

Findings of Fact and Statement of Overriding Considerations

January 2026

C LINE (GREEN) EXTENSION TO TORRANCE



Metro

Contents

1. Introduction	4
1.1 Overview	4
1.2 Document Organization	4
2. Project Description	5
2.1. Project Location and Setting	5
2.2. Project Objectives	7
2.3. Description of the Locally Preferred Alternative.....	7
3. CEQA Statutory Framework and Procedural Requirements	9
3.1. Record of Proceedings	10
3.2. Absence of Significant New Information Requiring Recirculation	11
4. Findings for Environmental Impacts Found to be Significant and Unavoidable	12
4.1. Noise and Vibration.....	12
5. Findings for Environmental Impacts Found to Be Less than Significant with Mitigation	17
5.1. Aesthetics	17
5.2. Noise and Vibration.....	18
5.3. Biological Resources.....	21
5.4. Geology, Soils, and Paleontological Resources	28
5.5. Cultural Resources.....	30
5.6. Tribal Cultural Resources.....	33
6. Findings for Environmental Impacts Found to be Less Than Significant	36
6.1. Transportation.....	36
6.2. Land Use and Planning	39
6.3. Aesthetics	41
6.4. Air Quality.....	43
6.5. Greenhouse Gas Emissions	49
6.6. Geology, Soils, and Paleontological Resources	51
6.7. Hazards and Hazardous Materials.....	57
6.8. Hydrology and Water Quality.....	64
6.9. Utilities and Service Systems.....	72
6.10. Energy.....	75
6.11. Tribal Cultural Resources.....	77
6.12. Public Services	78
7. Findings for Environmental Resources Found Not To Be Impacted	83
8. Findings for Cumulative Impacts	85
8.1. Transportation.....	85
8.2. Land Use and Planning	85
8.3. Aesthetics	85
8.4. Air Quality.....	86
8.5. Greenhouse Gas Emissions	87
8.6. Noise and Vibration.....	88
8.7. Biological Resources.....	90
8.8. Geology, Soils, and Paleontological Resources	90
8.9. Hazards and Hazardous Materials.....	91
8.10. Hydrology and Water Quality.....	91
8.11. Utilities and Service Systems.....	93
8.12. Energy.....	95

8.13. Cultural Resources.....	96
8.14. Tribal Cultural Resources.....	96
8.15. Public Services	97
9. Findings for Alternatives	99
9.1. No Project Alternative	99
9.2. High-Frequency Bus Alternative.....	100
9.3. Elevated/At-Grade Alignment.....	100
9.4. Trench Option.....	101
9.5. Hawthorne Option	102
9.6. Findings for the Environmentally Superior Alternative.....	103
10. Findings for Mitigation Measures.....	104
11. Statement of Overriding Considerations	105
11.1. Significant and Unavoidable Impacts	105
11.2. Overriding Benefits of the Project.....	106

1. INTRODUCTION

1.1 OVERVIEW

This document presents the Findings of Fact required by the California Environmental Quality Act (CEQA) (Public Resources Code [PRC], 21000 et seq.) and the State CEQA Guidelines (14 Cal. Code. Regs., 15000 et seq.) for each of the significant environmental effects identified in the Final Environmental Impact Report (EIR) (SCH NO. 2021010269) prepared for the Los Angeles County Metropolitan Transportation Authority (Metro) C Line (Green) Extension to Torrance Project (Project). This document also includes the Statement of Overriding Considerations, which describes the reasons why the economic, social, technical, and other benefits of the project outweigh its significant and unavoidable impacts.

In this document, “the project” refers to the locally preferred alternative (LPA)—initially analyzed in the Draft EIR as the 170th/182nd Grade-Separated Light Rail Transit Alternative, also known as the Hybrid Alternative. The project, including refinements in the Final EIR, is discussed in more detail in Section 2, and all alternatives analyzed in the Draft and Final EIRs are discussed in Section 9.

The Draft EIR analyzed the project as part of C Line operations with the northern terminus at the Los Angeles International Airport (LAX)/Metro Transit Center (the C-1 Operating Plan). In June 2023, following the release of the Draft EIR, the Metro Board of Directors (Metro Board) adopted a new K Line operating plan (the C-2 Operating Plan), under which the project would operate as a southern extension of the K Line from the existing Redondo Beach (Marine) Station to the Mary K. Giordano Regional Transit Center (Torrance TC).

For consistency with previously released documents, however, the project is still referred to as the C Line Extension to Torrance in the Final EIR and related materials. These Findings are based on the updated operational context reflected in the C-2 Operating Plan. While the revised operating plan results in updated ridership forecasts and associated travel benefits, these improvements do not alter the physical scope or operations characteristics of the project or result in any new or more severe environmental impacts.

1.2 DOCUMENT ORGANIZATION

The document is organized into the following sections:

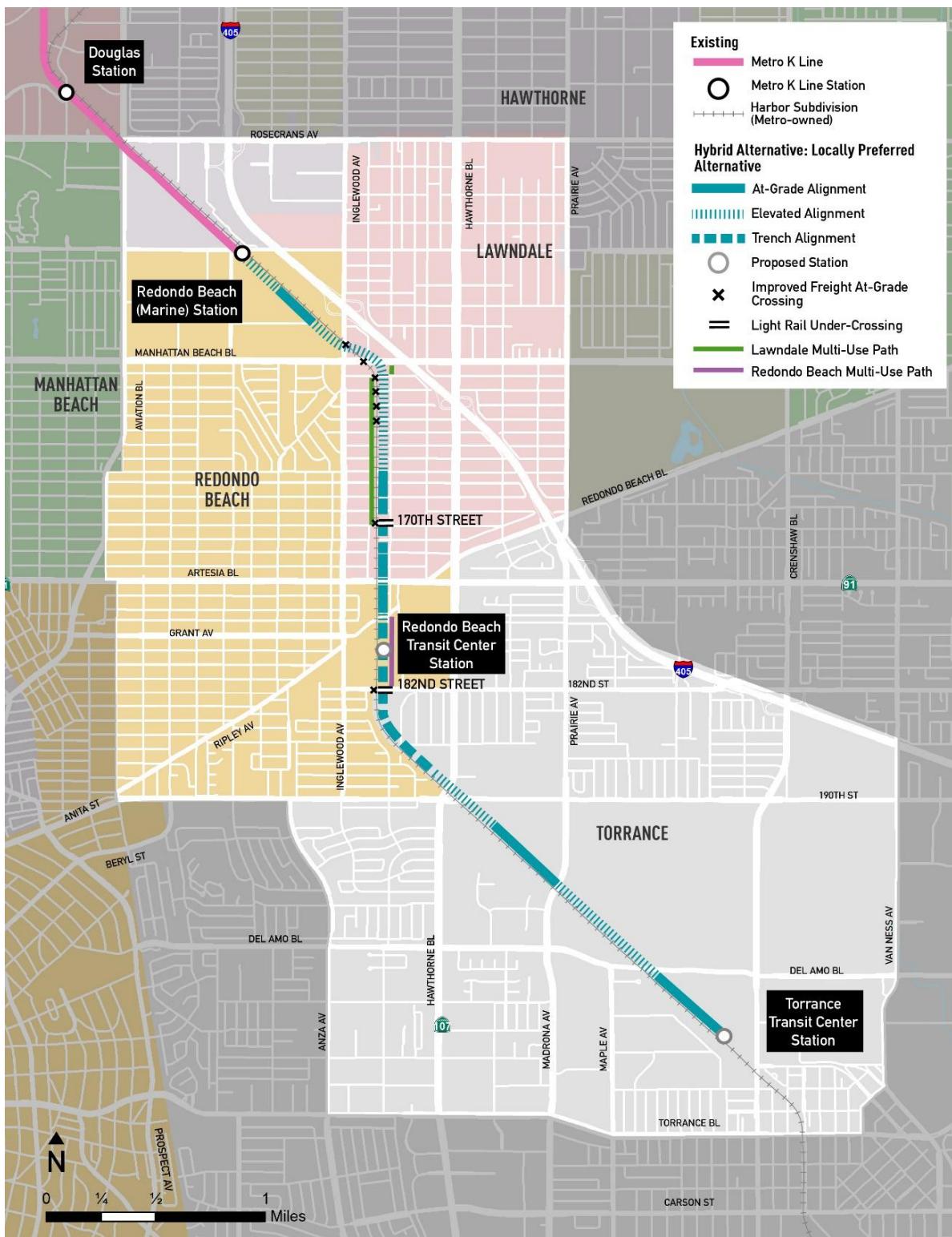
- > Section 1 Introduction
- > Section 2 Project Description
- > Section 3 CEQA Statutory Framework and Procedural Requirements
- > Section 4 Findings for Environmental Impacts Found to be Significant and Unavoidable
- > Section 5 Findings for Environmental Impacts Found to Be Less than Significant with Mitigation
- > Section 6 Findings for Environmental Impacts Found to be Less Than Significant
- > Section 7 Findings for Environmental Resources Found Not to be Impacted
- > Section 8 Findings for Cumulative Impacts
- > Section 9 Findings for Alternatives
- > Section 10 Findings for Mitigation Measures
- > Section 11 Statement of Overriding Considerations

2. PROJECT DESCRIPTION

2.1. PROJECT LOCATION AND SETTING

Figure 2-1 shows the LPA's location within the Project Area, which follows the Metro-owned railroad right-of-way (ROW) along a 4.5-mile north-south corridor from the existing Redondo Beach (Marine) Station, travelling southeast to the Torrance Transit TC. The LPA would travel through the Cities of Lawndale, Redondo Beach, and Torrance. The Project Area includes single-family and multi-family residential areas, industrial and institutional uses, as well as commercial and recreational areas. The Project Area also includes major activity centers, such as the South Bay Galleria, and high-capacity bus transit centers, such as the Redondo Beach TC and the Torrance TC.

Figure 2-1. Locally Preferred Alternative



Source: STV, 2025

2.2. PROJECT OBJECTIVES

The underlying purpose of the project is to provide high-capacity transit service in the South Bay. Metro has identified the following project objectives, which are included in Chapter 2 of both the Draft EIR and Final EIR:

- > Improve mobility within the South Bay and encourage mode shift by:
 - Introducing high-frequency transit service options from the current C Line terminus south to Torrance.
 - Creating direct connections between the regional transit network and local transit hubs for convenient transfers.
 - Providing an alternative mode of transportation for commuters traveling along congested arterials and I-405.
 - Providing first-last mile facilities to connect neighborhoods to station areas.
- > Reduce air pollution and greenhouse gas (GHG) emissions by making transit a more viable transportation choice.
- > Avoid and minimize environmental impacts on environmental resources to the maximum extent feasible.
- > Provide a cost-effective project.
- > Provide more equitable access to regional destinations by improving connections to the Metro regional rail system.

2.3. DESCRIPTION OF THE LOCALLY PREFERRED ALTERNATIVE

As previously noted, following release of the Draft EIR, Metro adopted the C-2 Operating Plan for the Metro C and K Lines. Under this plan, the LPA would operate as a southern extension of the K Line. This change does not otherwise alter the Project Description or physical or operational characteristics analyzed in the EIR. The LPA remains a 4.5-mile extension of Metro light-rail service along the existing Metro ROW, extending from the existing Redondo Beach (Marine) Station to the Torrance TC, with two new intermediate stations, as shown in Figure 2-1.

BNSF operates freight service along the Metro ROW in the project area. As part of the LPA, Metro proposes constructing two new light rail tracks and relocating the existing freight tracks in certain areas within the Metro and BNSF ROW. The LPA also includes multi-use recreational paths within the Metro ROW, where there is sufficient room, in the Cities of Lawndale and Redondo Beach. South of 190th Street, BNSF and Metro share ownership of the freight corridor and BNSF has several spur tracks to serve adjacent businesses. Metro owns approximately 15 feet in width and would acquire or lease additional ROW from BNSF to accommodate two new light rail tracks between 190th Street and the Torrance TC Station, while ensuring BNSF can maintain freight operations and deliveries via spur lines.

The LPA's light rail tracks would be grade-separated from all roadways that currently cross the Metro ROW. All at-grade freight crossings from Inglewood Avenue to 182nd Street would be upgraded with safety infrastructure to be quiet-zone ready, which would allow local jurisdictions to implement a quiet zone policy for the corridor in the future.

The following stations would be constructed under the LPA:

- > Redondo Beach TC Station: The Redondo Beach TC Station would be located south of Grant Avenue, west of the City of Redondo Beach's transit center.
- > Torrance TC Station: The Torrance TC Station would be located just west of Crenshaw Boulevard, west of the City of Torrance's transit center.

The light rail system components would adhere to the Metro Rail Design Criteria (MRDC) and would use a similar design as used on existing Metro light rail lines. The LPA would require an overhead contact system (OCS), six traction power substations (TPSS), and communications and signaling buildings.

The operating hours and schedules would be comparable to the other operating patterns of Metro's current rail lines. The proposed hours of operation are 4:00 a.m. to 1:00 a.m. On weekdays, trains would operate during early morning hours from 4:00 a.m. to 6:00 a.m. and late-night hours from 7:00 p.m. to 1:00 a.m. every 15 minutes. On weekdays, trains would operate every 5 minutes during peak travel hours, which are typically during commuting periods. Metro's implementation of the C-2 Operating Plan for the C and K Lines would not affect these operating conditions.

3. CEQA STATUTORY FRAMEWORK AND PROCEDURAL REQUIREMENTS

The following section summarizes the statutory framework governing the findings that a lead agency must make before approving a project under CEQA. These requirements establish the legal basis for Metro's findings and determinations in this document.

PRC Section 21081 and CEQA Guidelines Section 15091 require that:

- a. No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out 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**) (CEQA Guidelines Section 15091, subdivision (a)(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**) (CEQA Guidelines Section 15091, subdivision (a)(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**) (CEQA Guidelines Section 15091, subdivision (a)(3)).
- b. The findings required by subdivision (a) shall be supported by substantial evidence in the record. 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.
- c. 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.
- d. 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.
- e. A statement made pursuant to Section 15093 does not substitute for the findings required by this section.

CEQA Guidelines Section 15382 defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." The Final EIR identified all potentially significant environmental effects resulting from the project.

CEQA Guidelines Section 15093(a) states that, “If the specific economic, legal, social, technological, or other benefits” of a proposed project “outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered ‘acceptable.’” CEQA Guidelines Section 15093(b) requires for those significant impacts that cannot be avoided or substantially lessened, the lead agency must state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record. The findings provided in this document are based on substantial evidence in the entire record. The references set forth in these findings to certain pages or sections of the environmental documents for the project are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these findings. These findings do not attempt to describe the full analysis of each environmental impact contained in the Draft EIR, Final EIR, and additional documents in the record for the project. These findings hereby incorporate by reference and adopt the discussion and analysis in the Draft EIR, Final EIR, their appendices, and additional documents in the record for the project. In making these findings, the determinations and conclusions of the Final EIR relating to environmental impacts are hereby ratified, adopted, and incorporated in these findings. In the event these findings inadvertently omit or inaccurately reflect facts stated in the Final EIR due to a clerical error, such statements are nevertheless hereby adopted and incorporated in the findings below by reference, and the language set forth in the Final EIR shall control.

PRC Section 21081.6 also requires public agencies to adopt a mitigation monitoring and reporting program (MMRP) for assessing and ensuring the implementation of proposed mitigation measures. Pursuant to PRC Section 21081.6, public agencies are required to provide that the measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. The MMRP is published on the Metro project website at www.metro.net/clineext.

3.1. RECORD OF PROCEEDINGS

For purposes of CEQA and the findings set 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 (NOP) and other public notices issued by Metro in conjunction with the project
- > The Draft EIR dated January 2023 including all associated appendices and documents that were incorporated by reference
- > All testimony, documentary evidence, and all 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 EIR, and responses to those comments (Chapter 5, Responses to Comments, of the Final EIR)
- > The Final EIR dated September 2025 including all associated appendices and documents that were incorporated by reference
- > The MMRP
- > All findings and resolutions adopted by Metro in connection with the project, and all documents cited or referred to therein

- > All final technical reports and addenda, studies, memoranda, maps, correspondence, and all planning documents prepared by Metro or the consultants relating to the project
- > All documents submitted to Metro by agencies or members of the public in connection with the 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.

3.2. ABSENCE OF SIGNIFICANT NEW INFORMATION REQUIRING RECIRCULATION

The Metro Board finds that recirculation of the EIR is not required under PRC 21092.1 and CEQA Guidelines section 15088.5. Under CEQA Guidelines section 15088.5, a lead agency must recirculate an EIR prior to certification only when significant new information is added to the document after public review. Significant information includes information showing that the project will result in new or substantially more severe significant environmental impacts, or that new feasible mitigation measures or alternatives considerably different than those identified in the EIR are available to clearly lessen significant impacts and the agency declines to adopt them.

Metro has reviewed and considered all information developed since publication of the Draft and Final EIRs, including technical memoranda, updated ridership forecasts, revised VMT calculations, implementation of the C and K Line C-2 Operating Plan, and other supplemental analyses prepared during the administrative review projects. None of this information alters the fundamental characteristics of the LPA, changes the conclusions regarding the nature or severity of environmental impacts, or identifies new feasible mitigation measures or alternatives substantially different than those presented in the EIR that Metro declines to adopt. Rather, this information clarifies, amplifies, and provides minor updates to the analyses presented in the Draft and Final EIRs.

Accordingly, the Metro Board finds that no “significant new information,” as defined in CEQA Guidelines section 15088.5, has been added to the EIR or the record of proceedings, and recirculation of the EIR is therefore not required.

4. FINDINGS FOR ENVIRONMENTAL IMPACTS FOUND TO BE SIGNIFICANT AND UNAVOIDABLE

This section discusses the impacts found to remain significant, even with implementation of all feasible mitigation measures. These findings are based on the analyses in Chapters 3 and 4 of the Draft EIR and in Chapters 3 and 4 of the Final EIR, as well as relevant technical reports and responses to comments.

4.1. NOISE AND VIBRATION

During construction, the project would have significant and unavoidable temporary noise and vibration impacts with respect to the following significance thresholds:

- > 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 in the local general plan or noise ordinance, or applicable standards of other agencies? (Impact 3.6-4.1)
- > Would the project result in generation of excessive ground-borne vibration levels? (Impact 3.6-4.3)

Impacts

Impact 3.6-4.1: Ambient Noise During Construction

The LPA would require at-grade, elevated, and trench guideway construction. Construction activity at station areas would be dependent on the profile of the station (at-grade or below-grade). Construction noise levels at staging areas would be similar to noise levels generated by at-grade construction and would primarily involve the movement of equipment to and from the project site. At-grade construction, which would represent a typical construction day, would be the loudest phases with a 1-hour equivalent continuous sound level (L_{eq}) of 91.2 A-weighted decibels (dBA) at 50 feet for typical construction. Trench work would generate a similar 1-hour L_{eq} of 90.9 dBA, and elevated guideway work would generate a 1-hour L_{eq} of approximately 90.9 dBA. Noise levels during construction would exceed the 1-hour L_{eq} Federal Transit Administration (FTA) standards of 90 dBA during the day and 80 dBA at night for residential uses for all types of construction. Mitigation Measure MM-NOI-1 (Noise Control Plan) would be implemented, which would require the contractor to prepare a detailed, site-specific Noise Control Plan prior to initiating any localized construction activities and to implement the plan during the construction activities. The contractor would be required to conduct continuous noise monitoring and implement corrective actions to bring noise levels to below the FTA noise thresholds when the thresholds are exceeded. Impact equipment is to be minimized or replaced with quieter alternatives, and nighttime work must comply with local ordinances or obtain necessary variances demonstrating mitigation. However, in some instances the FTA construction impact criteria may still be exceeded, and the significant impact during construction would remain.

Impact 3.6-4.3: Ground-Borne Vibration During Construction

Ground-borne vibration caused by the LPA's construction could cause annoyance-related impacts to vibration-sensitive receptors, which include residences, hotels, and other locations where people sleep. Annoyance due to vibration would be limited only to the periods when the vibration-generating equipment is operating in close proximity to residences, which may be limited to only a few hours at a time, after which the equipment would move on to another area of construction. Nevertheless, vibration generated by construction activities would exceed the annoyance threshold and would be potentially significant. Mitigation Measure MM-VIB-1 (Vibration Control Plan) would require the contractor to prepare a Vibration Control Plan, conduct monitoring to demonstrate compliance with the

vibration limits, and use alternative construction methods to reduce vibration impacts, as feasible. Mitigation Measure MM-VIB-2 (Construction Equipment Location) would require that operation of vibratory rollers within 26 feet of a building structure would be in static mode only, that the use of vibratory pile drivers not occur within 22 feet of a building, and use of alternative pile driving techniques, when feasible. With implementation of the foregoing mitigation measures, the LPA would have a less than significant impact during construction related to *damage*. However, it would not be feasible to limit the use of all types of equipment, as some pieces of equipment cannot be modified or replaced, and a significant and unavoidable impact related to vibration *annoyance* during construction would remain.

References in the Draft and Final EIR

- > Section 3.6, Noise and Vibration, Subsections 3.6-4.1.1, 3.6-4.1.2, and 3.6-4.3.1 of the Draft EIR
- > Chapter 4, Evaluation of Alternatives, Subsection 4.5-3.6 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR
- > Chapter 5, Responses to Comments, Subsection 5.2-5, Main Topic Response MR-5: Vibration Impact Types and Impact Thresholds, of the Final EIR

Mitigation Measures

MM-NOI-1: Noise Control Plan

- > Metro's contractor shall develop a Noise Control Plan demonstrating how the FTA 1-hour L_{eq} noise criteria would be achieved during construction. The Noise Control Plan shall be prepared by a board-certified acoustical engineer. 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 Noise Control Plan shall be designed to follow Metro requirements, and shall include measurements of existing noise, a list of the major pieces of construction equipment that would be used, predictions of the noise levels at the closest noise-sensitive receivers (residences, hotels, schools, churches, temples, and similar facilities), and noise mitigation measures to be implemented to achieve compliance with applicable noise thresholds. The Noise Control Plans must be approved by Metro prior to initiating noise-generating construction activities. The contractor shall conduct continuous noise monitoring to demonstrate compliance with the FTA 1-hour L_{eq} noise limits. If the FTA 1-hour L_{eq} criteria are exceeded, the contractor shall implement alternative construction measures to reduce construction noise as much as feasible. The contractor shall establish a public information and complaint system. The contractor shall respond to and provide corrective action for complaints filed within a time period of 24 hours. In addition, Metro shall comply with local noise ordinances when applicable, including by obtaining a variance(s) from the applicable local jurisdiction when nighttime work is required. Noise-reducing methods that may be implemented by the contractor include:
- > Construction activities shall be limited to daytime hours, except when nighttime work is necessary due to utility coordination, safety considerations, traffic minimization, or other conditions requiring a nighttime variance. In such cases, the contractor shall obtain a variance from the applicable jurisdiction and demonstrate that noise control measures will maintain noise levels below FTA and local 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/movable noise barriers or noise-control curtains, where feasible and as required by the Noise Control Plan.
- > 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.
- > Limit certain construction activities to daytime hours, when feasible

MM-NOI-2: Soundwalls

Where feasible, soundwalls shall be placed at the edge of the near light rail track with appropriate setback distance from the tracks or at the edge of elevated structures to reduce noise related to light rail vehicles as required to meet FTA criteria. Height, length, and need for absorptive noise-reducing materials will be finalized during final design as necessary to reduce noise from light rail trains to below the FTA moderate impact criteria, as feasible. Materials, color, landscaping, and/or other aesthetic treatments would also be integrated into the design of the soundwall to minimize dominance and scale.¹

MM-NOI-3: Low Impact Frogs

Low impact frogs (crossing point of two rails) shall be installed to reduce crossover impact noise where necessary to reduce noise from light rail trains to below the FTA moderate impact criteria. Locations shall be verified during final design as necessary to reduce noise from light rail trains to below the FTA moderate impact criteria.

MM-VIB-1: Vibration Control Plan

Prior to construction, the contractor would prepare a Vibration Control Plan demonstrating how the FTA building damage risk criteria and the FTA vibration annoyance criteria would be achieved. The Vibration Control Plan must be approved by Metro prior to initiating vibration-generating construction activities

¹ The applicability of the term “feasible” applies only to the Elevated/At-Grade Alignment (the “Proposed Project” in the Draft EIR). Specifically, as explained on page 36-100 of the Draft EIR, with respect to the Elevated/At-Grade Alignment, soundwalls would not be feasible at the 170th Street and 182nd Street at-grade crossing because vehicle travel must be maintained. The “where feasible” and “as feasible” text in MM-NOI-2 was included in MM-NOI-2 to address this specific physical constraint for the Elevated/At-Grade Alignment. This qualifying language does not apply to the LPA, the Trench Option, or the Hawthorne Option, which do not have at-grade crossings or other physical constraints that would prevent construction of the soundwalls as necessary to reduce operational noise impacts of the light rail to below the FTA significance thresholds with mitigation.

and include the requirement that the contractor, in coordination with Metro and the City of Torrance Public Works Department, shall notify nearby receptors, including businesses near Del Amo Bridge, of pile-driving activities at least 72 hours in advance. The Vibration Control Plan would include a list of the major pieces of construction equipment that would be used, and the predictions of the vibration levels are the closest sensitive receivers. The contractor would conduct vibration monitoring to demonstrate compliance with the vibration limits. Where the construction cannot be performed to meet the vibration criteria, the contractor would investigate alternative means and methods of construction measures to reduce vibration levels as much as feasible.

MM-VIB-2: Construction Equipment Location

To address potential building damage, the following measures would be implemented.

- > Where a vibratory roller would be operated within 26 feet of a building structure, the vibratory roller shall be operated in static mode only.
- > Where pile driving is needed, the use of vibratory pile driving would be limited to being no closer than 22 feet of the nearest sensitive structure. In areas adjacent to sensitive structures where the distance cannot be limited to 22 feet or greater, pile driving will use alternative technology such as CIDH.
- > Limit the location of impact pile driving to the extent feasible.

Findings

Impact 3.6-4.1: Ambient Noise During Construction

Mitigation Measure MM-NOI-1 would be implemented, which will reduce construction noise levels. However, in some instances the FTA construction impact criteria may still be exceeded. There are no additional feasible mitigation measures that could be implemented to further reduce construction noise levels. Metro has considered sound proofing homes as a potential measure to mitigate construction noise. This approach is not considered feasible or appropriate. Although CEQA allows adoption of mitigation measures of uncertain efficacy, the measure must still be capable of achieving some portion of its intended result. An acoustic retrofitting program, however, would depend entirely on the voluntary cooperation of property owners and tenants—parties outside Metro’s jurisdiction and control. As a result, the effectiveness of the measure would remain speculative. Even if Metro could identify and analyze specific retrofit techniques (such as window replacement or façade sealing), their actual implementation would hinge on the willingness of numerous private third parties, leaving Metro with no assurance that any meaningful reduction in interior noise levels would be achieved. For this reason alone, acoustic retrofitting is not considered a feasible mitigation measure. In addition, acoustic retrofitting would not effectively address exterior noise levels at the source. As retrofitting requires windows to be closed to be effective, a retrofit program could impair interior ventilation. Implementing a retrofitting program would require extensive coordination with property owners and tenants, contractors, and city building departments that may need to issue permits, adding substantial time to the project’s implementation, as the retrofits would need to be installed prior to construction. Furthermore, retrofit measures may introduce secondary impacts, including noise and dust, and would be physically invasive. The costs and effort to undertake retrofitting at a broad scale would be burdensome relative to the temporary nature of the impact. 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.

Impact 3.6-4.3: Ground-Borne Vibration During Construction

Implementation of Mitigation Measures MM-VIB-1 and MM-VIB-2 would reduce the potential for vibration annoyance impacts during construction. Even with implementation of the foregoing mitigation measures, the LPA would have a significant and unavoidable impact related to vibration *annoyance* during construction. 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. For ground-borne-vibration-related *damage* impacts, Metro adopts CEQA Finding 2, as identified in Section 3 above and in Section 15091, subdivision (a)(b) of the CEQA Guidelines.

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

This section discusses the impacts found to be significant, which can be reduced to less than significant levels through implementation of mitigation measures. Notable project features and mitigation measures pertinent to the summaries of potential impacts discussed herein are included in this document. Project features include components of the project design, such as best management practices (BMP) and other design commitments. They are part of the project itself, and are not mitigation measures. They are listed here, because they provide evidence supporting the impact conclusions prior to consideration of mitigation. Mitigation measures, by contrast, are imposed to reduce or avoid significant impacts. All project features and mitigation measures established by the Draft EIR and Final EIR are provided in and made enforceable by the MMRP.

5.1. AESTHETICS

The project would have a less than significant impact with mitigation related to aesthetics with respect to the following significance thresholds:

- > Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, or create new shade or shadows that would substantially affect outdoor recreation facilities or other public areas? (Impact 3.3-4.4)

Impact

Impact 3.3-4.4: Create New Source of Substantial Light/Glare During Construction

Construction activities would occur mainly during daytime hours, and construction-related illumination would be temporary and limited to safety and security purposes. Construction activities are not anticipated to result in a substantial source of light or glare. However, if nighttime construction is required, residential uses around the Metro ROW could be affected if light spills over to the residences or if lighting is not shielded to limit glare at these residences. Therefore, there would be a significant impact related to light or glare during construction. Mitigation Measure MM-AES-1 (Construction Lighting) would be implemented to ensure that construction lighting would be shielded and directed downward and away from adjacent residential and commercial areas. With implementation of MM-AES-1, the impact would be less than significant.

References in the Draft and Final EIR

- > Section 3.3, Aesthetics, Subsection 3.3-4.4.1 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Mitigation Measures

MM-AES-1: Construction Lighting

During nighttime construction activities lighting, including “down lighting,” shall be directed toward the interior of the construction staging area and shall be shielded so that it would not spill over into adjacent light-sensitive areas.

Finding

Impact 3.3-4.4: Create New Source of Substantial Light/Glare During Construction

Implementation of MM-AES-1 would reduce the potential for introducing a new light glare or shadows generated by project construction to a less than significant level. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

5.2. NOISE AND VIBRATION

Operation of the project would have a less than significant permanent impact with mitigation related to noise and vibration with respect to the following significance thresholds:

- > 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 in the local general plan or noise ordinance, or applicable standards of other agencies? (Impact 3.6-4.1)
- > Would the project result in generation of excessive ground-borne vibration Levels? (Impact 3.6-4.3)

Impact

Impact 3.6-4.1: Ambient Noise During Operation

Sensitive uses would be exposed to a combination of noise sources, including light rail train pass-by noise, TPSS noise, and special trackwork noise. In addition, freight trains would generate noise from warning horns at the at-grade freight crossings. The combined light rail and freight noise would result in significant impacts to sensitive receivers.

Under the LPA, relocation of the freight tracks combined with light rail operations would result in potentially significant noise impacts to 178 Category 2 clusters and three Category 3 clusters. Metro would implement Project Feature PF-NV-1 (Quiet Zone Equipment Installation), which provides that design and construction of freight railroad at-grade crossings include all equipment needed to allow local jurisdictions to establish a quiet zone. This project feature is part of the project design and provides evidence supporting the impact conclusions prior to consideration of mitigation.

Mitigation Measures MM-NOI-2 (Soundwalls) and MM-NOI-3 (Low Impact Frogs) would be implemented, which would reduce noise via installation of soundwalls at identified impacted receptors and low impact frogs at crossovers which were determined to contribute to noise impacts. Mitigation Measure MM-NOI-4 (Quiet Zone Establishment) would require Metro to assist local jurisdictions to designate a quiet zone from north of Inglewood Avenue to south of 182nd Street. Establishment of a quiet zone would eliminate the regular use of freight horns in the corridor, reducing noise in the surrounding area.

With implementation of Mitigation Measures MM-NOI-2, MM-NOI-3, and MM-NOI-4, operational noise levels would be reduced to below the FTA's criteria for all sensitive receptors along the LPA, and the impact would be less than significant. Importantly, Metro has committed through Project Feature PF-NV-1 to construct all physical improvements needed for a quiet zone, such that the measure is fully enabled by the project. Once the improvements are in place, designation of a quiet zone is a ministerial act within the jurisdiction of the corridor cities under Federal Railroad Administration (FRA) regulations. Quiet zones have been routinely established in similar urban contexts once the necessary safety upgrades are complete, providing substantial evidence that this mitigation is feasible and effective.

In the event that local jurisdictions choose not to apply for a quiet zone, Mitigation Measure MM-NOI-4 would not be implemented to reduce freight horn noise, and the impact would remain significant and

unavoidable. However, CEQA Guidelines Section 15091(a)(2) expressly provides that where another agency has the authority and responsibility to implement a mitigation measure, the lead agency may find that the other agency can and should adopt the measure. Metro, therefore, finds that Mitigation Measure MM-NOI-4 is within the responsibility and jurisdiction of the corridor cities (City of Torrance, City of Redondo Beach, and City of Lawndale), and that those cities can and should implement the measure. All necessary safety upgrades to the freight crossings needed to implement a by-right quiet zone would be made as part of the project.

Impact 3.6-4.3: Excessive Ground-Borne Vibration Levels During Operations

The ground-borne vibration levels in areas where residences would experience an annoyance impact would exceed the FTA vibration impact criteria for light rail and freight. Therefore, operation of the LPA would have a significant impact related to excessive ground-borne vibration levels, and mitigation would be required. Mitigation Measure MM-VIB-4 (Low Impact Frogs) would be implemented, which would require installation of spring-loaded frogs at specific locations to reduce the impact from crossovers by reducing the width of gaps at joints when steel wheels roll over steel rails at rail joints. Mitigation Measures MM-VIB-5 (Resilient Fasteners) and MM-VIB-6 (Ballast Mats) would be implemented, which would require the use of resilient fasteners to incorporate resilience into the track support systems and ballast mats to reduce the impacts from train pass-bys caused by steel wheels rolling over steel rails at rail joints (which would provide a combined vibration reduction of up to 15 velocity level decibels [VdB]). With implementation of these mitigation measures, the LPA would not result in excessive ground-borne vibration during operation. The impact would be less than significant with mitigation.

References in the Draft and Final EIR

- > Section 3.6, Noise and Vibration, Subsection 3.6-4.3.2 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR
- > Chapter 5, Responses to Comments, Subsections MR-5.2-2, Major Topic Response MR-2: Operational Noise Analysis Methodology and Impact Thresholds; Major Topic Response MR-5.2-3, Operational Noise Project Features and Mitigation Measures; MR- MR-5.2-5, Major Topic Response MR-5, Vibration Impact Types and Impact Thresholds, of the Final EIR

Project Features

PF-NV-1. Quiet Zone Equipment Installation

The eight at-grade freight crossings between Inglewood Ave and 182nd Street have been designed and would be constructed to include all Federal Railroad Administration (FRA)-required Supplemental Safety Measures and associated improvements and equipment that are needed to qualify for Automatic FRA Approval to establish a quiet zone. In order to establish a quiet zone, local jurisdictions will need to submit a Notice of Intent to the operating railroads (e.g., BNSF), California Public Utilities Commission (CPUC), Metro, and FRA followed by a Notice of Establishment, which would ultimately eliminate the sounding of freight horns within the project limits. Crossing signal bells would continue to generate a minimum of noise level of 75 dBA at 10 feet per American Railway Engineering and Maintenance of Way requirements.

Mitigation Measures

MM-NOI-4: Quiet Zone Establishment

Metro shall cooperate with the City of Lawndale, City of Redondo Beach, and City of Torrance to provide support and guidance during the quiet zone establishment process. The cities shall comply with FRA requirements (49 Code of Federal Regulations [CFR] Section 222.35 to Section 222.57) to establish a quiet zone(s) from north of Inglewood Avenue to south of 182nd Street, including by providing written notice to BNSF, Metro, and CPUC on its intent to establish a quiet zone(s) for the listed freight crossings:

- > Inglewood Avenue
- > Manhattan Beach Boulevard
- > 159th Street
- > 160th Street
- > 161st Street
- > 162nd Street
- > 170th Street
- > 182nd Street

MM-VIB-4: Low Impact Frogs

Frogs with spring-loaded mechanisms shall be installed to close the gaps between running rails such that a 10 dB vibration reduction is achieved and the impact is reduced to below FTA criteria (80 VdB for freight and 72 VdB for light rail). The locations of the frogs shall be verified during final design using a site-specific Detailed Vibration Assessment, including transfer mobility measurements, for the preferred alignment option (as per FTA Transit Noise and Vibration Impact Assessment Manual (“FTA Guidance”), Section 6.5).

MM-VIB-5: Resilient Fasteners

Resilient fasteners shall be installed to fasten the rail to concrete track slabs or ties such that a minimum 5 dB vibration is achieved and the impact is reduced to below FTA criteria (80 VdB for freight and 72 VdB for light rail). The locations of the resilient fasteners shall be verified during final design using a site-specific Detailed Vibration Assessment, including transfer mobility measurements, for the preferred alignment option (as per FTA guidance, Section 6.5).

MM-VIB-6: Ballast Mats

Ballast mats consist of a rubber or other type of elastomer pad that is placed under the track ballast. Ballast mats shall be installed such that a minimum 10 dB vibration reduction is achieved and the impact is reduced to below FTA criteria (80 VdB for freight and 72 VdB for light rail). The locations of the ballast mats shall be verified during final design using a site-specific Detailed Vibration Assessment, including transfer mobility measurements, for the preferred alignment option (as per FTA guidance, Section 6.5).

Finding

Impact 3.6-4.1: Ambient Noise During Operation

Mitigation Measures MM-NOI-2 and MM-NOI-3 would reduce light rail transit noise impacts to less than significant. Mitigation Measure MM-NOI-4 would require Metro to assist local jurisdictions in

establishing a quiet zone from north of Inglewood Avenue to south of 182nd Street, which would eliminate freight horn noise. With implementation of MM-NOI-2, MM-NOI-3, and MM-NOI-4, the impact would be less than significant.

Metro has committed, through Project Feature PF-NV-1, to construct all physical improvements needed for the establishment of a quiet zone, thereby enabling local jurisdictions to act. Establishment of a quiet zone is a ministerial act for FRA and falls within the jurisdiction and authority of the Cities of Torrance, Redondo Beach, and Lawndale once those improvements are in place. Quiet zones have been routinely established in similar contexts once safety upgrades are complete, providing substantial evidence that this mitigation is feasible and effective.

Although Metro cannot, itself, designate the quiet zone, CEQA Guidelines Section 15091(a)(2) provides that where another agency has the responsibility and jurisdiction to implement a measure, the lead agency may properly find that the other agency can and should do so. Metro therefore finds that the Cities of Torrance, Redondo Beach, and Lawndale can and should implement MM-NOI-4, and that with implementation of this measure, the impact would be reduced to a less than significant level. Thus, Metro adopts CEQA Findings 1 and 2, as identified in Section 3 above and in Section 15091, subdivisions (a)(1), and (a)(2) of the CEQA Guidelines.

However, in the event that the corridor cities do not implement a quiet zone pursuant to MM-NOI-4, Metro, for purposes of the Statement of Overriding Considerations set forth in Section 11 below, adopts CEQA Finding 3, as identified in Section 3 above and in Section 15091, subdivision (a)(3) of the CEQA Guidelines.

Impact 3.6-4.3: Excessive Ground-Borne Vibration Levels During Operations

Implementation of Mitigation Measures MM-VIB-4, MM-VIB-5, and MM-VIB-6 would reduce the amount of excessive ground-borne vibration levels generated during project operation to a less than significant level. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

5.3. BIOLOGICAL RESOURCES

The project would have a less than significant impact with mitigation related to biological resources with respect to the following significance thresholds:

- > 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 U.S. Fish and Wildlife Service? (Impact 3.7-4.1)
- > Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Impact 3.7-4.5)

Impacts

Impact 3.7-4.1: Adverse Effects on Special-Status Species During Construction

The southern tarplant is known to occur within the City of Torrance Open Space Preserve adjacent to the Torrance TC. Specifically, suitable habitat for southern tarplant is present along the maintenance and emergency access path located partially within the established Open Space Preserve on its perimeter. The LPA's maintenance and emergency access path would occupy approximately 7,471 square feet of the 87,036-square-foot Preserve. Direct impacts to southern tarplant would include loss

of approximately 7,471 square feet of habitat and potential mortality of individual plants within the project footprint. Potential indirect impacts could include soil and contaminant runoff during the wet season, dust during the dry season, especially during excavations, and the introduction of non-native or invasive species that could degrade habitat and outcompete southern tarplant for resources.

Impacts to southern tarplant would be less than significant with implementation of MM-BIO-1 (General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources) and MM-BIO-4 (Pre-Construction Rare Plant Survey), which would require the delineation of work limits and buffers, a pre-construction rare plant survey prior to ground disturbance, and on-site monitoring by a qualified botanist. In addition, MM-BIO-5 (Off-Site Mitigation for Southern Tarplant Habitat) would require Metro to coordinate with the City of Torrance and the California Department of Fish and Wildlife (CDFW) to identify and evaluate suitable-off-site mitigation sites for southern tarplant habitat, with the goal of establishing, preserving, and managing such habitat in perpetuity at a minimum 3:1 replacement ratio or higher if required by CDFW. If the City of Torrance elects to relocate and re-establish the entire preserve, Metro may fulfill its compensatory mitigation obligation under MM-BIO-5 by funding and implementing a proportional share of the new preserve area under an agreement that includes long-term maintenance provisions and performance standards consistent with the requirements set forth in that mitigation measure. If the City does not proceed with relocation, Metro would implement independent off-site mitigation meeting the same performance standards, including securing appropriate land rights, implementing habitat enhancement measures, conducting long-term monitoring, and establishing an endowment or other funding mechanism. Construction impacts on southern tarplant would be reduced to a less than significant level with implementation of the foregoing mitigation measures.

Direct impacts to special-status bird species are not likely to occur as moderate to high quality suitable habitat was not identified within the resource study area (RSA). However, potential direct impacts to breeding birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG) Sections 3500 through 3705 may occur if construction related to the demolition of the bridges or if vegetation and tree removal occurs within the nesting bird season (defined herein as February 1 through September 15). Potential direct impacts could include the destruction of occupied nests and associated loss of young, as well as loss of suitable nesting substrate. Potential indirect impacts to breeding birds during the nesting bird season may include construction-related noise and light disturbance, the degradation of habitat related to dust settlement, nest abandonment, and an increase in opportunistic predators. Bridge demolition may also impact special-status bat species, specifically, Yuma myotis. Potential direct impacts resulting from the bridge demolition may include a loss of roosting habitat and/or direct mortalities. Potential indirect impacts may include construction-related noise, vibration, and light disturbance; all of which could lead to colony/roost abandonment.

Potential impacts to breeding birds would be less than significant through implementation of Mitigation Measure MM-BIO-2 (Nesting Bird Season Restrictions and Pre-Construction Surveys), which would require a pre-construction nesting bird survey during the nesting bird season, work/construction buffers around active nests, and the monitoring of nesting activity by qualified biologists. Impacts to special-status bat species would be less than significant through implementation of Mitigation Measure MM-BIO-3 (Roosting Bat Restrictions and Survey Requirements), which would require a bat roost habitat assessment and subsequent consultation with CDFW and preparation of a mitigation plan if presence is detected.

Impact 3.7-4.1: Adverse Effects on Special-Status Species During Operations

Maintenance activities along the Metro ROW could result in both temporary direct and indirect impacts to bird species protected under the MBTA and CFGC if trees and vegetation that have potential to support nesting birds are removed or disturbed during the nesting bird season. Potential direct impacts may subsequently cause nest abandonment (and thus loss of young), nest failure, or direct mortality of individuals. However, Metro routine maintenance during operation does not typically disturb vegetation or trees that support nesting birds.

In addition, if the City of Torrance does not proceed with relocation of the Open Space Preserve adjacent to the Torrance TC, project-related maintenance activities could result in indirect impacts to southern tarplant individuals and habitat within the Preserve. These impacts could occur from oil and fluid run-off associated with project's surface parking lot and use of the maintenance and emergency egress path, which could degrade habitat and soil quality and cause die-off of southern tarplant individuals, including the seed bank. However, such impacts are not expected because the LPA's parking lot would be impervious and designed with BMPs to retain stormwater on-site. These features and BMPs would also apply to the LPA's maintenance and emergency egress path.

If the City of Torrance does not relocate the Preserve, Metro would implement stand-alone off-site mitigation consistent with Mitigation Measure MM-BIO-5 to offset the affected portion of southern tarplant habitat. Implementation of MM-BIO-1 would further avoid or minimize degradation of habitat and soil quality, thereby preventing substantial adverse effects on southern tarplant during operation. Therefore, with implementation of MM-BIO-1 and MM-BIO-5, operation of the LPA would result in a less than significant impact to southern tarplant.

Impact 3.7-4.5: Conflicts with Local Policies or Ordinances Protecting Biological Resources During Construction

Construction of the LPA would have potential to conflict with local policies or ordinances protecting biological resources. The Open Space Preserve established for southern tarplant protection is located immediately adjacent to the project footprint (specifically, the surface parking lot) and the project's maintenance and emergency egress path would occupy approximately 7,471 square feet of the 87,036-square-foot Preserve. This encroachment would conflict with the Preserve's open space and habitat objectives and, therefore, would represent a significant impact before mitigation. Implementation of MM-BIO-5 (Off-Site Mitigation for Southern Tarplant Habitat) would reduce this impact to a less than significant level through either (1) participation in and funding of the City's relocation and re-establishment of the Preserve under an agreement that meets the mitigation measure's performance standards, or (2) implementation of an independent off-site mitigation preserve meeting the same performance standards, including long-term management and funding provisions. MM-BIO-1 (General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources) would also be implemented to avoid and minimize temporary construction-related effects within the Preserve. Thus, with implementation of MM-BIO-1 and MM-BIO-5, potential conflicts with local policies or ordinances protecting biological resources, specifically impacts to the established Open Space Preserve, would be reduced to less than significant.

Impact 3.7-4.5: Conflicts with Local Policies or Ordinances Protecting Biological Resources During Operation

The LPA's maintenance and emergency egress path near the Torrance TC Station would be located partially within the existing City of Torrance Open Space Preserve for southern tarplant. Use of the

maintenance and emergency egress path within the Preserve would represent a potential conflict with the Preserve's open space and habitat objectives, which would constitute a significant impact before mitigation. Prior to project operation, this impact would be mitigated via Mitigation Measure MM-BIO-5 (Off-Site Mitigation for Southern Tarplant) through either (1) Metro's participation in and funding of the City's relocation and re-establishment of the Preserve under an agreement that meets the mitigation measure's performance standards, or (2) implementation of an independent off-site mitigation project meeting the same performance standards, including long-term management and funding provisions. Because MM-BIO-5 would be implemented during construction, the required mitigation would be in place before operation begins. If the City does not relocate the Preserve, implementation of MM-BIO-1 (General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources) together with MM-BIO-5, would ensure operational impacts related to conflicts with local policies or ordinances protecting biological resources are reduced to a less than significant level. Thus, with implementation of MM-BIO-1 and MM-BIO-5, potential operational conflicts with local policies or ordinances protecting biological resources, specifically impacts to the established Open Space Preserve, would be less than significant.

References in the Draft and Final EIR

- > Section 3.7, Biological Resources, Subsections 3.7-4.1.1 and 3.7-4.1.2 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Mitigation Measures

MM-BIO-1: General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources

Prior to the initiation of construction activities, construction work limits shall be defined and marked (i.e., by caution tape, temporary fencing, etc.). All temporary fencing or other markers must be clearly visible to construction personnel.

Prior to and during construction, a qualified Biologist, selected by Metro, shall confirm that the outer perimeter of the construction work limits, fencing, and erosion control measures are properly installed and shall monitor compliance with these measures within and adjacent to the Open Space Preserve. No native vegetation removal or grading shall occur within any remaining areas of the Open Space Preserve.

Fenced impact limits shall include erosion control measures to minimize erosion and siltation during initial vegetation clearing/removal and construction through the use of silt fencing, siltation basins, gravel bags, or other controls necessary to stabilize the soil in cleared or graded areas. Erosion control measures would be installed prior to the onset of vegetation clearing/removal. These measures would be maintained in good repair until the completion of construction. Vegetation clearing/removal during routine maintenance shall also include similar erosion control measures. Specific work areas within the Torrance TC Station site adjacent to portions of the Open Space Preserve that remain in place, if the City of Torrance does not relocate the Preserve to a different site prior to construction, shall include specific erosion and run-off control measures necessary to ensure no contaminants enter the fenced impact limits of the Open Space Preserve and consequently degrade any remaining habitat for the southern tarplant. These erosion and run-off control measures shall be implemented long-term per Regional Water Quality Control Board requirements to ensure the continued protection of the Open Space Preserve and quality of habitat within. These measures are in addition to, and not in lieu of, the compensatory mitigation requirements of MM-BIO-5, which shall be implemented prior to any ground-disturbing activities within the Southern Tarplant Open Space Preserve.

MM-BIO-2: Nesting Bird Season Restrictions and Pre-Construction Surveys

The clearance of vegetation or demolition of nesting substrate (i.e., bridge features) during construction shall occur outside of the nesting bird season (nesting bird season defined herein as February 1 through September 15), if feasible. If vegetation removal and/or demolition outside this time period is not feasible, the following additional measures shall be employed to avoid impacts to nesting birds protected under the MBTA and CFGC.

A pre-construction nesting bird survey shall be conducted by a qualified biologist (i.e., a biologist familiar and experienced with the identification and life histories of wildlife and plant species in southern California) within 72 hours, or as determined by the qualified biologist, prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. Nests found shall be recorded.

If construction activities must occur within 150 feet of an active nest of any passerine bird or within 300 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a bi-weekly (twice a week) basis, or at a frequency necessary to determine potential project impacts, and the construction activity shall be postponed until the biologist determines that the nest is no longer active.

If the recommended nest avoidance zone is not feasible, the qualified biologist shall provide justification on a case-by-case basis if a buffer reduction is possible, taking into consideration the location of work and type of activity, distance of nest from work area, surrounding vegetation, and line-of-sight between the nest and work areas, tolerance of species to disturbance, and observations of the nesting bird's reaction to construction activities (including light, noise, dust, and human presence). If the biologist determines nesting activities may fail as a result of work activities, work activities shall be modified or shall temporarily cease (except access along established roadways) within the recommended no-disturbance buffer until the biologist determines the adults and young are no longer reliant on the nest site.

Buffers shall be delineated (by or under the supervision of a qualified biologist) on-site with bright flagging, for easy identification by staff and the construction team. The perimeter of the buffer (150 feet to 300 feet depending on the species) shall be flagged so as not to draw predator attention to the direct location of the nest itself and flagging will be minimized where feasible. The on-site construction supervisor and operator staff shall be notified of the nest and the buffer limits to ensure it is maintained.

The indirect impacts of night-time construction lighting on nesting birds outside the construction limits shall be reduced by shielding or directing construction lighting to avoid light encroachment into adjacent habitats.

A summary of pre-construction surveys, monitoring efforts, and any no-disturbance buffers that were installed shall be documented in a report by the qualified biologist at the conclusion of each nesting season.

MM-BIO-3: Roosting Bat Restrictions and Survey Requirements

Prior to any construction disturbance on or near bridges, a bat roost habitat assessment shall be performed by a qualified biologist (i.e., a biologist familiar with bat identification and ecology in southern California) at each location in order to identify both potential day time and nighttime roosting activity and maternity roosts, for bat species with potential to occur. The bat roost habitat assessment shall be conducted during the spring/summer months between April 1 through August 31 to most effectively identify maternity roost activity. Signs indicating active use by bat species may include guano,

urine staining, and audible vocalizations; and shall be recorded upon observation for inclusion in a summary report.

If active maternity roosts are identified, consultation shall occur with CDFW and a bat mitigation plan shall be prepared in advance of construction that shall include measures to avoid, minimize, and mitigate project impacts to bat species per conversations with, and recommendations from, CDFW. The bat mitigation plan may include bat exclusion measures to be implemented outside the California maternity season (the maternity season is defined as April 1 through August 31 in southern California) in order to prevent potential direct impacts to individuals. During the maternity season, a recommended buffer shall be implemented around any active maternity roosts, and no project related activities shall occur within the buffer until a biologist has determined that the roost is no longer in use. In addition, the bat mitigation plan shall require the replacement of lost habitat associated with demolition of the bridges and shall include mitigation addressing loss of roosts; this replacement should be on site when feasible and off site only when on site replacement is not feasible. The mitigation plan shall include required monitoring of mitigation to ensure the success of the proposed mitigation measures.

MM-BIO-4: Pre-Construction Rare Plant Survey

Prior to construction, if the Open Space Preserve has not been fully relocated and portions of the Preserve remain, suitable habitat in the portion of the RSA immediately adjacent to the Open Space Preserve shall be visually surveyed on foot by a qualified botanist (i.e., a botanist familiar with southern tarplant identification) in order to identify potential southern tarplant presence. Surveys should be conducted during the appropriate blooming period for optimal identification (defined as May – November).

If individuals are detected, individuals shall be flagged, and this area shall be clearly marked for avoidance through visible signage and fencing. A buffer zone shall be established of at least 50 feet from the outermost perimeter of the population in order to sufficiently eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including trampling, erosion, and dust. No vegetation removal, grading, or other earthwork shall occur within areas designated for avoidance. These avoidance requirements apply to southern tarplant individuals outside the permanent impact footprint of the project within the Open Space Preserve. Impacts to individuals within the permanent project footprint shall instead be addressed through the compensatory mitigation requirements of MM-BIO-5.

A qualified botanist shall perform bi-weekly (twice per week) site visits, or at a frequency necessary to ensure protection of any remaining areas of the Open Space Preserve, during all construction activities occurring immediately adjacent to any remaining areas of the Open Space Preserve to ensure construction activities remain within the designated, and delineated, approved construction area; and that construction fencing, and other boundary demarcations remain in the appropriate condition.

MM-BIO-5: Off-Site Mitigation for Southern Tarplant Habitat

Prior to construction, Metro shall coordinate with the City of Torrance and CDFW to identify and evaluate one or more suitable off-site mitigation sites for southern tarplant habitat. The goal of this effort is to mitigate the permanent loss of southern tarplant habitat through the establishment, preservation, and long-term management of suitable off-site mitigation habitat.

Metro shall ensure that mitigation occurs at a minimum 3:1 ratio for habitat area, or at a higher ratio if required by CDFW. A site-specific biological assessment, prepared by a qualified botanist (i.e., a botanist familiar with identification, survey, and management of southern tarplant), shall demonstrate that the

selected mitigation site(s) have appropriate soil, hydrology, and ecological conditions to support self-sustaining, long-term tarplant populations.

It is Metro's understanding that the City of Torrance is currently evaluating the relocation and re-establishment of the entire Open Space Preserve to the Elm Water Yard in the City of Torrance. If the City elects to proceed with that relocation, Metro may satisfy its mitigation obligation by entering into an agreement with the City to fund and implement a proportional share of the new preserve area. This agreement must include provisions for a non-wasting endowment or other long-term funding mechanism sufficient to cover Metro's proportional share of perpetual management costs and must include performance standards equivalent or greater than those described in this mitigation measure for Metro's proportional share.

If the City of Torrance opts not to relocate and re-establish the Open Space Preserve, Metro shall implement an independent off-site mitigation project that achieves the same performance standards for habitat value and long-term viability, including securing a conservation easement, deed restriction, or other legally enforceable land protection instrument; implementing habitat enhancement measures; conducting long-term monitoring, and establishing a non-wasting endowment or other funding mechanism sufficient to cover Metro's proportional share of perpetual management costs. Metro shall make a reasonable, documented effort to implement the off-site mitigation within the City of Torrance.

If no appropriate off-site mitigation site can be identified within the City of Torrance, Metro shall identify and evaluate one or more suitable sites outside the City, such as an existing preserve that includes the same species of southern tarplant, that achieve the same habitat value and long-term viability standards as determined by a qualified botanist.

A qualified botanist shall also prepare a Southern Tarplant Translocation/Enhancement Plan in consultation with CDFW that includes feasible and achievable performance standards. The plan shall include, but is not limited to, methods and sourcing guidelines for seed collection (to occur for a minimum of two years); BMPs for planting and invasive species control; monitoring protocols, and a schedule of implementation activities. The Translocation Plan shall be finalized prior to any ground-disturbing activities that could affect the Southern Tarplant Open Space Preserve.

If, after a reasonable and documented effort, no suitable off-site mitigation site can be identified or implemented within or outside the City of Torrance, Metro shall consult with CDFW to identify an alternative mitigation strategy that achieves equivalent biological value and long-term viability. This may include payment of an in-lieu fee to a CDFW-approved land management entity, provided that the entity commits to establishing, preserving, and managing southern tarplant habitat in perpetuity at a minimum ratio of 3:1 or higher, consistent with the performance standards described above.

Findings

Impact 3.7-4.1: Adverse Effects on Special-Status Species During Construction

Implementation of Mitigation Measures MM-BIO-1, MM-BIO-2, MM-BIO-3, MM-BIO-4, and MM-BIO-5 would reduce the impact on special-status species generated by project construction to a less than significant level. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

Impact 3.7-4.1: Adverse Effects on Special-Status Species During Operations

Implementation of Mitigation Measures MM-BIO-1 and MM-BIO-5 would reduce the impact on special-status species generated by project operation to a less than significant level. Thus, Metro adopts CEQA

Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

Impact 3.7-4.1: Conflicts with Local Policies or Ordinances Protecting Biological Resources During Construction

Implementation of Mitigation Measures MM-BIO-1 and MM-BIO-5 would ensure that construction of the project would not conflict with the Open Space Preserved established by the City of Torrance for southern tarplant. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

Impact 3.7-4.1: Conflicts with Local Policies or Ordinances Protecting Biological Resources During Operation

Implementation of Mitigation Measures MM-BIO-1 and MM-BIO-5 would be implemented prior to operation of the project, which would ensure that operation of the project does not conflict with the Open Space Preserve. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

5.4. GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

The project would have a less than significant impact with mitigation related to geology, soils, and paleontological resources with respect to the following significance thresholds:

- > Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Impact 3.8-4.9)

Impact

Impact 3.8-4.9: Destroy A Paleontological/Geologic Feature During Construction

The northern section of the RSA is underlain by an older Quaternary alluvium geologic unit (Qoa) that has high paleontological sensitivity. Grading and excavation activities within this formation could cause potentially significant impacts to paleontological resources, should they be encountered and destroyed without intervention. For these locations, Mitigation Measure MM-GEO-1 (Engage a Qualified Paleontological Resources Specialist) would be implemented, which would require hiring a qualified paleontologist to monitor grading and excavation within highly sensitive geologic formations (or direct subsurface microfossil testing when subsurface soil observation is not possible). In the event of a discovery, MM-GEO-1 would require temporary halting of activities, examination of the discovery, and documentation and treatment of finds, as determined by the qualified paleontologist. Therefore, with implementation of MM-GEO-1, impacts would be reduced to less than significant.

References in the Draft and Final EIR

- > Section 3.8, Geology, Soils, and Paleontological Resources, Subsection 3.8-4.9.1 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Mitigation Measures

MM-GEO-1: Engage a Qualified Paleontological Resources Specialist

Grading and excavation equating to 1,000 cubic yards or more at depths of 13 feet or greater within highly sensitive Qoa geologic formation shall require monitoring by a qualified paleontologist, including the following measures:

> Prior to beginning any work that requires paleontological monitoring:

- Metro shall retain the services of a qualified paleontologist meeting the standards of the Society of Vertebrate Paleontology (SVP) to compose a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) identifying the steps to be taken in the event of the inadvertent discovery of paleontological resources.
- A preconstruction meeting will be held that includes the qualified paleontologist, Construction Manager and/or Grading Contractor, and other appropriate personnel so the qualified paleontologist can make comments and/or suggestions concerning the monitoring program to the Construction Manager and/or Grading Contractor.
- The qualified paleontologist will (at that meeting or subsequently) submit to the Project Manager a copy of the site/grading plan (reduced to 11 x 17 inches) that identifies areas to be monitored as well as areas that may require delineation of grading limits.
- The qualified paleontologist will also coordinate with the Project Manager on the construction schedule to identify when and where monitoring is to begin and to specify the start date for monitoring.

> The qualified paleontologist will document monitoring activity on a standardized form. A record of daily activity will be sent to Metro and the Project Manager each month.

> The qualified paleontologist will be present initially during all earth-moving activities. After 50 percent of the excavations are complete within the unit, if no significant fossils have been recovered, the level of monitoring may be reduced or suspended entirely at the qualified paleontologist's discretion and in consultation with Metro.

> At locations where sensitive subsurface soils cannot be observed during ground disturbing activities, such as driving of piles, a subsurface investigation to test for the presence or absence of microfossils should be implemented under the direction of a qualified paleontologist following SVP guidelines. Prior to the start of ground disturbance, mechanical coring, or other methods determined appropriate by the paleontologist, will be used to collect a test sample of 600 lbs. (0.4 cubic yards) to be wet screened. In the event fossil remains are identified, two standard samples of 6,000 lbs. each (4.0 cubic yards) shall be collected for processing following SVP guidelines for microfossil salvage.

> Discoveries

- Discovery Process – In the event of a discovery, and when requested by the qualified paleontologist, the Project Manager will be contacted and will divert, direct, or temporarily halt ground-disturbing activities in the area of discovery to allow for preliminary evaluation of potentially significant paleontological resources. The paleontologist will also immediately notify Metro of such findings at the time of discovery.
- Determination of Significance – The significance of the discovered resources will be determined by the paleontologist in consultation with the Project Manager and Metro, who must concur with the evaluation before grading activities will be allowed to resume.
- Documentation and Treatment of Finds – Based on the scientific value and/or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. If treatment and salvage are required,

recommendations will be consistent with SVP 2015 guidelines and currently accepted scientific practice. Work in the affected area may resume once the fossil has been assessed and/or salvaged and a paleontological monitor is present.

- > Notification of Completion – The paleontologist will notify Metro in writing of the end date of monitoring.
- > Handling and Curation of Significant Paleontological Specimens and Letter of Acceptance – The paleontologist will ensure that all significant fossils collected are appropriately prepared and permanently curated with an appropriate institution, and that a letter of acceptance from the curation institution has been submitted to Metro.
- > Final Results Reports (Monitoring and Research Design and Recovery Program) – Prior to completion of the Proposed Project, two copies of the Final Results Report (even if no significant resources were found) and/or evaluation report, if applicable, which describe the results, analysis, and conclusions of the Paleontological Monitoring Program (with appropriate graphics) will be submitted to Metro for approval.

Finding

Impact 3.8-4.9: Destroy A Paleontological/Geologic Feature During Construction

Implementation of Mitigation Measure MM-GEO-1 would reduce the impact to unique paleontological resources generated by project construction to a less than significant level. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

5.5. CULTURAL RESOURCES

The project would have a less than significant impact with mitigation related to cultural resources with respect to the following significance thresholds:

- > Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? (Impact 3.13-4.2)
- > Would the project disturb any human remains, including those interred outside of formal cemeteries? (Impact 3.13-4.3)

Impacts

Impact 3.13-4.2: Adverse Change to Archaeological Resources During Construction

Project construction is not likely to impact any known archaeological resources. The records search of the California Historical Resources Information System (CHRIS) identified one previously recorded resource, P-19-000100, within the RSAs. P-19-000100 is a prehistoric archaeological resource, represented by only two stones, that was recorded as one of a series of small prehistoric campsites in Torrance by F.H. Racer in 1939; however, the context related to the exact location of the resource and means of discovery are not fully known. It is possible that unknown archaeological resources lay buried throughout the RSA and could be impacted by project construction. The LPA has the potential to disturb or destroy a significant unknown archaeological resource. Mitigation Measure MM-CUL-1 (Cultural Resources Identification Training) would be implemented, which would require construction personnel to be trained in the identification of archaeological resources. Mitigation Measure MM-CUL-2 (Cultural Resources Monitoring and Mitigation Plan) would also be implemented, which would establish procedures to stop work in the event of an unanticipated discovery and ensure that discovered

resources would be avoided or treated in accordance with a treatment plan developed in consultation with Metro. With implementation of Mitigation Measures MM-CUL-1 and MM-CUL-2, the impact would be reduced to less than significant.

Impact 3.13-4.3: Disturb Human Remains During Construction

There are known cemeteries containing human remains within the RSA. However, the LPA has moderate sensitivity for encountering historic remains near El Nido Park and a low sensitivity for buried Native American archaeological deposits, which could include human remains. Human remains could be encountered in fill, re-deposited, or disturbed soils, as well as intact soils. Disturbance of significant unknown human remains would result in a significant impact. Mitigation Measure MM-CUL-3 (Unanticipated Discovery of Human Remains) would be implemented for construction near El Nido Park and Pacific Crest Cemetery, which would require monitoring in accordance with the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as well as establish treatment measures and avoidance strategies for any remains that are identified. With implementation of Mitigation Measure MM-CUL-3, construction would result in a less than significant impact related to disturbance of human remains.

References in the Draft and Final EIR

- > Section 3.13, Cultural Resources, Subsections 3.13-4.2.1 and 3.13-4.3.1 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Mitigation Measures

MM-CUL-1: Cultural Resources Identification Training

Prior to the issuance of notice to proceed with construction, all construction personnel involved in ground-disturbing activities shall be provided with appropriate cultural resources training. The training shall instruct the personnel regarding the legal framework protecting cultural resources, typical kinds of cultural resources that may be found during construction, artifacts that would be considered potentially significant, and proper procedures and notifications if cultural resources and/or are inadvertently discovered. The training shall be prepared by a Secretary of the Interior (SOI) professionally qualified archaeologist, in consultation with interested Native American tribes consulting under Assembly Bill (AB) 52, who shall provide information on resources of interest to Native American tribes and include cultural resources and artifacts that would be considered potentially significant to ensure operator recognition of these materials during construction.

MM-CUL-2: Cultural Resources Monitoring and Mitigation Plan

Prior to the issuance of notice to proceed with construction, the construction contractor shall prepare, and Metro shall review and approve, a CRMMP. The CRMMP shall be prepared in consultation with a Secretary of the Interior-qualified archaeologist and interested Native American tribes consulting under AB 52.

At a minimum, the CRMMP shall:

- > Identify the areas where archaeological and Native American monitoring will occur, consistent with MM-CUL-3, and describe monitoring methods and reporting requirements.
- > Establish the protocol to follow in the event of an unanticipated discovery, requiring that, if an archaeological deposit is identified, the construction contractor shall stop construction within 50 feet of the exposed resource until a Secretary of Interior professionally qualified archaeologist can evaluate the find (see 36 CFR 800.11.1 and California Code of Regulations [CCR], Title 14, Section

15064.5[f]). If the resource is determined to be a historical resource (as defined in PRC Section 21084.1) or a unique archaeological resource (as defined in PRC Section 21083.2[g]), the CRMMP shall require:

- Avoidance of the resource, where feasible, through project redesign, preservation in place, capping or other methods consistent with Title 14, Section 15126.4(b)(3).
- Where avoidance is not feasible, as determined by Metro, in light of factors such as the nature of the find, LPA design, costs, and other considerations, data recovery shall be implemented through excavation and documentation consistent with the Secretary of Interior's Standards for Archaeology and Historic Preservation (48 Fed. Reg. 44716) and the State Office of Historic Preservation Standards.

> Define performance standards requiring all data recovery efforts to obtain information necessary to address important research questions, that all recovered be cleaned, catalogued, and curated at a qualified repository that meets federal and state curation standards, and that a comprehensive technical report be prepared and filed with the South Central Coastal Information Center of the CHRIS.

> Incorporate tribal consultation with Native American tribes consulting under AB 52.

> Provide documentation and reporting protocols for submitting monitoring logs during construction and a final report documenting all findings to be submitted to Metro, consulting tribes, and CHRIS.

The CRMMP shall be implemented throughout all ground-disturbing activities in previously undisturbed areas or areas of deep excavation below the depth of prior disturbance (generally assumed to be 5 feet unless site-specific studies show a greater or lesser depth of prior disturbance), or as otherwise required by MM-CUL-3.

MM-CUL-3: Unanticipated Discovery of Human Remains

Archaeological and Native American monitoring (see MM-CUL-1 and MM-TCR-1) shall be required during all ground- disturbing activities in areas of excavation extending below the depth of prior disturbances, as defined in MM-CUL-2, and in areas adjacent to known cemeteries or other locations where the potential for encountering human remains is elevated, including El Nido Park (located between the Kingsdale Avenue and 186th Street cross section to 182nd Street) and the Pacific Crest Cemetery (2701 182nd Street). Archaeological monitoring shall be conducted in accordance with the Project CRMMP required by MM-CUL-2, which establishes monitoring methods, evaluation procedures, treatment, standards, and reporting requirements. If human remains and/or associated funerary objects are encountered, then work shall be halted within 50 feet of the find and California Health and Safety Code Section 5097.98 and PRC Section 5097.98 shall be followed, including immediate notification of the County Coroner and consultation with the Most Likely Descendent identified by the Native American Heritage Commissions.

Findings

Impact 3.13-4.2: Adverse Change to Archaeological Resources During Construction

Implementation of Mitigation Measures MM-CUL-1 and MM-CUL-2 would reduce the impact on archeological resources generated by project construction to a less than significant level. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

Impact 3.13-4.3: Disturbance of Human Remains During Construction

Implementation of Mitigation Measure MM-CUL-3 would reduce the impact on human remains generated by project construction to a less than significant level. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

5.6. TRIBAL CULTURAL RESOURCES

The project would have a less than significant impact with mitigation related to tribal cultural resources with respect to the following significance thresholds:

- > Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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 listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)? (Impact 3.14-4.1)
- > Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in PRC 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 resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? (Impact 3.14-4.2)

Impacts

Impact 3.14-4.1: Substantial Adverse Change in The Significance of a Tribal Cultural Resource During Construction

Despite prior disturbances, the excavations associated with the LPA have the potential to adversely impact a significant tribal cultural resource. Thus, Mitigation Measure MM-TCR-1 (Native American Monitoring) would require retention of a Native American Monitor from, or approved by, consulting tribes under AB 52. Mitigation Measure MM-TCR-2 (Unanticipated Discovery of Tribal Cultural Resource Objects [Non-Funerary/Non-Ceremonial]), would establish procedures to stop work and determine treatment in consultation with the Native American monitor in the event of the discovery of non-funerary/non-ceremonial objects of Native American origin. Mitigation Measure MM-TCR-3 (Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects), would establish procedures to stop work and determine treatment in consultation with the Native American monitor in the event of the discovery of funerary/ceremonial objects of Native American Origin. Therefore, with implementation of Mitigation Measures MM-TCR-1, MM-TCR-2, and MM-TCR-3, the impact would be reduced to less than significant.

Impact 3.14-4.2: Substantial Adverse Change in The Significance of a Tribal Cultural Resource Determined by a Lead Agency During Construction

No resources have been determined by Metro, in its discretion and supported by substantial evidence, to be significant tribal cultural resources within the RSA. However, excavations associated with construction have the potential to disturb and destroy an unknown significant tribal cultural resource. This disturbance of significant tribal cultural resources could result in a significant impact. Thus,

Mitigation Measures MM-TCR-1, MM-TCR-2, and MM-TCR-3 would be implemented. With implementation of Mitigation Measures MM-TCR-1, MM-TCR-2, and MM-TCR-3, the impact would be reduced to less than significant.

References in the Draft and Final EIR

- > Section 3.14, Tribal Cultural Resources, Subsections 3.14-4.1.1 and 3.14-4.2.1 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Mitigation Measures

MM-TCR-1: Native American Monitoring

Prior to the issuance of notice to proceed with construction, Metro shall document retention of a Native American Monitor from, or approved by, consulting tribes under AB 52.

Native American monitoring shall be required during all excavation that extends below the depth of prior disturbance, as defined in MM-CUL-2, and in any areas identified through the cultural resources search or tribal consultation as having higher potential for intact tribal cultural resources. Native American monitoring shall be conducted in coordination with archaeological monitoring required under MM-CUL-3 and consistent with the CRMMP prepared under MM-CUL-2.

If, after a good-faith effort, a qualified Native American monitor is not available at the time ground-disturbing activities are scheduled, construction may proceed with archaeological monitoring in accordance with MM-CUL-3, provided that consultation with the tribes continues regarding treatment of any tribal cultural resources identified. For the purposes of this measure, a good-faith effort shall consist of documented outreach to consulting tribes regarding the construction schedule, made at least 15 working days in advance of the ground-disturbance start date, with at least one follow-up attempt by phone or email if no response is received.

The Native American Monitor shall prepare monitoring documentation describing the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, locations of monitoring, soil types, and any cultural or tribal resources identified, including but not necessarily limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. The documentation shall be prepared in accordance with the CRMMP and provided to Metro. Metro shall make the documentation available to consulting tribes upon request.

Native American monitoring may conclude when Metro determines, in consultation with the project archaeologist and consulting tribes, that all ground-disturbing activities with the potential to affect tribal cultural resources have been completed.

MM-TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)

In the event that potential cultural material is discovered during ground-disturbing activities, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet). The discovery shall be evaluated promptly by the archaeological and Native American monitors in accordance with the CRMMP required by MM-CUL-2. If the find is determined to be a tribal cultural resource under PRC Section 21074, Metro, in consultation with the monitors and consulting tribes under AB 52, shall determine appropriate treatment consistent with the protocols and performance standards set forth in MM-CUL-2. Preservation in place, including avoidance or protective

measures such as capping, shall be the preferred treatment. If preservation in place is not feasible, mitigation shall be implemented through data recovery and documentation in accordance with the SOI's Standards and CEQA Guidelines Section 15126.4(b), with tribal consultation to ensure culturally appropriate treatment.

MM-TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects

Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute.

In the event that human remains or associated funerary objects are encountered during ground-disturbing activities, construction shall halt within 50 feet of the find. The discovery shall be addressed in accordance with the CRMMP required by MM-CUL-2 and the protocols set forth in MM-CUL-3.

Consistent with California Health and Safety Code Section 7050.5, the County Coroner shall be notified immediately. If the remains are determined to be Native American, the Native American Heritage Commission shall be contacted, and consultation shall occur with the Most Likely Descendant identified by the Commission, pursuant to PRC Section 5097.98.

Native American human remains and associated funerary or ceremonial objects shall be treated together as a single burial unit under PRC Section 5097.98(d), with preservation in place as the preferred treatment.

If preservation in place is not feasible, the Most Likely Descendant, in consultation with Metro, shall determine culturally appropriate treatment in accordance with PRC Section 5097.98(d)(2). Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Findings

Impact 3.14-4.1: Substantial Adverse Change in The Significance of a Tribal Cultural Resource During Construction

Implementation of Mitigation Measures MM-TCR-1, MM-TCR-2, and MM-TCR-3 would reduce the impact on tribal cultural resources from project construction to a less than significant level. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

Impact 3.14-4.2: Substantial Adverse Change in The Significance of a Tribal Cultural Resource Determined by a Lead Agency During Construction

Implementation of Mitigation Measures MM-TCR-1, MM-TCR-2, and MM-TCR-3 would reduce the impact from project construction on unique tribal cultural resources as determined by a lead agency to a less than significant level. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

6. FINDINGS FOR ENVIRONMENTAL IMPACTS FOUND TO BE LESS THAN SIGNIFICANT

This section discusses the impacts found to be less than significant, and no mitigation is required.

6.1. TRANSPORTATION

The project would have a less than significant impact related to transportation with respect to the following significance thresholds:

- > Will the project conflict with a program, plan ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? (Impact 3.1-4.1)
- > Will the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) [increase in VMT]? (Impact 3.1-4.2)
- > Will the project substantially increase hazards due to a geometric design feature or incompatible uses? (Impact 3.1-4.3)
- > Will the project result in inadequate emergency access? (Impact 3.1-4.4)

Impacts

Impact 3.1-4.1: Conflict with Plans During Construction

Given the temporary nature of construction, it is not expected that construction of the LPA would preclude any programs, plan ordinances, or policies addressing the circulation system. Construction will temporarily reduce travel lanes and has the potential to temporarily close access through railroad crossings, which could necessitate that traffic be detoured to another parallel route. Constructing the trenches at 170th Street in Lawndale and 182nd Street in Redondo Beach may require alternating full closures of roadways, and construction of the roadway bridges crossing the trenches would be phased so as not to simultaneously close parallel adjacent crossings. As part of Project Feature PF-T-1 (Construction Traffic Management Plan), prior to the initiation of localized project construction activities, construction traffic management plans (CTMPs) would be prepared. The CTMPs will specify street closure information, detour plans, haul routes, and staging plans and will include provisions for maintaining safe access or alternate routes of travel for all road users and transit. PF-T-1 reflects standard construction practice for Metro projects and provides part of the substantial evidence supporting the conclusion that the LPA would not conflict with a program, plan, or policy addressing the circulation system during construction. Therefore, a less than significant impact would occur.

Impact 3.1-4.1: Conflict with Plans During Operations

The LPA introduces a new transit option consistent with several local jurisdictions' transportation policy objectives, provides new bicycling and walking infrastructure along the Metro ROW, and offers an alternative to driving that is anticipated to reduce vehicle trips.

As described in the 2025 Ridership Summary Report, available on the Metro website, Metro has updated the operational scenario for the LPA to reflect the C-2 Operating Plan. This change affects only how Metro designates and operates its service lines and does not alter the LPA's physical features, alignment, station locations, construction methods, or operational characteristics relevant to environmental impacts (e.g., train frequency, electrical demand, or service hours). Ridership modeling under the C-2 Operating Plan shows improved connectivity within the regional rail network, resulting in

higher projected ridership and associated travel benefits. Therefore, the conclusions of the environmental analysis remain valid, and the LPA would continue to have a less than significant impact.

As described in Section 3.2 above, per CEQA Guidelines, § 15088.5(a), recirculation of an EIR is required only when “significant new information” is added to the EIR or the record, such as information showing that the project would result in new or substantially more severe significant environmental impacts, or that a feasible alternative or mitigation measure considerably different from those previously analyzed would substantially reduce one or more significant impacts are available but the project proponent declines to adopt it. The updates reflected in the C-2 Operating Plan do not trigger any of these conditions. Rather, the revised operating plan clarifies and updates the operational assumptions analyzed in the Draft EIR without changing the project’s physical characteristics, environmental setting, or mitigation commitments. (See Memorandum re: Vehicle Miles Traveled Correction to the C Line (Green) Extension to Torrance Project, October 2025). Accordingly, the new information does not constitute significant new information within the meaning of CEQA Guidelines section 15088.5, and recirculation of the EIR is not required.

Impact 3.1-4.2: Induce Vehicle Miles Traveled During Construction

Due to the temporary nature of construction traffic associated with the LPA, a substantial increase in vehicle miles traveled (VMT) would not be anticipated to result from construction. Given the temporary nature of construction industry jobs, the relatively large regional construction industry, and the total number of construction workers needed during any construction phase, it is likely that the labor force from within the region would be sufficient to complete the majority of project construction without a substantial influx of new workers and their families and would not result in a substantial increase in VMT. Therefore, construction of the LPA would not conflict or be inconsistent with CEQA Guidelines Section 15064.3 and there would be a less than significant impact.

Impact 3.1-4.2: Induce Vehicle Miles Traveled During Operations

Per CEQA Guidelines Section 15064.3(b), transportation projects that reduce or have no impact on VMT should be presumed to cause a less than significant transportation impact. As a non-automobile modal option, the LPA is expected to result in either a positive or neutral effect on VMT, resulting in consistency with CEQA Guidelines Section 15064.3(b). Thus, project operation would result in a less than significant impact.

Impact 3.1-4.3: Increase Hazards Due to Geometric Design During Construction

Project construction would introduce partial and full street closures and closed worksites on streets for construction activities, such as foundations and steel erection. Construction worksites would be fenced, and lane closures and associated lane tapers, temporary advance warning signs, detour signs, etc., would be implemented in accordance with the Part 6 (Temporary Traffic Control) of the California Manual on Uniform Traffic Control Devices (CAMUTCD) to ensure that no significant geometric design hazards are introduced during the construction period. As elements such as columns are constructed, the potential for visibility obstructions for road users could be introduced. As part of Project Feature PF-T-1, CTMPs would be prepared in compliance with the CAMUTCD. The CTMPs would provide for safe separation of road users from construction activities, ensure visibility of pedestrians and at marked or signalized crossings meets engineering standards, and if necessary, detour vehicles, pedestrians, and/or bicyclists along a safer route, minimizing inconvenience to the extent practical. PF-T-1 reflects standard construction practice for Metro projects and provides part of the substantial evidence supporting the conclusion that construction of the LPA would not substantially increase hazards due to a geometric design feature or incompatible uses. Accordingly, a less than significant impact would occur.

Impact 3.1-4.3: Increase Hazards Due to Geometric Design During Operations

The LPA would not include support columns for section of elevated guideway near intersections that obstruct a motorist's view of a crossing pedestrian as part of the elevated configuration portion of the alignment. Proposed bridges or columns are not expected to degrade visibility, as they would be sufficiently high or not within stopping distance of any signalized intersections. In addition, the two roadways that cross the trench portion of the alignment would be reconstructed as bridges over the trench with safe clearance and barriers to prevent road users from entering the trench. Eight existing freight crossings between Inglewood Avenue and 182nd Street would be upgraded with railroad crossing gates and warning devices consistent with CAMUTCD standards. Thus, project operation would not substantially increase hazards due to a geometric design feature or incompatible uses, and a less than significant impact would occur.

Impact 3.1-4.4: Inadequate Emergency Access During Construction

Project construction would occur in various phases, which would have different effects on the street system. Any temporary full or partial street closures during construction would, by necessity, increase traffic volumes on the detour routes, which could increase traffic congestion on those routes. However, the LPA is located in an established urban area that is well-served by the surrounding roadway network, and multiple routes exist parallel to the affected streets. Emergency vehicle drivers normally have a variety of options for avoiding traffic such as using sirens to clear a path of travel, driving in the lanes of opposing traffic or center turn lanes, and bypassing signals and stopped traffic. As part of Project Feature PF-T-1, CTMP would be prepared to maintain access in and around the project construction areas and component sites throughout all construction activities. PF-T-1 reflects standard construction practice for Metro projects and provides part of the substantial evidence supporting the conclusion that adequate emergency access would be maintained. Therefore, there would be a less than significant impact.

Impact 3.1-4.4: Inadequate Emergency Access During Operations

The LPA fully grade-separates the light rail and maintains the existing road network above the two trenches at 170th Street and 182nd Street. Thus, there would be no effect on emergency access. Existing freight rail crossings would remain at-grade and would not decrease emergency access compared to existing conditions. Existing freight rail service is generally infrequent (e.g., typically one to two trains per day) and potential blocking of crossings is rare. Therefore, there would be a less than significant impact.

References in the Draft and Final EIR

- > Section 3.1, Transportation, Subsections 3.1-4.1, 3.1-4.2, 3.1-4.3, and 3.1-4.4 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Project Features

PF-T-1. Construction Traffic Management Plan

The MRDC requires that contractors develop a CTMP prior to the initiation of localized construction activities. Per Metro standard practice, this CTMP (inclusive of street closure information, detour plans, haul routes, and a staging plan) shall be prepared and submitted to the Cities of Lawndale, Redondo Beach, and Torrance for review. For the Hawthorne Option, it would also be submitted to Caltrans. Caltrans would also review selected areas of the LPA, such as bridge construction over Hawthorne Boulevard. The CTMPs shall be based on the nature and timing of the specific construction activities at

each of the construction sites. This coordination will ensure construction activities of the concurrent related projects and associated hauling activities are managed in collaboration with one another and the project. The CTMPs may be updated during construction to reflect evolving conditions and site-specific needs. The CTMPs will include, but not be limited to, the following elements, as appropriate:

- > As traffic lane, parking lane, sidewalk closures and full road closures are anticipated, worksite traffic control plans, approved by the local jurisdictions and Caltrans, shall be developed and implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures.
- > As partial and full street closures are anticipated at various locations during portions of the Project construction, detour plans, approved by the local jurisdictions, shall be developed and implemented to route vehicular traffic, pedestrians and bicyclists to alternative routes during these periods, including maintaining access for these modes across Hawthorne Boulevard during construction.
- > Ensure that vehicle and pedestrian access will remain available from at least one entry and egress point for properties in proximity to the LPA and component sites during construction with access to businesses maintained during normal business hours; nighttime closures may be possible and accordingly arranged with property owners.
- > Coordinate with the city and emergency service providers to ensure emergency access is provided to the LPA and component sites and neighboring land uses. Emergency access points will be marked accordingly in consultation with local fire departments, as applicable.
- > Provide off-site truck staging in a legal area furnished by the construction truck contractor.
- > Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods.

Mitigation Measures

The impacts under the thresholds above will be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these transportation impacts will be less than significant.

6.2. LAND USE AND PLANNING

The project would have a less than significant impact related to land use and planning with respect to the following significance thresholds:

- > Would the project physically divide an established community? (Impact 3.2-4.1)
- > 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 3.2-4.2)

Impacts

Impact 3.2-4.1: Divide an Established Community During Construction

Construction activities would likely cause disruptions in traffic flow, including road closures and potential traffic delays where construction activities would occur. Less substantial roadway construction activities that would occur for the LPA include construction of at-grade freight crossings, curb ramps,

striping, and signage. All construction impacts would be temporary, the duration of activity would be limited, and construction would be completed in phases, limiting their ability to divide the communities. As part of Project Feature PF-T-1, a CTMP would be prepared and implemented to maintain automobile, walking, bicycling, and other transportation access during all phases of construction. Consistent with Metro standard practice, the CTMP (including street closure information, detour plans, haul routes, and a staging plan) would be submitted to the Cities of Lawndale, Redondo Beach, and Torrance for review. PF-T-1 reflects standard construction practice and provides part of the substantial evidence supporting the conclusion that construction of the LPA would not physically divide an established community. Therefore, the impact would be less than significant.

Impact 3.2-4.1: Divide an Established Community During Operations

The key operational elements of the LPA that could impact the cohesion of an established community are light rail transit tracks, TPSS sites, fencing, realigned freight tracks, and stations. The majority of east-west streets along the corridor currently dead-end at the existing Metro ROW. Thus, the addition of a light rail line would not change the overall roadway network and connectivity within the RSA. Currently, the existing freight tracks run through a predominantly residential area in Lawndale, where safety fencing (required where adjacent to freight) is not maintained or has been breached, allowing local residents to cross the Metro ROW outside of the designated crossings and use the freight corridor for recreational activities. With the operation of the light rail line and rebuilding of freight track, local residents would no longer be able to freely cross the Metro ROW in areas where existing fencing is breached, as the LPA would include new or repaired security fencing and other barriers (such as soundwalls proposed as mitigation) adjacent to the light rail tracks. These barriers would restrict the current level of unauthorized pedestrian access into the Metro ROW, but they would not physically divide the community because residents would still be able to cross the Metro ROW at the existing crossings (159th, 160th, 161st, 162nd, 170th, and 182nd Streets), which would all be rebuilt with upgraded safety infrastructure for freight trains. As access across these existing east-west roadways would be maintained, the community would not be physically divided. Other project elements including stations, TPSS sites, and crossing equipment would not impede access. Thus, project operation would not divide an established community and less than significant impact would occur.

Impact 3.2-4.2: Conflict with Land Use Policy During Construction

Construction activities would be temporary and would not directly conflict with applicable regional and local land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. Further, the LPA would comply with all applicable regulations and local ordinances governing construction activities to the extent feasible. Therefore, construction of the LPA would have a less than significant impact.

Impact 3.2-4.2: Conflict with Land Use Policy During Operations

The LPA would not change the existing land use setting or conflict with the described plans and policies during operation. Additionally, the City of Redondo Beach's General Plan Circulation Element specifically calls for an extension of the Metro C Line as Policy P31. Thus, the LPA would have a less than significant impact.

References in the Draft and Final EIR

- > Section 3.2, Land Use and Planning, Subsections 3.2-4-1 and 3.2-4.2 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

- > Chapter 5, Responses to Comments, Subsection 5.2-10, Major Topic Response MR-10: Changes to Community Character, of the Final EIR.

Project Features

None

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these land use impacts would be less than significant.

6.3. AESTHETICS

The project would have a less than significant impact related to aesthetics with respect to the following significance thresholds:

- > In non-urbanized 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? (Impact 3.3-4.3)
- > Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, or create new shade or shadows that would substantially affect outdoor recreation facilities or other public areas? (Impact 3.3-4.4)

Impacts

Impact 3.3-4.3: Degrade Existing Visual Character During Construction

Construction activities would include the addition of construction equipment, vehicles, signs, staging, and personnel within the RSA. Construction activities would result in site disturbances, partial or full demolition of existing structures, use and movement of heavy construction equipment, import and export of materials, and removal of vegetation, use of erosion devices, and installation of piles, columns, and piers. Construction would also require the temporary use of staging and laydown areas, and installation of temporary lighting and fencing. Overall, construction would represent a temporary change in the visual quality and character of the RSA, similar to other construction projects in the city. However, the existing visual quality is low to moderately low throughout the entire RSA and construction activities would not substantially degrade the visual quality of the immediate area.

As part of Project Feature PF-AES-1 (Local Zoning Ordinances), Metro will verify that construction activities occurring outside of the Metro and public ROWs comply with applicable zoning regulations within the Cities of Hawthorne, Lawndale, Redondo Beach, and Torrance throughout the duration of construction. PF-AES-1 reflects standard practice for Metro projects and provides part of the substantial evidence supporting the conclusion that the LPA would not conflict with applicable general plan policies or local codes governing scenic quality. Because construction would not substantially change the primarily urban views in the RSA, impacts during construction would be less than significant.

Impact 3.3-4.3: Degrade Existing Visual Character During Operations

Overall, project operation would represent a visual change as compared to existing conditions. However, the project corridor is located in a primarily urbanized area that provides a mix of architectural styles and land uses. Viewers in the RSA, such as pedestrians, residents, commuters, and patrons and employees of commercial businesses, would have a low to moderate sensitivity to this visual change. As part of Project Feature PF-AES-1 (Local Zoning Ordinances), all project components located on properties outside of the existing Metro and public ROWs would adhere to local zoning ordinances. As part of PF-AES-2 (Metro Design Standards), project components, including track guideway, auxiliary facilities, and stations, would be designed in accordance with Metro established design standards and consistent with Metro's Art Program Policy. Landscaping and operational lighting would also be provided, consistent with these standards. Together, PF-AES-1 and PF-AES-2 reflect Metro's standard commitments and provide part of the substantial evidence supporting the conclusion that the LPA would be consistent with the local policies regarding visual character and scenic quality. Therefore, the LPA would be consistent with zoning requirements and other regulations governing scenic quality, and the potential impact would be less than significant.

Impact 3.3-4.4: Create New Source of Substantial Light/Glare During Operation

The LPA is within an urbanized area with various sources of existing nighttime lighting. During operation, new light sources would include security lighting and point sources of lighting at the new stations that would contribute to the overall ambient nighttime lighting conditions in the RSA. However, the lighting would be comparable to existing lighting for the existing Redondo Beach (Marine) Station. As part of Project Feature PF-AES-2 (Metro Design Standards), all lighting would be designed consistent with Metro's established standards, including requirements that address operational lighting, and would also comply with applicable lighting regulations verified during the permitting process. PF-AES-2 reflects Metro's standard design commitments and provides part of the substantial evidence supporting the conclusion that the increase in light generated by the LPA would not adversely affect day or nighttime views in the area.

During operation, the LPA would include at-grade, elevated, and trench configurations throughout the alignment. Supporting columns would be required in order to support the elevated structures in the northern segment of the alignment. The shade and shadow pattern created by the elevated structures would change throughout the day and seasonally. An adverse shadow impact could occur when new shadows substantially affect existing outdoor recreation facilities, such as parks, playgrounds, or similar. Although there are several outdoor recreational facilities present within the RSA, none are located adjacent to the proposed elevated structures. At El Nido Park, the only outdoor recreation facility close enough to be considered for analysis, the light rail tracks would be transitioning from a trench to at-grade, and it would not cause an adverse shadow impact.

Accordingly, the LPA would have a less than significant impact related to light and glare, as well as shading and shadows during operation.

References in the Draft and Final EIR

- > Section 3.3, Aesthetics, Subsections 3.3-4.3 and 3.3-4.4.2 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Project Features

PF-AES-1. Local Zoning Ordinances

All project components located on properties outside of existing Metro ROW and public ROW would adhere to local zoning ordinances.

PF-AES-2. Metro Design Standards

All project components, including, but not limited to track guideway, auxiliary facilities, and station (public and ancillary) facilities will be designed per the MRDC and consistent with the objectives of the Metro Art Program Policy, Metro's Transit Service Policies & Standards, Systemwide Station Design Standards Policy, and Standard/Directive Drawings, or equivalent. Landscaping and operational lighting will also be installed consistent with these design standards.

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these aesthetics impacts would be less than significant.

6.4. AIR QUALITY

The project would have a less than significant impact related to air quality with respect to the following significance thresholds:

- > Would the project conflict with or obstruct implementation of the applicable air quality plan? (Impact 3.4-4.1)
- > Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (Impact 3.4-4.2)
- > Would the project expose sensitive receptors to substantial pollutant concentrations? (Impact 3.4-4.3)
- > Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Impact 3.4-4.4)

Impacts

Impact 3.4-4.1: Conflict with Air Quality Plans During Construction

Construction of the trench segment for the LPA under 170th and 182nd Streets would involve approximately 0.7 miles of excavation. Maximum daily emissions during construction of the LPA would be below applicable South Coast Air Quality Management District (SCAQMD) mass daily thresholds screening levels. The assessment used a scaling approach, applying a conservative estimate that the LPA would require up to 172 daily truckloads (344 one-way truck trips, generating approximately 63.3 pounds per day of emissions of nitrogen oxides [NO_x]) based on the volume of excavation and the forecasted schedule. When combined with other concurrent construction activities, the maximum daily NO_x emissions for the LPA would be approximately 84.2 pounds per day, which is below the SCAQMD threshold of 100 pounds per day. All other emissions would also be below the corresponding SCAQMD screening thresholds.

As part of Project Feature PF-AQ-1 (Metro Green Construction Policy Compliance), construction would adhere to Metro's Green Construction Policy for off-road equipment, generators, and on-road trucks. As part of Project Feature PF-AQ-2 (SCAQMD Rule 403 Compliance), construction would implement BMPs identified in SCAQMD Rule 403 to control and minimize fugitive dust. As part of Project Feature PF-AQ-3 (Metro Moving Beyond Sustainability Strategic Plan Compliance), construction would follow Metro's sustainability commitments, including renewable diesel requirements and opportunities to decarbonize fuel sources at construction sites. These project features reflect Metro's standard policies and practices and provide part of the substantial evidence supporting the conclusion that daily construction emissions would remain below applicable thresholds.

In addition, all heavy-duty trucks would comply with California Air Resources Board (CARB) Airborne Toxic Control Measure (ATCM) 2485—which limits the idling of vehicles to no more than five minutes in any particular location to reduce diesel emissions—and the Truck and Bus Regulation. Compliance with these requirements provide further evidence that maximum daily regional and localized emissions would remain below the applicable mass daily thresholds developed by the SCAQMD.

Construction would not introduce new growth in population or housing to the RSA. The project is programmed in the Southern California Association of Governments (SCAG) Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) as a financially constrained project under the listing “Green Line South Bay Extension” (RTP ID 1TR1001), meaning that its implementation has been accounted for in the federally approved transportation conformity determinations for those planning documents.

Therefore, construction of the LPA would result in a less than significant impact related to air quality plan consistency.

Impact 3.4-4.1: Conflict with Air Quality Plans During Operations

The LPA would reduce on-road VMT associated with increased transit ridership, offsetting approximately 43,094 VMT relative to 2042 without project conditions on a daily basis through the displacement of passenger vehicle trips. The expansion of high-quality transit infrastructure and reduction of VMT that would occur with implementation of the LPA are key objectives of the SCAG RTP/SCS and would have a beneficial effect on air quality.

Project operations would not introduce new permanent growth in population or housing to the South Coast Air Basin (SCAB) or SCAG region. The extension of the light rail corridor would result in a marginal increase in regional electricity demand but would not require the expansion of Southern California Edison (SCE) capacity or substantial changes to its existing electrical infrastructure. The project is programmed in the financially constrained projects list in the Connect SoCal 2020–2045 RTP/SCS. Long-term operation of the project beginning in 2031 would not compromise the validity of the growth projections incorporated into the 2016 Air Quality Management Plan (AQMP) or the Connect SoCal 2020–2045 RTP/SCS. Therefore, operation of the LPA would result in a less than significant impact related to air quality plan consistency.

It should be noted that since the release of the Draft EIR, SCAG has released and adopted its 2024-2050 RTP/SCS, Connect SoCal 2024. The guiding policies, strategies, and regional planning assumptions in Connect SoCal 2024 are materially similar to those in the prior 2020-2045 RTP/SCS and continue to support development of high-capacity transit infrastructure, such as the LPA. (See Memorandum re: Regional Transportation Plan/Sustainable Communities Strategies Comparison, October 2025).

Therefore, the LPA remains consistent with the RTP/SCS, including Connect SoCal 2024's emphasis on expanding transit, reducing VMT, and supporting compact, infill development.

Impact 3.4-4.2: Cumulative Net Increase of Criteria Pollutants During Construction

The RSA is currently designated as nonattainment for the National Ambient Air Quality Standards (NAAQS) for ozone (O_3), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and is designated nonattainment for the California Ambient Air Quality Standards (CAAQS) for O_3 , particulate matter less than 10 microns in diameter (PM_{10}), and $PM_{2.5}$. CEQA requires that projects demonstrate that they will not generate emissions in excess of the air quality significance thresholds for O_3 precursors (volatile organic compounds [VOC] and NO_x) and PM_{10} and $PM_{2.5}$ to substantiate that they would not adversely contribute to the attainment of the air quality standards. Construction would not generate emissions in excess of any applicable SCAQMD regional-scale mass daily threshold established for the purpose of screening projects with less than significant air quality impacts. These emissions would also be considered less than significant at the cumulative level. Therefore, construction would result in a less than significant impact related to a cumulatively considerable net increase in emissions of O_3 precursors or particulate matter.

With respect to SCAG's adoption of its 2024-2050 RTP/SCS, Connect SoCal 2024, the travel demand modeling and growth forecasts used in the Draft EIR to reflect incremental population and employment growth in the study area and surrounding region remain valid for evaluating cumulative impacts. The differences between Connect SoCal 2024 and the Connect SoCal 2020-2045 RTP/SCS are not substantial enough to alter the environmental conclusions of the Draft EIR. Accordingly, an updated analysis using Connect SoCal 2024 as the basis for cumulative conditions is not required, as the results and findings would not be substantially different than what is presented in the Draft EIR.

Impact 3.4-4.2: Cumulative Net Increase of Criteria Pollutants During Operations

Operation of the LPA would not introduce a substantial permanent source of emissions to the RSA and would provide air quality benefits by replacing passenger vehicle trips with transit ridership. With a VMT reduction of 43,094 under the C-2 Operating Plan, the LPA would reduce air pollutant emissions as shown in Table 1.

Table 1. LPA Operations Emissions Analysis – 2042

	Criteria Pollutants					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Daily Reduction in Emissions (lbs./day)	-0.6	-2.1	-53.6	-0.2	-5.7	-1.2

VOC = volatile organic compounds; NO_x = nitrous oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter

This would indirectly decrease regional emissions of O_3 precursors and particulate matter. Therefore, operation of the LPA would not result in a cumulatively considerable increase in nonattainment pollutant or precursor emissions, and this impact would be less than significant.

SCAG's adoption of the 2024-2050 RTP/SCS after the release of the Draft EIR does not alter the conclusions of the transportation cumulative impact analysis. Connect SoCal 2024 carries forward similar growth forecasts, land use patterns, and transportation priorities as the 2020-2045 RTP/SCS on which the EIR was based. (See Memorandum re: Regional Transportation Plan/Sustainable Communities Strategies Comparison, October 2025). Accordingly, the LPA remains consistent with applicable regional plans, and no new or more severe impacts would occur.

Impact 3.4-4.3: Pollutant Concentrations During Construction

The localized analysis assessed maximum daily emissions generated by construction activities by assuming 40 pieces of equipment per acre with receptors within 50 feet of the construction site boundary. As part of Project Feature PF-AQ-1 (Metro Green Construction Policy Compliance), all heavy-duty off-road equipment would be required to comply with the provisions of the Metro Green Construction Policy, which includes that engines meet Tier 4 emissions standards and use Level 3-equivalent diesel particulate filters, where feasible. Based on the requirements, maximum daily emissions of NO_x, carbon monoxide (CO), PM₁₀, and PM_{2.5} generated at construction sites would remain below the applicable corresponding SCAQMD Localized Significance Threshold screening values for all individual and combined activities analyzed. PF-AQ-1 also requires that all diesel-fueled off-road equipment would be required to have engines meeting Tier 4 emissions standards, which would substantially reduce emissions of diesel particulate matter and other toxic gases. Additionally, all off-road equipment would be required to limit idling to no more than five minutes to minimize excess emissions and would be maintained in accordance with the optimal manufacturer specifications. Other construction BMPs would limit diesel particulate emissions from on-road trucks near construction sites. These features reflect Metro's standard construction policies and provide part of the substantial evidence supporting the conclusion that pollutant concentrations would remain below localized thresholds.

Therefore, construction of the LPA would result in a less than significant impact regarding elevated concentrations of criteria pollutants and the occurrence of substantial toxic air contaminant concentrations at nearby sensitive receptor locations.

Impact 3.4-4.3: Pollutant Concentrations During Operations

No direct source of air pollutant emissions along the LPA alignment would occur as the light rail cars, stations, and systems and signals would be electrically powered and connected to the electrical grid. Minor stationary sources would be associated with the use of landscaping equipment and sanitation service vehicle trips at station facilities. Operations would not involve a facility where a significant number of vehicles would dwell at nearby intersections.

Project operation would reduce daily regional VMT by approximately 43,094 miles relative to the 2042 without project conditions, thereby decreasing daily mobile source air toxics (MSAT) emissions throughout the RSA.

Regarding CO hot-spots, although the SCAB is designated as a maintenance area for CO, it is no longer a pollutant of concern in the region. As indicated in the CARB EMFAC model, CO emission rates would be substantially less in the future when the project opens, compared to 2003 when CO attainment was demonstrated in the AQMP. Therefore, there is no potential for CO emissions to result in an exceedance of air quality standards.

Both light rail and freight train operations would generate small amounts of dust due to braking friction and resuspended particulates from trains passing over unpaved areas. However, these emissions would not result in a substantial increase in localized PM concentrations along the alignment near residential receptors. Additionally, the proposed soundwalls would serve as a physical barrier between adjacent residences and uses and would reduce dust dispersion and deposition into the surrounding communities.

Therefore, operations would result in a less than significant impact related to criteria pollutant concentrations, toxic air contaminants, and CO hot-spots.

Impact 3.4-4.4: Adverse Other Emissions During Construction

Construction activities would not generate a substantial source of construction odors or visible dust plumes. Construction would result in temporary exhaust fumes through gasoline- or diesel-powered equipment and asphalt paving. Such emissions would occur intermittently, and associated odors would dissipate rapidly within the immediate vicinity of the work area. As part of Project Feature PF-AQ-1 (Metro Green Construction Policy Compliance), construction would follow Metro's Green Construction Policy, including use of BMPs to address emissions from construction equipment, and would comply with SCAQMD Rule 402 (Nuisance) regarding odors and dust. PF-AQ-1 reflects Metro's standard construction policy and provides part of the substantial evidence supporting the conclusion that construction activities would not result in nuisance odors or visible dust plumes.

Therefore, construction of the LPA would result in a less than significant impact related to public nuisance for odors or visible dust plumes.

Impact 3.4-4.4: Adverse Other Emissions During Operations

Operations would not involve a substantial source of odorous or particulate emissions that could cause public nuisances. Any unpleasant odors from transit operations would be subject to management under the odor complaint tracking system mandated by SCAQMD Rule 402 (Nuisance), which prevents nuisance odor conditions. With regards to the experience of future transit riders, Metro's heavy and light rail cars use high-efficiency air filters rated at MERV-8 or higher that recirculate air every two to four minutes. The onboard filtration systems would prevent the occurrence of persistent odors affecting future transit riders. As a result, operation of the LPA would have a minor, if any, impact with respect to odors. Therefore, the LPA would result in a less than significant impact related to operational odors.

References in the Draft and Final EIR

- > Section 3.4 Air Quality, Subsections 3.4-4-1, 3.4-4.2, 3.4-4.3, 3.4-4.4 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Project Features

PF-AQ-1. Metro Green Construction Policy Compliance

Following construction equipment requirements, construction BMPs and implementation strategies for all construction projects performed on Metro properties or rights-of-way.

- > Construction equipment shall incorporate, where feasible, emissions-reducing technology such as hybrid drives and specific fuel economy standards.
- > Maintain equipment according to manufacturer specifications.
- > Idling of construction equipment and heavy-duty trucks shall be restricted to a maximum of five minutes when not in use (certain exceptions apply based on CARB exemptions).
- > All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier-4 off-road emission standards at a minimum.
- > All on-road heavy-duty trucks with a gross vehicle weight rating greater than or equal to 14,000 pounds must have engines meeting U.S. 2010 on-road emission standards.
- > Where applicable and feasible, work with local jurisdictions to improve traffic flow by signal synchronization during construction activities.

- > Use electric power in lieu of diesel power where available.
- > Generators: every effort shall be made to utilize grid-based electric power at any construction site, where feasible. Where access to the power grid is not available, on-site generators must:
 - Meet a 0.01 gram per brake-horsepower-hour (g/bhp-hr) standard for PM; or,
 - Be equipped with Best Available Control Technology (BACT) for PM emissions reductions.
- > Inspections: Metro shall conduct inspections of construction sites and affected off-road and on-road equipment and generator as well as compliance with air quality rules.
- > Records: Prior to Notice to Proceed (NTP) to commence construction and to be verified afterwards consistent with project contract requirements and through enforcement provisions above, the Contractor shall submit to Metro the following information for all construction equipment to be used on Metro properties or rights-of-way:
 - A certified statement that all construction equipment used conform to the requirements specified above;
 - A list of all the equipment and vehicles (i.e., off-road equipment, include the CARB-issued Equipment Identification Number) to be used;
 - A copy of each Contractor's certified U.S. Environmental Protection Agency (USEPA) rating and applicable paperwork issued either by CARB, the SCAQMD, and any other jurisdiction that has oversight over the equipment.

PF-AQ-2. SCAQMD Rule 403 Compliance

Construction of the project would implement the following BMPs in compliance with SCAQMD Rule 403 – Fugitive Dust:

- > Backfilling: Backfill material stabilization when actively handling or inactive and stabilize soil at completion of activity.
- > Clearing/Grubbing: Maintain stability of soil through watering of site prior to, during, and after all clearing/grubbing activities.
- > Cut and Fill: Pre-water soils prior to cut and fill activities using water trucks; stabilize soil during and after activities.
- > Debris Hauling: All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches.
- > Demolition Activities: Prohibit demolition activities when wind speeds exceed 25 mph; apply water to disturbed soils after demolition is completed or at the end of each day of cleanup.
- > Disturbed Soil: Stabilize disturbed soil throughout the construction site by limiting vehicular traffic and disturbance on soil where possible and applying water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes (Rule 401 – Visible Emissions).
- > Disturbed Surface Areas: Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface; apply water at three-hour intervals to at least 80% of the un-stabilized area.

- > Earth-Moving Activities: Pre-apply water to depth of proposed cuts and reapply as necessary to maintain soils in a damp condition and to ensure that visible dust plumes do not exceed 100 feet in any direction.
- > Importing/Exporting of Bulk Materials: Stabilize material with tarps or other suitable enclosures on trucks while loading/unloading to reduce fugitive dust emissions and maintain at least six inches of freeboard on haul vehicle; provide water during loading/unloading to prevent dust plumes.
- > Staging Areas and Unpaved Roads: Stabilize surface areas and limit vehicle speeds to 15 miles per hour.
- > Stockpiles/Bulk Material Handling: Stabilize stockpiled materials with intermittent watering and limit stockpiles to eight feet in height within 100 yards of off-site occupied buildings.
- > Trenching: Stabilize surface soils with pre-watering where trencher or excavator and support equipment will operate; wash mud and soils from equipment at completion of activities.

PF-AQ-3. Metro Moving Beyond Sustainability Strategic Plan Compliance

Construction and operation of the project will adhere to the commitments established by the Metro Moving Beyond Sustainability Strategic Plan 2020, including, but not limited to the application of renewable diesel requirements for contractors and identify opportunities to decarbonize fuel sources at construction sites.

PF-AQ-4. Metro Rail Design Guidelines

The project will be designed in accordance with the MRDC and the Metro Systemwide Station Design Standards Policy, which includes the installation of high-efficiency light emitting diode (LED) lighting in all fixtures to reduce electricity consumption.

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these air quality impacts would be less than significant.

6.5. GREENHOUSE GAS EMISSIONS

The project would have a less than significant impact related to GHG emissions with respect to the following significance thresholds:

- > Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? (Impact 3.5-4.1)
- > Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs? (Impact 3.5-4.2)

Impacts

Impact 3.5-4.1: Generate Greenhouse Gas Emissions During Construction

Construction of the trench segment as part of the LPA under 170th and 182nd Streets would generate GHG emissions that would be offset over time through operational benefits, including reductions in regional on-road VMT. Construction of the LPA was estimated to generate approximately 15,250 metric

tons of carbon dioxide equivalent (MTCO₂e) over the duration of the construction period. The amortized construction emissions over a 30-year operational project lifetime would be approximately 508.3 MTCO₂e.² Construction-related GHG emissions under the LPA would be offset by the reductions in regional vehicle travel emissions within less than 10 years of operations. The magnitude of temporary construction-phase GHG emissions would not be sufficient to impede or delay the region's effort. Therefore, construction of the LPA would not conflict with any relevant plan for reducing GHG emissions and would result in a less than significant impact during construction.

Impact 3.5-4.1: Generate Greenhouse Gas Emissions During Operations

Implementation of the LPA under the C-2 Operating Plan would decrease regional on-road VMT by 43,094 daily miles through transportation mode shift, with an annual net GHG-emissions reduction of 1,833.58 MTCO₂e in 2042 due to displaced on-road vehicle trips. Long-term operation of the project would advance state, regional, and local initiatives to reduce GHG emissions by providing alternative modes of transportation and creating an efficient, well-connected public transit network to serve surrounding communities. The project is consistent with CARB plans and policies to reduce GHG emissions from passenger vehicles by providing alternative transportation modes for both local and regional trips. Implementation of the project and other planned transportation and transit improvements in the region are critical to achieving the Senate Bill (SB) 375 regional per capita targets for light duty vehicles. Therefore, implementation of the LPA would result in a less than significant impact related to the generation of GHG emissions.

Impact 3.5-4.2: Conflict With Emission Reduction Plans During Construction

Construction of the LPA would temporarily generate GHG emissions associated with off-road equipment and on-road vehicle activities, and following completion of the light rail transit corridor, sources involved in construction activities would no longer produce emissions associated with the LPA. The cumulative nature of GHG emissions implicitly precludes the potential for short-term emissions generated during construction to interfere with long-term GHG-emission-reduction targets established by state, regional, and local planning documentation. In accordance with SCAQMD guidance, the GHG emissions that would be generated during construction were amortized over a 30-year operational lifetime and considered in conjunction with the long-term operational effects of the project. Therefore, the LPA is consistent with the SCAG RTP/SCS, and would result in a less than significant impact related to regional GHG reductions.

Impact 3.5-4.2: Conflict With Emission Reduction Plans During Construction

Implementation of the LPA would directly contribute to the statewide efforts to reduce light-duty automobile VMT, inducing a daily displacement of approximately 43,094 light-duty vehicle miles. The LPA would provide an expansion of light rail transit service that would directly increase transit capacity,

² Chapter 4, Corrections and Additions, of the Final EIR, subsection 4.21 (Evaluation of Alternatives) describes the LPA as generating approximately 95 percent of the hauling-related GHG emissions for the Trench Option, which was determined to result in a less than significant impact. The Final EIR based this percentage on a conservative number of haul trips and did not estimate the construction emissions specific to the LPA. This Findings of Fact presents a more refined analysis based on the LPA construction assumptions presented in Table 2.5-1 of the Final EIR.

which would support the SCAG RTP/SCS' goal of improved accessibility and mobility relative to the future (2042) baseline condition. By enhancing connectivity to the regional transit network, the LPA would result in environmental benefits and would accommodate further strategies to reduce emissions at the community level. The LPA supports transportation efforts to reduce VMT and achieve GHG-emission-reduction targets outlined in the CARB Climate Change Scoping Plan and the SCAG Connect SoCal 2020–2045 RTP/SCS. By default, Metro will prioritize and ensure consistency with its own 2019 Climate Action and Adaptation Plan (CAAP) and 2020 Moving Beyond Sustainability Strategic Plan for all projects being implemented. At the local level, the LPA alignment would traverse portions of the cities of Lawndale, Redondo Beach, and Torrance and would also comply with each city's GHG-reduction plan to the extent feasible. Therefore, the LPA would result in a less than significant impact related to GHG plan and policy conflicts.

Since the release of the Draft EIR, SCAG has released and adopted its 2024-2050 RTP/SCS, Connect SoCal 2024. The guiding policies, strategies, and regional planning assumptions in Connect SoCal 2024 are materially similar to those in the prior 2020-2045 RTP/SCS and continue to support development of high-capacity transit infrastructure, such as the LPA. Therefore, the LPA remains consistent with the RTP/SCS, including Connect SoCal 2024's emphasis on expanding transit, reducing VMT, and supporting compact, infill development.

References in the Draft and Final EIR

- > Section 3.5 Greenhouse Gas Emissions, Subsections 3.5-4.1 and 3.5-4.2 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Project Features

None

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these GHG impacts would be less than significant.

6.6. GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

The project would have a less than significant impact related to geology and soils with respect to the following significance thresholds:

- > Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking? (Impact 3.8-4.2)
- > 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? (Impact 3.8-4-3)
- > Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides? (Impact 3.8-4.4)
- > Would the project result in substantial soil erosion or the loss of topsoil? (Impact 3.8-4.5)

- > 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? (Impact 3.8-4.6)
- > Would the project be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code¹, creating substantial direct or indirect risks to life or property? (Impact 3.8-4.7)

Impacts

Impact 3.8-4.2: Exposure to Strong Seismic Ground Shaking During Construction

Faults, such as the Palos Verdes and Newport-Inglewood Faults, which are the closest to the RSA are capable of producing earthquakes with magnitudes up to 7.7 and high ground accelerations. The RSA is approximately four miles east of the Palos Verdes and Newport-Inglewood Fault Zone. The construction of the LPA would involve the presence of construction workers at the site, thus increasing the potential risk of loss, injury, or death during a strong seismic event. However, given the intermittent and temporary nature of construction work and the relative rarity of strong seismic events in the region, the occurrence of strong seismic ground shaking during construction is unlikely. Therefore, construction of the LPA would have a less than significant impact related to risk of loss, injury, or death involving strong seismic ground shaking.

Impact 3.8-4.2: Exposure to Strong Seismic Ground Shaking During Operations

The LPA would be designed to accommodate the high seismic ground motion and associated consequences (such as liquefaction-induced vertical settlements/lateral spreading, if present). The structures would be designed to perform in accordance with the MRDC maximum design earthquake (MDE) and operating design earthquake (ODE) thresholds. As part of PF-GEO-1 (Metro Geotechnical Design Standards), site-specific geotechnical investigations would be performed in accordance with MRDC Section 5.6. The results of these investigations would be incorporated into the project's final design to address seismic demands and provide appropriate engineering solutions. Also, the LPA would comply with the latest applicable local and state building codes and regulations. PF-GEO-1 reflects Metro's established design standards and provides part of the substantial evidence supporting the conclusion that the project will be designed to withstand strong seismic ground shaking. Therefore, there would be a less than significant impact related to the risk of loss, injury, or death involving strong seismic ground shaking for the LPA during operations.

Impact 3.8-4.3: Liquefaction During Construction

The LPA is not located within a liquefaction zone mapped by the California Geological Survey (CGS). However, shallow groundwater was recorded in the northern area of the project footprint based on the existing geotechnical data. Based on review of the historically highest groundwater levels at the site, the groundwater depth will be 30 feet below ground surface (bgs) or deeper. As part of Project Feature PF-GEO-1 (Metro Geotechnical Design Standards), site-specific geotechnical investigations would be performed during final design to verify the potential for liquefaction and to incorporate appropriate design enhancements, if needed, to address identified conditions. PF-GEO-1 reflects Metro's established design requirements and provides part of the substantial evidence supporting the conclusion that the LPA would be designed to accommodate any liquefaction risk. Given the intermittent and temporary nature of construction work and the relative rarity of seismic events, the occurrence of seismic ground shaking resulting in liquefaction during construction of the LPA is unlikely. Therefore, risk of loss, injury, or death involving seismic-related ground failure, including liquefaction, as a result of the construction of the LPA is less than significant.

Impact 3.8-4.3: Liquefaction During Operations

The LPA would not involve any type of operational activities that would result in seismic-related ground failure, including liquefaction, during operation. As part of Project Feature PF-GEO-1 (Metro Geotechnical Design Standards), the LPA would be designed and constructed to meet Metro's seismic design criteria, incorporating site-specific geotechnical investigations and engineering measures to ensure structures are seismically resistant and capable of withstanding liquefaction and its effects during operation. PF-GEO-1 reflects Metro's established design standards and provides part of the substantial evidence supporting the conclusion that the LPA would be seismically resilient. Therefore, the LPA would have a less than significant impact related to seismic related failures, including liquefaction during operation.

Impact 3.8-4.4: Landslides During Construction

The RSA is located in a relatively low relief area, and the nearest CGS-mapped landslide zone is over 1.5 miles west and south. Therefore, there is no mapped landslide potential for the LPA. However, construction activities for embankments and retaining walls have the potential to temporarily destabilize the soils surrounding the RSA and could result in seismically induced slope failures. As part of Project Feature PF-GEO-1 (Metro Geotechnical Design Standards), any permanent unretained and retained sloped areas within the RSA would be evaluated for geotechnical global stability under both static and seismic loading events in accordance with the MRDC. PF-GEO-1 reflects Metro's established design requirements and provides part of the substantial evidence supporting the conclusion that slopes would be designed and constructed to meet applicable stability standards. Given the intermittent and temporary nature of construction work and the relative rarity of seismic events, the occurrence of seismic ground shaking resulting in slope failure during construction of the LPA is unlikely. Therefore, the risk of loss, injury, or death due to landslides or seismically induced slope failures as a result of construction of the LPA would be less than significant.

Impact 3.8-4.4: Landslides During Operations

The LPA would not involve any operational activities that could directly or indirectly cause substantial adverse effects related to the risk of loss, injury, or death involving landslides. As part of Project Feature PF-GEO-1 (Metro Geotechnical Design Standards), slope stability analyses for the operational configuration of the LPA would be conducted and would account for all potential loading cases, including light train loads and earth pressures. PF-GEO-1 reflects Metro's established design requirements and provides part of the substantial evidence supporting the conclusion that slopes and associated structures would be designed and constructed to maintain stability during operation. Therefore, the risk of loss, injury, or death involving landslides or seismically induced slope failures as a result of the operation of the LPA would be less than significant.

Impact 3.8-4.5: Soil Erosion During Construction

Based on previous geotechnical data in the vicinity of the RSA, the surficial soils mainly consist of cohesionless coarse-grained soils that can be susceptible to erosion. Construction activities for embankments, retaining walls, aerial guideways, at-grade crossings, and station platforms would disturb topsoil and, therefore, could result in topsoil erosion. As part of Project Features PF-GEO-1 (Metro Geotechnical Design Standards), site-specific investigations would inform design and construction methods that account for soil stability. In addition, PF-HWQ-1 (Stormwater Pollution Prevention Plan [SWPPP] Implementation per Construction General Permit and MS4 Permit), provides for development and implementation of a SWPPP, including BMPs for soil stabilization and sediment control, consistent with applicable permit requirements. These project features reflect Metro's established design and

construction practices and provide part of the substantial evidence supporting the conclusion that erosion control measures would be in place throughout construction. Therefore, substantial soil erosion and loss of topsoil for the LPA as a result of construction would be less than significant.

Impact 3.8-4.6: Unstable Geologic Units or Soils During Construction

The LPA is not located within a CGS-mapped liquefaction zone. The project footprint is generally in a relatively low relief area, and the nearest CGS-mapped landslide zone is over 1.5 miles west and south. Based on prior studies and existing geotechnical data, there is a low potential for subsidence and naturally occurring collapsible soils within the project area. Therefore, the LPA is not located on a geologic unit or soil that is unstable or would become unstable as a result of the LPA, and resulting impacts associated with unstable soils and their consequences are considered minimal. However, deep excavations for piles could encounter unconsolidated or water-saturated soils. Existing geotechnical investigations indicate that shallow groundwater was recorded in the northern portion of the project footprint. As part of PF-GEO-1 (Metro Geotechnical Design Standards), site-specific geotechnical investigations would be conducted during final design to assess the subsurface conditions and current groundwater depth. In accordance with PF-GEO-1, the results of these investigations would be incorporated into project design and construction, including evaluation of risks, such as landslides, lateral spreading, subsidence, liquefaction, and collapse, and use of appropriate engineering measures, such as deep foundations and ground improvements where necessary. PF-GEO-1 reflects Metro's established design standards and provides part of the substantial evidence supporting the conclusion that the LPA would be designed to address any unstable soil conditions identified. Given the intermittent and temporary nature of construction work and the relative rarity of seismic events, the occurrence of seismic ground shaking resulting in liquefaction, lateral spreading, landslides, or seismically induced slope failures during construction of the LPA is unlikely. In addition, there is no evidence of groundwater pumping within or around the project footprint that could cause ground subsidence, although this would be confirmed and evaluated during the final design phase. Therefore, the construction impacts for LPA would be less than significant on unstable soils as a result of landslides, lateral spreading, subsidence, liquefaction, or collapse.

Impact 3.8-4.6: Unstable Geologic Units or Soils During Operations

The LPA would not involve any activities during operation that could directly cause landslides, lateral spreading, subsidence, liquefaction, or collapse. As part of Project Feature PF-GEO-1 (Metro Geotechnical Design Standards), site-specific geotechnical investigations would be conducted during final design to evaluate conditions such as slope stability, subsidence potential, liquefaction susceptibility, and soil collapse. The findings of those investigations would be incorporated into the LPA's design and construction, with appropriate engineering measures applied where necessary to ensure long-term stability. PF-GEO-1 reflects Metro's established design requirements and provides part of the substantial evidence supporting the conclusion that the project will be designed and constructed to operate safely under expected geologic conditions. Therefore, landslides, lateral spreading, subsidence, liquefaction, or collapse would result in operational impacts for the LPA that are less than significant.

Impact 3.8-4.7: Expansive Soils During Construction

Based on available geotechnical data from previous geotechnical investigations in the vicinity of the RSA, the upper approximately 10 feet of soils along the entire alignment consists mainly of cohesionless coarse-grained soils. These coarse-grained soils have low expansion potential. However, deeper excavations (e.g., construction of retaining walls and station platforms) could encounter fine-grained soil

with higher expansive potential. As part of Project Feature PF-GEO-1 (Metro Geotechnical Design Standards), site-specific geotechnical investigations would be performed during final design to verify the presence of expansive soils, if any, and determine appropriate engineering responses as necessary. This could include measures such as removal and replacement of expansive soils or stabilization through lime or cement treatment, which would be incorporated into project construction as standard engineering practices. PF-GEO-1 reflects Metro's established design requirements and provides part of the substantial evidence supporting the conclusion that construction would be designed to address any expansive soils encountered. Therefore, the risk to life or property due to expansive soils during construction of the LPA is less than significant.

Impact 3.8-4.7: Expansive Soils During Operations

Operation of the LPA would not be adversely affected by expansive soils. As part of Project Feature PF-GEO-1 (Metro Geotechnical Design Standards), the LPA would be underlain by non-expansive engineered soil fills and/or treated on-site fill soils, and would be designed in compliance with MRDC and the latest state and local building codes. PF-GEO-1 reflects Metro's established design requirements and provides part of the substantial evidence supporting the conclusion that the project will be designed to address expansive soil conditions. Therefore, the LPA would result in less than significant impact as a result of operational activities.

References in the Draft and Final EIR

- > Section 3.8, Geology, Soils, and Paleontological Resources, Subsections 3.8-4.2, 3.8-4.3, 3.8-4.4, 3.8-4.5.1, 3.8-4.6, and 3.8-4.7 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR
- > Chapter 5, Responses to Comments, Subsection 5.2-13 Major-Topic Response MR-13: Soil Stability and Sinkholes, of the Final EIR

Project Features

PF-GEO-1. Metro Geotechnical Design Standards

Prior to construction, Metro will complete soil investigations, including examination of any potential sinkholes by the geotechnical engineer of record, to inform site-specific design and construction measures.

The project shall be designed and constructed per the MRDC. Key compliance sections of the MRDC relative to geology and soils are Section 5.3, Section 5.4, Section 5.6, and MRDC Section 5 Appendix, Metro Supplemental Seismic Design Criteria (SSDC). Section 5.6 of the MRDC provides detailed requirements for planning and conducting a geotechnical investigation, geotechnical design methodologies, and reporting. In accordance with the MRDC, geotechnical report recommendations shall be incorporated into the project plans and specifications. These recommendations shall be a product of final design and shall address potential subsurface hazards. In addition, Caltrans and the California Building Code (CBC) have independent design criteria for bridges, aerial structures and building structures, which shall be followed.

As noted in Section 3.8-1.2, SSDC outlined in the MRDC Section 5 appendix (Metro, 2017) recommends the seismic stability and potential permanent deformation of sloping ground or embankments supporting aerial guideway and bridges along the LPA be investigated. Investigations should include evaluation of the potential for ground liquefaction and related deformations. The evaluations and associated analyses shall be displacement-based leading to the determinations of potential lateral

deformations of slopes or embankments and ground settlement. It is recommended that the total settlement and lateral ground deformations under ODE seismic events shall not be allowed to exceed two inches to allow for track re-leveling or re-alignment. Larger deformations may be allowed for MDE events on a case-by-case basis on approval by Metro.

The MRDC section also provides details on how the stability analysis of the slopes and embankments is to be performed. Two options are provided: (1) seismic coefficient approach for pseudo-static case or (2) slope displacement method. If the factor of safety is less than 1.1, then slope performance shall be evaluated using Method (2) where displacements are computed using Newmark time-history analyses.

Metro SSDC outlined in the MRDC Section 5 appendix provides guidance for liquefaction studies. If potentially liquefiable soils are identified along the LPA, liquefaction susceptibility shall be determined using the procedures documented in the American Association of State Highway and Transportation Officials-California Load and Resistance Factor Design Bridge Design Specifications. The liquefaction potential assessment should consider the impact of the following effects where liquefaction is judged to occur:

- > Loss of strength of liquefied layers (post liquefaction residual strength)
- > Flow failures, slope deformations
- > Post liquefaction ground settlement

According to the SSDC, the displacement performance of slopes and embankments underlain by liquefied soils may be evaluated in a similar manner to non-liquefiable cases, except residual strengths of liquefied soils are used in analyses. The post-liquefaction settlement of liquefied soil layers may be determined using procedures documented by Tokimatsu and Seed (1987). The bridge and elevated rail structures located in liquefaction sites should be analyzed for non-liquefiable and liquefiable soil configurations. For the liquefiable condition, residual strengths of liquefied soil layers are used for lateral and axial deep foundation response analyses. For those sites where liquefaction related permanent lateral ground displacements are determined to occur, the effects on pile performance shall be evaluated. Down drag forces on piles due to post liquefaction settlement shall also be evaluated. If the above impact assessments yield unacceptable performance of the structures, appropriate measures shall be incorporated into the design.

As outlined in the MRDC Section 5.6, the geotechnical investigation should evaluate impacts related to potential settlement due to lowering of the groundwater table or excavation instability due to draining of perched groundwater during construction activities. Specific topics to be considered in the geotechnical investigation include the following:

- > Selection of appropriate construction methodology that minimizes permanent changes to sub-surface drainage conditions or groundwater pressures.
- > Installation of dewatering wells outside trench walls, sump pumps within the trench, deep secant pile walls to minimize excavation base instability, heaving of soils on the upgradient side of the trench, fluidization, and erosion.
- > Identification of zones of relatively high permeability strata with high potential to excessive groundwater influx and recommend construction methodology and design technologies such as keying secant pile walls into lower permeability strata.

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these impacts related to geology and soils would be less than significant.

6.7. HAZARDS AND HAZARDOUS MATERIALS

The project would have a less than significant impact related to hazards and hazardous materials with respect to the following significance thresholds:

- > Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Impact 3.9-4.1)
- > 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 3.9-4.2)
- > 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? (Impact 3.9-4.3)
- > 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? (Impact 3.9-4.4)
- > Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Impact 3.9-4.7)

Impacts

Impact 3.9-4.1: Hazardous Materials Transport During Construction

Construction equipment may inadvertently drip small quantities of hazardous materials (e.g., fuel oil and grease) and contaminate soil. Excavation and demolition of existing bridges would require the removal, transport, and disposal of soil and bridge materials that have potentially been contaminated by various contaminants of concern. The LPA would be in an active freight ROW, where historic railroad operations may have led to the presence of hazardous materials. The LPA includes several project features that reflect Metro's standard policies and contractor requirements on this subject. As part of PF-HHM-1 (Handling, Storage, and Transport of Hazardous Materials and Wastes), hazardous materials management plans detailing BMPs consistent with federal and state regulations for transport, storage, and use, and cleanup. As part of Project Feature PF-HHM-2 (Demolition Plans), demolition plans would be prepared detailing the procedures for asbestos-containing materials (ACM), lead-based paint (LBP), polychlorinated biphenyls (PCB), treated wood waste (TWW), and universal waste encountered during demolition activities in accordance with federal and state regulations. As part of Project Feature PF-HHM-3 (Property Acquisition Phase II Site Investigation), Phase II site investigations, including testing for aerially deposited lead (ADL) pursuant to ASTM International standards, would be performed to determine the presence of hazardous materials in soil on sites to be acquired, with necessary corrective action completed under agency oversight in compliance with federal and state regulations.

Contaminated groundwater from off-site sources could be encountered where pile foundations are installed for elevated structures. As part of Project Feature PF-HHM-4 (Soil, Soil Vapor, and Groundwater Management Plans), soil and soil vapor management plans would be developed consistent with Metro and regulatory requirements. Contaminated soil, if any, would be disposed of at a permitted landfill per the specifications of Department of Toxic Substances Control (DTSC) or Regional Water Quality Control Board (RWQCB) or other agencies overseeing project construction. As part of Project Feature PF-HHM-5 (Disposal of Groundwater), Metro would consult with the RWQCB to comply with all discharge permits, including the National Pollutant Discharge Elimination System (NPDES) permit, if contaminated groundwater is encountered. These project features provide part of the substantial evidence supporting the conclusion that hazardous materials would be handled in compliance with applicable federal, state, and local regulations. Therefore, impacts related to the transport, storage, use, or disposal of hazardous materials during construction would be less than significant.

Impact 3.9-4.1: Hazardous Materials Transport During Operations

Operation of the LPA would involve the occasional use, storage, and disposal of hazardous materials that could include limited quantities of maintenance vehicle fuels, oils, transmission fluids, paints, solvents, cleaners, and pesticides. The light rail transit vehicles are to be electrically powered and, therefore, would not use hazardous materials, such as diesel or natural gas, as fuel. The LPA would not generate significant amounts of hazardous materials that would require routine transport, use, or dispose of hazardous materials or create conditions involving the release of hazardous materials into the environment. As part of Project Feature PF-HHM-1 (Handling, Storage, and Transport of Hazardous Materials and Wastes), Metro would prepare and follow a hazardous materials management plan consistent with applicable regulatory requirements, including BMPs for transport, storage, use, and cleanup. PF-HHM-1 reflects Metro's established operational requirements and provides part of the substantial evidence supporting the conclusion that hazardous materials associated with LPA operation would be managed in compliance with applicable regulations. Therefore, the LPA would result in a less than significant impact related to routine transport, use, and disposal of hazardous materials during operation.

Impact 3.9-4.2: Release of Hazardous Materials into Environment During Construction

Oil and gas pipelines are located adjacent to the project corridor, and oil refineries are located near the southern end. Oil or gas could be released through spills during construction or rupture of a pipeline during construction, and such releases could pose potential fire and explosion hazards. At this phase of design, Metro has obtained as-built drawings from utility owners and developed preliminary plans for relocation or protect-in-place. To the greatest extent possible, pipelines and utilities would be protected in place during construction of the LPA, following all applicable safety regulations and utility owner standards regarding necessary clearances. Consistent with the MRDC, Metro would continue to coordinate with utility owners in future phases of design and present preliminary relocation concepts for affected facilities. Prior to and during construction, Metro and its contractors would follow established utility protection protocols and construction techniques and procedures to prevent accidental damage to underground utilities. As part of Project Feature PF-US-1 (Utility Identification and Coordination), all oil and gas pipelines within the Metro ROW would be identified and marked on-site in coordination with the utility owners prior to ground-disturbing activities. Metro would conduct additional surveys and potholing as needed to verify the relocation plans, which would avoid any conflicts with pipelines during construction. Utility agreements would be finalized to ensure the designs are prepared by third-party utility owners, and the final design layouts would be confirmed or adjusted as needed based on field verification conducted prior to construction. Anticipated levels of ground-

borne vibration during construction are below the levels at which damage to underground utilities could occur.

The LPA would traverse through small portions of Lawndale and Torrance oil fields. Construction activities in this area would involve constructing the at-grade light rail guideway and relocating the freight track and would not involve deep subsurface disturbance. There is one plugged and abandoned dry well hole within the RSA, but emissions are considered negligible. As part of PF-HHM-6 (Oil and Gas Wells), oil wells (including abandoned or suspected wells) within 200 feet of the LPA would be identified, inspected, and addressed in accordance with California Geologic Energy Management Division (CalGEM) standards and in coordination with the well owners.

Pile foundations for aerial structures could encounter potentially contaminated groundwater. As part of PF-HHM-4 (Soil, Soil Vapor, and Groundwater Management Plans) and PF-HHM-5 (Disposal of Groundwater), contaminated groundwater would be managed and disposed of in consultation with the RWQCB and in compliance with all applicable permits.

Other buried utilities could be disturbed during construction activities. Disturbance to the dry utilities could result in temporary interruptions of service, but would not cause the release of hazardous materials into the environment. Wet utilities, such as sewer lines or domestic water lines, if damaged, could release gray or black water and cause localized subsurface contamination. As part of PF-US-1, the contractor would coordinate with utility owners prior to construction and verify the location of existing utilities to avoid these conditions.

Together, these project features reflect Metro's established design and construction practices and provide part of the substantial evidence supporting the conclusion that utility-related hazards, including the potential release of hazardous materials during construction, would be effectively managed. Therefore, the impact would be less than significant.

Impact 3.9-4.2: Release of Hazardous Materials into Environment During Operations

Operation of the LPA would involve the occasional use and storage of routine detergents and cleansers for vehicle maintenance activities. There would also be potential for small quantities of fuels, oils, and transmission fluids to drip or spill from Metro support vehicles. Because only limited quantities of these materials would be stored and used on the project site, the potential for exposure of individuals to hazardous materials would be minimal. The LPA would not involve the use or storage of chemicals that have the potential to result in an off-site upset or accidental event.

The LPA would also not increase the risk of freight train derailment and, therefore, would not increase the risk of accidental release of hazardous materials in the unlikely event of such a derailment. The project would replace existing freight rails with modern rails, which would reduce the risk of track-related incidents. In addition, the light rail and freight trains would not pose a risk to underground utilities, as utilities affected by the LPA would have been either relocated during construction in compliance with utility setback requirements or protected in place using appropriate engineering measures. Vibration levels generated by the operation of light rail transit vehicles and freight trains during operation would remain well below thresholds known to cause damage to buried pipelines. Therefore, there would be a less than significant impact related to accident conditions involving the release of hazardous materials into the environment during operation.

Impact 3.9-4.3: Hazardous Materials Within Quarter-Mile of Schools During Construction

Several schools are located within one-quarter mile of the LPA, including RK Lloyd Continuation High School, Centinela Valley Independent Study School, Environmental Charter High School, William Green

Elementary School, Adams Middle School, Washington Elementary School, Franklin School, and the under-construction Friendship Campus.

Demolition of older structures could release ACMs. As part of Project Feature PF-HHM-2 (Demolition Plans), demolition activities would be carried out under demolition plans specifying the procedures for ACMs, LBP, PCB, TWW, and universal waste, consistent with federal and state regulations. Excavation of soils within the RSA that may be contaminated with VOCs would be subject to proper handling and disposal requirements. The hazardous waste and hazardous materials plan prepared as part of PF-HHM-1 would address the handling and transport of hazardous materials in compliance with applicable regulations, including SCAQMD Rule 1166. In addition, as part of Project Feature PF-AQ-1 (Metro Green Construction Policy Compliance), construction would comply with Metro's Green Construction Policy, including provisions for emissions controls and fugitive dust suppression.

Commercially available hazardous materials such as gasoline, brake fluids, coolants, and paints would also be used during construction. Standard equipment maintenance and good housekeeping practices would limit the potential for release. Any release of such substances, if it were to occur, would be localized and unlikely to pose a risk to nearby schools. Given the limited scale of these materials and the LPA components enacted as part of PF-HHM-1, PF-HHM-2, and PF-AQ-1, construction would not pose a risk to nearby schools.

Accordingly, construction of the LPA would result in a less than significant impact related to the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of a school.

Impact 3.9-4.4: Hazardous Material Sites During Construction

Table 3.9-2 of the Draft EIR lists recognized environmental condition (REC) sites within the RSA that may have potential subsurface contamination that could be implicated by the proposed construction. Construction activities such as grading, or any other ground-disturbing activities could encounter contaminants or interfere with ongoing remediation efforts. Construction at sites with existing contamination could also result in the generation of additional waste materials and could expose workers to hazardous materials.

Project-related effects of hazardous-waste-containing chemical compounds would generally be limited to areas where the RECs have been identified or unanticipated contamination at unknown releases. The individuals most at-risk would be construction workers, or others in the immediate vicinity during excavation, transportation, or storage of hazardous wastes, or during demolition and construction. The exposure pathways through which these individuals could be exposed include inhalation, ingestion, or dermal contact.

The contractor would be required to implement federal and state handling and disposal regulations. As part of Project Feature PF-HHM-1 (Handling, Storage, and Transport of Hazardous Materials and Wastes), contractors would prepare and follow a hazardous materials management plan consistent with applicable federal and state requirements. As part of PF-HHM-4 (Soil, Soil Vapor, and Groundwater Management Plans), construction management plans would be prepared to address the handling of contaminated materials if encountered, consistent with applicable regulatory requirements and standard BMPs. As part of PF-HHM-3 (Property Acquisition Phase II Site Investigation), Phase II site investigations would be completed prior to construction for the sites identified in Table 3.9-2 of the Draft EIR, and the results would inform construction management plans for spoils in areas identified as contaminated. Additionally, as part of Project Feature PF-HHM-5 (Disposal of Groundwater), contaminated groundwater would be managed in consultation with regulatory agencies and in

compliance with applicable permits. These project features reflect Metro's standard practices and contractor specifications and provide part of the substantial evidence supporting the conclusion that construction activities would comply with federal and state handling and disposal regulations for hazardous materials. Therefore, the LPA would have a less than significant impact related to hazardous material sites during construction.

Impact 3.9-4.7: Interfere With Emergency Response Plans During Construction

As part of Project Feature PF-T-1 (Construction Traffic Management Plan), the contractor would prepare a CTMP addressing emergency access during construction. The CTMP would include street closure information, detour plans, haul routes, and a staging plan based on the nature and timing of specific construction activities at each of the construction sites. As PF-T-1 is a standard requirement of Metro projects, construction would be planned and coordinated to maintain emergency access and avoid conflicts with adopted emergency response or evacuation plans. Therefore, construction of the LPA would result in a less than significant impact related to impairment of an adopted emergency response plan or emergency evacuation route.

Impact 3.9-4.7: Interfere With Emergency Response Plans During Operations

The operation of the LPA would maintain or improve all existing freight crossings. The light rail would be fully grade-separated from all roadways and, therefore, would not create closures of any crossings during operations. Therefore, operation of the LPA would result in a less than significant impact to emergency response and evacuation plans.

References in the Draft and Final EIR

- > Section 3.9, Hazardous Materials, Subsections 3.9-4.1, 3.9-4.2, 3.9-4.3, 3.9-4.4 and 3.9-4.7 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR
- > Chapter 5, Responses to Comments, Subsection 5.2-7, Major Topic Response MR-7: Utility Relocation and Hazardous Materials Safety; Subsection 5.2-8, Major Topic Response Mr-8: Light Rail and Freight Train Safety; and Subsection 5.2-20: Major Topic Response 20: Proximity Impacts of Relocated Freight Tracks, of the Final EIR

Project Features

PF-HHM-1. Handling, Storage, and Transport of Hazardous Materials and Wastes

Prior to the start of construction, the contractor would provide Metro with a hazardous waste and hazardous materials management plan, such as a plan defined in Title 19 CCR, or a Spill Prevention, Control, and Countermeasure Plan. The plan will be completed to Metro contractor specifications and will comply with the State Water Resources Control Board (SWRCB) Construction Clean Water Act (CWA) Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and storage of hazardous materials during construction and operation. The plan will identify the responsible parties and outline procedures for hazardous waste and hazardous materials handling, storage, and transport. The excavation and transport of soils contaminated by heavy metals (e.g., lead) would be managed according to SCAQMD Rule 1466 (Control of Particulate Emissions from Soils with Toxic Air Contaminants) and SCAQMD Rule 1166 (VOC emissions from Decontamination of Soil). The plan would also prescribe BMPs to follow to prevent hazardous material releases and for cleanup of any hazardous material releases that may occur. The transportation of hazardous materials and waste shall be conducted in accordance with the applicable regulations codified in 49 CFR Parts 101, 106, 107, and

171 to 180, including, but not limited to, those related to packaging, pre-transportation functions, transportation functions, and functions not subject to the requirements of the federal Hazardous Materials Regulations.

Additionally, the contractor would comply with applicable federal and state regulations regarding hazardous material handling and storage practices, such as the 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.

PF-HHM-2. Demolition Plans

Prior to the start of construction, the contractor would prepare demolition plans for the safe dismantling and removal of roadways, building components, and debris. The demolition plans would also include plans for testing and abatement procedures for asbestos-containing materials, lead-based paint, and polychlorinated biphenyls, as well as handling and disposal of treated wood waste, such as creosote and arsenic-treated railroad ties, and universal waste in accordance with federal and state regulations, including the 1994 Federal Occupational Exposure to Asbestos Standards, SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities), Title 22 CCR Division 4.5 (Hazardous Waste), the U.S. Department of Housing and Urban Development Lead- Based Paint Guidelines, and Title 40 of the Code of Federal Regulations Part 761.

PF-HHM-3. Property Acquisition Phase II Site Investigation

Consistent with Metro's standards, a Phase II site investigation would be conducted during the preliminary engineering phase on sites that would be acquired/utilized for the project to determine whether the suspected contamination had resulted in soil, groundwater, or soil vapor contamination exceeding regulatory action levels. Aerial deposited lead testing would be included as part of the Phase II site investigation. If the Phase II site investigation concludes that the site is contaminated, remediation or corrective action (e.g., removal of contamination, in-situ treatment, capping) 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. Generally, RECs, also known as sites of concern as identified in the Phase I Environmental Site Assessment (ESA), would be remediated by the property owner prior to acquisition of the property and construction on the site, depending on the arrangement negotiated during property acquisition.

PF-HHM-4. Soil, Soil Vapor, and Groundwater Management Plans

Prior to the start of construction, the contractor would retain a qualified environmental consultant to prepare a Soil Management Plan, Soil Reuse Management Plan, and/or a Soil, Soil Vapor, and Groundwater Management Plan. These plans would be completed to Metro's contractor specifications and submitted to Metro prior to any ground-disturbing activities for the Project.

The Soil and Soil Vapor Management Plan would establish provisions for the disturbance of contaminated materials (known and undocumented). Proper management and disposition of contaminated soils and gases would 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 would establish provisions for the reuse of contaminated known or undocumented soils. Proper management and disposition of contaminated soils would 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). Contaminated soil shall be disposed of at a permitted landfill per the specifications of DTSC or RWQCB or other agencies overseeing the project construction.

The Groundwater Management Plan would establish provisions for encountering and managing contaminated groundwater (known and undocumented). Proper disposal of contaminated groundwater would 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 (e.g., USEPA, DTSC, RWQCB) and construction involves plans to alter the use of the site and/or disturb contaminated soil and/or groundwater on-site, Metro would 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 would 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 would be obtained when investigation and/or remediation is complete.

PF-HHM-5. Disposal of Groundwater

If disposal of contaminated groundwater is required during construction, Metro would consult with the RWQCB, and the Project would comply with permits required by the RWQCB. The RWQCB may require a NPDES permit and/or WDR permit for dewatering and discharge activities. The County of Los Angeles Department of Public Works (LACDPW) would be contacted prior to discharging groundwater into their sewer or stormwater systems. The groundwater discharge and disposal requirements vary by agency, location, concentration, and contaminants of concern and are therefore developed in consultation with the agencies.

PF-HHM-6. Oil and Gas Wells

Prior to ground-disturbing activities, all oil wells (including abandoned or suspected wells) within 200 feet of the project would be identified, inspected, and addressed in accordance with the California Department of Conservation, CalGEM standards and in coordination with the well owners. Where the alignment cannot be adjusted to avoid well casings, CalGEM and a re-abandonment specialty contractor would 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. 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. If an unknown well is encountered during Project construction, the contractor will notify Metro, California OSHA, and CalGEM and proceed in accordance with state requirements.

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these impacts related to hazards and hazardous materials would be less than significant.

6.8. HYDROLOGY AND WATER QUALITY

The project would have a less than significant impact related to hydrology and water quality with respect to the following significance thresholds:

- > Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? (Impact 3.10-4.1)
- > 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? (Impact 3.10-4.2)
- > 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 which would result in substantial erosion or siltation on- or off-site? (Impact 3.10-4.3)
- > 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 which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (Impact 3.10-4.4)
- > 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 which 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? (Impact 3.10-4.5)
- > 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 which would impede or redirect flood flows? (Impact 3.10-4.6)
- > Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (Impact 3.10-4.7)
- > Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Impact 3.10-4.8)

Impacts

Impact 3.10-4.1: Degrade Water Quality During Construction

Project construction could introduce chemicals and/or hazardous substances from construction equipment into surface waters and groundwater. Dust and erosion resulting from soil exposure and disturbance during construction could lead to sedimentation of stormwater, and existing contaminants in newly exposed and eroded soil could also degrade surface water quality and groundwater quality. Introduction of these substances to receiving waters could exacerbate existing water quality impairments or introduce new water quality impairments. As part of Project Feature PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit) Metro would prepare and implement

a SWPPP consistent with the Construction General Permit. The SWPPP would include BMPs for soil stabilization, sediment control, and pollution prevention to protect water quality during construction.

Where excavation encounters groundwater, as identified through Phase II site investigations pursuant to PF-HHM-3, Project Feature PF-HWQ-2 (Groundwater Treatment and Discharge per RWQCB Waste Discharge Requirements for Construction Dewatering), provides that dewatered groundwater would be treated, if necessary, and discharged in accordance with RWQCB requirements. In the trench segment, surface runoff would be collected, treated (if necessary), pumped out of the trench, and discharged to a pervious area on-site for infiltration into the soil in accordance with PF-HWQ-4 (Trench Construction Runoff Collection and Treatment). In addition, Project Feature PF-HWQ-5 (Temporary Storm Drain Inflow Rerouting), provides that stormwater inflows temporarily rerouted during construction would be captured, treated (if required), and discharged consistent with waste discharge requirements detailed in the MS4 Permit.

These project features reflect Metro's standard construction practices and regulatory compliance obligations and provide part of the substantial evidence supporting the conclusion that construction activities will be managed to meet applicable water quality requirements. Therefore, the LPA would have a less than significant impact during construction related to violation of water quality standards or discharge requirements or to degradation of water quality.

Impact 3.10-4.1: Degrade Water Quality During Operations

Operation of the LPA would increase impervious surfaces and human presence in the area, which could introduce new or exacerbate existing surface water quality impairments. Potential sources of water quality effects include sedimentation from runoff on new impervious surfaces; nitrates from landscape fertilizing; and trash, debris, or bacteria from increased human activity. As part of Project Feature PF-HWQ-6 (Low Impact Development [LID] BMPs per Regional Requirements), the LPA would be designed with LID measures sized to retain the stormwater quality design volume (SWQDv) on-site in accordance with regional requirements. Retained stormwater would infiltrate on-site only after being managed through LID BMPs, ensuring that infiltration does not degrade groundwater quality. PF-HWQ-6 also provides for continued maintenance of existing catch basins to prevent debris and trash from entering storm drains. In the trench segment, surface runoff would be collected, treated as necessary, and discharged to the storm drain system in accordance with Project Feature PF-HWQ-7 (Trench Operation Runoff Collection and Treatment). These features reflect Metro's standard design requirements for stormwater management.

Project operation would not involve direct contact with groundwater. The LPA's trench segment would be lined with impervious retaining walls and a paved bottom that would prevent groundwater from entering the trench in substantial volumes. Any incidental groundwater that does permeate the trench would be collected and, if necessary, treated and discharged in compliance with relevant requirements of the RWQCB. No contaminants would be stored within the trench, and Metro vehicles running within the trench would be serviced regularly off-site. Together, PF-HWQ-6 and PF-HWQ-7 provide part of the substantial evidence supporting the conclusion that stormwater and trench runoff would be managed consistent with applicable regulatory requirements. Therefore, the LPA would have a less than significant impact during operation related to violation of water quality standards or discharge requirements or to degradation of water quality.

Impact 3.10-4.2: Decrease Groundwater Supplies During Construction

Construction of the LPA would not substantially interfere with groundwater supplies or groundwater recharge. Construction would require some water for activities like dust control and concrete mixing;

this water would be sourced from local utility lines that may depend on groundwater for a portion of their water supply. However, the water needed for construction of the LPA would be extremely minimal and temporary and would not substantially decrease groundwater supplies.

Construction may also require groundwater dewatering during excavation activities. As part of Project Feature PF-HWQ-2 (Groundwater Treatment and Discharge per RWQCB Waste Discharge Requirements for Construction Dewatering), dewatered groundwater would be discharged in a pre-approved location consistent with RWQCB requirements. The volume of groundwater potentially requiring dewatering would be small relative to the overall size of the West Coast Subbasin, and because the water would be discharged within or close to the RSA, it would ultimately recharge the subbasin. Further, detention basins considered for implementation on-site under PF HWQ-6 (LID BMPs per Regional Requirements) would retain runoff and allow infiltration, thereby helping recharge groundwater supplies. Project Feature PF-HWQ-4 (Trench Construction Runoff Collection and Treatment) also provides for collection and discharge of trench runoff to pervious areas on-site, thereby further recharging the groundwater basin. Together, these project features reflect Metro's standard construction and design practices and provide part of the substantial evidence supporting the conclusion that construction of the LPA would not cause a substantial decrease in groundwater supplies or interfere with groundwater recharge. Therefore, the impact would be less than significant.

Impact 3.10-4.2: Decrease Groundwater Supplies During Operations

Operational water usage primarily involves routine cleaning of equipment within the above- or at-grade alignment and occasional power washing of the surface parking lot; this water would be sourced from local utility lines that may depend on groundwater for a portion of their water supply. Proposed water uses for construction and operation would be minimal compared to the basin's overall annual demand. The LPA would increase the percentage of impervious surfaces within the permanent footprint, which would be similar to the Trench Option (from 19% existing to 37% proposed), as discussed in Section 3.10-4.2.2 of the Draft EIR. This increase in impervious surfaces would reduce the total amount of pervious areas capable of groundwater recharge. As part of Project Feature PF-HWQ-6 (LID BMPs per Regional Requirements), the LPA would incorporate LID measures designed to retain the SWQDv on-site, supporting infiltration and groundwater recharge. In the trench segment, Project Feature PF-HWQ-7 (Trench Operation Runoff Collection and Treatment) provides that runoff exceeding the SWQDv would be collected, treated as necessary, and conveyed to the existing storm drain system in accordance with applicable regulatory requirements. The majority of runoff would be infiltrated on-site during project operation. These project features reflect Metro's standard design practices and provide part of the substantial evidence supporting the conclusion that most stormwater generated on-site during operation would be retained for infiltration, and overall, operational water use would be minimal relative to basin supplies. Therefore, operation of the LPA would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, and the impact would be less than significant.

Impact 3.10-4.3: Substantial Erosion During Construction

Construction of the LPA would not result in substantial drainage pattern alteration such that erosion or siltation occurs. As part of Project Feature PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit) a SWPPP would be prepared and implemented with measures to stabilize soil, control sediment, and manage stormwater consistent with regulatory requirements. These measures would also reduce stormwater runoff velocity, thereby limiting its capacity to result in erosion and siltation on- or off-site, including in sumps. In the trench segment, Project Feature PF-HWQ-4 (Trench

Construction Runoff Collection and Treatment) would provide for surface runoff to be collected and discharged in a controlled manner, consistent with Basin Plan requirements. Where trench runoff is directed to different discharge points than existing points, Project Feature PF-HWQ-5 (Temporary Storm Drain Inflow Rerouting) provides for collection and rerouting of inflows in a manner that avoids erosion or siltation impacts. These project features reflect Metro's standard construction and water quality practices and provide part of the substantial evidence supporting the conclusion that drainage patterns during construction would be managed consistent with applicable requirements. Thus, the LPA would result in a less than significant impact during construction related to erosion or siltation.

Impact 3.10-4.3: Substantial Erosion During Operations

The LPA would increase the percentage of impervious surfaces within the permanent footprint (from 19% existing to 37% proposed). As part of Project Feature PDF-HWQ-6 (LID BMPs per Regional Requirements), the LPA would incorporate LID measures designed to retain the SWQDv on-site, supporting infiltration and reducing uncontrolled runoff. In the trench segment, Project Feature PF-HWQ-7 (Trench Operation Runoff Collection and Treatment) provides for collection, treatment (if necessary), and conveyance of excess runoff to the storm drain in accordance with RWQCB requirements. These project features reflect Metro's standard operational stormwater practices and provide part of the substantial evidence supporting the conclusion that drainage patterns during operation would be managed consistent with applicable requirements. Thus, there would be a less than significant impact during operations related to erosion or siltation.

Impact 3.10-4.4: Surface Runoff During Construction

Project excavation, equipment laydown, and other ground-disturbing activities could alter the existing drainage pattern within the project footprint and concentrate or redirect surface runoff such that flooding occurs on- or off-site. However, substantial drainage alterations are not expected because significant natural and manmade drainage features are absent from the area and any changes in surface runoff would be temporary in nature. As part of Project Feature PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit) construction would be conducted under a SWPPP with measures for soil stabilization, sediment control, and stormwater management consistent with permit requirements. These measures would manage runoff in a way that limits potential for localized flooding on- or off-site. In the trench segment, Project Feature PF-HWQ-4 (Trench Construction Runoff Collection and Treatment) provides for the collection and controlled discharge of surface runoff. Where storm drain inflows are temporarily rerouted during construction, Project Feature PF-HWQ-5 (Temporary Storm Drain Inflow Rerouting) provides for their capture, treatment if necessary, and discharge consistent with applicable requirements. These project features reflect Metro's standard construction and water quality practices and provide part of the substantial evidence supporting the conclusion that surface runoff during construction would be managed consistent with applicable regulatory requirements. Thus, the LPA would result in a less than significant impact related to flooding during construction.

Impact 3.10-4.4: Surface Runoff During Operations

The LPA would increase impervious surfaces compared to existing conditions, which could affect surface runoff and contribute to localized flooding if unmanaged. As part of Project Feature PF-HWQ-6 (LID BMPs per Regional Requirements), the LPA would incorporate LID measures designed to retain the SWQDv on-site in accordance with regional requirements. In the trench segment, Project Feature PF-HWQ-7 (Trench Operation Runoff Collection and Treatment) provides for excess runoff to be collected, treated if necessary, and discharged to existing storm drain facilities in compliance with RWQCB Basin

Plan requirements. These project features reflect Metro's standard operational stormwater practices and provide part of the substantial evidence supporting the conclusion that the LPA would not exceed stormwater drainage system capacity or generate additional polluted runoff. Thus, the LPA would result in a less than significant impact related to flooding during operation.

Impact 3.10-4.5: Stormwater Drainage Capacity During Construction

Construction activities such as excavation, equipment laydown, and other ground-disturbing activities could temporarily alter drainage patterns within the project footprint and concentrate or redirect surface runoff. These temporary alterations could increase volumes or flow rates and, if unmanaged, potentially exceed the capacity of the stormwater drainage system or introduce additional sources of polluted runoff. Project Feature PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit) provides for stormwater BMPs that limit stormwater runoff velocity and control erosion and sedimentation during construction. Project Feature PF-HWQ-4 (Trench Construction Runoff Collection and Treatment) establishes collection and on-site infiltration of trench runoff, avoiding exceedance of existing storm drain capacity. As part of Project Feature PF-HWQ-5 (Temporary Storm Drain Inflow Rerouting), any temporary rerouting of storm drain inflows would be designed consistent with the RWQCB Basin Plan water quality requirements and in a manner that maintains stormwater drainage system capacity. With these standard construction practices in place, the LPA would result in a less than significant impact during construction related to stormwater drainage system capacity or generation of additional polluted runoff.

Impact 3.10-4.5: Stormwater Drainage Capacity During Operations

Operation of the LPA would not result in substantial drainage pattern alteration such that runoff exceeds stormwater drainage systems or additional sources of polluted runoff are generated. As part of Project Feature PF-HWQ-6 (LID BMPs per Regional Requirements), the SWQDv would be retained on-site, thereby minimizing the potential for excessive and/or polluted runoff to enter storm drains. For the trench segment, as part of Project Feature PF-HWQ-7 (Trench Operation Runoff Collection and Treatment), additional runoff in the trenches would be collected, treated (if necessary), and transferred to nearby storm drains. Because most stormwater would be retained on-site and additional stormwater would be directed to existing storm drain facilities consistent with the RWQCB Basin Plan water quality requirements, operation of the LPA would not result in exceedances of stormwater drainage system capacity or generation of additional polluted runoff. Thus, the impact of project operation relating to the addition of impervious surfaces in a manner which would exceed stormwater drainage system capacity or substantially add sources of polluted runoff would be less than significant.

Impact 3.10-4.6: Redirect or Impede Floodflows During Construction

Project construction would not result in substantial drainage pattern alteration such that flood flows are impeded or redirected. A very small portion of the project's temporary footprint near the Torrance TC is located within a 100-year flood zone, which would be for a temporary construction easement. As part of Project Feature PF-HWQ-8 (City of Torrance Flood Zone Requirements), construction within this area would comply with the City of Torrance's flood hazard requirements, which establish permitting, administration, and construction standards designed to reduce potential run-ins with flood waters. Although portions of the alignment would be trenched below grade, this lowered elevation would not create a new flood zone area since the footprint is not located near any existing flood zones or large drainage features. These requirements reflect existing City code and Metro's standard construction practices, and they provide part of the substantial evidence supporting the conclusion that flood flows

would not be impeded or redirected. Thus, construction of the LPA would result in a less than significant impact regarding flood flows.

Impact 3.10-4.6: Redirect or Impede Floodflows During Operations

Operations would not result in substantial drainage pattern alteration such that flood flows are impeded or redirected. Portions of the LPA would operate at approximately the same elevation or in certain locations elevated above the existing railroad and freight rights-of-way and would not exacerbate the existing flood risk or impede or redirect flood flows. Although the trench would run below grade, the trench would not create a new flood zone given its distance from existing flood zones and from large drainage features. Although runoff from the trench may be directed to different discharge points than existing points, runoff would not be directed into an existing flood zone. Thus, operations would not result in substantial drainage pattern alteration which would impede or redirect flood flows, and the impact would be less than significant.

Impact 3.10-4.7: Inundation During Construction

Construction would not risk release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone. A very small portion of the temporary footprint is located within a 100-year flood zone, which would be for a temporary construction easement for the removal of an existing spur track. As part of Project Feature PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit), BMPs would be implemented to manage stormwater and prevent the release of pollutants, including in the unlikely event of localized flooding. In addition, as part of Project Feature PF-HWQ-8 (City of Torrance Flood Zone Requirements), construction within mapped flood zones would comply with the City of Torrance's established requirements for construction within flood hazard areas, designed to reduce potential run-ins with flood waters. These project features reflect existing regulatory requirements and Metro's standard construction practices, and they provide part of the substantial evidence supporting the conclusion that inundation during construction would not result in pollutant release. Therefore, construction would not risk the release of pollutants in flood hazard, tsunami, or seiche zones, and the impact would be less than significant.

Impact 3.10-4.7: Inundation During Operations

Operations would not risk release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone. No portions of the permanent project footprint would be located within the 100-year flood zone. As part of PF-HWQ-6 (LID BMPs per Regional Requirements), the LPA's design would incorporate LID measures to retain the SWQDv, thereby ensuring that the majority of stormwater is managed within the project footprint. This design feature reflects Metro's standard operational stormwater practices and provides part of the substantial evidence supporting the conclusion that operations would not risk the release of pollutants due to flood hazard, tsunami, or seiche zones. Therefore, the impact would be less than significant.

Impact 3.10-4.8: Conflict with Water Quality Plan During Construction

Project construction would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. A groundwater sustainability plan has not been developed for the West Coast Subbasin of the Coastal Plain of the Los Angeles Groundwater Basin, as it is considered a "very low priority" by the state. Therefore, project construction would not conflict with a sustainable groundwater management plan. The RWQCB Basin Plan (e.g., water quality control plan) pertinent to the RSA includes beneficial uses, water quality objectives, and waste discharge requirements designed to protect surface water and groundwater quality within the region. As part of

Project Features PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit) and Project Feature PF-HWQ-2 (Groundwater Treatment and Discharge per RWQCB Waste Discharge Requirements for Construction Dewatering), the project incorporates measures that ensure compliance with applicable regulatory requirements for construction stormwater management and groundwater handling. These design features reflect Metro's standard construction practices and provide part of the substantial evidence supporting the conclusion that construction would be consistent with the Basin Plan. Therefore, construction of the LPA would not conflict with implementation of the Basin Plan, and the impact would be less than significant.

Impact 3.10-4.8: Conflict with Water Quality Plan During Operations

A groundwater sustainability plan has not been developed for the West Coast Subbasin of the Coastal Plain of the Los Angeles Groundwater Basin; therefore, project operation would not conflict with a sustainable groundwater management plan. The RWQCB Basin Plan (i.e., water quality control plan) pertinent to the RSA includes beneficial uses, water quality objectives, and waste discharge requirements designed to protect surface water and groundwater quality within the region. As part of Project Feature PF-HWQ-6 (LID BMPs per Regional Requirements), the project will incorporate LID BMPs consistent with Metro's design criteria and regional MS4 permit requirements, including measures to retain the SWQDv on-site and maintain catch basins to prevent debris and trash from entering storm drains. This would protect surface water and groundwater quality and help ensure compliance with beneficial uses and water quality objectives for surface water and groundwater within the region. These features provide part of the substantial evidence supporting the conclusion that runoff during operation would be managed consistent with applicable Basin Plan requirements. Therefore, operation of the LPA would not conflict with implementation of the Basin Plan, and the impact would be less than significant.

References in the Draft and Final EIR

- > Section 3.10, Hydrology and Water Quality, Subsections 3.10-4.1, 3.10-4.2, 3.10-4.3, 3.10-4.4, 3.10-4.5, 3.10-4.6, 3.10-4.7, and 3.10-4.8 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Project Features

PF-HWQ-1. SWPPP Implementation per Construction General Permit and MS4 Permit

Construction of the project would disturb greater than one acre of ground surface and is thus subject to the Construction General Permit SWPPP requirements. The SWPPP would include BMPs designed to prevent impacts to water quality from occurring during construction. BMPs included would be the minimum BMPs required by the MS4 Permit for all construction sites and additional BMPs determined necessary by the SWPPP developer. BMPs designed to prevent the introduction of chemicals, trash, and/or hazardous substances into waters may include but are not limited to fueling equipment offsite, secondary containment, drip pans, spill response plans, and designed waste receptacles on site. BMPs designed to prevent erosion, prevent sedimentation, and slow and capture runoff on the construction site may include but are not limited to stabilized construction entrances/exits, fiber rolls, silt fences, sandbags, water application for dust control, check dams, drainage inlet protections, infiltration basins, and hydroseeding. BMPs would be implemented before, during, and/or immediately after construction.

PF-HWQ-2. Groundwater Treatment and Discharge per RWQCB Waste Discharge Requirements for Construction Dewatering

Per the requirements of the RWQCB Waste Discharge Requirements for Construction Dewatering, dewatered groundwater would be treated if necessary and then discharged in a pre-approved location specified by said requirements.

PF-HWQ-4. Trench Construction Runoff Collection and Treatment

During trench construction for the LPA, surface runoff flowing within the trench would be collected, pumped out of the trench, treated (if necessary), and discharged to a pervious area on site for infiltration into the soil. BMPs used for surface runoff collection, treatment, and discharge would minimize the potential for introduction of pollutants into surface runoff, as well as the potential for erosion, siltation, flooding, and exceedance of existing storm drain system capacities on or offsite. Surface runoff treatment and discharge would comply with RWQCB Basin Plan water quality requirements.

PF-HWQ-5. Temporary Storm Drain Inflow Rerouting

Although no existing storm drain rerouting is proposed under the LPA, runoff from the LPA footprint may be directed to different discharge points than existing points to avoid adverse hydrology and water quality impacts.

For the LPA, stormwater inflows would be captured, treated (if necessary), rerouted around the construction site, and discharged into the existing storm drain system. Treatment and discharge of storm drain inflows to the existing storm drain system would be conducted per RWQCB Basin Plan water quality requirements.

PF-HWQ-6. LID BMPs per Regional Requirements

The operational design of the project would include LID BMPs designed to retain the SWQDv on site per regional LID requirements. Examples of potential LID BMPs that may be implemented include but are not limited to increasing runoff's flow path length of travel and providing on-site detention basins for retention and infiltration. Additional runoff (beyond the SWQDv) would continue to be discharged via new or existing tie-ins to the existing stormwater drainage system. In elevated portions of the LPA, runoff would be collected by down drains. Discharge locations of underdrains installed along the project would be the same as existing discharge locations. Although no existing storm drain rerouting is proposed under the LPA, runoff from the LPA footprint may be directed to different existing discharge points. Existing catch basins on adjacent storm drains would be retained during operation to prevent debris and trash from entering the stormwater drainage system.

PF-HWQ-7. Trench Operation Runoff Collection and Treatment

During LPA operation, runoff that exceeds the SWQDv in the trench would be collected via a sump drainage system at the low point along the trenched alignment. Runoff collected in the sump would be treated as needed, and then would either be pumped or flow via gravity from the sump to the existing storm drain system in compliance with RWQCB Basin Plan water quality requirements.

PF-HWQ-8. City of Torrance Flood Zone Requirements

A small portion of the project temporary footprint would be located within the 100-year flood zone, where a temporary construction easement would be needed for removal of an existing spur track. Construction in this area would be required to comply with Division 7, Chapter 9 of the Torrance City

Code, titled “Flood Hazard Insurance.” This section establishes a development permit process for flood hazard areas, designates a floodplain administrator for the City, and establishes standards for construction within flood hazard areas.

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these impacts related to hydrology and water quality would be less than significant.

6.9. UTILITIES AND SERVICE SYSTEMS

The project would have a less than significant impact related to utilities and service systems with respect to the following significance thresholds:

- > Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (Impact 3.11-4.1)
- > Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (Impact 3.11-4.2)
- > Would the project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the LPA’s projected demand in addition to the provider’s existing commitments? (Impact 3.11-4.3)
- > Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (Impact 3.11-4.4)

Impacts

Impact 3.11-4.1: Expansion of Utility Facilities During Construction

The LPA would require the relocation of certain utilities, such as water and power lines, which could potentially result in environmental effects related to construction and the temporary disruption of services, including construction emissions and disrupting roadway circulation. No publicly owned oil or gas facilities are identified to be relocated. Existing telecommunication facilities would be protected in place. As part of Project Feature PF-US-1 (Utility Identification and Coordination), Metro would verify the locations of existing utilities, conduct field investigations, and develop layouts to address required separations and any relocations. In addition, as part of Project Feature PF-US-2 (Service Interruption Notification), the construction contractor would coordinate with utility and service providers to minimize service disruptions, provide temporary connections where needed, and notify the public of anticipated service interruptions, if any.

With respect to stormwater runoff, the LPA may require minor modifications to existing storm drain infrastructure, including the relocation of one storm drain pipeline. Consistent with Metro’s standard practice, coordination would occur with stormwater facility operations and service users would be notified (PF-US-1 and PF-US-2). Stormwater management during construction would also occur as part

of Project Features PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit), PF-HWQ-4 (Trench Construction Runoff Collection and Treatment) and PF-HWQ-5 (Temporary Storm Drain Inflow Rerouting), ensuring that the existing storm drain capacity is not exceeded.

Project construction has no potential to require new or expanded electric power, natural gas, oil, or telecommunication facilities. Minimal electricity would be used to power field offices for the construction contractor. Minimal electricity would be used to power contractor field offices.

The project features described above reflect Metro's established utility coordination, service notification, and stormwater practices and provide part of the substantial evidence supporting the conclusion that construction would not result in significant impacts related to water, stormwater drainage, electric, natural gas and oil, or telecommunications facilities. Therefore, the impact would be less than significant.

Impact 3.11-4.1: Expansion of Utility Facilities During Operations

The LPA would not involve a significant long-term, permanent source of water use or wastewater generation. The LPA would increase impervious surface areas, resulting in a potential increase in stormwater runoff during operations. However, as part of Project Feature PF-HWQ-6 (LID BMPs per Regional Requirements), the LPA would incorporate LID measures designed to retain the SWQDv on-site, limiting the potential for additional demand on stormwater facilities. Electricity would be provided to the light rail line by TPSS units and to stations by traditional distribution connection facilities (e.g., power poles, underground wires, transmission lines, and distribution lines). The LPA would require 6,946,500 kWh (6,946.5 MWh) of annual electricity use to power the extension. To offset electricity consumption levels across the Metro rail system, Metro constructed photovoltaic installations in 2018, which generated 2.9 million kWh in 2018; additional photovoltaic systems to generate renewable energy are expected in the future. The electrically powered transit line would not use oil or natural gas. It is not anticipated that natural gas would be utilized to maintain or store trains at the existing facility. There would be no potential for the LPA to require new or expanded natural gas or oil facilities. Operational activities associated with the LPA have no potential to interfere with telecommunication facilities, which would be entirely outside of the alignment. Therefore, the LPA would have a less than significant impact during operation related to utility facilities.

Impact 3.11-4.2: Sufficient Water Supplies During Construction

Construction of the LPA would not require substantial consumption of potable water. Water use would occur primarily related to water trucks required for dust control. This short-term use would require minimal water supplies when compared to regional supplies. Water supplies would not be impacted by limited water use during construction activities. Therefore, construction of the LPA would result in a less than significant impact related to water supplies.

Impact 3.11-4.2: Sufficient Water Supplies During Operations

The LPA does not include a significant long-term, permanent source of water use. The LPA would not construct station restroom facilities nor a new minimal storage facility. Some water use may be needed to clean stations or wash trains. This minimal water use would not interfere with the existing and planned capacity of water facilities. In addition, station perimeters would include drought-tolerant landscaping requiring nominal amounts of water consumption. There is no potential for the LPA to interfere with regional water supply services. Therefore, operations of the LPA would result in a less than significant impact related to water supplies.

Impact 3.11-4.3: Wastewater Treatment Capacity During Construction

The LPA would generate wastewater during construction through the use of temporary worker restrooms and limited construction uses. Any wastewater generated during construction would be transported to wastewater facilities via vacuum service trucks. The Sanitation Districts of Los Angeles County operates the Joint Water Pollution Control Plant (JWPCP) that serves the entire South Bay community as well as communities located as far east as Pomona and as far north as La Cañada Flintridge for wastewater treatment. Wastewater generated by temporary worker restrooms for construction of the LPA would represent a negligible proportion of the daily wastewater processed by the JWPCP, and the facility is anticipated to have adequate capacity to serve the project. Therefore, construction of the LPA would result in a less than significant impact related to wastewater treatment capacity.

Impact 3.11-4.4: Solid Waste Capacity During Construction

Construction of the LPA would generate solid waste related to discarded construction material. Construction of the LPA would require soil excavation and export at a similar, but lower, amount as the Trench Option (which is estimated to require approximately 340,000 CY of excavation and export of approximately 202,600 CY of soil, with 10% of that assumed to be contaminated). Contaminated soil and waste would be disposed of at a permitted landfill per the specifications of DTSC or RWQCB or other agencies overseeing construction of the LPA. The nearest landfills which actively process contaminated soil are the Hazmat TSDF facility and Soil Safe of California Incorporated, located in San Bernardino County. Based on the processing capacity of the two sites, they would be able to adequately process the contaminated soil anticipated to be generated by the LPA. Construction of the LPA would be required to comply with all applicable federal, state, and local statutes and regulations pertaining to solid waste disposal, including AB 939. Regional facilities that process contaminated soil should have the capacity for construction related solid waste. Therefore, construction of the LPA would result in a less than significant impact related to compliance with solid waste standards and capacity.

References in the Draft and Final EIR

- > Section 3.11, Utilities and Service Systems, Subsections 3.11-4.1, 3.11-4.2, 3.11-4.3.1, and 3.11-4.4.1 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR
- > Chapter 5, Responses to Comments, Subsection 5.2-7, Major Topic Response MR-7, Utility Relocation and Hazardous Materials Safety, of the Final EIR

Project Features

PF-US-1. Utility Identification and Coordination

Per Metro standard practice, as design progresses, Metro will continue to verify the locations of existing utilities potentially affected by construction activities. This will include coordinating with all existing utility providers for wet and dry utilities (water, sewer, oil, gas, electric, and telecommunications) and with private utility owners to obtain documentation of existing utility locations. Field verification (i.e., potholing and other methods as appropriate) shall be conducted throughout the preliminary engineering and final design phases to document the locations of all utilities within proximity to the guideway and station foundations of the guideway and station foundations, and other project elements that may affect utilities. Based on the information from the field investigations, the final designer will develop layouts of pipe separations based on coordination with the appropriate utility

owners/operators to determine specific setback requirements for each utility line and the need for any stabilization for protection in place or relocation measures. During the construction and prior to digging, the contractor will conduct additional field verifications, which include requirements such as contacting a utility location service to verify the position of existing pipes, and conducting additional potholing so that the final design layouts can be confirmed or adjusted as needed.

PF-US-2. Service Interruption Notification

Per Metro standard practice, prior to the start of any demolition or construction activities, Metro will be responsible for coordinating with utility and service providers regarding potential utilities service interruptions due to relocation of existing utilities. Metro will develop a construction plan in coordination with utilities and service providers to minimize interruptions of utilities systems to the greatest extent feasible, including providing temporary connection for services that must be disconnected for extended periods of time. Further, Metro will develop a contingency plan in cooperation with the utility providers for emergency repairs of any utilities unexpectedly found or that disintegrated because of age during excavations. The public would be notified of areas where temporary utilities service interruptions are anticipated.

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these impacts related to utilities and service systems would be less than significant.

6.10. ENERGY

The project would have a less than significant impact related to energy with respect to the following significance thresholds:

- > Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (Impact 3.12-4.1)
- > Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (Impact 3.12-4.2)

Impacts

Impact 3.12-4.1: Wasteful Energy Consumption During Construction

Construction of the LPA would require a one-time expenditure of diesel fuel and gasoline over the six-year construction period; as described in Section 4.21, Corrections and Additions, of the Final EIR, this amount would be higher than what would be required to construct the Elevated/At-Grade Alignment (approximately 1,300,000 gallons of diesel fuel and 102,000 gallons of gasoline) but lower than the Trench Option (approximately 1,900,000 gallons of diesel fuel and 153,000 gallons of gasoline). As part of Project Feature PF-AQ-1 (Metro Green Construction Policy Compliance), construction equipment and trucks would meet advanced emissions and fuel-efficiency standards. As part of Project Feature PF-AQ-3 (Metro Moving Beyond Sustainability Strategic Plan Compliance), the LPA would be consistent with Metro's broader sustainability commitments, including the use of renewable diesel, where applicable. As part of Project Feature PF-AQ-4 (Metro Rail Design Guidelines), construction activities would use

energy efficiently. These project features reflect Metro's standard construction and design practices and provide part of the substantial evidence supporting the conclusion that construction energy would be used efficiently. Furthermore, the energy expenditure associated with construction fuel consumption would eventually be offset by the energy savings of replacing and shortening on-road passenger vehicle trips with use of light rail. Therefore, the LPA would have a less than significant impact during construction related to energy.

Impact 3.12-4.1: Wasteful Energy Consumption During Operations

The LPA would consume energy related to the light rail propulsion systems and lighting and accessory equipment at station platforms. It would also indirectly change regional energy consumption through changes in regional VMT by displacing vehicle trips for transit trips, which would reduce petroleum fuels consumption. With a VMT reduction of 43,094, annual regional energy consumption would be reduced by approximately 28.38 million MJ in the design/horizon year of 2042, when compared to the no project condition. Total electricity consumption to power the light rail extension would be 7,829 MWh (28,182,841 MJ), which would represent an increase of 0.4% of total Metro system and facilities annual electricity consumption as of 2019. This incremental increase in electricity demand would not place an undue burden on the existing electrical infrastructure and represents a minuscule fraction of the total Metro electricity use. Overall, the LPA would result in a net energy benefit, and a less than significant impact would occur.

Impact 3.12-4.2: Conflict With Energy Plans During Construction

Energy-resource consumption during construction of the LPA would be predominantly combustion of petroleum-based transportation fuels. Project Feature PF-AQ-1 (Metro Green Construction Policy Compliance) commits Metro contractors to using less-polluting construction equipment and vehicles and implementing best practices to reduce harmful diesel emissions. Best practices include Tier 4 emission standards for off-road diesel-powered construction equipment with greater than 50 hp and restricting idling to a maximum of five minutes. Compliance with these provisions would limit excess petroleum fuels consumption during active use of off-road equipment and on-road vehicles. The CALGreen Code Tier 2 requires reduction, disposal, and recycling of at least 80% of nonhazardous construction materials and requires demolition debris to be recycled and/or salvaged, which would ultimately result in reductions of indirect energy use associated with waste disposal and storage. Therefore, construction would have a less than significant impact related to conflicting with or obstructing plans for renewable energy or energy efficiency.

Impact 3.12-4.2: Conflict With Energy Plans During Operations

The LPA is a light rail system extension providing energy efficient mass transit to communities in need of enhanced accessibility options. The LPA would reduce auto passenger vehicle trips and reliance on petroleum-based transportation fuels. The benefits of the LPA are consistent with the goals, objectives, and policies of SCAG and the Cities of Lawndale, Redondo Beach, and Torrance. As the renewable energy portfolios of Metro and local jurisdictions expand over time, natural resources consumption to provide the electricity required for operations would become more energy efficient. The LPA would not conflict with any adopted plan or regulation to enhance energy efficiency or reduce transportation fuels consumption and would support the initiatives of the Metro CAAP. In addition, the LPA would not interfere with renewable portfolio targets and would not result in a wasteful or inefficient expenditure of energy resources. The LPA would positively contribute to statewide, regional, and local efforts to create a more efficient and sustainable transportation infrastructure network. Therefore, operations

would result in a less than significant impact related to conflicting with or obstructing plans for renewable energy or energy efficiency.

References in the Draft and Final EIR

- > Section 3.12, Energy, Subsections 3.12-4.1 and 3.12-4.2 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Project Features

None

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these impacts related to energy would be less than significant.

6.11. TRIBAL CULTURAL RESOURCES

The project would have a less than significant impact related to tribal cultural resources with respect to the following significance thresholds:

- > Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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 listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)? (Impact 3.14-4.1)
- > Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in PRC 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 resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? (Impact 3.14-4.2)

Impacts

Impact 3.14-4.1: Substantial Adverse Change in The Significance of a Tribal Cultural Resource During Operation

Operational activities of the LPA would be limited to light rail operations on established tracks and at facilities constructed as part of the LPA. The operation of light rail transit traffic and other rail operations would not cause subsurface ground disturbance, nor alter any existing setting that would impact a tribal cultural resource within the RSA. Therefore, the impact would be less than significant.

Impact 3.14-4.2: Substantial Adverse Change in The Significance of a Tribal Cultural Resource Determined by a Lead Agency During Operation

Operational activities of the LPA would be limited to light rail operations on established tracks and at facilities constructed as part of the LPA. The operation of light rail transit and other rail operations would not cause subsurface ground disturbance nor alter any existing setting that would impact a resource of tribal significance within the RSA. Therefore, the impact would be less than significant.

References in the Draft and Final EIR

- > Section 3.14, Tribal Cultural Resources, Subsections 3.14-4.1 and 3.14-4.2 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR

Project Features

None

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these impacts related to tribal cultural resources would be less than significant.

6.12. PUBLIC SERVICES

The project would have a less than significant impact related to public services with respect to the following significance thresholds:

- > 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 service ratios, response times or other performance objectives for fire protection? (Impact 3.15-4.1)
- > 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 service ratios, response times or other performance objectives for police protection? (Impact 3.15-4.2)
- > 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 meet demand for schools? (Impact 3.15-4.3)
- > 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 meet demand for parks? (Impact 3.15-4.5)

- > 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 3.15-4.6)
- > Does 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 3.15-4.7)

Impacts

Impact 3.15-4.1: Fire Protection Response Times During Construction

There are no fire stations or other related government facilities in or adjacent to the RSA. Construction staging areas would, therefore, not result in the acquisition of any fire facilities within the RSA, nor result in the alteration of existing facilities or construction of new facilities to maintain fire protection services the RSA. Roadways that intersect the LPA would need to be temporarily closed to accommodate construction activities, which could impede the vehicle circulation network in the RSA. As part of Project Feature PF-T-1 (Construction Traffic Management Plan), Metro's construction contractor would coordinate with the cities and emergency providers to develop CTMPs that are communicated to those providers. The CTMPs would clearly identify alternative routes to ensure that fire services response times would remain compliant with NFPA guidelines. This project feature reflects Metro's standard construction coordination practices and provides part of the substantial evidence supporting the conclusion that construction would not result in the need for new or physically altered fire protection facilities.

Although construction of the LPA would create additional jobs in the project area, it would not indirectly result in population growth, and therefore, not lead to the need for additional fire protection facilities to maintain service ratios. Therefore, construction of the LPA would not result in the need for new or physically altered fire protection facilities and this impact would be less than significant.

Impact 3.15-4.1: Fire Protection Response Times During Operations

During operation of the LPA, fire protection services would continue to be provided by Los Angeles County Fire Department, Redondo Beach Fire Department, and the Torrance Fire Department. The LPA would fully grade-separate light rail transit from roadways and, therefore, would not have the potential to increase emergency vehicle delays and affect response times of fire protection services. Operation of the LPA would not induce unplanned population growth that would impact the demand for fire protection facilities. Therefore, operation of the LPA would not result in the need for new or physically altered fire protection facilities and this impact would be less than significant.

Impact 3.15-4.2: Police Protection Response Times During Construction

There are no police stations within the RSA. Construction staging areas would, therefore, not result in the acquisition of any police facilities within the RSA, nor would it result in the alteration of existing facilities or construction of new facilities to service the RSA. Construction activities of the LPA would be temporary and generally confined within the existing Metro ROW. Roadways that intersect the LPA would need to be temporarily closed to accommodate construction activities, which could impede the vehicle circulation network in the RSA. As part of Project Feature PF-T-1 (Construction Traffic Management Plan), Metro's contractor would coordinate with affected cities and emergency providers to prepare CTMPs that are communicated to those providers. The CTMPs would identify alternative routes to ensure that police response times remain adequate. This feature reflects Metro's standard

practice for construction coordination and provides part of the substantial evidence supporting the conclusion that construction would not interfere with police protection response times.

Construction activities would also be conducted in compliance with Metro's MRDC, which follows the principles of Crime Prevention through Environmental Design (CPTED) and Metro safety and security programs. Incorporation of CPTED principles would reduce potential impacts to police service performance ratios that may arise from the introduction of construction staging areas.

Although construction of the LPA would create additional jobs in the project area, it would not indirectly result in population growth and, therefore, not lead to the need for additional police facilities to maintain service ratios. Thus, construction of the LPA would not result in the need for new or physically altered police facilities and this impact would be less than significant.

Impact 3.15-4.2: Police Protection Response Times During Operations

During operations, police protection services would continue to be provided by the Los Angeles Sheriff's Department, Hawthorne Police Department, Redondo Beach Police Department, and Torrance Police Department within their respective jurisdictions. The LPA would fully grade separate light rail transit from roadways and, therefore, would not increase emergency vehicle delays. Operation of the LPA would not induce unplanned population growth that would impact the demand for police protection services. Therefore, operation of the LPA would not result in the need for new or physically altered police protection facilities and this impact would be less than significant.

Impact 3.15-4.3: School Demand During Construction

No educational facilities are located immediately adjacent to the proposed alignment or transit stations. Construction of the LPA would not require the acquisition of any public facilities, including educational facilities. Construction activity would be limited to the Metro ROW and staging areas and would not result in direct physical impacts to any school. As part of Project Feature PF-T-1 (Construction Traffic Management Plan), access to nearby schools would be maintained during construction and detour routes would be identified to ensure circulation is provided during construction. This feature reflects Metro's standard practice for construction coordination and provides part of the substantial evidence supporting the conclusion that construction would not interfere with access to educational facilities. Therefore, construction of the LPA would not result in the need for new or physically altered educational facilities and this impact would be less than significant.

Impact 3.15-4.5: Park Demand During Construction

El Nido Park is located adjacent to the existing Metro ROW and would be adjacent to construction staging areas at 182nd Street. Thus, construction activities could potentially hinder or block access to this park facility. Additionally, construction staging areas at 170th Street would potentially reduce access to William Green Park. Roadways that intersect the LPA would need to be temporarily closed to accommodate construction activities, which could impede the vehicle circulation network in the RSA. As part of Project Feature PF-T-1 (Construction Traffic Management Plan), alternative vehicular and pedestrian access routes to park facilities would be identified, clearly marked, and maintained throughout construction. This feature reflects Metro's standard practice for construction coordination and provides part of the substantial evidence supporting the conclusion that access to park facilities would be preserved.

Although construction of the LPA would create additional jobs in the project area, it would not indirectly result in population growth, and therefore, not lead to the need for additional park facilities to maintain

service ratios. Therefore, construction of the LPA would not result in the need for new or physically altered park facilities and this impact would be less than significant.

Impact 3.15-4.5: Park Demand During Operation

The LPA would not include stations at parks adjacent to the Metro ROW. El Nido Park would be located within a quarter mile of the Redondo Beach TC Station and may see some increased demand for and usage of its facilities during operation of the LPA. However, this station would be located adjacent to high-volume commercial uses and transportation connections, which are expected to attract greater numbers of riders than surrounding residential and open space destinations. Therefore, the LPA is reasonably anticipated to not generate substantial additional demand for and usage of El Nido Park beyond the existing maintenance capacity of the City of Torrance Park Services Division.

Metro acknowledges that residents currently use the Metro ROW as recreational space, although it is not a designated park or walkway, and its primary purpose is rail transportation. Operation of the LPA would result in a closure of the portion of the Metro ROW (which would include active light rail and freight service) to public access where fencing is currently breached, for the safety of residents. The closure of this portion of the Metro ROW would not, however, lead to the need for new or physically altered government facilities in order to meet demand for parks. The LPA would include the construction of two multi-use recreational paths. These paths would increase the overall capacity of recreational uses. The provision of new recreational facilities could benefit other facilities by potentially reducing the usage of other existing parks in the RSA.

Based on the above, project operation would not result in the need for new or physically altered park facilities and this impact would be less than significant.

Impact 3.15-4.6: Park Deterioration During Construction

The LPA would neither directly nor indirectly result in population growth that could lead to increased or accelerated deterioration of recreational facilities. Construction workers may potentially increase the usage of and demand for parks and recreational facilities, but this increased usage would be temporary and nominal compared to total facility usage by all local residents. The existing parks and recreational facilities in the RSA would continue to be regularly maintained by the respective recreational departments of the Cities of Hawthorne, Lawndale, Redondo Beach, and Torrance, and would continue to serve the existing surrounding residential population during construction activities. Therefore, construction impacts of the LPA would not result in the substantial deterioration of park facilities and this impact would be less than significant.

Impact 3.15-4.6: Park Deterioration During Operations

The LPA would not include stations at parks adjacent to the Metro ROW. El Nido Park would be located within a quarter mile of the Redondo Beach TC Station and may see some increased demand for and usage of its facilities during operation of the LPA. However, this station would be located adjacent to high-volume commercial uses and transportation connections, which are expected to attract greater numbers of riders than surrounding residential and open space destinations. Therefore, the LPA is reasonably anticipated to not generate substantial additional demand for and usage of El Nido Park beyond the existing maintenance capacity of the City of Torrance Park Services Division.

Metro acknowledges that residents currently use the Metro ROW as recreational space, although it is not a designated park or walkway, and its primary purpose is rail transportation. Operation of the LPA would result in a closure of the portion of the Metro ROW (which would include active light rail and freight service) to public access where fencing is currently breached, for the safety of residents. The

closure of this portion of the Metro ROW would not, however, lead to the need for new or physically altered government facilities in order to meet demand for parks. The LPA would include the construction of two multi-use recreational paths. These paths would increase the overall capacity of recreational uses. The provision of new recreational facilities could benefit other facilities by potentially reducing the usage of other existing parks in the RSA.

Based on the above, project operation would not result in the substantial deterioration of park facilities and this impact would be less than significant.

Impact 3.15-4.7: Expansion of Recreation During Construction

The LPA includes two multi-use recreational paths within the Metro ROW, neither of which would result in displacement of existing designated recreational facilities or adverse physical effects on the environment. Construction workers would temporarily work in the area and would not likely relocate to the project area on a permanent basis. Construction workers may potentially increase the usage of and demand for parks and recreational facilities, but this increased usage would be temporary and nominal compared to total facility usage by all local residents. Therefore, impacts related to adverse physical effects of construction of recreational facilities would be less than significant.

Impact 3.15-4.7: Expansion of Recreation During Operations

The LPA would not indirectly induce unplanned population growth that would impact the demand for recreational facilities. The LPA includes two multi-use recreational paths within the Metro ROW, which would provide passive recreation uses. The primary purpose of the multi-use paths would be transportation for pedestrians and bicyclists and would be similar to the existing usage of the Metro ROW as a non-designated recreational greenspace. The new multi-use paths are anticipated to be utilized by existing residents in the RSA and would not induce demand or new vehicle trips such as a new regional park or recreational facility. The multi-use paths would still allow residents to use a portion of the Metro ROW for recreational use. Therefore, impacts related to adverse physical effects of operation of recreational facilities would be less than significant.

References in the Draft and Final EIR

- > Section 3.15, Public Services and Utilities, Subsections 3.15-4.1, 3.15-4.2, 3.15-4.3.1, 3.15-4.5, 3.15-4.6, and 3.15-4.7 of the Draft EIR
- > Chapter 4, Corrections and Additions, of the Final EIR
- > Chapter 5, Responses to Comments, Subsection 5.2-10, Major Topic Response MR-10: Changes to Community Character; Subsection 5.2-12, Major Topic Response MR-12: Emergency Access, of the Final EIR

Project Features

PF-PS-1. Coordination with Torrance Refining Company and Emergency Responders

Before construction of the project and during the advanced design stages, Metro would work with the Torrance Refining Company and Torrance Logistics Company, BNSF Railway, the City of Torrance, and other City entities responsible for emergency response to coordinate emergency communication systems so that, in the event of an emergency relating to flaring or other refinery operations-related hazards, Metro could hold or detour trains to avoid traveling near the refinery.

Mitigation Measures

The impacts under the thresholds above would be less than significant, and mitigation measures are not required.

Findings

For the reasons stated above, Metro finds that these impacts related to public services and recreation would be less than significant.

7. FINDINGS FOR ENVIRONMENTAL RESOURCES FOUND NOT TO BE IMPACTED

Metro finds that there would be no impacts for the following environmental resources, as found in the referenced sections of the Draft EIR.

Aesthetics

- > Scenic Vistas: Construction (Subsection 3.3-4.1.1) and Operation (Subsection 3.3-4.1.2)
- > Scenic Highways: Construction (Subsection 3.3-4.2.1) and Operation (Subsection 3.3-4.2.2)

Noise and Vibration

- > Airports: Construction and Operation (Subsection 3.6-4.2)

Biological Resources

- > Riparian Habitat/Sensitive Natural Community: Construction (Subsection 3.7-4.2.1) and Operation (Subsection 3.7-4.2.2)
- > Wetlands: Construction (Subsection 3.7-4.3.1) and Operation (Subsection 3.7-4.3.2)
- > Movement of Fish & Wildlife Species: Construction (Subsection 3.7-4.4.1) and Operation (Subsection 3.7-4.4.2)
- > Conflicts with Habitat Conservation Plans: Construction (Subsection 3.7-4.6.1) and Operation (Subsection 3.7-4.6.2)

Geology, Soils, and Paleontological Resources

- > Known Earthquake Fault Zone: Construction (Subsection 3.8-4.1.1) and Operation (Subsection 3.8-4.1.2)
- > Soil Erosion: Operation (Subsection 3.8-4.5.2)
- > Septic Tanks or Alternative Wastewater Disposal Systems: Construction and Operation (Subsection 3.8-4.8)
- > Paleontological Features: Operations (Subsection 3.8-4.9.2)

Hazards and Hazardous Materials

- > Hazardous Materials Within One-Quarter Mile of School: Operation (Subsection 3.9-4.3.2)
- > Hazardous Materials Sites: Operation (Subsection 3.9-4.4.2)
- > Airport Land Use Plans: Construction and Operation (Subsection 3.9-4.5)
- > Private Air Strip: Construction and Operation (Subsection 3.9-4.6)

- > Wildfire Hazards: Construction and Operation (Subsection 3.9-4.8)

Utilities and Service Systems

- > Wastewater Treatment Capacity: Operation (Subsection 3.11-4.3.2)
- > Solid Waste Capacity: Operation (Subsection 3.11-4.3.4)
- > Compliance with Solid Waste Regulations: Construction (Subsection 3.11-4.3.5) and Operation (Subsection 3.11-4.3.6)

Cultural Resources

- > Adverse Change to Historical Resources: Construction (Subsection 3.13-4.1.1) and Operation (Subsection 3.13-4.1.2)
- > Adverse Change to Archaeological Resources: Operation (Subsection 3.13-4.2.2)
- > Disturbance of Human Remains: Operation (Subsection 3.13-4.3.2)

Public Services and Recreation

- > School Demand During Operation (Subsection 3.15-4.3.2)
- > Demand for Library Facilities: Construction (Subsection 3.15-4.4.1) and Operation (Subsection 3.15-4.4.2)

Other CEQA Considerations

- > Agricultural and Forestry Resources: Construction and Operation (Subsection 3.16-2.1)
- > Mineral Resources: Construction and Operation (Subsection 3.16-2.2)
- > Population and Housing: Construction and Operation (Subsection 3.16-2.3)
- > Wildfire: Construction and Operation (Subsection 3.16-2.4)

8. FINDINGS FOR CUMULATIVE IMPACTS

CEQA Guidelines Section 15130(a)(3) defines “cumulatively considerable” to mean the incremental effects of an individual project are significant when viewed in connection with effects of past, present, and reasonably foreseeable probable future projects. Refer to Section 3.0, Introduction of the Draft EIR for the methodology used to assess the potential for cumulative impacts, as well as for a list of the probable future projects considered in the cumulative analysis.

8.1. TRANSPORTATION

Overlapping construction activities could be potentially disruptive if construction occurred concurrently, but given the shorter and more intermittent duration of the nature of these types of roadway improvement projects, overlap of construction periods would be minimal, if at all. Construction of these projects is not expected to result in significant duration or disruption.

During operations, the cumulative projects are not within the footprint of the LPA and would not cumulatively create new geometric hazards, obstructed visibility, or reduce emergency access.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA, combined with past, present, and reasonably foreseeable projects, would not result in a cumulatively significant impact related to transportation during construction or operations.

8.2. LAND USE AND PLANNING

Simultaneous construction of other projects and the LPA could occur, potentially resulting in short-term and temporary construction disruptions to the existing built environment and circulation through temporary roadway or sidewalk closures or construction laydown areas. Given the shorter and more intermittent duration of the nature of these types of roadway improvement projects, overlap of construction periods would be minimal, if at all. The roadway closures and laydown areas during construction in conjunction with other projects would not divide existing communities as access within and out of the communities as they would generally be required to be maintained through their respective construction traffic management plans.

Operation of the LPA would not divide the existing community in conjunction with the related projects as access within and out of the communities would be unchanged or changed very little by these projects. Further, the cumulative projects would be required to be consistent with applicable general plans and zoning codes.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA, combined with past, present, and reasonably foreseeable projects, would not result in a cumulatively significant impact to land use and planning during construction or operations.

8.3. AESTHETICS

Scenic Vistas or Scenic Highways

No scenic vistas or scenic highways are located near the LPA.

Conflicts with Regulations on Scenic Quality

Construction of the LPA in combination with other projects would represent a temporary change in the visual quality and character of the RSA. This temporary change during construction would be similar to other construction projects in the RSA, which would also have a temporary impact on visual character and quality of the RSA and its surroundings compared to existing conditions. As part of Project Feature PF-AES-2 (Metro Design Standards), construction activities would comply with applicable zoning regulations within the Cities of Lawndale, Redondo Beach, and Torrance, as well as with BMPs and development standards within each City.

During operation, the LPA would result in a visual change compared to existing conditions, but would not conflict with local regulations related to scenic quality.

Light and Glare

Construction of the LPA could result in construction-related illumination and nighttime construction lighting. Cumulative projects may be constructed during the same timeframe as the LPA and may also require night-time lighting. Mitigation Measure MM-AES-1 (Construction Lighting) would require that construction lighting be shielded and directed downward and away from adjacent residential and commercial areas. Similar to the LPA, cumulative projects are expected to comply with applicable regulations with each City related to light and glare, and to incorporate mitigation measures that would reduce light and glare impacts to the maximum extent feasible.

During operations, the LPA would be lit to provide adequate lighting for maintenance activities and ensure a safe environment. As part of PF-AES-2 (Metro Design Standards), all lighting would comply with Metro Design Standards and applicable lighting regulations that would be verified during the permitting process. Cumulative projects are also expected to comply with applicable city regulations related to light and glare, and to incorporate mitigation measures that would reduce light and glare impacts to the maximum extent feasible.

Findings

For the reasons stated above and based on substantial evidence in the record as a whole, with implementation of Mitigation Measure MM-AES-1, the LPA would not result in a cumulatively considerable impact related to construction lighting. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivisions (a)(1) of the CEQA Guidelines.

For other impacts related to aesthetics, Metro finds that the LPA would either not result in a cumulatively significant impact or the incremental contribution to the cumulative impact would not be cumulative considerable.

8.4. AIR QUALITY

Construction of the LPA would generate emissions of air pollutants through the use of heavy-duty off-road equipment and light- and heavy-duty on-road vehicles. In addition to diesel exhaust fumes, off-road equipment would produce fugitive emissions including dust during ground disturbance and material stockpiling and volatile asphalt off-gassing during paving activities. As described in Section 3.4, Air Quality of the Draft EIR and Chapter 4, Correction and Additions of the Final EIR, construction activities for the LPA would not generate mass daily emission in excess of any regional-scale SCAQMD threshold for individual projects under CEQA.

Attainment of the air quality standards is accomplished at the regional level, and the SCAQMD has adopted the rationale that projects with mass daily emissions below the regional screening thresholds would not generate sufficient air pollution to render cumulative impacts potentially significant. Although construction of other projects would occur within SCAB during construction of the LPA, emissions from LPA construction would not be cumulatively considerable for nonattainment pollutants and would also not be cumulatively significant based on the SCAQMD guidance.

Construction of the LPA would not generate localized emissions of NOX, CO, or particulate matter in excess of the applicable LST screening values. Although it is possible that construction of other cumulative projects may occur within the localized RSA during construction of the LPA, emissions from LPA construction would be controlled to the maximum extent feasible through implementation of BMPs contained within the Metro Green Construction Policy and would not exceed the SRA 3 LST screening values.

Long-term operation of the LPA would not introduce a new substantial stationary, area, or mobile source of air pollutant emissions into the SCAB. The primary effect of operations on regional air quality would be the displacement of on-road VMT resulting from increased transit ridership. Operation of the LPA would reduce emissions of air pollutants within the SCAB overall through the elimination of passenger vehicle trips. The 2016 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, the 2020–2045 RTP/SCS and the 2024–2050 RTP/SCS under RTP ID 1TR1001 and Federal Transportation Improvement Program (FTIP) ID LA0G632, which demonstrates that the regional transportation and emissions modeling budget in the 2016 AQMP accounts for implementation of the LPA in its conformity demonstration. Therefore, operation of the LPA would not contribute in a significant way to cumulative effects related to air quality violations, timely attainment of the air quality standards, or emissions of nonattainment pollutants. Operation of the LPA would not introduce a substantial new source of emissions that could result in sensitive receptor exposures to unhealthy localized pollutant concentrations or public nuisances related to odors.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA's incremental contribution to cumulatively significant impacts related to air quality during construction and operation would not be cumulatively considerable.

8.5. GREENHOUSE GAS EMISSIONS

All construction activities for the LPA would comply with Project Features PF-AQ-1 (Metro Green Construction Policy Compliance), PF-AQ-3 (Metro Moving Beyond Sustainability Strategic Plan Compliance), and PF-AQ-4 (Metro Rail Design Guidelines). These features are integral components of Metro's standard construction and design requirements and ensure that equipment and vehicles are maintained according to manufacturer specifications and are subject to idling limitations consistent with applicable regulations. The LPA would not interfere with state and regional GHG-reduction targets.

Reasonably foreseeable actions within the RSA include all transportation projects that are programmed in the Connect SoCal 2020–2045 RTP/SCS. CARB issued a determination that the Connect SoCal SCS successfully demonstrated that the region would attain its established SB 375 per capita GHG emissions targets in the 2035 horizon year of the analysis on October 30, 2020. This determination relies on projects that are programmed into the RTP/SCS being implemented, one of which is the project as identified under RTP ID TR1001 (and FTIP ID LA0G632). Although implementation of the LPA would generate long-term indirect GHG emissions through energy use (i.e., light rail transit propulsion, lighting

and accessory equipment at station platforms), those emissions would be more than fully offset by reductions in on-road motor vehicle emissions due to mode shift from automobiles to transit. The LPA is anticipated to reduce overall GHG emissions relative to future 2042 baseline conditions and would not conflict with GHG emissions reductions plans and policies. In particular, under the C-2 Operating Plan, the LPA would achieve a net reduction of approximately 1,833.58 MTCO₂e compared to the future 2042 baseline. (See Memorandum re: Vehicle Miles Traveled Correction to the C Line (Green) Extension to Torrance Project, October 2025). The LPA would ultimately provide environmental and community benefits related to GHG emissions reductions and active transportation.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA's incremental contribution to cumulatively significant impacts related to GHG emissions during construction and operation would not be cumulatively considerable.

8.6. NOISE AND VIBRATION

Noise

Construction of the LPA would require heavy earth-moving equipment, generators, cranes, pneumatic tools, and other similar machinery. The existing cumulative noise condition is characterized by existing traffic noise and existing freight noise which was captured by existing ambient noise measurements. Construction noise levels for the LPA would exceed FTA and local noise standards due to the intensive nature of light rail construction activities and the proximity of sensitive land uses to the corridor. Implementation of Mitigation Measure MM-NOI-1 (Noise Control Plan) would reduce construction noise levels, but there may still be temporary or periodic exceedances of the FTA construction noise criteria and local standards resulting in temporary adverse effects related to construction noise. Similar to the LPA, construction of projected future projects would likely include the use of heavy construction equipment that would generate elevated construction noise levels. Projected future projects would go through their own environmental clearance process and would include mitigation for construction noise to reduce impacts. Related projects within 500 feet of construction could result in a cumulative construction noise impact at sensitive receptors. Although it is not possible to predict which related projects would result in a cumulative construction noise scenario, the construction noise levels associated with the LPA could increase ambient noise levels. Therefore, the LPA's incremental contribution to cumulatively significant noise impacts during construction would be cumulatively considerable.

Operation of the LPA would result in significant operational noise impacts at sensitive receptors along the project alignment from combined light rail and freight noise. The noise environment in the vicinity of the alignment can be primarily defined by traffic on adjacent roadways, freight trains, and the existing Metro C (Green) Line, and cumulative growth and development in the cities located in the vicinity of the LPA could result in increases in roadway traffic volumes over time that would concurrently increase ambient noise levels in the vicinity of the LPA. However, future increases in roadway noise are expected to be minimal along the alignment because of limited roadway capacity. Freight train noise is generally intermittent, as there are only two train pass-bys each day. Implementation of MM-NOI-2 (Soundwalls) and MM-NOI-3 (Low Impact Frogs), which would require installation of soundwalls and low impact frogs, would reduce the light rail transit operation noise impacts to a less than significant level. MM-NOI-4 (Quiet Zone Establishment) would enable local jurisdictions to designate a quiet zone, by right, from north of Inglewood Avenue to south of 182nd Street to eliminate freight horn noise, which would reduce all noise impacts to a less than significant level. Metro finds that the local cities can and should

establish the quiet zone. Therefore, the LPA's incremental contribution to cumulatively significant noise impacts during operation would not be cumulatively considerable. However, should the corridor cities elect not to designate a quiet zone, the LPA's incremental contribution to cumulative noise impacts during operation would be cumulatively considerable.

Vibration

Construction of the LPA would result in significant and unavoidable vibration impacts, even with implementation of Mitigation Measures MM-VIB-1 (Vibration Control Plan), MM-VIB-2 (Construction Equipment Location), and MM-VIB-3 (Pre- and Post-Construction Surveys). However, it is not anticipated that vibration-generating equipment from past, present, and probable future projects would operate at the same time and in the same location as the construction equipment for the LPA.

Existing vibration occurs within the corridor due to the freight line. It is possible that ground-borne vibration generated from the light rail and freight line could combine to produce a cumulatively significant ground-borne vibration effect. However, implementation of MM-VIB-4 (Low Impact Frogs), MM-VIB-5 (Resilient Fasteners), and MM-VIB-6 (Ballast Mats), would reduce ground-borne vibration impacts caused by the light rail and realigned freight tracks to less than significant.

Findings

Mitigation Measure MM-NOI-1 would reduce the LPA's construction noise impacts, but the incremental contribution to the potentially significant cumulative noise impact would remain cumulatively considerable. No additional feasible mitigation measures were identified to reduce the LPA's incremental contribution to this noise impact during construction. Thus, with respect to this cumulative impact and based on substantial evidence in the record as a whole, 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.

Mitigation Measures MM-NOI-2 and MM-NOI-3 would reduce light rail transit noise impacts to less than significant, and MM-NOI-4 would allow local jurisdictions to establish a quiet zone from north of Inglewood Avenue to south of 182nd Street, which would eliminate freight horn noise. With implementation of MM-NOI-2, MM-NOI-3, and MM-NOI-4, the impact would be less than significant. However, if local jurisdictions do not establish a quiet zone(s) as part of MM-NOI-4, a significant and unavoidable impact would remain, and the incremental contribution to significant cumulative noise impacts during operation would be cumulatively considerable. Thus, with respect to this cumulative impact and based on substantial evidence in the record as a whole, Metro adopts CEQA Findings 1, 2, and 3, as identified in Section 3 above and in Section 15091, subdivisions (a)(1), (a)(2), and (a)(3) of the CEQA Guidelines.

Mitigation Measures MM-VIB-4, MM-VIB-5, and MM-VIB-6 would reduce vibration levels to less than significant during operation, and the LPA's incremental contribution to cumulatively significant vibration impacts during operation would not be cumulatively considerable. Thus, for operational vibration impacts and based on substantial evidence in the record as a whole, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

For vibration impacts during construction and based on substantial evidence in the record as a whole, Metro finds that with mitigation, the LPA, combined with past, present, and reasonably foreseeable projects, would not result in a cumulatively significant impact.

8.7. BIOLOGICAL RESOURCES

Historically, development and rapid urbanization has been occurring in the surrounding region since the late 1800s. Continued development relating to infrastructure improvement, housing construction, and other community needs is regularly, and frequently, occurring. There is an existing cumulative impact related to biological resources as a result of the highly urbanized setting and both historic and present development throughout the region. Implementation of Mitigation Measures MM-BIO-1 (General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources), MM-BIO-2 (Nesting Bird Season Restrictions and Pre-Construction Surveys), MM-BIO-3 (Roosting Bat Restrictions and Survey Requirements), MM-BIO-4 (Pre-Construction Rare Plant Survey), and MM-BIO-5 (Off-Site Mitigation for Southern Tarplant Habitat) would reduce impacts to southern tarplant, nesting birds, and bats to less than significant levels. Therefore, with mitigation, the LPA's incremental contribution to cumulatively significant impacts on biological resources would not be cumulatively considerable during construction.

With implementation of MM-BIO-1 and MM-BIO-5, operation of the LPA on biological resources would be reduced to less than significant. Therefore, based on substantial evidence in the record as a whole, with mitigation, the LPA's incremental contribution to cumulatively significant impacts related to biological resources during operations would not be cumulatively considerable.

Finding

With implementation of Mitigation Measures MM-BIO-1, MM-BIO-2, MM-BIO-3, MM-BIO-4, and MM-BIO-5, Metro finds that the LPA would not result in a cumulatively considerable impact related to biological resources during construction. Thus, for this cumulative impact and based on substantial evidence in the record as a whole, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

For biological resources impacts during operations and based on substantial evidence in the record as a whole, Metro finds that with implementation of Mitigation Measures MM-BIO-1 and MM-BIO-5, the LPA, combined with past, present, and reasonably foreseeable projects, would not result in a cumulatively significant impact. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

8.8. GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

During both construction and operation, the LPA would not expose people or structures to adverse effects, including the risk of loss, injury, or death involving fault rupture or seismic hazards including liquefaction or landslides. The LPA would also not result in impacts related to soil erosion, unstable or expansive soils, or adequacy of soils to support septic tanks. The LPA would comply with all applicable state and local guidelines and mandatory design requirements related to geologic, subsurface, and seismic hazards. Projected future projects would also be required to comply with all prescribed standards, requirements, and guidance hazards, and implement mitigation measures as necessary.

While the LPA would result in significant impacts on unknown paleontological resources during construction, with implementation of Mitigation Measure MM-GEO-1 (Engage a Qualified Paleontological Resources Specialist), impacts would be reduced to less than significant. Other projects disturbing ground and subsurface areas would similarly be required to mitigate potential impacts to paleontological resources in highly sensitive paleontological areas.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that with implementation of Mitigation Measure MM-GEO-1, the LPA, combined with past, present, and reasonably foreseeable projects, would not result in a cumulatively significant impact related to geology, soils, and paleontological resources during construction or operation. Thus, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines for this impact.

8.9. HAZARDS AND HAZARDOUS MATERIALS

The LPA would not result in significant impacts related to hazards and hazardous materials during construction or operations. The LPA would be required to comply with all prescribed standards, requirements, and guidance related to hazards and hazardous waste. Impacts associated with hazards and hazardous materials are site-specific and largely localized. This project and other future projects would also comply with all the same requirements and apply mitigation measures as necessary to minimize impacts.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA, combined with related past, present, and probable future projects, would not result in cumulatively significant impact related to hazards and hazardous materials during construction or operations.

8.10. HYDROLOGY AND WATER QUALITY

Water Quality

The LPA is located in the Santa Monica Bay and Dominguez Channel watersheds, which currently are both impaired from development in the region. Additionally, development has resulted in limited availability of water resources, due to the use of groundwater for municipal water supplies and existing pollutant loads of surface water sources. Construction of the LPA has the potential to further introduce chemicals and/or hazardous substances as well as sediment into surface waters and groundwaters, or degrade surface water quality via dewatering of groundwater. Operations could impact water quality via sedimentation caused by runoff from newly added impervious surfaces; nitrates from landscape fertilizing; and trash, debris, and bacteria from human presence. However, multiple project features would be implemented as a part of the LPA that would protect water quality and ensure appropriate treatment and discharge of contaminated water. Probable future projects would also be required to comply with the same regulations and permits as the LPA. Nonetheless, given the existing levels of impairment, the cumulative water quality impact is significant. The LPA's incremental contribution to this cumulative impact, however, would be less than cumulatively considerable.

Groundwater Recharge and Groundwater Supplies

Development in the region has resulted in limited availability of water resources due to the use of groundwater for municipal water supplies and existing pollutant loads of surface water sources. This is considered a significant cumulative impact. Construction of the LPA would require water for activities like dust control and concrete mixing, which would be sourced from local utility lines that may depend on groundwater for a portion of their water supply. However, the water needed for construction would be minimal, and would not substantially decrease groundwater supplies. All dewatered groundwater would be discharged in a pre-approved location specified by the RWQCB Waste Discharge Requirements

for Construction Dewatering. LPA operation would involve minimal water usage for activities like routine cleaning, which would not substantially decrease groundwater supplies. As part of Project Feature PF-HWQ-6 (LID BMPs per Regional Requirements), the LPA would be designed with LID measures sized to retain the SWQDv on-site in accordance with regional requirements. There would be a less than significant impact on groundwater during operation. Water for probable future projects would likely also be minimal, and all projects would be subject to the same regional LID requirements. Nonetheless, given the historic impact development has had in the region, impacts to groundwater recharge and groundwater supplies are cumulatively significant. The LPA's incremental contribution to that impact, however, would not be cumulatively considerable.

Alteration of Drainage Patterns

Project construction or operation would not result in substantial drainage pattern alteration such that erosion or siltation, flooding, stormwater drainage system exceedance, additional polluted runoff, or impediment of flood flows would occur. As part of Project Feature PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit), construction would comply with the Construction General Permit requirements, which include BMPs to control erosion and siltation, stabilize disturbed soils, and manage runoff to reduce peak flow velocities. During operation, increased impervious surfaces would have the potential to generate additional runoff; however, as part of Project Feature PF-HWQ-6 (LID BMPs per Regional Requirements), the LPA would retain the SWQDv on-site through LID measures that promote infiltration and manage flows consistent with regional requirements. Probable future projects in the area would also be required to comply with the same state and local regulatory framework. Probable future projects would also be required to comply with the same regulations and local ordinances, at a minimum. Therefore, cumulative impacts related to alteration of drainage patterns would be less than significant.

Release of Pollutants in Flood Zones, Tsunami Zones, or Seiche Zones

The LPA is outside of current seiche and tsunami potential inundation areas. A very small portion of the temporary footprint overlaps with the 100-year flood zone, which is an area that would be used during construction to remove a spur track. As part of Project Feature PF-HWQ-8 (City of Torrance Flood Zone Requirements), construction would comply with the City of Torrance's requirements for construction within flood hazard areas, which are designed to reduce potential run-ins with flood waters. In addition, Project Feature PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit) provides that construction activities must incorporate BMPs to prevent the release of pollutants into surface waters during construction, including in the unlikely case of rare flooding events. None of the related projects are located within or adjacent to an existing flood zone or current seiche or tsunami area. Therefore, cumulative impacts related to the potential release of pollutants in flood hazard, tsunami, or seiche zones would be less than significant.

Conflict with a Water Quality Plan

Construction would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. A groundwater sustainability plan has not been developed for the groundwater basin. Construction of the LPA would be required to comply with beneficial uses, water quality objectives, and waste discharge requirements detailed in the RWQCB Basin Plan. Probable future projects would also be required to comply with the same regulations and local ordinances, at a minimum, and cumulative impacts would be less than significant.

Findings

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA's incremental contribution to cumulatively significant impacts related to water quality and groundwater during construction and operation would not be cumulatively considerable. Metro also finds that the LPA, in combination with past, present and probable future projects, would not result in a significant cumulative impact related to alteration of drainage patterns, flooding, or conflicts with water quality control plans during construction or operation.

8.11. UTILITIES AND SERVICE SYSTEMS

Water Facilities

As described in Section 3.11, Utilities and Service Systems, of the Draft EIR, the West Basin's water supplies are anticipated to be reliable, and no shortfalls are expected from 2021 to 2025, even when assuming a driest five-year scenario. Development of the LPA and probable future projects could cumulatively increase demands on water services post 2025, thereby creating shortages. However, construction of the LPA would not require substantial consumption of potable water, with water use occurring primarily for dust control. This short-term use would require minimal water supplies when compared to regional supplies. During operations, the LPA does not include a significant long-term, permanent source of water use. Although some water use may be needed to clean stations or wash trains, this minimal water use would not interfere with the existing and planned capacity of water facilities. There is no potential for the LPA to interfere with regional water supply services. The LPA's incremental contribution to cumulatively significant water service impacts would not be cumulatively considerable during construction or operation.

Wastewater

Construction activities would generate minimal wastewater through the use of temporary worker restrooms, which would have no potential to necessitate the construction of new or expanded wastewater facilities. Wastewater treatment facilities would not be required to be relocated during construction of the LPA. During operations, the LPA does not include a significant long-term, permanent source of wastewater. Although some water use may be needed to clean stations or wash trains, this minimal water generation would not interfere with the existing and planned capacity of wastewater facilities. As part of Project Feature PF-US-1 (Utility Identification and Coordination) and PF-US-2 (Service Interruption Notification), Metro would coordinate with utility providers to confirm service connections, ensure service continuity, and notify users of any temporary interruptions. The LPA's incremental contribution to cumulatively significant wastewater impacts would be less than cumulatively considerable.

Stormwater Drainage

Development of the LPA, in combination with past, present, and probable future projects, could cumulatively increase demands on existing stormwater infrastructure in the RSA. As part of Project Feature PF-HWQ-1 (SWPPP Implementation per Construction General Permit and MS4 Permit), construction would incorporate BMPs consistent with regulatory requirements, and any new stormwater drainage facilities constructed at stations or along the alignment would comply with applicable state and local design standards. If new stormwater drainage facilities are needed at stations or along the alignment, they would be designed in compliance with applicable state and local requirements.

During operations, the LPA would increase impervious surface areas, resulting in a potential increase in stormwater runoff during operations. As part of Project Feature PF-HWQ-6 (LID BMPs per Regional Requirements), stormwater volumes would be retained on-site, and proposed station designs would incorporate landscaping to further support runoff management. Metro's Environmental Compliance and Sustainability Department would oversee ongoing compliance with stormwater drainage requirements.

For these reasons, the LPA's incremental contribution to cumulatively significant impacts on stormwater drainage facilities would not be cumulatively considerable during construction or operation.

Solid Waste

Construction of the LPA and probable future projects could cumulatively increase demands on solid waste facilities. Construction of the LPA would generate solid waste from discarded construction materials, including contaminated soil. However, the LPA would not generate a substantial amount of solid waste during construction that would result in the exceedance of remaining regional capacity. Additionally, the construction contractor would be subject to AB 939, which requires implementation of a Solid Waste Diversion Program and diversion of at least 50% of the solid waste generated during construction activities from landfills to recycling facilities.

During operation, the LPA would not include a direct source of solid waste. Indirectly, solid waste would be generated by transit users, but this would be collected and managed by Metro. Therefore, the LPA's incremental contribution to cumulatively significant impacts on solid waste facilities would not be cumulatively considerable during construction or operation.

Electric Power

While development of the LPA and past, present, and probable future projects would increase the demand for SCE services, neither construction nor operation of the LPA would require significant electricity. Construction of the LPA would use only minimal amounts of electricity, such as to power field offices, and would not require new or expanded electric power facilities. For operations, the LPA would require electricity to power the extension, but this would be a minimal demand in comparison to what SCE delivers to its entire service area. Metro has also installed photovoltaic systems and plans additional renewable energy generation to offset systemwide electricity consumption. Accordingly, the incremental contribution of the LPA to significant cumulative electric power impacts would not be cumulatively considerable.

Natural Gas and Oil Facilities

While development of the LPA and past, present, and probable future projects would increase the demand for SoCal Gas services, neither construction nor operations of the LPA would require significant natural gas. SoCal Gas has not identified a cumulative shortfall in its service area. Construction of the LPA would not require significant natural gas supplies and has no potential to require new or expanded natural gas facilities. The electrically powered transit line would not use natural gas for operations. Similarly, there are no publicly owned oil facilities in the RSA that would require relocation and no potential for the LPA to require new or expanded oil facilities, thereby contributing to a cumulative effect. Development of the LPA, in combination with past, present, and probable future projects, would not result in a cumulatively considerable impact on natural gas or oil facilities. Therefore, cumulative impacts would be less than significant.

Telecommunications Facilities

AT&T, Frontier Communications, and Spectrum provide telephone and telecommunication services within the RSA, and no cumulative shortfalls in service capacity have been identified. Construction activities would have no potential to necessitate the construction of new or expanded telecommunication facilities. Operations have no potential to interfere with telecommunication facilities, which would be entirely outside of the alignment. For past, present, and probable future projects, any necessary utility upgrades would be determined and implemented by the responsible service providers under their established procedures and requirements. Accordingly, development of the LPA, in combination with other projects, would not result in a cumulatively considerable impact on telecommunication facilities during construction or operation. Therefore, cumulative impacts would be less than significant.

Findings

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA's incremental contribution to cumulatively significant impacts related to water facilities, wastewater, stormwater, solid waste, electric power, and natural gas during construction and operation would not be cumulatively considerable. Metro also finds that the LPA, in combination with past, present, and probable future projects, would not result in a significant cumulative impact related to oil or telecommunication facilities.

8.12. ENERGY

There is an existing cumulative impact related to energy resources. State, regional, and local agencies and jurisdictions have published a wide range of documents intended to reduce energy consumption and increase the use of renewable energy, in order to reduce pollution that contributes to global warming. The LPA, combined with past, present, and probable future projects, could contribute to the existing cumulative impact.

Construction of the LPA would require a one-time expenditure of diesel fuel and gasoline over the approximately six-year duration. However, the forecasted fuel consumption would represent tiny increases of less than 0.05% and less than 0.001% for diesel fuel and gasoline, respectively, relative to the forecasted on-road vehicle fueled consumption within the SCAB portion of Los Angeles County. These increases would not place an undue burden on existing petroleum-based transportation fuel reserves or supply within Los Angeles County. All equipment and vehicles that would be used in construction activities would comply with applicable CARB regulations, the Pavley and Low Carbon Fuel Standards, and the Corporate Average Fuel Economy Standards. The LPA would adhere to the provisions of the Metro Green Construction Policy to control and minimize emissions to the maximum extent feasible and would also be consistent with GHG-reduction plans.

Therefore, the incremental contribution of the LPA's construction activities to the existing cumulative energy impact would not be cumulatively considerable.

Regarding operational activities, the LPA would indirectly change regional energy consumption through changes in regional VMT. The LPA would reduce annual regional energy consumption and result in a net energy benefit. Operational electricity requirements would not place a strain on available SCE power supply.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA's incremental contribution to cumulatively significant impacts related to energy during construction and operation would not be cumulatively considerable.

8.13. CULTURAL RESOURCES

Development of the LPA in combination with other projects located in the adjacent area would increase the potential for impacts to historical and archaeological resources and could contribute to the loss of such resources in the region.

There are no historical resources located with the RSA, and therefore, there would be no impact related to historical resources. However, the LPA would have a potentially significant impact related to the disturbance of unknown archaeological resources or human remains during construction. Mitigation Measures MM-CUL-1 (Cultural Resources Identification Training), MM-CUL-2 (Cultural Resources Monitoring and Mitigation Plan), and MM-CUL-3 (Unanticipated Discovery of Human Remains) would be implemented, which would reduce the impact to less than significant. Probable future projects would be expected to comply with applicable federal, state, and local regulations to protect historic and archaeological resources, and would implement project-specific mitigation measures during construction. Operational activities would not have the potential to encounter archaeological resources or human remains, and there would be no impact. Therefore, the LPA, in combination with past, present, and probable future projects, would not result in a significant cumulative impact on historic and archaeological resources during construction or operation.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, with implementation of Mitigation Measures MM-CUL-1, MM-CUL-2, and MM-CUL-3, the LPA would not combine with past, present, and probable future projects to result in a significant cumulative impact on historic and archaeological resources during construction or operation. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

8.14. TRIBAL CULTURAL RESOURCES

Development of the LPA, in combination with past, present, and probable future projects, would increase the potential for disturbance of tribal cultural resources in the region. The degree of impact from cumulative development depends on site-specific conditions and the nature of each project. No tribal cultural resources have been identified within the LPA RSA, but unknown resources could be encountered during ground disturbance. In that event, Metro would comply with applicable federal, state, and local guidelines, including PRC Sections 2108.3.2 and 5097.98 and Health and Safety Code Section 7050.5. Mitigation Measures MM-TCR-1 (Native American Monitoring), MM-TCR-2 (Unanticipated Discovery of Tribal Cultural Resource Objects [Non-Funerary/Non-Ceremonial]), and MM-TCR-3 (Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects) would be implemented to address any discovery, which would reduce the impact to less than significant. Probable future projects in the area would similarly be required to comply with federal, state, and local regulations governing tribal cultural resources and implement appropriate mitigation measures, as needed. Accordingly, development of the LPA, in combination with past, present, and probable future projects, would not result in a cumulatively significant impact on tribal cultural

resources during construction. During operation, the LPA would not involve subsurface disturbance that could affect such resources, and no cumulative operational impacts would occur.

Finding

For the reasons stated above and based on substantial evidence in the record as a whole, with implementation of Mitigation Measures MM-TCR-1, MM-TCR-2, and MM-TCR-3, the LPA would not result in a cumulatively considerable impact related to cultural resources. Thus, with respect to this cumulative impact, Metro adopts CEQA Finding 1, as identified in Section 3 above and in Section 15091, subdivision (a)(1) of the CEQA Guidelines.

8.15. PUBLIC SERVICES

Fire and Police Protection

Construction of the LPA, in combination with past, present, and probable future projects, could increase demand for fire and police protection services within the RSA. Construction of the LPA would not result in direct physical impacts to fire and police protection facilities. While temporary lane closures could occur during construction, as part of Project Feature PF-T-1 (Construction Traffic Management Plan), Metro would coordinate with emergency service providers to maintain emergency access. There are planned roadway projects close to the Metro ROW that could be potentially disruptive to service if construction occurred concurrently, but given the shorter and more-intermittent duration of the nature of these types of roadway improvement projects, overlap of construction periods would be minimal, if at all. The probable future projects would implement their own measures to reduce impacts to emergency services by implementing detours and appropriate notification of agencies. Neither construction nor operation of the LPA would result in direct population growth that would necessitate new police facilities and police services or otherwise substantially impact police services. Indirect population growth as a result of and in combination with probable future projects in the region are anticipated to be consistent with the SCAG adopted growth projects and are accounted for within cities' plans. Accordingly, the LPA, in combination with past, present, and probable future projects, would not have cumulatively significant impacts related to fire and police protection during construction or operation.

Schools

Construction of the LPA, in combination with past, present, and probable future projects, would not result in a significant cumulative impact related to demand for school facilities. During construction, the LPA and other probable future projects could bring additional workers to the area. However, construction workers would be unlikely to relocate households or residences as a consequence of working on the LPA or other local projects; therefore, no significant demand for unpanned new school facilities would occur during construction and there would be no significant cumulative impact.

During operation, the LPA, combined with past, present, and probable future projects, could increase demand for schools by increasing the population in the area. However, the LPA would not directly increase the number of residents and, thus, would not directly increase demand for schools or necessitate new school facilities. Any indirect population growth as a result of and in combination with past, present, and probable future projects is expected to be consistent with the SCAG adopted growth projects and accounted for within cities' plans. Therefore, cumulative impacts to schools are expected to be less than significant. Moreover, the LPA's incremental contribution to any such impact would not be cumulatively considerable.

Parks and Recreational Facilities

Construction of the LPA, in combination with past, present, and probable future projects, would not result in a significant cumulative impact on parks. Cumulative construction could increase the local workforce, which could increase use of parks during construction. However, construction workers would not be expected to relocate household or permanent residences in connection with the LPA or other present and future projects under construction; therefore, no significant long-term demand on existing parks is anticipated during construction.

During operation, past, present, and probable future projects could increase demand for parks and recreational facilities by population growth. However, the LPA would not directly increase the number of residents and, therefore, would not directly increase the need for new parks and recreational facilities. Any indirect population growth as a result of the LPA, in combination with past, present and probable future projects in the region, is anticipated to be consistent with the SCAG regional growth projections, which account for population increases in planning for parks. Accordingly, cumulative impacts to parks and recreational facilities are expected to be less than significant, and, in any case, the incremental contribution of the LPA to any such cumulative impact would not be cumulatively considerable.

Libraries

There are no libraries within a quarter mile of the LPA. Regionally, past, present, and probable future projects could increase use of libraries during construction as a result of a larger workforce, but construction workers would not be expected to relocate households or permanent residences in connection with the LPA or other projects. Accordingly, no significant long-term demand for libraries is anticipated during construction.

During operation, the LPA would not directly increase the number of residents and thus would not directly increase demand for library facilities. Any indirect effects of the LPA, in combination with past, present, and probable future projects, are anticipated to be consistent with the SCAG adopted growth projects and accounted for within cities' plans, which already account for population increases in planning for libraries. Therefore, a significant cumulative impact is not expected. Moreover, the LPA's incremental contribution to any such impact would not be cumulatively considerable.

Findings

For the reasons stated above and based on substantial evidence in the record as a whole, Metro finds that the LPA's incremental contribution to cumulatively significant impacts related to schools, parks, and libraries during construction and operation would not be cumulatively considerable. Metro also finds that the LPA, in combination with past, present and probable future projects, would not result in a significant cumulative impact related to fire or police protection services during construction or operation.

9. FINDINGS FOR ALTERNATIVES

CEQA provides that “public agencies should not approve projects as proposed if there are feasible alternatives … available which would 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 … , individual projects may be approved in spite of one or more significant effects thereof.” (*Ibid.*) As defined by CEQA, “feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors. (PRC Section 21061.1; CEQA Guidelines Section 15126.6(f)(1).)

In determining whether an alternative is “feasible” under CEQA, an agency may consider whether that alternative will promote the project’s objectives and goals. (*Sequoia Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1001.) The feasibility determination also “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 401, 417; *California Native Plant Society, supra*, at p. 1001.) Broad policy decisions come into play when determining whether alternatives are feasible, and “an alternative that ‘is impractical or undesirable from a policy standpoint’ may be rejected as infeasible.” (*Ibid.* [upholding agency’s reliance on policy considerations like “promoting transportation alternatives” and “access to … open space for persons with disabilities” in making its infeasibility findings].)

In accordance with CEQA Guidelines Section 15126.6(a), a range of feasible alternatives was identified and evaluated in a manner intended to foster meaningful public participation and support informed decision making. A detailed description of the project alternatives is provided in Chapter 2, Project Description, and Chapter 4, Evaluation of Alternatives, of the Draft EIR.

9.1. NO PROJECT ALTERNATIVE

The No Project Alternative, required by CEQA Guidelines Section 15126.6(e)(2), assumes that the project would not be implemented. As part of the No Project Alternative, no additional light rail tracks or stations would be added south of the existing light rail terminus at the Redondo Beach (Marine) Station. The No Project Alternative is based on a review of local general plans, capital improvement programs, and regional transportation plans, including the SCAG 2020-2045 RTP/SCS and Metro’s 2020 Long-Range Transportation Plan (LRTP).

As described in Chapter 4, Evaluation of Alternatives, of the Draft EIR, the No Project Alternative would avoid all construction disruption and construction-related environmental impacts. However, the No Project Alternative would conflict with regional and local programs, plans, ordinances, and policies related to transportation, land use and planning, air quality, GHG emissions, and energy. It would also constrain opportunities for transit-oriented development and related economic investment in station areas, leaving adopted regional growth plans unsupported by major transit infrastructure. The No Project Alternative would also not achieve or address any of the project objectives or benefits since it would not provide light rail service in the South Bay, achieve the air quality and reduction in GHG emissions, avoid or minimize environmental impacts to the maximum extent, nor provide equitable development opportunities as proposed by the LPA. By failing to provide a transit solution, the No Project Alternative would exacerbate cumulative traffic, air quality, and GHG conditions by shifting growth-related travel demand onto already congested roadways.

Therefore, the No Project Alternative would not be consistent with the goals and objectives for the project. Thus, Metro adopts CEQA Finding 3, as identified in Section 3 above and in Section 15091, subdivision (a)(3) of the CEQA Guidelines.

9.2. HIGH-FREQUENCY BUS ALTERNATIVE

The High-Frequency Bus (HFB) Alternative would implement a rapid bus service instead of a light rail extension. There would be four bus stops between the existing Redondo Beach (Marine) Station and Torrance TC. Physical improvements would be limited to new signs at bus stops, as well as shelters with solar lighting, benches, and trash receptacles, as a minimum level of bus stop amenities. Where practical, the HFB Alternative may include curb extensions, elimination of street parking, or other improvements to the sidewalk area near new bus stops. The HFB Alternative would also require a transfer at the Redondo Beach (Marine) Station in order for riders to continue further, increasing travel time and potential delays. Travel times from end to end would be about 25 minutes, which is faster than local bus service (approximately one hour, with a transfer), but slower than the travel times expected from the LPA (approximately seven minutes). The HFB Alternative would create a duplication of service for Torrance Line 8.

As described in Chapter 4, Evaluation of Alternatives, of the Draft EIR, the HFB Alternative would reduce all significant impacts to a less than significant level, have the shortest construction period, and the lowest costs of all the alternatives, including the LPA. While the HFB Alternative would meet the objectives of the project to some degree, the objectives would be better met by the LPA, which would provide greater mobility benefits and VMT reductions. The HFB Alternative would offer less passenger capacity than the light rail alternatives and options. As traffic conditions worsen with projected population growth, the HFB Alternative may experience slower travel times and reduced reliability.

In addition, the HFB Alternative would not advance Metro's adopted regional transit expansion commitment or the SCAG RTP/SCS strategy of expanding high-capacity transit to meet climate and mobility goals to the degree that the LPA would. The HFB Alternative would not provide the same long-term capacity for projected ridership, limiting Metro's ability to reduce VMT, GHG emissions, and regional air pollutants relative to the LPA. The HFB Alternative would also provide fewer opportunities for equitable transit-oriented development near stations, reducing potential economic investment and housing opportunities compared to the LPA. Because the HFB Alternative would require transfers and provide longer travel times, it would be less attractive to riders, particularly transit-dependent riders who would disproportionately bear the burden of slower and less reliable service.

Given the limited environmental benefits of the HFB Alternative and its limited ability to achieve the project's goals and objectives, Metro adopts CEQA Finding 3, as identified in Section 3 above and in Section 15091, subdivision (a)(3) of the CEQA Guidelines.

9.3. ELEVATED/AT-GRADE ALIGNMENT

The Elevated/At-Grade Alignment, referred to as the Proposed Project in the Draft EIR, is similar to the LPA, except that it would have at-grade crossings at 170th and 182nd Streets (rather than the short below-grade trench segments proposed for the LPA).

As described in the 2025 Ridership Summary Report, the Elevated/At-Grade Alignment would have the same basic benefits as the LPA, which include an annual VMT reduction, increased ridership and travel time savings, direct access to other transit networks, and station areas. Although the Elevated/At-Grade Alignment would have a shorter construction schedule and lower capital cost compared to the LPA, it would result in significant and unavoidable noise impacts during operations due to the light rail crossing

gates and warning bells required for at-grade crossings. These impacts could not be reduced to less than significant levels with feasible mitigation. The at-grade light-rail and freight crossings would also require more coordination with the CPUC than the LPA, which has only freight at-grade crossings.

The Elevated/At-Grade Alignment would also result in a significant and unavoidable vibration damage impact during construction because it would require reconstruction of the existing Grant Avenue freight bridge—an impact that would not occur under the LPA. Even with implementation of mitigation measures, the Elevated/At-Grade Alignment would still result in a significant and unavoidable vibration damage impact to one structure during construction, as well as the temporary vibration annoyance impacts similar to those anticipated for the other light rail alternatives and options.

In sum, compared to the LPA, the Elevated/At-Grade Alignment would result in greater significant and unavoidable impacts without providing any additional long-term environmental benefits. Although the Elevated/At-Grade Alignment would have somewhat lower construction costs and a shorter duration than the LPA, these advantages are outweighed by the increased operational noise and construction vibration damage impacts, as well as the additional regulatory coordination associated with at-grade light rail crossings. No feasible mitigation measures are available to reduce the significant and unavoidable operational noise and construction vibration damage impacts to less than significant levels. Thus, Metro adopts CEQA Finding 3, as identified in Section 3 above and in Section 15091, subdivision (a)(3) of the CEQA Guidelines.

9.4. TRENCH OPTION

The Trench Option is similar to the LPA but would include a longer continuous below-grade trench between Inglewood Avenue and 170th Street, rather than the combination of elevated and trenched segments proposed for the LPA. Like the LPA, it would also include a short trench under 182nd Street to grade-separate the light rail crossing.

As described in the 2025 Ridership Summary Report, the Trench Option would achieve the same basic benefits as the LPA, including an annual VMT reduction, increased ridership and travel time savings, direct access to other transit networks, and opportunities for station area development. However, the Trench Option would require substantially longer and more complex construction, at considerably higher costs than the LPA. Unlike the LPA, the Trench Option would require deep excavations to avoid an underground storm drain near Inglewood Avenue and Manhattan Beach Boulevard, an area that includes shallow groundwater and known soil and groundwater contamination. As a result, the Trench Option would involve complex dewatering and groundwater management procedures to prevent migration or release of contaminated groundwater. Constructing a lengthy trench (approximately two miles) in close proximity to residential neighborhoods while maintaining active freight operations would also create logistical and engineering challenges.

Like the LPA, the Trench Option would avoid long-term noise impact at 170th Street by placing the light rail alignment below grade. By grade separating 170th Street and 182nd Street with trenches, the Trench Option and LPA would avoid delays to vehicles, including emergency vehicles, and enhance safety for pedestrians and cyclists along school routes. Unlike the LPA, the excavation required for the longer trench segment of the Trench Option would cause significant and unavoidable air quality impacts during construction, which could not be mitigated to less than significant levels. The more complex trench design would also increase community disruption during construction, including greater truck hauling, dust, and noise near sensitive residential uses.

In comparison to the LPA, the Trench Option would, therefore, achieve no additional long-term benefits while imposing higher costs, longer construction durations, and significant and unavoidable construction-related air quality impacts.

Accordingly, although the Trench Option would meet many project objectives, it would do so less effectively than the LPA and with greater adverse impacts. Metro, therefore, adopts CEQA Finding 3, as identified in Section 3 above and in Section 15091, subdivision (a)(3) of the CEQA Guidelines.

9.5. HAWTHORNE OPTION

The Hawthorne Option would start within the existing Metro ROW, then leave the Metro ROW to cross over streets and commercial properties before running parallel to Interstate 405 (I-405) within Caltrans ROW between Inglewood Avenue and Hawthorne Boulevard. From there, it would follow Hawthorne Boulevard (State Road 107) south between 162nd Street and 190th Street. Around 190th Street, the alignment returns to the Metro ROW, terminating at the Torrance TC. A station is proposed within the center of Hawthorne Boulevard (South Bay Galleria Station), south of Artesia Boulevard.

As described in the 2025 Ridership Summary Report, the Hawthorne Option would provide the highest number of annual project boardings and new riders of all the alternatives, including the LPA. The Hawthorne Option would not directly connect to the Redondo Beach TC, thereby not allowing for seamless connections between rail and bus. While the Hawthorne Option would provide a higher number of project boardings and new riders than the LPA, it provides lower VMT reductions and travel time savings than the LPA. It would also forego the improvements along the Metro ROW that are included in the LPA, such as quiet-zone-ready corridor improvements to eliminate existing freight horn noise, safety improvements from upgraded freight crossing infrastructure and trackwork, and new neighborhood paths where sidewalks are lacking today.

The Hawthorne Option would require additional permits and review by both Caltrans and the Federal Highway Administration (FHWA) due to the elevated structure encroaching into I-405 and Hawthorne Boulevard, both under the jurisdiction of Caltrans, adding an estimated two to four years to the project timeline. Construction would also temporarily reduce roadway capacity through lane closures, including closures to the I-405 on and off ramps, and would permanently reduce left turn-lanes and eliminate some on-site parking along Hawthorne Boulevard. These changes could worsen traffic congestion in an already heavily traveled corridor with 170 commercial properties, supporting approximately 350 businesses, located adjacent to the alignment on Hawthorne Boulevard. The 2023 Transportation Detail Report concluded that several intersections along Hawthorne Boulevard would experience deteriorated level of service as a result of the permanent roadway modifications required by this option. The alignment would also require relocation of major utilities, including an underground storm drain located in the roadway median, and raising overhead high-voltage transmission lines to accommodate the elevated structure. These factors increase both the cost and construction complexity and risk. Additionally, several commercial parcels would be affected, including permanent full acquisition of seven commercial parcels and permanent partial acquisition of five commercial parcels north of 190th Street.

Although the Hawthorne Option would achieve strong ridership and mobility benefits, it would do so at the expense of substantially greater construction costs, a longer project timeline, extensive utility relocations, and property acquisitions compared to the LPA. The Hawthorne Option would also introduce greater disruption to existing businesses and permanent traffic and parking constraints along Hawthorne Boulevard. By contrast, the LPA achieves comparable mobility benefits while avoiding these

heightened adverse effects and providing improvements along the Metro ROW that the Hawthorne Option lacks. Thus, Metro adopts CEQA Finding 3, as identified in Section 3 above and in Section 15091, subdivision (a)(3) of the CEQA Guidelines.

9.6. FINDINGS FOR THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 requires that an “environmentally superior” alternative be identified. The environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts, regardless of its ability to meet the project objectives. If the environmentally superior alternative is the No Project alternative, the EIR must also identify an environmentally superior alternative among the other alternatives.

As described in Chapter 4, Evaluation of Alternatives, in the Draft EIR, the HFB Alternative would be the environmentally superior alternative, as it would avoid all significant environmental impacts. However, while the HFB Alternative would minimize impacts, it would not realize the same level of benefits from VMT reduction, air quality improvements, GHG emissions reduction, energy savings, and equitable access. Accordingly, although the HFB Alternative is the environmentally superior alternative in terms of impact avoidance, the LPA is the superior alternative among those that feasibly meet the project objectives, because it provides the most effective balance of environmental protection, mobility improvements, and consistency with regional and local plans. Thus, with respect to the environmentally superior alternative, Metro adopts CEQA Finding 3, as identified in Section 3 above and in Section 15091, subdivision (a)(3) of the CEQA Guidelines.

10. FINDINGS FOR MITIGATION MEASURES

CEQA provides that “public agencies should not approve projects as proposed if there are … feasible mitigation measures available which would 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 mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.” (*Ibid.*) As defined by CEQA, “feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors. (PRC Section 21061.1; CEQA Guidelines Section 15126.6(f)(1).)

In determining whether a mitigation measure is “feasible” under CEQA, an agency may consider whether that mitigation measure will promote the project’s objectives and goals. (*Sequoyah Hills Homeowners Assn., supra*, 23 Cal.App.4th at p. 715; *California Native Plant Society, supra*, 177 Cal.App.4th at p. 1001.) The feasibility determination also “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, supra*, 133 Cal.App.3d at p. 417; *California Native Plant Society, supra*, at p. 1001.) Broad policy decisions come into play when determining whether mitigation measures are feasible. (See *Ibid.*)

The Metro Board has considered every mitigation measure recommended in the Draft EIR and Final EIR. Metro hereby binds itself to implement or, as appropriate, require implementation of these measures. The MMRP will be adopted concurrently with these Findings and will be effectuated through the process of constructing and implementing the LPA.

Regarding the project features, the Metro Board finds and affirms that these features are integral components of the LPA itself, not mitigation measures. They were included in the project description and evaluated in the Draft and Final EIR as part of the proposed project, rather than being imposed after the fact to reduce significant impacts. In approving the LPA, Metro commits to full implementation of the project features identified in the Draft and Final EIR.

Some comments on the Draft EIR suggested additional mitigation measures or modifications to the mitigation measures recommended in the Draft EIR. As shown in Chapter 4, Corrections and Additions, of the Final EIR, Metro added or revised project features and mitigation measures in response to comments. In response to other comments, Metro explained why suggested mitigation measures were not feasible or not superior to the mitigation measures already identified in the Draft EIR. The Metro Board agrees with the Final EIR in those instances when proposed mitigation measure revisions were not accepted, and hereby ratifies, adopts, and incorporates the Final EIR’s reasoning on these issues.

11. STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to PRC Section 21081, subdivision (b) and CEQA Guidelines Section 15093, if an EIR demonstrates that a project will result in one or more significant and unavoidable environmental impacts, the lead agency may nonetheless approve the project if it determines that the project's economic, social, environmental, or other benefits outweigh those impacts. This determination is embodied in a Statement of Overriding Considerations.

CEQA requires that such a statement be supported by substantial evidence in the record and reflect the lead agency's balancing of the project's benefits against its environmental consequences. In making this determination, the agency exercises its discretion to weigh competing policy considerations, including statewide and regional objectives, local planning goals, and community needs. The statute expressly recognizes that public agencies may approve projects with unavoidable impacts where there are countervailing benefits, and the courts have confirmed that the responsibility for striking this balance rests squarely with the decision-making body.

As the lead agency for the project, the Metro Board has both the authority and the responsibility under CEQA to make this policy judgment. In adopting this Statement of Overriding Considerations, the Metro Board exercises its discretion to determine that the benefits of the LPA outweigh the project's significant and unavoidable impacts, and that approval of the project is, therefore, appropriate under CEQA.

11.1. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The LPA would result in temporary significant and unavoidable impacts for noise and vibration during construction.

Additionally, as discussed in Section 5.2, if the corridor cities decline to pursue a quiet zone corridor establishment, routine freight horn noise at eight crossings in a residential area would continue, and the LPA would also result in a significant and unavoidable operational noise impact. This significant impact would be eliminated, however, if the corridor cities implement a quiet zone corridor as specified in Mitigation Measure MM-NOI-4. The LPA would not result in any other long-term significant and unavoidable impacts as part of project operations with implementation of mitigation measures.

Impact 3.6-4.1: Ambient Noise During Construction

The project would result in temporary and periodic increases in ambient noise levels due to construction activity that would exceed FTA standards. While Mitigation Measure MM-NOI-1 (Noise Control Plan) would be implemented as part of the LPA, which would include noise-reducing measures, there would still be temporary or periodic increases in ambient noise levels that exceed FTA construction impact criteria. There are no feasible mitigation measures to reduce construction noise levels below the FTA's threshold of significance. Therefore, the significant and unavoidable impact related to construction noise would remain.

Impact 3.6-4.1: Ambient Noise During Operation (Significant and Unavoidable Only if Corridor Cities Do Not Implement Quiet Zone)

The combination of relocated freight tracks and light rail noise would result in potentially significant noise impacts to 178 Category 2 clusters and 3 Category 3 clusters. Mitigation Measures MM-NOI-2 (Soundwalls) and MM-NOI-3 (Low Impact Frogs) would reduce light rail noise impacts, while Mitigation Measure MM-NOI-4 (Quiet Zone Establishment) would eliminate routine blowing of freight horns, thereby reducing the combined light rail and freight train noise to less than significant. **As found in Section 5.1, above, after implementation of Mitigation Measures MM-NOI-2, MM-NOI-3, and MM-**

NOI-4, the combination of light rail noise and freight track relocation noise from operation would result in noise levels below the FTA's criteria, and the impact would be less than significant. Implementation of MM-NOI-4 is within the jurisdiction of the corridor cities, which Metro finds can and should implement the measure.

However, establishment of a quiet zone corridor under MM-NOI-4 requires action by the corridor cities, which hold the authority to apply for quiet zone designation. The Metro Board finds that such action is both feasible and appropriate and that the Cities of Torrance, Redondo Beach, and Lawndale can and should pursue quiet zone corridor establishment to eliminate freight horn noise. **Nonetheless, for the purposes of this Statement of Overriding Considerations only, Metro has made a conservative assumption that MM-NOI-4 may not be implemented, solely because the decision rests with other jurisdictions.** In that event, the combined light rail and freight relocation noise would be significant and unavoidable.

Impact 3.6-4.3: Ground-Borne Vibration Annoyance During Construction

Construction of the LPA would result in significant annoyance vibration impacts, resulting from operation of construction equipment (e.g., vibratory roller and impact pile driver) near residential structures and sensitive land uses. Mitigation Measures MM-VIB-1 (Vibration Control Plan) and MM-VIB-2 (Construction Equipment Location) would reduce vibration impacts, but it would not be feasible to limit the use of all types of equipment, as some pieces of equipment cannot be modified or replaced. Therefore, the significant and unavoidable impact related to vibration annoyance during construction would remain.

11.2. OVERRIDING BENEFITS OF THE PROJECT

The Metro Board has carefully weighed the benefits of the LPA against its significant and unavoidable impacts identified above. As discussed in Section 11.1, these impacts consist of temporary construction-period noise and vibration (annoyance) impacts, as well as a potential operational noise impact that could occur if the corridor cities do not implement the quiet zone pursuant to Mitigation Measure MM-NOI-4. The Metro Board finds that, even assuming these impacts, the LPA would generate specific economic, social, environmental, and other benefits that outweigh the adverse impacts. Each benefit described below constitutes a separate and independent basis for approving the LPA, and any one of them, standing alone, would be sufficient to override the significant and unavoidable impacts.

Considered together, these benefits provide compelling and overwhelming justification for approval of the LPA.

- > **Increased Transportation Mobility:** The South Bay currently lacks fast, frequent, and reliable transit connections to the rest of Los Angeles County, limiting access to jobs, services, and key destinations. The project addresses these challenges and would substantially expand access to opportunities for residents and workers throughout the South Bay and the greater Los Angeles region. Approximately 3.6 million boardings are expected each year, including approximately 1.5 million annual new riders to the Metro system. By extending the K Line south to Torrance, the project would also integrate two new bus transit centers into the existing regional rail and bus network and provide seamless connections to the LAX/Metro Transit Center located at LAX, as well as the broader regional system. These connections would significantly improve transit mobility for South Bay residents and strengthen the regional multimodal transportation network.
- > **Reduced Travel Times:** The project would provide a direct, one-seat ride from the Torrance TC to LAX in 19 minutes. This represents a significant travel time saving compared to existing conditions and would markedly improve connections between the South Bay, the airport, and the greater Los

Angeles area. By providing faster, more reliable service, the project would link many Equity Focus Communities to major employment and activity centers along the Metro C, K, and E Lines, thereby improving access to jobs, education, health care, and other essential services. These mobility benefits would enhance regional competitiveness and promote equitable access to opportunities.

- > **Environmental Benefits:** The project would divert vehicle trips from congested freeways and arterial streets, thereby reducing VMT. Reductions in VMT translate into reductions in air pollutants and GHG emissions. These benefits are consistent with, and help advance, regional and statewide policy commitments to address climate change and improve air quality, including implementation of SB 375, California's Scoping Plan under AB 32 and SB 32, and SCAG's RTP/SCS. By shifting drivers to transit, the project would help address climate change and reduce congestion, with anticipated reductions of approximately 14.9 million VMT per year and 1,833.58 MTCO₂e per year.
- > **Community Safety Improvements:** The project would introduce multiple new safety features for corridor communities. Relocation and improvement of the freight corridor would include enhanced freight crossings with upgraded infrastructure and installation of security barriers to prevent pedestrian trespassing into the active freight corridor. The project would also construct new neighborhood walking paths, providing safe and dedicated pedestrian routes in areas that currently lack continuous sidewalks. These improvements would enhance the safety of schoolchildren and other pedestrians, reduce conflicts between freight and passenger rail operations, and improve the quality of the public realm in adjacent communities.
- > **Economic Development and Job Creation:** The project would generate substantial economic benefits through both short-term construction employment and long-term economic growth. During construction, the project is expected to create 15,000 jobs (8,600 construction and 6,400 non-construction) in the Los Angeles region, including skilled trade and apprenticeship opportunities that support local workforce development and disadvantaged communities. Consistent with Metro's commitment to small business participation and disadvantaged business enterprises, the project would also create contracting opportunities for local firms. Over the long term, the project would help catalyze investment in station areas, thereby supporting new housing, commercial space, and transit-oriented development and stimulating sustained economic activity and expanding the local tax base. These benefits would extend beyond the immediate corridor and strengthen the region's overall economic vitality.
- > **Equity Benefits:** The project would provide particular benefits for Equity Focus Communities in the South Bay and South Los Angeles, where many residents are transit-dependent and face disproportionate transportation cost burdens. By offering a fast, reliable, and affordable connection to major employment and activity centers, the project would expand access to jobs, education, health care, and other essential services. The project would also reduce exposure to harmful air pollutants in these communities by shifting trips away from single-occupancy vehicles and reducing emissions in areas already burdened by poor air quality. By advancing Metro's adopted equity policies and state commitments to environmental justice, the project would meaningfully improve mobility, affordability, and health outcomes for historically underserved populations. Additionally, Metro has engaged in, and would continue to engage in, extensive public outreach to ensure that community perspectives are reflected in the LPA's development.
- > **Consistency with Regional and Local Planning Documents:** The project advances the region's collective commitments to mobility, equity, air quality, and climate goals. The project is identified as a priority investment in Metro's 2020 Long Range Transportation Plan and SCAG's 2020–2045

RTP/SCS and 2024–2050 RTP/SCS. Advancing the project directly implements these adopted plans, which establish the region’s strategy for reducing GHG emissions, supporting sustainable growth, and expanding high-capacity transit. At the local level, the project is consistent with the general plans of the corridor cities, which encourage transit. Failure to implement the project would frustrate these adopted plans and undermine the region’s ability to achieve its climate and sustainability goals.

Based on the foregoing findings, the Metro Board determines that the economic, social, and environmental benefits of the LPA outweigh the significant and unavoidable impacts identified in the Final EIR and the record of proceedings. In making this determination, the Metro Board has carefully balanced the benefits of the LPA against its unavoidable impacts and concludes that approval of the LPA is appropriate under CEQA. The Metro Board further finds that each one of the foregoing benefits, independent of the others, provides a sufficient basis to approve the LPA notwithstanding its unavoidable significant impacts.

ACRONYMS

ACM	Asbestos-Containing Material
ADL	Aerially deposited lead
ATCM	Airborne Toxic Control Measure
BACT	Best Available Control Technology
bgs	Below Ground Surface
BMP	Best Management Practice
CAAP	Climate Action and Adaptation Plan
CAAQS	California Ambient Air Quality Standards
CalGEM	California Geologic Energy Management Division
CALGreen Code	California Green Building Standards Code
CAMUTCD	California Manual on Uniform Traffic Control Devices
CARB	California Air Resource Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGCC	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CO	Carbon Monoxide
CPTED	Crime Prevention through Environmental Design
CPUC	California Public Utilities Commission
CRMMP	Cultural Resources Monitoring and Mitigation Plan
CTMP	Construction Traffic Management Plan
CWA	Clean Water Act
CY	Cubic Yard
dBA	Decibels A
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
FRA	Federal Railroad Administration
GHG	Greenhouse Gasses
HFB	High-Frequency Bus
JWPCP	Joint Water Pollution Control Plant
kWh	Kilowatt-Hours
LACDPW	County of Los Angeles Department of Public Works
LAX	Los Angeles International Airport
LBP	Lead-Based Paint
LED	Light Emitting Diode
L _{eq}	Equivalent Continuous Sound Level
LID	Low Impact Development

LPA	Locally Preferred Alternative
LRTP	Long-Range Transportation Plan
MBTA	Migratory Bird Treaty Act
MDE	Maximum Design Earthquake
Metro	Los Angeles County Metropolitan Transportation Authority
Metro ROW	Metro-owned right-of-way
MJ	Megajoule
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MRDC	Metro Rail Design Criteria
MS4	Municipal Separate Storm Sewer System
MSAT	Mobile Source Air Toxics
MTCO _e	Metric tons of carbon dioxide equivalent
MWh	Megawatt-Hours
NAAQS	National Ambient Air Quality Standards
NOP	Notice of Preparation
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NTP	Notice to Proceed
O ₃	Ozone
ODE	Operating Design Earthquake
PCB	Polychlorinated Biphenyls
PF	Project Feature
PM _{2.5}	Particulate Matter Less than 2.5 Microns in Diameter
PM ₁₀	Particulate Matter Less than 10 Microns in Diameter
PRC	Public Resources Code
PRMMP	Paleontological Resources Monitoring and Mitigation Plan
RSA	Resource Study Area
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SOI	Secretary of the Interior
SSDC	Supplemental Seismic Design Criteria
SVP	Society of Vertebrate Paleontology
SWQDv	Stormwater Quality Design Volume
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TC	Transit Center
Torrance TC	Mary K. Giordano Regional Transit Center
TPSS	Traction Power Substation
TWW	Treated Wood Waste
USEPA	United States Environmental Protection Agency
VdB	Velocity Level Decibels

VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
WDR	Waste Discharge Requirements