EAST SAN FERNANDO VALLEY TRANSIT CORRIDOR PROJECT

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

PREPARED FOR:

Los Angeles County Metropolitan Transportation Authority



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1 Introduction

This document presents the findings required by the California Environmental Quality Act (CEQA) for each of the significant environmental effects identified in the Final Environmental Impact Statement/ Final Environmental Impact Report (FEIS/FEIR) (SCH No. 2013021064) that was prepared for the proposed East San Fernando Valley Transit Corridor Project (proposed project) and includes a Statement of Overriding Considerations, pursuant to CEQA, which states the reasons why the benefits of the project outweigh the project's unavoidable significant adverse effects. This document also describes the alternatives to the proposed project considered in the FEIS/FEIR, discusses whether the alternatives would avoid or minimize the significant impacts of the proposed project, identifies the environmentally superior alternative, and explains why the alternatives were rejected in favor of the proposed project.

1.1 Purpose of Findings and the Statement of Overriding Considerations

Section 21081 of the California Public Resources Code and Section 15091 of the CEQA Guidelines require a public agency, prior to approving a project, to identify significant impacts of the project and make one or more written findings for each such impact. According to Section 21081, "no public agency shall approve or carry out a project for which an environmental impact report 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 both of the following occur:

- (a) The public agency makes one or more of the following possible findings with respect to each significant effect:
 - 1. Changes or alterations have been required in, or incorporated into, the project to mitigate or avoid the significant effects on the environment.
 - 2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
 - Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.
- (b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment."

Section 21081.6 of CEQA also requires public agencies to adopt a monitoring and reporting program for assessing and ensuring the implementation of proposed mitigation measures. The mitigation measures identified in the Mitigation Monitoring and Reporting Program (MMRP) for the proposed project, which is provided under separate cover, are those identified within this Findings and the Statement of Overriding Considerations. Pursuant to Section 21081.6, public agencies are required to provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures.

The Statement of Overriding Considerations is a written statement explaining the specific reasons why the social, economic, legal, technical or other beneficial aspects of the proposed project outweigh the unavoidable adverse environmental impacts and why the Lead Agency is willing to accept such impacts. This statement shall be based on the FEIR and/or other substantial evidence in the record.

1.2 Document Organization

This Findings and the Statement of Overriding Considerations are organized as follows:

- Section 1.0, Introduction, provides background information of the purpose of Findings and the Statement of Overriding Considerations, presents the organization of this document, and provides a brief overview of the proposed project.
- Section 2.0, Statement of Environmental Effects and Required Findings, identifies the issue areas
 for which the proposed project would have no impact or a less than significant impact, and
 presents a summary of the significant effects of the proposed project along with the one or
 more written findings made by the public agency explaining how it dealt with each of the
 significant effects and mitigation measures.
- Section 3.0, Alternatives Considered, describes the alternatives evaluated in the EIR, and the findings and rationale for selection of the proposed project.
- Section 4.0, Statement of Overriding Considerations, explains in detail why the social, economic, legal, technical or other beneficial aspects of the proposed project outweigh the unavoidable, adverse environmental impacts and why the agency is willing to accept such impacts.

1.3 Overview of the Proposed Project

The East San Fernando Valley Transit Corridor Project would provide new service and infrastructure that would improve passenger mobility and connectivity to regional activity centers, increase transit service efficiency (speeds and passenger throughput), and make transit service more environmentally beneficial via reductions in greenhouse gas emissions.

Metro applied the objectives below in evaluating potential alternatives, including bus rapid transit (BRT) and light rail transit (LRT) alternatives, for the East San Fernando Valley Transit Corridor Project. These objectives reflect Metro's mission to meet public transportation and mobility needs



for transit infrastructure while also being a responsible steward of the environment and considerate of affected agencies and community members when planning a fiscally sound project.

- Provide new service and/or infrastructure that improves passenger mobility and connectivity to regional activity centers;
- Increase transit service efficiency (speeds and passenger throughput) in the project study area; and
- Make transit service more environmentally beneficial by providing alternatives to auto travel and other environmental benefits, such as reduced air pollutants, including reductions in greenhouse gas emissions in the project study area.

On June 28, 2018 the Metro Board of Directors formally identified a modified version of Alternative 4 (identified as "Alternative 4 Modified: At-Grade LRT" in the FEIS/FEIR) as the Locally Preferred Alternative (LPA). Factors that were considered by Metro in identifying Alternative 4 Modified: At-Grade LRT as the LPA include: the greater capacity of LRT compared to the Bus Rapid Transit alternatives, the reduced construction time and cost compared to the Draft EIS/EIR Alternative 4, fewer construction impacts compared to Draft EIS/EIR Alternative 4, and strong community support for a LRT. Additionally, Metro determined the LPA best fulfilled the project's purpose and need to:

- Improve north-south mobility;
- Provide more reliable operations and connections between key transit hubs/routes;
- Enhance transit accessibility/connectivity to local and regional destinations;
- Provide additional transit options in a largely transit-dependent area; and
- Encourage mode shift to transit.

The LPA consists of a 9.2-mile median running at- grade LRT with 14 stations. Under the LPA, the LRT would be powered by electrified overhead lines and would have two tracks fully separated from automobile traffic, except at signalized intersections or controlled at-grade crossings. The LPA would travel 2.5 miles along the Metro-owned right-of-way used by the Antelope Valley Metrolink line and Union Pacific Railroad from the Sylmar/San Fernando Metrolink Station south to Van Nuys Boulevard, along and just east of San Fernando Road. Metrolink and the Union Pacific Railroad would continue to use a separate dedicated track. As the LPA approaches Van Nuys Boulevard it would transition to and operate in a semi-exclusive right-of-way in what is currently the median of Van Nuys Boulevard, for approximately 6.7 miles south to the Van Nuys Metro Orange Line Station. Stations would be constructed at approximately 3/4 -mile intervals along the entire route. The 9.2-mile route of the LPA is illustrated in Figure 1. For additional information on the LPA, please see Chapter 2 of the FEIS/FEIR.

LRT vehicles would be similar to those currently used throughout the existing Metro LRT system. Metro's LRT system is designed to accommodate trains with up to three, 90-foot rail cars, for a total train length of 270 feet. Although LRT vehicles can operate at speeds of up to 65 mph in an exclusive at-grade guideway along Van Nuys Boulevard, they would not exceed the posted speed limit of the adjacent roadway, which is 35 mph. The LPA assumes a maximum speed of 65 mph when traveling within the Metro right-of-way adjacent to San Fernando Road. LRT vehicles could carry

Figure 1: LPA Alignment



Source: KOA, 2019.

approximately 230 seated passengers and up to 400 passengers when standing passengers on a three-car train are included. The LRT train sets would be configured with a driver's cab at either end, similar to other Metro light rail trains, allowing them to run in either direction without the need to turn around at the termini.

For the LPA, the proposed stations would have designs consistent with the Metro Rail Design Criteria (MRDC), including directive and standard drawings. Stations would be ADA compliant, including compliance with the requirements pertaining to rail platforms, rail station signs, public address systems, clocks, escalators, and track crossings.

Common elements would include signage, maps, fixtures, furnishings, lighting, and communications equipment. All stations would have center or side platforms, allowing passengers to access trains traveling in either direction. Typically, at-grade station platforms are 270 feet long (to accommodate three-car trains), 39 inches high (to allow level boarding and full accessibility, in compliance with the ADA), and a minimum of 12.2 feet wide for side platforms to 16 feet wide for center platform stations.

Canopies at the LRT stations would be approximately 13 feet high and would incorporate directional station lighting to enhance safety. LPA stations would include seating elements and contain ticket vending machines, variable message signs, route maps, and fare gates, as well as the name and location of the LRT station. In addition, Metro is moving to a fare gate system and such a system would be integrated into station design as appropriate.

Stations would also include bicycle parking and bike lockers at or near stations, as feasible. In addition, signage and safety and security equipment, such as closed-circuit televisions, public announcement systems, passenger assistance telephones, and variable message signs (providing real-time information), would be part of the amenities.

The LPA would require a number of additional elements to support vehicle operations, including an overhead catenary system (OCS) along the entire alignment, traction power substation (TPSS) units, communications and signaling buildings, and a maintenance and storage facility (MSF).

The MSF would provide secure storage of the LRT vehicles when they are not in operation, and regular light maintenance to keep them clean and in good operating condition as well as heavy maintenance. The MSF would accommodate both operational and administrative functions. The MSF would accommodate all levels of vehicle service and maintenance (i.e., progressive maintenance, scheduled maintenance, unscheduled repairs, warrantee service, and limited heavy maintenance) in addition to storage space for vehicles. The typical MSF would provide: interior and exterior vehicle cleaning, sanding, and inspection areas; maintenance and repair shops; storage yards for vehicles; and storage areas for materials, tools, and spare vehicle parts. The MSF would be the point of origin and termination for daily service.

MSF Option B, has been identified as the locally preferred site by the Metro Board. The MSF site would be approximately 25 acres in size. The MSF Option B site is located on the west side of Van Nuys Boulevard and is bounded by Keswick Street on the south, Raymer Street on the east and north, and the Pacoima Wash on the west. Access to the facility would be via two turnout tracks on



the west side of the alignment. A northbound turnout would be located in the vicinity of Saticoy Street. A southbound turnout would be located in the vicinity of Keswick Street.

The LPA is anticipated to operate with a 6-minute peak and 12-minute off-peak headways when it opens and is projected to operate at 5-minute peak and 10-minute off-peak once ridership begins to increase.

With implementation of the LPA, all curbside parking would be prohibited along Van Nuys Boulevard.

The number of travel lanes on Van Nuys Boulevard would be reduced from three to two lanes in each direction for the segment between the Metro Orange Line and Parthenia Street. North of that point, the LPA would maintain the two existing travel lanes in each direction to Laurel Canyon Boulevard and the existing one northbound lane and two southbound lanes along Van Nuys Boulevard from Laurel Canyon Boulevard to San Fernando Road.¹

Left turns from Van Nuys Boulevard onto cross streets would be maintained at most of the currently signalized intersections where the LRT would be running in the median. However, all vehicle movements across the median at currently unsignalized intersections would be prohibited. This would include left turns from Van Nuys Boulevard as well as left turns and through traffic from unsignalized side streets and private driveways. Motorists who desire to make a left turn onto an unsignalized cross street or into a driveway would have to make a U-turn at a signalized left-turn location or choose a route that would allow them to use a signalized cross street.

Left turns into and out of driveways would be blocked by the LRT dedicated guideway under the LPA. Only right turns into and out of minor cross streets and driveways would be allowed.

For the portion of the LPA alignment within the Metro-owned railroad right-of-way, the grade crossings at Paxton Street, Wolfskill Street, Brand Boulevard, Maclay Avenue, and Hubbard Avenue would be controlled by traditional vehicular crossing gates. The current single-track crossings would become three.

There would also be left-turn lane gates at signalized intersections along Van Nuys Boulevard where left turns are permitted across the LRT dedicated guideway. The gates would be activated whenever a train approaches the intersection to enhance safety at these locations.

There would be a pedestrian overcrossing or undercrossing at the Sylmar/San Fernando Metrolink Station from the LRT platform to the Metrolink platform.

All current crosswalks at signal-controlled intersections would be maintained. Between the signalized intersections, a barrier would be installed to prevent mid-block pedestrian crossings, as is Metro's current practice on its median-running LRT lines. Pedestrians would be required to walk to a signalized location to cross Van Nuys Boulevard. LRT passengers would reach the median station platforms from crosswalks at signalized intersections.

¹ In 2017, the City reconfigured Van Nuys Boulevard north of Laurel Canyon Boulevard to San Fernando Road to include a protected bike lane with two lanes in the south direction and one lane in the north direction.



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Bicycle parking would be provided at or near Metro stations, as feasible. The existing bike lanes, which extend approximately two miles north along Nuys Boulevard from Parthenia Street to Beachy Avenue and from Laurel Canyon Boulevard to San Fernando Road, would be removed due to right-of-way constraints.

The City of Los Angeles constructed a bicycle path within Metro's railroad right-of-way parallel to San Fernando Road. This existing Class I bike path would remain in place except in the City of San Fernando where the bike path would be relocated east in order to accommodate the relocated single Metrolink/UPRR track. The right-of-way is generally sufficiently wide enough to allow the bicycle path to remain alongside a pair of LRT tracks and a relocated track for Metrolink and the Union Pacific Railroad though some partial takes of adjacent properties would be required in the City of San Fernando. At the point where the LPA crosses the bicycle path, near the intersection of Pinney Street and San Fernando Road, a signalized grade crossing would be provided.

1.3.1 Project Phasing and an Initial Operating Segment

In order to ensure the objectives of the project are met in a timely manner and avoid delays due to the timing of funding availability, Metro is considering constructing the LPA in two phases. An Initial Operating Segment (IOS) was included in the FEIS/FEIR to enable Metro to realize potential cost savings from phasing the project and beginning work earlier on an initial segment. It should be noted that Metro is proceeding with IOS's on other projects for that reason and to specifically provide the decision-making body of Metro (the Metro Board) with flexibility in determining the most efficient and cost effective manner to implement those projects. Proceeding with an IOS for the proposed project will also allow further coordination to occur with the Public Utilities Commission (PUC) and Metrolink that will be necessary to accommodate double tracking of the Antelope Valley Line and with the City of San Fernando regarding traffic impacts at intersections in the City prior to development of the remaining northern segment of the LPA.

The first phase, or IOS, would run along the same alignment and have the same LRT design features, MSF, and operating and service characteristics as those described for the LPA; however, the IOS would only extend as far north as San Fernando Road and the proposed Van Nuys/San Fernando Station, rather than continuing 2.5 miles within the existing railroad right-of-way to the Sylmar/San Fernando Metrolink station, as would occur under the LPA. Therefore, it would have a smaller project footprint than the LPA and would include 11 stations and 11 TPSS units instead of the 14 stations and 14 TPSS units proposed under the LPA. It remains Metro's intent, however, to build the remaining northern 2.5 miles of the LPA located within the existing railroad right-of-way from the Van Nuys/San Fernando station to the Sylmar/San Fernando Metrolink station

A schedule for completing the second phase, i.e., the northern 2.5 miles, would be developed upon securing the necessary funding, resolution of ongoing discussions with the City of San Fernando regarding traffic impact issues, and obtaining necessary approvals from the Public Utilities Commission.

2 Statement of Significant Environmental Impacts and Required Findings

This section discusses the significant impacts and mitigation measures identified for the proposed project and makes findings for all significant impacts identified in the FEIS/FEIR for the LPA.

The FEIS/FEIR focused on those potential effects of the LPA on the environment that the Los Angeles County Transportation Authority (Metro), as the CEQA Lead Agency and project proponent, has determined may be significant in accordance with CEQA regulations. As described in Chapters 3 and 4 of the EIR, the proposed project could result in significant environmental impacts in the following issue areas, prior to mitigation:

- Transportation, Transit, Circulation, and Parking
- Land Use
- Visual Quality and Aesthetics
- Air Quality
- Noise and Vibration
- Geology, Soils, and Seismicity
- Hazardous Waste and Materials
- Ecosystems and Biological Resources
- Safety and Security
- Parklands and Community Facilities
- Historic, Archaeological, and Paleontological Resources

Each of the resource areas analyzed in the FEIS/FEIR is discussed in terms of:

- Description of Significant Impacts are specific descriptions of the environmental effects identified in the FEIS/FEIR as significant or potentially significant.
- *Mitigation Measures* are the proposed mitigation measures for the impacts identified as significant or potentially significant.
- Findings are the findings made in accordance with Section 21081 of CEQA. One of the three
 possible findings is made for each significant or potentially significant impact, as provided in
 Section 15091 of the CEQA Guidelines. The significance of the environmental impacts after
 mitigation is also provided.
- Rationale is a summary of the reasons for the findings.
- References are notations on the specific section in the EIR or other information source that support the findings.

2.1 Transportation, Transit, Circulation, and Parking

2.1.1 Description of Significant Impacts

Construction

Construction would occur over a period of approximately 4.5 to 5 years. The construction activity would likely be divided into separate work zones with varying levels of construction. The construction contractor would develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas. Additionally, where feasible, the construction contractor would temporarily restripe roadways including restriping turn lanes, through lanes, and parking lanes at the affected intersections to maximize the vehicular capacity at those locations affected by construction closures. A majority of construction-related travel (i.e., deliveries, hauling, and worker trips) would be scheduled during the off-peak hours.

At the start of construction within each work area, on-street parking areas would be removed for project-related construction activities and to accommodate the LRT alignment. This removal of parking would be permanent. Temporary street and lane closures may be necessary. The extent and duration of the closures would depend on a number of factors, including the construction contract limits and individual contractor's choices, and would be coordinated with the Cities of Los Angeles and San Fernando, as necessary. Restrictions on the extent and duration of the closures will be incorporated in the project construction specifications. In some cases, short-term full closures might be substituted for extended partial closures to reduce overall impacts. Community outreach to keep the public and businesses advised as to closures would be provided. Signage and access to businesses would also be provided. Additionally, traffic control officers should be placed at major intersections during peak hours to minimize delays related to construction activities.

Transit

Construction could take up to five years. The impacts on transit would be significant under CEQA due to the estimated duration and magnitude of construction activities required to relocate utilities, remove the existing roadbed, install the LRT system trackage, signals, power infrastructure, and install stations and related infrastructure.

Traffic

The construction traffic impacts would be significant under CEQA as a consequence of the estimated duration and magnitude of construction, which would include lane and street closures.

Pedestrian and Bicycle Facilities

Construction would require the permanent removal of bicycle facilities located within the work zones. This would be a significant impact under CEQA.

Operational

Traffic

Under the Existing-with-Project Scenario, the LPA would result in significant traffic impacts to the level of service (LOS)² at 16 of the 73 study intersections along the project corridor due to the reduction in the number of travel lanes and additional turn restrictions.

With implementation of the LPA, the shifts in traffic to the parallel corridors (Sepulveda and Woodman) would result in significant traffic impacts at 13 of the 51 study intersections along the parallel corridors under the Existing-with-Project scenario.

Under the Future-with-Project Scenario (Year 2040), the LPA would result insignificant traffic impacts at 20 of the 73 study intersections along the project corridor.

With the implementation of the LPA, the shifts in traffic to the Sepulveda and Woodman parallel corridors would result in significant traffic impacts at eight of the 51 study intersections under the Future-with-Project Scenario.

Pedestrian and Bicycle Facilities

Implementation of the LPA would affect existing and planned pedestrian and bicycle facilities. Project implementation would conflict with the City of Los Angeles Bicycle Plan, as designated bicycle lanes on Van Nuys Boulevard would not be feasible under the LPA. This would be a significant impact under CEQA. However, it should be noted that the City of Los Angeles General Plan Framework Element designates the corridor as a Transit Priority Segment, which conflicts with City of Los Angeles Bicycle Plan.

Cumulative

Cumulative Impacts during Construction

Construction

Under existing conditions, three of 73 study intersections operate at an unacceptable LOS of E or F. Future growth and development in the region would generate additional traffic on streets in the project corridor, which would adversely affect traffic flow and bus transit service. Although the lane or street closures required to construct the LPA would be temporary, they could, nonetheless, contribute to short-term increases in congestion for motorists and result in additional delays for bus vehicles, a potentially significant cumulative impact.

² On July 30, 2019, the City of Los Angeles adopted vehicle miles traveled (VMT) as a criterion in determining transportation impacts under CEQA. This adoption was required by SB 743 and the recent changes to Section 15064.3 of the State CEQA Guidelines. Adoption by the City Council began a transition period during which projects that already have a signed memorandum of understanding (MOU) with LADOT and have filed an application with the Department of City Planning may continue analyzing transportation impacts with LOS, as long as the project will be adopted and through any appeal period prior to the State deadline of July 1, 2020. The DEIS/DEIR and the FEIS/FEIR included analyses of the proposed project's LOS and VMT impacts. Although the LPA identified in the FEIS/FEIR would result in significant intersection impacts based on LOS thresholds, it would result in a beneficial effect by reducing VMT.



Construction of the LPA would require the permanent removal of existing bicycle facilities on Van Nuys Boulevard within Los Angeles and would conflict with planned bikeways along the length of Van Nuys Boulevard identified in the City's Bicycle Plan. Therefore, the LPA would result in a cumulatively considerable contribution to a significant cumulative project effect on bicycle facilities.

Operational

Under existing conditions, three of 73 study intersections would operate at an unacceptable level-of-service (LOS) of E or F. Because of future growth and development and the resulting increases in traffic, under future baseline (2040) conditions, 16 of the 73 study intersections would operate at unacceptable LOS of E or F, a cumulatively significant impact. The LPA would convert two mixed-flow lanes to a dedicated LRT guideway, resulting in a reduction in roadway capacity for mixed-flow traffic. As a consequence, in 2040, 19 study intersections would operate at LOS of E or F, an increase of four intersections compared to the future baseline conditions. The LPA would result in a cumulatively considerable contribution to significant cumulative traffic impacts. However, it should be noted that based on the analysis of vehicle miles travelled (VMT) and other transportation performance metrics in the FEIS/FEIR, the LPA would have a beneficial impact on VMT and regional mobility.

2.1.2 Mitigation Measures

Construction

Transit

MM-TRA-1: The Traffic Management Plan shall require Metro to communicate closures and information on any changes to bus service to local transit agencies in advance and develop detours as appropriate. Bus stops within work areas shall be relocated, with warning signs posted in advance of the closure, and warnings and alternate stop notifications posted during the extent of the closure.

Traffic

MM-TRA-2: The Traffic Management Plan shall include the following typical measures, and others as appropriate:

- Schedule a majority of construction-related travel (i.e., deliveries, hauling, and worker trips) during the off-peak hours.
- Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas.
- Where feasible, temporarily restripe roadways including turning lanes, through lanes, and
 parking lanes at the affected intersections to maximize the vehicular capacity at those locations
 affected by construction closures.
- Where feasible, temporarily remove on-street parking to maximize the vehicular capacity at those locations affected by construction closures. In these areas where street parking is temporarily removed in front of businesses, the contractor shall provide wayfinding to other

- nearby parking lots or temporary lots, with any temporary parking secured well in advance of parking being removed in the affected area.
- Place station traffic control officers at major intersections during peak hours to minimize delays related to construction activities.
- Assign a Construction Relations team inclusive of a manager, senior officers, and social media strategist to develop and implement the Metro Board's adopted Construction Relations model.
 The team will conduct the outreach program to inform the general public about the construction process, planned roadway closures, and anticipated mitigations through community briefings in public meeting spaces and use of signage (banners, etc.).
- Develop and implement a program with business owners to minimize effects to businesses during construction activities, including but not limited to signage, Eat, Shop, Play, and promotional programs.
- Consult and seek input on the designation and identification of haul routes and hours of operation for trucks with the local jurisdictions, school districts, and Caltrans. The selected routes should minimize noise, vibration, and other effects.
- To the extent practical, maintain traffic lanes in both directions, particularly during the morning and afternoon peak hours.
- Maintain access to adjacent businesses and schools (including passenger loading areas for parents dropping off students) via existing or temporary driveways or loading zones throughout the construction period.
- Coordinate potential road closures and detour routes and other construction activities that could adversely affect vehicle routes in the immediate vicinity of local schools with local school districts.
- Install and maintain appropriate traffic controls (signs and signals) to ensure vehicular safety.

Pedestrian and Bicycle Facilities

MM-TRA-3: To ensure potential impacts on pedestrian and bicycle facilities are minimized to the extent feasible, the Traffic Management Plan and Traffic Control Plan shall include the following:

- Bicycle detour signs shall be provided, as appropriate, to route bicyclists away from detour areas with minimal-width travel lanes and onto parallel roadways.
- Sidewalk closure and pedestrian route detour signs shall be provided, as appropriate, that safely
 route pedestrians around work areas where sidewalks are closed for safety reasons or for
 specific construction work within the sidewalk area. In addition, the project contractor shall
 ensure appropriate "Open during Construction," wayfinding, and promotional signage for
 businesses affected by sidewalk closures is provided and access to these businesses is
 maintained.

Operational

Traffic

MM-TRA-4: During the Preliminary Engineering phase of the project, Metro will work with the Cities of Los Angeles and San Fernando to synchronize and coordinate signal timing and to optimize changes in roadway striping to minimize potential operational traffic impacts and hazards to the extent feasible.

Pedestrian and Bicycle Facilities

MM-TRA-5: Additional visual enhancements, such as high-visibility crosswalks that meet current LADOT design standards, to the existing crosswalks at each proposed station location shall be implemented to further improve pedestrian circulation.

MM-TRA-6: To further reduce potential adverse and less-than-significant pedestrian impacts, Metro shall prepare a First/Last Mile study that documents preferred pedestrian access to each station, general pedestrian circulation in the immediate vicinity of the station, and potential sites for connections to nearby bus services. The purpose of this study shall include ensuring sufficient circulation, access, and information important to users of the transit system. The results of the study shall be implemented through coordination between Metro and the local jurisdictions of the City of Los Angeles and the City of San Fernando.

MM-TRA-7: To reduce the potential impacts due to removal of the existing bike lanes extending approximately 2 miles north on Van Nuys Boulevard from Parthenia Street to Beachy Avenue and from Laurel Canyon Boulevard to San Fernando Road, two parallel corridors have been identified for consideration and approval by the Los Angeles Department of Transportation (LADOT) as bike friendly corridors. These include Filmore Street to the west and Pierce Street to the east, which can be developed as Class III Bike Friendly streets by striping sharrows and providing signage. Metro shall also continue to work with LADOT to identify, to the extent feasible, replacement locations for Class II bike lanes that meet the goals and policies in the City of Los Angeles Bicycle Plan.

2.1.3 Findings

For the above impacts to Transportation, the following finding is made:

Changes or alterations have been required in, or incorporated into, the project to avoid or
substantially lessen the significant environmental effect as identified in the FEIS/FEIR.
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
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 FEIS/FEIR.



The potential Transportation impacts due to the proposed project are found to be.						
\boxtimes	Significant		Not Significant			

2.1.4 Rationale

Project construction would result in significant construction impacts on transit, traffic, and bicycle facilities, and less-than-significant impacts pedestrian facilities. Project operation would result in significant bicycle facilities and traffic impacts, and less-than-significant impacts on pedestrian facilities after implementation of proposed mitigation measures. Impacts on local transit would be less than significant but beneficial on overall regional transit service.

2.1.5 References

Chapter 3 Transportation, Transit, Circulation and Parking of the FEIS/FEIR describes the project's transportation, transit, circulation and parking impacts and identifies proposed feasible mitigation measures. Also, please note that mitigation measure MM-TRA-2 above incorporates revisions made in response to comment letter AL10 (see Appendix A1 to the FEIS/FEIR) from the Los Angeles Unified School District (see Appendix A2 for the responses to comment letter AL10).

2.2 Land Use

2.2.1 Description of Significant Impacts

Construction

Construction activities along the alignment would result in temporary nuisance impacts (e.g., noise, air quality impacts) on nearby land uses. Construction noise would result from the use of heavy equipment during construction activities, such as excavation, grading, ground clearing, and installing foundations and structures, as well as from trucks hauling materials to and from the construction areas. Air quality impacts would result from the generation of fugitive dust during ground disturbing activities, and from the operation of heavy-duty, diesel-fueled equipment, such as bulldozers, trucks, and scrapers. Additionally, construction staging areas would be established near the project alignment and used for equipment and material storage. The staging areas would be located within the right-of-way, parking lots, or on vacant land and would not require land from adjacent properties. No land acquisitions would be required for construction staging areas. Nonetheless, activities at the construction staging areas, similar to other construction activities along the alignment, would result in nuisance impacts on nearby sensitive land uses (e.g., residential, parks, schools, hospitals). Where temporary construction impacts on nearby land uses are determined to be significant (e.g., noise impacts), the land use incompatibility impacts would also be considered to be significant. Therefore, the construction impacts on nearby sensitive land uses would be potentially significant under CEQA, due to impacts exceeding the applicable CEQA thresholds and would be incompatible with existing land use plans and codes, before mitigation.

Operational

Under the LPA, significant traffic impacts would occur at 20 of 73 study intersections along the corridor. Since the LPA would result in localized traffic impacts, it would not fully achieve the congestion reduction objective specified in the City of Los Angeles General Plan, Transportation Element (Objective 2: To mitigate the impacts of traffic growth, reduce congestion, and improve air quality by implementing a comprehensive program of multimodal strategies that encompass physical and operational improvements as well as demand management). Though the LPA would not reduce congestion, the LPA would not conflict with the remainder of that objective. In addition, the LPA would conflict with an objective and policy in the City of Los Angeles General Plan, Air Quality Element (Objective 3.2. It is the objective of the City of Los Angeles to reduce traffic during peak periods; and Policy 3.2.1. Manage traffic congestion during peak periods). Therefore, the LPA, because of its localized traffic impacts, would conflict with local land use plan policies or objectives to reduce congestion, which would be a significant impact under CEQA.

Under the LPA, the existing Class II bike lanes on Van Nuys Boulevard north of Parthenia Street would be removed to make room for the LRT tracks. These changes would conflict with the City's Bicycle Plan because designated bicycle lanes on Van Nuys Boulevard, which are included as part of the Backbone Bicycle Network, would not be feasible with the implementation of the LPA. Although this conflict would occur, it should be noted that the Van Nuys Boulevard corridor is also designated a Transit Priority Segment within the City of Los Angeles General Plan Framework Element. Also, the City's proposed Mobility Element 2035 of the General Plan states in Section 2.9 that on a street that is designated as a Transit Enhanced Network, but is also intended to receive a bicycle lane, design elements for the transit can take precedence over the provision of a bicycle lane. Additionally, the City's Bicycle Plan includes planned bicycle lanes on Woodman Avenue (one-mile to the east of and parallel to Van Nuys Boulevard) between Ventura Boulevard and the Osborne Street and Nordhoff Street corridors. Bicycle lanes are also planned to connect the Osborne Street corridor to San Fernando Road. In addition, bicycle accommodations would be provided at LRT stations and on LRT trains, where feasible. Therefore, while Class II bicycle lanes along Van Nuys Boulevard would not be possible under the LPA, the ability for bicyclists to access areas in the project corridor would be retained, and the project would achieve other local planning goals of reducing reliance on the automobile and increasing transit ridership.

The LPA could also result in localized noise and vibration impacts due to the LRT vehicles operating on local roadways. Because the alignment would run in proximity to residential and recreation areas, sensitive receptors could be adversely affected by these impacts, which would conflict with an objective in the City of Los Angeles General Plan, Noise Element (Objective 2: Reduce or eliminate nonairport related intrusive noise, especially relative to noise sensitive uses). To the extent that the LPA results in other significant adverse environmental impacts, it would further conflict with any local land use plan goals and policies intended to minimize those environmental impacts. Therefore, given those potential conflicts and those discussed above, the potential impacts under CEQA are considered to be significant.

Cumulative

The LPA would result in localized traffic impacts at 20 of the 73 study intersections along the corridor. Operation of the LRT facilities would also generate additional noise that could result in noise impacts on some nearby sensitive land uses. Past projects have resulted in localized traffic and noise impacts, and other present or reasonably foreseeable future projects in the area could further degrade traffic and noise conditions in the area. Therefore, cumulative impacts from past, present, and reasonably foreseeable future projects are significant. As a result, any adverse land use impacts from the LPA due to traffic and noise impacts would be considered cumulatively considerable. However, because noise impacts resulting from the LPA would be minimized or mitigated through mitigation measures, as identified in sections 4.8, Noise and Vibration, the alternative's contribution to cumulative noise impacts during operation would be reduced to less than cumulatively considerable after implementation of mitigation measures.

2.2.2 Mitigation Measures

Compliance Design Requirements and Design Features

Station areas for the LPA would be designed in accordance with local codes and ordinances.

Construction Mitigation Measures

The reader is referred to the respective air quality and noise mitigation measures in Sections 2.2 and 2.9, respectively of this document.

Operational Mitigation Measures

The reader is referred to the operational noise mitigation measures in Section 2.9 of this document.

No feasible mitigation measures have been identified to mitigate the localized traffic impacts that would occur under this alternative, which would conflict with land use plan policies and goals to reduce congestion.

2.2.3 Findings

For the above impacts to Land Use, the following findings are made:

⊠ substar	Changes or alterations have been required in, or incorporated into, the project to avoid or ntially lessen the significant environmental effect as identified in the FEIS/FEIR.
• .	Such changes or alterations are within the responsibility and jurisdiction of another public and not the agency making the finding. Such changes have been adopted by such other or can and should be adopted by such other agency
	Specific economic, legal, social, technological, or other considerations, including provision of ment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the FEIS/FEIR.



The potential Land Use impacts due to the proposed project are found to be.					
\boxtimes	Significant		Not Significant		

2.2.4 Rationale

Proposed mitigation measures would reduce construction impacts to be less than significant under CEQA. The LPA operational impacts, because of its localized traffic impacts, would conflict with local land use plan policies or objectives to reduce congestion and would be significant and unavoidable. The removal of Class II bike lanes would also conflict with local land use plan policies. Although mitigation measure MM-TRA-7 (see above) is proposed. Impacts could still be significant after implementation of this measure. No additional feasible mitigation measures have been identified that would reduce these operational impacts to a less-than-significant level. However, it should also be noted that the LPA would provide regional transportation benefits by improving access to transit, increasing transit ridership, and reducing vehicle miles and hours traveled.

2.2.5 References

Section 4.1 of the EIR describes the LPA's land use impacts. Section 4.8, Noise and Vibration and Section 4.6, Air Quality of the EIR describe the impacts of the LPA on sensitive land uses along the corridor.

2.3 Visual Quality and Aesthetics

2.3.1 Description of Significant Impacts

Construction

Construction of the LPA could result in temporary visual impacts within and surrounding the project corridor due to the use of construction lighting, which could spill over onto adjacent properties and could result in glare that could adversely affect the clarity of nighttime views in the area; the presence of large equipment such as cranes and associated vehicles including bulldozers, backhoes, graders, scrapers, and truck; and the storage of construction materials in staging areas, which could be visible from public streets, sidewalks, and adjacent properties.

Construction activities would also require the removal of vegetation, including street trees (e.g., the landmark rows of palm trees along Van Nuys Boulevard in the Van Nuys Civic Center), which could significantly affect visual character and quality along the project corridor.

Operational

Impacts on scenic vistas, such as views of distant mountains, scenic resources, such as existing trees, vegetation, and historic buildings, and visual character would be significant under CEQA because the vertical elements proposed under the LPA such as the OCS, TPSS, a pedestrian bridge at the Sylmar/San Fernando Metrolink station (if constructed), as well as the MSF could obstruct or



diminish views and adversely visual quality substantially detract from existing views. The OCS, in particular, would substantially affect existing views of scenic vistas and resources because of their height, approximately 30 feet tall and the fact they would be located every 90 to 170 feet along the 9.2 miles of LRT tracks.

Cumulative

Construction activities associated with past, present, and reasonably foreseeable future projects that would result in visual impacts due to the presence of construction equipment and materials, would be less than significant because they would be temporary and impacts could be further minimized or mitigated through mitigation measures. Although construction of the LPA could also result in similar construction impacts and contribute to adverse cumulative impacts, because the impacts would be temporary and minimized by the proposed mitigation measures identified below, impacts during construction would not be cumulatively considerable.

Construction activities due to past, present, and reasonably foreseeable future projects that would result in the removal of or damage to scenic resources, including trees or other vegetation, could result in significant cumulative visual impacts. The removal of trees and vegetation due to construction of the LPA would contribute to those significant cumulative impacts. However, mitigation measures as identified below would reduce the project's contribution to potential cumulative impacts to less than significant.

During operation, the LPA would result in potentially significant operational visual impacts on sensitive viewer groups. Past projects have resulted in a highly urbanized landscape along the project corridor from the construction of buildings, transportation infrastructure, and other structures that have adversely affected scenic vistas, scenic resources, and visual character and quality. In addition, other present or reasonably foreseeable future projects in the area could further degrade the visual character and quality of the area. Therefore, cumulative impacts from past, present, and reasonably foreseeable future projects are significant. As a result, any adverse impacts from the LPA would be considered cumulatively considerable.

2.3.2 Mitigation Measures

Compliance Design Requirements and Design Features

The LPA would be designed in accordance with local codes and ordinances. This would include visual and aesthetic elements including siting and height restrictions, structure scale, streetscaping features, and landscape design.

Construction Mitigation Measures

MM-VIS-1: Construction staging shall be located away from residential and recreational areas and shall be screened to minimize visual intrusion into the surrounding landscape. The screening shall be a height and type of material that is appropriate for the context of the surrounding land uses. There shall be Metro-branded community-relevant messaging on the perimeter of the

construction staging walls. Lighting within construction areas shall face downward and shall be designed to minimize spillover lighting into adjacent properties.

MM-VIS-2: Vegetation removal shall be minimized and shall be replaced following construction either in-kind or following the landscaping design palette for the project, which would be prepared in consultation with the Cities of Los Angeles and San Fernando, including the City Tree Removal Policy and replacement ratio.

MM-VIS-3: Scenic resources, including landscape elements such as rows of palm trees (along Van Nuys Boulevard) or mature trees (along San Fernando Road) and uniform lighting, shall be preserved, where feasible.

Operational Mitigation Measures

The following measures are recommended to minimize potential impacts:

MM-VIS-4: Lighting associated with the project shall be designed to face downward and minimize spillover lighting into adjacent properties, in particular residential and recreational properties.

MM-VIS-5: Infrastructure elements shall be designed with materials that minimize glare.

2.3.3 Findings

For the abov	ve impacts to visual Quality and <i>P</i>	restnetic, the	tollowing findings are made:
	_		or incorporated into, the project to avoid mental effect as identified in the FEIS/FEIR.
	· ·	y making the	sponsibility and jurisdiction of another finding. Such changes have been adopted lopted by such other agency
		unities for hi	or other considerations, including ghly trained workers, make infeasible the lentified in the FEIS/FEIR.
The potentia	al Visual Quality and Aesthetic im	pacts due to	the proposed project are found to be.
	Significant		Not Significant

2.3.4 Rationale

The potential construction impacts that could result in visual impacts within and surrounding the project corridor would be less than significant after implementation of proposed mitigation measures.



The potential operational impacts due to introduction of structures and vertical elements including the OCS would be significant. No feasible measures have been identified that would reduce impacts to a less-than-significant level.

2.3.5 References

Section 4.5, Visual Quality and Aesthetics, of the EIR describes the LPA's impacts on aesthetics and visual quality and identifies feasible mitigation measures.

2.4 Air Quality

2.4.1 Description of Significant Impacts

Construction

Project construction under the LPA would result in the short-term generation of criteria pollutant emissions. Emissions would include: (1) fugitive dust generated from curb/pavement demolition, site work, and other construction activities; (2) hydrocarbon (ROG) emissions related to the application of architectural coatings and asphalt pavement; (3) exhaust emissions from powered construction equipment; and (4) motor vehicle emissions associated with construction equipment, worker commute, and debris-hauling activities. Estimated worst-case regional construction emissions would exceed the SCAQMD regional emissions thresholds for reactive organic gases (ROG) and nitrogen oxides (NOx) and localized construction mass emissions would exceed SCAQMD thresholds for NOx and fine particulate matter (PM₁₀ and PM_{2.5}), which would be a significant impact.

2.4.2 Mitigation Measures

Compliance Design Requirements and Design Features

The project would comply with all applicable SCAQMD Rules, which include Rule 403 (fugitive dust), Rule 431.2 (sulfur content of liquid fuels) and Rule 1113 (architectural coatings), among other rules.

Construction Mitigation Measures

The following measures are prescribed and shall be implemented to reduce short-term construction emissions that exceed SCAQMD significance thresholds:

MM-AQ-1: Construction vehicle and equipment trips and use shall be minimized to the extent feasible and unnecessary idling of heavy equipment shall be avoided.

MM-AQ-2: Solar powered, instead of diesel powered, changeable message signs shall be used.

MM-AQ-3: Electricity from power poles, rather than from generators, shall be used where feasible.

MM-AQ-4: Engines shall be maintained and tuned per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies. Periodic,



unscheduled inspections shall be conducted to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.

MM-AQ-5: Any tampering with engines shall be prohibited and continuing adherence to manufacturer's recommendations shall be required.

MM-AQ-6: New, clean (diesel or retrofitted diesel) equipment meeting the most stringent applicable federal or state standards shall be used and the best available emissions control technology shall be employed. Tier 4 engines shall be used for all construction equipment. If non-road construction equipment that meets Tier 4 engine standards is not available, the Construction Contractor shall be required to use the best available emissions control technologies on all equipment.

MM-AQ-7: EPA-registered particulate traps and other appropriate controls shall be used where suitable to reduce emissions of diesel particulate matter (PM) and other pollutants at the construction site.

MM-AQ-8: Consistent with South Coast Air Quality Management District Rule 1113, all architectural coatings for building envelope associated with the project shall use coatings with a Volatile Organic Compound content of 50 grams per liter or less.

MM-AQ-9: The Design-Builder shall implement feasible means and methods that would minimize cumulative air quality impacts during the construction period, including, but not limited to, the following:

- 1. Timing project-related construction activities associated with the MSF, stations, and track installation such that overlapping schedules are minimized.
- 2. Timing project-related construction activities so that overlapping schedules with other projects in the area are avoided.
- 3. Reducing the number of pieces of diesel-fueled equipment used at a given time when construction activities occur in the vicinity of sensitive receptors, such as residences, schools, parks, hospitals, and nursing homes.

2.4.3 Findings

For the above impacts to air quality, the following findings are made:

Changes or alterations have been required in, or incorporated into, the project to avoid or substantially lessen the significant environmental effect as identified in the FEIS/FEIR.
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.



	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 FEIS/FEIR.			
The potenti	al air quality impacts due to the p	roposed proje	ect are found to be.	
\boxtimes	Significant		Not Significant	

2.4.4 Rationale

Construction of the LPA would result in the emission of ROGs and NOx in excess of regional thresholds. ROG and NOx emissions would be reduced below the regional thresholds following the implementation of mitigation measures. Construction of the LPA would exceed the LSTs for PM10 and PM2.5 after the implementation of mitigation measures, which would be an unavoidable significant impact. No additional feasible mitigation measures have been identified to reduce PM_{10} and $PM_{2.5}$ to a less-than-significant impact.

2.4.5 References

Section 4.6, Air Quality, of the EIR describes the LPA's impacts on air quality and identifies proposed feasible mitigation measures.

2.5 Noise and Vibration

2.5.1 Description of Significant Impacts

Construction

Noise from construction of the LPA would result in a significant impact. Construction of the LPA would require the use of heavy earth-moving equipment, pneumatic tools, generators, concrete pumps, and similar equipment. The predicted noise level from a typical 8-hour work-shift is 87 dBA (8-hour L_{eq}) at 50 feet, which is about 15 to 20 decibels higher than the ambient noise level.

Many construction activities, such as pavement breaking and the use of tracked vehicles such as bulldozers could result in noticeable levels of ground-borne vibration. These activities would be limited in duration and vibration levels are likely to be well below thresholds for minor cosmetic building damage. However, the predicted vibration levels for equipment that produces the highest levels of vibration, such as a vibratory roller, is about equal to the construction vibration CEQA significance threshold for non-engineered and timber masonry buildings at a distance of 25 feet.

Operational

Changes in noise levels as a result of the LPA would occur as a result of the introduction of light rail vehicles and a decrease in the volume of buses. The predicted noise levels would exceed the CEQA significance thresholds at eight clusters of residences. Moderate noise impacts are predicted at an additional 67 clusters of sensitive receivers, which extend along much of Van Nuys Boulevard. TPSSs



are the only ancillary equipment associated with the LPA that have the potential to cause noise impacts. Noise impact is predicted to occur at ten clusters of sensitive receivers, which are all located within 20 feet of a TPSS site.

The predicted vibration levels from LRT trains would exceed the CEQA significance threshold at 24 clusters of residential receivers and two institutional land use areas. There are a total of 705 residential units within the clusters of sensitive receivers where vibration impacts are predicted:

Van Nuys Boulevard between Parthenia Street and Woodman Avenue. Vibration propagation
measurements show that there is very efficient vibration propagation through this area, where
multifamily residences line both sides of Van Nuys Boulevard. Vibration levels are predicted to
exceed the residential threshold level by 5 decibels.

Traditional crossovers can increase vibration levels by up to 10 dB at nearby receivers. Due to the close proximity of receivers to the alignment, predicted vibration levels assume the use of low-impact devices such as spring or conformal frogs, which increase vibration levels less dramatically, by around 5 dB. Without the low-impact frogs, impacts are predicted at 6 additional residential and 2 additional institutional locations. Assuming the use of low-impact frogs, predicted vibration impacts remain at two crossover locations:

- Van Nuys Boulevard and Osborne Street. This crossover increases vibration levels for
 multifamily residences on the east and west sides of Van Nuys Boulevard. The predicted
 vibration levels exceed the limit by up to 4 dB at these receivers.
- Van Nuys Boulevard and Canterbury Avenue. The crossover to the in-line siding track at this
 location is predicted to increase vibration levels for the two multifamily residential buildings
 north of Van Nuys Boulevard, and a cluster of single-family residences east of Canterbury
 Avenue and south of Van Nuys Boulevard. Vibration levels exceed the limit by up to 4 dB at these
 receivers.

Cumulative

Construction Impacts

The residual increases in noise levels due to the LPA, when combined with increased noise generated by other sources or projects in the vicinity of the project study area, could result in adverse cumulative noise impacts. The significance of cumulative noise impacts would depend on the locations of other proposed projects and potential sources of noise and the extent to which they would increase noise levels within the project study area during construction of the LRT. Although it's not possible to predict with certainty what future projects would contribute to cumulative noise levels and to quantify the increase in noise levels; nonetheless, because the construction noise levels associated with the LPA could increase ambient noise levels by as much as 15 to 20 decibels, the project's contribution would be cumulatively considerable over the temporary construction period.

Because vibration impacts are evaluated based on single-event levels, the fact that the cumulative vibration impacts project study area is limited to within 50 feet of project construction activities, and because mitigation measures would reduce vibration generated by the LPA's construction activities to a less-than-significant level, the probability is very low that a project construction activity and

another single-event activity would occur simultaneously and in very close proximity and would result in a significant cumulative impact. Therefore, during construction, the proposed LPA and other projects are not expected to result in significant cumulative vibration impacts on sensitive uses within the project study area.

Operational Impacts

Because roadway noise is the primary source of existing noise in the corridor, increases in roadway traffic volumes over time due to cumulative growth and development could also increase ambient noise levels in the area. However, future increases in roadway traffic are expected to result in a less than 1-decibel increase in community noise levels. The estimated increase in noise from the LRT, however, would be significant. Consequently, the cumulative impacts due to operational noise from the LPA and roadway traffic would be significant. However, proposed mitigation measures would reduce the operational noise impacts to a less-than-significant level; therefore, the noise impacts from the LPA would not be cumulatively considerable after mitigation.

A possibly significant source of noise along the San Fernando Road portion of the corridor is the proposed Brighton to Roxford double track commuter rail project. If the double track commuter rail project were constructed in the Metro owned railroad right-of-way along San Fernando Road, it would likely result in a significant noise impact and require noise mitigation. However, it is not known whether commuter rail noise impacts could be mitigated to a less-than-significant level. Therefore, although the potential increase in noise levels along San Fernando due to the LPA would be less than significant after mitigation, remaining noise due to the LPA, when combined with other future sources of noise along San Fernando Road, such as the double track project, would be cumulatively considerable or significant.

Because vibration impact is evaluated based on single-event levels and because it is unlikely that a LRT vehicle and other potential vibration sources would simultaneously pass by a vibration-sensitive use within 150 feet, operation of the LPA is not expected to result in significant cumulative vibration impacts.

2.5.2 Mitigation Measures

Construction Mitigation Measures

Construction noise impacts can be reduced with operational methods, scheduling, equipment choice, and acoustical treatments. The following best-practice noise mitigation measures shall be implemented to minimize annoyance from construction noise:

MM-NOI-1a: Specific measures to be employed to mitigate construction noise impacts shall be developed by the contractor and presented in the form of a Noise Control Plan. The Noise Control Plan shall be submitted for review and approval before the beginning of construction noise activities.

MM-NOI-1b: The contractor shall adequately notify the public of construction operations and schedules no less than 72 hours in advance of construction through a construction notice with confirmed details and a look-ahead briefing several weeks in advance.

MM-NOI-1c: If a noise variance from Section 41.40(a) of the Los Angeles Municipal Code is sought for nighttime construction work, a noise limit shall be specified. The contractor shall employ a combination of the noise-reducing approaches listed in MM-NOI-1d to meet the noise limit.

MM-NOI-1d: Where feasible, the contractor shall use the following noise-reducing approaches:

- The contractor shall use specialty equipment with enclosed engines and/or highperformance mufflers.
- The contractor shall locate equipment and staging areas as far from noise-sensitive receivers as possible.
- The contractor shall limit unnecessary idling of equipment.
- The contractor shall install temporary noise barriers to enclose stationary noise sources, such as compressors, generators, laydown and staging areas, and other noisy equipment.
- The contractor shall reroute construction-related truck traffic away from residential buildings to the extent practicable.
- The contractor shall sequence the use of equipment so that simultaneous use of the loudest pieces of equipment is avoided as much as practicable.
- The contractor shall avoid the use of impact equipment and, where practicable, use non-impact equipment. Non-impact equipment could include electric or hydraulic-powered equipment rather than diesel and gasoline-powered equipment where feasible.
- The contractor shall use portable noise control enclosures for welding in the construction staging area.
- The contractor shall use lined or covered storage bins, conveyors, and chutes with noise-deadening material for truck loading and operations.
- Contractor shall use strobe lights or other OSHA-accepted methods rather than back-up alarms during nighttime construction.

MM-VIB-1: Where equipment, such as a vibratory roller, that produces high levels of vibration is used near buildings, the Construction Vibration Control Plan shall also include mitigation measures to minimize vibration impact during construction. Recommended construction vibration mitigation measures that shall be considered and implemented where feasible include:

- The contractor shall minimize the use of tracked vehicles.
- The contractor shall avoid vibratory compaction.
- The contractor shall monitor vibration levels near sensitive receivers during activities that generate high vibration levels to ensure thresholds are not exceeded.



Operational Mitigation Measures

Predicted noise levels exceed the CEQA significance thresholds at eight clusters of sensitive receivers. The clusters of sensitive receivers are located near curves in the track alignment, the intersection of Van Nuys Boulevard and San Fernando Road where a row of buildings would be removed, and the intersection of Van Nuys Boulevard and Vesper Avenue. The following measures will be incorporated:

MM-NOI-2a: A sound wall shall be constructed at the northern edge of the alignment where the LRT curves to transition between Van Nuys Boulevard and San Fernando Road, in the area bounded by Pinney Street, El Dorado Avenue, Van Nuys Boulevard, and San Fernando Road. The sound wall shall be constructed to mitigate the increase in traffic noise levels that would result from removing the row of buildings in this area. Sound walls shall be constructed in such a fashion as to not impair the Train Operator vision triangle –sightlines.

MM-NOI-2b: Friction control shall be incorporated into the design for the curves at Van Nuys Boulevard/San Fernando Road, Van Nuys Boulevard/El Dorado Boulevard, and Van Nuys Boulevard/Vesper Avenue. Friction control may consist of installing lubricators on the rail or using an onboard lubrication system that applies lubrication directly to the wheel.

Noise impacts are also predicted near ten of the proposed TPSS sites. The measures to mitigate noise from the TPSS units are:

MM-NOI-3a: The following noise limit shall be included in the purchase specifications for the TPSS units: TPSS noise shall not exceed 50 dBA at a distance of 50 feet from any part of a TPSS unit.

MM-NOI-3b: The TPSS units shall be located within the parcel as far from sensitive receivers as feasible. If possible, the cooling fans shall be oriented away from sensitive receivers.

MM-NOI-3c: If necessary, a sound enclosure shall be built around the TPSS unit to further reduce noise levels at sensitive receivers to below the applicable impact threshold.

Predicted vibration levels could be reduced to below the CEQA significance thresholds at all sensitive receivers with traditional floating slab track and use of low-impact frogs. A floating slab consists of a concrete slab supported by rubber or steel springs. Floating slab is the most expensive vibration mitigation measure; however, it provides the most reduction in vibration levels. Further investigation may show that vibration levels could be reduced to below the applicable thresholds with a less expensive option, such as a continuous mat floating slab. Low-impact frogs such as conformal frogs and spring frogs result in a smoother transition over the gaps, reducing noise and vibration levels. Conformal frogs smooth the transition through wing slopes which match the wheel profile, and spring frogs use a spring-loaded mechanism. A moveable point frog includes a signal mechanism which allows trains running on the mainline to avoid any gaps in the rail, eliminating the noise and vibration impact of the special trackwork. Moveable point frogs are required mitigation measures in areas where other low-impact frogs do not provide enough vibration reduction.

MM-VIB-2a: Metro shall complete additional vibration analysis to confirm the locations where vibration levels would exceed NEPA significance thresholds as defined in the FTA (2018) *Transit Noise and Vibration Impact Assessment* guidance manual. Where exceedances would occur, the contractor shall employ methods to reduce vibration to levels below applicable thresholds. A floating-slab track, a continuous-mat floating slab, or a vibration-isolated embedded track system, such as QTrack, or other feasible measures, could be considered.

MM-VIB-2b: The contractor shall install moveable point frogs at the crossovers on Van Nuys Boulevard/Osborne Street and at Van Nuys Boulevard/Canterbury Avenue. If further investigation confirms that an alternative low-impact frog would reduce vibration levels below the applicable thresholds, the alternative may be installed.

MM-VIB-2c: Low-impact frogs such as conformal frogs or spring frogs shall be used at all crossovers and turnouts not covered under MM-VIB-2b. Traditional crossovers may be used in locations where analysis shows vibration levels will not exceed the applicable thresholds at nearby sensitive receivers.

For the above impacts to Noise and Vibration, the following findings are made:

2.5.3 Findings

\boxtimes		•	or incorporated into, the project to avoid
	or substantially lessen the significan	t environm	ental effect as identified in the FEIS/FEIR.
	•	aking the f	onsibility and jurisdiction of another inding. Such changes have been adopted pted by such other agency
	Specific economic, legal, social, tech provision of employment opportunimitigation measures or project alternatives.	ties for hig	nly trained workers, make infeasible the
The potentia	al Noise and Vibration impacts due to	the propo	sed project are found to be.
\boxtimes	Significant		Not Significant

2.5.4 Rationale

The noise and vibration from construction of the LPA would be temporary; however, due to the increase in noise levels above ambient levels, the LPA would still result in significant and unavoidable impacts, even with implementation of proposed mitigation measures.

The noise and vibration from operation of the LRT would result in less-than-significant impacts with implementation of proposed mitigation measures.

2.5.5 References

Section 4.8 Noise and Vibration of the EIR describes the LPA's noise and vibration impacts and identifies proposed feasible mitigation measures.

2.6 Geology, Soils, and Seismicity

2.6.1 Description of Significant Impacts

Operational

On the north end of the alignment, the proposed pedestrian bridge or underpass for the Sylmar/San Fernando Metrolink Station is located within an Alquist-Priolo Geologic Hazards Zone (APEFZ) (see Figure 4.9-1 in the FEIS/FEIR). In addition, the Pacoima Wash Bridge on San Fernando Road is located in the City of Los Angeles FRSA (see Figure 4.9-1). If further studies indicate that there is a potential for fault rupture at the proposed Sylmar/San Fernando Metrolink Station pedestrian crossing and/or the Pacoima Wash Bridge on San Fernando Road, the fault rupture hazards to these project facilities could be significant.

Other project structures along the alignment including the Pacoima Channel Bridge, traffic and pedestrian signs, and train stop canopies would be subject to strong seismic ground shaking and could pose a hazard to riders and passers-by. In addition, the proposed catenary wires, traffic and pedestrian signs, and train stop canopies south of Vanowen Street would be subject to potential liquefaction hazards. The catenary wires would move during a seismic event and the system, like other light rail systems currently operated by Metro, would need to be inspected prior to continuing service.

Cumulative

Cumulative impacts could occur if subsurface excavations under the LPA and other nearby projects result in ground and differential settlement that could affect adjacent properties. However, the LPA includes mitigation measure MM-GEO-2. Compliance with mitigation measures, regulatory requirements, and design features would minimize impacts and as a consequence, the LPA would not result in a cumulatively considerable contribution to a significant cumulative impact on ground and differential settlement. Therefore, compliance with proposed design and mitigation measures would reduce potential impacts to a less-than-significant level.

2.6.2 Mitigation Measures

Compliance Design Requirements and Design Features

Construction and design would be performed in accordance with Metro's Design Criteria, the latest federal and state seismic and environmental requirements, and state and local building codes.

Operational Mitigation Measures

To reduce and minimize potential geologic hazards to project facilities and operations, the following Metro standard design criteria shall be implemented according to the *Metro Rail Design Criteria*, 2012.

MM-GEO-1: Metro design criteria require probabilistic seismic hazard analyses (PSHA) to estimate earthquake loads on structures. These analyses take into account the combined effects of all nearby faults to estimate ground shaking. During Final Design, site-specific PSHAs shall be used as the basis for evaluating the ground motion levels along the project corridor. The structural elements of the proposed project shall be designed and constructed to resist or accommodate appropriate site-specific estimates of ground loads and distortions imposed by the design earthquakes and conform to Metro's *Design Standards for the Operating and Maximum Design Earthquakes*. The concrete structures are designed according to the *Building Code Requirements for Structural Concrete* (ACI 318) by the American Concrete Institute.

MM-GEO-2: At liquefaction or seismic settlement prone areas, evaluations by geotechnical engineers shall be performed during Final Design to provide estimates of the magnitude of the anticipated liquefaction or settlement. Based on the magnitude of evaluated liquefaction, either structural design, or ground improvement (such as deep soil mixing) or deep foundations to non-liquefiable soil (such as drilled piles) measures shall be selected. Site-specific design shall be selected based on State of California guidelines and design criteria set forth in the *Metro Seismic Design Criteria*.

2.6.3 Findings

For the above impacts to Geology, the following findings are made:

\boxtimes	· ·	•	or incorporated into, the project to avoid mental effect as identified in the FEIS/FEIR
	•	y making the	ponsibility and jurisdiction of another finding. Such changes have been adopted opted by such other agency
		unities for hi	or other considerations, including ghly trained workers, make infeasible the entified in the FEIS/FEIR.
The potentia	al Geology impacts due to the pro	posed projec	t are found to be.
	Significant	\boxtimes	Not Significant

2.6.4 Rationale

Impacts would be less than significant under CEQA after implementation of the mitigation measures identified above.



2.6.5 References

Section 4.9, Geology, Soils, and Seismicity, of the EIR describes the LPA's geotechnical impacts and identifies proposed feasible mitigation measures.

2.7 Hazardous Waste and Materials

2.7.1 Description of Potential Impacts

Construction

Construction of proposed improvements may encounter hazardous materials during grading and excavation within the right-of-way. The Environmental Site Assessment (ESA) prepared in support of the FEIS/FEIR indicated that in or adjacent to the project right-of-way, there are potential instances of leaking underground storage tanks (LUSTs) and hazardous substances from industrial activities. In addition, it is likely that lead and arsenic may have been deposited within the soil along the project alignment and may occur at hazardous levels. Dust created from construction activities may contain hazardous contaminants. Construction equipment contains fuel, hydraulic oil, lubricants, and other hazardous materials, which could be released accidentally during operation of the equipment.

The LPA also includes MSF and TPSS facilities. The ESA indicated historical land usage as auto repair facilities, waste transfer facilities, manufacturing, and other industrial purposes at the potential properties to be acquired for the proposed MSF and TPSS sites. During demolition of the existing structures, lead based paint (LBP) and asbestos containing materials (ACM) may be encountered in waste building materials. The construction work for the proposed MSF and TPSS sites would generally include excavations in the upper 5 to 10 feet of soil and may encounter subsurface hazardous waste residue from spills or releases from the former facilities. Construction of the MSF and TPSS facilities would include removal of existing hazardous materials within the construction footprint.

Cumulative

The cumulative impacts are similar to the project impacts, disturbance of contaminated soils or groundwater could expose workers, the public, and environment to increased hazards and result in cumulative hazardous materials impacts. The extent of potential cumulative impacts would depend on the location and extent of construction, the level of any on-site contamination, as well as construction practices and methods. Given the extent of construction to construct the LPA, including the MSF, stations, and TPSS, there is a high probability that contaminated soils or groundwater would be encountered during construction.

2.7.2 Mitigation Measures

Compliance Requirements and Design Features

Compliance with the federal, state, and local regulations listed in Section 4.10.1.1 governing the investigation, testing, handling, treatment, transport, and disposal of hazardous wastes and materials would minimize potential impacts due to encountering hazardous materials. The project would also comply with all applicable SCAQMD Rules relevant to hazardous waste and materials including Rule 403 (fugitive dust).

Construction Mitigation Measures

MM-HAZ-1: An environmental investigation shall be performed during design for transit structures, TPSS locations, stations, and the MSF. The environmental investigation shall collect soil, groundwater, and/or soil gas samples to delineate potential areas of contamination that may be encountered during construction or operations. The environmental investigation shall include the following:

- Properties potentially to be acquired are listed on multiple databases and shall be evaluated
 further for contaminants that were manufactured, stored, or released from the facility. If
 contaminated soil (e.g., soil contaminated from organic wastes, sediments, minerals, nutrients,
 thermal pollutants, toxic chemicals, and/or other hazardous substances) is found, it shall be
 removed, transported to an approved disposal location, and remediated according to state law.
- Phase II subsurface investigations for potential impacts from adjoining current or former underground storage tanks (UST) sites and nearby LUST sites.
- A Phase II subsurface investigation to evaluate potential presence of PCE shall be performed
 along the portions of the project alignment that are adjacent to former and current dry cleaners.
 If contaminated soil is found, it shall be removed, transported to an approved disposal location,
 and remediated according to state law.
- If construction encroaches into the two former plugged and abandoned dry-hole oil exploration
 wells mapped adjacent to the proposed project right-of-way, the project team shall consult with
 DOGGR regarding the exact locations of the abandoned holes and the potential impact of the
 wells on proposed construction.
- The locations of proposed improvements involving excavations adjacent to (within 50 feet of)
 the electrical substation shall be screened prior to construction by testing soils within 5 feet of
 the existing ground surface for polychlorinated biphenyls (PCB)s. If contaminated soil is found, it
 shall be removed, transported to an approved disposal location, and remediated according to
 state law.
- Buildings that will be demolished shall have a comprehensive ACM inspection prior to demolition. In addition, ACM may be present in the existing bridge crossings at the Pacoima Diversion Channels. If improvements associated with the proposed project will disturb the existing bridge crossings, then these structures shall be evaluated for suspect ACM. If ACM is found, it shall be removed, and transported to an approved disposal location according to state law.



- Areas where soil may be disturbed during construction shall be tested for ADL according to Caltrans ADL testing guidelines. If contaminated soil is found, it shall be removed, transported to an approved disposal location, and remediated according to state law.
- Lead and other heavy metals, such as chromium, may be present within yellow thermoplastic
 paint markings on the pavement. These surfacing materials shall be tested for LBP prior to
 removal. If contaminated soil is found, it shall be removed, transported to an approved disposal
 location, and remediated according to state law.
- Former railroad rights-of-way that crossed or were adjacent to the project right-of-way may contain hazardous materials from the use of weed control, including herbicides and arsenic, and may also contain Treated Wood Waste (TWW). Soil sampling for potentially hazardous weed control substances shall be conducted for health and safety concerns in the event that construction earthwork involves soil removal from the former railroad rights-of-way. If encountered during construction, railroad ties designated for reuse or disposal (including previously salvaged railroad ties in the project right-of-way) shall be managed or disposed of as TWW in accordance with Alternative Management Standards provided in CCR Title 22 Section 67386.

MM-HAZ-2: The contractor shall implement a Worker Health and Safety Plan prior to the start of construction activities. All workers shall be required to review the plan, receive training if necessary, and sign the plan prior to starting work. The plan shall identify properties of concern, the nature and extent of contaminants that could be encountered during excavation activities, appropriate health and environmental protection procedures and equipment, emergency response procedures including the most direct route to a hospital, and contact information for the Site Safety Officer.

MM-HAZ-3: The contractor shall implement a Contaminated Soil/Groundwater Management Plan during construction to establish procedures to follow if contamination is encountered in order to minimize associated risks. The plan shall be prepared during the final design phase of the project, and the construction contractor shall be held to the level of performance specified in the plan. The plan shall include procedures for the implementation of the following measures:

- Contacting appropriate regulatory agencies if contaminated soil or groundwater (e.g., groundwater contaminated from organic wastes, sediments, minerals, nutrients, thermal pollutants, toxic chemicals, and/or other hazardous substances) is encountered
- Sampling and analysis of soil and/or groundwater known or suspected to be impacted by hazardous materials
- The legal and proper handling, storage, treatment, transport, and disposal of contaminated soil and/or groundwater shall be delineated and conducted in consultation with regulatory agencies and in accordance with established statutory and regulatory requirements in Section 4.10.1.1 of this EIR
- Implementation of dust control measures such as soil wetting, wind screens, etc., for contaminated soil

 Groundwater collection, treatment, and discharge shall be performed according to applicable standards and procedures listed in Section 4.10.1.1 of this EIR

MM-HAZ-4: The contractor shall properly maintain equipment and properly store and manage related hazardous materials, so as to prevent motor oil, or other potentially hazardous substances used during construction, from spilling onto the soil. If contaminated soil is found, it shall be removed, transported to an approved disposal location, and remediated according to state law.

MM-HAZ-5: If reconstruction of the Pacoima Wash bridge that crosses Metro right-of-way is required, the construction spoils (e.g., excavated soils, cuttings generated during installation of CIDH piles), including those in contact with the groundwater, shall be contained and tested for total chromium, 1,4-dioxane, trichloroethylene (TCE), and PCE to determine appropriate disposal.

MM-HAZ-6: A Contaminated Soil/Groundwater Management Plan shall be prepared during final design that describes appropriate methods and measures to manage contamination encountered during construction.

2.7.3 Findings

For the above impacts to hazards and hazardous materials, the following finding is made:

Changes or alterations have been required in, or incorporated into, the project to avoid or substantially lessen the significant environmental effect as identified in the FEIS/FEIR.

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

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 FEIS/FEIR.

The potential hazards and hazardous materials impacts due to the proposed project are found to be.

Not Significant

Not Significant

2.7.4 Rationale

While construction on the project site has potential to encounter hazardous materials in excavated soils, groundwater, or in the materials of the demolished buildings, mitigation measures would ensure that, if encountered, these hazardous materials are handled appropriately to minimize the risk of exposure to construction workers and the general population.

2.7.5 References

Section 4.10 of the EIR describes the LPA's hazardous waste and materials impacts and identifies proposed feasible mitigation measures.



2.8 Ecosystems and Biological Resources

2.8.1 Description of Significant Impacts

Construction

Construction of major project components would require removal of trees, which could potentially affect nesting birds and/or tree roosting bats. Construction would also result in increases in noise, movement, and vibration at the bridges over the Pacoima Wash, the Pacoima Diversion Canal, and East Canyon Creek and the existing overpasses at Interstate 5, State Route 118, and the Union Pacific Railroad (on Van Nuys Boulevard). As a consequence, the LPA could result in potentially significant impacts under CEQA to nesting birds or roosting bats if construction activities remove vegetation where nesting birds are present or affect structures or vegetation used by special-status bat species. However, Mitigation Measures BIO-1 and BIO-2, detailed below, would reduce potential impacts to less than significant under CEQA.

The potential bridge upgrades required under the LPA could potentially affect Waters of the US (WoUS), Waters of the State (WoS), and California Department of Fish and Wildlife (CDFW) jurisdictional streambeds, though it should be noted that the channels that may be affected on are concrete lined and contain trace amounts of vegetation. If project-related impacts in WoUS occur, permitting under Section 404 of the Clean Water Act (CWA) may be required, most likely in the form of a Nationwide Permit 14 if project-related impacts on WoUS are less than 0.5 acre. Impacts on WoUS/WoS would also trigger the need for a Section 401 Certification, issued by the Regional Water Quality Control Board (RWQCB). Acquisition of these permits would ensure compliance with CWA (Section 401 and 404). A streambed Alteration Agreement, as regulated by Section 1602 of the California Fish and Game Code, would be required for project-related impacts on a CDFW jurisdictional streambed.

If permanent impacts on WoUS/WoS and CDFW unvegetated streambeds are unavoidable, compensatory mitigation may be required under section 401 and 404 of the CWA and Section 1602 of the California Fish and Game Code. This is expected to be required at a minimum 1:1 ratio. Final compensatory mitigation will be determined during the aquatic permitting process. In addition, temporary impacts would be required to be restored to pre-project conditions at the location of these impacts. Impacts on WoUS/WoS and CDFW streambeds would be less than significant under CEQA after compliance with regulatory permit requirements and implementation of mitigation measure MM BIO-3 described below.

2.8.2 Mitigation Measures

Construction Mitigation Measures

MM-BIO-1: Avoid and Minimize Project-Related Impact on Special-Status Bat Species

In the maternity season (April 15 through August 31) prior to the commencement of construction activities, a field survey shall be conducted by a qualified biologist to determine the potential presence of colonial bat roosts (including palm trees) on or within 100 feet of the project boundaries. Should a potential roost be identified that will be affected by proposed construction activities, a visual inspection and/or one-night emergence survey shall be used to determine if it is being used as a maternity-roost.

To avoid any impacts on roosting bats resulting from construction activities, the following measures shall be implemented:

Bridges and Overpasses

- Should potential bat roosts be identified that will require removal, humane exclusionary devices shall be used. Installation would occur outside of the maternity season and hibernation period (February 16-April 14 and August 16-October 30, or as determined by a qualified biologist) unless it has been confirmed as absent of bats. If the roost has been determined to have been used by bats, the creation of alternate roost habitat shall be required, with CDFW consultation. The roost shall not be removed until it has been confirmed by a qualified biologist that all bats have been successfully excluded.
- Should an active maternity roost be identified, a determination (in consultation with the California Department of Fish and Wildlife or a qualified bat expert) shall be made whether indirect impacts of construction-related activities (i.e., noise and vibration) could substantially disturb roosting bats. This determination shall be based on baseline noise/vibrations levels, anticipated noise-levels associated with construction of the proposed project, and the sensitivity to noise-disturbances of the bat species present. If it is determined that noise could result in the temporary abandonment of a day-roost, construction-related activities shall be scheduled to avoid the maternity season (April 15 through August 31), or as determined by the biologist.

Trees

All trees to be removed as part of the project shall be evaluated for their potential to support bat roosts. The following measures would apply to trees to be removed that are determined to provide potential bat roost habitat by a qualified biologist.

• If trees with colonial bat roost potential require removal during the maternity season (April 15 through August 31), a qualified bat biologist shall conduct a one-night emergence survey during acceptable weather conditions (no rain or high winds, night temperatures above 52°F) or if conditions permit, physically examine the roost for presence or absence of bats (such as with lift equipment) before the start of construction/removal. If the roost is determined to be occupied

during this time, the tree shall be avoided until after the maternity season when young are self-sufficiently volant.

- If trees with colonial bat roost potential require removal during the winter months when bats are in torpor, a state in which the bats have significantly lowered their physiological state, such as body temperature and metabolic rate, due to lowered food availability. (October 31 through February 15, but is dependent on specific weather conditions), a qualified bat biologist shall physically examine the roost if conditions permit for presence or absence of bats (such as with lift equipment) before the start of construction. If the roost is determined to be occupied during this time, the tree shall be avoided until after the winter season when bats are once again active.
- Trees with potential colonial bat habitat can be removed outside of the maternity season and winter season (February 16 through April 14 and August 16 through October 30, or as determined by a qualified biologist) using a two-step tree trimming process that occurs over 2 consecutive days. On Day 1, under the supervision of a qualified bat biologist, Step 1 shall include branches and limbs with no cavities removed by hand (e.g., using chainsaws). This will create a disturbance (noise and vibration) and physically alter the tree. Bats roosting in the tree will either abandon the roost immediately (rarely) or, after emergence, will avoid returning to the roost. On Day 2, Step 2 of the tree removal may occur, which would be removal of the remainder of the tree. Trees that are only to be trimmed and not removed would be processed in the same manner; if a branch with a potential roost must be removed, all surrounding branches would be trimmed on Day 1 under supervision of a qualified bat biologist and then the limb with the potential roost would be removed on Day 2.
- Trees with foliage (and without colonial bat roost potential), such as sycamores, that can support lasiurine bats, shall have the two-step tree trimming process occur over one day under the supervision of a qualified bat biologist. Step 1 would be to remove adjacent, smaller, or non-habitat trees to create noise and vibration disturbance that would cause abandonment. Step 2 would be to remove the remainder of tree on that same day. For palm trees that can support western yellow bat (the only special-status lasiurine species with the potential to occur in the project area), shall use the two-step tree process over two days. Western yellow bats may move deeper within the dead fronds during disturbance. The two-day process will allow the bats to vacate the tree before removal.

MM BIO-2: Avoid Impacts on Nesting Birds (including raptors)

To avoid any impacts on migratory birds, resulting from construction activities that may occur during the nesting season, March 1 through August 31, the following measure shall be implemented:

- A qualified biologist shall conduct a preconstruction survey of the proposed construction alignment with a 150-foot buffer for passerines and 500-feet for raptors around the site. This preconstruction survey shall commence no more than 3 days prior to the onset of construction, such as clearing and grubbing and initial ground disturbance.
- If a nest is observed, an appropriate buffer shall be established, as determined by a qualified biologist, based on the sensitivity of the species. For nesting raptors, the minimum buffer shall

be 150 feet. The contractor shall be notified of active nests and directed to avoid any activities within the buffer zone until the nests are no longer considered to be active by the biologist.

MM BIO-3: Jurisdictional Waters

Any work resulting in materials that could be discharged into jurisdictional features shall adhere to strict best management practices (BMPs) to prevent potential pollutants from entering any jurisdictional feature. Applicable BMPs to be applied shall be included in the Stormwater Pollution Prevention Plan and/or Water Quality Management Plan and shall include, but not be limited to, the following BMPs as appropriate:

- Containment around the site shall include use of temporary measures such as fiber rolls to surround the construction areas to prevent any spills of slurry discharge or spoils recovered during the separation process;
- Downstream drainage inlets shall be temporarily covered to prevent discharge from entering the storm drain system;
- Construction entrances/exits shall be properly set up so as to reduce or eliminate the tracking of sediment and debris offsite by including grading to prevent runoff from leaving the site, and establishing "rumble racks" or wheel water points at the exit to remove sediment from construction vehicles;
- Onsite rinsing or cleaning of any equipment shall be performed in contained areas and rinse water shall be collected for appropriate disposal;
- Use of a tank on work sites to collect the water for periodic offsite disposal;
- Soil and other building materials (e.g., gravel) stored onsite shall be contained and covered to
 prevent contact with stormwater and offsite discharge; and
- Water quality of runoff shall be periodically monitored before discharge from the site and into the storm drainage system.

MM BIO-4: A Project Tree Report Shall Be Approved by the City of Los Angeles and City of San Fernando

Prior to construction, the contractor shall review the approved alternative alignment to determine whether any trees protected by the City of Los Angeles Tree Ordinance 177404 and City of San Fernando Comprehensive Tree Management Program Ordinance (Ordinance No. 1539) will be removed or trimmed. A tree report must be prepared, by a qualified arborist, for the project and approved by each city. Trees approved for removal (or replacement) shall be done in accordance to the specifications outlined in the city ordinances.

2.8.3 Findings

For the above impacts to Ecosystems and Biological Resources, the following finding is made:

⊠ substa	•		re been required in, or incorporated into, the project to avoid or environmental effect as identified in the FEIS/FEIR.					
•	and not the age	ncy making	s are within the responsibility and jurisdiction of another public the finding. Such changes have been adopted by such other ed by such other agency					
•	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 FEIS/FEIR.							
The po	otential Ecosyster	ns and Biolo	ogical Resources impacts due to the proposed project are found to	0				
	Significant	\boxtimes	Not Significant					

2.8.4 Rationale

Impacts associated with project construction would be reduced to less than significant with implementation of the above listed mitigation measures.

2.8.5 References

Section 4.12, Ecosystems and Biological Resources, of the EIR describes the LPA's impacts on biological resources and identifies proposed feasible mitigation measures.

2.9 Safety and Security

2.9.1 Description of Significant Impacts

Construction

Construction of the LPA may have temporary impact on public safety and security in the project study area. During construction, motorists, pedestrians, and bicyclists in close proximity to construction activities would experience circulation impacts and could be exposed to hazards posed by construction activities and equipment. Construction activities could also result in lane closures, traffic detours, and designated truck routes, which could adversely affect emergency vehicle response time, a potentially significant impact under CEQA.

Operational

Pedestrian, Vehicle, and Bicycle Safety

Issues of pedestrian safety under the LPA would include pedestrian safety along the alignment and at station locations and designated crossings. The proposed 14 at-grade stations could introduce a new safety hazard for pedestrians if the stations do not adequately account for pedestrian traffic and

movement. The occurrence of this hazard may be attributed to the inherent purpose of a station, where large numbers of people congregate and cross the trackway to access or depart from the transit stations, thus creating a potential hazard of collision between pedestrians and LRT vehicles. Pedestrian safety impacts are potentially significant without mitigation. Implementation of mitigation measures would reduce effects/impacts to less than significant under CEQA.

Along Van Nuys Boulevard, where the existing sidewalks on each side of Van Nuys Boulevard are approximately 13 feet wide, sidewalks would be narrowed to 10 feet to accommodate the installation of the LRT line. (Note: At Van Nuys Boulevard and Amboy Avenue [east of Van Nuys and north of Amboy], the sidewalk would be narrowed from 13 feet to 9 feet.) Although the new sidewalk width would meet the minimum 10-foot-wide accessibility requirements, at some locations with higher pedestrian activity (at the proposed Vanowen Station), the reduction in sidewalk width (from 13 feet to 10 feet) would result in further crowding of the sidewalk, particularly during passenger boarding and exiting of buses. Crowded sidewalks could affect pedestrian safety, particularly for people with limited mobility. The sidewalk reduction, therefore, would result in a potentially significant impact on pedestrians.

The LPA would result in modifications to existing bicycle lanes in the corridor. The removal of Class II bike lanes to accommodate the project would increase the potential for conflicts between bicyclists and motor vehicles traveling along Van Nuys Boulevard in this segment of the corridor, reducing safety, which would be a potentially significant impact under CEQA.

Security

The removal of mixed-flow lanes would result in additional roadway congestion due to the decreased roadway capacity, which could adversely affect emergency vehicle response times and access or evacuation plans in the event of an emergency. The proposed motor vehicle turn restrictions could also result, in some instances, in emergency vehicles taking a slightly more circuitous route, and therefore, require more time to respond to emergencies. For these reasons, the LPA would result in a significant impact under CEQA.

Cumulative

The lane closures or traffic detours during construction of the LPA and other potential lane or road closures due to the concurrent construction of other projects could result in significant cumulative impacts to emergency vehicle response time.

2.9.2 Mitigation Measures

Construction Mitigation Measures

MM-SS-1: Alternate walkways for pedestrians shall be provided around construction staging sites in accordance with ADA requirements.

MM-SS-2: Safe and convenient pedestrian routes to local schools shall be maintained during construction.



- **MM-SS-3**: Ongoing communication with school administrators shall be maintained to ensure sufficient notice of construction activities that could affect pedestrian routes to schools is provided.
- **MM-SS-4:** All pedestrian and bicyclist detour locations around staging sites shall be signed and marked in accordance with the Manual on Uniform Traffic Control Devices "work zone" guidance, and other applicable local and state requirements.
- **MM-SS-5:** Appropriate traffic controls (signs and signals) shall be installed and maintained to ensure pedestrian and vehicular safety.
- **MM-SS-6**: To the extent feasible, construction haul trucks shall not use haul routes that pass any school, except when the school is not in session.
- **MM-SS-7:** Staging or parking of construction-related vehicles, including worker-transport vehicles, shall not occur on or adjacent to a school property when school is in session.
- **MM-SS-8:** Crossing guards or flaggers shall be provided at affected school crossings when the safety of children may be compromised by construction-related activities.
- **MM-SS-9:** Barriers or fencing shall be installed to secure construction equipment and to minimize trespassing, vandalism, short-cut attractions, and attractive nuisances.
- **MM-SS-10:** Security patrols shall be provided to minimize trespassing, vandalism, and short-cut attractions where construction activities occur in the vicinity of local schools.
- **MM-SS-11:** Project plans, work plans, and traffic control measures shall be coordinated with emergency responders during preliminary engineering, final design, and construction to limit effects on emergency response times.

Operational Mitigation Measures

- **MM-SS-12:** All stations shall be illuminated to avoid shadows and all pedestrian pathways leading to/from sidewalks and parking facilities shall be well illuminated. In addition, lighting would provide excellent visibility for train operators to be able to react to possible conflicts, especially to pedestrians crossing the track.
- **MM-SS-13:** Proposed station designs shall not include design elements that obstruct visibility or observation nor provide discrete locations favorable to crime; pedestrian access to at-grade stations shall be at ground-level with clear sight lines.
- **MM-SS-14:** The following measures shall be implemented to reduce pedestrian circulation impacts and hazards:
- Sidewalk widths shall be designed with the widest dimensions feasible in conformance with the Los Angeles/Metro's adopted "Land Use/Transportation Policy".
- Minimum widths shall not be less than those allowed by the State of California Title 24 access requirements, or the ADA design recommendations. Section 1113A of Title 24 states that walks and sidewalks shall be a minimum of 48 inches (1,219 mm) in width, except that

walks serving dwelling units in covered multi-family dwelling buildings may be reduced to 36 inches (914 mm) in clear width except at doors.

- Accommodating pedestrian movements and flows shall take priority over other transportation improvements, including automobile access.
- Physical improvements shall ensure that all stations are fully accessible as defined in the ADA.

MM-SS-15: Wide crosswalks shall be provided in areas immediately around proposed stations to facilitate pedestrian mobility.

MM-SS-16: Metro shall coordinate and consult with the LAFD, LAPD, LASD, and City of San Fernando Police Department to develop safety and security plans for the proposed alignment, parking facilities, and station areas.

MM-SS-17: Fire separations shall be provided and maintained in public occupancy areas. Station public occupancy shall be separated from station ancillary occupancy by a minimum 2-hour fire-rated wall. The only exception is that a maximum of two station agents, supervisors, or information booths may be located within station public occupancy areas.

MM-SS-18: For portions of the alignment where pedestrians and/or motor vehicles must cross the tracks, Metro shall prepare grade crossing applications in coordination with the California Public Utilities Commission (CPUC) and local public agencies, such as LADOT, City of Los Angeles Bureau of Engineering, and the City and County of Los Angeles Fire Departments. Crossings shall require approval from the CPUC and shall meet applicable CPUC standards for grade crossings.

MM-SS-19: All proposed LRT stations and related parking facilities shall be equipped with monitoring equipment, which would primarily consist of video surveillance equipment to monitor strategic areas of the LRT stations and walkways, and/or be monitored by Metro security personnel on a regular basis.

MM-SS-20: Metro shall implement a security plan for LRT operations. The plan shall include both incar and station surveillance by Metro security or other local jurisdiction security personnel.

MM-SS-21: Metro is continuing to investigate light rail vehicle modifications to increase light rail vehicle safety and minimize or prevent train and pedestrian conflicts. Metro's design criteria also identifies multiple efforts to increase light rail vehicle safety and minimize or prevent the potential for pedestrians and vehicle conflicts. Measures identified shall be included during the final design of the LPA.

MM-SS-22: To reduce potential risk of collisions between LRTs and automobiles on the street portion of the LPA, Metro shall coordinate with the CPUC, City and County of Los Angeles traffic control departments, City of Los Angeles Bureau of Engineering, and the City and County of Los Angeles Fire Departments, and also comply with the Federal Highway Administration's Manual on Uniform Traffic Control Devices for signing and pavement marking treatments.

MM-SS-23: The diverse needs of different types of traveling public including senior citizens, disabled citizens, low-income citizens, shall be addressed through a formal educational and outreach



campaign. The campaign shall target these diverse community members to educate them on proper system use and benefits of LRT ridership.

For the above impacts to Safety and Security, the following finding is made:

2.9.3 Findings

to the doctor impacts to carely and occurry, the remaining in many
Changes or alterations have been required in, or incorporated into, the project to avoid or substantially lessen the significant environmental effect as identified in the FEIS/FEIR.
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
Specific economic, legal, social, technological, or other considerations, including provision or employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIS/FEIR.
The potential Safety and Security impacts due to the proposed project are found to be.
Significant

2.9.4 Rationale

After implementation of the proposed mitigation measures, the proposed impacts due to reduced sidewalk width in some locations, the potential for increased conflicts between bicyclists and motor vehicles, and increased delay for emergency responders during project operation would remain and would be unavoidable significant impacts under CEQA.

2.9.5 References

Section 4.14 Safety and Security of the FEIS/FEIR describes the LPA's impacts on Safety and Security and identifies proposed feasible mitigation measures. Also, please note that the mitigation measures identified above incorporate revisions made in response to comment letter AL10 (see Appendix A1 to the FEIS/FEIR) from the Los Angeles Unified School District (see Appendix A2 for the responses to comment letter AL10).

2.10 Parklands and Community Facilities

Construction

The LPA construction activities would result in noise, dust, odors, and traffic delays resulting from haul trucks and construction equipment in public streets and staging areas. These temporary impacts could adversely affect the recreational values of adjacent parklands or could cause disturbance to community facilities that are sensitive to these impacts, such as schools, libraries, hospitals, daycare facilities, and senior facilities. As described in Sections 4.6 and 4.8 of the FEIS/FEIR, respectively,



localized air quality impacts and noise impacts on nearby sensitive uses during construction of the LPA would be significant under CEQA.

Construction of the LPA may also result in visual impacts on viewers from parklands and community facilities within and surrounding the project corridor, which could adversely affect the aesthetic value of these resources. Construction activities at staging areas and construction sites may introduce considerable heavy equipment such as cranes and associated vehicles, including bulldozers, backhoes, graders, scrapers, and trucks, into the view corridor of public streets, sidewalks, and properties. In addition, mature vegetation, including trees, could temporarily or permanently be removed from some areas. These visual impacts on nearby visually sensitive uses would be significant under CEQA; however, they would be reduced to less-than-significant with implementation of proposed mitigation measures.

Operational

The following parks are also in proximity to the proposed improvements and could be affected by visual changes from the LPA:

- Tobias Avenue Park, 9122 Tobias Avenue, Panorama City: This park is adjacent to the project corridor on Van Nuys Boulevard to the north of Nordhoff Street.
- Pacoima Wash Greenway: This greenway is a future proposed project that crosses under the
 project corridor south of Van Nuys Boulevard and Arleta Avenue, and at San Fernando Road to
 the south of La Rue Street in San Fernando.
- Recreation Park (and San Fernando Regional Pool Facility), 208 Park Avenue, San Fernando: The
 park and pool facility are adjacent to the project corridor at the Metro-owned railroad right-ofway and Park Avenue.

The changes in aesthetic character from the LPA would be expected to be substantial in areas where sensitive viewers are located. Potential impacts on aesthetic character from the LPA are also addressed in more detail in Section 4.5 of the EIR. The visual impacts on sensitive viewers at local parklands or community facilities could be significant under CEQA.

Cumulative

Other present and reasonably foreseeable future projects in the area, including the cumulative projects in Table 2-3 of the FEIS/FEIR, could result in temporary impacts from construction activities, and impacts from past projects may also have resulted in temporary impacts. All cumulative impacts would be less than significant, except for potentially significant operational visual impacts.

The LPA would result in potentially significant operational visual impacts because it would introduce new vertical structures, such as the OCS that could obstruct views to and from parklands along the alignment. Past projects have resulted in a highly urbanized landscape along the project corridor from the construction of buildings, transportation infrastructure, and other structures that have affected scenic vistas, scenic resources, and visual character and quality. In addition, other present or reasonably foreseeable future projects in the area could further degrade the visual character and quality of the area, although that is unlikely since the related projects consist of infill development



projects that would not result in drastic changes to the existing visual character of the corridor or introduce new elements that would obstruct views. However, because impacts from the LPA would remain significant after implementation of mitigation measures, its contribution to cumulative visual impacts on parklands and community facilities during operation would be cumulatively considerable.

2.10.1 Mitigation Measures

The reader is referred to the following sections in these Findings for mitigation measures to reduce or avoid potential construction and operational impacts on parklands and community facilities: Section 2.1.1 (MM-TRA-1 to MM-TRA-3); Section 2.3.2 (MM-VIS- 1 to MM-VIS-5); Section 2.4.2 (MM-AQ-1 to MM-AQ-9); Section 2.5.2 (MM-2A to 2B, MM-NOI-3A to 3C; and Section 2.9.2 (MM-SS-1 to 23).

2.10.2 Findings

For the above impacts to Parklands, the following finding is made:

Changes or alterations have been required in, or incorporated into, the project to avoid or substantially lessen the significant environmental effect as identified in the FEIS/FEIR.

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

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 FEIS/FEIR.

The potential Parklands impacts due to the proposed project are found to be.

Significant

Not Significant

2.10.3 Rationale

The potential construction air quality impacts on parklands and community facilities would remain significant after implementation of proposed mitigation measures. The operational impacts of the LPA on emergency vehicle access and visual impacts on sensitive viewers would be significant after implementation of proposed mitigation measures. All other impacts would be less than significant.

2.10.4 References

Section 4.15 Parklands of the EIR describes the LPA's impacts on Parklands and identifies proposed feasible mitigation measures.

2.11 Historic, Archaeological and Paleontological Resources

2.11.1 Description of Significant Impacts

Archaeological Resources

Construction

The LPA would involve shallow excavation during platform construction in the median, station upgrades, and sidewalk widening. Construction activities could encounter and result in damage or destruction of previously undiscovered significant archaeological resources or human remains, which would be considered a significant impact. Archaeological sites 19-001124 and 19-002681 are located immediately adjacent to and within the footprint of the LPA. Even though neither resource is considered eligible for the California Register of Historic Places (CRHP) or an historical resource under CEQA, the immediate resource areas are still considered sensitive for containing previously undiscovered archaeological resources. Implementation of Mitigation Measure MM AR-2 would avoid or reduce potential impacts on archaeological resources, and Mitigation Measure MM AR-3 would avoid or reduce potential impacts on human remains.

Cumulative

Related and other proposed projects in the project study area, i.e., the San Fernando Valley, could require earthmoving activities during construction that could disturb or result in the destruction of archaeological resources, a potentially significant impact. If previously unknown resources are discovered during construction of the LPA, proposed measures would avoid or reduce potential impacts to archaeological resources or human remains to less-than-significant level. As a consequence, and because the related projects may also include mitigation measures to minimize or reduce potential impacts to archaeological resources, the LPA is not expected to result in or contribute to significant cumulative impacts on archaeological resources within the project study area.

Paleontological Resources

Construction

Fossils in valley areas are located subsurficially. If excavation of the LPA extends into native sediments, e.g., for sewer and water lines as well as for underground storage tanks at the proposed MSF, significant impacts/adverse effects to any paleontological resources that are encountered could occur.

Cumulative

Other related projects could require excavation to depths containing fossil bearing soils and could result in the destruction of fossil resources, a potentially significant impact. However, potential impacts to any paleontological resources that may be encountered during construction of the LPA



would be mitigated to a less-than-significant-level. Additionally, the related projects may also include mitigation measures that would minimize or reduce potential impacts to a less-than-significant level. Therefore, the LPA, after mitigation, would not contribute to any cumulative impacts to paleontological resources.

2.11.2 Mitigation Measures

Construction Mitigation Measures (Archaeological Resources)

If construction occurs in the immediate vicinity of Archaeological sites 19-001124 and 19-002681, the following measure is proposed to mitigate potential impacts.

MM-AR-1: Ground disturbing activities within site areas 19-001124 and 19-002681 and within a 50-foot buffer area around the sites shall be monitored by an Archaeological and Native American monitor. Construction related ground disturbance includes grading, excavation, trenching, and drilling. An Archaeological monitor and a Native American monitor shall examine all sediments disturbed during earth moving activities, including geotechnical drilling and environmental borings, if being conducted, prior to construction.

Archaeological monitoring for site CA-LAN-2681 shall be conducted as discussed in the project's Cultural Resources Monitoring Plan (CRMP). All archeological monitoring and any necessary identification, testing, and evaluation of resources identified during monitoring shall be conducted per the methods and procedures described in the CRMP for the project.

Standard methods of excavation such as grading and trenching shall be monitored by observation of the excavations as they occur.

Drilling of project features such as the overhead catenary system (OCS) result in earthen materials being delivered to the ground surface as loosened spoils. Materials to be examined by the Archaeological and Native American monitors are spoils removed from the drill holes while the drilling occurs. The monitors must be provided a safe location and opportunity to view spoils as they are being stored prior to being hauled away from the work area. Access of the monitors to the spoils material may be limited by safety concerns or by hazardous materials contamination.

If requested by an Archaeological or Native American monitor, opportunities shall be provided for the monitor, as part of their daily shift activities, to screen or rake spoils to determine if the spoils contain cultural materials.

Archaeological monitors are empowered to briefly halt construction if a discovery is made during standard excavation, such as grading and trenching, in the area of that discovery and a 50-foot buffer zone. If a Native American monitor wishes to halt construction, the monitor shall consult with the Archaeological monitor, who may then briefly halt construction. A request to halt activities by the Archaeological monitor should have no effect on ground disturbing activities outside the 50-foot buffer zone; however, spoil piles may not be removed until the monitor can examine them.

If an Archaeological or Native American monitor observes an isolated find, the Archaeological monitor shall temporarily halt construction in order to document the find. Documentation shall be completed by collecting a GPS point, photography, and recording information onto the daily monitoring log. All isolated prehistoric artifacts shall be collected. Diagnostic historic-era items shall be collected. Once an isolated item is documented, construction may resume.

MM-AR-2: If buried cultural materials are encountered in areas not actively being monitored during construction, the Contractor Project Foreman shall halt construction in a 50-foot radius around the discovery and shall immediately contact the LACMTA Metro Project Manager, LACMTA Metro Environmental Specialist, and Project Archaeologist.

Per the CRMP prepared for the proposed project, for any discovery of an archaeological feature, regardless of eligibility, the Metro Environmental Specialist shall notify all Consulting Parties identified for the project within 48 hours of any discovery. Notifications shall not be made for ubiquitous infrastructure elements such as modern utilities (cistern, electric, gas, sewer, and water supply lines), transportation infrastructure (bridge piers, buried roadways, and rail segments), sidewalks, and concrete rubble, fill, or waste.

MM-AR-3: In the event that human remains are encountered during construction, potentially destructive activities in the vicinity of the discovery shall be stopped and the provisions of California PRC § 5097.98 and HSC § 7050.5 shall be followed. The Archaeological monitor shall halt construction, establish a 50-foot buffer around the discovery, and shall contact the Metro Project Manager, Metro Environmental Specialist, and Project Archaeologist. The Metro Environmental Specialist shall notify the Los Angeles County Coroner on the same day of the discovery. and other Consulting Parties within 48 hours of discovery. Treatment of the remains and all subsequent actions shall be completed per the Cultural Resources Monitoring Plan (CRMP).

Construction Mitigation Measures (Paleontological Resources)

MM-PR-1: Metro shall retain the services of a qualified paleontologist (minimum of graduate degree, 10 years of experience as a principal investigator, and specialty in vertebrate paleontology) to oversee execution of this mitigation measure. Metro's qualified principal paleontologist shall then develop a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) acceptable to the collections manager of the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County. Metro will implement the PRMMP during construction. The PRMMP will clearly demarcate the areas to be monitored and specify criteria. At the completion of paleontological monitoring for the proposed project, a paleontological resource monitoring report will be prepared and submitted to the Natural History Museum of Los Angeles County to document the results of the monitoring activities and summarize the results of any paleontological resources encountered.

The PRMMP shall include specifications for processing, stabilizing, identifying, and cataloging any fossils recovered as part of the proposed project. Metro's qualified principal paleontologist shall prepare a report detailing the paleontological resources recovered, their significance, and arrangements made for their curation at the conclusion of the monitoring effort.

MM-PR-2: Prior to the start of construction a qualified Principal Paleontologist shall prepare a Paleontological Mitigation Plan (PMP) that includes the following requirements:

- All project personnel involved in ground-disturbing activities shall receive paleontological resources awareness training before beginning work.
- Excavations, excluding drilling, deeper than 8 feet below the current surface in the Quaternary alluvium shall be periodically spot checked to determine when older sediments conducive to fossil preservation are encountered. Once the paleontologically sensitive older alluvium is reached, a qualified paleontologist shall perform full-time monitoring of construction. Should sediments in a particular area be determined by the paleontologist to be unsuitable for fossil preservation, monitoring shall be suspended in those areas. A paleontologist shall be available to be on call to respond to any unanticipated discoveries and may adjust monitoring based on the construction plans and field visits.
- Sediment samples from the Quaternary older alluvium shall be collected and screened for microfossils.
- Recovered specimens shall be stabilized and prepared to the point of identification. Specimens shall be identified to the lowest taxonomic level possible and transferred to an accredited repository for curation along with all associated field and lab data.
- Upon completion of project excavation, a Paleontological Mitigation Report (PMR) documenting compliance shall be prepared and submitted to the Lead Agency under CEQA.

For the above impacts to Historical, Archaeological, and Paleontological Resources, the following

2.11.3 Findings

finding is made: \boxtimes Changes or alterations have been required in, or incorporated into, the project to avoid or substantially lessen the significant environmental effect as identified in the FEIS/FEIR. 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 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 FEIS/FEIR. The potential Historical, Archaeological, and Paleontological Resources due to the proposed project are found to be. \boxtimes Significant **Not Significant**



2.11.4 Rationale

Potential impacts to archaeological or paleontological resources that may be encountered during construction would be reduced to less than significant with implementation of the proposed mitigation measures.

2.11.5 References

Section 4.16 of the EIR describes the LPA's archaeological and paleontological resources impacts and identifies proposed feasible mitigation measures.

3 Alternatives

Section 15126.6 of the CEQA Guidelines requires an evaluation of the comparative effects of a reasonable range of alternatives to the project that would feasibly attain most of the project's basic objectives and would avoid or substantially lessen any of the significant impacts of the project. A feasible alternative is one that can be accomplished successfully in a reasonable period of time, taking into consideration economic, legal, social, and technological factors. The range of alternatives is governed by the "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasonable choice. As discussed in Section 1.2 above, the Metro Board of Directors formally identified a modified version of Alternative 4 described in the Draft EIS/EIR as the Locally Preferred Alternative (LPA). This alternative is identified as Alternative 4 Modified: At-Grade LRT in the FEIS/FEIR. Chapter 2, Project Description/Alternatives Considered, of the FEIS/FEIR describes the LPA in detail and also describes the four build alternatives, a Transportation Systems Management Alternative, and a No-Build Alternative that were considered in the Draft EIS/EIR. Chapter 2 also discusses alternatives that were eliminated from detailed consideration in the EIR.

3.1.1 No-Build Alternative

The No-Build Alternative represents projected conditions in 2040 without implementation of the project. No new transportation infrastructure would be built within the project study area, aside from related transportation projects that are currently under construction or funded for construction and operation by 2040. These projects include highway and transit projects funded by Measure R and Measure M, as well as projects specified in the current constrained element of the Metro LRTP and the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Although the No-Build Alternative would result in none of the significant impacts that could occur under the LPA (or IOS), it would not fulfill the objectives of the project to: improve mobility, enhance transit accessibility/connectivity for local residents to local and regional destinations, provide more reliable transit service; increase transit service efficiency, provide additional transit options in an area with a large transit-dependent population, and encourage modal shift to improve air quality and reduce greenhouse gas emissions. In addition to not achieving any of the objectives that could be achieved by the LPA (and IOS), under the No-Build Alternative, traffic congestion would continue to

increase adversely affecting traffic speeds for motorists and buses and resulting in additional pollutant emissions.

3.1.2 TSM Alternative

The transportation system management (TSM) Alternative would increase the number and frequency of buses compared with the No-Build Alternative but would not provide improvements in travel time along the corridor (i.e., faster service). However, the build alternatives would improve transit service efficiency (i.e., speeds and passenger throughput) in the project study area compared with the TSM Alternative because of the dedicated guideways or lanes and increased capacity (e.g., LRT cars can carry more passengers than buses). The TSM Alternative would provide more frequent bus service compared with existing conditions but would not separate buses from mixed-flow traffic conditions. Although the TSM Alternative has the lowest capital costs compared with the build alternatives, it has the longest travel time and the lowest number of new linked trips.

Although the TSM Alternative would result in none of the significant impacts that could occur under the LPA (or IOS,) the minor improvements under this alternative would provide limited benefits and would not fulfill the project objectives to the extent the LPA would. Specifically, the TSM Alternative would result in only minor improvements to mobility and accessibility within the project area. It would have minor beneficial effects on transit service reliability and efficiency. The TSM Alternative would not provide additional transit options in an area with a large transit-dependent population and would likely not result in modal shift to an appreciable degree that would noticeably improve air quality and reduce greenhouse gas emissions.

3.1.3 Alternative 1 – Curb-Running BRT

Under the Curb-Running BRT Alternative, 6.7 miles of existing curb lanes (i.e., lanes closest to the curb) along Van Nuys Boulevard between San Fernando Road and the Metro Orange Line would be converted to dedicated bus lanes. This alternative would be similar to the Metro Wilshire BRT Project with a dedicated bus lane that could operate 24-hours a day or only during peak periods. The hours during which the curb lane would be used as a dedicated BRT lane may be limited to the period extending from 7:00 a.m. to 7:00 p.m. (further refinement of the operating hours and days for the Curb-Running BRT could occur, if necessary, based on passenger demand and community input after operation of this alternative commences). The existing asphalt lane along Van Nuys Boulevard, Truman Street, and San Fernando Road would be replaced with a concrete lane; similar to what was done for the Wilshire BRT Project. The lanes would be dedicated curb-running bus lanes for Metro Rapid Line 744, which replaced Metro Rapid Line 761, and Metro Local Line 233, and for other transit lines that operate on short segments of Van Nuys Boulevard. In addition, this alternative would incorporate 2.5 miles of mixed-flow lanes, where buses would operate in the curb lane along San Fernando Road and Truman Street between Van Nuys Boulevard and Hubbard Avenue. Metro Local Line 233 would continue north on Van Nuys Boulevard to Lakeview Terrace. These improvements would result in an improved Metro Rapid Line 761 (now 744; hereafter referred to as 744X) and an improved Metro Local Line 233 (hereafter referred to as 233X).

The buses operating under the Curb-Running BRT Alternative would be similar to existing Metro high-capacity, articulated 60-foot buses. Each bus would have the capacity to serve up to 75 passengers (57 seats x 1.30 passenger loading standard). Buses would be equipped with transit signal priority equipment to allow for improved operations and on-time performance.

Bicycle parking would be provided at or near Metro stations, as required by the Metro BRT Design Criteria. On Van Nuys Boulevard between the Metro Orange Line and San Fernando Road, with one exception (between Parthenia Street and Roscoe Boulevard), the curbside lane would be 12 feet wide or greater. The curb lane would be restricted to buses and bicyclists, with other vehicles allowed in the lane only for right-turns.

The existing bike lanes on Van Nuys Boulevard north of Parthenia Street would be removed under this alternative.

On Van Nuys Boulevard between Parthenia Street and Roscoe Boulevard, the curbside lane would be 11 feet wide. Parking is currently prohibited on the segment. A permanent curbside bus lane would be provided on this segment so that bicyclists would share the curbside lane only with buses and right-turning vehicles.

This alternative would fulfill most of the project objectives but not to the same extent as the LPA (or IOS). Under this alternative, the travel time for the curb-running BRT would be greater than would occur under the LPA, and there would be fewer daily boardings than would occur under the LPA. Therefore, this alternative would not increase transit service efficiency as much as would occur under the LPA. As a consequence, it would not result in as great a mode shift as could occur under the LPA and therefore, would not result in the greenhouse gas emission reductions that could occur under the LPA (or IOS).

3.1.4 Alternative 2 – Median-Running BRT

The Median-Running BRT Alternative would provide approximately 6.7 miles of dedicated median-running bus lanes between San Fernando Road and the Metro Orange Line and have operational standards similar to the Metro Orange Line. Similar to Alternative 1, the minor construction under this alternative would include removing the existing asphalt lane and replacing it with a concrete lane, similar to what was done for the Wilshire BRT Project. The remaining 2.5 miles would operate in mixed-flow traffic between the Sylmar/San Fernando Metrolink Station and San Fernando Road/Van Nuys Boulevard.

Articulated 60-foot buses, similar to those under the Curb-Running BRT Alternative would be operated. Each bus would have the capacity to serve up to 75 passengers (57 seats x 1.30 passenger loading standard). Buses would be equipped with transit signal priority equipment, similar to existing Metro Rapid buses, to continue to allow for improved operations and on-time performance.

Under this alternative, all curbside parking would be prohibited along the entire extent of Van Nuys Boulevard from the Van Nuys Metro Orange Line Station to San Fernando Road.

Left turns from Van Nuys Boulevard onto cross streets would be maintained at most of the currently signalized intersections and prohibited at all unsignalized intersections. The dual left-turn lanes on



northbound and southbound Van Nuys Boulevard at Sherman Way and at Roscoe Boulevard would be reduced to single left-turn lanes. Several left-turns in the Van Nuys Civic Center, between Calvert and Hartland Streets, would be prohibited to accommodate median bus stop platforms.

All movements across the median dedicated guideway along Van Nuys Boulevard in-between signalized cross streets would be prohibited. This includes left turns from Van Nuys Boulevard at unsignalized intersections and private driveways, as well as left turns and through traffic from the side streets.

On Van Nuys Boulevard between the Van Nuys Metro Orange Line Station and San Fernando Road, the curbside lanes typically would be 11 feet wide. Thus, motorists in the curbside lane would need to shift to the left to pass a bicyclist. The existing bike lanes extending north on Van Nuys Boulevard approximately two miles from Parthenia Street to Beachy Avenue would be removed and would not be replaced under this alternative. However, bicycle parking would be provided at or near Metro stations, as required by the Metro BRT Design Criteria.

All existing signal-controlled crosswalks would be maintained. However, all other pedestrian crossings on Van Nuys Boulevard at unsignalized intersections would be prohibited.

Bus patrons would be guided to signal-controlled crosswalks between curbside local bus stops and median BRT bus stops by railings on the backside of median bus stop platforms.

Similar to Alternative 2, Alternative 3 would fulfill most of the project objectives but not to the same extent as the LPA or IOS. Under this alternative, the travel time for the median-running BRT would be greater than would occur under the LPA and there would be fewer daily boardings than would occur under the LPA. Therefore, this alternative would not increase transit service efficiency as much as would occur under the LPA. As a consequence, it would not result in as great a mode shift as could occur under the LPA and therefore, would not result in the greenhouse gas emission reductions that could occur under the LPA (or IOS).

3.1.5 Alternative 3 – Median-Running Low-Floor LRT/Tram

The Low-Floor LRT/Tram Alternative would operate along a 9.2-mile route from the Sylmar/San Fernando Metrolink Station to the north to the Van Nuys Metro Orange Line Station to the south. The Low-Floor LRT/Tram Alternative would operate in a median dedicated guideway for approximately 6.7 miles along Van Nuys Boulevard between San Fernando Road and the Van Nuys Metro Orange Line Station. The Low-Floor LRT/Tram Alternative would operate in mixed-flow traffic lanes on San Fernando Road between the intersection of San Fernando Road/Van Nuys Boulevard and just north of Wolfskill Street. Between Wolfskill Street and the Sylmar/San Fernando Metrolink Station, the Low-Floor LRT/Tram would operate in a median dedicated guideway. The Low-Floor LRT/Tram would serve the Cities of San Fernando and Los Angeles, including Pacoima, Arleta, Panorama City, and Van Nuys, with 28 stations.

The Low-Floor LRT/Tram Alternative would operate using low-floor articulated vehicles that would be electrically powered by overhead wires. This alternative would include supporting facilities, such as the TPSSs units and the MSF.

Low-Floor LRT/Tram vehicles may be similar to the streetcar rail vehicles currently used in Portland, Oregon, or may resemble the multi-unit low-floor light rail vehicles that are also used in Portland, as well as San Diego and many other US cities. It is assumed the Low-Floor LRT/Tram trains would consist of three rail cars (each 90-feet long) that would be connected to form a 270-foot-long train. Although Low-Floor LRT/Tram vehicles could operate at speeds of up to 60 miles

The typical Low-Floor LRT/Tram station platform would be a minimum of 12 feet wide for a side platform station to a minimum of 16 feet wide for a center platform station, 270 feet long. Access to the Low-Floor LRT/Tram station platforms would be from crosswalks.

The new Low-Floor LRT/Tram MSF would accommodate both operational and administrative functions. The MSF would accommodate all levels of vehicle service and maintenance (i.e., progressive maintenance, scheduled maintenance, unscheduled repairs, warrantee service, and limited heavy maintenance) in addition to storage space for vehicles. The number of Low-Floor LRT/Tram vehicles needed under this alternative would be 46.

The proposed Low-Floor LRT/Tram would operate with 4-minute peak and 8-minute off-peak headways. Metro Rapid Line 744S would operate with 6-minute peak and 12-minute off-peak headways, while Metro Local Line 233S would operate with 8-minute peak and 16-minute off peak headways.

Based on Metro's Operations Plan for the eastern San Fernando Valley Transit Corridor Project, the Low-Floor LRT/Tram Alternative would assume a travel speed of 35 MPH, which is similar to the Median-Running BRT Alternative, with speed improvements of 18 percent during peak hours/peak direction and 15 percent during off-peak hours.

All curbside parking would be prohibited along the alignment on Van Nuys Boulevard and on San Fernando Road under DEIS/DEIR Alternative 3.

Most of the left turns would be prohibited from San Fernando Road through the City of San Fernando between the Sylmar/San Fernando Metrolink Station and Wolfskill Street.

All existing turning movements would be maintained on San Fernando Road between Wolfskill Street and Van Nuys Boulevard, where the Low-Floor LRT/Tram would share travel lanes with motor vehicles.

Left turns from Van Nuys Boulevard onto cross streets would be maintained at most of the currently signalized intersections where the Low-Floor LRT/Tram would be running in the medians. However, all vehicle movements across the median at currently unsignalized intersections would be prohibited. This would include left turns from Van Nuys Boulevard as well as left turns and through traffic from minor side streets and private driveways. Motorists who desire to make a left turn onto an unsignalized cross street or into a driveway would have to make a U-turn at a signalized left-turn location or choose a route that would allow them to use a signalized cross street.

On Van Nuys Boulevard between San Fernando Road and the Metro Orange Line, the curbside lanes typically would be 11 feet wide. The existing bike lanes extending approximately 2 miles north on Van Nuys Boulevard from Parthenia Street to Beachy Avenue and from Laurel Canyon Boulevard to San Fernando Road would be removed, but the existing Class I bike path adjacent to San Fernando



Road would remain in place. Class I bikeways, also known as bike paths or shared-use paths, are facilities with exclusive right of way for bicyclists and pedestrians, away from the roadway and with cross flows by motor traffic minimized. In addition, bicycle parking would be provided at or near Metro stations, as feasible.

Alternative 3 would fulfill most of the project objectives but not to the same extent as the LPA. Since this alternative includes more stations than any of the rail alternatives, it would improve transit accessibility to the greatest extent but it would result in increased travel time compared to the LPA. There would also be fewer daily boardings than would occur under the LPA. Therefore, this alternative would not increase transit service efficiency as much as would occur under the LPA. As a consequence, it would not result in as great a mode shift as could occur under the LPA and therefore, would not result in the greenhouse gas emission reductions that could occur under the LPA (or IOS).

3.1.6 Alternative 4 – Median-Running LRT

Under this alternative, the LRT would be powered by overhead lines and would travel along the Metro-owned right-of-way used by the Antelope Valley Metrolink line and Union Pacific Railroad from the Sylmar/San Fernando Metrolink Station south to Van Nuys Boulevard. The distance is approximately 2.5 miles. Then it would travel along Van Nuys Boulevard from San Fernando Road to the Van Nuys Metro Orange Line Station; a distance of approximately 6.7 miles. The route of the LRT Alternative is a total of approximately 9.2 miles. As described in the DEIS/DEIR, Alternative 4 includes a subway segment from just north of Parthenia Street south to Hart Street.

LRT vehicles would be similar to those currently used throughout the existing Metro LRT system. The LRT train sets would be configured with a driver's cab at either end, similar to other Metro light rail trains, allowing them to run in either direction without the need to turn around at the termini.

The Alternative 4 LRT alignment would have two tracks and be fully separated from automobile traffic, except at controlled grade crossings. The LRT Alternative would operate along the following route:

Along and just east of San Fernando Road, from the Sylmar/San Fernando Metrolink Station south to Van Nuys Boulevard, the alignment would be located within the existing Metro-owned right-of-way currently used by Metrolink and the Union Pacific Railroad. Metrolink and the Union Pacific Railroad would continue to use a separate dedicated track;

From the intersection of San Fernando Road and Van Nuys Boulevard to the Metro Orange Line, the LRT Alternative would operate in a semi-exclusive right-of-way in what is currently the median of Van Nuys Boulevard; within this segment, the LRT would be underground beneath Van Nuys Boulevard from just north of Parthenia Street south to Hart Street. The train would operate at prevailing traffic speeds and would be controlled by train signals that would coordinate with the traffic signals.

Stations would be constructed at approximately 3/4-mile intervals along the entire route. There would be 14 stations, three of which would be underground. The three underground stations would be located near Sherman Way, the Van Nuys Metrolink Station, and Roscoe Boulevard.



All local curbside bus stops along Van Nuys Boulevard north of the Metro Orange Line would remain in their current location. Along San Fernando Road and Truman Street, the existing bus stops would also remain in their current locations.

The proposed stations would have designs consistent with the MRDC, including directive and standard drawings. Stations would be ADA compliant, including compliance with the requirements pertaining to rail platforms, rail station signs, public address systems, clocks, escalators, and track crossings.

The LRT Alternative would require a number of additional elements to support vehicle operations, including an OCS, TPSS, communications and signaling buildings, and an MSF.

The proposed LRT would operate with 6-minute peak and 12-minute off-peak headways when it opens and is projected to operate at 5-minute peak and 10-minute off-peak once ridership begins to increase.

All curbside parking would be prohibited along the surface-running segments of the LRT Alternative on Van Nuys Boulevard.

This alternative would maintain two travel lanes in each direction, while traveling along Van Nuys Boulevard.

Left turns from Van Nuys Boulevard onto cross streets would be maintained at most of the currently signalized intersections where the LRT would be running in the median. However, all vehicle movements across the median at currently unsignalized intersections would be prohibited. This would include left turns from Van Nuys Boulevard as well as left turns and through traffic from unsignalized side streets and private driveways. Motorists who desire to make a left turn onto an unsignalized cross street or into a driveway would have to make a U-turn at a signalized left-turn location or choose a route that would allow them to use a signalized cross street.

Bicycle parking would be provided at or near Metro stations, as feasible. The existing bike lanes extending approximately 2 miles north on Van Nuys Boulevard from Parthenia Street to Beachy Avenue and from Laurel Canyon Boulevard to San Fernando Road would be removed.

The City of Los Angeles constructed a bicycle path within Metro's railroad right-of-way parallel to San Fernando Road. This existing Class I bike path would remain in place except in the City of San Fernando where the bike path would be relocated east in order to accommodate the relocated single Metrolink/UPRR track. The right-of-way is sufficiently wide enough to allow the bicycle path to remain alongside a pair of LRT tracks and relocated track for Metrolink and Union Pacific Railroad. At the point where the LRT Alternative crosses the bicycle path, near the intersection of Pinney Street and San Fernando Road, a signalized grade crossing would be provided.

There would be a pedestrian bridge or underground access at the Sylmar/San Fernando Metrolink Station from the LRT platform to the Metrolink platform.

All current crosswalks at signal-controlled intersections would be maintained. Between the signalized intersections, a barrier would be installed to prevent mid-block pedestrian crossings, as is Metro's current practice on its median-running LRT lines. Pedestrians would be required to walk to a signalized location to cross Van Nuys Boulevard. LRT passengers would reach the median station platforms from crosswalks at signalized intersections.

Left turns into and out of driveways would be blocked by a median barrier under the LRT Alternative. Only right turns into and out of cross streets and driveways would be allowed.

This alternative, like the LPA, would fulfill all of the project objectives. Additionally, since Alternative 4 includes a subway segment, it would result in slightly less travel time and slightly more transit boardings than the LPA. However, construction of the subway would result in greater construction impacts along that segment compared to the LPA (or IOS). This alternative would also take longer to construct and the construction costs would be substantially higher than any of the other build alternatives.

3.2 Maintenance and Storage Facility (MSF) Sites

The LPA (and IOS) would include construction of a new MSF, which would provide secure storage of the LRT vehicles when they are not in operation, and regular light maintenance to keep them clean and in good operating condition as well as heavy maintenance. Three sites (Options A, B, and C) identified below were evaluated in the DEIS/DEIR.

- MSF Option A Van Nuys Boulevard/Metro Orange Line;
- MSF Option B Van Nuys Boulevard/Keswick Street; and
- MSF Option C Van Nuys Boulevard/Arminta Street.

MSF Option B, was identified as the locally preferred site by the Metro Board. The MSF Option B site, which would be approximately 25 acres in size, would be located on the west side of Van Nuys Boulevard and would be bounded by Keswick Street on the south, Raymer Street on the east and north, and the Pacoima Wash on the west.

MSF Option A was eliminated from consideration because of significant public opposition by a large number of business and property owners that would be displaced by construction of an MSF on the site.

MSF Option B was identified as the preferred site because of its central location along the alignment, public support for the site, and because sites A and C would result in potentially greater impacts on nearby sensitive residential uses than would occur with implementation of MSF Option B.

3.3 Alternatives Considered but Not Analyzed in the EIR

Chapter 2 also discussed several alternatives that were considered but not carried forward. These alternatives were considered by the lead agency but rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Alternative alignments that were identified and considered but subsequently eliminated from further review and not carried forward in the EIR include Sepulveda Boulevard, I-210 Freeway Terminus Point, and Van Nuys Boulevard between the Metro Orange Line and Ventura Boulevard. These alternatives were not carried forward into the EIR because they would not avoid or substantially lessen the proposed Project's significant impacts and/or they did not meet the project objectives. A detailed description of these alternatives and an explanation of why they were not carried forward are included in Chapter 2 of the FEIS/FEIR.

3.4 Environmentally Superior Alternative

Section 15126.6 of the CEQA Guidelines requires that an "environmentally superior" alternative be identified and the reasons for such a selection be disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of adverse impacts. In this case, the No Project Alternative would result in fewer impacts on the existing environment. However, it should also be recognized that there could be adverse transportation, air quality, and greenhouse gas environmental consequences from making no improvements to transit service along the project corridor, and none of the mobility and connectivity benefits for the community that could occur under the proposed build alternatives would occur under the No-Build Alternative.

Pursuant to CEQA regulations (see State CEQA Guidelines Section 15126.6(e)(2), when the No-Project (aka No-Build) Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. To determine which of the other alternatives would be environmentally superior, the analysis focuses on those impacts identified as adverse and/or significant and unavoidable, even after mitigation.

As shown in Table 1 below, the TSM Alternative would not result in any significant impacts/adverse effects after mitigation, as opposed to all five build alternatives, which would result in significant impacts/adverse effects after implementation of proposed mitigation measures. The TSM Alternative would, therefore, be the environmentally superior alternative. However, as shown in Table 1, the TSM Alternative would meet only three of the five primary project objectives and to a much more limited extent for those three objectives than under the build alternatives. Alternatives 1 through 3 would meet four of the five project objectives; Alternatives 4 and the LPA would meet all five of the project objectives. Among Alternatives 1 through 4 and the LPA, Alternatives 1 and 2 would result in unavoidable significant adverse impacts in 6 of the 12 impact categories; Alternative 3 would result in unavoidable significant adverse impacts in 8 categories, and Alternative 4 and the LPA would result in unavoidable significant adverse impacts in 7 of the 12 environmental impact categories.

Alternative 1 would be the environmentally superior alternative because although it would result in significant impacts in the same number of categories as Alternative 2, those impacts would be less extensive. However, it should be noted that Alternative 1 would not provide the mobility and environmental benefits that could occur under the LPA, which would result in substantially more transit boardings, significantly less travel time, and greater reductions in vehicle miles traveled and greenhouse gas emissions than Alternative 1. Therefore, Alternative 1 would not fulfill the project objectives to the extent that the LPA would.

Table 1: Alternatives Evaluation

Criteria	No Build	TSM	Alt 1: Curb- Running BRT	Alt 2: Median- Running BRT	Alt 3: Median- Running Low-Floor LRT/Tram	Alt 4: Median- Running LRT	LPA (Alt. 4 Modified: At- Grade LRT)			
Project Objectives										
Provide new service and/or infrastructure that improves passenger mobility and connectivity to regional activity centers.	No	Yes	Yes	Yes	Yes	Yes	Yes			
Provide more reliable transit service.	No	Yes	Yes	Yes	Yes	Yes	Yes			
Increase transit service efficiency (speeds and passenger throughput) in the project study area.	No	No	Yes	Yes	Yes	Yes	Yes			
Provide additional transit options in an area with a large transit-dependent population.	No	Yes	Yes	Yes	Yes	Yes	Yes			
Encourage modal shift thereby improving air quality and reducing greenhouse gas emissions in the project study area.	No	No	No	No	No	Yes	Yes			
Alternative Features										
Travel time (minutes)*	35.7	35.7	32.2	29.2	34.3	25.4	25.9			
Capital costs (millions of \$ [2018])	\$ 0	\$39.4	\$329.3	\$450.2	\$1,456	\$2,995–\$3,220	\$1,900-\$2,200			
Alternative length (miles)	N/A	N/A	9.2	9.2	9.2	9.2	9.2			
New stations	0	0	18	17	28	14	14			
Significant Environmental Impacts Remaining after Mitigation?										
Transportation, Transit, Circulation, and Parking	No	No	Yes	Yes	Yes	Yes	Yes			
Land Use	No	No	Yes	Yes	Yes	Yes	Yes			
Visual Quality and Aesthetics	No	No	No	No	Yes	Yes	Yes			



Criteria	No Build	TSM	Alt 1: Curb- Running BRT	Alt 2: Median- Running BRT	Alt 3: Median- Running Low-Floor LRT/Tram	Alt 4: Median- Running LRT	LPA (Alt. 4 Modified: At- Grade LRT)
Air Quality	No	No	Yes	Yes	Yes	Yes	Yes
Greenhouse Gas Emissions	No	No	No	No	Yes	No	No
Noise and Vibration	No	No	Yes	Yes	Yes	Yes	Yes
Geology, Soils, and Seismicity	No	No	No	No	No	No	No
Hazardous Waste and Materials	No	No	No	No	No	No	No
Ecosystems and Biological Resources	No	No	No	No	No	No	No
Safety and Security	No	No	Yes	Yes	Yes	Yes	Yes
Parklands and Community Facilities	No	No	Yes	Yes	Yes	Yes	Yes
Historic, Archaeological, and Paleontological Resources	No	No	No	No	No	No	No

 $^{^{\}ast}$ AM peak northbound travel time from Metro Orange Line to Sylmar Metrolink station. Source: KOA and ICF, 2019.



3.5 Statement of Overriding Considerations

The LPA would result in unavoidable significant adverse impacts after mitigation in the following impact categories: Transportation, Transit, Circulation, and Parking; Land Use; Visual Quality and Aesthetics; Air Quality; Noise and Vibration; Safety and Security; and Parklands and Community Facilities.

The benefits of the project are listed below. Any one of the overriding considerations of economic, social, and environmental benefits individually would be sufficient to outweigh the adverse environmental impacts of the proposed project and justify the adoption and certification of the FEIS/FEIR.

- 1. The LPA successfully meets all of the project objectives, which reflect Metro's mission to meet public transportation and mobility needs for transit infrastructure while also being a responsible steward of the environment and considerate of affected agencies and community members when planning a fiscally sound project.
- 2. The LPA provides more reliable operations and connections between key transit hubs and routes throughout the immediate and exterior study area.
- 3. Implementation of the LPA would enhance transit accessibility/connectivity to a multitude of local and regional destinations, and the greater Los Angeles County regional transit network by connecting to the Sylmar/San Fernando Metrolink Station in the north and the Metro Orange Line Station in the south. New links between the LPA and other transit lines would improve transit travel time for residents throughout the County and increase transit service efficiency by improving public transportation travel speeds and passenger throughput.
- 4. The implementation of the LPA would provide additional transit options in a largely transit-dependent area, which may indirectly contribute to the upwards social mobility of residents in the region. Because of the centralized trip patterns, transit accessibility and connectivity are integral to project study area resident travel needs (35 percent are transit-dependent).
- 5. The LPA is expected to decrease daily Vehicle Miles Traveled (VMT) under the future year 2040 with project conditions, by 78,131 miles compared to the No-Build Alternative by promoting modal shift to transit from private vehicles within the eastern San Fernando Valley, which will reduce energy consumption and lower emissions of some air pollutants, including greenhouse gas emissions and other pollutants that currently contribute to our regional air quality problems, resulting in beneficial air quality and climate change effects.
- 6. The LPA would address the increasing travel demand in the region.

Improved mobility through the implementation of the LPA has the potential to boost economic development and improve social justice by providing better access to employment, educational and health facilities, and activity centers. Accordingly, the Los Angeles County Metropolitan Transportation Authority (Metro) hereby concludes that the proposed LPA's benefits outweigh and override its unavoidable significant impacts for the reasons stated above. Metro has reached this decision after having done all of the following: (1) adopted all feasible mitigation measures, (2) rejected infeasible alternatives to the project, (3) rejected alternatives that would not feasibly attain

most of the project objectives, (4) recognized all significant, unavoidable impacts and rejected alternatives that would not avoid or substantially lessen any of the significant effects of the project, and (5) balanced the benefits of the proposed project against its significant and unavoidable impacts.