocity</td><td>(Mitigation Measure VIB-3). Verify in field.</td><td></td><td></td><td></td></tr>
</table>

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
VIB-7 Construction Monitoring for Vibration Near Historic Properties/Historical Resources: The contractor will monitor construction vibration levels within 200 feet of historic buildings and structures to ensure the vibration damage threshold for that building or structure as identified will not be exceeded. A preconstruction and post-construction survey of these buildings will be conducted by a qualified structural engineer. Any damage will be noted. All vibration monitors used for these measurements will be equipped with an "alarm" feature to provide advanced notification that vibration impact criteria have been approached. This measure applies to structures identified as eligible for the National Register of Historic Places and/or California Register of Historical Resources in the West Santa Ana Branch Transit Corridor Project Final Cultural Resources Survey Report – Rev 2 (Metro 2023b) and Section 4.14 of the Historic, Archaeological, and Paleontological Resources Section of the Final EIS/EIR.	Verify construction vibration monitoring activities are conducted.	Construction Contractor/ Metro	1. Metro 2. Construction	Not Applicable
ECOSYSTEMS/BIOLOGICAL RESOURCES				
BIO-1 Bats: A Bat Habitat Suitability Assessment will be conducted by a qualified bat biologist prior to initiation of construction near areas with the potential to provide bat habitat to determine the potential presence and document suitable locations for bat species. If project construction occurs within the vicinity of suitable habitat for western mastiff bat, pallid bat, silver-haired bat, and big free-tailed bat, a qualified biologist will complete a maternity colony survey during the bat maternity season (June 1 through October 31) to determine the presence or absence of any maternity roosting of bats. If no active roosts are found, then no further action will be required. Mitigation Measures BIO-1a, -1b, and -1c will be implemented, as appropriate if active roosts are found. a. If bats are present, project activities disruptive to the roost within 100 feet of an active maternity roost will be	Verify completion of Bat Habitat Suitability Assessment. Verify completion of maternity colony survey if construction occurs within the vicinity of suitable habitat for western mastiff bat, pallid bat, silver-haired bat, and big free-tailed bat. Verify implementation of identified measures, including preparation of a Bat Relocation Plan, and coordination with CDFW if active roosts are found.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	CDFW

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
delayed, if feasible, until after the maternity season, or until a qualified biologist determines that the roosting site is no longer in use, or as otherwise determined in coordination with the applicable resource agency. This buffer may be reduced at the discretion of a qualified monitoring biologist. A criterion to be used to evaluate the appropriate maternity roosting site buffer includes existing levels of ambient disturbance. b. If active maternity roosts or hibernacula are found within 100 feet of project construction, the qualified bat biologist will survey (through the use of radio telemetry or other California Department of Fish and Wildlife (CDFW)-approved methods) for nearby alternative maternity colony sites. If the biologist determines in consultation with the CDFW that there are alternative roost sites used by the maternity colony and young are not present, then a Bat Relocation Plan will be prepared by the qualified bat biologist for review and approval by CDFW. Eviction procedures as outlined in a CDFW-approved Bat Relocation Plan will apply. However, if there are no alternative roost sites that can be used by the maternity colony nearby, Mitigation Measure BIO-1c (providing substitute maternity roost nearby) will be required. c. If a maternity roost would be affected by the Project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony will be provided in close proximity to the affected maternity roost no less than three months prior to the eviction of the colony. Alternative roost sites will be constructed in accordance with the specific bat's requirements as detailed in the CDFW-approved Bat Relocation Plan. Alternative roost sites will be of comparable size and proximal in location to the affected colony. Alternate roost sites will remain in place following project construction to provide long-term substitute roosting habitat.				

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
BIO-2 Nesting Birds: If project construction occurs within the peak bird breeding season (February 1 through May 31 for raptors, and March 1 through August 31 for passerines) within suitable nesting habitat (e.g., vegetation, bridges, or other structures), a nesting bird and/or raptor preconstruction survey will be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer. The survey will occur no more than three days prior to initiation of ground disturbance and/or vegetation removal. If project construction occurs in an area over multiple nesting seasons, a subsequent preconstruction nesting bird and raptor survey may be required prior to the initiation of construction each season. Preconstruction nesting bird and raptor surveys will be conducted during the time of day when birds are active and will be of sufficient duration to reliably conclude the presence or absence of nesting birds and/or raptors on-site and within the designated vicinity. The nesting bird and raptor survey results will be submitted to Metro prior to ground and/or vegetation disturbance activities. If active nests are found, their locations will be flagged. An appropriate avoidance buffer, depending upon the species and the proposed work activity, will be determined by a qualified biologist in consultation with the appropriate regulatory agency. The buffer will be delineated with bright orange construction fencing or other suitable flagging. Active nests will be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. If project activities must occur within the buffer, they will be conducted at the discretion of the qualified biologist. Inactive nests that have been confirmed by a qualified biologist could be removed based on their recommendations.	Verify completion of nesting bird and/or raptor preconstruction survey if project construction occurs within the peak bird breeding season. Verify implementation of measures, including coordination with applicable resource agencies, if active nests are found.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife, depending on species

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
BIO-3 Jurisdictional Resources: Impacts associated with permanently disturbed areas within regulated waters will be mitigated in-kind at a minimum ratio of 1:1. Mitigation can be completed by providing adequate funding to a third-party organization, conservation bank, or in-lieu fee program for the in-kind creation or restoration. If mitigation is implemented offsite, mitigation lands should be located in the vicinity of the Affected Area or within the Los Angeles River Watershed. The Affected Area falls within the service area for the Land Veritas Soquel Canyon mitigation bank, which is approved to provide mitigation for permitted impacts under U.S. Army Corps of Engineers 404 permits, Los Angeles Regional Water Quality Control Board 401 Certifications, and California Department of Fish and Wildlife 1600 agreements. Note: the final mitigation ratios required by regulatory agencies during the permitting process may differ from those identified above.	Verify coordination with regulatory agencies. Verify identification and implementation of applicable measure(s) for permanent impacts.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction	U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and/or California Department of Fish and Wildlife
BIO-4 Protected Trees: Prior to removal of any protected trees (as specified in applicable local ordinances), an Arborist Study will be completed to plot the location of each protected tree that may be encroached upon (i.e., construction activities within the tree protection zone, as measured 5 feet from the canopy dripline), and identify each protected tree proposed to be removed or retained and impacted. The Arborist Study will be prepared by a Certified Consulting Arborist in compliance with local ordinance guidelines and will be prepared in accordance with the reporting requirements of the applicable local jurisdiction. In addition, as required by applicable local jurisdiction ordinances, a tree protection plan will be prepared that will, at a minimum, include site plans, protective tree barriers, the designated tree protection zone (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), activities prohibited or	Verify development and implementation of Arborist Study and tree protection plan. Verify submittal of study and plan to applicable local jurisdiction.	Construction Contractor/ Metro	1. Metro 2. Final Design, Prior to Construction	City of Los Angeles, City of Huntington, Park, City of Bell, City of South Gate, Cit of Downey, City of Cerritos, as applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
permitted within the tree protection zone, and encroachment boundaries. The Arborist Study and tree protection plan will be submitted to the appropriate departments of local jurisdictions with applicable tree ordinances for approval prior to the start of any tree-disturbing construction activities.				
HAZARDS AND HAZARDOUS MATERIALS				
HAZ-1 Unidentified Oil and Gas Wells: If an unknown oil and gas well is encountered during construction, the contractor will notify Metro, California Division of Occupational Safety and Health, and the California Department of Conservation Geologic Energy Management Division (CalGEM) and proceed in accordance with state requirements. The requirements include written notification to CalGEM, protection of adjacent property, and before commencing any work to abandon any well, obtaining approval by CalGEM. Abandonment work, including sealing off oil and gas bearing units, pressure grouting, etc., must be performed by a state-licensed contractor under the regulatory oversight and approval of CalGEM. Where the Locally Preferred Alternative cannot be adjusted to avoid unidentified abandoned wells, the California Department of Conservation (Department of Oil, Gas, and Geothermal Resources) and a re-abandonment specialty contractor will be contacted to determine the appropriate method of re-abandoning the well. Oil well abandonment must proceed in accordance with California Laws for Conservation of Petroleum and Gas (1997), Division 3. Oil and Gas, Chapter 1. Oil and Gas Conservation, Article 4, Sections 3228, 3229, 3230, and 3232.	Maintain log of construction surveys prior to and during construction. Verify implementation of any identified measures and coordination.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	California Division of Occupational Safety and Health, CalGEM, California Department of Conservation (Department of Oil, Gas, and Geothermal Resources), if applicable
HISTORIC, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES				
CR-1 Development of Cultural Resources Monitoring and Discovery Program Prior to the start of any ground-disturbing activity, an archaeologist that meets the Secretary of Interior's Professional Qualification Standards in Archaeology will	Verify development and implementation of CRMDP. Verify inclusion of the requirements of Mitigation	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
prepare and implement a Cultural Resources Monitoring and Discovery Program (CRMDP) for the Project. The CRMDP will include the requirements of Mitigation Measures CR-2 through CR-4 and the following: • A summary of the results of the West Santa Ana Branch Transit Corridor Project Final Cultural Resources Survey Report—Rev 2 and the West Santa Ana Branch Transit Corridor Project Revised Final Cultural Resources Effects Report. • Procedures for avoidance of unanticipated discoveries where possible. • Procedures for preservation in place of unanticipated discoveries where possible. • Provisions of cultural resources awareness training to construction workers that will be implemented as part of Mitigation Measure CR-2 (Archaeological Work Environmental Awareness Program). • Provisions for archaeological and Native American monitoring of ground disturbance related to construction of the Project. • Summary of the treatment procedures for unanticipated discoveries, as specified in Mitigation Measure CR-4 (Treatment of Unanticipated Discoveries). This will include general research questions to be addressed by any studies, field, and laboratory methods for the gathering of data to evaluate sites for the California Register of Historical Resources and/or National Register of Historic Places, and requirements for addressing any sites identified as significant. • Procedures for Native American coordination and input. • Procedures for the treatment of human remains, if applicable, as outlined in existing regulations. These procedures will include, but not be limited to, communication protocol for contacting the coroner and preparation of a human remains treatment plan in consultation with the Most Likely Descendant(s).	Measures CR-2 through CR-4.			

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
• Guidelines for the reporting of monitoring and treatment results.				
CR-2 Archaeological Worker Environmental Awareness Program: A Secretary of the Interior qualified archaeologist will be retained to prepare a Worker's Environmental Awareness Program training for archaeological sensitivity. This training will be provided to all construction personnel prior to the commencement of any ground-disturbing activities. Archaeological sensitivity training will include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.	Verify preparation and implementation of Worker's Environmental Awareness Program training for archaeological sensitivity.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not applicable
CR-3 Archaeological Monitoring: Monitoring pursuant to the Cultural Resources Monitoring and Discovery Program will be supervised by the qualified archaeologist who meets the Secretary of Interior Standards. The duration and timing of the monitoring will be determined by the qualified archaeologist. The archaeological monitor under the direction of a Secretary of the Interior qualified archaeologist will be present during ground-disturbing activities that have the potential to uncover previously known and unknown archaeological resources (i.e., ground-disturbing activities that will extend beyond the limits of prior disturbances). These activities will include, but will not be limited to, pavement removal, grading, and trenching. Activities such as drilling that do not allow for soil visibility during excavation will be spot-checked but will not require a full-time monitor. Monitoring and spot checking will be required up to a depth of 20 feet. If the qualified archaeologist determines that full-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot checking or cease entirely. Monitoring will be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension of the monitoring will need to be reconsidered by the qualified archaeologist. In the event that an archaeological resource is discovered, the monitor will have	Verify a qualified archaeological monitor has been retained prior to construction. Verify monitoring activities pursuant to the Cultural Resources Monitoring and Discovery Program. Verify consultation with State Historic Preservation Officer and consulting parties, if applicable. Verify development and review of final report that summarizes the results of the archaeological monitoring efforts.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction, Post Construction	Federal Transit Administration, State Historic Preservation Officer

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
the authority to temporarily divert construction equipment around the find with a 50-foot buffer, or other buffer as determined by the archaeologist, to protect the resource until it is assessed for significance and treatment (e.g., avoidance, testing, data recovery), if necessary, is determined by the FTA in consultation with the State Historic Preservation Officer and consulting parties and executed. At the conclusion of archaeological monitoring, a final report will be prepared by the Secretary of the Interior qualified archaeologist, or his or her designee, describing the results of the archaeological monitoring efforts associated with the Project. If previously unidentified cultural resources are discovered during construction monitoring, a report will be prepared following the State Historic Preservation Office's Archaeological Resource Management Report Guidelines that document the findings of the field and laboratory analysis and interpret the data within appropriate research context.				
CR-4 Treatment of Unanticipated Discoveries: The contractor or archaeological monitor will notify Metro immediately if potentially significant archaeological resources are exposed during ground-disturbing activities. Archaeological monitors will have the authority to divert or temporarily halt ground-disturbing operations at the discovery. The area will be fenced or flagged as soon as possible following the discovery. Until the boundaries of the resource can be established with testing procedures, a 50-foot buffer zone around the identified deposit will be fenced or flagged off. Subsequent to the identification of site boundaries, the fenced or flagged buffer surrounding the resource could be reduced to a 10- to 15-foot buffer zone at the discretion of the qualified archaeologist. All fencing or flagging of archaeological deposits will be monitored by a qualified archaeologist. Temporary fencing or flagging will remain in place until the resource has been released by the qualified archaeological monitor, in consultation with Metro	Verify in the field that a qualified archaeologist is monitoring the site during ground-disturbing activities. Verify notification and implementation of methods identified in the Cultural Resource Monitoring and Discovery Plan. Verify development and implementation of treatment plan, inclusive of consultation, if an archaeological resource is eligible for the NRHP and/or CRHP.	Construction Contractor/ Metro	1. Metro 2. Construction	FTA, State Historic Preservation Officer

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
and FTA. Construction activities may continue in areas beyond the buffer zones. The discovery will be evaluated by the qualified archaeologist in accordance with the methods identified in the Cultural Resources Monitoring and Discovery Program (Mitigation Measure CR-1) to determine if the archaeological resource is eligible for listing on the National Register of Historic Places (NRHP) and/or California Register of Historic Resources (CRHR). If the archaeological resource is determined eligible for the NRHP and/or CRHR, a treatment plan, will be prepared in accordance with 36 Code of Federal Regulations § 800.13(a)(2) in consultation with the State Historic Preservation Officer.				
PR-1(a) Paleontological Resources Mitigation and Monitoring Program: Prior to the commencement of ground-disturbing activities for the Locally Preferred Alternative (LPA), Metro will retain a qualified professional paleontologist to prepare and implement a Paleontological Resources Mitigation and Monitoring Program (PRMMP) for the LPA. The qualified paleontologist (principal paleontologist) must have at least a Master's degree or equivalent work experience in paleontology, will have experience with local paleontology, and will be familiar with paleontological procedures and techniques. The PRMMP will describe mitigation requirements to be consistent with the Society of Vertebrate Paleontology (SVP) standards for paleontological resources mitigation (SVP 2010). The PRMMP will include at a minimum the following: 1) Geologic setting, including paleontological sensitivity of the LPA site 2) Description of the LPA, outlining the type and extent of ground disturbance 3) Specifications for what ground-disturbing activity requires paleontological monitoring 4) Paleontological monitoring procedures: a. qualifications of paleontological monitors	Verify a qualified paleontologist has been retained. Verify preparation and implementation of PRMMP.	Construction Contractor/ Metro	1. Metro 2. Prior to ground-disturbing construction activities, Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
b. timing and duration of monitoring c. required data collection procedures d. d. daily monitoring log content 5) Communication protocols to be followed in the event that an unanticipated fossil discovery is made during development of the LPA 6) Construction diversion and resource recovery protocols: a. authority for ceasing construction. b. aerial extent of avoidance (construction exclusion) for any discovery c. timing to evaluate and recover the fossil 7) Fossil collection and preparation standards (field and museum) 8) Curation standards including appropriate institutions, curation agreements, and deadlines for materials to be accessioned 9) Post-recovery reporting requirements				
PR-1(b) Paleontological Worker Environmental Awareness Program: Prior to the start of construction, the qualified paleontologist or his or her designee will conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The Paleontological Worker Environmental Awareness Program will be fulfilled at the time of a preconstruction meeting. In the event of a fossil discovery by construction personnel, all ground-disturbing activities within 50 feet of the find will be halted, a 50-foot exclusion zone around the find will be established, and the qualified paleontologist and/or designee will be contacted to evaluate the find before restarting work in the exclusion zone. If the qualified paleontologist determines that the fossil(s) is (are) scientifically significant, the qualified paleontologist will complete the conditions outlined in Mitigation Measure PR 1(c) and PR 1(d) to mitigate impacts to significant fossil resources.	Verify the development and implementation of a Paleontological Worker Environmental Awareness Program. Verify implementation of Mitigation Measure PR 1(c) and PR 1(d).	Construction Contractor/ Metro	1. Metro 2. Prior to ground-disturbing construction activities	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
PR-1(c) Construction Monitoring: Ground-disturbing construction activities (including grading, excavation, and trenching) that have the potential to impact previously undisturbed (i.e., native) sediments or geologic units of high paleontological sensitivity below 5 feet below ground surface will be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. Monitoring pursuant to the Paleontological Mitigation and Monitoring Program will be supervised by the qualified paleontologist and will be conducted by a monitor who meets or exceeds the Society of Vertebrate Paleontology (2010) requirements for a qualified paleontological monitor, including at least a Bachelor's degree in geology, paleontology, or related field, and experience with collection and salvage of paleontological resources. If geological evidence indicates that sediments are younger alluvium or previously disturbed sediments and have a low potential to yield paleontological resources, or if older sediments are determined not to be fossiliferous based on results of monitoring at this location, the qualified paleontologist may determine that full-time monitoring is no longer warranted and may recommend reducing monitoring to periodic spot checking or cease entirely. Monitoring will be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension of the monitoring will need to be reconsidered by the qualified paleontologist. Ground-disturbing activity that reaches a depth of less than 5 feet below ground surface will not require paleontological monitoring. In the event that a paleontological resource is discovered, the monitor will have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and collected. Typically, fossils can be safely recorded and, if significant, potentially collected quickly by a single paleontologist without disrupting construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) may require more extensive excavation and longer recovery periods. In	Verify monitoring activities pursuant to the Paleontological Mitigation and Monitoring Program.	Construction Contractor/ Metro	1. Metro 2. Construction	Not Applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
such a case, the monitor, under the supervision of the principal paleontologist, will have the authority to temporarily direct, divert, or halt construction activity so that the fossil(s) can be removed in a safe and timely manner.				
PR-1(d) Preparation and Curation of Recovered Fossils: Once recovered, significant fossils will be identified to the lowest possible taxonomic level, prepared to a curation ready condition, and curated at a scientific institution with a permanent paleontological collection (such as the Natural History Museum of Los Angeles County) along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the qualified paleontologist. The cost of curation is assessed by the repository and will be the responsibility of Metro. At the conclusion of all required monitoring, laboratory work, and museum curation, the qualified paleontologist will prepare a final report describing the results of the paleontological mitigation monitoring efforts associated with the Locally Preferred Alternative. The report will include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, then a copy of the report will also be submitted to the designated museum repository and to Metro.	Verify the preparation and curation of recovered fossils is completed if significant fossils are recovered. Verify development and review of final report that summarizes the results of the paleontological mitigation monitoring efforts.	Construction Contractor/ Metro	1. Metro 2. Construction, Post construction	Scientific institution, if applicable
TRIBAL CULTURAL RESOURCES				
TCR-1 Native American Monitoring: Because of the potential to encounter previously undocumented Traditional Cultural Properties and/or Tribal Cultural Resources, a Native American monitor will be retained by the Los Angeles County Metropolitan Transportation Authority to monitor project-related, ground-disturbing construction activities (e.g., grading, excavation, drilling, trenching) that occur within areas that are identified	Verify a Native American monitor has been retained. Verify in the field that a Native American monitor is monitoring the site during ground-disturbing activities per the CRMDP.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Consulting tribes, if applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
as having a moderate-to-high potential for containing prehistoric Native American remains, as specified in the Cultural Resources Monitoring and Discovery Plan (CRMDP), as described in Mitigation Measure CR-1 (Development of Cultural Resources Monitoring and Discovery Program). The appropriate Native American monitors will be selected based on the tribal consultation under Assembly Bill 52 and Section 106. Monitoring staff will be identified in the CRMDP. Monitoring procedures and the role and responsibilities of the Native American monitor will be outlined in the CRMDP. In the event that the Native American monitor identifies a cultural resource of Native American origin during construction, the monitor will be given the authority to temporarily halt ground-disturbing activities (if safe) within 50 feet (15 meters) of the discovery to investigate the find and contact the Project Archaeologist and Metro. The Native American monitor and consulting tribe(s) will be provided an opportunity to participate in the documentation and evaluation of the find and development of treatment, as necessary.				
TCR-2 Unanticipated Discovery of Traditional Cultural Properties/Tribal Cultural Resources: In the event that cultural resources of Native American origin are identified during construction, all earth-disturbing work within a 50-foot radius of the find will be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. The specific procedures to be followed in the event of an unanticipated discovery of cultural resources of Native American origin will be identified in the Cultural Resources Monitoring and Discovery Program, as described in Mitigation Measure CR-1 (Development of Cultural Resources Monitoring and Discovery Program). If Metro determines that the resource is a Traditional Cultural Property and/or Tribal Cultural Resource and is found significant under CEQA/Section 106, a treatment plan will be	Verify notification and implementation of methods identified in the Cultural Resources Monitoring and Discovery Plan. Verify development and implementation of a treatment plan, if applicable.	Construction Contractor/ Metro	1. Metro 2. Construction	SHPO, FTA, Native American groups, as applicable

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
prepared and implemented in accordance with state guidelines and in consultation with Native American groups as described below. The treatment plan will be developed by a Secretary of the Interior qualified archaeologist in consultation with the State Historic Preservation Officer (SHPO) and with Native American contacts, as applicable. Metro will be responsible for ensuring that the treatment plan is developed and consultation with stakeholders (e.g., tribes, SHPO) is completed. The treatment plan will be developed to ensure treatment of archaeological historic properties/historical resources meets the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation, the California Office of Historic Preservation's Archaeological Resources Management Report, Recommended Contents and Formats (1989), the Guidelines for Archaeological Research Design (1991), the Advisory Council on Historic Preservation's publication Treatment of Archaeological Properties: A Handbook, and the Department of the Interior's Guidelines for Federal Agency Responsibility under Section 106 of the National Historic Preservation Act. The treatment plan will include the following: procedures required should archaeological historic properties/historical resources be determined to no longer be extant, methods for avoidance should avoidance be determined feasible upon discovery, and Phase III data recovery methods in the event that avoidance is infeasible. Phase III data recovery methods within the treatment plan would include, but not be limited to, research questions to be addressed by the study of each site, a description of methods including excavation methods, data analysis, reporting requirements, and final disposition of recovered materials. Phase III data recovery methods will also identify the thresholds at which point data redundancy is achieved. Phase III data recovery will ensure each site is adequately documented in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The treatment plan will be implemented when a				

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
determination is made that a property/resource cannot be avoided and will be adversely affected/significantly impacted by the Project.				
PARKLANDS AND COMMUNITY FACILITIES				
LU-1	Refer to LU-1	Refer to LU-1	Refer to LU-1	Refer to LU-1
COM-1	Refer to COM-1	Refer to COM-1	Refer to COM-1	Refer to COM-1
NOI-6	Refer to NOI-6	Refer to NOI-6	Refer to NOI-6	Refer to NOI-6
VIB-3 through **VIB-7**	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7	Refer to VIB-3 through VIB-7
SAFETY AND SECURITY				
SAF-1 Encroachment Detection: Subject to coordination with the applicable stakeholders, the Locally Preferred Alternative will incorporate a means of encroachment detection along the portion of the corridor that shares right-of-way with freight operations. The encroachment detection system will detect unauthorized entry into Metro right-of-way, such as a freight train derailment. Prior to the start of service, Metro will develop a plan that outlines procedures should the encroachment detection system be triggered. In the event the intrusion detection system detects a possible derailment, all parties operating in the shared right-of-way corridor will be notified and train traffic (freight and light rail transit) will not be permitted to enter the area until the detection is investigated and the intrusion, if any, addressed to avoid possible derailments.	Verify coordination with applicable stakeholders (i.e., freight operators) to identify encroachment detection. Verify incorporation of encroachment detection system along the portion of the corridor that shares right-of-way with freight operations, including verifying on design plans. Verify development of a plan that outlines procedures if the encroachment detection system is triggered.	Construction Contractor/ Metro	1. Metro 2. Final Design, Construction, Prior to Operation	Applicable freight operators
SAF-2 School District Coordination: Metro will coordinate with and notify the school districts and individual school administrators to maintain or modify safe and convenient pedestrian, bicycle, and bus routes to schools as necessary during and after construction. This also includes the publication and distribution of alternative pedestrian and bicycle route maps.	Verify coordination with and notification of school districts and individual school administrators.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction, After Construction	Local school districts and school administrators

Mitigation Measures	Monitoring Action/Procedure	Responsible Party for Implementation	1. Monitoring Responsibility 2. Implementation Phase	Outside Agency/ Organization Coordination
SAF-3 Construction Site Measures: Metro's contractor will provide safety and security measures at the construction sites and staging areas. Security measures will include barriers for excavations, installation of temporary barriers around perimeters, security patrols, and appropriate signage and lighting. The contractor will provide a safety and security plan to Metro for review prior to the start of construction.	Verify development and implementation of safety and security measures at construction sites and staging areas. Verify in field. Verify development and implementation of a safety and security plan.	Construction Contractor/ Metro	1. Metro 2. Prior to Construction, Construction	Not Applicable

Source: TAHA and WSP 2024

ATTACHMENT C

Los Angeles County
Metropolitan Transportation Authority

West Santa Ana Branch Transit Corridor

Findings of Fact and Statement of Overriding Considerations

Metro

WEST SANTA ANA BRANCH TRANSIT CORRIDOR PROJECT

Findings of Fact and Statement of Overriding Considerations

Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

March 2024

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
ACM	asbestos-containing material
AQMP	Air Quality Management Plan
APE	Area of Potential Effect
bgs	below ground surface
BMPs	best management practices
CalGEM	California Department of Conservation's Geologic Energy Management Division
CARB	California Air Resources Board
CCR	California Code Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CRHR	California Register of Historical Resources
CRMDP	Cultural Resources Monitoring and Discovery Program
dBA	A-weighted decibels
DTSC	Department of Toxic Substance Control
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
EPP	Emergency Preparedness Plan
ESA	Environmental Site Assessment
FTA	Federal Transit Administration
GHG	greenhouse gases
HVAC	heating, ventilation, and air conditioning
IGP	Industrial General Permit
LA	Los Angeles
LADWP	Los Angeles Department of Water and Power
LARWQCB	Los Angeles Regional Water Quality Control Board
LAUS	Los Angeles Union Station
LBP	lead-based paint
Leq	equivalent noise level
LPA	Locally Preferred Alternative
LRT	light rail transit

Acronym	Definition
LRV	light rail vehicle
Metro	Los Angeles County Metropolitan Transportation Authority
MMBTU	million British thermal units
MMRP	Mitigation Monitoring and Reporting Program
MRDC	Metro Rail Design Criteria
MS4	Regional Municipal Separate Storm Sewer System
MSF	maintenance and storage facility
$MTCO_2e$	metric tons of carbon dioxide equivalent
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O&M	operations and maintenance
OPR	Office of Planning and Research
PCB	polychlorinated biphenyls
PEROW	Pacific Electric Right-of-Way
PRC	Public Resources Code
PRMMP	Paleontological Resources Mitigation and Monitoring Program
Project	West Santa Ana Branch Transit Corridor Project
ROW	right-of-way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SHPO	State Historic Preservation Officer
SOI	Secretary of the Interior
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	temporary construction easement
TMP	Transportation Management Plan
TOD	transit-oriented development
TPSS	traction power substation
UPRR	Union Pacific Railroad

Acronym	Definition
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VdB	vibration decibels
VMT	vehicle miles traveled
WSAB	West Santa Ana Branch

1 INTRODUCTION

This Findings of Fact and Statement of Overriding Consideration pertains to the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the West Santa Ana Branch (WSAB) Transit Corridor Project (Project)[1]. The findings are made pursuant to the California Environmental Quality Act (CEQA) (Public Resource Code [PRC] Section 21000 et seq.) and CEQA Guidelines (California Code of Regulations (CCR), Title 14, Section 15000 et seq.). The Federal Transit Administration (FTA) is the Lead Agency under the National Environmental Policy Act (NEPA) and the Los Angeles County Metropolitan Transportation Authority (Metro) is the Lead Agency under CEQA.

The purpose of the Final EIS/EIR is to analyze and disclose the Project's potential significant effects under CEQA and to identify feasible mitigation measures and alternatives to reduce or avoid those significant effects. As concluded in the Final EIS/EIR, after consideration of mitigation, implementation of the Project will result in significant and unavoidable project-level impacts related to conflicts with bicycle plans (operation); noise during construction and operational activities; and vibration during operational activities. The Project will also result in significant cumulative effects to land use and noise and vibration during operations and significant cumulative effects to transportation and noise during construction. These significant and unavoidable impacts remain after incorporation of mitigation measures as part of the project approval.

These findings summarize the analysis in the Final EIS/EIR but do not purport to provide the full analysis of each environmental impact contained in the Final EIS/EIR. A full explanation of these environmental findings and conclusions is provided in the Final EIS/EIR. These Findings hereby incorporate by reference the discussion and analysis in those documents supporting the Final EIS/EIR determinations regarding the Project's impacts and mitigation measures designed to address those impacts.

The Statement of Overriding Considerations in this document identifies economic, social, technical, and other benefits of the Project that override any significant and unavoidable impacts that would result from the Project.

1.1 Adoption of the Findings of Fact

With the adoption of this Findings of Fact and Statement of Overriding Considerations, the Mitigation Monitoring and Reporting Program (MMRP) is also adopted by Metro. Metro finds that the MMRP meets the requirements of PRC Section 21081.6 by providing for the implementation and monitoring of measures to mitigate potentially significant effects of the Project. The MMRP is provided as a part of these findings as Attachment C to the April Metro Board Report.

In accordance with the CEQA Guidelines, Metro adopts these findings as part of the approval of the Project. Pursuant to PRC Section 21082.1(c)(3) and CEQA Guidelines Section 15090, Metro certifies:

1) The Final EIS/EIR has been completed in compliance with CEQA;
2) The Final EIS/EIR was presented to the Board of Directors and the Board reviewed and considered the information contained in the Final EIS/EIR prior to approving the Project; and
3) The Final EIS/EIR reflects Metro's independent judgment and analysis.

[1] As a result of a renaming campaign, the Southeast Gateway Line was unveiled as the new project name on January 22, 2024, to be used as the Project advances.

1.2 Organization

The Findings of Fact and Statement of Overriding Considerations is comprised of the following sections:

Section 1 Introduction

Section 2 Project Description and Goals and Objectives

Section 3 Statutory Requirements

Section 4 Findings Regarding Environmental Impacts Found To Be Significant With Mitigation

Section 5 Findings Regarding Environmental Impacts Found To Be Less Than Significant With Mitigation

Section 6 Findings Regarding Environmental Impacts Found To Be Less Than Significant

Section 7 Findings Regarding Environmental Resources Found To Not Be Impacted

Section 8 Findings Regarding Growth-Inducing Impacts

Section 9 Findings Regarding Cumulative Impacts

Section 10 Findings Regarding Alternatives

Section 11 Findings For Mitigation Measures and Project Measures

Section 12 Statement of Overriding Considerations

2 PROJECT DESCRIPTION AND GOALS AND OBJECTIVES

2.1 Project Overview

The Project is a light rail transit (LRT) project that will extend from a northern terminus in the City of Los Angeles/Florence-Firestone community of Los Angeles (LA) County to a southern terminus in the City of Artesia traversing densely populated and heavily transit-dependent communities. The Project will traverse through or be directly adjacent to the Cities of Los Angeles, Vernon, Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Cerritos, and Artesia, as well as the unincorporated community of Florence-Firestone of LA County.

The Project will include approximately 12.1 miles of at-grade and 2.4 miles of aerial alignment for a total of 14.5 miles. The northern terminus of the Project will be located just south of the intersection of Long Beach Avenue and Slauson Avenue, connecting to the existing A Line Slauson Station. South of Slauson Avenue, the Project will follow the Union Pacific Railroad (UPRR)-owned La Habra Branch Right-of-Way (ROW) east along Randolph Street. At the Ports-owned San Pedro Subdivision ROW, the Project will turn southeast to follow the San Pedro Subdivision ROW and then transition to the PEROW south of the I-105 freeway. The Project will then follow the Metro-owned PEROW to the southern terminus at the Pioneer Station in Artesia.

The Project will consist of 9 LRT stations (Slauson/A Line, Pacific/Randolph, Florence/Salt Lake, Firestone, Gardendale, I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer Station) and 5 parking facilities (Firestone, I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer) totaling approximately 2,800 parking spaces. Of the nine LRT stations, six stations will be at-grade and three stations 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. The Project will include 30 at-grade crossings, 15 elevated street crossings, 6 freight crossings, 4 freeway crossings (3 freeway undercrossings and 1 aerial freeway crossing), and 3 river crossings. The Project also includes a maintenance and storage facility (MSF) in the City of Bellflower. Ancillary facilities and project components are provided in Table 2.1. Additional details of the Project are included in Chapter 2, Project Description/Alternatives Considered, of the Final EIS/EIR. Within these Findings, the "Project" refers to the Locally Preferred Alternative (LPA) with the design option to close 186th Street and keep 187th Street open, as evaluated in the Final EIS/EIR.

The Project will operate approximately 22 hours daily, 7 days per week, from about 4:00 a.m. to 2:00 a.m. Construction activities are anticipated to occur over the course of approximately eight years. Construction is anticipated to begin in 2024 and continue through 2032, with system testing beginning in 2034 and revenue service beginning in 2035.

In addition to mitigation measures, the Final EIS/EIR identifies project measures that are incorporated as part of the Project and consist of design features, best management practices (BMPs), or other measures required by law and/or permit approvals that avoid or minimize potential effects. These project measures are requirements of the Project and incorporated into the project description. Where relevant, the project measures were explained in the impact analyses. In contrast to the project measures, mitigation measures are additional actions, not otherwise part of the Project, that are designed to avoid, minimize, or compensate for adverse or significant impacts. These mitigation measures are required where significant or adverse impacts have been identified based on the impact analyses.

Table 2.1. Summary of Project Components

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

Source: WSP 2023
Notes:
[1] Alignment configuration measurements count retained fill embankments as at-grade.
[2] The light rail tracks crossing beneath freeway structures.
MSF = maintenance and storage facility; TPSS = traction power substation

2.2 Goals and Objectives

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

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

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

- Address mobility and access constraints faced by transit-dependent communities, thereby improving transit equity

3 STATUTORY REQUIREMENTS

Pursuant to PRC Section 21081 and CEQA Guidelines Section 15091:

(a) No public agency shall approve or carry out a project for which a certified EIR identifies one or more significant environmental effects of the Project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR. [CEQA Finding 1]
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. [CEQA Finding 2]
3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR. [CEQA Finding 3]

(b) The findings required by subdivision (a) shall be supported by substantial evidence in the record.

(c) The finding in subdivision (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. The finding in subdivision (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.

(d) When making the findings required in subdivision (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.

(e) The public agency shall specify the location and custodian of the documents or other material which constitute the record of the proceedings upon which its decision is based.

(f) A statement of overriding considerations made pursuant to Section 15093 of the CEQA Guidelines does not substitute for the findings required by PRC Section 21081 and CEQA Guidelines Section 15091.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to avoid or mitigate significant environmental impacts that would otherwise occur with implementation of the Project.

For those significant impacts that cannot be mitigated to less than significant levels, the lead agency is required to find that specific overriding economic, legal, social, technological, or other benefits of the Project outweigh the significant impacts on the environment. CEQA Guidelines Section 15093(a) states that if the specific economic, legal, social, technological, or other benefits of a Project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable. If the significant adverse environmental effects are considered acceptable, the lead agency is required to prepare a Statement of Overriding Considerations.

3.1 Record Of Proceedings

For purposes of CEQA and the findings set forth herein, the record of proceedings for Metro's decision on the Project consists of: (a) matters of common knowledge to Metro, including, but not limited to, federal, state, and local laws and regulations; and (b) the following documents which are in the custody of Metro, One Gateway Plaza, Records Management, MS 99-PL-5, Los Angeles, CA 90012:

- Notice of Preparation and other public notices issued by Metro in conjunction with the Project
- Draft EIS/EIR dated July 2021, including associated appendices and documents that were incorporated by reference
- Testimony, documentary evidence, and correspondence submitted in response to the Project during the scoping meetings or by agencies or members of the public during the public comment period on the Draft EIS/EIR, and responses to those comments (Appendix D, Responses to Comments Received on the Draft EIS/EIR, of the Final EIS/EIR)
- Final EIS/EIR dated March 2024, including associated appendices and documents that were incorporated by reference
- MMRP
- Findings and resolutions adopted by Metro in connection with the Project, and all documents cited or referred to therein
- Final technical reports, studies, memoranda, maps, correspondence, and planning documents relating to the Project
- All documents submitted to Metro by agencies or members of the public in connection with development of the Project
- All actions of Metro with respect to the Project
- Any other materials required by PRC Section 21167.6(e) to be in the record of proceedings

4 FINDINGS REGARDING ENVIRONMENTAL IMPACTS FOUND TO BE SIGNIFICANT WITH MITIGATION

Metro finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the Project will remain significant or have the potential to be significant despite the implementation of all feasible mitigation measures. These findings are based on the discussion of impacts in the impact analyses in Chapter 3, Transportation, and Chapter 4, Affected Environment and Environmental Consequences, of the Final EIS/EIR, as well as relevant technical reports and responses to comments.

4.1 Transportation

As discussed in Section 3.6.1 of the Final EIS/EIR, the Project will result in a significant and unavoidable impact related to transportation with respect to the following significance threshold:

- Threshold TRA-1: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact

Threshold TRA-1 (Operation)

The Project will provide expanded transit service through a new LRT line consistent with adopted policies, plans, and programs related to public transit, roadway, bicycle, and pedestrian facilities, including the Metro Long Range Transportation Plan.

The Bellflower Bike Trail segment from Lakewood Boulevard south to Clark Avenue is located within the Pacific Electric Right-of-Way (PEROW) and south of the MSF. This segment of the PEROW will not have sufficient room to accommodate the MSF lead tracks, LRT tracks, and operate the Bellflower Bike Trail safely. Realignment in this segment of the Bellflower Bike Trail will be required to maintain connectivity with the Paramount Bike Trail west of Lakewood Boulevard and the other segments of the Bellflower Bike Trail, although realignment will not be required near the MSF.

The Project could also preempt the future development and implementation of several proposed bicycle paths, including the Class I bicycle path along Salt Lake Avenue (Cities of Huntington Park, Bell, and Cudahy) and Class I bicycle path north of Rayo Avenue and south of the Los Angeles River (City of South Gate). However, while planned, the bike facilities are unfunded and not scheduled for implementation. Sufficient space will be available to develop a Class II or Class III bicycle path along the street, which will maintain the connectivity identified in the bicycle master plans. However, the reclassification of the bike paths is considered a conflict with the current bike plans.

Mitigation Measure LU-1 (Consistency with Bike Plans) requires Metro to continue coordination efforts with jurisdictions and local agencies to minimize potential impacts on the future implementation of the planned bike trails identified in their bicycle master plans. As part of this effort, Metro, as appropriate, will prepare 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. As such, the Project may still conflict with bicycle master plans despite Metro's best efforts and coordination and with implementation of mitigation.

Reference in the Final EIS/EIR

Section 3.6.1.

Mitigation Measures

LU-1 **Consistency with Bike Plans.** During the planning process and prior to construction, Metro will prepare amended language for each affected bicycle plan demonstrating that existing, planned, and modified bicycle facilities will be connected during project operation. This language will be subject to the approval of the Cities of Huntington Park, South Gate, Bell, Paramount, and Bellflower, as applicable. Metro will modify the following bike trail segments into a Class II bikeway:

- Within the San Pedro Subdivision Right-of-Way between Ardmore Avenue to Century Boulevard (City of South Gate)
- Along Salt Lake Avenue from Gage Avenue to Florence Avenue (City of Bell)

Metro will relocate the following bike trail segments:

- Paramount Bike Trail segments from Paramount Boulevard to Somerset Boulevard within the Metro-owned PEROW (City of Paramount)
- Bellflower Bike and Trail segment from Lakewood Boulevard to the maximum extent of Clark Avenue within the Metro-owned PEROW (City of Paramount and City of Bellflower)

Findings

Threshold TRA-1 (Operations): Mitigation Measure LU-1 (Consistency with Bike Plans) requires Metro to continue coordination efforts with jurisdictions and local agencies to minimize the preemption of future development, goals and plans within each jurisdiction. The Project may still preempt future development and the implementation of the planned bike paths despite Metro's best efforts and coordination. Therefore, a significant impact will remain after implementation of the mitigation. No additional mitigation measures were identified to reduce significant impacts related to bicycle facilities. Each of the alternatives would have the same impact, so adopting one of the other alternatives from the EIS/EIR would not avoid the significant impacts. Changing the Project to avoid impacts related to consistency with bicycle plans would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measure LU-1 (Consistency with Bike Plans), this impact will be significant. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines. Additionally, Metro adopts CEQA Finding 2, as identified in Section 3 above and in Section 15091(a)(2) of the CEQA Guidelines because aspects of Mitigation Measure LU-1 (Consistency with Bike Plans) are within the responsibility and jurisdiction of other public agencies and that such changes can or should be adopted by those agencies.

4.2 Land Use and Planning

As discussed in Section 4.1.5.2 of the Final EIS/EIR, the Project will result in a significant and unavoidable impact related to land use and planning with respect to the following significance threshold:

- Threshold LU-2: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact

Threshold LU-2 (Operations)

The Project will be generally consistent with the applicable land use plans, goals, objectives, and policies of regional agencies and local jurisdictions. The Project will provide an alternative mode of transportation to the automobile; provide regional transit services for land use; improve and provide greater transit opportunities to residents, visitors, and employees; construct transit stations that are pedestrian and bicycle friendly; and integrate safety measures for transit users and bicyclists. However, the Project could preempt future development and implementation of planned bike paths identified for the Cites of Cudahy, Huntington Park, South Gate, and Bell, as there will be inadequate space to accommodate the planned bicycle paths, project tracks, and relocated freight tracks. The Project will also require the realignment of existing segments of the Paramount Bike Trail and Bellflower Bike Trail. Converting the planned Class I bicycle paths into Class II or Class III bicycle paths is feasible and will maintain the connectivity identified in the bicycle master plans. However, the reclassification of the bike paths is considered an inconsistency with the current bike plans.

Under Mitigation Measure LU-1 (Consistency with Bike Plans), Metro will continue to coordinate with jurisdictions and local agencies to minimize the preemption of future development, goals, and plans within each jurisdiction. As part of this effort, Metro, as appropriate, will prepare and support adoption 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 Project may still preempt future development and the implementation of the planned bike paths despite Metro's best efforts and coordination.

Reference in the Final EIS/EIR

Section 4.1.5.2.

Mitigation Measures

LU-1 **Consistency with Bike Plans.** During the planning process and prior to construction, Metro will prepare amended language for each affected bicycle plan demonstrating that existing, planned, and modified bicycle facilities will be connected during project operation. This language will be subject to the approval of the Cities of Huntington Park, South Gate, Bell, Paramount, and Bellflower, as applicable. Metro will modify the following bike trail segments into a Class II bikeway:

- Within the San Pedro Subdivision Right-of-Way between Ardmore Avenue to Century Boulevard (City of South Gate)
- Along Salt Lake Avenue from Gage Avenue to Florence Avenue (City of Bell)

Metro will relocate the following bike trail segments:

- Paramount Bike Trail segments from Paramount Boulevard to Somerset Boulevard within the Metro-owned PEROW (City of Paramount)
- Bellflower Bike and Trail segment from Lakewood Boulevard to the maximum extent of Clark Avenue within the Metro-owned PEROW (City of Paramount and City of Bellflower)

Findings

Threshold LU-2 (Operations): Mitigation Measure LU-1 (Consistency with Bike Plans) requires Metro to continue coordination efforts with jurisdictions and local agencies to minimize the preemption of future development, goals, and plans within each jurisdiction. The Project may still preempt future development and the implementation of the planned bike paths despite Metro's best efforts and coordination. Therefore, a significant impact will remain after implementation of the mitigation. No additional mitigation measures were identified to reduce significant impacts related to bicycle facilities. Each of the alternatives would have the same impact, so adopting one of the other alternatives from the EIS/EIR would not avoid the significant impacts. Changing the Project to avoid impacts related to consistency with bicycle plans would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measure LU-1 (Consistency with Bike Plans), this impact will be significant. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines. Additionally, Metro adopts CEQA Finding 2, as identified in Section 3 above and in Section 15091(a)(2) of the CEQA Guidelines because aspects of Mitigation Measure LU-1 (Consistency with Bike Plans) are within the responsibility and jurisdiction of other public agencies and that such changes can or should be adopted by those agencies.

4.3 Noise and Vibration

As discussed in Section 4.7.5.1, Section 4.7.5.2, and Section 4.19.3.7 of the Final EIS/EIR, the Project will result in significant and unavoidable impacts related to noise during construction and operational activities and vibration during construction activities with respect to the following significance thresholds:

- Thresholds NOI-1 (Operation) and NOI-CON-1 (Construction): Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established by the Federal Transit Administration (FTA) or in the local general plans or noise ordinances?
- Threshold NOI-2 (Operation): Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

Impact

Threshold NOI-1 (Operations)

Sensitive uses will be exposed to a combination of operational LRT noise sources, including LRT pass-by noise (steel wheels rolling on steel rails), audible warnings noise (crossing signal bells), wheel squeal noise, and special trackwork noise. The noise assessment identified 96 unmitigated moderate impacts and 118 unmitigated severe impacts. Mitigation Measures NOI-1 (Soundwalls), NOI-2 (Low Impact Frogs), and NOI-3 (Wheel Squeal Noise Monitoring) will reduce the number and severity of operational noise impacts. Project Measures NOI PM-1 (Crossing Signal Bells) and NOI PM-2 (Gate-Down-Bell-Stop Variance) will provide noise reductions to clusters near grade crossings for LRT noise. After implementation of mitigation measures related to LRT noise sources, 33 moderate impacts and 2 severe impacts will remain.

Relocation of existing freight tracks will be required to the north of the alignment within the La Habra Branch ROW, to the west of the alignment within the San Pedro Subdivision ROW, and to the north of the alignment within the Metro-owned PEROW to accommodate the project alignment and maintain existing freight operations along the ROW where the LRT tracks will be co-located with the freight tracks. The noise assessment identified 61 unmitigated moderate impacts and 22 unmitigated severe impacts as a result of the combination of freight track relocation, freight train noise, and LRT noise. Thirty-eight moderate impacts and one severe impact will remain after implementation of

Mitigation Measures NOI-1 (Soundwalls), NOI-2 (Low Impact Frogs), and NOI-3 (Wheel Squeal Noise Monitoring) for LRT noise and NOI-5 (Freight Track Relocation Soundwalls) for relocated freight noise.

Noise levels were also assessed for the parking facilities and MSF operational activities. Noise levels will not exceed the noise impact criteria at nearby sensitive uses according to the FTA impact assessment guidance. Ancillary facilities, such as traction power substations (TPSSs), will also contribute to noise at sensitive receptors. Sources of TPSS noise include heating, ventilation, and cooling systems (HVAC) and transformer hum. One moderate impact and two severe impacts will occur as a result of ancillary facility noise. Mitigation Measure NOI-4 (TPSS Noise Reduction) will reduce TPSS noise levels. However, at this stage in design, various TPSS noise-reduction methods may or may not be completely effective due to design constraints for individual TPSS locations, which will be determined as part of final design. Therefore, one moderate and two severe ancillary facility impacts will remain.

Threshold NOI-CON-1 (Construction)

The Project will be located in a fully built-out urban environment, and construction activities will occur in close proximity to sensitive land uses, including residences, parks, religious uses, and schools, throughout the corridor and may occur during daytime or nighttime hours. Unless variances, such as variances for nighttime or weekend construction, are obtained, the Project will be required to comply with the construction time limits of the Cities of Los Angeles, Huntington Park, Cudahy, South Gate, Downey, Paramount, Bellflower, Artesia, and Cerritos, and the County of Los Angeles.

The Project will require at-grade construction and elevated guideway construction. Construction activity at station areas will be dependent on the profile of the station (at-grade or aerial). At-grade construction will be the loudest with an hourly equivalent noise level (Leq) of 91.2 dBA at 50 feet. The 1-hour Leq will exceed the 1-hour Leq FTA standards of 90 dBA during the day and 80 dBA at night for residential uses during the at-grade and elevated guideway phases. Mitigation Measure NOI-6 (Noise Control Plan) will require the contractor to prepare a Noise Control Plan to be approved by Metro to reduce construction noise levels. Noise-reducing methods that could be used include acoustically attenuating shields around construction equipment, high-performance noise-reducing mufflers, temporary noise barriers, and substitution of diesel power equipment for quieter electric equipment. The Noise Control Plan will require the contractor to conduct periodic noise monitoring in response to noise complaints to demonstrate compliance with FTA construction impact criteria. Other less conventional techniques, such as temporarily relocating affected residents, could be employed when the noise-reducing options would not suffice, particularly when loud, necessary construction operations must occur. However, in some instances, the FTA construction impact criteria may still be exceeded.

Threshold NOI-2 (Operations)

LRT pass-bys will create groundborne vibration that could interfere with land use activities. The FTA vibration thresholds will be exceeded at 88 sensitive receptors without mitigation. The vibration level associated with the relocated freight train tracks will range from 74 vibration decibels (VdB) to 80 VdB at the nearest residential structures, which does not exceed the FTA impact criterion for residential properties exposed to infrequent vibration events of 80 VdB. Mitigation Measures VIB-1 (Ballast Mat or Resilient Rail Fasteners) and VIB-2 (Low Impact Frogs) will reduce LRT pass-by vibration impacts. However, impacts in the range of 1 VdB to 2 VdB will remain at two vibration-sensitive receptors along the alignment after mitigation. In accordance with FTA guidance, there is a strong chance that actual groundborne vibration levels at these locations will be below the impact threshold with mitigation. Final mitigation design will be based on the Detailed Vibration

Assessment to eliminate residual impacts to the extent feasible. Nonetheless, there is the potential for impacts to remain even after implementation of mitigation.

Regarding the MSF, the nearest residential use is located approximately 75 feet away along Virginia Avenue. Train movements through crossover trackwork at 10 miles per hour are predicted to result in a groundborne vibration level at these residential land uses of 71 VdB, which will not exceed the FTA impact threshold of 72 VdB. However, vibration created at the track switch for the MSF access track could exceed 75 VdB at Dante Valve Company if not mitigated. VIB-2 (Low Impact Frogs) will reduce vibration levels from the track switch for the MSF access track near Dante Valve Company. With mitigation, impacts near Dante Valve Company will be less than significant.

Reference in the Final EIS/EIR

Section 4.7.5.1, Section 4.7.5.2, Section 4.19.3.7.

Project Measures

NOI PM-1 **Crossing Signal Bells.** Crossing signal bell noise will not exceed 75 dBA L_{max} sound exposure level at 10 feet at all protected at-grade crossings. Crossing signal bells at the locations identified in the following table, will be equipped with shrouds to direct bell noise away from residential sensitive receivers. This measure has been coordinated with the California Public Utility Commission but remains subject to its final approval.

NOI PM-2 **Gate-Down-Bell-Stop Variance.** Metro will apply for a gate-down-bell-stop variance at the locations identified in the following table to reduce the duration of bell ringing and therefore reduce impacts at residential sensitive receivers. Crossing signal noise will not exceed 30 seconds in duration. This measure has been coordinated with the California Public Utility Commission but remains subject to its approval.

Mitigation Measures

NOI-1 **Soundwalls.** Soundwalls will be placed at-grade or at the edge of aerial structures to reduce noise related to light rail transit vehicles at the identified sensitive receiver locations shown in the following table where moderate and severe impacts have been identified based on design completed to date. Height and length will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria. Where separate soundwalls are identified in close proximity and gaps are not required for access, they may be linked to form a continuous wall.

NOI-1 LRT Soundwall Locations

Civil Station	Location	Track Side	Placement	Height
653+04 to 657+60	Between 55th St and 57th St	Left	Aerial	4 Feet
698+30 to 702+25	Between Cottage St and Albany St	Right	At-grade	8 Feet
703+25 to 709+25	Between Albany St and Santa Fe Ave	Right	At-grade	8 Feet
711+00 to 719+50	Between Santa Fe Ave and Rugby Ave	Left	At-grade	8 Feet
710+15 to 720+90	Between Santa Fe Ave and Rugby Ave	Right	At-grade	8 Feet
721+50 to 724+50	Between Rugby Ave and Pacific Blvd	Right	At-grade	8 Feet
729+50 to 732+50	Between Rita Ave and Seville Ave	Right	At-grade	8 Feet
733+75 to 743+00	Between Seville Ave and Miles Ave	Left	At-grade	8 Feet
733+50 to 743+00	Between Seville Ave and Miles Ave	Right	At-grade	8 Feet

Civil Station	Location	Track Side	Placement	Height
744+00 to 762+80	Between Miles Ave and State St	Right	At-grade	8 Feet
745+75 to 762+00	Between west of Oak St and State St	Left	At-grade	8 Feet
764+00 to 769+75	Between State St and Plaska Ave	Right	At-grade	12 feet
769+75 to 779+00	Between Plaska Ave and Hollenbeck St	Right	At-grade	10 feet
778+00 to 789+00	Between Hollenbeck St and Benedict Wy	Right	Aerial	6 Feet
803+00 to 813+69	Between Gage Ave and Bell Ave	Left	At-grade	8 feet
815+15 to 829+85	Between Bell Ave and Florence Ave	Left	At-grade	8 feet
840+00 to 868+75	Between Live Oak St and Otis Ave	Right	At-grade	8 feet
840+40 to 862+50	Between Live Oak St and Olive St	Left	At-grade	8 feet
870+50 to 878+00	Between Otis Ave and Santa Ana St	Right	At-grade	8 feet
872+50 to 877+50	Between Otis Ave and Santa Ana St	Left	At-grade	8 feet
881+20 to 893+50	Between Santa Ana St and Cecilia St	Left	At-grade	8 feet
957+50 to 962+50	Between Southern Ave and Duncan Wy	Right	At-grade	8 feet
962+50 to 973+00	Between Duncan Wy and center of Los Angeles River channel	Right	Aerial	6 feet
971+00 to 983+00	Between center of Los Angeles River channel and Frontage Rd	Left	Aerial	8 feet
1023+00 to 1029+75	Between Imperial Hwy and south of Garfield Ave	Left	Aerial	8 feet
1089+50 to 1096+00	Between I-105 Fwy and Happy St	Right	At-grade	14 feet
1096+00 to 1107+75	Between Happy St and Pacific Electric ROW	Right	At-grade	16 feet
1089+50 to 1096+50	Between I-105 Fwy and Pearle St	Left	At-grade	12 feet
1096+50 to 1104+00	Between Happy St and south of Howe St	Left	At-grade	16 feet
1104+00 to 1108+50	Between south of Howe St and Pacific Electric ROW	Left	At-grade	12 feet
1108+50 to 1120+50	Between Union Pacific ROW and Colorado Ave	Left	At-grade	14 feet
1096+50 to 1104+00	Between Happy St and south of Howe St	Left	Aerial	8 feet
1096+50 to 1104+00	Between Happy St and south of Howe St	Right	Aerial	8 feet
1104+00 to 1124+00	Between south of Howe St and Paramount Blvd	Left	Aerial	6 feet
1104+00 to 1108+00	Between south of Howe St and Pacific Electric ROW	Right	Aerial	6 feet
1124+00 to 1134+50	Between Paramount Blvd and approximately 350 feet east of 144th St	Left	Aerial	4 feet
1141+00 to 1155+50	Between Paramount High School railroad pedestrian crossing and Downey Ave	Left	Aerial	8 feet
1140+00 to 1167+00	Between Paramount High School railroad pedestrian crossing and approximately 400 feet west Somerset Blvd	Right	Aerial	8 feet
1167+00 to 1171+00	Between approximately 400 feet west of Somerset Blvd and Somerset Blvd	Right	At-grade	8 feet
1173+00 to 1184+50	Between Somerset Blvd and Lakewood Blvd	Right	At-grade	12 feet

Civil Station	Location	Track Side	Placement	Height
1186+50 to 1216+00	Between Lakewood Blvd and approximately Clark Ave	Right	At-grade	12 feet
1200+00 to 1215+70	Between approximately 50 feet west of Virginia Ave and Clark Ave	Left	At-grade	12 feet
1217+00 to 1222+00	Between Clark Ave and Alondra Blvd	Left	At-grade	10 feet
1224+00 to 1245+50	Between Alondra Blvd and approximately 200 feet west of Bellflower Blvd	Right	At-grade	8 feet
1226+50 to 1241+75	Between approximately 220 feet southeast of Alondra Blvd and Orchard Ave	Left	At-grade	8 feet
1248+50 to 1256+50	Between Bellflower Blvd and approximately 120 feet northwest of Civic Center Dr	Left	At-grade	12 feet
1250+00 to 1257+50	Between approximately 130 southeast of Bellflower Blvd and Civic Center Dr	Right	At-grade	12 feet
1257+50 to 1261+50	Between Civic Center Dr and approximately 200 feet southeast of Civic Center Dr	Right	At-grade	8 feet
1261+00 to 1265+50	Between approximately 500 feet northwest of Cornuta Ave and approximately 130 feet northwest of Cornuta Ave	Left	Aerial	8 Feet
1265+50 to 1275+50	Between approximately 130 feet northwest of Cornuta Ave and Woodruff Ave	Left	Aerial	4 feet
1261+00 to 1276+50	Between approximately 200 feet southeast of Civic Center Dr and Woodruff Ave	Right	Aerial	4 Feet
1275+50 to 1286+80	Between Woodruff Ave and Flora Vista St	Left	Aerial	8 feet
1276+50 to 1286+50	Between Woodruff Ave and Flora Vista St	Right	Aerial	10 feet
1286+80 to 1300+00	Between Flora Vista St and approximately 300 feet southeast of Ripon Ave	Left	At-grade	10 feet
1286+50 to 1303+00	Between California Ave and SR-91 Fwy	Right	At-grade	10 feet
1309+00 to 1320+00	Between SR-91 Fwy and approximately 600 feet southeast of San Gabriel River channel	Right	At-grade/ Structure	10 feet
1351+00 to 1360+00	Between approximately 230 feet northwest of Rosewood Park and approximately 450 feet northwest of Harvest Ave	Left	At-grade	12 feet
1360+00 to 1372+00	Between approximately 450 feet northwest of Harvest Ave and Harvest Ave	Left	Aerial	12 feet
1372+00 to 1389+00	Between Harvest Ave and approximately 300 feet northwest of 186th St	Left	Aerial	10 Feet
1374+80 to 1389+00	Between Gridley Rd and approximately 300 feet northwest of 186th St	Right	Aerial	10 Feet
1389+00 to 1392+50	Between approximately 300 feet northwest of 186th St and 186th St	Left	At-grade	10 feet
1389+00 to 1392+00	Between approximately 300 feet northwest of 186th St and 186th St	Right	At-grade	10 feet
1393+75 to 1397+00	Between 186th St and 187th St	Left	At-grade	10 feet

Civil Station	Location	Track Side	Placement	Height
1393+40 to 1397+00	Between 186th St and 187th St	Right	At-grade	10 feet
1397+00 to 1405+50	Between Alburtis Ave and approximately 200 feet northwest of Pioneer Blvd	Left	At-grade	8 feet
1397+00 to 1405+50	Between Alburtis Ave and approximately 200 feet northwest of Pioneer Blvd	Right	At-grade	8 feet
1409+50 to 1417+87	Between Pioneer Blvd and South St	Left	At-grade	8 feet
1409+20 to 1413+60	Between Pioneer Blvd and approximately 350 feet northwest of South St	Right	At-grade	8 feet

Note: ROW = right-of-way

NOI-2 **Low Impact Frogs.** Low impact frogs (crossing point of two rails) will be installed at the identified locations shown in the following table to reduce crossover impact noise where necessary to reduce noise from light rail trains to below the FTA moderate impact criteria. Locations will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria.

NOI-2 Low Impact Frog Locations

Civil Station	Location	Noise Clusters	Vibration Clusters
657+14 to 662+34	Between 55th St and Slauson Ave	N40, N41, N42, N43, N44, N45, N46, N48, N49	V43
739+92 to 741+32	Between Templeton St and Miles Ave	N74, N75, N76, N77, N78, N79, N80, N81, N349	V63
807+41 to 808+82	Between Gage Ave and Nevada St	N108, N109, N110, N11, N112, N113	V81
873+15 to 874+56	Between Otis Ave and Santa Ana St	N162, N163, N164	V115 and V116
1004+06 to 1005+47	Between Lincoln Ave and Florence Ave	N187	V153, V154, and V155
1178+55 to 1179+96	Between Castana Ave and Olivia Ave	N227, N228, N229, N230	V172, V173, V174, and V175
1188+00	MSF access track switch east of Lakewood Boulevard	none	V234
1228+76 to 1230+17	Between Alondra Blvd and Harvard St	N254, N255	V192, V193, and V194
1289+49 to 1291+03 and 1294+09 to 1295+37	Between Flora Vista St and Park St	N285, N289, N290, N291, N293, N294, N295, N296, N360	V195, V196, V197, and V198
1394+72 to 1399+92	Between 186th St and 187th St	N328, N330, N331, N332, N334, N336, N337, N338, N339, N340, N341, N342, N343	V217, V218, V221, V222, and V223
1409+62 to 1414+81	Between Pioneer Blvd and South Ave	N344, N345, N346	V230, V231 and V232

NOI-3 **Wheel Squeal Noise Monitoring.** Metro will conduct wheel squeal noise monitoring prior to the start of revenue operations to determine if excessive wheel squeal is occurring at the curves identified in the following table. If wheel squeal occurs, Metro will use wayside rail lubrication to lubricate rail surfaces as necessary with the objectives of minimizing wheel squeal and reducing noise from light rail trains to below the FTA moderate impact criteria.

NOI-3 Wheel Squeal Wayside Friction Applicator Locations

Civil Station	Curve
670+00	Curve from Randolph St to Long Beach Ave
788+00	Curve from San Pedro Subdivision Right-of-Way to Randolph St
1109+00	Curve from PEROW to San Pedro Subdivision Right-of-Way following Arthur Ave

NOI-4 **TPSS Noise Reduction.** At the TPSS locations identified in the following table, Metro will implement measures to reduce TPSS noise below the performance criteria shown in the table below. FTA impact criteria shown in the table are based on existing noise levels per FTA guidance. Measures to reduce TPSS noise may include, but are not limited to:

- Orient cooling fans and HVAC equipment away from sensitive receivers
- Use quieter cooling fans or HVAC equipment
- Provide a surrounding enclosure around the TPSS unit
- Install baffles on the exterior of the cooling fan and HVAC equipment
- Provide sound insulation of TPSS unit enclosure or mount sound isolation materials to minimize transformer hum

NOI-4 TPSS Locations

Civil Station	TPSS	Location	FTA Impact Criteria (dBA, L_{dn})
737+75	15(e)	East of Stafford Ave and north of Randolph St within private property	59
1110+50	7(e2)	South of Rose Street and just west of Arthur Ave within Metro-owned property	59
1195+50	5(e)	North of Hegel St and south of the Bellflower Bike Trail within private property	54

Notes: dBA = A-weighted decibel; FTA = Federal Transit Administration; L_{dn} = day-night noise level; TPSS = traction power substation

NOI-5 **Freight Track Relocation Soundwalls.** Soundwalls will be placed at the edge of the right-of-way at the locations identified in the following table to reduce freight and light rail transit noise related to the freight track relocation. Height and length will be verified during final design with the objective to reduce noise from light rail trains to below the FTA moderate impact criteria.

NOI-6 **Noise Control Plan.** Metro's contractor will develop a Noise Control Plan demonstrating how noise criteria will be achieved during construction. The Noise Control Plan will be designed to follow Metro requirements, Construction Noise Control, and will include

measurements of existing noise, a list of the major pieces of construction equipment that will be used, and predictions of the noise levels at the closest noise-sensitive receivers (residences, hotels, schools, churches, temples, and similar facilities). The Noise Control Plan will be approved by Metro prior to initiating construction. Where the construction cannot be performed in accordance with the FTA 1-hour L_{eq} construction noise standards, the contractor will investigate alternative construction measures that will result in lower sound levels. The FTA 1-hour L_{eq} construction noise standards are as follows: Residential daytime standard of 90 dBA L_{eq} and nighttime standard of 80 dBA L_{eq}, and Commercial and Industrial daytime standard of 100 dBA L_{eq} and nighttime standard of 100 dBA L_{eq}. The contractor will conduct noise monitoring to demonstrate compliance with contract noise limits. In addition, Metro will comply with local noise ordinances when applicable. Noise-reducing methods that may be implemented by Metro include:

- If nighttime construction is planned, a noise variance may be prepared by the contractor, if required by the jurisdiction, that demonstrates the implementation of control measures to maintain noise levels below the applicable FTA standards.
- Where construction occurs near noise-sensitive land uses, specialty equipment with enclosed engines, acoustically attenuating shields, and/or high-performance mufflers may be used.
- Limit unnecessary idling of equipment.
- Install temporary noise barriers or noise-control curtains, where feasible and desirable.
- Reroute construction-related truck traffic away from local residential streets and/or sensitive receivers.
- Limit impact pile driving where feasible and effective.
- Use electric instead of diesel-powered equipment and hydraulic instead of pneumatic tools where feasible.
- Minimize the use of impact devices, such as jackhammers and hoe rams, using concrete crushers and pavement saws instead.

NOI-5 Freight Track Relocation Soundwalls

Civil Station	Location	Track Side	Placement	Height
764+00 to 769+75	Between State St. and Plaska Ave	Right	At-grade	12 feet
769+75 to 779+00	Between Plaska Ave and Hollenbeck St	Right	At-grade	10 feet
1089+50 to 1096+00	Between I-105 Fwy and Happy St	Right	At-grade	14 feet
1096+00 to 1107+75	Between Happy St and Pacific Electric ROW	Right	At-grade	16 feet
1089+50 to 1096+50	Between I-105 Fwy and Pearle St	Left	At-grade	12 feet
1096+50 to 1104+00	Between Happy St and south of Howe St	Left	At-grade	16 feet
1104+00 to 1108+50	Between south of Howe St and Pacific Electric ROW	Left	At-grade	12 feet
1108+50 to 1120+50	Between Union Pacific ROW and Colorado Ave	Left	At-grade	14 feet

Note: ROW = right-of-way

VIB-1 **Ballast Mat or Resilient Rail Fasteners.** At the locations identified in the following table where exceedance of FTA groundborne vibration impact criteria for frequent events will occur, Metro will isolate trackwork using ballast mats for ballast and tie track and

resilient rail fasteners for direct fixation track or other equally or more effective vibration isolation techniques. Locations where mitigation is necessary will be verified during final design with the objective to reduce vibration levels to below the FTA groundborne vibration impact criteria for frequent events.

VIB-1 Ballast Mat or Resilient Rail Fasteners

Civil Station	Location
705+00 to 720+00	Between Albany St and Rugby Ave
732+00 to 757+00	Between Seville Avenue and Arbutus Ave
802+00 to 893+00	Between Gage Ave. and Cecilia St
1089+00 to 1105+00	Between I-105 and Racine Avenue
1124+00 to 1135+00	Between Paramount Boulevard and Paramount High School
1162+00 to 1240+00	Between approximately 600 feet southeast of Downey Ave and Orchard Ave
1251+00 to 1257+00	Between approximately 300 feet southeast of Bellflower Blvd and approximately 200 feet northeast of Civic Center Dr
1273+00 to 1311+00	Between Flower St and San Gabriel River channel
1363+00 to 1403+00	Between approximately 500 feet southeast of Rosewood Park and 187th St
1410+00 to 1419+00	Between Pioneer Blvd and South St

VIB-2 **Low Impact Frogs.** Low impact frogs will be used at the turnout and crossover track locations identified where exceedance of the Federal Transit Administration impact thresholds has been identified. The locations of low impact frogs required to reduce vibration impacts are identified with Mitigation Measure NOI-2 (Low Impact Frogs). Locations where mitigation is necessary will be verified during final design with the objective to reduce vibration levels to below the FTA groundborne vibration impact criteria for frequent events.

Findings

Threshold NOI-1 (Operations): Mitigation Measures NOI-1 (Soundwalls), NOI-2 (Low Impact Frogs), and NOI-3 (Wheel Squeal Noise Monitoring), NOI-4 (TPSS Noise Reduction), and NOI-5 (Freight Track Relocation Soundwalls) will reduce operational noise impacts at sensitive land uses. However, significant operational noise impacts will remain after implementation of the mitigation. No additional mitigation measures were identified to reduce significant impacts related to operational noise. Each of the alternatives would have significant operational noise impacts, so adopting one of the other alternatives from the EIS/EIR would not avoid this significant impact. Changing the Project to avoid impacts related to operational noise would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measures NOI-1 through NOI-5, the operational noise impact will be significant. Thus, Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines.

Threshold NOI-CON-1 (Construction): Mitigation Measure NOI-6 (Noise Control Plan) will reduce construction noise levels. However, in some instances the FTA construction impact criteria may still be exceeded. No additional mitigation measures were identified to reduce significant impacts related to construction noise. Each of the alternatives would have this significant impact, so adopting one of the other alternatives from the EIS/EIR would not avoid the significant impact. Changing the Project to avoid impacts related to construction noise would not be feasible as it would not meet the

underlying purpose of the Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measure NOI-6 (Noise Control Plan), construction noise impacts will be significant. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines.

Threshold NOI-2 (Operations): Mitigation Measures VIB-1 (Ballast Mat or Resilient Rail Fasteners) and VIB-2 (Low Impact Frogs) will reduce operational vibration levels at sensitive land uses. However, in some instances the FTA vibration impact criteria may still be exceeded. No additional mitigation measures were identified to reduce significant impacts related to vibration. Each of the alternatives would have this significant impact, so adopting one of the other alternatives from the EIS/EIR would not avoid the significant impact. Changing the Project to avoid operational impacts related to vibration would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measures VIB-1 (Ballast Mat or Resilient Rail Fasteners) and VIB-2(Low Impact Frogs), operational vibration impacts will be significant. Thus, for this impact, Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines.

With respect to operational vibration impacts to the Dante Valve Company, for the reasons stated above, Metro finds that implementation of Mitigation Measure VIB-2 (Low Impact Frogs) will reduce the impact to less than significant. For this impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

4.4 Parklands and Community Facilities

As discussed in Section 4.16.5.1 and Section 4.16.5.3 of the Final EIS/EIR, the Project will result in a significant and unavoidable impact related to parks and recreation with respect to the following significance threshold:

- Threshold PARK-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable standards for any park or recreational facility?
- Threshold PARK-3: Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact

Threshold PARK-1 (Operations)

The Project is an infrastructure improvement project in an urban setting that will provide a mode of transportation, accessibility, and connectivity in the surrounding communities. The Project will not directly create or increase the residential population of the surrounding communities that will result in substantial adverse physical impacts associated with the provision of new or physically altered bicycle facilities. Instead, accessibility to bicycle facilities may be improved by having a nearby transit station. Realignment of segments of the Paramount and Bellflower Bike Trails will not result in physical impacts or prevent access to bike facilities. However, the Project could preempt future development and implementation of the planned Class I bicycle path along Salt Lake Avenue and the planned 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*. Converting the planned Class I bicycle paths into Class II or Class III bicycle paths is feasible and will maintain the connectivity

identified in the bicycle master plans. The reclassification of the bike paths is considered an inconsistency with the current bike plans.

Mitigation Measure LU-1 (Consistency with Bike Plans) requires Metro to continue coordination efforts with jurisdictions and local agencies to minimize the preemption of future development, goals, and plans within each jurisdiction. As part of this effort, Metro, as appropriate, will prepare 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 Project may still preempt future development of bicycle facilities despite Metro's best efforts and coordination.

Threshold PARK-3 (Operations)

The Project does not include the construction of recreational facilities or require the expansion of existing park facilities. The existing Paramount Bike Trail and Bellflower Bike Trail will be reconfigured to accommodate the Project, and access and connectivity will be maintained with the implementation of Mitigation Measure LU-1 (Consistency with Bike Plans). As discussed in Threshold Park-1, converting the planned Class I bicycle paths into Class II or Class III bicycle paths is feasible and will maintain the connectivity identified in the bicycle master plans. However, the reclassification of the bike paths is considered an inconsistency with the current bike plans and a significant impact will occur. The Project could preempt future development and implementation of the planned Class I bicycle path along Salt Lake Avenue and the planned Class I bicycle path north of Rayo Avenue and south of the Los Angeles River.

Mitigation Measure LU-1 (Consistency with Bike Plans) requires Metro to continue coordination efforts with jurisdictions and local agencies to minimize the preemption of future development, goals, and plans within each jurisdiction. As part of this effort, Metro, as appropriate, will prepare 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 Project may still preempt future development and the implementation of the planned bike paths despite Metro's best efforts and coordination.

Reference in the Final EIS/EIR

Section 4.16.5.1; Section 4.16.5.3.

Mitigation Measures

LU-1 **Consistency with Bike Plans.** During the planning process and prior to construction, Metro will prepare amended language for each affected bicycle plan demonstrating that existing, planned, and modified bicycle facilities will be connected during project operation. This language will be subject to the approval of the Cities of Huntington Park, South Gate, Bell, Paramount, and Bellflower, as applicable. Metro will modify the following bike trail segments into a Class II bikeway:

- Within the San Pedro Subdivision Right-of-Way between Ardmore Avenue to Century Boulevard (City of South Gate)
- Along Salt Lake Avenue from Gage Avenue to Florence Avenue (City of Bell)

Metro will relocate the following bike trail segments:

- Paramount Bike Trail segments from Paramount Boulevard to Somerset Boulevard within the Metro-owned PEROW (City of Paramount)

- Bellflower Bike and Trail segment from Lakewood Boulevard to the maximum extent of Clark Avenue within the Metro-owned PEROW (City of Paramount and City of Bellflower).

Findings

Threshold PARK-1 (Operations): Mitigation Measure LU-1 (Consistency with Bike Plans) requires Metro to coordinate with jurisdictions and local agencies to minimize the preemption of future development, goals, and plans within each jurisdiction. The Project may still preempt future development and the implementation of the planned bike paths despite Metro's best efforts and coordination. Therefore, a significant impact will remain after implementation of the mitigation. No additional mitigation measures were identified to reduce significant impacts with respect to bicycle facilities. Each of the alternatives would have the same impact, so adopting one of the other alternatives from the EIS/EIR would not avoid the significant impacts. Changing the Project to avoid impacts related to bicycle facilities would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measure LU-1 (Consistency with Bike Plans), this impact will be significant. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines. Additionally, Metro adopts CEQA Finding 2, as identified in Section 3 above and in Section 15091(a)(2) of the CEQA Guidelines because aspects of Mitigation Measure LU-1 (Consistency with Bike Plans) are within the responsibility and jurisdiction of other public agencies and that such changes can or should be adopted by those agencies.

Threshold PARK-3 (Operations): Mitigation Measure LU-1 (Consistency with Bike Plans) requires Metro to coordinate with jurisdictions and local agencies to minimize the preemption of future development, goals, and plans within each jurisdiction. The Project may still preempt future development and the implementation of the planned bike paths despite Metro's best efforts and coordination. Therefore, a significant impact will remain after implementation of the mitigation. No additional mitigation measures were identified to reduce significant impacts related to land use effects with respect to bicycle facilities. Each of the alternatives would have the same impact, so adopting one of the other alternatives from the EIS/EIR would not avoid the significant impacts. Changing the Project to avoid impacts related to land use plans concerning bicycle facilities would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measure LU-1 (Consistency with Bike Plans), this impact will be significant. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines. Additionally, Metro adopts CEQA Finding 2, as identified in Section 3 above and in Section 15091(a)(2) of the CEQA Guidelines because aspects of Mitigation Measure LU-1 (Consistency with Bike Plans) are within the responsibility and jurisdiction of other public agencies and that such changes can or should be adopted by those agencies.

5 FINDINGS REGARDING ENVIRONMENTAL IMPACTS FOUND TO BE LESS THAN SIGNIFICANT WITH MITIGATION

As discussed in the sections that follow, Metro finds that, based upon substantial evidence in the record, the following impacts associated with the Project are significant but can be reduced to less than significant levels through the mitigation measures listed below and included in the MMRP. The Metro Board finds that changes or alterations that avoid or substantially lessen the significant environmental effects have been required by, or incorporated into, the Project.

5.1 Transportation

As discussed in Section 3.6.3 and Section 3.7.4.4 of the Final EIS/EIR, the Project will result in potentially significant transportation impacts with respect to the following significance thresholds:

- Threshold TRA-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- Threshold TRA-CON-4: Would the Project result in inadequate emergency access?

Impact

Threshold TRA-3 (Operations)

The primary new safety hazard for pedestrians, bicyclists, and vehicular traffic will be the locations where the Project will cross streets at-grade. This impact will be addressed through features of the light rail vehicle, such as audible warning devices to alert pedestrians, bicyclists, and vehicular traffic that a light rail vehicle is approaching. Additionally, design of the at-grade crossings will comply with federal and state regulations. Design of the crossings will incorporate safety measures, such as crossing gates, and comply with regulatory requirements, including those established by the California Public Utilities Commission (CPUC). Design will also be consistent with Metro Rail Design Criteria, and the at-grade crossings will be operated in accordance with Metro system safety plans, policies, and procedures.

The MSF will not introduce design elements that could increase hazards (e.g., new at-grade crossings, pedestrian crossings with safety issues). The MSF will be located on a site with fencing, preventing public access. Additionally, the entrance to the MSF has been designed as a signalized intersection and will include a dedicated right-turn lane into the facility.

The Project will operate adjacent to existing freight service along portions of the alignment that operate in shared right-of-way. There could be a potential for derailment, which could present a safety concern. Mitigation Measure SAF-1 (Encroachment Detection) will be implemented to reduce safety and security impacts associated with operation of freight and LRT in shared ROW. Additionally, operational changes could result in the lengths of vehicle queues from nearby intersections extending back to train crossings. The result could be vehicles stopped on the tracks unless other measures are taken, such as placing signs to indicate that stopping on the tracks is not permitted. Through Project Measure TR PM-1 (Pre-signals and Queue-cutter Signals), the potential for vehicles queuing onto at-grade crossings will be minimized.

Threshold TRA-CON-4 (Construction)

Construction activities will require the temporary modification or closure of existing transportation facilities, as needed. Coordination with emergency responders will occur to maintain emergency access or to minimize delays in response times. However, the coordination will not completely

eliminate interference with local jurisdictions' emergency response plans for emergency service providers. Mitigation Measure TRA-18 (Transportation Management Plan[s]) will ensure that all closures and detours will be coordinated with the affected emergency service providers to address access and response time requirements during construction. Transportation Management Plans are a proven strategy for minimizing transportation impacts through and around construction zones during construction. Metro has successfully implemented Transportation Management Plans on its sponsored projects to minimize short-term transportation impacts during construction. These plans have proved to be effective at reducing transportation impacts during construction.

Fire and emergency medical services personnel have the ability to use onboard live mapping software that alerts drivers of construction activities that may impede travel times to and from the scene of an emergency. Emergency responders are also able to see which roadways are experiencing delays due to construction, accidents, or other events, and will be able to take alternate routes accordingly. Metro and the contractor will coordinate with involved police, medical, and fire service providers during construction. Mitigation Measure COM-1 (Construction Outreach Plan) will be implemented during construction, which requires development of a Construction Outreach Plan in coordination with affected communities and businesses.

Reference in the Final EIS/EIR

Section 3.6.3, Section 3.7.4.

Project Measures

TR PM-1: **Pre-signals and Queue-cutter Signals.** Installation of pre-signals or queue-cutter signals to discourage vehicles from stopping on tracks. Pre-signals are traffic control devices that control traffic approaching a grade crossing in conjunction with the traffic control for the intersection(s) beyond the tracks. Pre-signals can be used to stop vehicular traffic before the railroad crossing. Queue-cutter signals only control traffic approaching a crossing and are operated independently of other traffic signals in the vicinity. The concept of operation of a queue-cutter is to hold traffic upstream from a crossing before a queue caused by a downstream traffic control signal or other roadway congestion can grow long enough to back up into the crossing.

Mitigation Measures

TRA-18: **Transportation Management Plan(s) (TMP)**

TMP(s) will be prepared to address construction impacts on transportation facilities as applicable under the jurisdiction of all involved cities and agencies.

The TMP(s) will address potential impacts from construction activities on vehicular, transit, pedestrian, and bicycle access and mobility, including, but not limited to, temporary lane/roadway, sidewalk, bicycle facility, and freeway ramp closures; detours; increases in traffic volumes (including regular traffic and construction traffic, construction equipment, materials delivery vehicles, waste/haul vehicles, and employee commutes); construction parking; and emergency services (e.g., fire, police, ambulances).

The development of the TMP will be coordinated with Metro, local jurisdictions (cities and the county), agencies, and other potentially affected parties (e.g., school bus and transit operators and police, fire, and emergency services providers). The TMP(s) will identify specific TMP strategies, the party/parties responsible for implementing those strategies, the agencies and parties the TMP strategies will be coordinated with, and implementation timing.

The TMP will include specific strategies to address short-term, project-related construction effects on traffic, bicyclists, pedestrians, and area residents and businesses. The following list, which is part of this mitigation measure, identifies the types of TMP strategies that will be applicable:

- Public Information
  - Brochures and Mailers
  - Press Releases
  - Paid Advertising
  - Public Meetings/Speakers Bureau
  - Internet
  - Public Meeting Rooms
- Motorist Information
  - Portable Changeable-Message Signs
  - Ground-mounted Signs
- Incident Management
  - Traffic Management Team
- Construction
  - Lane Closure Chart
  - Reduced Speed Zone
  - Incentives and Disincentives (e.g., early completion payments and late re-opening penalties for contractors)
  - Movable Barrier
  - Temporary Pedestrian Walkways and Detour

The Resident Engineer will require the Construction Contractor to implement the strategies in the TMP prior to, during, and after construction activities, as required in the TMP.

Pedestrian and Bicycle Facility Closures: When sidewalks, crosswalks, and/or bicycle facilities are temporarily closed during construction, pedestrian and bicycle detours will be developed and clearly signed prior to closing those facilities.

COM-1 **Construction Outreach Plan.** Metro will develop a Construction Outreach Plan as part of Metro's Construction Relation & Mitigation Programs in Community Relations in coordination with affected communities, community facilities, and businesses that will be implemented by Metro and its contractors during construction of the Project. The Construction Outreach Plan will include, but not be limited to, the following elements:

- Maintain access to community assets (including, but not limited to, schools and bike trails) and neighborhoods during construction as practicable
- Maintain access to businesses during the operating hours of the businesses as practicable
- Provide signage to direct pedestrians and motorists around construction areas; around sidewalk, street, and lane closures; to entrances of businesses and community assets; to maintain the flow of traffic around the construction area;

and to notify pedestrians and motorists of any permanently closed streets prior to the closure of such streets

- Provide appropriate signage, barriers, and fencing for pedestrian and bicycle detour routes to prevent pedestrians and bicyclists from entering the construction zones
- Provide signage alerting potential customers that businesses are open during construction and clearly mark detours as appropriate
- Provide the public with updates, alerts, and schedules during construction and prior to the start of revenue service through informational meetings, the project website, and other forms of communication such as, but not limited to, mailings and flyers to businesses and residences with 0.25-mile of the construction zone
- Develop a mitigation plan to support businesses affected by construction to help reduce impacts to businesses during construction
- Coordinate construction activities with other capital improvement projects being carried out nearby to minimize construction impacts and competing needs for detour routes

SAF-1 **Encroachment Detection.** Subject to coordination with the applicable stakeholders, the LPA will incorporate a means of encroachment detection along the portion of the corridor that shares right-of-way with freight operations. The encroachment detection system will detect unauthorized entry into Metro right-of-way, such as a freight train derailment. Prior to the start of service, Metro will develop a plan that outlines procedures should the encroachment detection system be triggered. In the event the intrusion detection system detects a possible derailment, all parties operating in the shared right-of-way corridor will be notified and train traffic (freight and light rail transit) will not be permitted to enter the area until the detection is investigated and the intrusion, if any, addressed to avoid possible derailments.

Findings

Threshold TRA-3 (Operations): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure Measures SAF-1 (Encroachment Detection), impacts related to this transportation threshold will be reduced to a less than significant level. Thus, with respect to Threshold TRA-3 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Threshold TRA-CON-4 (Operations): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure Measures TRA-18 (Transportation Management Plan[s]) and COM-1 (Construction Outreach Plan), impacts related to this transportation threshold will be reduced to a less than significant level. Thus, with respect to Threshold TRA-CON-4 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.2 Land Use and Planning

As discussed in Section 4.19.3.1 of the Final EIS/EIR, the Project will result in a potentially significant impact related to land use with respect to the following significance threshold:

- Threshold LU-CON-1: Would the Project physically divide an established community?

Impact

Threshold LU-CON-1 (Construction)

Temporary barriers and fencing will be placed along the perimeter of construction areas. Although these barriers may result in sidewalk detours and traffic lane closures, the barriers will not permanently divide an established community because they will be removed once construction is complete. Construction will also result in temporary street and lane closures, temporary construction easements (TCEs), reconstruction of a pedestrian bridge in the City of Paramount, and potentially detoured segments of the Bellflower Bike Trail. During construction, detours and directional signage will be provided per the Construction Outreach Plan as part of Metro's Construction Relation Program in Community Relations designed for the Project, as further detailed in Mitigation Measure COM-1 (Construction Outreach Plan). This plan will maintain accessibility to residences and businesses in communities and neighborhoods to the extent practicable, as well as the flow of traffic around the construction area. In addition, affected sites with TCEs for construction staging and temporary street, lane, pedestrian bridge, and bike path detours and closures will be returned to preconstruction conditions once construction is complete.

Reference in the Final EIS/EIR

Section 4.19.3.1.

Mitigation Measures

COM-1 **Construction Outreach Plan.** Metro will develop a Construction Outreach Plan as part of Metro's Construction Relation & Mitigation Programs in Community Relations in coordination with affected communities, community facilities, and businesses that will be implemented by Metro and its contractors during construction of the Project. The Construction Outreach Plan will include, but not be limited to, the following elements:

- Maintain access to community assets (including, but not limited to, schools and bike trails) and neighborhoods during construction as practicable
- Maintain access to businesses during the operating hours of the businesses as practicable
- Provide signage to direct pedestrians and motorists around construction areas; around sidewalk, street, and lane closures; to entrances of businesses and community assets; to maintain the flow of traffic around the construction area; and to notify pedestrians and motorists of any permanently closed streets prior to the closure of such streets
- Provide appropriate signage, barriers, and fencing for pedestrian and bicycle detour routes to prevent pedestrians and bicyclists from entering the construction zones
- Provide signage alerting potential customers that businesses are open during construction and clearly mark detours as appropriate
- Provide the public with updates, alerts, and schedules during construction and prior to the start of revenue service through informational meetings, the project website, and other forms of communication such as, but not limited to, mailings and flyers to businesses and residences with 0.25-mile of the construction zone
- Develop a mitigation plan to support businesses affected by construction to help reduce impacts to businesses during construction
- Coordinate construction activities with other capital improvement projects being carried out nearby to minimize construction impacts and competing needs for detour routes

Finding

Threshold LU-CON-1 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure COM-1 (Construction Outreach Plan), impacts related to physically dividing a community during construction activities will be reduced to a less than significant level. Thus, with respect to Threshold LU-CON-1 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.3 Visual and Aesthetics

As discussed in Section 4.4.5.3 and Section 4.19.3.4 of the Final EIS/EIR, the Project will result in potentially significant impacts related to aesthetics with respect to the following significance thresholds:

- Threshold VIS-3 (Operation) and Threshold VIS-CON-3 (Construction): In nonurbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?
- Threshold VIS-CON-4: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact

Threshold VIS-3 (Operations)

Within the PEROW, the Project will remove the existing decorative wall and landscaping on the south side of the World Energy storage tracks (east of the LRT tracks) in the City of Paramount and the "Belle" public art cow statue in the City of Bellflower. Removal of the decorative wall and landscaping on the south side of the World Energy storage tracks will make the refinery storage tank cars within the PEROW more apparent along Somerset Boulevard and will not comply with Section 44.82(53) of the City of Paramount Municipal Code, which requires open storage or outdoor uses be concealed from view from nearby streets and adjoining property by buildings or solid masonry walls not less than 6 feet in height. With implementation of Mitigation Measure VA-1 (Screening at Somerset Boulevard), the Project will comply with Section 44.82(53) of the City of Paramount Municipal Code, and views of the World Energy storage tracks will continue to be blocked by a decorative screening wall and landscaping.

The "Belle" public art cow statue was installed as part of the City of Bellflower's public arts program (codified in City of Bellflower Municipal Code Chapter 3.32) and has aesthetic value to the city. With the removal of the "Belle" public art cow statue, the Project will be inconsistent with the program's intent of promoting visual arts in the city. Implementation of Mitigation Measure VA-2 (Relocation of "Belle") will require Metro to coordinate with the city to relocate the "Belle" public art cow statue so that the public art cow statue will continue to be displayed in the city.

Threshold VIS-CON-3 (Construction)

The municipal codes of the affected jurisdictions generally do not contain regulations that govern scenic quality during construction. Construction has the potential to temporarily alter visual character because construction activities will introduce heavy equipment (e.g., cranes, bulldozers, scrapers, and trucks), security fencing, barricade materials, stockpiled building materials, and safety and directional signage into the view corridor of public streets, sidewalks, and properties where construction will occur. However, construction activities and equipment are temporary and will be removed once construction is completed. Implementation of Mitigation Measures VA-3 (Construction Screening), and NOI-6 (Noise Control Plan) will reduce construction-related effects on visual character and quality. Mitigation

Measure VA-3 (Construction Screening) will screen construction activities from sensitive viewers. Additionally, Mitigation Measure NOI-6 (Noise Control Plan) will reduce the significant impacts that construction could have on visual quality because this mitigation measure will require that equipment and staging areas be located away from noise-sensitive receivers, which also include some sensitive viewers (such as residences). Mitigation Measure NOI-6 (Noise Control Plan) will also require the installation of temporary noise barriers or noise-control curtains, both of which will screen views of construction activities. In addition, mandatory compliance with SCAQMD Rule 403 will have the potential to beneficially affect visual quality during construction by reducing the amount of visible dirt and dust at and near the construction areas. Rule 403 does not permit track-out dust to extend 25 feet or more beyond the active construction area and requires all track-out dirt to be removed at the end of each workday or evening shift.

Threshold VIS-CON-4 (Construction)

Nighttime and weekend construction may be required and may include, but not be limited to, trackwork, catenary wire installation, and other construction at at-grade crossings. Generally, construction activities will not result in a substantial source of light or glare. However, nighttime construction work could increase nighttime light or glare and temporarily affect visibility and result in temporary significant impacts related to spillover lighting and glare if not mitigated. Implementation of Mitigation Measure VA-4 (Construction Lighting) will reduce construction-related effects on spillover lighting and glare.

Reference in the Final EIS/EIR

Section 4.4.5.3, Section 4.19.3.4.

Mitigation Measures

VA-1 **Screening at Somerset Boulevard.** The existing World Energy landscaping and decorative wall north of Somerset Boulevard and east of the light rail transit tracks will remain in place with the exception of a segment parallel to the storage tracks. If segments of the existing decorative screening wall and/or landscaping directly south of the World Energy storage tracks and east of the light rail transit tracks are removed, these screening elements will be replaced with a new screening wall and/or landscaping that are at least as decorative in terms of design, materials, and screening height as the existing wall and landscaping. A decorative screening wall and/or landscaping will be placed within the PEROW between the light rail transit tracks and storage tracks at a length and height capable of screening the refinery storage track from views on Somerset Boulevard.

VA-2 **Relocation of "Belle."** Metro will provide relocation site alternatives to determine the best possible location to relocate the public art statue, "Belle," in its existing condition, subject to a condition assessment detailing the current physical condition of the artwork. The site will be subject to approval by the City of Bellflower.

VA-3 **Construction Screening.** During construction, the perimeter of construction staging areas and laydown areas will be screened to shield construction activities and laydown areas from adjacent visually sensitive land uses, including the following:

- Residential properties
- Salt Lake Park (City of Huntington Park)
- Hollydale Community Park (City of South Gate)
- Original Bellflower Pacific Electric Station (City of Bellflower)
- Artesia Historical Museum (City of Artesia)
- Old Station #30 (City of Artesia)

The screening will be designed consistent with the Metro requirements and in coordination with cities and may incorporate artwork, Metro-branded design treatment, and/or community-relevant messaging.

VA-4 **Construction Lighting.** During construction, nighttime construction lighting will be directed toward the interior of the construction area and shielded with temporary construction screening approved by Metro to limit light spillover into adjacent areas.

NOI-6 **Noise Control Plan.** Metro's contractor will develop a Noise Control Plan demonstrating how noise criteria will be achieved during construction. The Noise Control Plan will be designed to follow Metro requirements, Construction Noise Control, and will include measurements of existing noise, a list of the major pieces of construction equipment that will be used, and predictions of the noise levels at the closest noise-sensitive receivers (residences, hotels, schools, churches, temples, and similar facilities). The Noise Control Plan will be approved by Metro prior to initiating construction. Where the construction cannot be performed in accordance with the FTA 1-hour L_{eq} construction noise standards, the contractor will investigate alternative construction measures that will result in lower sound levels. The FTA 1-hour L_{eq} construction noise standards are as follows: Residential daytime standard of 90 dBA L_{eq} and nighttime standard of 80 dBA L_{eq}, and Commercial and Industrial daytime standard of 100 dBA L_{eq} and nighttime standard of 100 dBA L_{eq}. The contractor will conduct noise monitoring to demonstrate compliance with contract noise limits. In addition, Metro will comply with local noise ordinances when applicable. Noise-reducing methods that may be implemented by Metro include:

- If nighttime construction is planned, a noise variance may be prepared by the contractor, if required by the jurisdiction, that demonstrates the implementation of control measures to maintain noise levels below the applicable FTA standards.
- Where construction occurs near noise-sensitive land uses, specialty equipment with enclosed engines, acoustically attenuating shields, and/or high-performance mufflers may be used.
- Limit unnecessary idling of equipment.
- Install temporary noise barriers or noise-control curtains, where feasible and desirable.
- Reroute construction-related truck traffic away from local residential streets and/or sensitive receivers.
- Limit impact pile driving where feasible and effective.
- Use electric instead of diesel-powered equipment and hydraulic instead of pneumatic tools where feasible.
- Minimize the use of impact devices such as jackhammers and hoe rams, using concrete crushers and pavement saws instead.

Findings

Threshold VIS-3 (Operations): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures VA-1 (Screening at Somerset Boulevard) and VA-2 (Relocation of "Belle") impacts related to this aesthetic threshold will be reduced to a less than significant level. Thus, with respect to Threshold VIS-3 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Threshold VIS-CON-3 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure VA-3 (Construction

Screening) and Mitigation Measure NOI-6 (Noise Control Plan) impacts related to this aesthetic threshold will be reduced to a less than significant level. Thus, with respect to Threshold VIS-CON-3 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Threshold VIS-CON-4 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure VA-4 (Construction Lighting) impacts related to this aesthetic threshold will be reduced to a less than significant level. Thus, with respect to Threshold VIS-CON-4 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.4 Noise and Vibration

As discussed in Section 4.19.3.7 of the Final EIS/EIR, the Project will result in a potentially significant noise and vibration impact with respect to the following significance threshold:

- Threshold NOI-CON-2: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

Impact

Threshold NOI-CON-2 (Construction)

Vibration-generating activities could result in noticeable levels of vibration but are unlikely to result in building damage. Construction vibration criteria are based on potential damage risk to buildings and potential annoyance to building occupants. Most construction activities beyond 15 feet from a building are unlikely to cause damage. Without mitigation, vibration levels could exceed resource-specific damage risk criteria at three historic resources.

Mitigation Measure VIB-3 (Vibration Control Plan) will require the contractor to prepare a Vibration Control Plan to be approved by Metro to reduce construction vibration levels. Mitigation Measure 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) include construction BMPs that will avoid exceedance of damage risk criteria, including at historical resources. With mitigation incorporated, impacts related to construction vibration will not be significant because vibration levels will be monitored at sensitive structures and construction will be halted and alternative construction methods implemented prior to vibration limits being exceeded.

Reference in the Final EIS/EIR

Section 4.19.3.7.

Mitigation Measures

VIB-3 **Vibration Control Plan.** Metro's contractor will prepare a Vibration Control Plan demonstrating how the Federal Transit Administration building damage risk criteria and the Federal Transit Administration vibration annoyance criteria will be achieved. The Vibration Control Plan will include a list of the major pieces of construction equipment that will be used and predictions of the vibration levels at the closest sensitive receivers (residences, hotels, schools, churches, temples, historic properties, and similar facilities). The Vibration Control Plan must be approved by Metro prior to initiating construction. Where the construction cannot be performed to meet the FTA vibration damage criteria, the contractor will investigate and implement alternative means and methods of construction measures that will result in lower vibration levels.

As part of the Vibration Control Plan, the contractor will prepare a Vibration Monitoring Plan that specifies construction activities requiring monitoring, monitoring locations, warning levels and limits at each location, equipment, procedures, schedule of measurements, and reporting methods to be used to ensure that the FTA damage criteria and the criteria specified in Mitigation Measure VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources) are not exceeded. Vibration levels will be monitored in real time. If limits are exceeded, the activity causing the exceedance must immediately be halted. Work on that activity will be suspended until such time as alternative construction methods can be used and additional abatement measures can be implemented as specified in the Vibration Control Plan. Vibration monitoring data will be submitted to the Project Engineer weekly.

VIB-4 **Minimize the Use of Impact Devices.** Metro's contractor will avoid or minimize the use of impact devices, such as jackhammers and hoe rams, using concrete crushers and pavement saws instead.

VIB-5 **Drilling for Building Foundations.** Where building foundation systems are needed, drilling instead of driven piles will be used.

VIB-6 **Construction Vibration Limits for Historic Properties/Historical Resources.** Historic structures will be held to the vibration damage criteria identified in the following table. Where possible, operation of the compactor/ballast tamper will be restricted to no closer than 40 feet, and other equipment, such as, and similar to, vibratory rollers, large bulldozers, caisson drills, and hoe rams no closer than 25 feet to a historic structure. Such equipment will not be used within 25 feet of the Bellflower Pacific Electric Railway Depot or the Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line towers or within 40 feet of the Frampton-Dantema House (81644 Alburtis Avenue, Artesia).

VIB-6 Construction Restrictions near Historic Properties

APE Map No.	Property Location	Damage Risk Criteria – in/sec (PPV)	Predicted Vibration Level – in/sec (PPV) with Mitigation Measure VIB-6
17-005	Los Angeles Department of Water and Power Boulder Dam-Los Angeles 287.5 kV Transmission Line (1936)	0.50	0.21 to 0.43 at 25 feet (below damage risk criteria)
28-008	Bellflower Pacific Electric Railway Depot, 16336 Bellflower Boulevard, Bellflower	0.50	0.21 to 0.43 at 25 feet (below damage risk criteria)
32-021	81644 Alburtis Ave, Artesia	0.20	0.10 to 0.20 at 40 feet (below damage risk criteria)

Notes: APE = Area of Potential Effect; in/sec = inches per second; PPV = peak particle velocity

VIB-7 **Construction Monitoring for Vibration Near Historic Properties/Historical Resources.** The contractor will monitor construction vibration levels within 200 feet of historic buildings and structures to ensure the vibration damage threshold for that building or structure will not be exceeded. A preconstruction and post-construction survey of these buildings will be conducted by a qualified structural engineer. Any damage will be noted. All vibration monitors used for these measurements will be equipped with an "alarm" feature to provide advanced notification that vibration impact criteria have been approached. This measure applies to structures identified as eligible for the National

Register of Historic Places and/or California Register of Historical Resources in Section 4.14 of the Historic, Archaeological, and Paleontological Resources Section.

Finding

Threshold NOI-CON-2 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures VIB-3 (Vibration Control Plan) through VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources), impacts related to construction vibration will be reduced to a less than significant level. Thus, with respect to Threshold NOI-CON-2 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.5 Ecosystems and Biological Resources

As discussed in Section 4.19.3.8 of the Final EIS/EIR, the Project will result in potentially significant biological resources impacts with respect to the following significance thresholds:

- Threshold BIO-CON-1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?
- Threshold BIO-CON-3: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Threshold BIO-CON-5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact

Threshold BIO-CON-1 (Construction)

Limited low-quality roosting habitat is available for western mastiff bat and pallid bat (Species of Special Concern), as well as silver-haired bat (special-status species), primarily in existing bridges crossing the Los Angeles River, Rio Hondo channel, and San Gabriel River. Suitable foraging habitat is present for big free-tailed bat (Species of Special Concern). Impacts to roosting bats may occur during construction activities if the species is roosting within buildings or bridges. Impacts to bats will be reduced with implementation of Mitigation Measure BIO-1 (Bats) requiring the preparation of a Bat Habitat Suitability Assessment and preconstruction bat survey, and potential delay of construction activities if active maternity roosts are present. In addition, habitat for protected nesting birds is present within and adjacent to the Affected Area for biological resources. Mitigation Measure BIO-2 (Nesting Birds) requires the avoidance of the bird nesting season or the implementation of a preconstruction nesting bird survey, which avoids impacts to nesting birds.

Threshold BIO-CON-3 (Construction)

State and federally protected wetlands are not present within the Affected Area for biological resources. Therefore, impacts to protected wetlands as a result of the Project will not occur.

Urban channels, including the Los Angeles River, Rio Hondo channel, and the San Gabriel River, occur within the Affected Area for biological resources. The Project does not propose to alter any embankments or the existing contours of the jurisdictional resources. Impacts within regulated waters may be subject to the jurisdiction of regulatory agencies. This includes the requirements of the United States Army Corps of Engineers under Section 404 of the Clean Water Act and Section 408 of the Rivers and Harbors Act, the Los Angeles Regional Water Quality Control Board

(LARWQCB) under Section 401 of the Clean Water Act, and CDFW pursuant to Section 1600 et. seq. of the California Fish and Game Code. The jurisdictional delineation conducted for this Project mapped the extent of regulated waters and potential impacts. However, the location and extent of jurisdictional features will be confirmed by the state and federal authorities at the time that permits are requested. Implementation of Mitigation Measure BIO-3 (Jurisdictional Resources) requiring avoidance, minimization, and compensatory measures will be implemented to minimize and compensate for potential significant impacts to jurisdictional waters.

Threshold BIO-CON-5 (Construction)

The Cities of Los Angeles, Huntington Park, Bell, South Gate, Downey, and Cerritos have numerous protected trees. The exact number and species of protected trees potentially affected by the Project is not known at this time. Based on a desktop study, approximately 85 trees could be affected by construction activities. With the implementation of Mitigation Measure BIO-4 (Protected Trees), an Arborist Study prepared by a Certified Consulting Arborist will be completed to plot the location of each protected tree that may be encroached upon and identify each protected tree proposed to be removed or retained and affected. Additionally, the Arborist Study will detail a mitigation program for the potential impacts to be tailored to comply with the requirements of each relevant local jurisdiction.

Reference in the Final EIS/EIR

Section 4.9.13.8.

Mitigation Measures

BIO-1: **Bats.** A Bat Habitat Suitability Assessment will be conducted by a qualified bat biologist prior to initiation of construction near areas with the potential to provide bat habitat to determine the potential presence and document suitable locations for bat species.

If project construction occurs within the vicinity of suitable habitat for western mastiff bat, pallid bat, silver-haired bat, and big free-tailed bat, a qualified biologist will complete a maternity colony survey during the bat maternity season (June 1 through October 31) to determine the presence or absence of any maternity roosting of bats. If no active roosts are found, then no further action will be required. Mitigation Measures BIO-1a, -1b, and -1c will be implemented, as appropriate, if active roosts are found.

a. If bats are present, project activities disruptive to the roost within 100 feet of an active maternity roost will be delayed, if feasible, until after the maternity season, or until a qualified biologist determines that the roosting site is no longer in use, or as otherwise determined in coordination with the applicable resource agency. This buffer may be reduced at the discretion of a qualified monitoring biologist. A criterion to be used to evaluate the appropriate maternity roosting site buffer includes existing levels of ambient disturbance.

b. If active maternity roosts or hibernacula are found within 100 feet of project construction, the qualified bat biologist will survey (through the use of radio telemetry or other CDFW-approved methods) for nearby alternative maternity colony sites. If the biologist determines in consultation with the CDFW that there are alternative roost sites used by the maternity colony and young are not present, then a Bat Relocation Plan will be prepared by the qualified bat biologist for review and approval by CDFW. Eviction procedures as outlined in a CDFW-approved Bat Relocation Plan will apply. However, if there are no alternative roost sites that can be used by the maternity colony nearby, Mitigation Measure BIO-1c (providing substitute maternity roost nearby) will be required.

c. If a maternity roost would be affected by the Project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony will be provided in close proximity to the affected maternity roost no less than three months prior to the eviction of the colony. Alternative roost sites will be constructed in accordance with the specific bat's requirements as detailed in the CDFW-approved Bat Relocation Plan. Alternative roost sites will be of comparable size and proximal in location to the affected colony. Alternate roost sites will remain in place following project construction to provide long-term substitute roosting habitat.

BIO-2: **Nesting Birds.** If Project construction occurs within the peak bird breeding season (February 1 through May 31 for raptors, and March 1 through August 31 for passerines) within suitable nesting habitat (e.g., vegetation, bridges, or other structures), a nesting bird and/or raptor preconstruction survey will be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer. The survey will occur no more than three days prior to initiation of ground disturbance and/or vegetation removal. If Project construction occurs in an area over multiple nesting seasons, a subsequent preconstruction nesting bird and raptor survey may be required prior to the initiation of construction each season. Preconstruction nesting bird and raptor surveys will be conducted during the time of day when birds are active and will be of sufficient duration to reliably conclude the presence or absence of nesting birds and/or raptors on-site and within the designated vicinity. The nesting bird and raptor survey results will be submitted to Metro prior to ground and/or vegetation disturbance activities.

If active nests are found, their locations will be flagged. An appropriate avoidance buffer, depending upon the species and the proposed work activity, will be determined by a qualified biologist in consultation with the appropriate regulatory agency. The buffer will be delineated with bright orange construction fencing or other suitable flagging. Active nests will be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. If project activities must occur within the buffer, they will be conducted at the discretion of the qualified biologist. Inactive nests that have been confirmed by a qualified biologist could be removed based on their recommendations.

BIO-3: **Jurisdictional Resources.** Impacts associated with permanently disturbed areas within regulated waters will be mitigated in-kind at a minimum ratio of 1:1.

Mitigation can be completed by providing adequate funding to a third-party organization, conservation bank, or in-lieu fee program for in-kind creation or restoration. If mitigation is implemented off-site, mitigation lands should be located in the vicinity of the Affected Area for bio or within the Los Angeles River Watershed. The Affected Area for bio falls within the service area for the Land Veritas Soquel Canyon mitigation bank, which is approved to provide mitigation for permitted impacts under U.S. Army Corps of Engineers 404 permits, LARWQCB 401 Certifications, and CDFW 1600 agreements.

Note: the final mitigation ratios required by regulatory agencies during the permitting process may differ from those identified above.

BIO-4: **Protected Trees.** Prior to removal of any protected trees (as specified in applicable local ordinances), an Arborist Study will be completed to plot the location of each protected tree that may be encroached upon (i.e., construction activities within the tree protection zone, as measured 5 feet from the canopy dripline), and identify each protected tree proposed to be removed or retained and impacted. The Arborist Study will be prepared by

a Certified Consulting Arborist in compliance with local ordinance guidelines and would be prepared in accordance with the reporting requirements of the applicable local jurisdiction. In addition, as required by applicable local jurisdiction ordinances, a tree protection plan will be prepared that would, at a minimum, include site plans, protective tree barriers, the designated tree protection zone (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), activities prohibited or permitted within the tree protection zone, and encroachment boundaries. The Arborist Study and tree protection plan will be submitted to the appropriate departments of local jurisdictions with applicable tree ordinances for approval prior to the start of any tree-disturbing construction activities.

Findings

Threshold BOI-CON-1 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures BIO-1 (Bats) and BIO-2 (Nesting Birds), impacts related to this biological threshold will be reduced to a less than significant level. Thus, with respect to Threshold BIO-CON-1, identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Threshold BOI-CON-3 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure BIO-3 (Jurisdictional Resources) impacts related to this biological threshold will be reduced to a less than significant level. Thus, with respect to Threshold BIO-CON-3, identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Threshold BOI-CON-5 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure BIO-4 (Protected Trees) impacts related to this biological threshold will be reduced to a less than significant level. Thus, with respect to Threshold BIO-CON-5, identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.6 Geotechnical, Subsurface, and Seismic Hazards

As discussed in Section 4.19.3.14 of the Final EIS/EIR, the Project will result in a potentially significant impact related to geology and soils with respect to the following significance threshold:

- GEO-CON-9/PALEO-CON-1: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact

Threshold GEO-CON-9/PALEO-CON-1 (Construction)

Construction activities such as grading, excavation, and trenching that require a high degree of sediment displacement may disturb paleontological resources. These activities will directly impact and disturb the geologic strata at depth and have a high potential to impact buried paleontological resources where disturbance will extend below 5 feet below ground surface if resources are present. Staging areas or access roads are examples of construction activities that will result in limited surface-disturbing activities; therefore, the potential to significantly impact paleontological resources as a result of these ancillary activities is low or is not anticipated. Removal of existing structures is not anticipated to result in significant impacts because ground disturbance will occur within previously disturbed sediments. Indirect impacts are not anticipated because non-construction personnel will not be allowed to gain access to any newly unearthed, previously buried paleontological resources and unlawful collection of fossils will not occur. Potential impacts will be avoided with implementation of Mitigation Measures PR-1(a): Paleontological Resources Mitigation

and Monitoring Program, Mitigation Measure PR-1(b): Paleontological Worker Environmental Awareness Program, Mitigation Measure PR-1(c): Construction Monitoring, and Mitigation Measure PR-1(d): Preparation and Curation of Recovered Fossils.

Reference in the Final EIS/EIR

Section 4.19.3.14.

Mitigation Measures

PR-1(a) Paleontological Resources Mitigation and Monitoring Program

Prior to the commencement of ground-disturbing activities for the LPA, Metro will retain a qualified professional paleontologist to prepare and implement a Paleontological Resources Mitigation and Monitoring Program (PRMMP) for the LPA. The qualified paleontologist (principal paleontologist) must have at least a Master's degree or equivalent work experience in paleontology, will have experience with local paleontology, and will be familiar with paleontological procedures and techniques. The PRMMP will describe mitigation requirements to be consistent with the Society of Vertebrate Paleontology (SVP) standards for paleontological resources mitigation (SVP 2010). The PRMMP will include at a minimum the following:

1) Geologic setting, including paleontological sensitivity of the LPA site
2) Description of the LPA, outlining the type and extent of ground disturbance
3) Specifications for what ground-disturbing activity requires paleontological monitoring
4) Paleontological monitoring procedures:
    a. Qualifications of paleontological monitors
    b. Timing and duration of monitoring
    c. Required data collection procedures
    d. Daily monitoring log content
5) Communication protocols to be followed in the event that an unanticipated fossil discovery is made during project development of the LPA
6) Construction diversion and resource recovery protocols:
    a. Authority for ceasing construction
    b. Aerial extent of avoidance (construction exclusion) for any discovery
    c. Timing to evaluate and recover the fossil
7) Fossil collection and preparation standards (field and museum)
8) Curation standards, including appropriate institutions, curation agreements, and deadlines for materials to be accessioned
9) Post-recovery reporting requirements

PR-1(b) Paleontological Worker Environmental Awareness Program

Prior to the start of construction, the qualified paleontologist or his or her designee will conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The Paleontological Worker Environmental Awareness Program will be fulfilled at the time of a preconstruction meeting. In the event of a fossil discovery by construction personnel, all ground-disturbing activities within 50 feet of the find will be halted, a 50-foot exclusion zone around the find will be established, and the qualified paleontologist and/or designee will be contacted to evaluate the find before re-starting work in the exclusion zone. If the qualified paleontologist determines that the fossil(s) is (are) scientifically significant, the qualified paleontologist will complete the conditions

outlined in Mitigation Measure PR-1(c) and PR-1(d) to mitigate impacts to significant fossil resources.

PR-1(c) Construction Monitoring

Ground-disturbing construction activities (including grading, excavation, and trenching) that have the potential to impact previously undisturbed (i.e., native) sediments or geologic units of high paleontological sensitivity below 5 feet bgs will be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. Monitoring pursuant to the Paleontological Mitigation and Monitoring Program will be supervised by the qualified paleontologist and will be conducted by a monitor who meets or exceeds the SVP (2010) requirements for a qualified paleontological monitor, including at least a Bachelor's degree in geology, paleontology, or related field, and experience with collection and salvage of paleontological resources. If geological evidence indicates that sediments are younger alluvium or previously disturbed sediments and have a low potential to yield paleontological resources, or if older sediments are determined not to be fossiliferous based on results of monitoring at this location, the qualified paleontologist may determine that full-time monitoring is no longer warranted and may recommend reducing monitoring to periodic spot-checking or cease entirely. Monitoring will be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension of the monitoring will need to be reconsidered by the qualified paleontologist. Ground-disturbing activity that reaches a depth of less than 5 feet bgs will not require paleontological monitoring.

In the event that a paleontological resource is discovered, the monitor will have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and collected. Typically, fossils can be safely recorded and, if significant, potentially collected quickly by a single paleontologist without disrupting construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) may require more extensive excavation and longer recovery periods. In such a case, the monitor, under the supervision of the principal paleontologist, will have the authority to temporarily direct, divert, or halt construction activity so that the fossil(s) can be removed in a safe and timely manner.

PR-1(d) Preparation and Curation of Recovered Fossils

Once recovered, significant fossils will be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated at a scientific institution with a permanent paleontological collection (such as the Natural History Museum of Los Angeles County) along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the qualified paleontologist. The cost of curation is assessed by the repository and will be the responsibility of Metro.

At the conclusion of all required monitoring, laboratory work, and museum curation, the qualified paleontologist will prepare a final report describing the results of the paleontological mitigation monitoring efforts associated with the LPA. The report will include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, then a copy of the report will also be submitted to the designated museum repository and to Metro.

Finding

Threshold GEO-CON-9/PALEO-CON-1 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures PR-1(a) (Paleontological Resources Mitigation and Monitoring Program), PR-1(b) (Paleontological Worker Environmental Awareness Program), PR-1(c) (Construction Monitoring), and PR-1(d) (Preparation and Curation of Recovered Fossils), impacts related to paleontological resources during construction activities will be reduced to a less than significant level. Thus, with respect to Threshold GEO-CON-9/PALEO-CON-1 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.7 Hazards and Hazardous Materials

As discussed in Section 4.19.3.10 of the Final EIS/EIR, the Project will result in a potentially significant impact related to hazards and hazardous materials with respect to the following significance threshold:

- Threshold HAZ-CON-2: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact

Threshold HAZ-CON-2 (Construction)

Construction activities may disturb contaminated soils and/or groundwater and may require handling on-site or may be processed and moved off-site for disposal or recycling. These activities could result in accident or upset of hazardous materials, which could create a health risk to construction workers and nearby residents and/or the public.

Soils and groundwater may be contaminated with hazardous materials such as volatile organic compounds, petroleum hydrocarbons, pesticides and herbicides, polycyclic aromatic hydrocarbons, and heavy metals, including lead and arsenic, due to the presence of known, potential, and historical concern sites. These materials could be excavated or otherwise disturbed, resulting in a potential health risk to construction workers and nearby residents and/or the public. In addition, one former landfill (South Gate Rod and Gun Club) that poses soil vapor concerns is located in the Affected Area for hazards and hazmat. A health and explosion hazard may occur during construction if methane or other landfill gases are present and accumulate near construction areas.

Lead-based paints and yellow paint striping, asbestos-containing materials, and polychlorinated biphenyls will likely be encountered during demolition of roads and structures. Additionally, soils surrounding structures may be contaminated with the same pollutants. Soil and/or groundwater may also be contaminated due to past railroad and agricultural use.

The disturbance of contaminated soils and/or groundwater associated with railroad or agricultural use could create a health risk to construction workers and nearby residents and/or the public. Additionally, the relocation or disturbance of existing pipelines could create a health risk to construction workers and nearby residents or the public through the disturbance of contaminated soil and/or groundwater. As required by California law, Government Code 4216, Underground Service Alert (a utility marking service) will be notified prior to the commencement of any subsurface excavation.

One abandoned oil well is located within the Project vicinity, and unidentified wells may also be present. If these wells require re-abandonment per the California Department of Conservation's Geologic Energy Management (CalGEM) Division standards, hazardous materials may be

encountered during soil disturbance associated with the re-abandonment, resulting in a health risk to construction workers and nearby residents or the public.

Contractors will be required to implement federal and state handling and disposal regulations, which will reduce the risk of exposure of the public and the environment during transport and disposal of hazardous contaminants encountered during construction. The contractor will comply with existing federal regulations pertaining to hazardous material handling, transport, and disposal, as required by the following project measures and mitigation measures: HAZ PM-4 (Handling, Storage, and Transport of Hazardous Materials or Wastes), HAZ PM-5 (Property Assessment-Phase I and II Environmental Site Assessments (ESAs)), HAZ PM-6 (Demolition Plans), HAZ PM-7 (Disposal of Groundwater), HAZ PM-8 (Oil Well Abandonment), HAZ PM-9 (Contaminated Soil, Soil Vapor, and Groundwater), and Mitigation Measure HAZ-1 (Unidentified Oil and Gas Wells).

Reference in the Final EIS/EIR

Section 4.19.3.10.

Project Measures

HAZ PM-4 Handling, Storage, and Transport of Hazardous Materials or Wastes

Prior to the start of construction, the contractor will provide Metro with an industrial waste management plan and/or a waste and hazardous materials management plan, such as a plan defined in Title 19 CCR or a Spill Prevention, Control, and Countermeasure Plan. These plans will be completed to Metro contractor specifications and will identify the responsible parties and outline procedures for hazardous waste and hazardous materials handling, storage, and transport during construction. The plan will specify how the contractor will handle and manage wastes on-site, including the following:

- Prescribe BMPs to follow to prevent hazardous material releases and cleanup of any hazardous material releases that may occur
- Comply with the SWRCB Construction CWA Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and other BMPs for storage of hazardous materials during construction (SWRCB 2017)
- During construction, the contractor will comply with applicable federal and state regulations that consider hazardous material handling and storage practices, such as the Resource Conservation and Recovery Act, the Comprehensive Environmental Response and Compensation Liability Act, the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act.

HAZ PM-5 Property Assessment – Phase I and II ESAs

Consistent with Metro's standard practice, prior to the start of construction, the contractor must provide Phase I ESAs in accordance with standard ASTM methodologies to assess the land use history of each parcel that will be acquired/utilized for the LPA, including the railroad corridor properties. The determination of parcels that require a Phase II ESA (i.e., soil, groundwater, soil vapor subsurface investigations) will be evaluated after the Phase I ESAs have been completed and will be based on the results of the Phase I ESAs. Specifically, if the Phase I ESAs identify suspected contamination in the soil, soil vapor, or groundwater, a Phase II ESA will be conducted to determine whether the suspect contamination resulted in soil, groundwater, or soil vapor contamination exceeding regulatory action levels.

If the Phase II ESA concludes that the site is contaminated, remediation or corrective action (e.g., removal of contamination, *in-situ* treatment, capping, venting, monitoring, alarm, and system activation measures) would be conducted prior to or during construction under the oversight of federal, state, and/or local agencies (e.g., USEPA, DTSC, RWQCB, Los Angeles County) and in full compliance with current and applicable federal and state laws and regulations. Additionally, Voluntary Cleanup Agreements may be used for parcels where remediation or long-term monitoring is necessary.

HAZ PM-6 Demolition Plans

The contractor will prepare demolition plans for the safe dismantling and removal of building components and debris prior to construction. The demolition plans will be completed to Metro's contractor specifications and will include the following:

- LBP testing and abatement procedures
- Proper procedures for handling and disposal of lead and chromium in roadway paint striping
- ACM testing and abatement procedures
- PCB testing and abatement procedures

The demolition plans will be submitted to Metro for verification that appropriate demolition practices will be followed, consistent with federal and state handling and disposal regulations regarding ACM, lead, LBP, and PCBs.

HAZ PM-7 Disposal of Groundwater

If disposal of contaminated groundwater (decontamination water, purge water, dewatering, or underground structures [groundwater leakage into the final structure]) is generated during construction, the LARWQCB will be consulted and the Project will comply with permits as required by the LARWQCB. The LARWQCB may require that an individual NPDES permit and/or waste discharge requirements be obtained for dewatering activities. Additionally, the following agencies will be contacted as needed:

- City of Los Angeles Sanitation will be notified if contaminated groundwater will be discharged to the sewer system.
- City of Vernon Health and Environmental Control Department will be contacted if contaminated groundwater will be discharged to the stormwater system.
- County of Los Angeles Department of Public Health will be contacted if contaminated groundwater is encountered during dewatering within the boundaries of the following cities: Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Cerritos, and Artesia, and the unincorporated community of Florence-Firestone.

The groundwater discharge and disposal requirements vary by agency, location, concentration, and contaminant of concern and, therefore, are developed in consultation with the appropriate agency and the project proponent.

HAZ PM-8 Oil Well Abandonment

The Well Safety Devices for Critical Wells (CCR, Title 14, Section 1724.3) regulation governs safety devices required on "critical wells" located within 100 feet of an operating railway. Therefore, prior to demolition, grading, or construction within 400 feet of operating or abandoned oil wells, the contractor must perform the following steps in the

Affected Area for hazards and hazmat (within 200 feet of the LPA footprint) to reduce risk:

- Notify CalGEM about planned subsurface work within 200 feet of the LPA footprint and use its Construction Site Review Plan Program to locate wells (CalGEM 2020).
- "Critical" oil wells within 100 feet of the construction footprint will be evaluated by CalGEM to determine if they require additional safety features. The definition of a critical oil well is set forth in California Code of Regulations, Title 14, section 1720(a).
- The Department of Conservation's Geologic Energy Management Division (CalGEM, formerly DOGGR) Construction Site Well Review Program will be utilized per Section 3208.1 of the Public Resources Code and the local permitting agencies will also be consulted to evaluate whether any specific preconstruction requirements will apply to oil wells located within 100 feet of the construction footprint.
- Oil well abandonment must proceed in accordance with Sections 3228, 3229, 3230, and 3232 of the Public Resources Code. These requirements include written notification to CalGEM, protection of adjacent property, and before commencing any work to abandon any well, obtaining approval by CalGEM.
- Abandonment work, including sealing off oil and gas bearing units, pressure grouting, etc., must be performed by a state-licensed contractor under the regulatory oversight and approval of CalGEM.

Proper abandonment of oil wells must be conducted by the contractor prior to conducting subsurface activities that disturb soil, and documentation of the completed work will be provided to Metro. Documented wells in the Affected Area for hazards and hazmat and undocumented oil and gas wells encountered during construction will also be subject to this project measure.

HAZ PM-9 Contaminated Soil, Soil Vapor, and Groundwater

Prior to the start of construction, the contractor must retain a qualified environmental consultant to prepare a Soil Management Plan; Soil Reuse Management Plan; Groundwater Management Plan; Landfill Gas Accumulation Management Plan; and/or Soil, Soil Vapor, and Groundwater Management Plan. These plans must be completed to Metro's contractor specifications and submitted to Metro prior to any ground-disturbing activities for the LPA. Alternatively, Soil, Soil Vapor, and/or Groundwater Plans may be prepared separately or together as a Soil, Soil Vapor, and Groundwater Management Plan.

The Soil and Soil Vapor Plans (and/or Landfill Gas Accumulation Management Plan) must establish provisions per Metro's contractor specifications for the disturbance of contaminated materials (known and undocumented). Proper management and disposition of contaminated soils gases will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).

The Soil Reuse Management Plan must establish provisions per Metro's contractor specifications for the reuse of contaminated known or undocumented soils. Proper management and disposition of contaminated soils will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).

The Groundwater Management Plan, which must be prepared prior to construction activities, will establish provisions per Metro's contractor specifications for encountering and managing contaminated groundwater (known and undocumented). Proper disposal of contaminated groundwater will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).

Where open or closed regulatory release cases are already managed by a regulatory agency (USEPA, DTSC, RWQCB, etc.) and Metro plans to alter the use of the site and/or disturb contaminated soil and/or groundwater on-site, Metro will notify the regulatory agency of the planned land use changes prior to ground-disturbing activities at the location of the open or closed regulatory release site. The regulatory agency will determine the level of investigation and/or remediation (performance standards) necessary on a case-by-case basis. A closure or no further action determination letter from the regulatory agency will be obtained when investigation and/or remediation is complete.

Mitigation Measures

HAZ-1 Unidentified Oil and Gas Wells

If an unknown oil and gas well is encountered during construction, the contractor will notify Metro, Cal/OSHA, and CalGEM and proceed in accordance with state requirements. The requirements include written notification to CalGEM, protection of adjacent property, and before commencing any work to abandon any well, obtaining approval by CalGEM. Abandonment work, including sealing off oil and gas bearing units, pressure grouting, etc., must be performed by a state-licensed contractor under the regulatory oversight and approval of CalGEM.

Where the LPA cannot be adjusted to avoid unidentified abandoned wells, the California Department of Conservation (Department of Oil, Gas, and Geothermal Resources) and a re-abandonment specialty contractor will be contacted to determine the appropriate method of re-abandoning the well. Oil well abandonment must proceed in accordance with California Laws for Conservation of Petroleum and Gas (1997), Division 3. Oil and Gas, Chapter 1. Oil and Gas Conservation, Article 4, Sections 3228, 3229, 3230, and 3232.

Finding

Threshold HAZ-CON-2 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure HAZ-1 (Unidentified Oil and Gas Wells), impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be reduced to a less than significant level. Thus, with respect to Threshold HAZ-CON-2 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.8 Historic, Archaeological, and Paleontological Resources

As discussed in Section 4.19.3.14 of the Final EIS/EIR, the Project will result in potentially significant cultural resources impacts with respect to the following significance thresholds:

- Threshold HIS-CON-1: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- Threshold ARCH-CON-1: Would the Project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?

Impact

Threshold HIS-CON-1 (Construction)

Construction-related vibration has the potential to effect three built environment historical resources—the Los Angeles Department of Water and Power (LADWP) Boulder Dam-Los Angeles 287.5 kV Transmission Line (MRN 17-005), the Bellflower Pacific Electric Railway Depot (28-008), and the Frampton-Dantema House (MRN 32-021). However, implementation of Mitigation Measure VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources) will reduce vibration associated with compaction such that it will not exceed damage risk criteria, and there will be no physical damage to these resources. Additionally, Mitigation Measure VIB-7 (Construction Monitoring for Vibration Near Historic Properties/Historical Resources) will be implemented to require monitoring of construction vibration levels within 200 feet of historic properties/historical resources to ensure the vibration damage thresholds will not be exceeded. This measure will be implemented as a precautionary measure.

Construction of the Project will temporarily alter the condition of the following historical resources within the Area of Potential Effect: the Century Freeway-Transitway Historic District (105 historic district) (MRN 21-027) in Paramount, the Union Pacific Los Angeles River Rail Bridge (MRN 17-006) in South Gate, the Los Angeles River channel (MRN 17-007) in South Gate, the Rio Hondo channel (MRN 18-017) in South Gate, and the San Gabriel River channel (MRN 29-025) in Cerritos. A small portion of the 105 historic district will be temporarily modified during construction to construct permanent elements of the Project. This will result in a temporary modification to the setting of the district; however, these temporary changes will not diminish the district's integrity. Additionally, these temporary construction elements will be removed following construction, and trees removed will be replaced at a 1:1 ratio.

Similarly, the Union Pacific Los Angeles River Rail Bridge will also be temporarily physically modified (nonoriginal debris walls will be partially demolished) during construction of the Project. However, permanent designs associated with extension of the bridge's nonoriginal concrete debris walls will be developed in accordance with the Secretary of Interior (SOI) Standards per Project Measure CR PM-1 (SOI Standards Design Review), and the bridge's setting is such that the addition of the construction-related visual elements in its vicinity will not diminish its integrity.

Construction of the Project over and within the Los Angeles River channel, Rio Hondo channel, and the San Gabriel River channel will temporarily alter the condition of the river channels. However, due to the existing setting within and surrounding these historical resources, the visual elements introduced into and in areas surrounding these historic properties during construction of the Project will not alter their setting nor any of their character-defining features.

Threshold ARCH-CON-1 (Construction)

No known archaeological resources have been identified within the direct Area of Potential Effect for the Project. As such, ground-disturbing activities associated with construction of the Project will not result in significant impacts to known archaeological resources. Ground-disturbing activities associated with construction of the Project have the potential to alter, remove, or destroy unanticipated archaeological resources, if present. If unanticipated archaeological historical resources are directly altered, removed, or destroyed by construction of the Project, a significant impact will occur. Implementation of Mitigation Measures CR-1 (Development of Cultural Resources Monitoring and Discovery Program), CR-2 (Archaeological Worker Environmental Awareness Program), CR-3 (Archaeological Monitoring), and CR-4 (Treatment of Unanticipated Discoveries) will avoid or reduce potential impacts related to unanticipated discovery of potential archaeological resources.

Reference in the Final EIS/EIR

Section 4.19.3.14.

Project Measures

CR PM-1 **Secretary of the Interior Standards Design Review.** As the Project progresses through the design phase, associated designs will be reviewed and approved by a professional who meets the Secretary of the Interior's Professional Qualification Standards in architectural history, history, or architecture (36 CFR 61). The goal of the review will be to confirm that designs remain consistent with the fundamental principles of the Secretary of the Interior's Standards for the Treatment of Historic Properties and guidelines for Rehabilitation (36 CFR 68).

Mitigation Measures

VIB-6 **Construction Vibration Limits for Historic Properties/Historical Resources.** Historic structures will be held to the vibration damage criteria identified in the following table. Where possible, operation of the compactor/ballast tamper will be restricted to no closer than 40 feet, and other equipment, such as, and similar to, vibratory rollers, large bulldozers, caisson drills, and hoe rams no closer than 25 feet to a historic structure. Such equipment will not be used within 25 feet of the Bellflower Pacific Electric Railway Depot or the LADWP Boulder Dam-Los Angeles 287.5 kV Transmission Line towers or within 40 feet of the Frampton-Dantema House (81644 Alburtis Avenue, Artesia).

VIB-7 **Construction Monitoring for Vibration Near Historic Properties/Historical Resources.** The contractor will monitor construction vibration levels within 200 feet of historic buildings and structures to ensure the vibration damage threshold for that building or structure will not be exceeded. A preconstruction and post-construction survey of these buildings will be conducted by a qualified structural engineer. Any damage will be noted. All vibration monitors used for these measurements will be equipped with an "alarm" feature to provide advanced notification that vibration impact criteria have been approached. This measure applies to structures identified as eligible for the National Register of Historic Places and/or California Register of Historical Resources in Section 4.14 of the Historic, Archaeological, and Paleontological Resources Section.

CR-1 **Development of Cultural Resources Monitoring and Discovery Program**

Prior to the start of any ground-disturbing activity, an archaeologist that meets the Secretary of Interior's Professional Qualification Standards in Archaeology will prepare and implement a Cultural Resources Monitoring and Discovery Program (CRMDP) for the Project. The CRMDP will include the requirements of Mitigation Measures CR-2 through CR-4 and the following:

- A summary of the results of the *West Santa Ana Branch Transit Corridor Project Final Cultural Resources Survey Report—Rev 2* and the *West Santa Ana Branch Transit Corridor Project Revised Final Cultural Resources Effects Report*.
- Procedures for avoidance of unanticipated discoveries where possible.
- Procedures for preservation in place of unanticipated discoveries where possible.
- Provisions of cultural resources awareness training to construction workers that will be implemented as part of Mitigation Measure CR-2 (Archaeological Work Environmental Awareness Program).
- Provisions for archaeological and Native American monitoring of ground disturbance related to construction of the Project.

- Summary of the treatment procedures for unanticipated discoveries, as specified in Mitigation Measure CR-4 (Treatment of Unanticipated Discoveries). This will include general research questions to be addressed by any studies, field, and laboratory methods for the gathering of data to evaluate sites for the California Register of Historical Resources and/or National Register of Historic Places, and requirements for addressing any sites identified as significant.
- Procedures for Native American coordination and input.
- Procedures for the treatment of human remains, if applicable, as outlined in existing regulations. These procedures will include, but not be limited to, communication protocol for contacting the coroner and preparation of a human remains treatment plan in consultation with the Most Likely Descendant(s).
- Guidelines for the reporting of monitoring and treatment results.

CR-2 Archaeological Worker Environmental Awareness Program

A Secretary of the Interior qualified archaeologist will be retained to prepare a Worker's Environmental Awareness Program training for archaeological sensitivity. This training will be provided to all construction personnel prior to the commencement of any ground-disturbing activities. Archaeological sensitivity training will include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.

CR-3 Archaeological Monitoring

Monitoring pursuant to the Cultural Resources Monitoring and Discovery Program will be supervised by the qualified archaeologist who meets the Secretary of Interior Standards. The duration and timing of the monitoring will be determined by the qualified archaeologist. The archaeological monitor under the direction of a Secretary of the Interior qualified archaeologist will be present during ground-disturbing activities that have the potential to uncover previously known and unknown archaeological resources (i.e., ground-disturbing activities that will extend beyond the limits of prior disturbances). These activities will include, but will not be limited to, pavement removal, grading, and trenching. Activities such as drilling that do not allow for soil visibility during excavation will be spot-checked but will not require a full-time monitor. Monitoring and spot-checking will be required up to a depth of 20 feet. If the qualified archaeologist determines that full-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot-checking or cease entirely. Monitoring will be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension of the monitoring will need to be reconsidered by the qualified archaeologist. In the event that an archaeological resource is discovered, the monitor will have the authority to temporarily divert construction equipment around the find with a 50-foot buffer, or other buffer as determined by the archaeologist, to protect the resource until it is assessed for significance and treatment (e.g., avoidance, testing, data recovery), if necessary, is determined by the Federal Transit Administration in consultation with the State Historic Preservation Officer and consulting parties and executed.

At the conclusion of archaeological monitoring, a final report will be prepared by the Secretary of the Interior qualified archaeologist, or his or her designee, describing the results of the archaeological monitoring efforts associated with the Project. If previously unidentified cultural resources are discovered during construction monitoring, a report will be prepared following the State Historic Preservation Office's Archaeological Resource Management Report Guidelines that document the findings of the field and laboratory analysis and interpret the data within appropriate research context.

CR-4 Treatment of Unanticipated Discoveries

The contractor or archaeological monitor will notify Metro immediately if potentially significant archaeological resources are exposed during ground-disturbing activities. Archaeological monitors will have the authority to divert or temporarily halt ground-disturbing operations at the discovery. The area will be fenced or flagged as soon as possible following the discovery. Until the boundaries of the resource can be established with testing procedures, a 50-foot buffer zone around the identified deposit will be fenced or flagged off. Subsequent to the identification of site boundaries, the fenced or flagged buffer surrounding the resource could be reduced to a 10- to 15-foot buffer zone at the discretion of the qualified archaeologist. All fencing or flagging of archaeological deposits will be monitored by a qualified archaeologist. Temporary fencing or flagging will remain in place until the resource has been released by the qualified archaeological monitor, in consultation with Metro and FTA. Construction activities may continue in areas beyond the buffer zones. The discovery will be evaluated by the qualified archaeologist in accordance with the methods identified in the Cultural Resources Monitoring and Discovery Program (Mitigation Measure CR-1) to determine if the archaeological resource is eligible for listing on the National Register of Historic Places (NRHP) and/or California Register of Historic Resources (CRHR). If the archaeological resource is determined eligible for the NRHP and/or CRHR, a treatment plan, will be prepared in accordance with 36 Code of Federal Regulations §800.13(a)(2) in consultation with the State Historic Preservation Officer.

Findings

Threshold HIS-CON-1 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures VIB-6 (Construction Vibration Limits for Historic Properties/Historical Resources) and, for precaution, Mitigation Measure VIB-7 (Construction Monitoring for Vibration Near Historic Properties/Historical Resources), construction impacts to built environment historical resources will be less than significant. Thus, with respect to Threshold HIS-CON-1 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Threshold ARCH-CON-1 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures CR-1 (Development of Cultural Resources Monitoring and Discovery Program), CR-2 (Archaeological Worker Environmental Awareness Program), CR-3 (Archaeological Monitoring), and CR-4 (Treatment of Unanticipated Discoveries), construction impacts to archaeological resources will be less than significant. Thus, with respect to Threshold ARCH-CON-1 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.9 Tribal Cultural Resources

As discussed in Section 4.19.3.15 of the Final EIS/EIR, the Project will result in a potentially significant tribal cultural resources impact with respect to the following significance threshold:

- Threshold TCR-CON-1: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subsection (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe

Impact

Threshold TCR-CON-1 (Construction)

No tribal cultural resources have been identified in the Area of Potential Effect associated with the LPA. Therefore, construction activities will not impact known tribal cultural resources. Ground-disturbing activities associated with construction would have the potential to alter, remove, or destroy unanticipated tribal cultural resources, if present. A significant impact will occur if unanticipated tribal cultural resources are directly altered, removed, or destroyed by construction of the Project. These impacts will be reduced with implementation of Mitigation Measures TCR-1 (Native American Monitoring), TCR-2 (Unanticipated Discovery of Tribal Cultural Resources), and CR-1 (Development of Cultural Resources Monitoring and Discovery Program).

Reference in the Final EIS/EIR

Section 4.19.3.15.

Mitigation Measures

TCR-1 **Native American Monitoring.** Because of the potential to encounter previously undocumented Traditional Cultural Properties and/or Tribal Cultural Resources, a Native American monitor will be retained by the Los Angeles County Metropolitan Transportation Authority (Metro) to monitor project-related, ground-disturbing construction activities (e.g., grading, excavation, drilling, trenching) that occur within areas that are identified as having a moderate-to-high potential for containing prehistoric Native American remains, as specified in the Cultural Resources Monitoring and Discovery Program (CRMDP), as described in Mitigation Measure CR-1 (Development of Cultural Resources Monitoring and Discovery Program). The appropriate Native American monitors will be selected based on the tribal consultation under AB 52 and Section 106. Monitoring staff will be identified in the CRMDP. Monitoring procedures and the role and responsibilities of the Native American monitor will be outlined in the CRMDP. In the event that the Native American monitor identifies a cultural resource of Native American origin during construction, the monitor will be given the authority to temporarily halt ground-disturbing activities (if safe) within 50 feet (15 meters) of the discovery to investigate the find and contact the Project Archaeologist and Metro. The Native American monitor and consulting tribe(s) will be provided an opportunity to participate in the documentation and evaluation of the find and development of treatment, as necessary.

TCR-2 **Unanticipated Discovery of Traditional Cultural Properties/Tribal Cultural Resources.** In the event that cultural resources of Native American origin are identified during construction, all earth-disturbing work within a 50-foot radius of the find will be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. The specific procedures to be followed in the event of an unanticipated discovery of cultural resources of Native American origin will be identified in the Cultural Resources Monitoring and Discovery Program, as described in Mitigation Measure CR-1 (Development of Cultural Resources Monitoring and Discovery Program).

If Metro determines that the resource is a Traditional Cultural Property and/or Tribal Cultural Resource and is found significant under CEQA/Section 106, a treatment plan will be prepared and implemented in accordance with state guidelines and in consultation with Native American groups, as described below.

The treatment plan will be developed by a Secretary of the Interior qualified archaeologist in consultation with the State Historic Preservation Officer (SHPO) and with Native American contacts, as applicable. Metro will be responsible for ensuring that the treatment plan is developed and that consultation with stakeholders (e.g., tribes, SHPO) is completed. The treatment plan will be developed to ensure treatment of archaeological historic properties/historical resources meets the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation, the California Office of Historic Preservation's Archaeological Resources Management Report, Recommended Contents and Formats (1989), the Guidelines for Archaeological Research Design (1991), the Advisory Council on Historic Preservation's publication Treatment of Archaeological Properties: A Handbook, and the Department of the Interior's Guidelines for Federal Agency Responsibility under Section 106 of the National Historic Preservation Act.

The treatment plan will include the following: procedures required should archaeological historic properties/historical resources be determined to no longer be extant, methods for avoidance should avoidance be determined feasible upon discovery, and Phase III data recovery methods in the event that avoidance is infeasible. Phase III data recovery methods within the treatment plan would include, but not be limited to, research questions to be addressed by the study of each site; a description of methods, including excavation methods; data analysis; reporting requirements; and final disposition of recovered materials. The Phase III data recovery methods will also identify the thresholds at which point data redundancy is achieved. Phase III data recovery will ensure each site is adequately documented in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The treatment plan will be implemented when a determination is made that a property/resource cannot be avoided and will be adversely affected/significantly impacted by the Project.

CR-1 **Development of Cultural Resources Monitoring and Discovery Program.** Prior to the start of any ground-disturbing activity, an archaeologist that meets the Secretary of Interior's Professional Qualification Standards in Archaeology will prepare and implement a Cultural Resources Monitoring and Discovery Program (CRMDP) for the Project. The CRMDP will include the requirements of Mitigation Measures CR-2 through CR-4 and the following:

- A summary of the results of the West Santa Ana Branch Transit Corridor Project Final Cultural Resources Survey Report—Rev 2 and the West Santa Ana Branch Transit Corridor Project Revised Final Cultural Resources Effects Report.
- Procedures for avoidance of unanticipated discoveries where possible.
- Procedures for preservation in place of unanticipated discoveries where possible.
- Provisions of cultural resources awareness training to construction workers that will be implemented as part of Mitigation Measure CR-2 (Archaeological Work Environmental Awareness Program).
- Provisions for archaeological and Native American monitoring of ground disturbance related to construction of the Project.
- Summary of the treatment procedures for unanticipated discoveries, as specified in Mitigation Measure CR-4 (Treatment of Unanticipated Discoveries). This will include general research questions to be addressed by any studies, field, and

laboratory methods for the gathering of data to evaluate sites for the California Register of Historical Resources and/or National Register of Historic Places, and requirements for addressing any sites identified as significant.
- Procedures for Native American coordination and input.
- Procedures for the treatment of human remains, if applicable, as outlined in existing regulations. These procedures will include, but not be limited to, communication protocol for contacting the coroner and preparation of a human remains treatment plan in consultation with the Most Likely Descendant(s).
- Guidelines for the reporting of monitoring and treatment results.

Finding

Threshold TCR-CON-1 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures TCR-1 (Native American Monitoring), TCR-2 (Unanticipated Discovery of Tribal Cultural Resources), and CR-1 (Development of Cultural Resources Monitoring and Discovery Program), impacts related to tribal cultural resources during construction activities will be reduced to a less than significant level. Thus, with respect to Threshold TCR-CON-1 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.10 Parklands and Community Facilities

As discussed in Section 4.19.3.16 of the Final EIS/EIR, the Project will result in a potentially significant impact related to parklands and community facilities with respect to the following significance threshold:

- Threshold PARK-CON-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable standards for any park or recreational facility?

Impact

Threshold PARK-CON-1 (Construction)

Construction activities will result in temporary activities and require construction staging, materials stockpiling, hauling of dirt and materials, temporary street and lane closures, and TCEs. Temporary construction activities will be located within the public ROW and/or rail ROW or on sites acquired for construction activities. Construction activities will not be located on, and will not permanently disrupt, parklands, recreational facilities, bike facilities, and community facility properties. Pedestrian and bicycle access routes in the construction area will be temporarily disrupted during construction. In addition, off-street parking that may be used by parkland, recreational facility, bike facility, and community facility visitors may be temporarily removed for the duration of construction. Implementation of Mitigation Measure COM-1 (Construction Outreach Plan) will maintain access to parklands, recreational facilities, and community facilities during construction; and construction detour signage, barriers, and fencing will be provided.

Reference in the Final EIS/EIR

Section 4.19.3.16.

Mitigation Measures

COM-1 **Construction Outreach Plan.** Metro will develop a Construction Outreach Plan as part of Metro's Construction Relation & Mitigation Programs in Community Relations in

coordination with affected communities, community facilities, and businesses that will be implemented by Metro and its contractors during construction of the Project. The Construction Outreach Plan will include, but not be limited to, the following elements:

- Maintain access to community assets (including, but not limited to, schools and bike trails) and neighborhoods during construction as practicable
- Maintain access to businesses during the operating hours of the businesses as practicable
- Provide signage to direct pedestrians and motorists around construction areas; around sidewalk, street, and lane closures; to entrances of businesses and community assets; to maintain the flow of traffic around the construction area; and to notify pedestrians and motorists of any permanently closed streets prior to the closure of such streets
- Provide appropriate signage, barriers, and fencing for pedestrian and bicycle detour routes to prevent pedestrians and bicyclists from entering the construction zones
- Provide signage alerting potential customers that businesses are open during construction and clearly mark detours as appropriate
- Provide the public with updates, alerts, and schedules during construction and prior to the start of revenue service through informational meetings, the project website, and other forms of communication such as, but not limited to, mailings and flyers to businesses and residences with 0.25-mile of the construction zone
- Develop a mitigation plan to support businesses affected by construction to help reduce impacts to businesses during construction
- Coordinate construction activities with other capital improvement projects being carried out nearby to minimize construction impacts and competing needs for detour routes

Findings

Threshold PARK-CON-1 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure COM-1 (Construction Outreach Plan), impacts related to pedestrian and bicycle facilities during construction activities will be reduced to a less than significant level. Thus, with respect to Threshold PARK-CON-1 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

5.11 Economic and Fiscal Impacts

As discussed in Section 4.19.3.17 of the Final EIS/EIR, the Project will result in a potentially significant impact related to economic and fiscal impacts with respect to the following significance thresholds:

- Threshold ECON-CON-1: Would the Project result in substantial impacts to regional mobility and connectivity?
- Threshold ECON-CON-2: Would the Project result in substantial construction-related impacts to businesses and residences that would result in physical deterioration of the existing environment ?

Impact

Threshold ECON-CON-1 (Construction)

Construction activities will likely result in access modifications and potential delays on the transportation network that will result in temporary significant impacts to the surrounding communities. Mitigation Measures COM-1 (Construction Outreach Plan) and TRA-21 (Loss of Parking [Construction]) will be implemented to address impacts to mobility and connectivity. Implementation of these two measures during construction activities will address the potential construction impacts to businesses and residences located near construction areas and will minimize temporary effects.

Threshold ECON-CON-2 (Construction)

Construction will have beneficial economic and fiscal impacts related to direct and indirect effects from construction spending. While the construction spending effects will be a positive for the overall regional economy, construction will have potential impacts on businesses and residences near active construction areas. The Project will require additional ROW for the alignment, construction staging areas, and parking areas, resulting in displacements of businesses and residences. Affected property owners and tenants will be eligible for compensation or relocation assistance in accordance with state and federal law. Property owners will be compensated based on the highest and best use of the property. Construction activities will also cause temporary road closures, modified access, and construction-related nuisances (noise, dust, and vibration) that may deter potential customers from visiting the area while the Project is under construction. The temporary construction-related impacts will not lead to physical deterioration of the existing environment or "urban decay." Implementation of COM-1 (Construction Outreach Plan) and TRA-21 (Loss of Parking [Construction]), will further reduce impacts and minimize economic impacts.

Reference in the Final EIS/EIR

Section 4.19.3.17.

Mitigation Measures

COM-1 **Construction Outreach Plan.** Metro will develop a Construction Outreach Plan as part of Metro's Construction Relation & Mitigation Programs in Community Relations in coordination with affected communities, community facilities, and businesses that will be implemented by Metro and its contractors during construction of the Project. The Construction Outreach Plan will include, but not be limited to, the following elements:

- Maintain access to community assets (including, but not limited to, schools and bike trails) and neighborhoods during construction as practicable
- Maintain access to businesses during the operating hours of the businesses as practicable
- Provide signage to direct pedestrians and motorists around construction areas; around sidewalk, street, and lane closures; to entrances of businesses and community assets; to maintain the flow of traffic around the construction area; and to notify pedestrians and motorists of any permanently closed streets prior to the closure of such streets
- Provide appropriate signage, barriers, and fencing for pedestrian and bicycle detour routes to prevent pedestrians and bicyclists from entering the construction zones
- Provide signage alerting potential customers that businesses are open during construction and clearly mark detours as appropriate

- Provide the public with updates, alerts, and schedules during construction and prior to the start of revenue service through informational meetings, the project website, and other forms of communication such as, but not limited to, mailings and flyers to businesses and residences with 0.25-mile of the construction zone
- Develop a mitigation plan to support businesses affected by construction to help reduce impacts to businesses during construction
- Coordinate construction activities with other capital improvement projects being carried out nearby to minimize construction impacts and competing needs for detour routes

TRA-21 Loss of Parking (Construction)

Metro will coordinate with local jurisdictions to address the loss of public parking spaces during construction. This could include, but not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, phasing construction activities in a way that minimizes parking disruption, and adjusting the time limits for on-street parking.

Findings

Thresholds ECON-CON-1 and ECON-CON-2 (Construction): Under CEQA, economic and fiscal impacts are not treated as significant effects on the environment. (CEQA Guidelines, Section 15064(a)). The focus of CEQA is on the physical environment. To the degree, however, that a finding under Section 15091 is required with respect to ECON-CON-1 and ECON-CON-2, identified in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures COM-1 (Construction Outreach Plan) and TRA-21 (Loss of Parking [Construction], economic and fiscal impacts during construction activities will be reduced to a less than significant level. Thus, with respect to Thresholds ECON-CON-1 and ECON-CON-2 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a) of the CEQA Guidelines.

5.12 Safety and Security

As discussed in Sections 4.18.5.3 and 4.19.3.18 of the Final EIS/EIR, the Project will result in a potentially significant impact related to safety and security with respect to the following significance threshold:

- Threshold SAF-3 and SAF-CON-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact

Threshold SAF-3 (Operations)

The addition of light rail vehicles (LRV) and an increase in the frequency of trains will be the primary new safety hazard for pedestrians, bicyclists, and vehicular traffic for locations where the Project will cross streets at-grade. This impact will be addressed through design features of the LRV, such as audible warning devices to alert pedestrians, bicyclists, and vehicular traffic that an LRV is approaching. Per the Metro Rail Design Criteria (MRDC), pedestrian and bicycle traffic control and channelization techniques will also be used to control pedestrian and bicycle movements at intersections and encourage the use of designated crossings through pedestrian gates and crosswalks. Metro will also prepare grade-crossing applications for approval by the CPUC and in coordination with local public agencies. Additional safety and security design features may be incorporated, if necessary, following review of grade-crossing applications. Impacts will be further reduced through the incorporation and application of the MRDC or equivalent, CPUC rail crossing

rules and regulations, and requirements of the Manual on Uniform Traffic Control Devices. In addition, FTA-required hazard analyses will be prepared during preliminary engineering and final design stages of the Project to identify specific hazards.

Safety requirements for LRT operations and stations will be established in accordance with FTA and Federal Railroad Administration regulations (49 Code of Federal Regulations [CFR] 659), CPUC GO 164-E and GO 143-B requirements, the MRDC or equivalent, and with additional input from the freight operators for safety elements. The Project will also operate in accordance with Metro system safety plans, policies, and procedures, including the Metro System Safety Program Plan, the Metro System Security Plan, the Metro Standard Emergency Operating Procedures, and the Metro Rail Operating Rulebook.

The safety characteristics will reduce the potential for conflicts between freight and LRT service; however, impacts will not be completely avoidable and will be considered significant. Therefore, Mitigation Measure SAF-1 (Encroachment Detection) has been identified so that additional safety measures are incorporated to lower impacts from LRT operations and freight operations within shared ROW to less than significant levels.

The LPA will provide security features to support the prevention of crime and terrorism. The LPA will comply with Metro's MRDC or equivalent and security plans, incorporate Crime Prevention Through Environmental Design features, and include security patrols to minimize potential security concerns associated with criminal and terrorist activities. Design features and operational security features and requirements will help prevent crime and terrorism.

Threshold SAF-CON-3 (Construction)

Temporary construction-related activities and conditions could impact pedestrian, bicyclist, and motorist safety. However, the Project will be constructed primarily along an existing rail ROW and, therefore, impacts on pedestrian and bicyclist safety will be minimal. Lane closures and detour routes will be provided for the public to safely navigate around at-grade construction. Fencing and barriers will be provided for all at-grade construction to prevent entry into active construction sites for the safety of pedestrians, bicyclists, and motorists.

Other impacts on pedestrian and bicyclist safety during construction of the Project may potentially occur along the Los Angeles River Bike Path, Rio Hondo Bike Path, San Gabriel River Bike Path, Artesia Historic District Recreational Trails, and Bellflower-Paramount Bike Trail. The existing pedestrian overcrossing at Paramount High School over the PEROW will be temporarily removed during construction of the Project, and a new, replacement pedestrian bridge will be constructed as part of the Project to maintain safe pedestrian connectivity at this location. A temporary detour route will be designated to provide safe access between Paramount High School and Paramount Park during construction of the Project.

Implementation of safety measures during construction of the Project will minimize potential hazards to pedestrians, bicyclists, and motorists. However, these same construction activities and the corresponding detour routes may interfere with or potentially block Safe Routes to School. Therefore, construction-related impacts on pedestrian and bicyclist safety along Safe Routes to School will be potentially significant during construction. However, with implementation of Mitigation Measure SAF-2 (School District Coordination), as well as elements of COM-1 (Construction Outreach Plan), construction-related impacts will be reduced to a less than significant level.

The potential for crime and protection of the public during construction is primarily related to construction equipment and staging areas that are not adequately secured. To reduce potential impacts, construction sites will include security features such as closed-circuit television, on-site guards and security teams, and perimeter fencing to prohibit unauthorized individuals from

accessing the area. However, crime from intentional acts against people and facilities cannot be completely eliminated. Therefore, Mitigation Measure SAF-3 (Construction Site Measures) will be implemented to reduce construction-related impacts.

Reference in the Final EIS/EIR

Section 4.18.5.3, Section 4.19.3.18.

Mitigation Measures

SAF-1 **Encroachment Detection.** Subject to coordination with the applicable stakeholders, the LPA will incorporate a means of encroachment detection along the portion of the corridor that shares right-of-way with freight operations. The encroachment detection system will detect unauthorized entry into Metro right-of-way, such as a freight train derailment. Prior to the start of service, Metro will develop a plan that outlines procedures should the encroachment detection system be triggered. In the event the intrusion detection system detects a possible derailment, all parties operating in the shared right-of-way corridor will be notified and train traffic (freight and light rail transit) will not be permitted to enter the area until the detection is investigated and the intrusion, if any, addressed to avoid possible derailments.

COM-1 **Construction Outreach Plan.** Metro will develop a Construction Outreach Plan as part of Metro's Construction Relation & Mitigation Programs in Community Relations in coordination with affected communities, community facilities, and businesses that will be implemented by Metro and its contractors during construction of the Project. The Construction Outreach Plan will include, but not be limited to, the following elements:

- Maintain access to community assets (including, but not limited to, schools and bike trails) and neighborhoods during construction as practicable
- Maintain access to businesses during the operating hours of the businesses as practicable
- Provide signage to direct pedestrians and motorists around construction areas; around sidewalk, street, and lane closures; to entrances of businesses and community assets; to maintain the flow of traffic around the construction area; and to notify pedestrians and motorists of any permanently closed streets prior to the closure of such streets
- Provide appropriate signage, barriers, and fencing for pedestrian and bicycle detour routes to prevent pedestrians and bicyclists from entering the construction zones
- Provide signage alerting potential customers that businesses are open during construction and clearly mark detours as appropriate
- Provide the public with updates, alerts, and schedules during construction and prior to the start of revenue service through informational meetings, the project website, and other forms of communication such as, but not limited to, mailings and flyers to businesses and residences with 0.25-mile of the construction zone
- Develop a mitigation plan to support businesses affected by construction to help reduce impacts to businesses during construction
- Coordinate construction activities with other capital improvement projects being carried out nearby to minimize construction impacts and competing needs for detour routes

SAF-2 **School District Coordination.** Metro will coordinate with and notify the school districts and individual school administrators to maintain or modify safe and convenient

pedestrian, bicycle, and bus routes to schools as necessary during and after construction. This also includes the publication and distribution of alternative pedestrian and bicycle route maps.

SAF-3 **Construction Site Measures.** Metro's contractor will provide safety and security measures at the construction sites and staging areas. Security measures will include barriers for excavations, installation of temporary barriers around perimeters, security patrols, and appropriate signage and lighting. The contractor will provide a safety and security plan to Metro for review prior to the start of construction.

Findings

Threshold SAF-3 (Operations): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure SAF-1 (Encroachment Detection), impacts related to safety and security during construction will be reduced to a less than significant level. Thus, with respect to Threshold SAF-3 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Threshold SAF-CON-3 (Construction): For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures COM-1 (Construction Outreach Plan), SAF-2 (School District Coordination), and SAF-3 (Construction Site Measures), impacts related to safety and security during construction will be reduced to a less than significant level. Thus, with respect to Threshold SAF-CON-3 identified in the Final EIS/EIR, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

6 FINDINGS REGARDING ENVIRONMENTAL IMPACTS FOUND TO BE LESS THAN SIGNIFICANT

Metro finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the Project are less than significant, and no mitigation is required.

6.1 Transportation

As discussed in Sections 3.6.2, 3.6.3, 3.6.4, and 3.7.4 of the Final EIS/EIR, the Project will result in a less than significant impact related to transportation with respect to the following significance thresholds:

- Threshold TRA-CON-1: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- Threshold TRA-2 and Threshold TRA-CON-2: Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
- Threshold TRA-CON-3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- Threshold TRA-4: Would the Project result in inadequate emergency access?

Impact

Threshold TRA-CON-1 (Construction)

Construction activities are temporary and will not conflict with plans, policies, or ordinances associated with the transportation system. All modes of transportation will be accommodated within the construction areas to the extent feasible. When closures will be needed, alternate routes will be provided to maintain connectivity for all modes of transportation.

Threshold TRA-2 (Operations)

Vehicle miles traveled (VMT) for the six-county county Southern California Association of Governments (SCAG) region was estimated using the Metro Travel Demand Model. The Project will have a less than significant impact because implementation of the Project will result in a decrease in VMT of approximately 0.02 percent under both the existing and horizon year scenarios. The conclusion is reinforced by guidance published by the Office of Planning and Research (OPR) in December 2018. CEQA Guidelines Section 15064.3(b)(2) provides that “[t]ransportation projects that reduce, or have no impact on, [VMT] should be presumed to cause a less than significant transportation impact." Similarly, the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018) notes that “transit and active transportation projects generally reduce VMT and therefore are presumed to cause a less than significant impact on transportation.”

Threshold TRA-CON-2 (Construction)

VMT during construction will be similar to existing conditions. Construction activity will be localized to the work area haul routes and will not significantly change vehicle circulation as a whole.

Threshold TRA-CON-3 (Construction)

Construction activity will require the temporary modification of existing transportation facilities, as needed. These temporary modifications will follow standard construction practices for temporary vehicle, freight, pedestrian, and bicycle handling that will minimize hazards.

Threshold TRA-4 (Operations)

The Project will not interfere with adopted emergency response or evacuation plans, emergency service providers, or otherwise increase the demand for emergency response services. The Project will not remove access routes used by existing emergency service providers. Delays in emergency response services or evacuation plans due to at-grade crossings gate down times will also be less than significant because these plans will not typically involve crossing active rail corridors. In addition, an Emergency Preparedness Plan will be integrated with local jurisdictional emergency response plans. This plan will reduce impacts on emergency access by establishing the roles and responsibilities that will be carried out by emergency response agencies in the event of a fire, medical, or security emergency. Through this process and coordination with local jurisdictions, operation of the Project will avoid interference with emergency response plans, minimize scenarios where the emergency response service providers are overtaxed, and reduce the potential for significant delayed response times.

Reference in the Final EIS/EIR

Section 3.6.2, Section 3.6.3, Section 3.6.4, Section 3.7.4.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that these transportation impacts will be less than significant.

6.2 Land Use and Planning

As discussed in Sections 4.1.5.1 and 4.19.3.1 of the Final EIS/EIR, the Project will result in a less than significant impact related to land use with respect to the following significance thresholds:

- Threshold LU-1: Would the Project physically divide an established community?
- Threshold LU-CON-2: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact

Threshold LU-1 (Operations)

Existing development has been built around the rail ROW, which physically separates the local neighborhoods and communities. The Project will introduce safety barriers along the alignment and stations to hinder illegal crossing of the rail tracks. In addition, pursuant to Mitigation Measures NOI-1 (Soundwalls) and NOI-5 (Freight Track Relocation Soundwalls), the Project will include soundwalls along portions of the alignment to reduce noise associated with LRVs and the relocated freight tracks at nearby sensitive receptors. These safety barriers and soundwalls are not expected to physically divide an established community because safe access and crossings throughout the community will be maintained at intersections and via crosswalks.

The Project will introduce street closures and/or modifications, vehicle-turning restrictions, and truck turn restrictions. Vehicular, bicyclist, and pedestrian access to the surrounding uses will be maintained by rerouting traffic to adjacent streets, and permanent access disruptions to existing land uses will not occur. The turning restrictions and street closures will not conflict with the surrounding land uses, will

not change or impair the function of the surrounding land uses, and will not physically divide an established community because the surrounding land uses will remain accessible.

The pedestrian bridge between the Paramount High School campuses will be demolished and reconstructed to maintain similar or improved pedestrian access. Parking facilities will operate entirely on-site and will not physically divide the surrounding community.

The MSF, including the lead tracks, will be designed following MRDC guidance or equivalent criteria. Fencing and/or walls will be placed around the perimeter of the MSF site, and MSF activities will operate entirely on-site. The MSF, including the lead tracks, will not involve roadway/ intersection closures or turning restrictions that will restrict access to residential neighborhoods or community assets. The lead tracks for the MSF will be constructed within the PEROW and will not divide the Bellflower Bike Trail. The MSF will not introduce any safety barriers that will physically divide an established community, and components associated with the MSF will not result in permanent access disruptions to the surrounding land uses.

Threshold LU-CON-2 (Construction)

Construction activities will be temporary and will not directly conflict with applicable regional and local land use plans, policies, and regulations. Construction of the Project will further the objectives of the SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) by providing jurisdictions the opportunities to develop compact communities around the public transit system, offering an alternative to automobile travel, and providing residents, visitors, and employees within the vicinity of the Project another mode of transportation to access regional destinations and employment areas.

TCEs and property acquisitions will be required for construction staging areas and construction support sites. Following construction, affected sites with TCEs are anticipated to be returned to preconstruction conditions, and acquired parcels will increase the opportunity for development in station areas. Because the acquired parcels will be Metro-owned, it will create additional opportunity for transit-oriented development (TOD). Metro's role in the ownership of these acquired parcels will be limited to that of a property owner as these parcels will be outside of the rail ROW, and the parcels will be subject to the land use controls of local jurisdictions. In addition, construction activities will be consistent with air quality plans and policies and noise ordinances to minimize construction impacts to surrounding land uses. Construction of the Project will further the goals, objectives, and policies of local land use plans as they relate to alternative transportation, public transportation, and future growth in transit within the respective jurisdictional boundaries.

Reference in the Final EIS/EIR

Section 4.1.5.1, Section 4.19.3.1.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to land use will be less than significant related to physically dividing established communities during operations and conflicting with land use plans, policies, or regulations during construction activities.

6.3 Community and Neighborhoods

As discussed in Sections 4.2 and Section 4.19.3.2 for unplanned population growth of the Final EIS/EIR, the Project will result in a less than significant impact related to population and housing with respect to the following significance thresholds:

- Thresholds COM-1 and COM-CON-1: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact

Threshold COM-1 (Operations)

The Project will not directly result in population growth within surrounding communities. The Project could indirectly affect growth and development by providing opportunities for TODs around stations. However, this development will be subject to approval by the city and to all applicable requirements and regulations of the affected city. It also is anticipated to be consistent with SCAG growth projections and will not induce growth beyond that already anticipated in the adopted growth projections for the region and in local community plans. The Project will be located in an area surrounded by urban uses with a limited number of vacant or underutilized parcels and is not expected to substantially change existing growth and development patterns.

Threshold COM-CON-1 (Construction)

Construction activities will be temporary and will not directly or indirectly induce unplanned population growth in the area. Construction workers are anticipated to be existing Metro workers or new workers who live within driving distance to the job site and will not require moving to the surrounding area for work.

Reference in the Final EIS/EIR

Section 4.2.5.1, Section 4.19.3.2.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to community and neighborhoods will be less than significant.

6.4 Acquisitions and Displacements

As discussed in Sections 4.3.5.1 and Section 4.19.3.3 for displacement of the Final EIS/EIR, the Project will result in a less than significant impact related to population and housing with respect to the following significance thresholds:

- Thresholds DIS-1 and DIS-CON-1: Would the Project displace substantial numbers of existing people, housing, or businesses, necessitating the construction of replacement housing or replacement business elsewhere?

Impact

Threshold DIS-2 (Operations)

The Project will require full and partial acquisitions on approximately 206 parcels (Table 4.3.1 of the Final EIS/EIR). Property acquisitions will be located in the Cities of Los Angeles, Huntington Park, Cudahy, South Gate, Downey, Paramount, Bellflower, Artesia, and Cerritos, and in unincorporated LA County. The Project will displace a total of approximately 59 businesses with an estimated 443 employees. The Project will displace 13 residential units and approximately 47 residential occupants. Based on 2023 market conditions, replacement sites for residential properties that are for sale or lease were identified in the affected and surrounding cities (Table 4.3.6 of the Final EIS/EIR). Unless there is a significant change in vacancy rates at the time of acquisition, there will likely be sufficient replacement sites to relocate all displaced residents and construction of new residences will not be required. Displacement of residential units and their occupants, or businesses and their employees, will not necessitate the construction of replacement housing or businesses.

For relocated businesses, an abundance of replacement sites currently available relative to the number of anticipated displacements suggests that replacement sites will be available in the future. However, a sufficient number of comparable replacement sites may not be available within displacement cities for select businesses. Nearby cities have a sufficient number of replacement sites available within 6 miles of the affected locations with the exception of the plant nursery property in the City of South Gate which may struggle to find a suitable replacement site to lease at the time of acquisition. A search for similar-sized vacant land for lease was conducted by using available listing services. The search resulted in no viable options within the city boundaries or within 6 miles of the affected property, suggesting that at the time of acquisition, finding suitable replacement sites may be challenging for the plant nursery property.

The MSF is currently developed with the Hollywood Sports Paintball & Airsoft Park and Bellflower BMX business. The MSF will displace this business, which operates with approximately 75 employees. Currently, an insufficient number of potential replacement sites for sale or lease exists to accommodate these types of displacements and the business may not be able to successfully relocate based on the size and specialized use. Thus, attempting to find a suitable relocation site may require the business to relocate so far from the displacement location that relocation will not be feasible. Metro will provide relocation assistance and compensation for identified eligible displaced businesses and residences as required under the Uniform Act and California Relocation Act.

Threshold DIS-CON-2 (Construction)

Construction-related acquisitions will be primarily located on acquired sites characterized as industrial, commercial, or vacant. Parcels to be fully acquired for construction will require the demolition of existing structures on the properties and require the relocation of existing businesses. TCEs will not change the primary function of the existing use. Parcels with TCEs are anticipated to be returned to preconstruction conditions once construction is completed. For construction staging areas that require full permanent acquisitions, those sites will not be returned to preconstruction conditions, but rather will be used for permanent elements for the Project, such as station parking facilities and the MSF, at the conclusion of construction and to support operation of the Project. Construction staging areas and construction support sites for the Project will not require the relocation or demolition of residential uses. Metro will provide compensation for identified eligible businesses and residents affected during construction.

Reference in the Final EIS/EIR

Section 4.3.5.1, Section 4.19.3.3.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to acquisitions and displacements will be less than significant.

6.5 Visual and Aesthetics

As discussed in Section 4.4.5.4 of the Final EIS/EIR, the Project will result in a less than significant impact related to aesthetics with respect to the following significance thresholds:

- Threshold VIS-4: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact

Threshold VIS-4 (Operations)

Project lighting will primarily emanate from LRVs and station areas (including at-grade and above-grade station platforms and parking facilities), and will primarily occur along the rail ROW, street rights-of-way, and/or new parking facilities. Lighting will be designed per MRDC or equivalent and will be directed toward the rail ROWs, street rights-of-way, and/or new parking facilities to minimize potential spillover onto surrounding properties. Light emanating from aerial structures will be directed away from adjacent residential uses and other light-sensitive use.

Lighting from LRVs (on at-grade tracks and on aerial structures) is not expected to extend beyond the rail ROWs or public street rights-of-way. Light intensity from LRVs is expected to be comparable to lighting from existing buildings, vehicles, LRVs from the existing Metro A (Blue) Line (along the Wilmington Branch ROW), freight trains along the rail ROWs, and the Paramount Bike Trail. South of Somerset Boulevard, LRVs will be a new source of transportation-related light within the Affected Area since the PEROW south of Somerset Boulevard does not have any existing transportation-related lighting (e.g., freight trains and LRVs). However, light intensity from the LRVs south of Somerset Boulevard will be consistent with vehicle lights along surrounding streets, and recreational trails including the Bellflower Bike Trail and Artesia Historic District Recreational Trails. Existing walls that separate adjacent properties from the PEROW will limit the amount of light along the PEROW from spilling over onto adjacent properties.

None of the project components (i.e., stations and associated infrastructure) are expected to be a substantial source of glare. Vertical stainless-steel elements and glass panels could create new sources of glare; however, based on Metro design criteria and standards, the station elements that will use stainless-steel materials will be dulled to reduce glare.

Reference in the Final EIS/EIR

Section 4.4.5.4.

Mitigation Measures

Impacts under the threshold summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to aesthetics will be less than significant.

6.6 Air Quality

As discussed in Sections 4.5.5.1 through 4.5.5.4 and Section 4.19.3.5 of the Final EIS/EIR, the Project will result in a less than significant impact related to air quality with respect to the following significance thresholds:

- Threshold AQ-1 and Threshold AQ-CON-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?
- Threshold AQ-2 and Threshold AQ-CON-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant under an applicable federal or state ambient air quality standard?
- Threshold AQ-3 and Threshold AQ-CON-3: Would the Project expose sensitive receptors to substantial pollutant concentrations)?
- Threshold AQ-4 and Threshold AQ-CON-4: Would the Project result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?

Impact

Threshold AQ-1 (Operations)

The applicable air quality plan is the South Coast Air Quality Management District (SCAQMD) 2022 Air Quality Management Plan (AQMP). The 2022 AQMP incorporates regional growth projections from the SCAG 2020–2045 RTP/SCS, and the two plans are heavily interrelated. The Project is included in the 2020-2045 RTP/SCS under Project ID 1TR1011, and an updated entry for the Project is included in Draft Amendment #3 that reflects the revised project scope and cost. On June 5, 2020, the Federal Highway Administration and FTA determined that the 2020-2045 RTP/SCS is in conformity with the State Implementation Plan. Amendment #3 to the 2020–2045 RTP/SCS was approved in June 2023. Demonstrating conformity with the State Implementation Plan is a crucial element of transportation planning, as it ensures that the projects approved for implementation will not create emissions of air pollutants that will impede or delay improvements in regional air quality achieved by various control strategies. The expansion of LRT infrastructure and the displacement of VMT are critical components of regional transportation planning initiatives to improve air quality and public health. The OPR recommends streamlining the environmental analyses of transit and active transportation projects that reduce VMT, as decreasing vehicle travel is widely acknowledged to directly correlate with improving air quality.

The Project will improve regional connectivity and encourage transit ridership, and will induce changes in regional transportation patterns by replacing vehicle trips with transit ridership. Every displaced vehicle ignition that is started up and VMT induced by project implementation will indirectly reduce regional emissions related to transportation. As shown in Table 4.5.3 of the Final EIS/EIR, the Project (if operational in 2017) would have reduced daily VMT by approximately 71,845 vehicle miles relative to Existing Conditions. By 2042, the Project will reduce daily VMT by approximately 130,870 vehicle miles compared to the No Project Alternative. The VMT displacement will reduce emissions associated with vehicle exhaust and road dust from passenger vehicle trips that will not occur with implementation of the Project. The displacement of 71,845 daily regional on-road VMT will more than offset the increase in Metro vehicle activities. The changes in emissions associated with VMT displacement are induced, indirect air quality benefits. As presented in Table 4.5.10 of the Final EIS/EIR, daily operational emissions will remain below applicable SCAQMD

thresholds for all criteria pollutants and ozone precursors and will not contribute to an increase in the frequency or severity of air quality violations in the context of Existing Conditions.

The MSF will be located in Bellflower and will be the predominant source of direct and indirect air pollutant emissions introduced to the SCAQMD jurisdiction during future operations, generating up to approximately 250 additional vehicle trips per day. The AQMP consistency analyses considers the MSF as a component of the Project, as the MSF will not function independently of the LRT. Table 4.5.11 of the Final EIS/EIR presents operational emissions associated with the MSF in 2017 and compares them to the SCAQMD mass daily air quality significance thresholds at the regional and localized levels. Daily emissions of criteria pollutants and ozone precursors will remain below applicable thresholds at both levels of analysis in this 2017 scenario. Due to improvements in engine technologies, fuel efficiency, and more stringent regulations, operational emissions for the MSF will be lower in 2042 than in 2017.

The Project will reduce emissions of criteria pollutants and ozone precursors relative to the No Project Alternative, with the exception of a minor increase in reactive organic gas emissions associated with MSF operations. The incremental increase in reactive organic gas emissions is below the regional screening threshold and will not cause a significant impact. Therefore, the Project will provide environmental benefits related to air quality and emissions of nonattainment pollutants and will result in a less than significant impact related to conflicts with the 2022 AQMP.

The Project will not introduce new population or housing growth into Los Angeles County, and the expansion of Metro operations will represent a negligible increase in regional employment compared to the 1.35 million jobs that are anticipated to be created in Los Angeles County between 2015–2040. As such, the Project is consistent with the objectives and assumptions of the 2022 AQMP, and thus will not interfere with the region's ability to attain the air quality standards on the designated schedule.

Threshold AQ-CON-1 (Construction)

The Project will involve a variety of construction activities throughout the project corridor and will be conducted in accordance with the Metro *Green Construction Policy* consistent with Project Measure AQ PM-1 (Metro Green Construction Policy). The emissions modeling results presented in Table 4.19.9 of the Final EIS/EIR demonstrate that construction activities will not produce emissions exceeding any regional mass daily threshold. Construction activities will not obstruct timely attainment of air quality standards as outlined in the 2016 AQMP and 2022 AQMP.

Threshold AQ-2 (Operations)

The Project is located in the South Coast Air Basin, which is designated as in nonattainment of the federal and/or state ambient air quality standards for ozone and particulate matter. Therefore, there is an ongoing cumulative impact associated with these air pollutants. The potential for the Project to contribute to a permanent cumulative impact is assessed through consistency with air quality plans. The SCAQMD has promulgated guidance related to cumulative emissions, stating that if daily emissions associated with implementation of a project do not exceed any applicable regional or localized threshold values, those emissions would not be considered cumulatively significant. The Project is listed in the region's currently conforming 2020-2045 RTP/SCS. Furthermore, as shown in Table 4.5.10 of the Final EIS/EIR, the Project will not result in an incremental increase in daily emissions that will exceed any applicable SCAQMD threshold. The Project will decrease regional air pollutant emissions associated with on-road regional VMT in the horizon year of 2042. Permanent emissions associated with the project emissions will not be cumulatively considerable.

Threshold AQ-CON-2 (Construction)

The SCAQMD states that if a project generates daily emissions exceeding the project-level CEQA mass daily thresholds of significance, those emissions would also be considered cumulatively

considerable. Conversely, maximum daily emissions that do not exceed the regional threshold would also be determined to not be cumulatively considerable or significant. As demonstrated in the emissions analysis detailed in Table 4.19.9 of the Final EIS/EIR for construction of the transit system and Table 4.19.5 for construction of the MSF, construction emissions will not exceed the SCAQMD significance thresholds.

Threshold AQ-3 (Operations)

The Project will not introduce a new land use development that will constitute a substantial direct source of air pollutant emissions. Permanent sources of operational emissions will include LRT operations and maintenance activities at the MSF. Primary emissions sources at the MSF during operation will be consumer product use (e.g., solvents and cleaners) and ancillary activities (i.e., landscaping and building upkeep). The Project will be propelled by electricity, which produces negligible emissions of particulate matter compared to diesel-powered freight trains as there is no source of combustion emissions. The only source of particulate emissions associated with project operations within the corridor will be associated with brake dust resulting from frictional contact between the rail car wheels and the tracks since the cars will be powered by electric propulsion and not diesel-fueled internal combustion engines. Emissions of brake friction dust are reduced relative to diesel-powered trains because primary braking is regenerative through the electric motors of the LRT vehicles, and these emissions will be extremely minor. Future operation of the Project will result in a net decrease in particulate matter and dust emissions at the regional scale relative to the No Project Alternative, as shown in Table 4.5.10 of the Final EIS/EIR.

The Project will require freight track relocations in certain segments of the alignment. Regarding particulate emissions from freight train movements, the Project will not increase freight train activities at any location along the LRT alignment. Existing particulate matter emissions and dust deposition are not related to the environmental effects of the Project itself. Review of observational counts taken at various points along the ROW indicate that existing average daily train pass-bys are only one or two per day. Any increases in freight activity will be separate from and independent of the Project. Furthermore, relocation of the existing train tracks by a distance of 15 to 20 feet will not increase particulate emissions from freight train movements and will not substantially alter dust deposition patterns from those movements. Additionally, ambient particulate matter concentrations and resulting dust deposition are anticipated to decrease between the existing environmental setting (2017) and the horizon year of project operations (2042) as a result of future implementation of control strategies outlined in the SCAQMD AQMP.

Threshold AQ-CON-3 (Construction)

The potential sensitive receptor exposures to substantial pollutant concentrations and the public health implications of construction emissions are assessed in both regional and localized contexts. The regional emissions analysis presented in Table 4.19.9 of the Final EIS/EIR for construction of the transit system and Table 4.19.15 of the Final EIS/EIR for construction of the MSF demonstrates that maximum daily regional emissions will remain below all applicable SCAQMD mass daily thresholds of significance.

The localized analysis assesses maximum daily emissions that will be generated by various construction activities occurring on 1- and 2-acre work sites. Exposure was considered for sensitive receptors located within approximately 80 feet of the construction sites. Tables 4.19.10 through 4.19.13 of the Final EIS/EIR for construction of the transit system and Table 4.19.14 of the Final EIS/EIR for construction of the MSF demonstrate that maximum daily localized emissions will remain below all applicable SCAQMD mass daily thresholds of significance. Construction activities will not generate regional or localized emissions that will potentially expose sensitive receptors to substantial pollutant concentrations.

Threshold AQ-4 (Operations)

The Project will not generate a substantial source of operational odors. Land uses and industrial operations commonly associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Any unpleasant odors from transit operations will be subject to management under the odor complaint tracking system mandated by SCAQMD Rule 402 (Nuisance), which prevents nuisance odor conditions. All trash receptacles at Metro station locations will be subject to regular servicing and maintenance to ensure that unpleasant odors do not emanate from waste bins and present unpleasant conditions to patrons.

The Project will not introduce a new substantial source of dust emissions. The Project will reduce daily VMT which will reduce regional mobile source emissions associated with both vehicle exhaust and re-entrained dust on the roadways.

Threshold AQ-CON-4 (Construction)

Construction activities will not generate a substantial source of construction odors or visible dust plumes. Construction of the Project will result in exhaust fumes through gasoline or diesel-powered equipment and asphalt paving. Such emissions will occur intermittently and associated odors will dissipate rapidly within the immediate vicinity of the work area. With implementation of Project Measure AQ PM-1 (Metro Green Construction Policy), construction activities will adhere to the stringent provisions of the Metro Green Construction Policy and employ BMPs to prevent the occurrence of a nuisance odor or dust plume in accordance with SCAQMD Rule 402 (Nuisance).

Reference in the Final EIS/EIR

Section 4.5.5.1 through Section 4.5.5.4, Section 4.19.3.5.

Project Measures

AQ PM-1 **Metro Green Construction Policy.** LPA construction activities will be conducted in compliance with the Metro Green Construction Policy and will implement Best Management Practices contained therein as practicable.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that air quality impacts will be less than significant.

6.7 Greenhouse Gas Emissions

As discussed in Sections 4.6.5.1, 4.6.5.2 and 4.19.3.6 of the Final EIS/EIR, the Project will result in less than significant impacts related to greenhouse gas (GHG) emissions with respect to the following significance thresholds:

- Thresholds GHG-1 and GHG-CON-1: Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Thresholds GHG-2 and GHG-CON-2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?

Impact

Threshold GHG-1 (Operations)

Operational activities will generate direct GHG emissions through operations at the MSF, and indirect GHG emissions will be generated through energy use (i.e., LRT propulsion, lighting and accessory equipment at station platforms, and MSF operations). As demonstrated by the analysis in Table 4.6.5 of the Final EIS/EIR, LRT operations will reduce regional emissions by 8,202 metric tons of carbon dioxide equivalents ($MTCO_2e$) annually (0.013 percent decrease) in the operational horizon year of 2042. The MSF site will result in the consumption of fuels and electricity generating approximately 712 $MTCO_2e$ of operational emissions. The MSF site will comply with mandatory Title 24 and CALGreen Building Code requirements, will achieve a minimum Leadership in Energy and Environmental Design Silver rating, and will contribute to a net GHG emissions reduction by contributing to implementation of the LRT and the associated VMT reductions. The Project is a regionally significant transit expansion that induces the displacement of on-road VMT and supports transportation planning efforts to reduce VMT and achieve GHG emissions reduction targets outlined in the California Air Resources Board (CARB) Climate Change Scoping Plan and the SCAG RTP/SCS. The Project is consistent with statewide plans and policies to reduce GHG emissions from passenger vehicles by providing alternative transportation modes for both local and regional trips.

Threshold GHG-CON-1 (Construction)

Construction activities will generate GHG emissions through off-road heavy-duty equipment exhaust and on-road vehicle exhaust associated with construction workers, material deliveries, and hauling of materials. Construction activities will be conducted in accordance with Metro's Green Construction Policy to prevent excessive emissions per Project Measure AQ PM-1 (Metro Green Construction Policy). In addition, the Project will comply with the CARB In-Use Off-Road Diesel Vehicle Regulation and CARB Truck and Bus Rule which minimize GHG emissions generated by these sources. All equipment and vehicles will be maintained in accordance with optimal manufacturer specifications, and idling of equipment and vehicles will be restricted to less than five minutes. Table 4.19.16 of the Final EIS/EIR presents the source contributions to construction GHG emissions. Construction of the LRT system will generate approximately 25,743 $MTCO_2e$ and construction of the MSF will generate approximately 2,455 $MTCO_2e$, for a total of 28,198 $MTCO_2e$ over the approximate 8-year construction period. This mass quantity equates to approximately 940 $MTCO_2e$ annually when amortized over a 30-year operational lifetime. Emissions related to construction activities will be temporary; total construction emissions have been amortized over 30 years and included in the operational analysis. The generation of construction emissions is not considered significant as the emissions are related to the construction of a mass transit system, which has been identified by state and regional agencies as an efficient method of reducing statewide emissions. Temporary GHG emissions will be generated to construct an energy-efficient mass transit system that will reduce long-term regional GHG emissions.

Threshold GHG-2 (Operations)

No state, regional, or local GHG reduction plans promote increased passenger vehicles on the roadway network. Reducing VMT is identified in the 2022 Climate Change Scoping Plan as an indispensable component of achieving the state's GHG emissions reduction targets. The Project will enhance regional transportation planning efforts to reduce VMT and GHG emissions from transportation sources. The Project is consistent with statewide plans and policies to reduce GHG emissions from passenger vehicles by providing alternative transportation modes for both local and regional trips. As shown in Table 4.6.1 of the Final EIS/EIR, the Project will reduce annual on-road VMT by approximately 25 million if operational in 2017 and will reduce annual on-road VMT by approximately 45 million in 2042. The MSF will be designed and constructed in compliance with mandatory Title 24 and CALGreen Building Code requirements and will achieve a minimum

Leadership in Energy and Environmental Design Silver rating. The MSF is a necessary component of the Project and will be consistent with applicable policies and plans designed to enhance sustainable development and reduce the regional GHG emissions inventory. Results of the emissions analysis determined that operation of the MSF will generate 712 $MTCO_2e$. Metro identifies transportation mode shift as the primary mechanism of GHG emissions displacement, and the expansion of public transit infrastructure is an essential element of statewide and regional GHG emissions reduction strategies within long-range planning objectives. The Project will be consistent with the 2022 Scoping Plan, the 2016-2040 RTP/SCS, and other relevant GHG reduction and conservation plans through achieving a net reduction in emissions.

Threshold GHG-CON-2 (Construction)

Construction activities for the Project will be conducted in accordance with Metro's Green Construction Policy to prevent excessive emissions per Project Measure AQ PM-1 (Metro Green Construction Policy). Best practices include Tier 4 emission standards for off-road diesel-powered construction equipment with greater than 50 horsepower and restricting idling to a maximum of five minutes. In addition, during construction Metro will comply with the CALGreen Code, which requires reduction, disposal, and recycling of at least 50 percent of nonhazardous construction and demolition debris. Temporary GHG emissions will be generated to construct an energy-efficient mass transit system that will reduce long-term regional GHG emissions. Construction of the Project will not interfere with GHG reduction plans, policies, or regulations.

Reference in the Final EIS/EIR

Section 4.6.5.1, Section 4.6.5.2, Section 4.19.3.6.

Project Measures

AQ PM-1 **Metro Green Construction Policy.** LPA construction activities will be conducted in compliance with the Metro Green Construction Policy and will implement Best Management Practices contained therein as practicable.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to GHG emissions will be less than significant.

6.8 Ecosystems and Biological Resources

As discussed in Section 4.8.5.1 of the Final EIS/EIR, the Project will result in a less than significant impact related to biological resources with respect to the following significance threshold:

- Threshold BIO-1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Impact

Threshold BIO-1 (Operations)

The Project will be located in a heavily developed/disturbed area and, as such, project operations will not present a new or unusual use within the area. As a result, the Project will be unlikely to directly or indirectly affect special-status species should they be present.

Reference in the Final EIS/EIR

Section 4.8.5.1.

Mitigation Measures

Impacts under the threshold summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that the biological resources impact related to candidate, sensitive, or special-status species during operations will be less than significant.

6.9 Geotechnical, Subsurface, and Seismic Hazards

As discussed in Sections 4.9.5.2 through 4.9.5.7 and Section 4.19.3.9 of the Final EIS/EIR, the Project will result in a less than significant impact related to geology and soils with respect to the following significance thresholds:

- Threshold GEO-CON-1: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?
- Threshold GEO-2 and Threshold GEO-CON-2: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?
- Threshold GEO-3 and Threshold GEO-CON-3: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?
- Threshold GEO-4 and Threshold GEO-CON-4: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?
- Threshold GEO-5 and Threshold GEO-CON-5: Would the Project result in substantial soil erosion or the loss of topsoil?
- Threshold GEO-6 and Threshold GEO-CON-6: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
- Threshold GEO-7 and Threshold GEO-CON-7: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact

Threshold GEO-CON-1 (Construction)

The design features being considered are not uncommon for the Los Angeles region. The improvements included in the Project are shallow from a geologic perspective and will not exacerbate existing geologic conditions related to active faulting during construction. Impacts will be less than significant.

Threshold GEO-2 (Operations)

The potential to experience substantial seismic ground shaking is a common hazard for every project in Southern California, and the hazard cannot be avoided. Structures (aerial, at-grade, and underground) have been and continue to be successfully designed and constructed based on mandatory design criteria. Operation of the Project will not have an adverse effect on the geologic environment. The design features being considered are not uncommon for the Los Angeles region and will not exacerbate existing geologic conditions related to seismic shaking. Project Measure GEO PM-1 (Geotechnical Design [Operation]) mandates that the Project be designed to accommodate the anticipated levels of ground shaking associated with a design seismic event, and structures will perform in accordance with regulatory standards. Considering the seismic design requirements mandated by Project Measure GEO PM-1 (Geotechnical Design [Operation]), project operations will not result in significant impacts, including the risk of loss, injury, or death, related to seismic shaking.

Threshold GEO-CON-2 (Construction)

Construction of the Project will not have significant impacts on the seismic potential of the geotech Affected Area. The project design features being considered are not uncommon for the Los Angeles region. The project components are shallow from a geologic perspective and will not exacerbate existing geologic conditions related to seismic shaking.

Threshold GEO-3 (Operations)

The seismic-related ground failure hazard is a well-known hazard in Southern California and structures (aerial, at-grade, and underground) have been and continue to be successfully designed and constructed based on the referenced mandatory design criteria. The Project could be exposed to seismic-related ground failure, including liquefaction, lateral spreading, and seismically induced settlement. As mandated by Project Measure GEO PM-1 (Geotechnical Design [Operation]), the Project will be designed to accommodate the anticipated levels of deformation associated with a design seismic event, and structures will perform in accordance with the MRDC maximum design earthquake and operating design earthquake thresholds. Where warranted by site-specific subsurface conditions identified during the geotechnical investigations for the Project, design enhancements (e.g., ground improvements or structural enhancements) can reduce potentially significant impacts to acceptable limits for the structure. Considering the seismic design requirements mandated by Project Measure GEO PM-1 (Geotechnical Design [Operation]), operation of the Project will not result in substantial adverse effects, including the risk of loss, injury, or death related to seismic-related ground failure, including liquefaction. Operation of the LPA will not have an adverse effect on the geologic environment. The design features being considered are not uncommon for the Los Angeles region and will not exacerbate existing geologic conditions related to seismic-related ground failure. Therefore, impacts will be less than significant with design and construction performed in accordance with applicable design criteria, and mitigation will not be required.

Threshold GEO-CON-3 (Construction)

Construction of the LPA and MSF will not result in significant impacts on the geologic environment of the Affected Area for geotech. The design features being considered for the Project are not

uncommon for the Los Angeles region and will not result in new liquefiable areas or exacerbate existing geologic conditions related to seismic-related ground failure, including liquefaction.

Threshold GEO-4 (Operations)

The landscape within the geotech Affected Area is relatively flat, and no landslides have been mapped in the vicinity of the Project. Natural landslides are not considered a hazard to the Project. Operation of the Project will not have a potentially significant impact on the geologic environment. The Project design features being considered are not uncommon for the Los Angeles region and will not exacerbate existing geologic conditions. Project Measure GEO PM-1 (Geotechnical Design [Operation]) further ensures that the Project design and operation will comply with applicable design criteria and regulatory standards.

Threshold GEO-CON-4 (Construction)

The landscape within the geotech Affected Area is relatively flat, and no landslides have been mapped in the vicinity of the Project. Construction activities for the Project could result in impacts related to unconsolidated/saturated alluvial soils if construction (deep excavations) directly or indirectly causes settlement resulting in distress to existing adjacent improvements. Unconsolidated or water-saturated alluvial soil deposits can be encountered during deep excavations. Shoring, casing, or other ground-stabilization methods will be used to minimize impacts during excavations. All temporary excavations will be performed in accordance with the safety requirements of the California Division of Occupational Safety and Health. Temporary excavation bracing will be designed to protect adjacent structures, traffic, utilities, and construction personnel. Suitable factors of safety will be used in the design of the temporary supports. Performance of the temporary construction must conform to the requirements stated in the MRDC or equivalent. Project Measure GEO PM-2 (Geotechnical Design [Construction]) mandates compliance with standards, requirements, and guidance related to unconsolidated/saturated alluvial soils.

Threshold GEO-5 (Operations)

The Project is located in an urban setting and the topsoil layer in most of the geotech Affected Area has been disturbed or concealed by previous human activities. Potential impacts could involve the loss of topsoil as an agricultural resource and loss of an erosional barrier. Project operation will not result in ground-surface disturbance, site clearance, excavation, or grading that would otherwise create the potential for soil erosion to occur. The Project will operate on designed and constructed facilities implemented in accordance with state and local guidelines regarding erosion. Additionally, a required Stormwater Pollution Prevention Plan and Water Quality Control Plan will be in place as part of operation, among other regulatory requirements.

Threshold GEO-CON-5 (Construction)

The Project is located in an urban setting and the topsoil layer in most of the geotech Affected Area has been disturbed or concealed by previous human activities. Construction activities will result in ground-surface disturbance during site clearance, excavation, and grading that could create the potential for soil erosion. The Project will be designed and constructed in accordance with state and local guidelines regarding erosion control and management. Additionally, a Stormwater Pollution Prevention Plan and Water Quality Control Plan will be required as implementation elements of the Project, which will limit potential impacts related to erosion.

Threshold GEO-6 (Operations)

See Threshold GEO-3 regarding the CEQA determination for ground failure (including liquefaction and lateral spreading) and Threshold GEO-4 for the landslide hazard determination.

The geotech Affected Area may be prone to collapse or settlement, which can result in differential movement beneath foundations potentially causing distress to above-grade and at-grade structures. As such, operation of the above-grade and at-grade structures associated with the Project could subject people and structures to the effects of ground settlement, which could result in damage to structures. Detrimental ground settlement from new structures or earth loads is typically alleviated by removal and replacement of the settlement/collapse-prone soils. Additionally, implementation of ground improvement methods (similar to those indicated for liquefaction) and structural support systems will minimize the potential for impacts related to collapse or settlement. As part of Project Measure GEO PM-1 (Geotechnical Design [Operation]), the Project will be designed in accordance with the mandatory design requirements of the MRDC or equivalent, including design criteria identified in the geotechnical design reports from site-specific geotechnical investigations. The geotechnical design reports' recommendations will specifically address detrimental ground settlement from new project structures or earth loads.

Regional subsidence results from the withdrawal of groundwater and/or hydrocarbons from the subsurface. The California Department of Water Resources estimated the potential for future land subsidence within the geotech Affected Area to be low because groundwater withdrawal is restricted and managed, and, where performed, it is compensated for by reinjection of water in volumes similar to what is withdrawn.

Threshold GEO-CON-6 (Construction)

Construction activities will not generate new natural geologic hazard areas (landslide, lateral spreading, subsidence, liquefaction, or collapse) or result in significant impacts on the geologic environment. The design features being considered are not uncommon for the Los Angeles region and will not exacerbate existing geologic conditions related to potential on- or off-site lateral spreading, subsidence, liquefaction, or collapse or seismic-related ground failure, including liquefaction.

Threshold GEO-7 (Operations)

Clay-rich soils may exist locally within alluvial soils. The placement of structures on expansive soil could result in structural distress. Project Measure GEO PM-1 (Geotechnical Design [Operation]) mandates that structures for the Project be designed and constructed in accordance with MRDC and Los Angeles County Building Code standards or equivalent specific to expansive soils. These required design standards will yield structures that will tolerate the effects of expansive soil or the expansive soils will be remediated. Expansive soil remediation could include soil removal and replacement, chemical treatment, or structural enhancements.

Threshold GEO-CON-7 (Construction)

Construction activities for the Project will not have a significant impact on the expansive potential of the soils. The design features being considered are not uncommon for the Los Angeles region and will not exacerbate existing geologic conditions related to expansive soils during construction.

Reference in the Final EIR

Sections 4.9.5.2 through 4.9.5.7, Section 4.19.3.9.

Project Measures

GEO PM-1 Geotechnical Design (Operation). A number of geotechnical design reports are required for the Project, as detailed in the MRDC, Section 5.6, Geotechnical Investigations, Analysis and Design. Section 5.6 of the MRDC provides detailed requirements for planning and conducting a geotechnical investigation, geotechnical design methodologies, and reporting. In addition, and as referenced in the MRDC, Caltrans and

the County of Los Angeles Building Code have their own design requirements for bridges and aerial structures (Caltrans) and building structures (County of Los Angeles) that are required.

In accordance with the MRDC, geotechnical report recommendations will be incorporated into the project plans and specifications. These recommendations will be a product of the LPA design process and will address the subsurface hazards identified in this report. Without these report recommendations, the project plans and specifications will not be approved, and the LPA will not be allowed to advance into the final design stage or ultimately into construction. As a part of the Project, Metro has developed a comprehensive geotechnical field investigation and laboratory testing program (Metro 2020c) and is in the process of implementing the program. Findings from that program will be used to verify the information presented in the Final EIS/EIR.

GEO PM-2 Geotechnical Design (Construction). A number of geotechnical design reports are required for the LPA, as detailed in the MRDC, Section 5.6, Geotechnical Investigations, Analysis, and Design. Section 5.6 of the MRDC provides detailed requirements for planning and conducting a geotechnical investigation, geotechnical design methodologies, and reporting. In addition, and as referenced in the MRDC, Caltrans and the County of Los Angeles Building Code have their own design requirements for bridges and aerial structures (Caltrans) and building structures (County of Los Angeles) that are also required.

In accordance with the MRDC, geotechnical report recommendations will be incorporated into the LPA plans and specifications. These recommendations will be a product of the LPA design process and will address the subsurface hazards identified in this report. The design reports will also provide recommendations to be implemented during construction. The construction recommendations will address temporary excavations and ground settlement, and oil and gas hazards, and will include construction monitoring plans specific to the LPA. Implementation of the recommendations and monitoring plans will be required, as applicable, for both on-site and off-site properties and existing improvements that could be affected by an excavation.

Without these construction recommendations, the LPA plans and specifications will not be approved and the LPA will not be allowed to advance into the final design stage nor ultimately into construction. As a part of the LPA, Metro has developed a comprehensive geotechnical field investigation and laboratory testing program and is in the process of implementing the program. Findings from that program will be used to verify the information presented in the Final EIS/EIR.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that the above impacts related to geology and soils will be less than significant.

6.10 Hazards and Hazardous Materials

As discussed in Section 4.10.5.1 through Section 4.10.5.4, Section 4.10.5.6, Section 4.18.5.1, Section 4.19.3.10, and Section 4.19.3.18 of the Final EIS/EIR, the Project will result in a less than significant

impact related to hazards and hazardous materials with respect to the following significance thresholds:

- Threshold HAZ-1 and HAZ-CON-1: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Threshold HAZ-2: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- Threshold HAZ-3 and HAZ-CON-3: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Threshold HAZ-4 and HAZ-CON-4: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- Threshold HAZ-6 or SAF-1 and HAZ-CON-6 or SAF-CON-1: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact

Threshold HAZ-1 (Operations)

Operation of the Project is not expected to include the use of large quantities of extremely hazardous materials. However, maintenance activities may require use, handling, and transport of hazardous materials along the alignment. Limited quantities of hazardous materials may be temporarily stored or handled at the MSF. Cleaners and degreasers that could contain small amounts of hazardous or extremely hazardous materials, substances, or wastes may be used during operation of the MSF. Off-the-shelf products will be used in small quantities and exposure outside the facility will be unlikely. The routine transport, use, or disposal of hazardous materials or wastes will not exceed state threshold quantities specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code. Additionally, Project Measure HAZ PM-1 (Handling, Storage, and Transport of Hazardous Materials or Wastes [Operation]) will minimize the public risk from the transport of hazardous materials.

Threshold HAZ-CON-1 (Construction)

Construction contractors may use hazardous materials such as fuels, paints and coatings, solvents, and welding materials during construction of the Project. Upset and accident involving hazardous materials could expose workers and the nearby public to health risks and could contaminate the environment. Contractors will be required to implement federal and state handling and disposal regulations, which will reduce the risk of exposure to the public and the environment. Additionally, implementation of Project Measure HAZ PM-4 (Handling, Storage, and Transport of Hazardous Materials or Wastes) will minimize the risk of exposure to the public and the environment. Refer to Threshold HAZ-CON-2 for a discussion of hazardous and hazmat impacts associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

Threshold HAZ-2 (Operations)

Operation of the Project is not expected to include the use of large quantities of extremely hazardous materials. Maintenance activities may require the use of limited quantities of hazardous materials (such as herbicides or cleaners) associated with routine maintenance of rail facilities. The use of hazardous materials will be limited, and any use will occur in accordance with all federal and state regulatory requirements that are intended to manage hazards and prevent spills. Additionally,

implementation of Project Measure HAZ PM-1 (Handling, Storage, and Transport of Hazardous Materials or Wastes [Operation]) will minimize the risk of upset or accident release of hazardous materials.

Soil disturbance during maintenance activities is not anticipated to encounter hazardous materials. Project Measure HAZ PM-5 (Property Assessment-Phase I and II ESAs) requires that on-site soils be tested and remediated, if needed, prior to construction. Because pre-existing soil contaminants, if present above regulatory limits, will be removed prior to operation of the Project, these contaminants will not be encountered during maintenance of the Project.

The potential exists for residual contamination or common railroad corridor contaminants to be present in on-site soils. If future maintenance involving soil disturbance is necessary during operation of the Project, residual contamination or common railroad corridor contaminants present in on-site soils may create a hazard to the public or environment due to reasonably foreseeable upset and accident conditions involving the release of hazardous materials during soil disturbance. In the event that soil disturbance is necessary during operation, Project Measures HAZ PM-1 (Handling, Storage, and Transport of Hazardous Materials or Wastes [Operation]) and HAZ PM-3 (Contaminated Soil, Soil Vapor, and Groundwater [Operation]) will be implemented to identify and reduce potential contaminated soil disturbance impacts. With implementation of these project measures, impacts will be less than significant, and mitigation will not be required.

There are 21 sites with known groundwater contamination within the Affected Area for hazards and hazmat. In locations where groundwater has been contaminated, long-term groundwater monitoring or dewatering may be necessary during operation in order to manage and treat the contaminated groundwater. If long-term groundwater dewatering or monitoring is required, risk of upset or accident of hazardous materials may occur during handling and disposal of contaminated groundwater. Project Measures HAZ PM-2 (Disposal of Groundwater [Operation]) and HAZ PM-3 (Contaminated Soil, Soil Vapor, and Groundwater [Operation]) require appropriate management of hazardous materials and affected groundwater.

Threshold HAZ-3 (Operations)

There are 45 educational facilities located within the Affected Area for hazards and hazmat (educational facilities). Operation of the Project will not result in hazardous emissions or require handling of acutely hazardous materials, substances, or waste within 0.25 mile of educational facilities. Routine maintenance activities for the Project may require the use of small quantities of hazardous materials (such as herbicides or cleaners). Routine maintenance activities of the MSF will require the use of cleaners and degreasers, although off-the-shelf products will be used in small quantities and exposure outside the facility will be unlikely. The use of hazardous materials will occur in accordance with all federal and state regulatory requirements that are intended to manage hazards and prevent spills. Additionally, implementation of Project Measure HAZ PM-1 (Handling, Storage, and Transport of Hazardous Materials or Wastes [Operation]) will minimize the risk of hazardous waste emissions within 0.25-mile of a school.

Threshold HAZ-CON-3 (Construction)

There are 45 educational facilities located within the Affected Area for hazards and hazmat (educational facilities). Construction activities for the Project will not emit acutely hazardous materials or require handling of acutely hazardous materials, substances, or wastes within 0.25-mile of a school.

Threshold HAZ-4 (Operations)

The Project will be located near three Government Code Section 65962.5 (Cortese) hazardous material sites (the Jervis site, the Cooper Drum site, and the Southern Avenue Industrial Area site).

However, there is only one location where the Project footprint will occur within a Cortese site: TPSS Site #10 is present on the Jervis site. Project operation will also occur on other regulatory-listed sites, including a landfill, with hazardous material impacts in the soil, soil vapor, and/or groundwater. Minimal soil disturbance may be required for maintenance activities (such as trenching to repair underground signal lines or utilities that pass through the area). Project Measure HAZ PM-5 (Property Assessment-Phase I and II ESAs) requires that on-site soils be tested and remediated, if needed, prior to construction. Because pre-existing contaminants from hazardous materials sites, if present, will be removed prior to operations, contaminants associated with hazardous materials sites will not be encountered during operation and maintenance activities.

Threshold HAZ-CON-4 (Construction)

The Project footprint will be located within one Cortese site: TPSS Site #10 is present on the Jervis site. Additionally, one groundwater well at the Jervis site is located immediately east of TPSS Site #10 near Firestone Boulevard.

Potential impacts from construction activities with regard to Cortese and environmental concern sites include the potential exposure of construction workers or members of the public to chemical compounds in soils, soil gases, and groundwater, and exposure of workers, the public, and the environment to airborne chemical compounds migrating from the demolition, grading, or construction areas. Soil disturbance such as trenching, digging, and/or grading in contaminated areas could result in exposure of construction workers and the public or the environment to hazardous materials.

Construction activities could also encounter contaminants or interfere with the ongoing remediation efforts at some facilities. For example, a groundwater monitoring well may need to be relocated prior to construction, which will interfere with ongoing remediation efforts at Cortese and environmental concern site. Unless construction activities are properly coordinated with those site remediation activities, there could be a temporary increased risk of damage to or interference with ongoing site remediation activities such as soil containment areas, or potential negative influences on the control of contaminated groundwater due to construction dewatering activities. Construction activities could also result in the discovery of unanticipated contamination at known release sites, potential environmental concern sites, or historical environmental concern sites.

Construction contractors will be required to implement federal and state handling and disposal regulations, which would reduce the risk of exposure of the public and the environment to hazardous materials during transport and disposal of hazardous contaminants encountered during construction. Compliance with existing federal regulations pertaining to hazardous material handling, transport, and disposal and implementation of 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-7 (Disposal of Groundwater), and HAZ PM-9 (Contaminated Soil, Soil Vapor, and Groundwater) will reduce the risk of exposure of the public and the environment to hazardous materials used during construction. These measures will minimize the risk of exposure of the public or the environment to hazardous materials encountered because hazardous materials will be managed appropriately; property assessments (Phase I and II ESAs) will be completed prior to construction; contaminated groundwater will be managed appropriately; and contractors will be prepared to encounter known or undocumented hazardous materials.

Threshold HAZ-6 or SAF-1 (Operations)

The Project will not impair or interfere with adopted emergency response plans or evacuation plans because evacuation plans typically avoid crossing active rail corridors and the at-grade portions of the Project are located within active rail corridors. The aerial segments will not impair or interfere with adopted emergency response plans or emergency evacuation plans. The Project will include

development of a comprehensive Emergency Preparedness Plan, per CPUC General Order 164-E, that will be integrated with local jurisdictional emergency response plans. The Emergency Preparedness Plan will establish and coordinate the roles and responsibilities that will be carried out by Metro personnel and by various emergency response agencies in the event of a fire, medical, or security emergency. In addition to the Emergency Preparedness Plan, a Fire/Life Safety Report will be developed to explain the safety features in the proposed stations, the design specifics related to emergency access and egress, and the security and fire suppression systems.

Per FTA's System Safety Program Plans (49 CFR Part 659) and CPUC General Order 164-E requirements, Metro will be responsible for implementing or conducting a Threat and Vulnerability Assessment, Safety and Security Certification Plan, System Safety Management Plan provisions, and hazard analyses. Metro's Fire/Life Safety Committee will be responsible for overseeing project compliance with National Fire Protection Association 130 and Metro's Fire/Life Safety Design Criteria, as well as coordination with fire jurisdictions for design reviews, training, and familiarization. The Project will not impair or interfere with emergency response and evacuation plans.

Threshold HAZ-CON-6 or SAF-CON-1 (Construction)

Construction activities such as street or lane closures, roadway detours, increased traffic near emergency facilities or along emergency response routes, and construction staging plans could interfere with emergency response plans or emergency evacuation plans. Fire and emergency medical services personnel can use onboard live mapping software that alerts drivers of construction activities that may impede travel times to and from the scene of an emergency. Emergency responders are also able to see which roadways are experiencing delays due to construction, accidents, or other events, and take alternate routes. Additionally, Metro and the contractor will coordinate with police, medical, and fire service providers during construction activities.

Reference in the Final EIS/EIR

Section 4.10.5.1 through Section 4.10.5.4, Section 4.10.5.6, Section 4.18.5.1, Section 4.19.3.10, Section 4.19.3.18.

Project Measures

HAZ PM-1 Handling, Storage, and Transport of Hazardous Materials or Wastes (Operation). During Project operations, hazardous materials may be temporarily stored, handled, or transported along the alignment and at the MSF.

As required by Metro, the operator will provide an industrial waste management plan and/or waste and hazardous materials management plan, such as a plan defined in CCR, Title 19 or a Spill Prevention, Control, and Countermeasure Plan prior to the start of revenue service. This plan will identify the responsible parties and outline procedures for hazardous waste and hazardous materials handling, storage, and transport during operation of the LPA. The plan will be prepared to Metro Contractor specifications, submitted to Metro prior to operation, and will be implemented during operation. The plan will:

- Comply with prescribed BMPs to prevent hazardous material releases and cleanup of any hazardous material releases that occur
- Comply with the State Water Resources Control Board Construction Clean Water Act Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and other BMPs for storage of hazardous materials

Ground-disturbing activities could occur along the Project if trenches or other soil disturbing activities are needed to maintain or replace the rails or underground rail

features or utilities. If ground-disturbing activities occur during operation and undocumented hazardous materials are identified, the operator will comply with the plan identified above for known contaminant sources and applicable federal and state regulations, such as Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation, and Liability Act, the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act.

HAZ PM-2 **Disposal of Groundwater (Operation).** If disposal of contaminated groundwater is required during Project operations, (decontamination water, purge water, dewatering, etc.), the regional water LARWQCB will be consulted and Metro will comply with permits as required by the LARWQCB. LARWQCB may require that an individual NPDES permit and/or waste discharge requirements be obtained for dewatering and discharge activities. Additionally, the following agencies will be contacted as needed:

- City of Los Angeles Sanitation will be notified if contaminated groundwater will be discharged to the sewer system.
- City of Vernon Health and Environmental Control Department will be contacted if contaminated groundwater will be discharged to the stormwater system.
- County of Los Angeles Department of Public Health will be contacted if contaminated groundwater is encountered during dewatering within the boundaries of the following cities: Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Cerritos, Artesia, and the unincorporated community of Florence-Firestone.

The groundwater discharge and disposal requirements vary by agency, location, concentration, and contaminants of concern and are therefore developed in consultation with the agency and the project proponent.

HAZ PM-3 **Contaminated Soil, Soil Vapor, and Groundwater (Operation).** Prior to the start of Project operations, the operator will retain a qualified environmental consultant to prepare a Soil Management Plan, Soil Vapor Management Plan (and/or Landfill Gas Accumulation Management Plan), Soil Reuse Management Plan, and Groundwater Management Plan or a combined Soil, Soil Vapor, Soil Reuse, and Groundwater Management Plan to address the possibility of encountering contaminated soil, soil vapor, and groundwater during operation. These plans will be completed to Metro's contractor specifications and submitted to Metro prior to operation and any ground-disturbing activities for the Project.

Depending on the overall design of the LPA, contaminated soil, soil vapor, and/or groundwater may be encountered during normal Project operations (dewatering or soil vapor venting) or during repairs and maintenance along the alignment that involve disturbance of soil, soil vapor, or groundwater (trenching, potholing, and utility repairs).

The Soil and Soil Vapor Management Plans (and/or Landfill Gas Accumulation Management Plan) must establish provisions per Metro's contractor specifications for the disturbance of contaminated materials (known and undocumented). Proper management and disposition of contaminated soils will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (United States Environmental Protection Agency (USEPA), California Department of Toxics Substances Control (DTSC), LARWQCB, and other local agencies).

The Soil Reuse Management Plan must establish provisions per Metro's contractor specifications for the reuse of contaminated known or undocumented soils. Proper

management and disposition of contaminated soils will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, California DTSC, LARWQCB, and other local agencies).

The Groundwater Management Plan must establish provisions per Metro's contractor specifications for encountering and managing contaminated groundwater (known and undocumented). Proper disposal of contaminated groundwater will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, California DTSC, LARWQCB, and other local agencies).

Where open or closed regulatory release cases are already managed by a regulatory agency (e.g., USEPA, California DTSC, LARWQCB) and Metro's operation involves plans to alter the use of the site and/or disturb contaminated soil and/or groundwater onsite, Metro will notify the regulatory agency of the planned land use changes prior to ground-disturbing activities at the location of the open or closed regulatory release site. The regulatory agency will determine the level of investigation and/or remediation (performance standards) necessary on a case-by-case basis. A closure or no further action determination letter from the regulatory agency will be obtained when investigation and/or remediation is complete.

HAZ PM-4 Handling, Storage, and Transport of Hazardous Materials or Wastes. Prior to the start of construction, the contractor will provide Metro with an industrial waste management plan and/or a waste and hazardous materials management plan, such as a plan defined in CCR Title 19, or a Spill Prevention, Control, and Countermeasure Plan. These plans will be completed to Metro contractor specifications and will identify the responsible parties and outline procedures for hazardous waste and hazardous materials handling, storage, and transport during construction. The plan will specify how the contractor will handle and manage wastes on-site, including the following:

- Prescribe BMPs to follow to prevent hazardous material releases and cleanup of any hazardous material releases that may occur
- Comply with the SWRCB Construction Clean Water Act Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and other BMPs for storage of hazardous materials during construction (SWRCB 2017)
- During construction, the contractor will comply with applicable federal and state regulations that consider hazardous material handling and storage practices, such as the Resource Conservation and Recovery Act, the Comprehensive Environmental Response and Compensation Liability Act, the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act.

HAZ PM-5 Property Assessment – Phase I and II ESAs. Consistent with Metro's standard practice, prior to the start of construction, the contractor must provide Phase I ESAs in accordance with standard ASTM methodologies to assess the land use history of each parcel that will be acquired/utilized for the LPA, including the railroad corridor properties. The determination of parcels that require a Phase II ESA (i.e., soil, groundwater, soil vapor subsurface investigations) will be evaluated after the Phase I ESAs have been completed and will be based on the results of the Phase I ESAs. Specifically, if the Phase I ESAs identify suspected contamination in the soil, soil vapor, or groundwater, a Phase II ESA will be conducted to determine whether the suspect contamination resulted in soil, groundwater, or soil vapor contamination exceeding regulatory action levels.

If the Phase II ESA concludes that the site is contaminated, remediation or corrective action (e.g., removal of contamination, *in-situ* treatment, capping, venting, monitoring, alarm, and system activation measures) would be conducted prior to or during construction under the oversight of federal, state, and/or local agencies (e.g., United States Environmental Protection Agency, California Department of Toxics Substances Control, RWQCB, Los Angeles County) and in full compliance with current and applicable federal and state laws and regulations. Additionally, Voluntary Cleanup Agreements may be used for parcels where remediation or long-term monitoring is necessary.

HAZ PM-6 **Demolition Plans.** The contractor will prepare demolition plans for the safe dismantling and removal of building components and debris prior to construction. The demolition plans will be completed to Metro's contractor specifications and will include the following:

- Lead-based paint testing and abatement procedures
- Proper procedures for handling and disposal of lead and chromium in roadway paint striping
- Asbestos-containing materials testing and abatement procedures
- Polychlorinated biphenyls testing and abatement procedures

The demolition plans will be submitted to Metro for verification that appropriate demolition practices will be followed, consistent with federal and state handling and disposal regulations regarding asbestos-containing materials, lead, lead-based paint, and polychlorinated biphenyls.

HAZ PM-7 **Disposal of Groundwater.** If disposal of contaminated groundwater (decontamination water, purge water, dewatering, or underground structures [groundwater leakage into the final structure]) is generated during construction, the LARWQCB will be consulted and the Project will comply with permits as required by the LARWQCB. The LARWQCB may require that an individual NPDES permit and/or waste discharge requirements be obtained for dewatering activities. Additionally, the following agencies will be contacted as needed:

- City of Los Angeles Sanitation will be notified if contaminated groundwater will be discharged to the sewer system.
- City of Vernon Health and Environmental Control Department will be contacted if contaminated groundwater will be discharged to the stormwater system.
- County of Los Angeles Department of Public Health will be contacted if contaminated groundwater is encountered during dewatering within the boundaries of the following cities: Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Cerritos, and Artesia, and the unincorporated community of Florence-Firestone.

The groundwater discharge and disposal requirements vary by agency, location, concentration, and contaminant of concern and, therefore, are developed in consultation with the appropriate agency and the project proponent.

HAZ PM-8 Oil Well Abandonment. The Well Safety Devices for Critical Wells (CCR, Title 14, Section 1724.3) regulation governs safety devices required on "critical wells" located within 100 feet of an operating railway. Therefore, prior to demolition, grading, or construction within 400 feet of operating or abandoned oil wells, the contractor must perform the following steps in the Affected Area for hazards and hazmat (within 200 feet of the LPA footprint) to reduce risk:

- Notify CalGEM about planned subsurface work within 200 feet of the LPA footprint and use its Construction Site Review Plan Program to locate wells (CalGEM 2020).
- "Critical" oil wells within 100 feet of the construction footprint will be evaluated by CalGEM to determine if they require additional safety features. The definition of a critical oil well is set forth in CCR, Title 14, section 1720(a).
- The Department of Conservation's Geologic Energy Management Division (CalGEM, formerly DOGGR) Construction Site Well Review Program will be utilized per Section 3208.1 of the Public Resources Code and the local permitting agencies will also be consulted to evaluate whether any specific preconstruction requirements will apply to oil wells located within 100 feet of the construction footprint.
- Oil well abandonment must proceed in accordance with Sections 3228, 3229, 3230, and 3232 of the Public Resources Code. These requirements include written notification to CalGEM, protection of adjacent property, and before commencing any work to abandon any well, obtaining approval by CalGEM.
- Abandonment work, including sealing off oil and gas bearing units, pressure grouting, etc., must be performed by a state-licensed contractor under the regulatory oversight and approval of CalGEM.

Proper abandonment of oil wells must be conducted by the contractor prior to conducting subsurface activities that disturb soil, and documentation of the completed work will be provided to Metro. Documented wells in the Affected Area for hazards and hazmat and undocumented oil and gas wells encountered during construction will also be subject to this project measure.

HAZ PM-9 Contaminated Soil, Soil Vapor, and Groundwater. Prior to the start of construction, the contractor must retain a qualified environmental consultant to prepare a Soil Management Plan; Soil Reuse Management Plan; Groundwater Management Plan; Landfill Gas Accumulation Management Plan; and/or Soil, Soil Vapor, and Groundwater Management Plan. These plans must be completed to Metro's contractor specifications and submitted to Metro prior to any ground-disturbing activities for the LPA. Alternatively, Soil, Soil Vapor, and/or Groundwater Plans may be prepared separately or together as a Soil, Soil Vapor, and Groundwater Management Plan.

The Soil and Soil Vapor Plans (and/or Landfill Gas Accumulation Management Plan) must establish provisions per Metro's contractor specifications for the disturbance of contaminated materials (known and undocumented). Proper management and disposition of contaminated soils gases will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).

The Soil Reuse Management Plan must establish provisions per Metro's contractor specifications for the reuse of contaminated known or undocumented soils. Proper management and disposition of contaminated soils will be determined in consultation

with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).

The Groundwater Management Plan, which must be prepared prior to construction activities, will establish provisions per Metro's contractor specifications for encountering and managing contaminated groundwater (known and undocumented). Proper disposal of contaminated groundwater will be determined in consultation with appropriate regulatory agencies and in accordance with applicable federal and/or state guidance (USEPA, DTSC, RWQCB, and other local agencies).

Where open or closed regulatory release cases are already managed by a regulatory agency (USEPA, DTSC, RWQCB, etc.) and Metro plans to alter the use of the site and/or disturb contaminated soil and/or groundwater on-site, Metro will notify the regulatory agency of the planned land use changes prior to ground-disturbing activities at the location of the open or closed regulatory release site. The regulatory agency will determine the level of investigation and/or remediation (performance standards) necessary on a case-by-case basis. A closure or no further action determination letter from the regulatory agency will be obtained when investigation and/or remediation is complete.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that the above impacts related to hazards and hazardous materials will be less than significant.

6.11 Water Resources

As discussed in Section 4.11.1 through Section 4.11.5 and Section 4.19.3.11 of the Final EIS/EIR, the Project will result in a less than significant impact related to hydrology and water quality with respect to the following significance thresholds:

- Thresholds WR-1 and WR-CON-1: Would the Project violate any applicable water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
- Thresholds WR-2 and WR-CON-2: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?
- Thresholds WR-3 and WR-CON-3: Would the Project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would result in substantial erosion or siltation onsite or offsite?
- Thresholds WR-4 and WR-CON-4: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
- Thresholds WR-5 and WR-CON-5: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute

runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

- Thresholds WR-6 and WR-CON-6: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through addition of impervious surfaces, in a manner which would impede or redirect flood flows?
- Thresholds WR-7 and WR-CON-7: Would the Project be subject to inundation by seiche, tsunami, or mudflow?
- Thresholds WR-8 and WR-CON-8: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact

Threshold WR-1 (Operations)

The Project will result in new impervious areas that could increase the pollutant concentration in site runoff, resulting in an increase of total pollutant loading on the existing stormwater system. Additionally, rail operations will contribute pollutants in concentrations and amounts that are typical for transportation facilities and increased operation, including total suspended solids, metals, oil and grease, and debris. The Project will be subject to the Los Angeles County Regional Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit and Industrial General Permit (IGP) during the operational phase. The MS4 NPDES permit and other local stormwater policies require implementation of site design, source control, and treatment control BMPs to the maximum extent practical. The IGP requires preparation of an industrial Stormwater Pollution Prevention Plan (SWPPP) and a monitoring plan for industrial facilities, including vehicle maintenance facilities associated with transportation operations.

Threshold WR-CON-1 (Construction)

Construction activities could temporarily impact water quality, which could violate water quality standards or degrade surface or groundwater quality. To address these temporary impacts, the Project will comply with water-related Project Design Features and BMPs along with a SWPPP that complies with the Construction General Permit (CGP) and applicable water quality standards. Dewatering of the construction site will also be subject to the requirements of the Construction Dewatering Permit (Order No. R4-2018-0125). Construction within city rights-of-way (e.g., street intersection modifications) will be subject to building/encroachment permits issued by the relevant city. Similarly, construction within Los Angeles County ROW will be subject to an encroachment permit issued by the Los Angeles County Department of Public Works. Compliance with these permits will be mandatory and a condition of approval of the final construction permits for construction within public rights-of-way. These permits will require the Project to exhibit compliance with the total maximum daily standards. Further, all phases of construction will be subject to the CGP.

Groundwater could be contaminated with gasoline and petroleum hydrocarbons, dry-cleaning chemicals or other volatile organic compounds, or metals from previous site use or releases. Construction dewatering may be required to temporarily lower the groundwater level below the excavation depth or to an impermeable layer. Dewatering may also be required for bridge and structure footings. Dewatering facilitates installation of shoring systems improves soil stability and allows excavation in dry conditions. To dewater an area, groundwater will be pumped from wells installed around the perimeter of the excavation, limiting impacts on surrounding structures, ground, and utilities adjacent to the excavation. Contaminated groundwater could be disturbed during construction if dewatering activities occur in proximity to the groundwater release, which will result in an adverse effect. Therefore, depending on the final design of the Project, it may be necessary to monitor groundwater or dewatering during construction. In support of final design and

prior to the start of construction, known dewatering or groundwater monitoring sites will be used to analyze the quality of the groundwater to determine if hazardous materials are present. The applicable procedures will be identified based on the results of this review. If necessary, Project Measure HAZ PM-7 (Disposal of Groundwater) will be implemented as required by the local, regional, or state agencies.

Threshold WR-2 (Operations)

The Project will result in 40.9 acres of new impervious area within the Central Basin, including 3.6 acres associated with the MSF. By comparison, the entire basin is 177,000 acres. Groundwater recharge could be impeded if a substantial amount of pervious area were converted to impervious surfaces. The Project-related increase in impervious surfaces will be a negligible fraction of the entire aquifer area and will not affect the spreading grounds.

To minimize the impacts of new impervious area, the Project will comply with the post-construction and hydromodification requirements of the Los Angeles County MS4 NPDES permit along with design features. These design features include low impact development treatment controls, such as landscaping and permeable materials, to help offset the loss of permeable surfaces and provide treatment before runoff infiltrates the ground. Furthermore, most recharge to the groundwater supply in Los Angeles County comes from large, natural stream systems or constructed groundwater recharge basins, which will be minimally affected by the Project.

As noted under Threshold HAZ-2, it may be necessary to implement long-term groundwater monitoring or dewatering during operation. If this location also corresponds to a known groundwater release site, the dewatering activity will also need to include the handling of contaminated groundwater. Should long-term contaminated groundwater dewatering be necessary, HAZ PM-2 (Disposal of Groundwater [Operation]) will be implemented. This measure requires LARWQCB consultation and permit compliance with *Order No. R4-2018-0125 Discharge of Groundwater from Construction and Project Dewatering to Surface Waters,* which may include water disposal to the sanitary sewer or the proper on-site management of contaminated groundwater and disposal or recycling of contaminated groundwater off-site at appropriate waste management facilities.

Threshold WR-CON-2 (Construction)

Dewatering activities may impact groundwater by temporarily reducing the local groundwater elevation. Dewatering of the construction site will be subject to the requirements of the Construction Dewatering Permit (Order No. R4-2018-0125) and other applicable permits and, therefore, will not cause construction-related impacts on groundwater quality. Furthermore, the Project design features include a SWPPP that complies with the CGP.

Threshold WR-3 (Operations)

Implementation of the Project will require existing grade adjustments and an overall increase in impervious surfaces; however, it will not substantially alter drainage patterns. The existing topography within the area will be retained, and existing storm drainage systems will be preserved as much as possible for use during project operation. Therefore, the existing drainage pattern of the site and its surroundings will not change in a manner that will result in significant erosion or siltation on-site or off-site. Furthermore, implementation of project design features will avoid potential impacts.

Threshold WR-CON-3 (Construction)

Construction of the Project may temporarily increase the impervious area around construction sites (e.g., by installing access roads, contractor staging areas, or required localized changes in drainage patterns to control stormwater on and around the project site). Construction will minimize new impervious areas and will discharge runoff to existing storm drain systems. Existing drainage

patterns will be preserved. Construction activities could temporarily increase the potential for stormwater to come in contact with exposed soils. Furthermore, implementation of project design features will avoid potential impacts.

Threshold WR-4 (Operations)

Implementation of the Project will require existing grade adjustments and an overall increase in impervious surfaces. Storm drains will be modified as needed, and existing storm drainage systems will be preserved as much as possible for use during project operation. The existing topography within the area will be retained and drainage patterns will be preserved as much as possible. To minimize the impacts of new impervious area, the Project will implement design features and will maintain pre-development hydrology characteristics. The Project will comply with the post-construction and hydromodification requirements of the LA County MS4 NPDES permit. New or modified storm drainage systems will be designed to meet local and regional standards.

Threshold WR-CON-4 (Construction)

Construction activities for the Project may temporarily increase the impervious area around the project site (e.g., by installing access roads, contractor staging areas, or required localized changes in drainage patterns to control stormwater on and around the project site). Implementation of project design features and a SWPPP that complies with the CGP and applicable water quality standards will avoid potential impacts.

Threshold WR-5 (Operations)

The Project will not substantially alter drainage patterns or stream courses or substantially increase runoff that will contribute to exceedance of the capacity of stormwater drainage systems. The Project will also not provide additional sources of polluted runoff. With implementation of project design features, the Project will not result in significant impacts related to stormwater runoff.

Threshold WR-CON-5 (Construction)

Construction activities may temporarily increase the impervious area around construction sites (e.g., by installing access roads, contractor staging areas, or required localized changes in drainage patterns to control stormwater on and around the project site). This could temporarily increase the potential for stormwater to come in contact with construction-related contaminants. Implementation of project design features and a SWPPP that complies with the CGP will address these temporary impacts.

Threshold WR-6 (Operations)

The Project will cross three major flood-control channels, each with established floodplains: the Los Angeles River, the Rio Hondo channel, and the San Gabriel River. New bridges with piers or columns will be constructed within each of these flood-control channels. While each crossing will result in some change to the water surface elevation in each channel, changes to the water surface elevation at each river crossing are anticipated to be minor. The floodplains are protected by existing levees or channel walls. The Project will not alter the ability of the channel to convey 100-year flows, and there will be negligible change to the floodplain extents. In addition, tracks and aerial structures associated with the Project will be built above the existing river channel walls or levees.

Threshold WR-CON-6 (Construction)

Construction activities may temporarily increase the impervious area around construction sites (e.g., by installing access roads, contractor staging areas, or required localized changes in drainage patterns to control stormwater on and around the project site). These impacts will not substantially increase the rate or volume of stormwater flows. Where construction occurs in the Los Angeles River, the Rio Hondo channel, or the San Gabriel River, activities will comply with all applicable federal and

local floodplain regulations, including applicable National Flood Insurance Program regulations. Furthermore, implementation of project design features will avoid potential impacts by requiring the contractor to control stormwater runoff from the project site and avoid and minimize construction-related flooding impacts. In the event of a flood, construction equipment will be moved to minimize impeding or redirecting flood flows.

Threshold WR-7 (Operations)

Implementation of the Project will include new bridges across three major flood-control channels: the Los Angeles River, the Rio Hondo, and the San Gabriel River. New bridge deck structures will be built above the existing river channel walls or levees, with new bridge piers or columns built within the channels. Location hydraulic studies were prepared to evaluate the potential impacts on each river. The new bridges will raise the water surface elevation within the channel; however, the Project will not alter the ability of the channel to convey the 100-year flows, and there will be a negligible change to the floodplain extents.

No hazardous materials will be stored in the floodplain so as to avoid accidental release of pollutants in the event of project inundation. Therefore, the Project will not be at risk to release pollutants due to project inundation. Additionally, the Project is located more than 20 miles from the ocean and approximately 250 feet above mean sea level, which is outside of the Los Angeles County Tsunami Hazard Area, and no larger bodies of water subject to seiches are located near the Project.

Threshold WR-CON-7 (Construction)

The Project will include construction of new bridges across three major flood-control channels: the Los Angeles River, the Rio Hondo channel, and the San Gabriel River. New bridge deck structures will be built above the existing river channel walls or levees, with new bridge piers or columns built within the channel. Location hydraulic studies have been prepared to evaluate the impacts on each river. The new bridges will raise the water surface elevation within the channel; however, implementation of the Project will not alter the ability of the channel to convey the 100-year flows, and there will be negligible change to the floodplain extents. In the event of flood, hazardous materials used for construction activities will be moved or stored appropriately to minimize risk of release because of project inundation from flood water. The Project is located more than 20 miles from the ocean and approximately 250 feet above mean sea level, which is outside of the Los Angeles County Tsunami Hazard Area, and no larger bodies of water subject to seiches are located near the Project.

Threshold WR-8 (Operations)

Operation and maintenance activities for the Project could increase pollutant discharges to stormwater and/or groundwater that are typical for rail facilities (e.g., oils and grease, metals, solvents, pesticides). The Project will be subject to the IGP and the LA County MS4 NPDES permit during the operational phase and the CGP during the construction phase, each pursuant to the Los Angeles Basin Plan. The MS4 NPDES permit requires implementation of site design, source control, and treatment control BMPs to the maximum extent practical. The stormwater IGP (Order No. 2014-0057-DWQ [as amended by Order 2015-0122-DWQ]) requires preparation of an industrial SWPPP and a monitoring plan for industrial facilities, including the MSF. Compliance with these permits will be required by the LARWQCB as a condition of approval of the Section 401 Water Quality Certification or as conditions of various NPDES permits prior to implementation. Further, all phases of construction will be subject to the CGP.

The Project will be located within the Central Basin, which is an adjudicated basin and, therefore, not required to develop a groundwater management plan. The Central Basin is actively managed by Water Replenishment District of Southern California and subject to annual reporting for monitoring of groundwater levels and quality to confirm proper resource management. Therefore, the Project

will not obstruct implementation of a water quality control plan or sustainable groundwater management plan because no sustainable groundwater management plan is applicable to the Affected Area.

Threshold WR-CON-8 (Construction)

Construction activities could result in temporary impacts on groundwater resources. To address these temporary impacts, project design features along with a SWPPP that complies with the CGP and local water quality control plan will be implemented to avoid potential impacts. Construction site dewatering activities (if needed) will be permitted. Therefore, the Project will not obstruct implementation of a water quality control plan or sustainable groundwater management plan because no sustainable groundwater management plan is applicable.

Reference in the Final EIS/EIR

Section 4.11.5.1 through Section 5.11.5.8, Section 4.19.3.11.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to hydrology and water quality will be less than significant.

6.12 Energy

As discussed in Section 4.12.5.1 through Section 4.12.5.2 and Section 4.19.3.12 of the Final EIS/EIR, the Project will result in a less than significant impact related to energy with respect to the following significance thresholds:

- Thresholds ENERGY-1 and ENERGY-CON-1: Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?
- Thresholds ENERGY-2 and ENERGY-CON-2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
- Threshold ENERGY-CON-3: Would the Project require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Impact

Threshold ENERGY-1 (Operations)

Implementation of the Project will result in less annual energy use than the 2042 No Build Alternative (0.015 percent net decrease) as a result of decreased regional VMT and associated fuel use. Under the Existing + Project conditions, the Project would have resulted in 32,613 million British thermal units (MMBTU) less energy resource consumption than existing conditions had it been operational in the scenario year of 2017, which is a 0.004 percent reduction. Operation of the MSF will result in the consumption of petroleum transportation fuels, electricity, and natural gas and is a critical component of the Project. The MSF will use approximately 12,856 MMBTU per year in the operational scenario year of 2017. By 2042, MSF operations will consume approximately 10,450 MMBTU of energy annually. The MSF is required to operate the Project and is considered cumulatively with the effects of the increased LRT ridership and corresponding regional VMT

reductions. Overall, project operations will result in a net energy benefit. The Project will contribute to statewide and regional efforts to conserve transportation fuels and reduce on-road VMT, which are key elements of enhancing transportation efficiency and sustainability. The Project will not constitute a wasteful, inefficient, or unnecessary consumption of energy during operations.

Threshold ENERGY-CON-1 (Construction)

Construction of the Project, including the MSF, will require a one-time expenditure of approximately 2,143,114 gallons of renewable diesel fuel and 803,410 gallons of gasoline, which sums to the equivalent of 381,064 MMBTU. As the MSF is a critical component of the Project that will not be developed independently of the LRT alignment, energy consumption is accounted for in the overall analysis of the Project. Given that these fuels will be used to construct an energy-efficient mass transit system, the extensive network of fueling stations throughout the project vicinity, and the temporary nature of the construction activities, the Project will not require new or expanded sources of energy or infrastructure to meet energy demands and will not result in the wasteful or inefficient use of energy. In addition, construction activities will comply with Metro's Green Construction Policy per Project Measure AQ PM-1 (Metro Green Construction Policy) and construction equipment will be maintained in accordance with manufacturers' specifications and off-road equipment will be powered by renewable diesel fuel.

Threshold ENERGY-2 (Operations)

The Project, including the MSF, will be designed per the MRDC or equivalent and will implement mandatory Title 24 and CALGreen requirements as specified in the Metro Energy Conservation and Management Plan. In addition, the Project includes implementation of Measure AQ PM-1 (Metro Green Construction Policy) to be in compliance with Metro's Green Construction Policy. Implementation of the Project will contribute to improving regional transportation-related energy efficiency and decreasing reliance on petroleum-based transportation fuels. There are no state, regional, or local energy conservation plans that promote increasing passenger vehicle miles on the roadway network in place of mass transit. Implementation of the Project will be consistent with applicable regional and local conservation plans; and energy used for operation of the Project will not be considered a wasteful or inefficient use of energy as mass transit and reduced on-road VMT are key components of relevant energy conservation plans. Furthermore, the Project will be designed to provide electric vehicle-ready infrastructure and will consider opportunities to potentially accommodate solar energy installations should Metro pursue such projects in the future.

Threshold ENERGY-CON-2 (Construction)

Construction activities will be consistent with state and local energy plans and policies to reduce energy consumption. In addition, Project Measure AQ PM-1 (Metro Green Construction Policy) will be implemented during construction, which will require use of less-polluting construction equipment and vehicles and implementing best practices to reduce harmful diesel emissions, as well as requiring the exclusive use of renewable diesel fuel in off-road equipment. The Metro Green Construction Policy includes Tier 4 emission standards for off-road diesel-powered construction equipment with greater than 50 horsepower and restricting idling to a maximum of five minutes. The CALGreen Code requires reduction, disposal, and recycling of at least 50 percent of nonhazardous construction materials and requires demolition debris to be recycled and/or salvaged. The Project will comply with state and local plans for energy efficiency in construction activities.

Threshold ENERGY-CON-3

The Project will not require new or relocated distribution infrastructure such as transmission lines from power facilities and transformers. New connections between TPSS units and existing electrical utility lines will be constructed within the existing ROW, will not be related to supply or capacity

deficiencies, and will be similar to routine utility improvements (e.g., construction of new underground conduits).

Reference in the Final EIS/EIR

Section 4.12.5.1 through Section 4.12.5.2, Section 4.19.3.12.

Project Measures

AQ PM-1 **Metro Green Construction Policy.** LPA construction activities will be conducted in compliance with the Metro Green Construction Policy and will implement Best Management Practices contained therein as practicable.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to energy will be less than significant.

6.13 Historic, Archaeological, and Paleontological Resources

As discussed in Sections 4.14.5.1 and 4.19.3.14 of the Final EIS/EIR, the Project will result in a less than significant impact related to cultural resources with respect to the following significance thresholds:

- Threshold HIS-1: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- Threshold ARCH-CON-2: Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

Impact

Threshold HIS-1 (Operations)

Potential impacts to built environment historical resources in the Area of Potential Effect (APE) for the Project as a result of operation of the Project include those directly related to its operation (e.g., permanent visual effects, permanent property acquisitions and easements). Implementation of the Project will introduce new rail-related visual elements, including stations, rail tracks, catenary poles and wires, aerial structures, TPSSs, and soundwalls, to the existing built-up, urban landscape surrounding historical resources in the APE for the Project. Due to the nature of the existing urban setting surrounding historical resources, the introduction of additional rail-related features is consistent with and will not materially impair or reduce the integrity of historical resources.

Three historical resources in the APE for the Project will be altered by minor, small-scale permanent acquisitions or easements necessary for the construction or modification of infrastructure, such as curbs and sidewalks. These resources include 6101 Santa Fe Avenue [MRN 10-012] and 6020 Miles Avenue [MRN 10-021] in Huntington Park and Cudahy Substation [MRN 15-032] in Cudahy. Additionally, a small portion of the Southern California Edison Long Beach to Laguna Bell Transmission Line [MRN 18-016] corridor will be permanently acquired to enable construction of LRT tracks and a TPSS site within the corridor. Although these changes represent the physical alteration of these built environment resources, modifications are minor and consistent with the existing surroundings, which consist of a highly urbanized setting encompassing paved roadways, traffic signals, sidewalks, and curbs. The elements that will be introduced by the Project are in keeping with

the existing setting of these historical resources. Additionally, none of the built environment features within the boundaries of these resources will be altered as a result of modifications. Therefore, the acquisitions and proposed modifications will not significantly impact, materially impair, or reduce the integrity of these historical resources.

The Project will require the physical alteration of small portions of the 105 historic district (MRN 21-027) in Paramount, the Union Pacific Los Angeles River Rail Bridge (MRN 17-006) in South Gate, the Los Angeles River channel (MRN 17-007) in South Gate, the Rio Hondo channel (MRN 18-017) in South Gate, and the San Gabriel River channel (MRN 29-025) in Cerritos. None of the physical alterations to these five resources would materially alter the historic significance of any resources or their contributing elements.

In the **105 historic district**, implementation of the Project will require demolition and replacement of one character-defining bridge (the Century Boulevard Underpass), construction of a new infill Metro C Line station and associated vertical circulation elements in the median of I-105 below the existing Façade Avenue Overcrossing, realignment of 2,500 feet of existing Metro C Line LRT track to accommodate the infill station platform, and minimal removal and replacement of landscaping. Implementation of the Project will not result in the material impairment of the 105 historic district in accordance with CEQA Section 15064.5(b)(2), nor will it result in significant impacts to the district in accordance with CEQA.

While implementation of the Project will result in alterations and the loss of some historic fabric, alterations will not result in a diminished loss of historic fabric such that the historic district will no longer be eligible for inclusion in the CRHR and/or qualify as a historical resource under CEQA. The elements proposed for construction within the district, including the new LRT bridge, replacement freight bridge, and new Metro C Line station, will be designed in a manner compatible in massing, scale, and overall design with the district such that they will not significantly reduce the district's overall integrity. In the case of the new LRT and replacement freight bridges, a concrete relief consistent with that present on character-defining bridges will be integrated into bridge designs. In addition, Project Measure CR PM-1 (SOI Standards Design Review) will be implemented to support compliance with the SOI Standards and guidelines for Rehabilitation. Accordingly, design of the new LRT bridge and new infill Metro C Line station will be reviewed by a professional who meets the SOI Professional Qualification Standards in architectural history, history, or architecture as they advance to confirm they remain consistent with the fundamental principles of the SOI Standards and guidelines for Rehabilitation.

According to National Register Bulletin 15, for a historic district to retain integrity as a whole, the majority of the components that make up the district's historic character must possess integrity even if they are individually undistinguished, and the relationships among the district's components must also be substantially unchanged since the period of significance. Following implementation of the Project, a majority of the district's character-defining features will remain unaltered from their original state and will retain their relationships to one another. Therefore, the district will retain sufficient integrity to convey its historical associations. Proposed alterations within the historic district will enhance and improve its intermodal connectivity, which is one of the primary reasons the historic district is significant. Additionally, the California Department of Transportation considered construction of the LPA and accommodated for its new elements as part of its ExpressLanes Project. Thus, proposed alterations required by implementation of the Project will not materially alter the district in accordance with CEQA Section 15064.5(b)(2), and the district will continue to convey its historical significance and will remain eligible for inclusion in the CRHR.

Regarding the **Union Pacific Los Angeles River Rail Bridge**, implementation of the Project will require alteration of the bridge, including the extension of its existing nonoriginal concrete debris walls to the north. The existing bridge will remain intact and continue its historic and current use

following implementation of the Project. Modifications to the debris walls will be undertaken using materials consistent with the existing debris walls and piers, and the scale and massing of extended portions of the piers will be consistent with those currently extant. While the bridge's integrity of design, materials, and workmanship will be altered by the Project, modifications will be undertaken in a manner such that the historical resource will not be significantly impacted. Project Measure CR PM-1 (SOI Standards Design Review) will be implemented to support compliance with the SOI Standards and guidelines for Rehabilitation. Therefore, the Project will not alter any of the characteristics of the Union Pacific LA River Bridge that qualify it for inclusion in the NRHP, CRHR, and for local designation, nor will it diminish the integrity of its location, design, setting, materials, workmanship, feeling, and association such that it would be significantly impacted. Therefore, the Project will result in less than significant impacts to the Union Pacific LA River Bridge in accordance with CEQA.

Regarding the **Los Angeles River channel**, implementation of the Project will the addition of a new LRT bridge over the Los Angeles River channel and the partial removal of the existing debris walls attached to the Union Pacific Los Angeles River Bridge's piers to enable the reconstruction of extended pier walls to also support the new LRT bridge. The river channel's character-defining features include its orientation, roughly north-south, in addition to its overall size and shape, which enable it to effectively direct water throughout its length. Operation of the Project will not alter the segment's orientation or its overall size or shape and will not impact its ability to function in its historic or current capacity. The new LRT bridge and its associated features, including approximately 6-foot and 8-foot-tall soundwalls, rail track, and catenary poles and wires, are compatible with the subject segment's surrounding urban industrial setting, which includes numerous transmission lines, rail lines, and industrial and commercial properties. Additionally, many bridges dating from various construction periods cross the river channel throughout its 51-mile length. The introduction of an additional bridge within the subject segment is in keeping with the river channel's overall character and represents minimal change when considered in the context of its entire length.

The actions associated with the Project are confined to a small portion of the 51-mile-long historical resource and will not alter any of the characteristics of the subject segment that qualify it for inclusion in the NRHP or CRHR. Following completion of the Project, the Los Angeles River channel will continue to be used as it was historically. Therefore, the Project will result in less than significant impacts to the Los Angeles River channel in accordance with CEQA.

Regarding the **Rio Hondo channel**, implementation of the Project will result in introduce new permanent visual elements, most notably an LRT bridge, into the channel, approximately 15 feet west of the existing Rio Hondo Bridge, which is not a historical resource. The subject segment's character-defining features include its orientation, roughly northeast-to-southwest, which, in addition to its overall size and shape, enable it to effectively direct water through its length. While the Project will alter the channel by introducing a new bridge, piers, and abutments, the modifications will not result in significant impacts because the river's character-defining features will remain intact and the new project elements will be compatible with the design, workmanship, and materials found throughout the 16-mile-long river. The Project will not alter the segment's orientation or its overall size or shape and will not impact its ability to function in its historic and current capacity. The new LRT bridge and its associated features, such as rail track and catenary poles and wires, are generally compatible with the subject segment's surrounding setting, which includes the presence of built features, such as transmission lines, rail lines, and I-710, in addition to a variety of industrial and commercial properties. Additionally, many bridges dating from various construction periods cross the river channel throughout its 16-mile length. The introduction of an additional bridge within the subject segment is in keeping with the river channel's overall character and represents minimal change when considered in the context of its entire length.

The Project will alter only a small segment of the Rio Hondo channel and will not modify any of the characteristics of the property that qualify it for inclusion in the NRHP, nor will it diminish the integrity of its location, design, setting, materials, workmanship, feeling, and association. Following completion of the Project, the Rio Hondo channel will continue to be used as it was historically. Further, the actions proposed are small in scale when considered in the context of the 16-mile alignment of the river as a whole. Therefore, the Project will result in less than significant impacts to the Rio Hondo channel in accordance with CEQA.

Regarding the **San Gabriel River channel**, implementation of the Project will require introduction of a new LRT bridge to cross over the San Gabriel River channel in roughly the same location as the existing abandoned San Gabriel River Bridge, which will be demolished and is not a historical resource. The subject segment's character-defining features include its orientation, roughly north-to-south course which, in addition to its overall size and shape, enable it to effectively direct water through its length. Although the Project will introduce a new bridge, piers, and abutments, the channel's character-defining features will remain intact, and elements introduced by the Project will be compatible with the design, workmanship, and materials found throughout the 58-mile-long river channel. The new LRT bridge will not change the historic alignment of the channel or result in the removal or substantial alteration of its character-defining features. The Project will not alter the segment's orientation or its overall size or shape and will not impact its ability to function in its historic and current capacity. Additionally, while demolition and construction activities may require removal of concrete within the channel, all removed materials will be replaced in-kind. The replacement LRT bridge and its associated features, such as an approximately 10-foot-tall soundwall, rail track, and catenary poles and wires, are generally compatible with the subject segment's surrounding setting, which is highly urbanized and includes the presence of built features, such as transmission lines and existing rail lines, in addition to a variety of property types. Additionally, many bridges dating from various periods cross the river channel throughout its 58-mile length. The introduction of an additional bridge within the subject segment is in keeping with the river channel's overall character and represents minimal change when considered in the context of its entire length.

The alterations proposed as part of the Project are confined to a small portion of the San Gabriel River channel. The Project will not alter any of the characteristics that qualify it for inclusion in the NRHP, nor will it diminish the integrity of its location, design, setting, materials, workmanship, feeling, and association. Therefore, implementation of the Project will result in less than significant impacts to the San Gabriel River channel in accordance with CEQA.

Threshold ARCH-CON-2 (Construction)

No known human remains or cemeteries have been documented in the direct APE for the Project, including near the MSF. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the Los Angeles County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner is required to notify the Native American Heritage Commission, which would determine and notify a Most Likely Descendant who must complete the inspection of the site within 48 hours of notification and provide recommendations for treatment to the landowner within 48 hours of being granted access. Archaeological and Native American monitors will be present during all project ground-disturbing activities with the potential to encounter human remains. Incidental discoveries will be treated in accordance with existing regulation.

Reference in the Final EIS/EIR

Section 4.14.5.1, Section 4.19.3.14.

Project Measures

CR PM-1 **SOI Standards Design Review** As the Project progresses through the design phase, associated designs will be reviewed and approved by a professional who meets the Secretary of the Interior's Professional Qualification Standards in architectural history, history, or architecture (36 CFR 61). The goal of the review will be to confirm that designs remain consistent with the fundamental principles of the Secretary of the Interior's Standards for the Treatment of Historic Properties and guidelines for Rehabilitation (36 CFR 68).

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds these impacts related to cultural resources will be less than significant.

6.14 Parklands and Community Facilities

As discussed in Sections 4.16.5.2 and 4.19.3.16 of the Final EIS/EIR, the Project will result in a less than significant impact related to recreational facilities with respect to the following significance thresholds:

- Thresholds PARK-2 and PARK-CON-2: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Impact

Threshold PARK-2 (Operations)

The Project will improve accessibility to existing neighborhood parks, recreational facilities, and bike facilities by having a nearby transit station. The Project will not directly increase the local residential population that could result in an increased use of parklands and other recreational facilities. Instead, improved access to recreational facilities may result in more use by the local and surrounding communities. Occasionally, an increase in parkland and recreational facilities may occur during large community events such as fairs and festivals for which city departments will provide adequate services and resources to serve attendees of these events. However, these events are anticipated to be minimal, and the potential increase in the use of parklands and recreational facilities is not anticipated to physically deteriorate the community facilities. In addition, the existing Paramount and Bellflower Bike Trails will need to be reconfigured to accommodate the Project, but changes will not accelerate physical deterioration of the bike facilities. Furthermore, the existing and planned bike facilities will be reconfigured with the coordination of each city so the bike facilities will be able to accommodate the Project while meeting city standards.

Threshold PARK-CON-2 (Construction)

Construction of the Project will be temporary and will not generate permanent residences that will increase the local residential population that could result in an increased use of parklands and other recreational facilities resulting in accelerated physical deterioration of the facilities. Construction workers may use nearby parks or recreational facilities during lunchtime breaks, but such use will be temporary and nominal.

Reference in the Final EIS/EIR

Section 4.16.5.2, Section 4.19.3.16.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to parklands and community facilities will be less than significant.

6.15 Economic and Fiscal Impacts

As discussed in Sections 4.18.5.1 and 4.19.3.18 of the Final EIS/EIR, the Project will result in a less than significant impact related to economic and fiscal impacts with respect to the following significance threshold:

- Threshold ECON-1: Would the Project result in substantial impacts to regional mobility and connectivity?

Impact

Threshold ECON-1 (Operation)

The Project 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. These improvements will likely encourage greater economic activity and will benefit businesses and commuting employees. In addition, the Project 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. The Project will provide additional access and connections to the larger regional network. This will likely encourage greater economic activity and will benefit businesses and commuting employees. The potential for TOD will provide opportunities for utilization of properties and structures and lessen the likelihood of urban decay. The operation of the Project will also increase employment and tax revenue, which will benefit local and regional economies.

Reference in the Final EIS/EIR

Section 4.17.6.1.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to economic and fiscal impacts during operations will be less than significant.

6.16 Safety and Security

As discussed in Sections 4.18.5.1 and 4.19.3.18 of the Final EIS/EIR, the Project will result in a less than significant impact related to safety and security with respect to the following significance thresholds:

- Threshold SAF-1 and SAF-CON-1: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact

Threshold SAF-1 (Operation)

The Project will introduce operation of a new LRT route; however, the Project will not impair or interfere with adopted emergency response plans or evacuation plans because evacuation plans typically avoid crossing active rail corridors and the at-grade portions of the Project are located within active rail corridors. The aerial segments of the Project will not impair or interfere with adopted emergency response plans or emergency evacuation plans.

The Project will include development of a comprehensive Emergency Preparedness Plan (EPP), per CPUC GO 164-E, that will be integrated with local jurisdictional emergency response plans. The EPP will establish and coordinate the roles and responsibilities that will be carried out by Metro personnel and by various emergency response agencies in the event of a fire, medical, or security emergency. In addition to the EPP, a Fire/Life Safety Report will be developed to explain the safety features in the proposed stations, the design specifics related to emergency access and egress, and the security and fire suppression systems. Per FTA's System Safety Program Plans (49 CFR Part 659) and CPUC GO 164-E requirements, Metro will be responsible for implementing or conducting the Threat and Vulnerability Assessment, Safety and Security Certification Plan, System Safety Management Plan provisions, and hazard analyses. Metro's Fire/Life Safety Committee will be responsible for overseeing project compliance with the National Fire Protection Association 130 standard and Metro's Fire/Life Safety Design Criteria, as well as coordination with fire jurisdictions for design reviews, training, and familiarization. The operation of the Project will not impair or interfere with emergency response and evacuation plans.

Threshold SAF-CON-1 (Construction)

Construction-related impacts of the Project on emergency response plans or emergency evacuation plans could be caused by the following temporary construction activities: street or lane closures; roadway detours; increased traffic near emergency facilities or along emergency response routes; and construction staging plans. In response to these potential conditions, fire and emergency medical services personnel have the ability to use onboard live mapping software that alerts drivers of construction activities that may impede travel times to and from the scene of an emergency. Emergency responders are also able to see which roadways are experiencing delays due to construction, accidents, or other events, and will be able to take alternate routes accordingly. Metro and the contractor would coordinate with involved police, medical, and fire service providers during construction.

Reference in the Final EIS/EIR

Section 4.18.5.1, Section 4.19.3.18.

Mitigation Measures

Impacts under the thresholds summarized above will be less than significant and mitigation measures are not required.

Findings

For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that impacts related to safety and security will be less than significant.

7 FINDINGS REGARDING ENVIRONMENTAL RESOURCES FOUND TO NOT BE IMPACTED

The following environmental resources will not be impacted by the Project:

- Visual and Aesthetics (Thresholds VIS-1 and VIS-CON-1, affect a scenic vista; Thresholds VIS-2 and VIS-CON-2, damage a scenic resource)
- Noise and Vibration (Thresholds NOI-3 and NOI-CON-3, exposure of persons to noise from private airstrips or public-use airports)
- Ecosystems and Biological Resources (Thresholds BIO-2 and BIO-CON-2, adverse effect on riparian or other sensitive natural community during operations and construction; Threshold BIO-3 adverse effect on federally protected wetlands during operations; Thresholds BIO-4 and BIO-CON-4, interfere with wildlife movement during operations and construction; Threshold BIO-5, conflict with local policies or ordinances protecting biological resources during operations; Thresholds BIO-6 and BIO-CON-6, conflict with conservation plan during operations and construction)
- Geotechnical, Subsurface, and Seismic Hazards (Threshold GEO-1, rupture of a known earthquake fault during operations; Thresholds GEO-8 and GEO-CON-8, alternative wastewater disposal systems during operations and construction; Threshold GEO-9, paleontological resources during operations)
- Hazards and Hazardous Materials (Thresholds HAZ-5 and HAZ-CON-5, proximity to private airstrips and public-use airports during operations and construction; Thresholds HAZ-7 and HAZ-CON-7, exposure to wildland fires during operations and construction)
- Electromagnetic fields (generation of electromagnetic fields during operations and construction)
- Historic, Archaeological, and Paleontological Resources (Threshold ARCH-1, archaeological resources during operations; Threshold ARCH-2, human remains during operations; Threshold PALEO-1, paleontological resources during operations)
- Tribal Cultural Resources (Threshold TCR-1, effect on California Native American Tribal Cultural Resources during operations)
- Parklands and Community Facilities (Threshold PARK-CON-3, include or require the construction or expansion of recreational facilities during construction)
- Safety and Security (Thresholds SAF-2 and SAF-CON-2, new or physically altered government facilities to maintain response times or other performance objectives during operations and construction)
- Agriculture and Forestry Resources (farmland conversion; existing zoning for agricultural use; forest lands)
- Mineral Resources (loss of a known mineral resource; loss of a locally important mineral resource)
- Wildfire (emergency response or evacuation plans; exacerbate wildfire risk and associated mitigating infrastructure; risk from post-fire slope instability or drainage changes)
- Utilities and Service Systems during operations (relocation or construction of new or expanded water, wastewater treatment or storm water drainage; electric power, natural gas, or telecommunications facilities; water supplies; wastewater; solid waste)

Impact

No impacts will occur.

Reference in the Final EIS/EIR

- Visual and Aesthetics, Section 4.4.5.1 through Section 4.4.5.2, Section 4.19.3.4.
- Noise and Vibration, Section 4.7.5.3, Section 4.19.3.7.
- Ecosystems and Biological Resources, Section 4.8.5.2 through Section 4.8.5.6, Section 4.19.3.8.
- Geotechnical, Subsurface, and Seismic, Section 4.9.5.1, Section 4.9.5.1 Section 4.14, Section 4.19.3.9.
- Hazards and Hazardous Materials, Section 4.10.5.5, Section 4.10.5.7, Section 4.19.3.9.
- Electromagnetic Fields, Section 4.13.5.
- Historic, Archaeological, and Paleontological Resources, Section 4.14.5.2, Section 4.14.5.3.
- Tribal Cultural Resources, Section 4.15.5.1.
- Parklands and Community Facilities, Section 4.19.3.16.
- Safety and Security, Section 4.18.5.2, Section 4.19.3.18.
- Agriculture and Forestry Resources, Section 4.23.1.1.
- Mineral Resources, Section 4.23.1.2.
- Wildfire, Section 4.23.1.3.
- Utilities and Service Systems, Section 4.23.1.4.

Mitigation Measures

No impact will occur and mitigation measures are not required.

Findings

Metro finds that the Project will not result in impacts to one or more aspects of the following resources, as described above:

- Visual and Aesthetics
- Noise and Vibration
- Ecosystems and Biological Resources
- Geotechnical, Subsurface, and Seismic
- Hazards and Hazardous Materials
- Electromagnetic Fields
- Historic, Archaeological, and Paleontological Resources
- Tribal Cultural Resources
- Parklands and Community Facilities
- Safety and Security
- Agriculture and Forestry Resources
- Mineral Resources
- Wildfire
- Utilities and Service Systems

8 FINDINGS REGARDING GROWTH-INDUCING IMPACTS

The Project is a transit infrastructure project proposed to serve forecasted population, housing, and employment growth within the project corridor and SCAG region and accommodate the existing and future transportation needs of the area identified in the SCAG 2016-2040 RTP/SCS and Metro's 2009 Long Range Transportation Plan and is not new unplanned growth. The Project will not generate direct growth within the project corridor and station areas, but instead will accommodate the directed growth from throughout the SCAG region to the project corridor and public transit options. In addition, the Project will be located within a densely developed region, both urban and suburban in character, and will not extend into previously undeveloped areas.

Potential indirect effects of the Project will include the future planning and development of TODs surrounding the proposed station areas. Metro prepared the *West Santa Ana Branch Transit-Oriented Development Strategic Implementation Plan* to be used by local jurisdictions as a resource to develop new corridor-wide governance strategies and implement plans, policies, and economic development strategies to transform station areas into equitable, sustainable, and safe areas for development in the project corridor. As a toolkit for future planning, the plan does not contain specific plans for TOD development within the project corridor. In addition, several jurisdictions in the corridor have completed or are in the process of developing their own individual station area plans. Such future planned densification of land uses is also incorporated into the forecasted SCAG growth data and is not considered unplanned growth. TOD planning will not generate new unplanned growth, but instead will redistribute forecasted growth of a jurisdiction.

As such, the Project will not induce direct or indirect growth beyond that already anticipated in the regional plans, projections for the SCAG region, or in local land use and community plans. The Project will direct planned growth to transit areas and will provide benefits to jurisdictions in the project corridor and in the SCAG region. For this reason, Metro finds that the Project will not result in significant growth-inducing impacts.

9 FINDINGS REGARDING CUMULATIVE IMPACTS

The cumulative impact analysis in the Final EIS/EIR considers the combined effect of the Project and past, present, and reasonably foreseeable future projects. The past, present, and reasonably foreseeable future projects that are considered in the cumulative impact analysis are those projects that may occur in the project vicinity within the same timeframe as the Project. Refer to Section 4.21 of the Final EIS/EIR for the methodology used to assess the potential for cumulative impacts.

As stated in CEQA Guidelines Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result in part from a proposed project. Metro finds that there is no potential for a cumulative impact related to Agricultural and Forestry Resources, Electromagnetic Fields, Mineral Resources, Utilities and Service Systems, or Wildfire.

9.1 Transportation

Operations

Based on the transportation analysis in the Final EIS/EIR, the LPA in combination with the projected growth in the region will not cause significant cumulative transportation effects during operations under CEQA (see CEQA Guidelines, Section 15064.3, subdivisions (a), (b)(2)). For this reason, Metro finds that the Project's incremental contribution to the potentially significant cumulative impact related to transportation during operational activities is not cumulatively considerable.

Construction

Construction activities will require 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 Project may also require temporary closure of streets and lanes and loss of on- and off-street parking. Construction of the Project in combination with construction of other projects will cause significant cumulative temporary transportation effects. For this reason, Metro finds that the Project's incremental contribution to the potentially significant cumulative impact related to transportation during construction activities is cumulatively considerable.

Findings: Mitigation Measure Measures TRA-18 (Transportation Management Plan[s]) and COM-1 (Construction Outreach Plan) will be implemented to reduce construction impacts on transportation. Even with these mitigation measures, however, the Project's incremental contribution to the cumulatively significant transportation impact will be cumulatively considerable. No additional mitigation measures were identified to reduce cumulatively considerable impacts related to transportation. Each of the alternatives would have similar impact, so adopting one of the other alternatives from the EIS/EIR would not avoid this cumulatively considerable impact. Changing the Project to avoid this cumulatively considerable impact would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measures TRA-18 (Transportation Management Plan[s]) and COM-1 (Construction Outreach Plan), this cumulatively considerable impact will be significant and unavoidable. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines.

9.2 Land Use and Planning

Operations

The Project is not anticipated to introduce project components that will create physical barriers or generate any permanent access disruptions to existing land uses, and access to the surrounding

communities will remain available. New street closures and turning restrictions associated with the Project and related projects will not divide existing communities as access to streets and surrounding properties will generally be required to be maintained through the rerouting of traffic within adjacent local streets. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with the division of an established community during operational activities is not cumulatively considerable.

The Project and projected growth in the region will provide future development opportunities that may result in a more densely developed urban environment. The Project 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. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with conflicts with land use plans during operational activities is not cumulatively considerable.

The Project could preempt future development and implementation of planned 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. With implementation of Mitigation Measure LU-1 (Consistency with Bike Plans), Metro will continue to coordinate with jurisdictions and local agencies and will prepare 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 Project may preempt future development and implementation of planned bike paths. For this reason, Metro finds that the Project's incremental contribution to the potentially significant cumulative impact related to bicycle plans during operational activities is cumulatively considerable.

Finding: Mitigation Measure LU-1 (Consistency with Bike Plans) requires Metro to continue coordination efforts with jurisdictions and local agencies to minimize the preemption of future development, goals, and plans within each jurisdiction. The Project may still preempt future development and the implementation of the planned bike paths despite Metro's best efforts and coordination. Even with the adoption of Mitigation Measure LU-1 (Consistency with Bike Plans), the Project may preempt future development and implementation of planned bike paths. For this reason, the Project's incremental contribution to the potentially significant cumulative impact related to bicycle plans during operational activities is cumulatively considerable. No additional mitigation measures were identified to reduce the Project's incremental contribution to this impact. Each of the alternatives would have the same impact, so adopting one of the other alternatives from the EIS/EIR would not avoid the cumulatively considerable impact. Changing the Project to avoid impacts related to consistency with bicycle plans would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that the Project's contribution to this cumulatively significant land use impact remains cumulatively considerable and thus significant and unavoidable. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines. Additionally, Metro adopts CEQA Finding 2, as identified in Section 3 above and in Section 15091(a)(2) of the CEQA Guidelines because aspects of Mitigation Measure LU-1 are within the responsibility and jurisdiction of other public agencies and that such changes can or should be adopted by those agencies.

Construction

Construction will involve temporary construction activities, such as construction staging, materials stockpiling, hauling of dirt and materials, temporary street and lane closures, TCEs, and construction

laydown areas, and property acquisitions. Similar construction activities may also occur with projected future projects. Although access to businesses and neighborhoods may be detoured temporarily during construction, Mitigation Measure COM-1 (Construction Outreach Plan) will be implemented to minimize impacts to the community. Metro will coordinate with other ongoing construction projects to minimize temporary construction effects. Similarly, projected future projects would also result in temporary construction effects and would also implement a construction plan to minimize those impacts. Construction of the Project 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 Project 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. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with land use and planning during construction activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure COM-1 (Construction Outreach Plan), construction of the Project would not result in a cumulatively considerable impact related to land use and planning. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.3 Community and Neighborhoods

Operations

The Project will not directly result in population growth within surrounding communities. However, the Project could indirectly affect population and housing 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. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with unplanned population growth during operational activities is not cumulatively considerable.

Construction

The Project and projected future projects will involve temporary construction activities that could disrupt the community where the construction activities occur. The Project will implement Mitigation Measure COM-1 (Construction Outreach Plan) to minimize effects to communities and businesses where practicable, and 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) will be implemented, where applicable, during construction to reduce construction-related noise and vibration impacts to the extent feasible. Similarly, projected future projects would result in temporary construction activities that could result in temporary adverse effects to the surrounding community and may also require mitigation measures to minimize effects. Metro will coordinate with other concurrent construction projects to minimize street and sidewalk closures, maintain access to businesses, and to minimize other cumulative temporary community impacts. For this reason, Metro finds that the contribution of the Project's construction activities to the significant cumulative impact associated with communities and neighborhoods is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures COM-1 (Construction Outreach Plan), 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), construction of the Project would not result in a cumulatively considerable impact related to community and neighborhoods. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.4 Acquisitions and Displacements

Operations

In general, effects associated with acquisitions and displacements are site-specific and impacts are largely localized and located in a highly urbanized geographical area. The Project will result in property acquisitions and displacements required to accommodate project components. This acquisition 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 surrounding areas based on a gap analysis of the housing and business market as of June/July 2023. In addition, projected population and housing growth is accounted for in the local and regional plans to guide jurisdictions in market growth. Metro will provide relocation assistance and compensation for identified eligible displaced residences as required under the Uniform Act and California Relocation Act. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with displacement and acquisitions during operation is not cumulatively considerable.

Construction

The Project will require TCEs and full acquisitions for construction-related activities. Affected sites with TCEs are anticipated to 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 eligible 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. As with the Project, projected future projects may require TCEs and full acquisitions for construction-related activities and will 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, and impacts will not be adverse. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with displacement and acquisitions during construction activities is not cumulatively considerable.

9.5 Visual and Aesthetics

Operations

No scenic vistas or scenic highways are located near the Project. For this reason, Metro finds that there is no potential for the Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact related to scenic vistas during operational activities.

The Project and projected future projects would provide for future development opportunities that could result in a more densely developed urban environment, which in turn, could affect visual character and quality in the vicinity of the related projects. The Project and projected future projects will be required to comply with local jurisdictional regulations in the areas in which they will be located, will be designed to complement the surrounding area, and would require mitigation

measures to reduce visual impacts, if any. The Project 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"). For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with visual character or quality during operational activities is not cumulatively considerable.

The Project and projected future projects could provide opportunities for development that may result in an increase in daytime glare and ambient nighttime lighting. These development opportunities will be required to adhere to glare and lighting regulations of the affected jurisdictions. The Project and projected growth are located in a highly developed and already 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 Project 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 the projected future projects would also incorporate similar practices in their lighting and structure design to minimize excessive adverse lighting and glare effects. Therefore, the Project in combination with projected future projects will not result in significant cumulative impacts on light and glare. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with light and glare during operational activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures VA-1 (Screening at Summerset Boulevard) and VA-2 (Relocation of "Belle"), operation of the Project would not result in a cumulatively considerable impact related to visual and aesthetic resources. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Construction

No scenic vistas or scenic highways are located near the Project. For this reason, Metro finds that there is no potential for the Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact related to scenic vistas during construction activities.

The Project and projected future projects are located in a highly urbanized area with varied heights and massing in the visual environment. Construction activities for the Project will temporarily alter the visual character and quality of the Affected Area. Mitigation Measure VA-3 (Construction Screening) will be implemented to minimize potential temporary construction visual impacts (see Section 4.19.3.4, Construction-related Visual and Aesthetics). Similar temporary visual impacts would also be associated with construction of projected future projects, which will be localized to the area and may require implementation of mitigation measures to minimize potential construction-related impacts. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with visual character or quality during construction activities is not cumulatively considerable.

Construction activities for the Project will not result in a substantial source of light or glare. Implementation of Mitigation Measure VA-4 (Construction Lighting) will minimize potential construction lighting impacts. Similar to the Project, projected future projects will be required to comply with applicable policies and regulations regarding construction hours and light and glare and would need to implement project measures or mitigation measures to further minimize potential construction lighting effects. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with light and glare during construction activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures VA-3 (Construction Screening) and VA-4 (Construction Lighting) construction of the Project would not result in a cumulatively considerable impact related to visual and aesthetic resources. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.6 Air Quality

Operations

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 being in nonattainment of the federal and state ambient air quality standards for ozone and particulate matter (PM_{10} and $PM_{2.5}$). Therefore, there is an ongoing significant cumulative effect associated with these air pollutants.

The applicable air quality plan is the SCAQMD 2022 AQMP. The SCAQMD is responsible 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 AQMP 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. AQMP emissions budgets are partially developed based on the 2016-2040 RTP/SCS, and the two planning documents are 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 AQMP accounts for implementation of the Project. The RTP entry for the Project was included in 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 Project alignment. Amendment #3 was approved in June 2023. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with projections built into the AQMP during operational activities is not cumulatively considerable.

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 Project represents a public transit project that will reduce regional VMT and associated air pollutant emissions, and operation of the Project 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 Project will not independently generate emissions exceeding the applicable SCAQMD thresholds at regional or localized scales. The Project will reduce regional emissions of most criterial pollutants. The majority of the emissions generated by operation of the Project 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 Project will remain less than

significant and no further analysis is necessary despite the nearby AltAir/World Energy Project, which is projected to emit pollutants at magnitudes above the regional and localized SCAQMD thresholds. Therefore, the Project's incremental contribution to cumulatively significant air quality impacts is not cumulatively considerable.

For the reasons stated above, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with pollutant emissions during operational activities is not cumulatively considerable.

Construction

Construction activities 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. Construction activities 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 Project 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 Project 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 Project will remain less than significant and no further analysis is necessary despite the nearby AltAir/World Energy project emitting pollutants at magnitudes above the regional and localized SCAQMD thresholds. For these reasons, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with pollutant emissions during construction activities is not cumulatively considerable.

Construction activities will adhere to provisions of the Metro *Green Construction Policy* (Project Measure AQ-1 [Metro Green Construction Policy]) and employ 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. For this reason, Metro finds that there is no potential for the Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact during construction activities related to nuisance odor or dust plume.

For the reasons stated above, Metro finds that the contribution of the Project's construction activities to the significant cumulative impact associated with pollutant emissions and odors is not cumulatively considerable.

9.7 Greenhouse Gas Emissions

Operations

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. As compared to the Existing Condition and the No Build Alternative, the Project will result in fewer GHG emissions with reductions related to the reduction of regional VMT for passenger vehicles associated with increased transit ridership. The Project will be consistent with applicable GHG plans, policies, and regulations. The Project 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 Project to interfere with state and regional GHG reduction targets. For

this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with GHG emissions during operational activities is not cumulatively considerable.

Construction

The Project will result in fewer GHG emissions than both the Existing Condition and the No Build Alternative. The Project will be consistent with applicable GHG plans, policies, and regulations. Standard construction procedures will be undertaken in accordance with the Metro *Green Construction Policy* (Project Measure AQ-1 [Metro Green Construction Policy]) and SCAQMD and CARB regulations applicable to heavy-duty construction equipment and diesel haul trucks. Adherence 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 Project from conflicting with GHG emissions reductions efforts. The Project will be consistent with the 2016-2040 RTP/SCS, the 2020-2045) RTP/SCS, the *Energy Conservation Management Plan*, the *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 impact will occur as the Project is a mass transit project and reduced VMT is a key component of relevant GHG reduction plans. There is no potential for the Project to interfere with state and regional GHG reduction targets. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with GHG emissions during construction activities is not cumulatively considerable.

9.8 Noise and Vibration

Operations

Cumulative growth and development in cities located in the vicinity of the Project could result in increases in roadway traffic volumes over time that would concurrently increase ambient noise levels in the vicinity of the Project. However, future increases in roadway noise are expected to be minimal along the alignment because of limited roadway capacity and freight train noise, which is generally intermittent as only two to three trains pass-by per day. Increased freight frequency would also occur in the future as a result of the AltAir/World Energy Project at the Paramount Refinery facility. It is possible that the operational noise impacts and future increase in freight train noise under the AltAir/World Energy Project to combine to produce a significant cumulative adverse noise effect. Nonetheless, train pass-bys per day would remain infrequent, and Mitigation Measure NOI-5 (Freight Track Relocation Soundwalls) would reduce freight noise at sensitive receptors. The Project will result in moderate or severe operational noise effects at sensitive receptors along the project alignment. 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 impacts related to noise; however, due to physical constraints along the alignment, not all noise impacts will be fully mitigated and significant and unavoidable impacts will remain. For this reason, Metro finds that the Project's incremental contribution to the potentially significant cumulative impact related to noise during operational activities is cumulatively considerable.

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 Project where project-generated vibration could occur concurrently with vibration from other sources. The primary source of existing vibration is from freight trains. Due to the infrequency of freight trains, 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), significant and unavoidable impacts will remain at two locations. For this reason, Metro finds that the Project's

incremental contribution to the potentially significant cumulative impact related to vibration during operational activities is cumulatively considerable.

Findings: 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, and Mitigation Measures VIB-1 (Ballast Mat or Resilient Rail Fasteners) and VIB-2 (Low Impact Frogs), will reduce the Project's noise and vibration impacts, although not all impacts will be reduced to less than significant levels. For this reason, the Project's incremental contribution to significant cumulative noise and vibration impacts during operational activities is cumulatively considerable. No additional mitigation measures were identified to reduce the Project's incremental contribution to these impacts. Each of the alternatives would have similar impacts, so adopting one of the other alternatives from the EIS/EIR would not avoid the cumulatively considerable impacts. Changing the Project to avoid operational noise and vibration impacts would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that the Project's contributions to cumulatively significant noise and vibration impacts remains cumulatively considerable and thus significant and unavoidable. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines.

Construction

The geographic scope for the cumulative noise analysis is the immediate vicinity (within 500 feet) of the Project where construction-generated noise could be heard concurrently with noise from other sources. Construction of the Project will require heavy earth-moving equipment, generators, cranes, pneumatic tools, and other similar machinery. Without mitigation, construction noise levels for the Project will exceed FTA and local noise standards due to the intensive nature of LRT construction activities and the proximity of sensitive land uses to construction activities. Implementation of Mitigation Measure NOI-6 (Noise Control Plan) will reduce construction noise levels but will still likely exceed the FTA construction noise criteria and local standards resulting in temporary impacts related to construction noise.

Similar to the Project, 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 Project construction 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 Project. 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 Project occur concurrently, the cumulative impact would not be substantially more severe than that identified for the Project.

Although it is not possible to predict which related projects will result in a cumulative construction noise scenario, construction noise levels associated with the Project could increase ambient noise levels. For this reason, Metro finds that the Project's incremental contribution to the potentially significant cumulative impact related to noise during construction activities is cumulatively considerable.

The geographic scope for the cumulative construction vibration analysis is the immediate vicinity (within 75 feet) of the Project where construction-generated vibration could occur concurrently with vibration from other sources. The Project in combination with projected future projects is 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 near each construction site could be affected by each activity. For the combined vibration impact from concurrent construction projects to reach cumulatively significant levels, intense construction from these projects will 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 same location as equipment related to the Project. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with vibration during construction activities is not cumulatively considerable.

Findings: Mitigation Measure NOI-6 (Noise Control Plan) will reduce the Project's construction noise impacts, although the Project's incremental contribution to the potentially significant cumulative noise impact during construction could remain cumulatively considerable. For this reason, even with mitigation, the Project's incremental contribution to significant cumulative noise remains cumulatively considerable. No additional mitigation measures were identified to reduce the Project's incremental contribution to this noise impact. Each of the alternatives would have similar impacts, so adopting one of the other alternatives from the EIS/EIR would not avoid the cumulatively considerable impact. Changing the Project to avoid construction noise impacts would not be feasible as it would not meet the underlying purpose of the Project. For the reasons stated above, Metro finds that the Project's contribution to cumulatively significant noise impacts remains cumulatively considerable and thus significant and unavoidable. Metro adopts CEQA Findings 1 and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) and (a)(3) of the CEQA Guidelines.

9.9 Ecosystem Resources and Biological Resources

Operations

The Project and projected future projects will be 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 CDFW or the USFWS, and will be unlikely to affect wildlife species if present. Most wildlife species that could be expected to be present are species adapted to urban environments and disturbances caused by human-induced activities. The Project in combination with projected future projects will not result in impacts to ecosystems and biological resources. Similar to the Project, the projected future projects will be required to comply with applicable regulations and include mitigation measures so that impacts to biological resources are reduced or avoided. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with biological resources during operational activities is not cumulatively considerable.

Construction

The Project and projected future projects will be constructed in dense urban environments. Although unlikely, the Project 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 could also result in an adverse indirect effect on nesting birds and bats. The Project will comply with all required applicable regulations. Construction of the Project will not result in 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 Section 4.19.3.8, Construction-related Ecosystems/Biological Resources). Similar to the Project, projected future projects would comply with applicable regulations and ordinances and would implement applicable mitigation so construction-related impacts to special-status species, jurisdictional waters, and protected trees are minimized or avoided. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with biological resources during construction activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures BIO-1 (Bats), BIO-2 (Nesting Birds), BIO-3 (Jurisdictional Resources), and BIO-4 (Protected Trees), construction of the Project would not result in a cumulatively considerable impact to biological resources. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.10 Geologic, Subsurface, and Seismic Hazards

Operations

The geographic scope for geologic, subsurface, and seismic hazards is site-specific and impacts are largely localized. The Project and projected future projects will be located in a seismically active region of Southern California, with large liquefaction zones under the Project; however, the Project and projected future projects would not be located in an area with landslide risks. The Project and projected future projects will be required to comply with all prescribed standards, requirements, and guidance related to geologic, subsurface, and seismic hazards and implement mitigation measures, as necessary. The Project will implement Project Measure GEO PM-1 (Geotechnical Design [Operation]), which requires the Project to be designed in accordance with design standards, including anticipated level of seismic ground shaking, liquefaction, and seismic settlement, and will comply with all applicable state and local guidelines and mandatory design requirements with seismic-related ground failure. Therefore, the Project will not result in impacts. As such, the Project in combination with projected future projects will not result in significant cumulative geologic, subsurface, and seismic hazards effects. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with geologic, subsurface, and seismic hazards during operational activities is not cumulatively considerable.

Construction

Construction activities will not result in impacts related to geologic, subsurface, and seismic hazards, and the Project will comply with all prescribed standards, requirements, and guidance related to geologic, subsurface, and seismic hazards. In addition, the Project will implement GEO PM-2 (Geotechnical Design [Construction]) that requires the incorporation of the geotechnical report recommendations and monitoring plans. Similarly, projected future projects will be required to comply with all prescribed standards, requirements, and guidance related to geologic, subsurface, and seismic hazards. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with geologic, subsurface, and seismic hazards during construction activities is not cumulatively considerable.

9.11 Hazards and Hazardous Materials

Operations

In general, impacts associated with hazards and hazardous materials are site-specific and impacts are largely localized. The Project will not result in impacts related to hazards and hazardous materials with 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]). The Project and projected future projects will be required to comply with all prescribed standards, requirements, and guidance related to hazards and hazardous materials. Therefore, the Project in combination with projected future projects will not result in significant cumulative hazard and hazardous materials effects. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with hazards and hazardous materials during operational activities is not cumulatively considerable.

Construction

Construction of the Project will not result in impacts related to hazards and hazardous materials. Construction activities will comply with all regulatory requirements and hazardous wastes will be properly handled. The Project will implement 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. Similarly, construction of projected future projects will 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. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with hazards and hazardous materials during construction activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure HAZ-1 (Unidentified Oil and Gas Wells), construction of the Project would not result in a cumulatively considerable impact related to hazards and hazardous materials. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.12 Water Resources

Operations

The geographic scope for the cumulative water resources analysis is the LA County storm drainage system serving the water resources Affected Area as well as the watersheds the area discharges to (i.e., the Los Angeles River Watershed, the Rio Hondo channel and Compton Creek subwatersheds, the San Gabriel River Watershed, and the Coyote Creek and Los Cerritos channel subwatersheds). The Project and projected future projects will result in modifications to the local drain systems, a cumulative increase in impervious surfaces or pollutant runoff, and may also affect groundwater resources that could result in adverse effects. The Project will implement project design features for water resources. Similar to the Project, projected future projects would be subject to the same state and regional water quality permit requirements as the Project and would be designed in compliance with all existing regulations regarding water resources. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with water resources during operational activities is not cumulatively considerable.

Construction

Construction of the Project could lead to temporary changes in grades and drainage patterns, discharge of pollutants into surface waters, and exposure of soils to stormwater and erosive conditions. In addition, temporary dewatering may be required. These temporary impacts will be addressed via a SWPPP that complies with the General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). Construction of the Project over the Los Angeles River, Rio Hondo channel, and San Gabriel River will not result in impacts to 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 Project will implement the project design features to avoid, minimize, or reduce the potential for impacts on water resources. 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. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with water resources during construction activities is not cumulatively considerable.

9.13 Energy

Operations

The Project and projected future development will be subject to compliance with applicable energy efficiency and management codes and regulations, including, but not limited to, the California Building Standards Code Energy Efficiency Standards (Title 24 Parts 6 and 11) 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. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with energy conservation plans and standards during operational activities is not cumulatively considerable.

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 Project will not require new distribution infrastructure, and existing electrical utility lines will be required to operate the Project. Such activities will not be related to supply or capacity deficiencies and will be similar to routine utility improvements. There is no potential for operation of the Project to conflict with energy conversion goals or interfere with the energy supply and distribution facilities. For these reason, Metro finds that there is no potential for the Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact related to energy resources during operational activities.

Construction

Diesel fuel for construction vehicles and equipment will be the primary end use of energy resources consumed throughout the course of the construction period for the Project. There is no identified ongoing cumulatively significant condition related to energy resources that construction of the Project will have the potential to exacerbate. Given the extensive network of fueling stations along the Project alignment and the fact that construction will be temporary, no new or expanded sources of energy or infrastructure will be required to meet the energy demands during construction of the Project. In addition, construction activities will comply with the Metro *Green Construction Policy* per Project Measure AQ PM-1 (Metro Green Construction Policy) and construction equipment and vehicles will be maintained in accordance with manufacturers' specifications to limit the consumption of transportation fuels to the maximum extent feasible. The one-time expenditure of fuel is not considered a wasteful or inefficient use of nonrenewable resources as the fuel is being used to construct a mass transit system that has been identified by state and regional agencies as an efficient method of reducing permanent energy use. Projected future projects, including transportation and general land use development projects, are not expected to place an undue burden on the availability of existing or future energy resources. For this reason, Metro finds that there is no potential for the Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact related to energy resources during construction activities.

9.14 Historic, Archaeological, and Paleontological Resources

Operations

The geographic scope of historic and archaeological and paleontological effects is generally site-specific and localized and generally characterized as urbanized and highly developed. No impacts will occur to historic properties, archaeological resources, or paleontological resources during operation of the Project. Direct and indirect impacts to historic, archaeological, or paleontological resources due to ongoing maintenance and operations of the Project will not occur because there will be no or minimal ground disturbance. Similarly, projected future projects will be located within existing public ROWs or in highly urbanized areas. As all historic, archaeological, and paleontological resources are unique, projected future projects will be expected to comply with applicable federal, state, and local regulations to protect those resources. For this reason, Metro finds that there is no potential for the Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact related to historic properties, archaeological resources, or paleontological resources during operational activities.

Construction

There are no known archaeological resources in the APE. Ground-disturbing construction activities could directly impact paleontological resources 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 adverse construction-related effects to archaeological and paleontological resources. Projected future projects could require ground-disturbing activities during construction and will be required to comply with all applicable regulations and would implement mitigation measures to reduce impacts. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with archaeological and paleontological resources during construction activities is not cumulatively considerable.

Surface-level activities could 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 will be temporary and will not result in any permanent change to historical resources. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with historic properties during construction activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through 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), construction of the Project would not result in a cumulatively considerable impact on historical, archaeological or paleontological resources. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.15 Tribal Cultural Resources

Operations

The geographic scope of effects to tribal cultural resources is generally site-specific and localized and generally characterized as urbanized and highly developed. No tribal cultural resources were

identified within the APE and no impacts will occur to tribal cultural resources during Project operations. Direct and indirect impacts to unanticipated tribal cultural resources due to ongoing maintenance and operations of the Project will not occur because there will be no or minimal ground disturbance. Similarly, related projects will be located within existing public ROWs or in highly urbanized areas. As tribal cultural resources are unique, projected future projects will be expected to comply with applicable federal, state, and local regulations to protect tribal cultural resources. Similar to the Project, projected future projects are not anticipated to cause impacts to tribal cultural resources during operation with compliance of all applicable regulations regarding the handling and care of such resources. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with tribal cultural resources during operational activities is not cumulatively considerable.

Construction

The Project is located within a previously disturbed developed area. Nonetheless, the potential exists for tribal cultural resources to be encountered due to the previous inhabitance of the Los Angeles Basin by various Native American tribes. 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 PRC Sections 21083.2 and 5097.98 and State Health and Safety Code Section 7050.5 so that no impacts will occur. In addition, the Project will implement Mitigation Measures TCR-1 (Native American Monitoring), TCR-2 (Unanticipated Discovery of Tribal Cultural Resources), and CR-1 (Development of Cultural Resources Monitoring and Discovery Program) and will not result in impacts. Projected future projects would also be required to comply with applicable federal, state, and local guidelines. As with the Project, projected future projects are not anticipated to cause impacts to tribal cultural resources during construction and would comply with all applicable regulations regarding the handling and care of such resources. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with tribal cultural resources during construction activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures TCR-1 (Native American Monitoring), TCR-2 (Unanticipated Discovery of Tribal Cultural Resources), and CR-1 (Development of Cultural Resources Monitoring and Discovery Program) construction of the Project would not result in a cumulatively considerable impact to tribal cultural resources. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.16 Parklands and Community Facilities

Operations

Realignment of segments of the Paramount Bike Trail and Bellflower Bike Trail will not result in adverse physical effects or prevent access to existing bike facilities. Mitigation Measure LU-1 (Consistency with Bike Plans) will be implemented to maintain connectivity. The Project could preempt future development and implementation of the planned 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 prepare 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 cumulative impacts and findings related to consistency with land use plans are discussed in Section 9.2.

The Project will operate within the confines of the rail ROW and will not impede access to recreational facilities. The Project and projected future projects will be located in urban areas and primarily will be located within existing rail or public ROW or within infill parcels. Partial acquisitions will not affect the function or result in a displacement of recreational facilities. 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. For this reason, Metro finds that the Project's incremental contribution to the potentially significant cumulative impact related to parklands and community facilities during operational activities is not cumulatively considerable.

Construction

Construction of the Project may temporarily affect recreational facilities. Indirect impacts related to noise, vibration, and air quality will be temporary and are not anticipated to result in impacts to recreational facilities. The use of nearby streets may result in restricted street parking, sidewalk detours, and traffic lane or full street closures that may affect access to recreational facilities. The Project will implement Mitigation Measure COM-1 (Construction Outreach Plan) so that access to community assets and neighborhoods during construction is maintained and construction detour routes signage is provided. Similarly, construction of proposed future projects could cause indirect effects related to noise, vibration, and air quality, and require temporary restrictions in street parking, sidewalk detours, and traffic detours. As with the Project, projected future projects will be required to coordinate with local jurisdictions to minimize construction impacts to surrounding recreational facilities through project-specific construction management plans that would maintain access to recreational facilities to the extent feasible. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with recreational facilities during construction activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure COM-1 (Construction Outreach Plan) construction of the Project would not result in a cumulatively considerable impact related to parklands and community facilities. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.17 Economic and Fiscal Impacts

Operations

The Project 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 businesses, residents, and jobs to the area, the growth of which has been accounted for in the local and regional plans. Combined with the Project, projected future projects will likely encourage greater economic activity and benefit surrounding businesses and commuting employees. The Project and projected future projects will increase employment and tax revenue that will benefit local and regional economies. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with public services during operational activities is not cumulatively considerable.

Construction

Construction 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 will be temporary. The Project 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. Similarly, projected future projects would bring beneficial economic and

fiscal effects to the city in which the project is located. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with public services during construction activities is not cumulatively considerable.

Finding: Under CEQA, economic and fiscal impacts are not treated as significant effects on the environment (CEQA Guidelines, Section 15064(a).) The focus of CEQA is on the physical environment. To the degree, however, that a finding under Section 15091 is required with respect to cumulative economic and fiscal impacts, Metro finds that, through implementation of Mitigation Measures COM-1 (Construction Outreach Plan) and TRA-21 (Loss of Parking [Construction]), construction of the Project would not result in a cumulatively considerable economic or fiscal impact. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

9.18 Safety and Security

Operations

Safety and security impacts are generally site-specific and localized. Metro will coordinate with fire and police services so that response times and emergency access will not be impacted during operation. The Project will be in accordance with Metro system safety plans, policies, and procedures, including the *Metro System Safety Program Plan,* the *Metro System Security Plan,* the *Metro Standard and Emergency Operating Procedures,* and the *Rail Operating Rulebook*, or equivalent. The Project will comply with all applicable federal, state, and local safety codes and regulations, and Project Measures SAF PM-1 (Emergency Access) through SAF PM-8 (Fire/Life Safety Committee) and Mitigation Measure SAF-1 (Encroachment Detection). Similarly, projected future projects will be required to be designed safely and will be subject to all safety codes and regulations and would comply with the requirements of local emergency services. In the event projected future projects affect fire and police services, each project will be required to implement project-specific measures and mitigation measures, as necessary, to reduce impacts. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with public services during operational activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measure SAF-1 (Encroachment Detection), operation of the Project would not result in a cumulatively considerable impact to safety and security. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

Construction

Project construction activities could temporarily affect fire and police services. Temporary street closures may also result in impacts to emergency response services. The Project will coordinate with police, medical, and fire services; develop construction staging plans; and comply with applicable regulations. Project Measures SAF PM-9 (Service Providers), SAF PM-10 (MRDC Compliance), and SAF PM-11 (Fire/Life Safety Committee [Construction]) and Mitigation Measures SAF-2 (School District Coordination), SAF-3 (Construction Site Measures), and elements of COM-1 (Construction Outreach Plan) will avoid impacts to fire and police services. Similarly, projected future projects will be required to comply with all applicable regulations and implement mitigation measures and/or BMPs to reduce impacts. For this reason, Metro finds that the contribution of the Project's activities to the significant cumulative impact associated with public services during construction activities is not cumulatively considerable.

Finding: For the reasons stated above and as set forth in the Final EIS/EIR, Metro finds that, through implementation of Mitigation Measures SAF-2 (School District Coordination), SAF-3 (Construction

Site Measures), and elements of COM-1 (Construction Outreach Plan), construction of the Project would not result in a cumulatively considerable impact to safety and security. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

10 FINDINGS REGARDING ALTERNATIVES

CEQA provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which will substantially lessen the significant environmental effects of such projects" (PRC Section 21002.) However, "in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof."

As defined by CEQA, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, considering economic, environmental, social, legal, and technological factors (PRC Section 21061.1; CEQA Guidelines, Section 15126.6(f)(1)). The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project (*Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993), 23 Cal.App.4th 704, 715). Moreover, "'feasibility' under CEQA encompasses "desirability" to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors" (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 417; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957).

10.1 Alternatives

Pursuant to CEQA Guidelines Section 15126.6(a), the Draft EIS/EIR described and evaluated the relative merits of a range of reasonable alternatives to the Project. Metro considered three Build Alternatives other than the Project (referred to as Alternative 3 in the Draft EIS/EIR), two design options, one MSF site option other than the Bellflower site associated with the Project, and a No Build Alternative. The four alternatives and options were evaluated in the Draft EIS/EIR at the same level of detail and remain under conceptual consideration.

Alternative 3 was identified in the Draft EIS/EIR as the Environmentally Superior Alternative and the Staff Preferred Alternative; it was subsequently identified by the Metro Board of Directors as the LPA in January 2022. Additionally, the Bellflower MSF was included as a component of the LPA.

Since completion of the Draft EIS/EIR, the Project was refined based on public comments received on the Draft EIS/EIR and stakeholder coordination. As allowed by 23 United States Code 139 (f)(4)(D), the design continued for the Project in this Final EIS/EIR to support mitigation design and interagency permitting or other approvals. Alternative 3 inclusive of refinements was evaluated as the LPA in the Final EIS/EIR. The analysis of alternatives in the Draft EIS/EIR is incorporated in the Final EIS/EIR by reference under CEQA. The No Build Alternative and the four Build Alternatives identified in the Draft EIS/EIR are also discussed in Chapter 6, Evaluation of Alternatives, of the Final EIS/EIR.

Table 10.1 presents the capital and operations and maintenance (O&M) costs presented in the Draft EIS/EIR for the four Build Alternatives, along with characteristics of the alignments, including length, configuration (at grade, aerial, and underground), number of stations, length of alignment in shared right-of-way with existing rail, and length of alignment needing freight track relocation.

Table 10.1. Comparative Build Alternative Cost and Features

Cost/Features	Alternative 1	Alternative 2	Alternative 3[5]	Alternative 4
Capital cost (2020$[1]) without MSF[2, 4]	$8.1 billion	$8.8 billion	$4.4 billion	$1.9 billion
Capital cost (2020$[1]) with MSF[3,4]	$8.5 billion – $8.8 billion	$9.2 billion – $9.5 billion	$4.9 billion – $5.1 billion	$2.3 billion – $2.6 billion
Capital cost per mile with MSF (2020$[1,4])	$442 million –$455 million	$479 million – $490 million	$331 million – $346 million	$355 million – $389 million
Annual O&M cost (2020$[1])	$87 million	$101 million	$67 million	$41 million
Alignment length (miles)	19.3	19.3	14.8[6]	6.6
At-grade length (miles)	12.3	12.3	12.2	5.6
Aerial length (miles)	4.7	4.7	2.6	1.0
Underground length (miles)	2.3	2.3	0	0
Number of stations	11	12	9	4
Parking facilities	5 (up to approx. 2,795 spaces)	5 (up to approx. 2,795 spaces)	5 (up to approx. 2,795 spaces)	4 (up to approx. 2,180 spaces)
At-grade crossings	31	31	31	11
Elevated street crossings	25	25	15	7
Freight crossings	10	10	9	2
Freeway crossings	6 (3 freeway undercrossings at I-710; I-605, SR-91)	6 (3 freeway undercrossings at I-710; I-605, SR-91)	4 (3 freeway undercrossings at I-710; I-605, SR-91)	3 (2 freeway undercrossings at I-605, SR-91)
River crossings	3	3	3	1
Radio towers	2	2	0	0
TPSS facilities	22	23	17	7
Shared right-of-way with rail (miles)	11.4	11.4	10.1	2.0

Cost/Features	Alternative 1	Alternative 2	Alternative 3[5]	Alternative 4
Freight relocation needed (miles)	8.1	8.1	8.1	1.3
MSF site options	2	2	2	2

Source: Metro 2021a
Notes: [1] 2020$ refers to dollar values assumed in Fiscal Year 2020.
[2] All estimated costs generally include guideway and track elements, stations, stops, terminals, intermodal and support facilities, sitework and special conditions, systems, right-of-way, vehicles, professional services, and unallocated contingencies. Variable costs not included in the table are Design Options 1 and 2 for Alternative 1 and the maintenance and storage facility site options.
[3] Costs range from the low end (with the Bellflower MSF site option) to the high end (with the Paramount MSF site option).
[4] The capital cost estimates will be further refined as the project advances through the project development process and more detailed engineering is undertaken.
[5] Alternative 3 presented within this table is summarized from the Draft EIS/EIR and does not include refinements since the Draft EIS/EIR.
[6] The length of Alternative 3 in the Draft EIS/EIR was incorrectly presented as 14.8 miles; the correct length was 14.5 miles. The alignment endpoints for the LPA are largely unchanged from the Draft EIS/EIR.
LPA = Locally Preferred Alternative; MSF = maintenance and storage facility; O&M = operating and maintenance; TPSS = traction power substation

10.1.1 No Project Alternative

The No Project Alternative is required by CEQA Guidelines Section 15126.6(e)(2) and assumes that the Project will not be implemented by Metro. The No Project Alternative allows decision-makers to compare the impacts of approving the Project with the impacts of not approving the Project. The No Project Alternative analyzed in the Final EIS/EIR is identical to that analyzed in the Draft EIS/EIR and maintains the same baseline as the Draft EIS/EIR (2042). The No Project Alternative does not include the new transit service. The No Project Alternative is evaluated in the context of the existing conditions at the time of the CEQA Notice of Preparation.

The No Project Alternative will not result in impacts to all of the environmental topics included in the Final EIS/EIR, with the exception of consistency with land use and plans development. Operation-related impacts for the No Project Alternative would limit the opportunity to intensify land uses at potential project station areas and throughout the corridor. This would limit jurisdictions from developing compact communities around a public transit system. As such, the No Project Alternative would result in a significant impact for land use impacts. Overall, the No Project Alternative would have the least number of impacts compared to the other alternatives. Although selecting the No Project Alternative would avoid most of the Project's significant impacts, Metro finds that specific economic, legal, social, technological, and other considerations render the No Project Alternative identified in the Final EIS/EIR infeasible (CEQA Guidelines Section 15091(a)(3)). The No Project Alternative would not achieve any of the Project's objectives and, therefore, would not address the Purpose and Need of the Project. By pursuing the No Project Alternative, Metro would not provide mobility improvements; support local and regional land use plans and policies; minimize environmental impacts; improve cost effectiveness and financial feasibility; or promote equity. Thus, with respect to the No Project Alternative, Metro adopts CEQA Finding 3, as set forth in Section 3 above and in Section 15091(a)(3) of the CEQA Guidelines.

10.1.2 Alternative 1

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

District Station (all specific to Alternative 1), followed by Slauson/A Line Station, Pacific/Randolph Station, Florence/Salt Lake Station, Firestone Station, Gardendale Station, I-105/C Line Station, Paramount/Rosecrans Station, Bellflower Station, and Pioneer Station. The Draft EIS/EIR documented two design options for Alternative 1. Design Option 1 would change the northern terminus to behind the east side of the historic LAUS building and the Metropolitan Water District building. Design Option 2 would add the Little Tokyo Station.

Alternative 1 would provide regional benefits but would also result in more impacts and/or effects compared to Alternatives 3 and 4 from the Draft EIS/EIR. This alternative would provide more VMT reductions and associated GHG and air quality emission reductions and would result in more user benefit hours, daily new transit trips, average weekday daily boardings, and construction jobs than Alternatives 3 and 4, as evaluated in the Draft EIS/EIR.

Alternative 1 would have the highest number of unmitigated vibration impacts and severe noise impacts compared to the other Build Alternatives as evaluated in the Draft EIS/EIR. This alternative would also have the potential to affect the greatest number of archaeological sites. Alternative 1 would affect the second-highest number of parcels and would displace the second-highest number of businesses and employees. This alternative would displace the same number of residential units and residents as Alternative 2. This alternative would also be located in proximity to the second-highest number of hazardous materials sites, which would affect capital cost and potentially result in delays during construction to account for remediation efforts.

Construction of Alternative 1 would result in exceedances of emissions levels for nitrogen oxide (NO_X) and effects related to hazardous subsurface gases due to the tunnel segment. Construction of Alternative 1 would also increase the GHG emissions from construction vehicles and fuel used, compared to Alternatives 3 and 4 from the Draft EIS/EIR. Alternative 1 would provide regional benefits. Specifically, this alternative would provide the greatest VMT reductions and would be comparable to Alternative 2 in terms of emissions/GHG reductions during operation.

Given the environmental impacts, mitigation requirements, property acquisition requirements, and risks associated with hazardous materials, as well as substantial costs, with respect to Alternative 1, Metro adopts CEQA Finding 3, as set forth in Section 3 above and in Section 15091(a)(3) of the CEQA Guidelines.

10.1.3 Alternative 2

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

Alternative 2 would provide regional benefits but would also result in more impacts and/or effects compared to Alternatives 3 and 4 from the Draft EIS/EIR. This alternative would provide more VMT reductions and associated GHG and air quality emission reductions and would result in more user benefit hours, daily new transit trips, average weekday daily boardings, and construction jobs than

Alternatives 3 and 4, as evaluated in the Draft EIS/EIR. Alternative 2 would require a considerable level of mitigation given the number of significant impacts. Alternative 2 would result in the highest number of severe noise impacts and the second-highest number of vibration impacts and moderate noise impacts compared to the other Build Alternatives as evaluated in the Draft EIS/EIR. After mitigation, Alternative 2 would result in the highest number of moderate noise impacts and would have the same number of unmitigated vibration and severe noise impacts as Alternative 1. Alternative 2 would permanently affect the highest number of parcels and displace the greatest number of businesses. This alternative would have the same number of displacements of residential units and residents as Alternative 1. This alternative would also be located in proximity to the highest number of hazardous materials sites, which would affect capital cost and potentially result in delays during construction to account for remediation efforts.

Construction of Alternative 2 would result in exceedances of emissions levels for NO_X and effects related to hazardous subsurface gases due to the tunnel segment. Additionally, construction would require increased truck trips, which would increase the GHG emissions from construction vehicles and fuel used compared to Alternatives 3 and 4 of the Draft EIS/EIR. Alternative 2 would result in considerably more environmental impacts and mitigation measures, as well as affect the greatest number of parcels. Thus, with respect to Alternative 2, Metro adopts CEQA Finding 3, as set forth in Section 3 above and in Section 15091(a) of the CEQA Guidelines.

10.1.4 Alternative 3

Alternative 3 would be a 14.8-mile[2] alignment with a northern terminus at the Slauson/A Line Station in the City of Los Angeles/Florence-Firestone unincorporated area of LA County, and a southern terminus located at the Pioneer Station in the City of Artesia. Alternative 3 would operate in the communities of Los Angeles (the Southeast Los Angeles Community Plan Area), the unincorporated Florence-Firestone community of LA County, Vernon, Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Artesia, and Cerritos. Alternative 3 would consist of 9 stations and 5 parking facilities (Firestone, I 105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer) totaling approximately 2,780 parking spaces. Proposed stations under Alternative 3 include: Slauson/A Line Station, Pacific/Randolph Station, Florence/Salt Lake Station, Firestone Station, Gardendale Station, I-105/C Line Station, Paramount/Rosecrans Station, Bellflower Station, and Pioneer Station.

Alternative 3, as evaluated in the Draft EIS/EIR, would result in fewer vibration impacts and moderate and severe noise impacts compared to Alternatives 1 and 2. Mitigation identified for these impacts would not fully mitigate all impacts. Alternative 3 in the Draft EIS/EIR would affect fewer parcels and displace fewer businesses and employees than Alternatives 1 and 2. This alternative would also be located in proximity to fewer hazardous materials sites than Alternatives 1 and 2 due to the shorter length of the alignment.

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

Alternative 3 in the Draft EIS/EIR would not include a tunnel segment, which would decrease construction impacts, such as excavation quantities, emissions, and fuel usage. As a result, NO_X levels would be below the regional threshold. Additionally, effects associated with hazardous subsurface gas would be avoided. Section 2.4.3 of the Final EIS/EIR provides an updated discussion of Alternative 3 as the Project (referred to in the Final EIS/EIR as the LPA), inclusive of project refinements. The new information added to the Final EIS/EIR does not involve a new significant environmental impact, a substantial increase in the severity of an environmental impact, or a feasible mitigation measure or alternative considerably different from others previously analyzed that the project sponsor declines to adopt and that would clearly lessen the significant environmental impacts of the Project. The project description presented in the Draft EIS/EIR for Alternative 3 has been modified to include refinements to the Project in the Final EIS/EIR. As a result of these project refinements, the impact analysis for several environmental resources was updated from the Draft EIS/EIR to the Final EIS/EIR. In many cases, project refinements avoided or reduced project impacts. In no case did the project refinements result in a new significant impact or a substantial increase in the severity of a significant impact identified in the Draft EIS/EIR. The Final EIS/EIR also incorporates information obtained and produced after the Draft EIS/EIR was completed, including additions, clarifications, and modifications. The Metro Board finds that revisions to the Final EIS/EIR clarify, amplify, or make insignificant modifications to the analysis presented in the document and do not trigger the need to recirculate per CEQA Guidelines §15088.5(b). This finding is based upon all the information presented in the Final EIS/EIR and the record of proceedings.

10.1.5 Alternative 4

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

Alternative 4 would result in the lowest number of impacts of the Build Alternatives in the EIS/EIR, which is attributed to this alternative having the shortest alignment. Specifically, this alternative would result in the lowest number of vibration and moderate and severe noise impacts, both with and without mitigation. Alternative 4 would also have the smallest effect on properties and would displace the lowest number of businesses, employees, and residential units. This alternative would also be located in proximity to the lowest number of hazardous materials sites. This alternative would not have significant and unavoidable impacts associated with consistency with land use plans and development. With implementation of Alternative 4, intersection operations would not be adversely impacted after mitigation, but street and sidewalk closures would still be required, although less than under Alternatives 1, 2, and 3 as evaluated in the Draft EIS/EIR.

Alternative 4 would not include a tunnel segment, which would decrease construction impacts such as excavation quantities, emissions, and fuel usage. Because this alternative would have the shortest alignment, the quantities of each of these impacts would be the smallest. NO_X levels would be below the regional threshold and affects associated with hazardous subsurface gas would be avoided. While these reduced impacts are beneficial, Alternative 4 would result in fewer user benefit hours, daily new transit trips, average weekday daily boardings, and construction jobs than the LPA. Thus, given the limited regional environmental benefits, with respect to Alternative 4, Metro adopts CEQA Finding 3, as set forth in Section 3 above and in Section 15091(a) of the CEQA Guidelines.

10.2 Findings For Environmentally Superior Alternative

CEQA Guidelines Section 15126.6 requires that an “environmentally superior” alternative be identified among the alternatives that are evaluated in the EIR. Alternative 3 as evaluated in the Draft EIS/EIR was identified as the Environmentally Superior Alternative when compared to the No Project

Alternative and other Build Alternatives based on the trade-offs among environmental benefits, impacts, and capital cost. Alternative 3 was identified to have fewer permanent acquisitions, residential and business displacements, noise and vibration impacts, and be in proximity to fewer hazardous materials sites compared to Alternatives 1 and 2. Construction of Alternative 3 will affect access to fewer community facilities, require fewer construction laydown areas, and will not result in exceedances in daily regional emissions compared to Alternatives 1 and 2. Due to the lack of connectivity and limited benefits achieved with four stations, Alternative 4 would provide a lower level of environmental benefits to the region when compared to the other Build Alternatives. Alternative 3 was selected by the Metro Board as the LPA. Overall, Alternative 3 (the LPA) will generate environmental benefits by providing mobility and connectivity to transit-dependent populations in 12 cities throughout the corridor, as well as $5.1 million (2020$) in economic activity annually to the region. With respect to the Environmentally Superior Alternative, in approving the LPA, the Environmentally Superior Alternative, Metro adopts CEQA Finding 1, as set forth in Section 3 above and in Section 15091(a)(1) of the CEQA Guidelines.

11 FINDINGS FOR MITIGATION MEASURES AND PROJECT MEASURES

The Metro Board has considered every mitigation measure recommended in the Final EIS/EIR. Metro hereby binds itself to implement or, as appropriate, require implementation of these measures. These Findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when Metro adopts a resolution approving the Project. The mitigation measures are referenced in the MMRP adopted concurrently with these Findings and will be effectuated through the process of constructing and implementing the Project.

Regarding the project measures, Metro acknowledges and finds that the project measures are integral components of the Project. The project measures were properly identified in the Final EIS/EIR, as required by CEQA Guidelines Section 15126.4(a)(1)(A). In approving the Project, Metro commits to full implementation of the project measures identified in the Final EIS/EIR. The project measures will be effectuated through the process of constructing and implementing the Project.

Some comments on the Draft EIS/EIR suggested additional mitigation measures and/or modifications to the Project and the mitigation measures recommended in the Draft EIS/EIR. As shown in the Final EIS/EIR, Metro added project measures and modified several of the mitigation measures in response to such comments. In response to other such comments, Metro explained why the suggested mitigation measures were not feasible and/or not superior to the mitigation measures identified in the Draft EIS/EIR. The Metro Board commends staff for its careful consideration of these comments and agrees with the Final EIS/EIR in those instances when staff did not accept proposed language, and hereby ratifies, adopts, and incorporates the Final EIS/EIR's reasoning on these issues.

12 STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to CEQA Guidelines Section 15093, if a project's EIR and administrative record substantiate that the project will result in significant and unavoidable impacts, then the lead agency is required to balance the project's significant and unavoidable impacts against its economic, legal, social, technological, or other benefits. If these benefits outweigh the significant and unavoidable impacts, then the significant and unavoidable impacts may be deemed acceptable. In such a case, the lead agency must state, in writing, the specific reasons that support this conclusion. This section presents the potential significant and unavoidable impacts associated with the Project followed by a demonstration of how they are outweighed by the Project's benefits.

12.1 Significant And Unavoidable Impacts

The Project will result in the following significant and unavoidable impacts:

Conflict with Bicycle Plans and Facilities during Operations

The Project could preempt the future development and implementation of several proposed bicycle paths, including the Class I bicycle path along Salt Lake Avenue (Cities of Huntington Park, Bell, and Cudahy) and Class I bicycle path north of Rayo Avenue and south of the Los Angeles River (City of South Gate). While planned, the bike facilities are unfunded and not scheduled for implementation. Sufficient space will be available to develop a Class II or Class III bicycle path along the street, which will maintain the connectivity identified in the bicycle master plans. However, the reclassification of the bike paths is considered a conflict with the current bike plans. Metro will continue coordination efforts with jurisdictions and local agencies to minimize potential impacts on the future implementation of the planned bike trails identified in their bicycle master plans. As part of this effort, Metro, as appropriate, will prepare 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 Project may still conflict with bicycle master plans despite Metro's best efforts and coordination and with implementation of mitigation, which constitutes a significant and unavoidable impact.

Operational Noise and Vibration Levels; Construction Noise Levels

Sensitive uses will be exposed to a combination of operational LRT noise sources, including LRT pass-by noise (steel wheels rolling on steel rails), audible warnings noise (crossing signal bells), wheel squeal noise, and special trackwork noise. Thirty-three moderate impacts and two severe impacts will remain after implementation of mitigation measures.

Relocation of existing freight tracks will be required to the north of the alignment within the La Habra Branch ROW, to the west of the alignment within the San Pedro Subdivision ROW, and to the north of the alignment within the Metro-owned PEROW to accommodate the project alignment and maintain existing operations along the ROW where the LRT tracks will be co-located with the freight tracks. Thirty-eight moderate impacts and one severe impact will remain after implementation of mitigation measures.

Ancillary facilities, such as TPSSs would also contribute to noise at sensitive receptors. Sources of TPSS noise include HVAC systems and transformer hum. One moderate impact and two severe impacts remain after implementation of mitigation measures.

Construction noise will exceed the 1-hour Leq FTA standards of 90 dBA during the day and 80 dBA at night for residential uses during the at-grade and elevated guideway phases. In some instances, the

FTA standards would still be exceeded after implementation of mitigation, and construction noise impacts will remain.

LRT pass-bys will create groundborne vibration that could interfere with land use activities. Impacts will remain at two vibration-sensitive receptors along the alignment after implementation of mitigation measures.

Cumulative Impacts to Transportation Facilities during Construction

Construction activities will require 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 Project may also require temporary closure of streets and lanes and loss of on- and off-street parking. Construction of the Project in combination with construction of other projects will cause significant cumulative temporary transportation effects.

Cumulative Impacts to Bicycle Plans and Facilities during Operations

The Project could preempt future development and implementation of planned 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. Metro will continue to coordinate with jurisdictions and local agencies and will prepare 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. The Project may preempt future development and implementation of planned bike paths. Therefore, the Project's incremental contribution to the potentially significant cumulative impact related to bicycle plans during operational activities is cumulatively considerable.

Cumulative Impacts to Operational Noise and Vibration Levels; Construction Noise Levels

Operation of the Project will result in moderate or severe operational noise effects at sensitive receptors along the project alignment. Soundwalls, low impact frogs, TPSS noise reduction, and wheel squeal noise monitoring will reduce impacts related to noise. However, not all noise impacts will be fully mitigated due to physical constraints along the alignment. Therefore, the Project's incremental contribution to the potentially significant cumulative impact related to noise during operational activities is cumulatively considerable.

Construction of the Project will require heavy earth-moving equipment, generators, cranes, pneumatic tools, and other similar machinery. Similar to the Project, 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. Although it is not possible to predict which related projects will result in a cumulative construction noise scenario, construction noise levels associated with the Project could increase ambient noise levels. Therefore, the Project's incremental contribution to the potentially significant cumulative impact related to noise during construction activities is cumulatively considerable.

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 Project where project-generated vibration could occur concurrently with vibration from other sources. The primary source of existing vibration is from freight trains. Due to the infrequency of freight trains, it is unlikely that LRT vibration and freight train vibration will combine to produce a cumulative vibration effect. Significant impacts remain after implementation of mitigation measures such as ballast mat or resilient rail fasteners and low impact frogs. Therefore, the Project's incremental contribution to the

potentially significant cumulative impact related to vibration during construction activities is cumulatively considerable.

12.2 Determination

Metro recognizes that significant and unavoidable impacts would result from implementation of the Project. Having (i) adopted all feasible mitigation measures; (ii) adopted the Environmentally Superior Alternative; (iii) recognized all significant, unavoidable impacts; and (iv) balanced the benefits of the Project against the Project's significant and unavoidable impacts, Metro hereby finds that the benefits of the Project outweigh and override the significant unavoidable impacts for the reasons stated below and are thus considered acceptable. Each of these overriding considerations would be sufficient to outweigh the adverse environmental impacts.

The Project will provide high-quality, reliable transit service to meet the future mobility needs of residents, employees, and visitors who travel within and through the corridor. The Project will provide new transit services to the Equity Focused Communities that will be traversed by or adjacent to the alignment. The Project will also connect the Gateway Cities with the surrounding region. The Project will provide a reliable transit service that will enhance connectivity and reduce travel times to local and regional destinations. It will accommodate future travel demand, including the high number of transit trips made by residents living near the alignment. It will also improve access for densely populated neighborhoods, major employment centers, and other key regional destinations where future growth is forecasted to occur near the alignment. The Project will also address mobility and access constraints faced by transit-dependent communities, thereby improving transit equity.

The Project will allow for the increase in service and expansion of the geographical reach of the Metro LRT system. This will enhance the appeal and viability of LRT as a mode of transportation in Los Angeles County. Such improvements to alternative modes of transportation provide the opportunity for reductions in regional single-occupancy vehicle VMT and associated air pollutant and GHG emissions. Enhancing and expanding the public transit network is at the crux of reducing regional VMT and associated GHG emissions, which is the top priority of state, regional, and local transportation and sustainability plans. The Project will contribute to regional efforts to improve sustainability and reduce VMT.

The Project will create regional economic and social benefits by providing more frequent transit service as well as the overall environmental and social benefits of cleaner air and reduced GHG. Thus, although the Project has the potential to create significant and unavoidable impacts, these impacts are greatly outweighed by the benefits that the Project will bring to the region.

Southeast Gateway Line (formerly West Santa Ana Branch)

Legistar: 2024-0104

April 2024

Metro

Recommendations

A. **APPROVING** the board-identified Locally Preferred Alternative (LPA) as the Southeast Gateway Line (formerly West Santa Ana Branch) Light Rail Transit (LRT) Project (Project), which is a 14.5-miles LRT line with nine (9) stations and includes a new C Line infill station at the I-105 Freeway. The Project extends from its northern LPA terminus at the Slauson/A Line Station located in the City of Los Angeles/Florence-Firestone unincorporated area of Los Angeles (LA) County to its southern terminus at the Pioneer Station located in the City of Artesia. Approval of the Project also provides for the inclusion of five (5) parking facilities, ancillary facilities and a Maintenance and Storage Facility (MSF) in the City of Bellflower;

B. **CERTIFYING** in accordance with the California Environmental Quality Act (CEQA) the Final Environmental Impact Report (EIR), which includes the design option that would close 186th Street but keep 187th Street open in the City of Artesia;

C. **ADOPTING**, in accordance with CEQA, the:

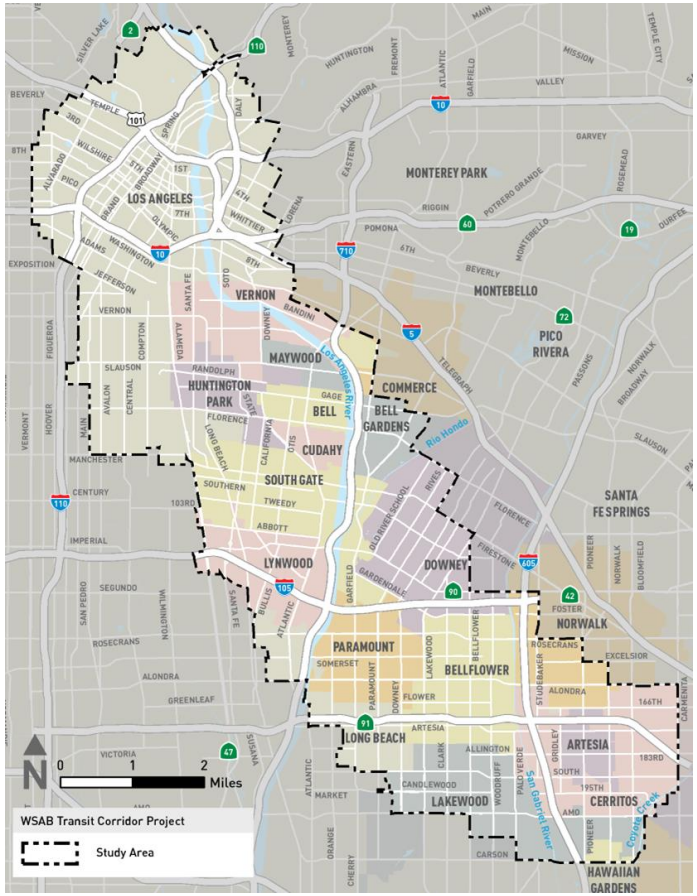
a) Findings of Fact and Statement of Overriding Considerations, and

b) Mitigation Monitoring and Reporting Plan (MMRP); and

D. **AUTHORIZING** the Chief Executive Officer to file a Notice of Determination with the Los Angeles County Clerk and the State of California Clearinghouse.

Purpose and Benefits

- **Study Area:** 98 square miles
- **High projected populations and employment densities** that are five times higher than LA County
  - Population densities: 15,000 to 25,000 residents per square mile
  - Employment densities: 6,800 jobs per square mile
- **High-travel demand corridor** with 44% population below the poverty line and 18% of households that do not own a car; transit demand is significant
- **Environmental Justice Communities** populated by a majority-minority community with 65% minority residents, with Hispanic/Latino groups alone accounting for 51%.
- **Increasing Travel Demand** with a total daily travel projected to increase by 14%, an increase of 870,000 daily person trips by 2042.
- **Direct connection** to the Metro C Line (Green), Metro A Line (Blue) and LA County's broader regional transit network



LPA: Slauson/A Line to Pioneer Station (14.5 Miles, 9 Stations and infill new C Line Station)

- **14.5 miles**
  - 12.1 miles at-grade
  - 2.4 miles aerial
- **9 stations**
  - 6 at-grade
  - 3 aerial
- **1 new C Line Station at I-105**
- **5 park & ride facilities**
  - 4 surface lots
  - 1 parking structure
- **3 river crossings**
  - Los Angeles River
  - Rio Hondo Channel
  - San Gabriel River
- **4 freeway crossings**
  - SR-91, I-605, I-105, I-710
- **Street Crossings**
  - 15 aerial grade separations
  - 30 at-grade crossings
- **Freight realignment (8.7 miles)**
- **Bellflower MSF facility**

Environmental Impacts

> Significant and unavoidable impacts would result from implementation of the Project having:

- Adopted the environmentally superior alternative
- Adopted a Mitigation Monitoring and Reporting Program (MMRP)

With mitigation, the LPA will result in unavoidable impacts to:

- Transportation (bike facilities)
- Land Use (bike facilities)
- Noise and Vibration (select receivers)
- Parklands and Community Facilities (bike facilities)

> The benefits of the Project outweigh and override the significant and unavoidable impacts

Final EIS/EIR Community Outreach

> March 29, 2024: Final EIS/R released

> Digital copies of the Final EIS/R have been mailed to agencies & organizations (227), affected property owners (243), and Draft EIS/R commenters (275)

> Printed copies of the Final EIS/R are available at library locations throughout the project corridor

- Artesia Library
- Arts District BID
- Clifton M. Brakensiek Library
- Gateway Cities COG
- Hollydale Library
- Huntington Park Library
- Little Tokyo Branch Library
- LA Central Library
- Metro Library
- Paramount Park Community Center
- South Park BID

> Over 4,500 eblasts and 450 SMS (texts)

> 55,000 printed notices distributed door-to-door to over 48,000 properties along the corridor

> 5,000 mailed notices to stakeholders and elected officials

> 1,000 fliers handed out at community events

Next Steps

Milestone	Dates
Federal Register Publication and public release of Final EIS/EIR	March 29, 2024
Board approves project and certifies Final EIR	**April 25, 2024**
• File NOD; 30-day CEQA statute of limitations	April 26 to May 27, 2024
• Minimum 30-day waiting period for NEPA action	March 29 to April 29, 2024
• Prepare a summary of comments (and corresponding responses) received during circulation of the Final EIS to be included as an attachment to the ROD	May 2024
FTA issues ROD	**June/July 2024**