

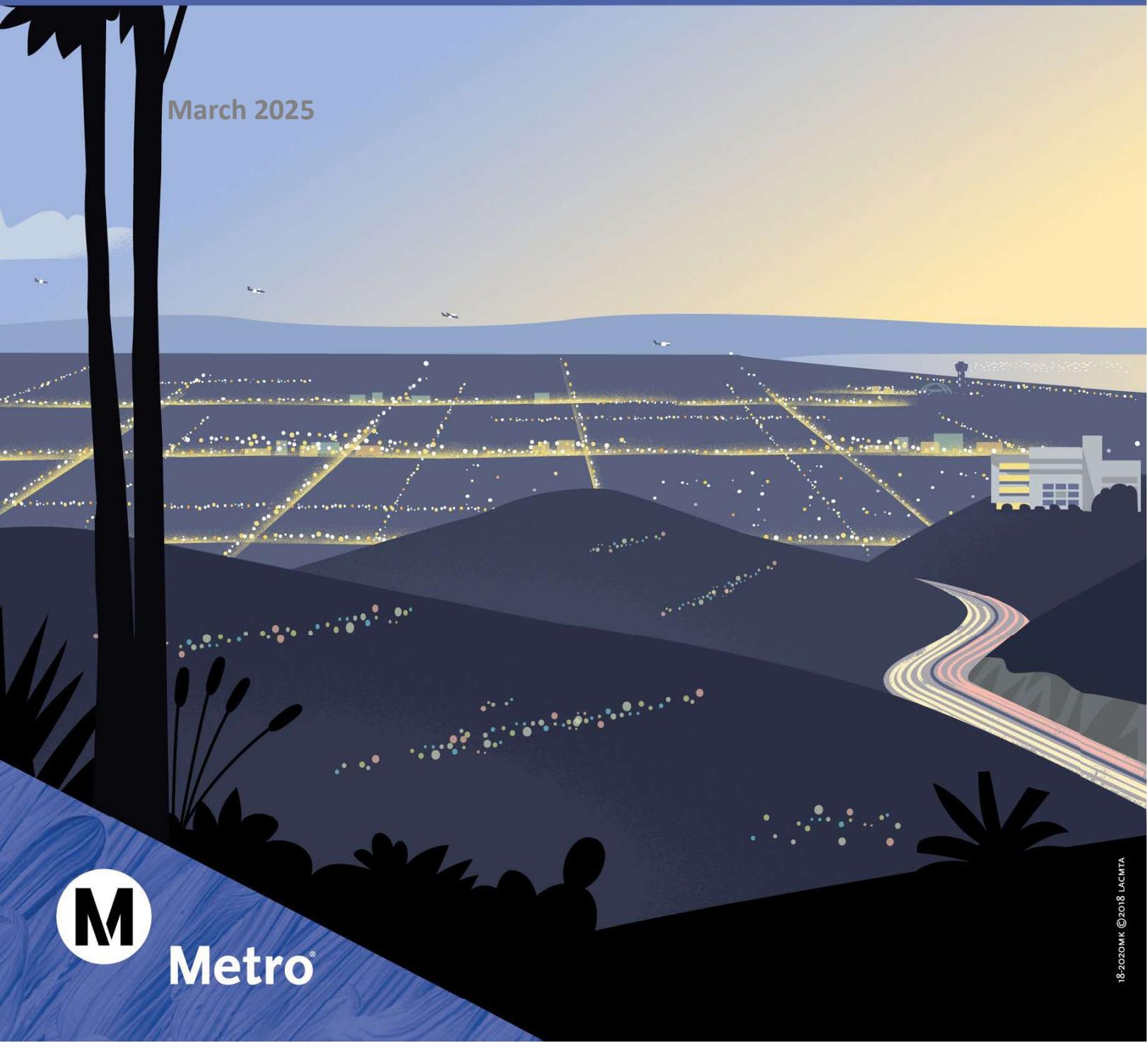
Appendix P. Parklands Technical Report



SEPULVEDA TRANSIT CORRIDOR PROJECT

Parklands Technical Report

March 2025



Metro®

SEPULVEDA TRANSIT CORRIDOR PROJECT

Contract No. AE67085000

Parklands Technical Report

Task 5.24.11

Prepared for:



Los Angeles County
Metropolitan Transportation Authority

Prepared by:



HTA PARTNERS
HNTB + TAHA + AECOM

777 S. Figueroa Street, Suite 2300
Los Angeles, California 90017

Review		
	Date	Name
Originator	3/17/25	Peter Feldman
Checker	3/19/25	Nick Suarez
Backchecker/Updater	3/19/25	Steven Edmonds
Verifier	3/19/25	Nick Suarez
QA Review	3/21/25	Aaron Grisel

March 2025

Table of Contents

ABBREVIATIONS AND ACRONYMS	IX
1 INTRODUCTION	1-1
1.1 Project Background	1-1
1.2 Project Alternatives	1-1
1.3 Project Study Areas.....	1-2
1.4 Purpose of this Report and Structure.....	1-2
2 REGULATORY AND POLICY FRAMEWORK.....	2-1
2.1 Federal.....	2-1
2.1.1 Uniform Relocation Assistance and Real Property Acquisition Policies Act	2-1
2.1.2 U.S. Department of Transportation Act of 1966	2-1
2.1.3 Land and Water Conservation Fund Act of 1965	2-2
2.1.4 National Park Service Organic Act of 1916.....	2-2
2.1.5 Wilderness Act.....	2-2
2.2 State.....	2-2
2.2.1 Public Park Preservation Act of 1971	2-2
2.2.2 Quimby Act of 1975.....	2-3
2.3 Regional	2-3
2.3.1 Southern California Association of Governments’ 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy	2-3
2.3.2 Los Angeles County Metropolitan Transportation Authority’s Transit to Parks Strategic Plan.....	2-3
2.3.3 OurCounty: Los Angeles Countywide Sustainability Plan.....	2-3
2.3.4 Los Angeles County General Plan 2035	2-4
2.3.5 Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment Plus	2-4
2.3.6 Los Angeles County 2045 Climate Action Plan	2-4
2.3.7 County of Los Angeles Bicycle Master Plan.....	2-5
2.3.8 LA River Master Plan 2022	2-5
2.4 Local.....	2-5
2.4.1 The Citywide General Plan Framework	2-5
2.4.2 City of Los Angeles Community Plans.....	2-7
2.4.3 City of Los Angeles 2010 Bicycle Plan.....	2-9
2.4.4 Mulholland Scenic Parkway Specific Plan.....	2-9
2.4.5 2009 Citywide Community Needs Assessment	2-9
2.4.6 LA’s Green New Deal Sustainable City pLAn 2019	2-9
2.4.7 City of Santa Monica.....	2-9

2.4.8	Santa Monica Mountains Comprehensive Plan	2-10
2.4.9	Santa Monica Mountains National Recreation Area General Management Plan.....	2-10
2.4.10	Eastern Santa Monica Mountains Natural Resources Protection Plan	2-11
2.4.11	Sepulveda Dam Basin Master Plan.....	2-11
3	METHODOLOGY	3-1
3.1	Operations and Construction	3-1
3.2	CEQA Thresholds of Significance	3-1
4	FUTURE BACKGROUND PROJECTS.....	4-1
4.1	Highway Improvements.....	4-1
4.2	Transit Improvements	4-1
4.3	Regional Rail Projects	4-2
5	NO PROJECT ALTERNATIVE.....	5-1
5.1	Existing Conditions.....	5-1
5.1.1	Parks and Recreational Facilities	5-4
5.1.2	Bicycle Facilities.....	5-11
5.1.3	Recreational Hiking Trails	5-12
5.2	Impact Evaluation	5-12
5.2.1	Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Or Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?	5-12
5.2.2	Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	5-13
5.3	Mitigation Measures.....	5-13
5.3.1	Operational Impacts	5-13
5.3.2	Construction Impacts	5-13
5.3.3	Impacts After Mitigation	5-13
6	ALTERNATIVE 1	6-1
6.1	Alternative Description.....	6-1
6.1.1	Operating Characteristics	6-1
6.1.2	Construction Activities	6-19
6.2	Existing Conditions.....	6-22
6.2.1	Parks and Recreational Facilities	6-25
6.2.2	Bicycle Facilities.....	6-27
6.2.3	Recreational Hiking Trails	6-28



- 6.3 Impact Evaluation 6-29
 - 6.3.1 Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Or Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks? 6-29
 - 6.3.2 Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? 6-33
- 6.4 Mitigation Measures..... 6-33
 - 6.4.1 Operational Impacts 6-33
 - 6.4.2 Construction Impacts 6-33
 - 6.4.3 Impacts After Mitigation 6-34
- 7 ALTERNATIVE 3 7-1**
 - 7.1 Alternative Description..... 7-1
 - 7.1.1 Operating Characteristics 7-1
 - 7.1.2 Construction Activities 7-18
 - 7.2 Existing Conditions..... 7-22
 - 7.2.1 Parks and Recreational Facilities 7-25
 - 7.2.2 Bicycle Facilities 7-27
 - 7.2.3 Recreational Hiking Trails 7-28
 - 7.3 Impact Evaluation 7-29
 - 7.3.1 Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Or Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks? 7-29
 - 7.3.2 Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? 7-33
 - 7.4 Mitigation Measures..... 7-34
 - 7.4.1 Operational Impacts 7-34
 - 7.4.2 Construction Impacts 7-34
 - 7.4.3 Impacts After Mitigation 7-34
- 8 ALTERNATIVE 4 8-1**
 - 8.1 Alternative Description..... 8-1
 - 8.1.1 Operating Characteristics 8-1

8.1.2	Construction Activities	8-16
8.2	Existing Conditions.....	8-21
8.2.1	Parks and Recreational Facilities	8-24
8.2.2	Bicycle Facilities.....	8-27
8.2.3	Recreational Hiking Trails	8-27
8.3	Impact Evaluation	8-27
8.3.1	Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Or Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?	8-27
8.3.2	Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	8-30
8.4	Mitigation Measures.....	8-30
8.4.1	Operational Impacts	8-30
8.4.2	Construction Impacts	8-30
8.4.3	Impacts After Mitigation	8-30
9	ALTERNATIVE 5	9-1
9.1	Alternative Description.....	9-1
9.1.1	Operating Characteristics	9-1
9.1.2	Construction Activities	9-14
9.2	Existing Conditions.....	9-18
9.2.1	Parks and Recreational Facilities	9-21
9.2.2	Bicycle Facilities.....	9-23
9.2.3	Recreational Hiking Trails	9-24
9.3	Impact Evaluation	9-24
9.3.1	Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Or Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?	9-24
9.3.2	Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	9-26
9.4	Mitigation Measures.....	9-27
9.4.1	Operational Impacts	9-27

9.4.2	Construction Impacts	9-27
9.4.3	Impacts After Mitigation	9-27
10	ALTERNATIVE 6	10-1
10.1	Alternative Description.....	10-1
10.1.1	Operating Characteristics	10-1
10.1.2	Construction Activities	10-10
10.2	Existing Conditions.....	10-13
10.2.1	Parks and Recreational Facilities	10-16
10.2.2	Bicycle Facilities	10-19
10.2.3	Recreational Hiking Trails	10-20
10.3	Impact Evaluation	10-20
10.3.1	Impact REC-1: Would the project to increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Or Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?	10-20
10.3.2	Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	10-22
10.4	Mitigation Measures.....	10-22
10.4.1	Operational Impacts	10-22
10.4.2	Construction Impacts	10-22
10.4.3	Impacts After Mitigation	10-22
11	PREPARERS OF THE TECHNICAL REPORT	11-1
12	REFERENCES	12-1

Figures

Figure 1-1.	Sepulveda Transit Corridor Project Study Area	1-3
Figure 5-1.	Parks and Recreational Facilities within the Project Study Area (Panaroma City to Brentwood)	5-2
Figure 5-2.	Parks and Recreational Facilities within the Project Study Area (Brentwood to Mar Vista)	5-3
Figure 6-1.	Alternative 1: Alignment.....	6-2
Figure 6-2.	Typical Monorail Guideway Cross-Section	6-4
Figure 6-3.	Typical Monorail Straddle-Bent Cross-Section	6-5
Figure 6-4.	Typical Monorail Beam Switch Cross-Section.....	6-10
Figure 6-5.	Alternative 1: Maintenance and Storage Facility Options.....	6-12

Figure 6-6. Alternative 1: Electric Bus Maintenance and Storage Facility	6-13
Figure 6-7. Alternative 1: Traction Power Substation Locations	6-15
Figure 6-8. Alternative 1: Roadway Changes	6-18
Figure 6-9. Alternative 1: Construction Staging Locations.....	6-21
Figure 6-10. Alternative 1: Parks and Recreational Facilities within the Resource Study Area (from Panaroma City to Brentwood)	6-23
Figure 6-11. Alternative 1: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)	6-24
Figure 7-1. Alternative 3: Alignment.....	7-2
Figure 7-2. Typical Aerial Monorail Guideway Cross-Section	7-4
Figure 7-3. Typical Monorail Straddle-Bent Cross-Section	7-5
Figure 7-4. Typical Underground Monorail Guideway Cross-Section.....	7-6
Figure 7-5. Typical Monorail Beam Switch Cross-Section.....	7-11
Figure 7-6. Alternative 3: Maintenance and Storage Facility Options.....	7-13
Figure 7-7. Alternative 3: Traction Power Substation Locations	7-15
Figure 7-8. Alternative 3: Roadway Changes	7-17
Figure 7-9. Alternative 3: Construction Staging Locations.....	7-21
Figure 7-10. Alternative 3: Parks and Recreational Facilities within the Resource Study Area (from Panaroma City to Brentwood)	7-23
Figure 7-11. Alternative 3: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)	7-24
Figure 8-1. Alternative 4: Alignment.....	8-2
Figure 8-2. Typical Underground Guideway Cross-Section	8-4
Figure 8-3. Typical Aerial Guideway Cross-Section.....	8-5
Figure 8-4. Typical Aerial Straddle-Bent Cross-Section.....	8-6
Figure 8-5. Alternative 4: Maintenance and Storage Facility Site.....	8-10
Figure 8-6. Alternative 4: Traction Power Substation Locations	8-12
Figure 8-7. Alternative 4: Roadway Changes	8-14
Figure 8-8. Alternative 4: Street Vacation at Del Gado Drive	8-15
Figure 8-9. Alternative 4: On-Site Construction Staging Locations.....	8-17
Figure 8-10. Alternative 4: Potential Off-Site Construction Staging Locations.....	8-20
Figure 8-11. Alternative 4: Parks and Recreational Facilities within the Resource Study Area (from Panaroma City to Brentwood)	8-22
Figure 8-12. Alternative 4: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)	8-23
Figure 9-1. Alternative 5: Alignment.....	9-2
Figure 9-2. Typical Underground Guideway Cross-Section	9-4
Figure 9-3. Typical Aerial Guideway Cross-Section.....	9-5
Figure 9-4. Alternative 5: Maintenance and Storage Facility Site.....	9-9

Figure 9-5. Alternative 5: Traction Power Substation Locations	9-11
Figure 9-6. Alternative 5: Roadway Changes	9-13
Figure 9-7. Alternative 5: On-Site Construction Staging Locations.....	9-15
Figure 9-8. Alternative 5: Potential Off-Site Construction Staging Locations.....	9-17
Figure 9-9. Alternative 5: Parks and Recreational Facilities within the Resource Study Area (from Panaroma City to Brentwood)	9-19
Figure 9-10. Alternative 5: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)	9-20
Figure 10-1. Alternative 6: Alignment.....	10-2
Figure 10-2. Typical Underground Guideway Cross-Section	10-3
Figure 10-3. Alternative 6: Maintenance and Storage Facility Site	10-7
Figure 10-4. Alternative 6: Traction Power Substation Locations	10-9
Figure 10-5. Alternative 6: Mid-Mountain Construction Staging Site	10-12
Figure 10-6. Alternative 6: Parks and Recreational Facilities within the Resource Study Area (from Panaroma City to Brentwood)	10-14
Figure 10-7. Alternative 6: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)	10-15

Tables

Table 2-1. Los Angeles County General Plan Parkland and Community Facility Goals and Policies.....	2-4
Table 2-2. The Citywide General Plan Framework – Goals, Objectives, and Policies	2-6
Table 2-3. Relevant City of Los Angeles Community Plans Goals, Objectives, and Policies	2-7
Table 2-4. City of Santa Monica General Plan Relevant Goals, Objectives, and Policies.....	2-10
Table 2-5. Santa Monica Mountains Comprehensive Plan Objectives	2-10
Table 4-1. Fixed Guideway Transit System in 2045	4-2
Table 5-1. Parks and Recreational Facilities within the Project Study Area	5-5
Table 5-2. Bicycle Facilities within the Project Study Area	5-11
Table 5-3. Recreational Hiking Trails within the Project Study Area	5-12
Table 6-1. Alternative 1: Station-to-Station Travel Times and Station Dwell Times.....	6-9
Table 6-2. Alternative 1: Traction Power Substation Locations.....	6-14
Table 6-3. Alternative 1: Roadway Changes	6-16
Table 6-4. Alternative 1: Construction Staging Locations	6-20
Table 6-5. Alternative 1: Parks and Recreational Facilities within the Resource Study Area	6-25
Table 6-6. Alternative 1: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations	6-27
Table 6-7. Alternative 1: Bicycle Facilities within the Resource Study Area.....	6-28
Table 6-8. Alternative 1: Recreational Hiking Trails within the Resource Study Area.....	6-28
Table 6-9. Alternative 1: Parkland and Recreational Facilities Property Acquisitions Summary.....	6-29

Table 7-1. Alternative 3: Station-to-Station Travel Times and Station Dwell Times.....	7-10
Table 7-2. Alternative 3: Traction Power Substation Locations.....	7-14
Table 7-3. Alternative 3: Roadway Changes	7-16
Table 7-4. Alternative 3: Construction Staging Locations	7-19
Table 7-5. Alternative 3: Parks and Recreational Facilities within the Resource Study Area	7-25
Table 7-6. Alternative 3: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations	7-27
Table 7-7. Alternative 3: Bicycle Facilities within the Resource Study Area.....	7-28
Table 7-8. Alternative 3: Recreational Hiking Trails within the Resource Study Area	7-28
Table 7-9. Alternative 3: Parkland and Recreational Facilities Property Acquisitions Summary.....	7-29
Table 8-1. Alternative 4: Station-to-Station Travel Times and Station Dwell Times.....	8-9
Table 8-2. Alternative 4: Traction Power Substation Locations.....	8-11
Table 8-3. Alternative 4: Roadway Changes	8-13
Table 8-4. Alternative 4: On-Site Construction Staging Locations	8-16
Table 8-5. Alternative 4: Potential Off-Site Construction Staging Locations	8-19
Table 8-6. Alternative 4: Parks and Recreational Facilities within the Resource Study Area	8-24
Table 8-7. Alternative 4: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations	8-26
Table 8-8. Alternative 4: Bicycle Facilities within the Resource Study Area.....	8-27
Table 9-1. Alternative 5: Station-to-Station Travel Time and Station Dwell Time.....	9-8
Table 9-2. Alternative 5: Traction Power Substation Locations.....	9-10
Table 9-3. Alternative 5: Roadway Changes	9-12
Table 9-4. Alternative 5: On-Site Construction Staging Locations	9-14
Table 9-5. Alternative 5: Potential Off-Site Construction Staging Locations	9-16
Table 9-6. Alternative 5: Parks and Recreational Facilities within the Resource Study Area	9-21
Table 9-7. Alternative 5: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations	9-23
Table 9-8. Alternative 5: Bicycle Facilities within the Resource Study Area.....	9-24
Table 10-1. Alternative 6: Station-to-Station Travel Times and Station Dwell Times.....	10-5
Table 10-2. Alternative 6: Traction Power Substation Locations.....	10-7
Table 10-3. Alternative 6: Parks and Recreational Facilities within the Resource Study Area	10-16
Table 10-4. Alternative 6: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations	10-19
Table 10-5. Alternative 6: Bicycle Facilities within the Resource Study Area.....	10-19

Abbreviations and Acronyms

ABC	Accelerated Bridge Construction
APM	automated people mover
BRT	bus rapid transit
CEQA	California Environmental Quality Act
CIDH	cast-in-drilled-hole
EIR	Environmental Impact Report
FTIP	Federal Transportation Improvement Program
HRT	heavy rail transit
HTA	HTA Partners
I-405	Interstate 405
LADRP	Los Angeles Department of Recreation and Parks
LADWP	City of Los Angeles Department of Water and Power
LASRE	LA SkyRail Express
LAX	Los Angeles International Airport
LOSSAN	Los Angeles-San Diego-San Luis Obispo
LRT	light rail transit
Metro	Los Angeles County Metropolitan Transportation Authority
MOW	maintenance-of-way
MRCA	Mountains Recreation and Conservation Authority
MRT	monorail transit
MSF	maintenance and storage facility
NOP	Notice of Preparation
NPS	National Park Service
Project	Sepulveda Transit Corridor Project
ROW	right-of-way
RSA	Resource Study Area
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SCAG	Southern California Association of Governments
SCORE	Southern California Optimized Rail Expansion
SMMC	Santa Monica Mountains Conservancy
STCP	Sepulveda Transit Corridor Partners
TBM	tunnel boring machine
TMP	Transportation Management Plan
TPSS	traction power substation

UCLA	University of California, Los Angeles
US-101	U.S. Highway 101
USDOT	U.S. Department of Transportation
VA	U.S. Department of Veterans Affairs
Valley	San Fernando Valley
Westside	Westside of Los Angeles

1 INTRODUCTION

1.1 Project Background

The Sepulveda Transit Corridor Project (Project) is intended to provide a high-capacity rail transit alternative to serve the large and growing travel market and transit needs currently channeled through the Sepulveda Pass and nearby canyon roads between the San Fernando Valley (Valley) and the Westside of Los Angeles (Westside). The Project would have a northern terminus with a connection to the Van Nuys Metrolink/Amtrak Station and a southern terminus with a connection to the Los Angeles County Metropolitan Transportation Authority's (Metro) E Line. In addition to providing local and regional connections to the existing and future Metro rail and bus network, the Project is anticipated to improve access to major employment, educational, and cultural centers in the greater Los Angeles area.

In 2019, Metro completed the Sepulveda Transit Corridor Feasibility Study and released the Project's *Final Feasibility Report* (Metro, 2019a), which documented the transportation conditions and travel patterns in the Sepulveda corridor; identified mobility problems affecting travel between the Valley and the Westside; and defined the Purpose and Need, goals, and objectives of the Project. Using an iterative evaluation process, the Feasibility Study identified feasible transit solutions that met the Purpose and Need, goals, and objectives of the Project. The Feasibility Study determined that a reliable, high-capacity, fixed guideway transit system connecting the Valley to the Westside could be constructed along several different alignments. Such a transit system, operated as either heavy rail transit (HRT) or monorail transit (MRT), would serve the major travel markets in the Sepulveda Transit Corridor Project and would provide travel times competitive with the automobile.

1.2 Project Alternatives

In November 2021, Metro released a Notice of Preparation (NOP) of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act, for the Project that included six alternatives (Metro, 2021a). Alternatives 1 through 5 included a southern terminus station at the Metro E Line Expo/Sepulveda Station, and Alternative 6 included a southern terminus station at the Metro E Line Expo/Bundy Station. The alternatives were described in the NOP as follows:

- Alternative 1: Monorail with aerial alignment in the Interstate 405 (I-405) corridor and an electric bus connection to the University of California, Los Angeles (UCLA)
- Alternative 2: Monorail with aerial alignment in the I-405 corridor and an aerial automated people mover connection to UCLA
- Alternative 3: Monorail with aerial alignment in the I-405 corridor and underground alignment between the Getty Center and Wilshire Boulevard
- Alternative 4: Heavy rail with underground alignment south of Ventura Boulevard and aerial alignment generally along Sepulveda Boulevard in the San Fernando Valley
- Alternative 5: Heavy rail with underground alignment including along Sepulveda Boulevard in the San Fernando Valley
- Alternative 6: Heavy rail with underground alignment including along Van Nuys Boulevard in the San Fernando Valley and a southern terminus station on Bundy Drive

The NOP also stated that Metro is considering a No Project Alternative that would not include constructing a fixed guideway line. Metro established a public comment period of 74 days, extending from November 30, 2021, through February 11, 2022. Following the public comment period, refinements to the alternatives were made to address comments received. Further refinements to optimize the designs and address technical challenges of the alternatives were made in 2023 following two rounds of community open houses.

In July 2024, following community meetings held in May 2024, Alternative 2 was removed from further consideration in the environmental process because it did not provide advantages over the other alternatives, and the remaining alternatives represent a sufficient range of alternatives for environmental review, inclusive of modes and routes (Metro, 2024a). Detailed descriptions of the No Project Alternative and the five remaining “build” alternatives are presented in Sections 5 through 10.

1.3 Project Study Areas

Figure 1-1 shows the Project Study Area. It generally includes Transportation Analysis Zones from Metro’s travel demand model that are within 1 mile of the alignments of the four “Valley-Westside” alternatives from the *Sepulveda Transit Corridor Project Final Feasibility Report* (Metro, 2019a). The Project Study Area represents the area in which the transit concepts and ancillary facilities are expected to be located. The analysis of potential impacts encompasses all areas that could potentially be affected by the Project, and the EIR will disclose all potential impacts related to the Project.

1.4 Purpose of this Report and Structure

This technical report examines the environmental impacts of the Project as it relates to parklands. It describes existing parklands conditions in the Project Study Area, the regulatory setting, methodology for impact evaluation, and potential impacts from operation and construction of the project alternatives, including maintenance and storage facility site options.

The report is organized according to the following sections:

- Section 1 Introduction
- Section 2 Regulatory and Policy Framework
- Section 3 Methodology
- Section 4 Future Background Projects
- Section 5 No Project Alternative
- Section 6 Alternative 1
- Section 7 Alternative 3
- Section 8 Alternative 4
- Section 9 Alternative 5
- Section 10 Alternative 6
- Section 11 Preparers of the Technical Report
- Section 12 References

Figure 1-1. Sepulveda Transit Corridor Project Study Area


Source: HTA, 2024

2 REGULATORY AND POLICY FRAMEWORK

2.1 Federal

In the absence of federal sponsorship, federal regulations and policies related to parks and recreation are not applicable to the Project. However, Metro anticipates that federal funding for the Project will be sought and has determined that adherence to federal requirements applicable to the Project is required. Accordingly, the following federal regulations and policies have been included in the regulatory and policy framework for recreation impacts.

2.1.1 Uniform Relocation Assistance and Real Property Acquisition Policies Act

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (42 United States Code [U.S.C.] Section 61) mandates that certain relocation services and payments be made available to eligible residents, businesses, and non-profit organizations displaced as a direct result of projects undertaken by a federal agency or with federal financial assistance. The Uniform Act provides for uniform and equitable treatment of persons displaced from their homes and businesses and establishes uniform and equitable land acquisition policies.¹ Owners and holders of real estate interests of private property have federal constitutional guarantees that their property will not be acquired, taken, or damaged for public use unless they first receive an offer of just compensation.

A just compensation amount is measured by the “fair market value” of the real estate property interests and rights acquired, where fair market value is considered to be the “highest price on the date of valuation that would be agreed to by a seller, being willing to sell, but under no particular or urgent necessity for so doing, nor obliged to sell; and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with the full knowledge of all the uses and purposes for which the property is reasonably adaptable and available” (Code of Civil Procedure Section 1263.320a). The establishment of fair market value of a property is determined by an independent appraisal opinion of value of a property’s worth that is just and equitable on the open market and confirmed by an outside independent review appraisal. The Federal Transit Administration (FTA) brochure, General Acquisition and Relocation Information (FTA, 2015), provides a description of the process by which private property is acquired for transit projects. The Uniform Act is also codified in 49 Code of Federal Regulations (CFR) Part 24. All real estate acquisition and relocation assistance undertaken with FTA federal assistance must be compliant with this act and its implementing regulations at 49 CFR Part 24.

2.1.2 U.S. Department of Transportation Act of 1966

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 (re-codified as amended at 49 United States Code Section 303) affords special protection to public recreational lands and facilities, including local parks and school facilities that are open and available to the general public for recreational purposes, significant cultural resources, and national wildlife refuges. Federally funded

¹ The term "displaced person" means any person who moves from real property or moves his personal property from real property. The term "business" means any lawful activity, excepting a farm operation, conducted primarily for the purchase, sale, lease, and rental of personal and real property, and for the manufacture, processing, or marketing of products, commodities, or any other personal property; for the sale of services to the public; by a nonprofit organization; or for assisting in the purchase, sale, resale, manufacture, processing, or marketing of products, commodities, personal property, or services by the erection and maintenance of an outdoor advertising display or displays, whether or not such display or displays are located on the premises on which any of the above activities are conducted. (42 U.S.C. Ch. 61, Section 4601)

transportation improvement projects are prohibited from using (either directly from property take or indirectly from proximity impacts) Section 4(f) lands for transportation purposes unless it can be demonstrated that no other alternative exists. Section 4(f) requirements apply to all projects requiring USDOT approval. Anticipated future involvement of USDOT agencies would trigger the requirements of Section 4(f). Upon initiation of any federal environmental review, each open space and recreation resource identified in this technical report would be assessed in accordance with the following Section 4(f) requirements:

- Section 4(f) protection applicability
- Potential for Section 4(f) use
- Measures to minimize harm
- Avoidance alternatives
- A “de minimis” impact or least overall harm determination (as necessary)²

2.1.3 Land and Water Conservation Fund Act of 1965

The Land and Water Conservation Fund Act established a funding source for both federal acquisition of park and recreational lands and matching grants to state and local governments for recreation planning, acquisition, and development. Section 6(f) of the Land and Water Conservation Fund Act requires that all property acquired or developed with assisted funding from the Land and Water Conservation Fund be maintained perpetually in public outdoor recreation uses. Section 6(f) requires that conversion of lands or facilities acquired under the Land and Water Conservation Fund Act fund be coordinated with the U.S. Department of Interior, and usually requires replacement in kind. Section 6(f) requirements apply to projects that are subject to federal approval.

2.1.4 National Park Service Organic Act of 1916

The National Park Service Organic Act of 1916, also known as the Organic Act of 1916, established the National Park Service (NPS) as a federal bureau in the Department of the Interior. The act’s mission was to conserve the natural and cultural resources of parks — including scenery, wildlife, and historic objects — in a way that would allow future generations to enjoy them without impairment. The act also outlined the NPS’ responsibilities to promote and regulate the use of national parks, monuments, and reservations.

2.1.5 Wilderness Act

The Wilderness Act of 1964 established the National Wilderness Preservation System, a national network of more than 800 federally designated wilderness areas. These wilderness areas are managed by the NPS, Bureau of Land Management, U.S. Fish and Wildlife Service, and U.S. Forest Service.

2.2 State

2.2.1 Public Park Preservation Act of 1971

California’s Public Park Preservation Act of 1971 is codified as Public Resources Code, Sections 5400–5409. Cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the acquired parkland.

² De minimis is a legal principle that allows for matters that are small scale or of insufficient importance to be exempted from a rule or requirement

2.2.2 Quimby Act of 1975

The Quimby Act of 1975, Government Code Section 66477, allows the legislative body of a city or county to require, by ordinance, the dedication of land, payment of fees in lieu thereof, or a combination of both for park or recreational purposes as a condition to the approval of a tentative tract map or parcel map.

2.3 Regional

2.3.1 Southern California Association of Governments' 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments' (SCAG) *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (2024-2050 RTP/SCS)* (SCAG, 2024a) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. It embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The 2024-2050 RTP/SCS includes a core vision for "sustainable development" that aligns transportation investments and land use decisions.

2.3.2 Los Angeles County Metropolitan Transportation Authority's Transit to Parks Strategic Plan

Los Angeles County Metropolitan Transportation Authority's (Metro) *Transit to Parks Strategic Plan* (Metro, 2019b) provides a systematic plan for increasing access to parks and open space. While Los Angeles County has plenty of open space and recreational assets, these places are out of reach for many residents. The plan highlights partnerships and programs like the Transit to Trails program in the Santa Monica Mountains National Recreation Area, which provides bus transportation to the park and includes programming facilitated by a bilingual naturalist.

2.3.3 OurCounty: Los Angeles Countywide Sustainability Plan

The *OurCounty: Los Angeles Countywide Sustainability Plan* (Los Angeles County, 2019) sets sustainability goals and policies for Los Angeles County. It outlines ways to reduce damage to the natural environment and adapt to the changing climate while focusing on communities that have been disproportionately burdened by environmental pollution. The plan envisions the following:

- Streets and parks that are accessible, safe, and welcoming to everyone
- Air, water, and soil that are clean and healthy
- Affordable housing that enables all residents to thrive in place
- A just economy that runs on renewable energy instead of fossil fuels

Goal 6 of the plan is related to parks and public services:

- Accessible parks
- Beaches
- Recreational waters
- Public lands
- Public spaces that create opportunities for respite, recreation, ecological discovery, and cultural activities

2.3.4 Los Angeles County General Plan 2035

Within the Project Study Area, the *Los Angeles County General Plan 2035* would apply only to the West Los Angeles Veterans Affairs Medical Center campus (LA County Planning, 2015). The plan provides the policy framework and establishes the long-range vision for how and where the unincorporated areas of the county will grow. The Conservation and Natural Resources Element of intends to guide the county’s long-range preservation of its natural resources and open space and sets policy direction for the open space and natural and energy-related resources within unincorporated Los Angeles. The Parks and Recreation Element provides policy direction for the maintenance and expansion of the Los Angeles County’s parks and recreation system through goals and policies that address the growing and diverse recreation needs of the communities served by Los Angeles County. The Public Services and Facilities Element promotes the orderly and efficient planning of public facilities and infrastructure in conjunction with land use development and growth. The Safety Element aims to reduce the potential risk of death, injuries, and economic damage resulting from natural and human-made hazards. Table 2-1. summarizes the applicable parklands and recreation goals and policies of the *Los Angeles County General Plan 2035* (LA County Planning, 2015).

Table 2-1. Los Angeles County General Plan Parkland and Community Facility Goals and Policies

Goal/Policy	Description
<i>Conservation and Natural Resources Element</i>	
Policy C/NR 1.2	Protect and conserve natural resources, natural areas, and available open spaces.
Policy C/NR 1.3	Support the acquisition of new available open space areas. Augment this strategy by leveraging County resources in concert with the compatible open space stewardship actions of other agencies, as feasible and appropriate.
<i>Parks and Recreation Element</i>	
Goal P/R 1	Enhanced active and passive park and recreation opportunities for all users.
Policy P/R 1.2	Provide additional active and passive recreation opportunities based on a community’s setting, and recreational needs and preferences.
Policy P/R 2.5	Support the development of multi-benefit parks and open spaces through collaborative efforts among entities such as cities, the county, state, and federal agencies, private groups, schools, private landowners, and other organizations.

Source: LA County Planning, 2015

2.3.5 Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment Plus

The 2022 *Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment Plus* is a focused update to the 2016 *Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment* (Los Angeles County Department of Parks and Recreation, 2022, 2016) and serves as Los Angeles County’s 30×30 strategy for land conservation and restoration. The 2022 report builds on *the 2016 Parks and Recreation Needs Assessment* by providing a more in-depth and nuanced understanding of 1) the distribution of environmental benefits and burdens within Los Angeles County, 2) park access and need considerations for regional parks and open spaces, and 3) park needs that are specific to the rural areas of Los Angeles County.

2.3.6 Los Angeles County 2045 Climate Action Plan

The *Los Angeles County 2045 Climate Action Plan* (Los Angeles County, 2024b) was adopted in June 2024 and is Los Angeles County’s plan for reducing greenhouse gas emission in the unincorporated areas of the County. Strategies directly related to parklands includes preserving and supporting unincorporated

Los Angeles County’s forests, parks, and working lands essential to reducing climate change impacts and protecting the communities, economies, and ecosystems that depend on the land.

2.3.7 County of Los Angeles Bicycle Master Plan

The *County of Los Angeles Bicycle Master Plan* (Los Angeles County, 2012) provides direction for improving mobility of bicyclists and encouraging more bicycle ridership within the county by the following:

- Expanding the existing bikeway network
- Connecting gaps
- Addressing constrained areas
- Providing for greater local and regional connectivity
- Encouraging more residents to bicycle often

The plan proposes to build on the existing 144 miles of bikeways throughout the County of Los Angeles and install approximately 831 miles of new bikeways in the next 20 years. This also includes bicycle infrastructure improvements, bicycle-related programs, implementation strategies, and policy and design guidelines for the unincorporated communities of Los Angeles County.

2.3.8 LA River Master Plan 2022

The *LA River Master Plan* (LADPW, 2022) was first created in 1996 and recognized the river as a body of resources of regional importance that must be protected and enhanced by implementing efforts as identified in the *LA River Master Plan*. These efforts included goals to improve the appearance of the river and the pride of local communities, provide a safe environment and a variety of recreational opportunities along the river, and ensure safe access to and compatibility between the river and other activity streams. On June 14, 2022, Los Angeles County (the County) adopted an update to the *LA River Master Plan*. The update builds on planning and implementation efforts from the LA River, including efforts by the County, City of Los Angeles, LA River Ecosystem Restoration Feasibility Study Lower LA River Working Group, and the Upper LA River and Tributaries Working Group. The current *LA River Master Plan* includes a vision for the Los Angeles River to become a continuous 51-mile trail with improved and increased access points to help the river serve as an active and alternative transit mode for communities adjacent to the river and throughout the County.

2.4 Local

2.4.1 The Citywide General Plan Framework

The City of Los Angeles *Citywide General Plan Framework* (DCP, 2001a), which is an element of the *City of Los Angeles General Plan* (City of Los Angeles, 2001), was originally adopted in December 1996 and re-adopted in August 2001. The *Citywide General Plan Framework* provides guidance for long-term growth in the City of Los Angeles and guides the update of community plans and citywide elements. Chapter 6, Open Space and Conservation addresses open space and recreation facilities and services provided to the City of Los Angeles. Chapter 9, Infrastructure and Public Services addresses police protection, fire prevention, fire protection, emergency medical services, and school and library services provided to the City of Los Angeles.

Table 2-2 summarizes the applicable parkland and recreation goals, objectives, and policies of the *Citywide General Plan Framework*.

Table 2-2. The Citywide General Plan Framework – Goals, Objectives, and Policies

Goal/Objective/Policy	Description
<i>Open Space Conservation Element</i>	
Goal 6A	An integrated citywide/regional public and private open space system that serves and is accessible by the City of Los Angeles’ population and is unthreatened by encroachment from other land uses.
Objective 6.1	Protect the City of Los Angeles’ natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City of Los Angeles’ natural resources to contribute to the sustainability of the region.
Policy 6.1.4	Conserve and manage the undeveloped portions of the City of Los Angeles’ watersheds, where feasible, as open spaces that protect, conserve, and enhance natural resources.
Objective 6.1.6	Consider preservation of private land open space to the maximum extent feasible. In areas where open space values determine the character of the community, development should occur with special consideration of these characteristics.
Objective 6.2	Maximize the use of the City of Los Angeles’ existing open space network and recreation facilities by enhancing those facilities and providing connections, particularly from targeted growth areas, to the existing regional and community open space system.
Policy 6.3.1	Preserve flood plains, landslide areas, and steep terrain areas as open space, wherever possible, to minimize the risk to public safety.
Policy 6.3.3	Utilize development standards to promote development of public open space that is visible, thereby helping to keep such spaces and facilities as safe as possible.
Objective 6.4	Ensure that the City of Los Angeles’ open spaces contribute positively to the stability and identity of the communities and neighborhoods in which they are located or through which they pass.
Policy 6.4.1	Encourage and seek to provide for usable open space and recreational facilities that are distributed throughout the City of Los Angeles.
Policy 6.4.3	Encourage appropriate connections between the City of Los Angeles’ neighborhoods and elements of the Citywide Greenways Network.
Policy 6.4.6	Explore ways to connect neighborhoods through open space linkages, including the “healing” of neighborhoods divided by freeways, through the acquisition and development of air rights over freeways (such as locations along the Hollywood Freeway between Cahuenga Pass and Downtown), which could be improved as a neighborhood recreation resource.
Policy 6.4.7	Consider as part of the City of Los Angeles’ open space, inventory of pedestrian streets, community gardens, shared school playfields, and privately-owned commercial open spaces that are accessible to the public, even though such elements fall outside the conventional definitions of “open space.” This will help address the open space and outdoor recreation needs of communities that are currently deficient in these resources.
Policy 6.4.9	Encourage the incorporation of small-scaled public open spaces within transit-oriented development, both as plazas and small parks associated with transit stations, and as areas of public access in private joint development at transit station locations.
<i>Infrastructure and Public Services Element</i>	
Objective 9.22	Monitor and forecast demand for existing and projected recreation and park facilities and programs.
Policy 9.22.1	Monitor and report appropriate park and recreation statistics and compare with population projections and demand to identify the existing and future recreation and parks needs of the City of Los Angeles.

Goal/Objective/Policy	Description
Goal 9L	Sufficient and accessible parkland and recreation opportunities in every neighborhood of the City of Los Angeles, which gives all residents the opportunity to enjoy green spaces, athletic activities, social activities, and passive recreation.

Source: DCP, 2001a

2.4.2 City of Los Angeles Community Plans

The Land Use Element of the *City of Los Angeles General Plan* (City of Los Angeles, 2001) includes 35 community plans that describe the land use designations, policies, and implementation programs for each community plan area. Each community plan discusses goals, objectives, and policies for developing a public transit system that improves mobility and ensures adequate access to public services and facilities, including parks, open space, schools, libraries, police, and fire services. The Project Study Area includes the following community plan areas: Bel Air-Beverly Crest, North Hollywood-Valley Village, Palms-Mar Vista-Del Rey, Brentwood-Pacific Palisades, Encino-Tarzana, Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass, Van Nuys-North Sherman Oaks, Mission Hills-Panorama City-North Hills, Reseda-West Van Nuys, Sun Valley-La Tuna Canyon, West Los Angeles, and Westwood (DCP, 1996a, 1996b, 1997, 1998a, 1998b, 1998c, 1998d, 1999a, 1999b, 1999c, 1999d, 1999e).

Table 2-3 provides the relevant parklands and recreation goals, objectives, and policies contained in these community plans.

Table 2-3. Relevant City of Los Angeles Community Plans Goals, Objectives, and Policies

Relevant Community Plan	Goal/Objective/Policy
<ul style="list-style-type: none"> • Encino-Tarzana • Mission Hills-Panorama City – North Hills • Palms-Mar Vista-Del Rey • Reseda-West Van Nuys (Goal 5) • Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass • Sun Valley-La Tuna Canyon (Goal 4) • Van Nuys-North Sherman Oaks • West Los Angeles 	<p>Goal 4, Goal 5: Adequate recreation and park facilities, which meet the needs of the residents in the plan area.</p>
<ul style="list-style-type: none"> • Brentwood-Pacific Palisades (Goal 4) • Encino-Tarzana • Mission Hills-Panorama City-North Hills (Goal 5) • Reseda-West Van Nuys (Goal 6) • Westwood 	<p>Goal 4, Goal 5, Goal 6: A community with sufficient open space in balance with development to serve the recreational, environmental, health and safety needs of the community and to protect environmental and aesthetic resources.</p>
<ul style="list-style-type: none"> • Encino-Tarzana • Mission Hills-Panorama City-North Hills • Palms-Mar Vista-Del Rey • Reseda-West Van Nuys (Objective 5-1) • Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass • Sun Valley-La Tuna Canyon (Objective 4-1) • Van Nuys-North Sherman Oaks • West Los Angeles 	<p>Objective 4-1, Objective 5-1: To conserve, maintain and better utilize existing recreation and park facilities, which promote the recreational needs of the community.</p>

Relevant Community Plan	Goal/Objective/Policy
<ul style="list-style-type: none"> Brentwood-Pacific Palisades (Objective 4-1) 	<p>Objective 4-1: To protect the resources of the Plan area for the benefit of the residents and of the region by preserving existing open space and, where possible, acquiring new open space.</p>
<ul style="list-style-type: none"> Encino-Tarzana Mission Hills-Panorama City-North Hills (Objective 5-1) Reseda-West Van Nuys (Objective 6-1) Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Van Nuys-North Sherman Oaks 	<p>Objective 5-1, Objective 6-1: To preserve existing open space resources and where possible develop new open space.</p>
<ul style="list-style-type: none"> Palms-Mar Vista-Del Rey Sun Valley-La Tuna Canyon (Policy 4-1.1) West Los Angeles 	<p>Policy 4-1.1: Preserve the existing recreational facilities and park space.</p>
<ul style="list-style-type: none"> Bel Air-Beverly Crest (Open Space and Conservation Policy) 	<p>Open Space and Conservation Policy: Designated Open Space Lands are not intended to be developed for residential or other urban uses. These lands should be considered for recreation, wildlife refuge, and preservation areas, and zoned appropriately depending on public or private ownership.</p>
<ul style="list-style-type: none"> Westwood (Policy 4-1.1) 	<p>Policy 4-1.1: Encourage the retention of passive and visual open space in balance with development in the community.</p>
<ul style="list-style-type: none"> Palms-Mar Vista-Del Rey Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Sun Valley-La Tuna Canyon (Goal 5) Van Nuys-North Sherman Oaks West Los Angeles 	<p>Goal 5: A community with sufficient open space in balance with development to serve the recreational, environmental and health needs of the community and to protect environmental and aesthetic resources.</p>
<ul style="list-style-type: none"> Encino-Tarzana (Objective 5-2) Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass 	<p>Objective 5-2: Provide access to the regional parks in the Santa Monica Mountains.</p>
<ul style="list-style-type: none"> North Hollywood-Valley Village (Objective 5) 	<p>Objective 5: To provide a basis for the location and programming of public facilities services and utilities and to coordinate the phasing of public facilities with private development by:</p> <ol style="list-style-type: none"> Providing neighborhood park and recreational facilities, including bicycle paths that utilize rights-of-way and other public lands where feasible Enlarging and expanding library facilities and services to better serve the community Modernizing and enlarging school facilities and providing community education centers to help residents with special problems; and Improving street lighting throughout the area.
<ul style="list-style-type: none"> North Hollywood-Valley Village (Objective 7) 	<p>Objective 7: To encourage open space for recreational uses for the enjoyment of both local residents and persons throughout the Los Angeles region.</p>

Source: DCP, 1996a, 1996b, 1997, 1998a, 1998b, 1998c, 1998d, 1999a, 1999b, 1999c, 1999d, 1999e

2.4.3 City of Los Angeles 2010 Bicycle Plan

The *2010 Bicycle Plan: A Component of the City of Los Angeles Transportation Element (Bicycle Plan)* (DCP, 2011) designates a 1,684-mile bikeway system and introduces a comprehensive collection of programs and policies, including a citywide bikeway system comprising three bikeway networks throughout the City of Los Angeles, bicycle friendly streets, the bundling of programs and policies, and a multi-pronged implementation strategy. The purpose of the Bicycle Plan is to increase, improve, and enhance bicycling in the City of Los Angeles as a safe, healthy, and enjoyable means of transportation and recreation.

2.4.4 Mulholland Scenic Parkway Specific Plan

The *Mulholland Scenic Parkway Specific Plan* (DCP, 1992) establishes specific land use policies for the area along Mulholland Drive from approximately Calabasas to the Hollywood Hills. It regulates land uses, environmental protection measures, grading, and building standards for projects within the Mulholland Scenic Parkway Specific Plan area. It encourages preservation of scenic resources, recreational and educational land uses, existing residential character, aesthetic compatibility, and protection of natural and archeological resources.

2.4.5 2009 Citywide Community Needs Assessment

The City of Los Angeles Department of Recreation and Parks (LADRP) conducted the *Citywide Community Needs Assessment* as the first step in preparing a Citywide Recreation and Parks Master/Strategic Plan and a Five-Year Capital Improvement Plan (LADRP, 2009). The Needs Assessment identifies, quantifies, and preliminarily prioritizes the tremendous need for recreation and open space in the City of Los Angeles. The LADRP performed a high-level review to address the various facilities needing improvements to meet current and future needs, prevent future maintenance problems, and offer positive alternatives to an increasingly dense and urbanized population.

2.4.6 LA's Green New Deal Sustainable City pLAN 2019

LA's Green New Deal Sustainable City pLAN 2019 (Sustainable City pLAN 2019) expands the City of Los Angeles' vision for a sustainable future and tackles the climate emergency with accelerated targets and more aggressive goals (City of Los Angeles Mayor's Office, 2019). The Sustainable City pLAN 2019 contains targets and initiatives pertaining to recreational facilities, including expanding 50 City of Los Angeles parks. The plan identifies the need to increase access to public parks and open spaces for all neighborhoods in the City of Los Angeles with a specific target to establish parks in underserved communities.

2.4.7 City of Santa Monica

The *City of Santa Monica General Plan* (City of Santa Monica, 2017) consists of the Land Use and Circulation, Conservation, Historic Preservation, Housing, Noise, Open Space, and Safety Elements. Together, they make up the framework for the City of Santa Monica's decision-making regarding growth and development. The mission of the Land Use and Circulation Element (City of Santa Monica, 2010) is to create housing and social connectivity, ensure mobility, assure open space and public services, and facilitate a vibrant economy celebrating arts and culture. The Conservation Element (City of Santa Monica, 1975) includes goals and policies for planned management and preparation and utilization of natural resources. The Open Space Element (City of Santa Monica, 1997) establishes a long-range vision

for the future development of parks and open spaces within the City of Santa Monica. Table 2-4 lists the applicable parklands and recreation goals, objectives, and policies of the *City of Santa Monica General Plan*.

Table 2-4. City of Santa Monica General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/Policy	Description
<i>Land Use and Circulation Element</i>	
Policy CE1.9	Continue to maintain a diverse range of recreational facilities, offering residents of all ages affordable and safe access to high-quality recreational opportunities.
Goal LU 17	Increase the amount of open space in the City of Santa Monica and improve the quality and character of existing open space areas ensuring access for all residents.
<i>Conservation Element</i>	
Goal	Preservation of the ecological balance and natural resources of the city and conservation of the energies and materials without serious interference with community needs.
<i>Open Space Element</i>	
Objective 1	Develop and maintain and diversified and balanced system of high-quality open space.
Objective 9	Increase the accessibility of open space.

Source: City of Santa Monica, 1975, 1997, 2010

2.4.8 Santa Monica Mountains Comprehensive Plan

The *Santa Monica Mountains Comprehensive Plan* (Santa Monica Mountains Comprehensive Planning Commission, 1979) guides land use management with the goal of doing the least damage to the natural and human-made environment. It aims to compromise this goal only for projects with overriding benefit and importance. Specific objectives include valuing open space and recreation, preventing urban sprawl, improving air quality, preventing noise pollution, and developing public transportation alternatives for access to the Santa Monica Mountains. Table 2-5 summarizes the applicable parkland and recreation objectives of the *Santa Monica Mountains Comprehensive Plan*.

Table 2-5. Santa Monica Mountains Comprehensive Plan Objectives

Objective	Description
Objective 3	Provide for public parks and facilities in the Santa Monica Mountains that offer a variety of recreational opportunities accessible to all income groups.
Objective 4	Provide a pattern of land use that balances conservation and development, prevents urban sprawl, retains a maximum amount of open space, avoids natural hazards, and allows the efficient and economic delivery of public services.
Objective 8	Develop innovative public transportation alternatives within the framework of existing roadways for access to the Santa Monica Mountains in ways that will protect the environment, maintain air quality, efficiently deliver public resources, and assure maximum access to the recreation areas for the public.

Source: Santa Monica Mountains Comprehensive Planning Commission, 1979

2.4.9 Santa Monica Mountains National Recreation Area General Management Plan

The *Santa Monica Mountains National Recreation Area General Management Plan and Environmental Impact Statement* (NPS, 2002) provides a framework for managing development, visitation, and natural and cultural resources. Issues addressed in the plan include impacts to natural and cultural resources caused by development, growing visitation and demand for outdoor recreation, lack of transportation to

and within the national recreation area, and an increasing awareness about the national recreation area among residents of the Metropolitan Los Angeles area. The National Parks and Recreation Act of 1978 authorized the addition of the Santa Monica Mountains National Recreation Area to the National Park System.

2.4.10 Eastern Santa Monica Mountains Natural Resources Protection Plan

The *Eastern Santa Monica Mountains Natural Resources Protection Plan* is a baseline document that guides land protection in the Santa Monica Mountains between Topanga Canyon Boulevard and Griffith Park's eastern boundary (SMMC, 2021). The plan was adopted on December 13, 2021, by the Santa Monica Mountains Conservancy and is intended to protect open spaces and wildlife connections. The plan's boundary is defined by the outer perimeter of the mapped habitat blocks in three habitat planning maps adopted by the Santa Monica Mountains Conservancy. The plan may serve as a standard and guide for protecting, preserving, and restoring sensitive resources.

2.4.11 Sepulveda Dam Basin Master Plan

The *Sepulveda Dam Basin Master Plan and Draft Environmental Assessment* (Sepulveda Dam Master Plan) (U.S. Army Corps of Engineers, 2011) describes the existing resources in the Sepulveda Dam Basin and provides a guide for the U.S. Army Corps of Engineers land management responsibilities and decisions in regard to project lands, water, and associated resources. The Sepulveda Dam Basin Master Plan provides direction and guidance for land development and utilization in the Sepulveda Dam Basin pursuant to applicable federal laws, regulations, and policies.

3 METHODOLOGY

3.1 Operations and Construction

The Project Study Area served as the geographic extent for which information on existing parklands and recreational facilities, including hiking trails and bike facilities was gathered. The Resource Study Area (RSA) for evaluating impacts to parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignments, a 0.5-mile radius from stations, and 0.25-miles from maintenance and storage facility (MSF) site boundaries. Parks and recreational facilities were identified from existing sources, including planning documents and a desktop analysis of aerial maps and satellite imagery.

The assessment of operational impacts includes an analysis of direct land acquisition and access disruptions within or adjacent to existing parks and recreational facilities. Generally, direct impacts to parks and recreational facilities are assessed for those facilities within 50 feet of an alternative's alignment. Parks and recreational facilities in the vicinity of stations are assessed to determine whether a project's alternatives would burden existing facilities. The assessment of construction-related impacts consists of an analysis of potential physical impacts based on the construction footprint and activities. These activities may include, but are not limited to, construction staging, temporary right-of-way (ROW) encroachments, and temporary access disruptions within or adjacent to existing parks and recreational uses.

3.2 CEQA Thresholds of Significance

For the purposes of the Environmental Impact Report, impacts are considered significant if the Project would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks.
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4 FUTURE BACKGROUND PROJECTS

This section describes planned improvements to highway, transit, and regional rail facilities within the Project Study Area and the region that would occur whether or not the Project is constructed. These improvements are relevant to the analysis of the No Project Alternative and the project alternatives because they are part of the future regional transportation network within which the Project would be incorporated. These improvements would not be considered reasonably foreseeable consequences of not approving the Project as they would occur whether or not the Project is constructed.

The future background projects include all existing and under-construction highway and transit services and facilities, as well as the transit and highway projects scheduled to be operational by 2045 according to the *Measure R Expenditure Plan* (Metro, 2008), the *Measure M Expenditure Plan* (Metro, 2016), the Southern California Association of Governments (SCAG) *Connect SoCal, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS)* (SCAG, 2020a, 2020b), and the Federal Transportation Improvement Program (FTIP), with the exception of the Sepulveda Transit Corridor Project (Project). The year 2045 was selected as the analysis year for the Project because it was the horizon year of SCAG's adopted RTP/SCS at the time Metro released the NOP for the Project.

4.1 Highway Improvements

The only major highway improvement in the Project Study Area included in the future background projects is the Interstate 405 (I-405) Sepulveda Pass ExpressLanes project (ExpressLanes project). This would include the ExpressLanes project as defined in the *2021 FTIP Technical Appendix, Volume II of III* (SCAG, 2021a), which is expected to provide for the addition of one travel lane in each direction on I-405 between U.S. Highway 101 (US-101) and Interstate 10 (I-10). Metro is currently studying several operational and physical configurations of the ExpressLanes project, which may also be used by commuter or rapid bus services, as are other ExpressLanes in Los Angeles County.

4.2 Transit Improvements

Table 4-1 lists the transit improvements that would be included in the future background projects. This list includes projects scheduled to be operational by 2045 as listed in the *Measure R and Measure M Expenditure Plans* (with the exception of the Project) as well as the Inglewood Transit Connector and LAX APM. In consultation with the Federal Transit Administration, Metro selected 2045 as the analysis year to provide consistency across studies for Measure M transit corridor projects. The Inglewood Transit Connector, a planned automated people mover (APM), which was added to the FTIP with *Consistency Amendment #21-05* in 2021, would also be included in the future background projects (SCAG, 2021b). These projects would also include the Los Angeles International Airport (LAX) APM, currently under construction by Los Angeles World Airports. The APM will extend from a new Consolidated Rent-A-Car Center to the Central Terminal Area of LAX and will include four intermediate stations. In addition, the new Airport Metro Connector Transit Station at Aviation Boulevard and 96th Street will also serve as a direct connection from the Metro K Line and Metro C Line to LAX by connecting with one of the APM stations.

During peak hours, heavy rail transit (HRT) services would generally operate at 4-minute headways (i.e., the time interval between trains traveling in the same direction), and light rail transit (LRT) services would operate at 5- to 6-minute headways. During off-peak hours, HRT services would generally operate at 8-minute headways and LRT services at 10- to 12-minute headways. Bus rapid transit (BRT) services would generally operate at peak headways between 5 and 10 minutes and off-peak headways between

10 and 14 minutes. The Inglewood Transit Connector would operate at a headway of 6 minutes, with more frequent service during major events. The LAX APM would operate at 2-minute headways during peak and off-peak periods.

Table 4-1. Fixed Guideway Transit System in 2045

Transit Line	Mode	Alignment Description ^a
Metro A Line	LRT	Claremont to downtown Long Beach via downtown Los Angeles
Metro B Line	HRT	Union Station to North Hollywood Station
Metro C Line	LRT	Norwalk to Torrance
Metro D Line	HRT	Union Station to Westwood/VA Hospital Station
Metro E Line	LRT	Downtown Santa Monica Station to Lambert Station (Whittier) via downtown Los Angeles
Metro G Line	BRT	Pasadena to Chatsworth ^b
Metro K Line	LRT	Norwalk to Expo/Crenshaw Station
East San Fernando Valley Light Rail Transit Line	LRT	Metrolink Sylmar/San Fernando Station to Metro G Line Van Nuys Station
Southeast Gateway Line	LRT	Union Station to Artesia
North San Fernando Valley Bus Rapid Transit Network Improvements	BRT	North Hollywood to Chatsworth ^c
Vermont Transit Corridor	BRT	Hollywood Boulevard to 120th Street
Inglewood Transit Connector	APM	Market Street/Florence Avenue to Prairie Avenue/Hardy Street
Los Angeles International Airport APM	APM	Aviation Boulevard/96th Street to LAX Central Terminal Area

Source: HTA, 2024

^aAlignment descriptions reflect the project definition as of the date of the Project’s Notice of Preparation (Metro, 2021).

^bAs defined in Metro Board actions of [July 2018](#) and [May 2021](#), the Metro G Line will have an eastern terminus near Pasadena City College and will include aerial stations at Sepulveda Boulevard and Van Nuys Boulevard.

^cThe North San Fernando Valley network improvements are assumed to be as approved by the Metro Board in [December 2022](#).

4.3 Regional Rail Projects

The future background projects would include the Southern California Optimized Rail Expansion (SCORE) program, which is Metrolink’s Capital Improvement Program that will upgrade the regional rail system (including grade crossings, stations, and signals) and add tracks as necessary to be ready in time for the 2028 Olympic and Paralympic Games. The SCORE program will also help Metrolink to move toward a zero emissions future. The following SCORE projects planned at Chatsworth and Burbank Stations will upgrade station facilities and allow 30-minute all-day service in each direction by 2045 on the Metrolink Ventura County Line:

1. Chatsworth Station: This SCORE project will include replacing an at-grade crossing and adding a new pedestrian bridge and several track improvements to enable more frequent and reliable service.
2. Burbank Station: This SCORE project will include replacing tracks, adding a new pedestrian crossing, and realigning tracks to achieve more frequency, efficiency, and shorter headways.

In addition, the Link Union Station project will provide improvements to Los Angeles Union Station that will transform the operations of the station by allowing trains to arrive and depart in both directions, rather than having to reverse direction to depart the station. Link Union Station will also prepare Union Station for the arrival of California High-Speed Rail, which will connect Union Station to other regional multimodal transportation hubs such as Hollywood Burbank Airport and the Anaheim Regional Transportation Intermodal Center.

5 NO PROJECT ALTERNATIVE

The only reasonably foreseeable transportation project under the No Project Alternative would be improvements to Metro Line 761, which would continue to serve as the primary transit option through the Sepulveda Pass with peak-period headways of 10 minutes in the peak direction and 15 minutes in the other direction. Metro Line 761 would operate between the Metro E Line Expo/Sepulveda Station and the Metro G Line Van Nuys Station, in coordination with the opening of the East San Fernando Valley Light Rail Transit Line, rather than to its current northern terminus at the Sylmar Metrolink Station.

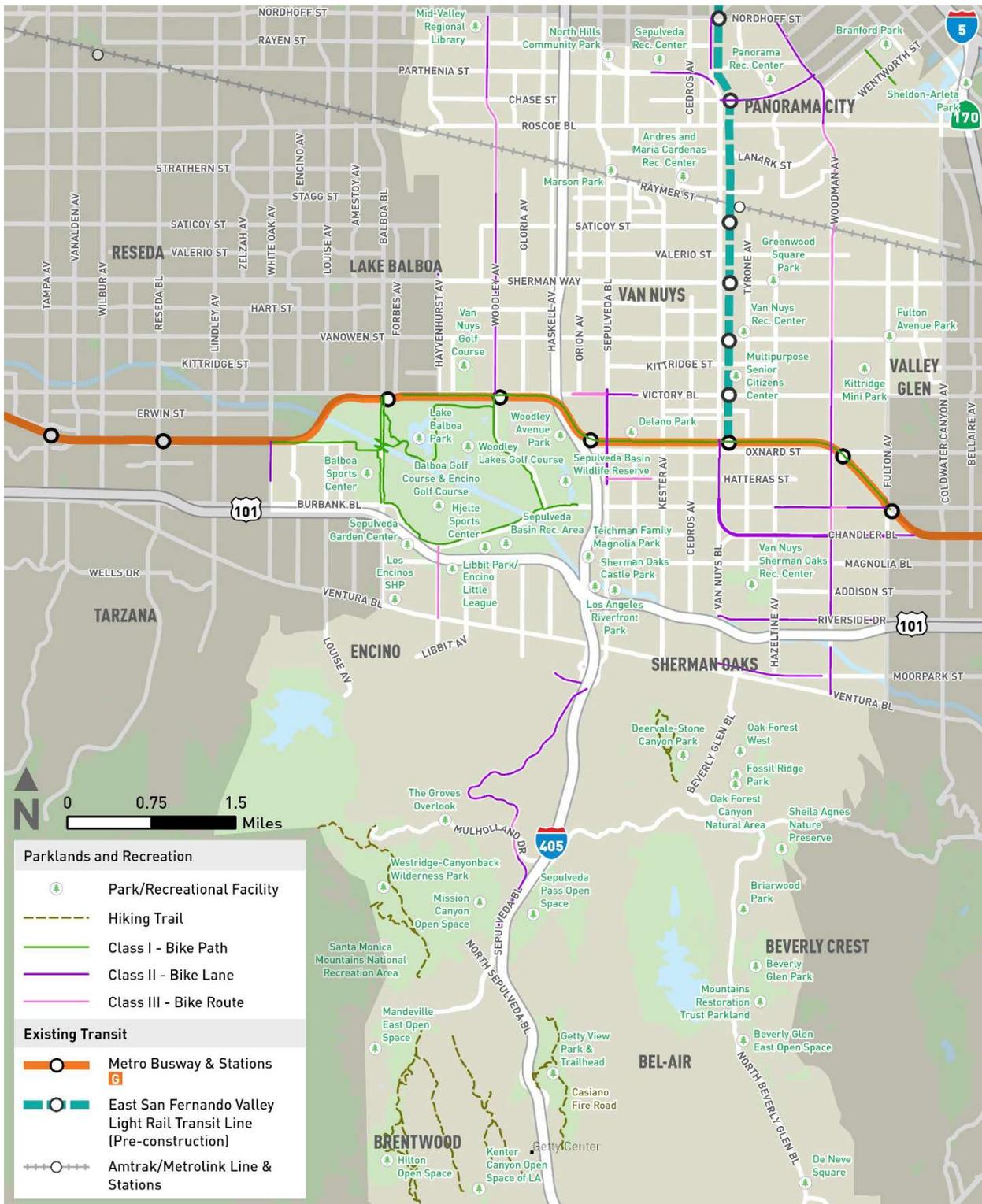
5.1 Existing Conditions

The Project Study Area for the No Project Alternative includes the Transportation Analysis Zones from Metro's travel demand model that are within 1 mile of the alignments for the project alternatives. The Project Study Area consists of portions of the City of Los Angeles, the City of Santa Monica, and unincorporated Los Angeles County community of West Los Angeles, which contains the Department of Veterans Affairs complex. Affected communities identified within the City of Los Angeles include the following:

- Bel Air
- Beverly Crest
- Brentwood
- Encino
- Lake Balboa
- Mar Vista
- North Hills
- North Hollywood
- North Sherman Oaks
- Palms
- Panorama City
- Sherman Oaks
- Sun Valley
- Van Nuys
- West Los Angeles
- Westwood

Figure 5-1 and Figure 5-2 show the locations of the parks and recreational facilities, including bicycle facilities and recreational hiking trails, within the Project Study Area.

**Figure 5-1. Parks and Recreational Facilities within the Project Study Area
(Panorama City to Brentwood)**



Source: HTA, 2024

Figure 5-2. Parks and Recreational Facilities within the Project Study Area (Brentwood to Mar Vista)



Source: HTA, 2024

5.1.1 Parks and Recreational Facilities

The Project Study Area is approximately 5,091 acres and includes approximately 72 park and recreational facilities and open space areas. The 72 park and recreational facilities in the Project Study Area include 44 parks; 22 nature/wildlife preserves and regional open spaces; 4 public golf courses; 1 botanical garden; and 1 amusement park. Of the facilities identified, 54 are located in the City of Los Angeles, 9 are in the City of Santa Monica, 1 is in the City of Beverly Hills, and the botanical garden is located at the University of California, Los Angeles (UCLA). Several agencies own and manage the park and recreational facilities identified, including the U.S. Army Corps of Engineers, Los Angeles County, City of Los Angeles, City of Santa Monica, Mountains Recreation and Conservation Authority, Santa Monica Mountains Conservancy, Mountains Restoration Trust, National Park Service, Los Angeles Neighborhood Land Trust, California Department of Parks and Recreation, UCLA, and the Colorado Center.

Table 5-1 lists the parks and recreational facilities within the Project Study Area, and Figure 5-1 and Figure 5-2 show the locations of these facilities.

Table 5-1. Parks and Recreational Facilities within the Project Study Area

Name	Address	Agency	Facility Type	Amenities	Size (acres)
Airport Park	3201 Airport Avenue, Santa Monica	City of Santa Monica	Local Park	Soccer field, playground, dog park	8.3
Andres and Maria Cardenas Recreation Center	14740 Blythe Street, Panorama City	City of Los Angeles	Local Park	Skate park, splash pad, community center	0.7
Balboa Golf Course and Encino Golf Course	16821 Burbank Boulevard, Encino	USACE	Golf Course	Golf course	320.9
Balboa Sports Center	17015 Burbank Boulevard, Encino	USACE	Local Park	Tennis court, basketball court, baseball field, soccer field, playground, gym	81.9
Barrington Dog Park	333 S Barrington Avenue, Los Angeles	City of Los Angeles	Regional Open Space	Dog park	1.6
Barrington Recreation Center	333 Barrington Avenue, Los Angeles	City of Los Angeles	Local Park	Basketball court, baseball field, multipurpose field, playground, community center	17.1
Beverly Glen East Open Space	Los Angeles	MRCA	Natural Areas	Open space	0.4
Beverly Glen Park	2448 Angelo Drive, Los Angeles	MRCA	Natural Areas	Open space	95.5
Branford Park	13310 Branford Street, Pacoima	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, playground, gym	13.6
Briarwood Park	461 Almaden Court, Los Angeles	City of Los Angeles	Local Park	Basketball court, multipurpose field, playground	10.7
Ohio and Bundy Triangle	Santa Monica Boulevard; South Bundy Drive; and Ohio Avenue, Los Angeles	City of Los Angeles	Regional Open Space	Open space	0.2
Cheviot Hills Park and Recreation Center	2551 Motor Avenue, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, multipurpose field, playground, pool, gym	34.2
Clover Park	2600 Ocean Park Boulevard, Santa Monica	City of Santa Monica	Local Park	Tennis court, basketball court, baseball field, fitness zone, playground	18.7
Colorado Center Park	Broadway, Santa Monica	Colorado Center	Local Park	Tennis court, basketball court, fitness zone, playground	2.5
Crestwood Hills Park	1000 Hanley Avenue, Los Angeles	City of Los Angeles	Local Park	Basketball court, baseball field, multipurpose field, playground, community center	16.0

Name	Address	Agency	Facility Type	Amenities	Size (acres)
De Neve Square	314 Beverly Glen, Los Angeles	City of Los Angeles	Local Park	Open space	1.1
Deervale-Stone Canyon Park	14700 Deervale Place, Sherman Oaks	City of Los Angeles	Regional Open Space	Open space	79.4
Delano Park	15100 Erwin Street, Van Nuys	City of Los Angeles	Local Park	Baseball field, soccer field, playground, community center	6.1
Douglas Park	2439 Wilshire Boulevard, Santa Monica	City of Santa Monica	Local Park	Tennis courts, playground, community center	4.2
Felicia Mahood Multipurpose Center	11338 Santa Monica Boulevard, Los Angeles	City of Los Angeles	Local Park	Senior Center	4.3
Fossil Ridge Park	Sherman Oaks	SMMC	Regional Open Space	Open space	57.7
Fulton Avenue Park	13255 Vanowen Street, North Hollywood	City of Los Angeles	Local Park	Playground	0.4
Gandara Park	1819 Stewart Street, Santa Monica	City of Santa Monica	Local Park	Basketball court, baseball field, multipurpose field, playground	3.9
Getty View Park and Trailhead	1399 Casiano Road, Los Angeles	SMMC	Regional Open Space	Open space	180.1
Greenwood Square Park	14101 Sherman Way, Van Nuys	City of Los Angeles	Local Park	Playground	0.3
Hilton Open Space	5711 W Century Boulevard, Los Angeles	SMMC	Regional Open Space	Open space	232.1
Hjelte Sports Center	16200 Burbank Boulevard, Encino	USACE	Local Park	Baseball field	14.7
Holmby Park	601 Club View Drive, Los Angeles	City of Los Angeles	Local Park	Picnic shelter, playground	8.5
Ishihara Park	2909 Exposition Boulevard, Santa Monica	City of Santa Monica	Local Park	Picnic shelter, playground	2.4
Kenter Canyon Open Space of LA	645 N Kenter Avenue, Los Angeles	City of Los Angeles	Natural Areas	Open space	0.4
Kittridge Mini Park	6565 Greenbush Avenue, Van Nuys	City of Los Angeles	Regional Open Space	Open space	0.1
Lake Balboa Park	6300 Balboa Boulevard, Encino	USACE	Regional Recreation Park	Baseball field, picnic shelter, playground	111.0

Name	Address	Agency	Facility Type	Amenities	Size (acres)
Libbit Park/Encino Little League	5120 Hayvenhurst Avenue, Encino	USACE	Local Park	Baseball field	24.5
Los Angeles Riverfront Greenway	Sherman Oaks	City of Los Angeles	Regional Open Space	Open space	6.2
Los Encinos State Historic Park	16756 Moorpark Street, Encino	California Department of Parks and Recreation	Local Park	Open space	5.3
Mandeville East Open Space	457 N Fairfax Avenue, Los Angeles	MRCA	Regional Open Space	Open space	4.1
Mar Vista Recreation Center	11430 Woodbine Avenue, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, multipurpose field, playground, gym	19.1
Marson Park	15262 Marson Street, Panorama City	Los Angeles Neighborhood Land Trust	Local Park	Playground	0.3
Mid-Valley Regional Library Park	16244 Nordhoff Street, North Hills	City of Los Angeles	Local Park	Open space	2.5
Mildred E. Mathia Botanical Garden	707 Tiverton Drive, Los Angeles	University of California, Los Angeles	Botanical Garden	Botanical garden	8.2
Mission Canyon Open Space	8260 Mulholland Drive	County of Los Angeles	Natural Areas	Open space	479.9
Mountains Restoration Trust Parkland	3815 Old Topanga Canyon Road, Topanga	Mountains Restoration Trust	Regional Open Space	Open space	18.1
Multipurpose Senior Citizens Center	6514 Sylmar Avenue, Van Nuys	City of Los Angeles	Local Park	Senior center	1.4
North Hills Community Park	8756 Parthenia Place, North Hills	City of Los Angeles	Local Park	Basketball court, soccer field, picnic shelter, playground, community center	3.2
Oak Forest Canyon Natural Area	Sherman Oaks	MRCA	Regional Open Space	Open space	1.1
Oak Forest West	Sherman Oaks	SMMC	Regional Open Space	Open space	9.7
Ocean View Farms/North Venice Little League Baseball/Venice Reservoir Site	3304-3324 S Centinela Avenue, Los Angeles	City of Los Angeles	Local Park	Community garden, baseball field	14.3

Name	Address	Agency	Facility Type	Amenities	Size (acres)
Palms Park	2950 Overland Avenue, Los Angeles	City of Los Angeles	Local Park	Basketball court, baseball field, multipurpose field, picnic shelter, playground, community center	2.7
Panorama Recreation Center	8600 Hazeltine Avenue, Panorama City	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, playground, splash pads, gym, community center	6.0
Park Drive Park	2415 Broadway, Santa Monica	City of Santa Monica	Regional Open Space	Open space	0.3
Rancho Park Municipal Golf Course	10460 West Pico Boulevard, Los Angeles	City of Los Angeles	Golf Course	Golf course	148.5
Schader Park	1425 Cloverfield Boulevard, Santa Monica	City of Santa Monica	Local Park	Open space	0.2
Sepulveda Basin Recreation Area	17017 Burbank Boulevard, Encino	USACE	Regional Recreation Park	Baseball field, soccer field, multipurpose field, fitness zone, skatepark, dog park, senior center	268.4
Sepulveda Basin Wildlife Reserve	17017 Burbank Boulevard, Encino	USACE	Regional Open Space	Open space	327.3
Sepulveda Garden Center	16633 W Magnolia Boulevard, Encino	USACE	Local Park	Picnic shelter, community center	24.1
Sepulveda Pass Open Space	457 N Fairfax Avenue, Los Angeles	SMMC	Regional Open Space	Open space	155.0
Sepulveda Recreation Center	8801 Kester Avenue, Panorama City	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, playground, pool, gym, community center	10.9
Sheila Agnes Nature Preserve	3101 Benedict Canyon Drive, Beverly Hills	SMMC	Regional Open Space	Open space	37.1
Sheldon-Arieta Park	12455 Wicks Street, Sun Valley	City of Los Angeles	Local Park	Baseball field, soccer field	45.2
Sherman Oaks Castle Park	4989 Sepulveda Boulevard, Sherman Oaks	City of Los Angeles	Amusement Park	Amusement Park	5.0
Stoner Recreation Center	1835 Stoner Avenue, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, multipurpose field, skate park, playground, pool, gym, community center	8.7



Name	Address	Agency	Facility Type	Amenities	Size (acres)
Teichman Family Magnolia Park	15365 Magnolia Boulevard, Sherman Oaks	City of Los Angeles	Local Park	Basketball court	3.9
The Groves Overlook	16501 Mulholland Drive, Los Angeles	City of Los Angeles	Regional Open Space	Open space	0.2
Van Nuys Golf Course	6550 Odessa Avenue, Van Nuys	City of Los Angeles	Golf Course	Golf course	56.3
Van Nuys Recreation Center	14301 Vanowen Street, Van Nuys	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, playground, community center	3.9
Van Nuys Sherman Oaks Recreation Center	14201 Huston Street, Sherman Oaks	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, fitness zone, picnic shelter, playground, pool, community center, senior center	65.5
Virginia Avenue Park	2200 Virginia Avenue, Santa Monica	City of Santa Monica	Local Park	Basketball court, multipurpose field, playground, splash pad, community center	9.3
Westridge-Canyonback Wilderness Park	17500 Mulholland Drive, Los Angeles	MRCA	Regional Open Space	Open space	1,629.6
Westwood Gardens Park	1246 Glendon Avenue, Los Angeles	City of Los Angeles	Local Park	Open space	0.3
Westwood Park	1350 Sepulveda Boulevard, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, multipurpose field, playground, pool, gym	26.7
Woodley Avenue Park	6350 Woodley Avenue, Encino	USACE	Regional Recreation Park	Fitness zone, picnic shelter, playgrounds	119.8
Woodley Lakes Golf Course	6331 Woodley Avenue, Encino	USACE	Golf Course	Golf course	209.2
Total					5,090.8

Source: LA County Planning, 2024a; City of Los Angeles, 2024

MRCA = Mountains Recreation and Conservation Authority
SMMC = Santa Monica Mountains Conservancy
USACE = U.S. Army Corps of Engineers

Notes:

1. Size (acres) refers to the full size of the resource, not the acreage within the Resource Study Area.
2. Facility Type is categorized based on the LA County Department of Regional Planning and City of Los Angeles, and includes the following types:
 - Amusement Park: Family entertainment, managed by the City of Los Angeles.
 - Botanical Garden: Public garden.
 - Local Park: Designed to serve residents of all ages in several surrounding neighborhoods and may include facilities such as a community building, multipurpose fields, hard court areas, parking, maintenance service areas, and play areas.
 - Natural Area: A place that has a unique value that is scenic, historic, geologic, ecological, or educational. Natural areas are maintained in a natural state to preserve their wilderness, native ecosystems, and their processes.
 - Regional Recreation Park: Regional parks are typically greater than 100 acres in size and have a service radius of 25 miles or more. They include unique areas such as lakes, wetlands, auditoriums, water bodies, and campgrounds, in addition to the active recreational facilities offered in community and community regional parks.
 - Regional Open Space: Undeveloped land in its natural state, as well as active and passive park space that is regional in size.

5.1.2 Bicycle Facilities

The bicycle facilities within the Project Study Area are classified using Caltrans' *Highway Design Manual*. These facility classifications include the following:

- Class I – Bike Path: Bike paths are commonly referred to as shared-use paths, or bicycle trails. They provide a completely separated travel facility for the exclusive use of bicycles and pedestrians with cross flow by vehicles minimized.
- Class II – Bike Lanes: Bike lanes provide a striped lane for one-way bike travel on a street or highway. Buffered bike lanes also fall into this category, this is when a bike lane is accompanied by a painted striped buffer between the bike lane and parking or travel lane.
- Class III – Bike Routes: Bike routes provide for shared use with pedestrian or motor vehicle traffic and are typically indicated by signage or surface markings such as sharrows.
- Class IV – Separated Bikeway: Separated bikeways, also referred to as protected bike lanes, are protected bike lanes physically separated from the vehicle travel lane by more than the white stripe. Separation may be accomplished with flexible bollards or permanent barriers.

The existing bicycle facilities in the Project Study Area consists of a network of approximately 117 miles of Class I, Class II, and Class III bicycle facilities, including approximately 18 miles of Class I bicycle facilities, approximately 57 miles of Class II bicycle facilities, and approximately 42 miles of Class III bicycle facilities. There are no Class IV bicycle facilities within the Project Study Area. Future planned bicycle facilities in the Project Study Area would comprise approximately 180 miles of additional bicycle facilities, including approximately 21.1 miles of Class I bike paths, 51.3 miles of Class II bike lanes, 80.6 miles of Class III bike routes, and 26.9 miles of Class IV separated bikeways (SCAG, 2024b). Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* (Metro, 2025a) for additional information regarding active transportation facilities. Off-road bicyclists also have access to unpaved roads and trails in the Santa Monica Mountains, including Getty View Park and Trailhead, which spans several ridges and canyons within the Project Study Area.

Table 5-2 lists the Class I bicycle facilities in the Project Study Area, and Figure 5-1 and Figure 5-2 show the locations of these facilities.

Table 5-2. Bicycle Facilities within the Project Study Area

Bicycle Facilities	Length (miles)	Location
<i>Class I - Bike Paths</i>	<i>17.9</i>	—
Balboa Boulevard Bike Path	1.5	Balboa Boulevard between Burbank Boulevard and Victory Boulevard
Burbank Boulevard Bike Path	2.0	Burbank Boulevard between Balboa Boulevard and I-405
Canterbury Avenue Bike Path	0.4	Canterbury Avenue between Tonopah Street and Branford Street
Exposition Corridor Bikeway	3.2	Along Metro E Line
Lake Balboa Bike Path	2.5	Lake Balboa Park
Metro G Line Bikeway	6.3	Along Metro G Line Busway
Westwood Park Bike Path	0.8	Westwood Park
Woodley Avenue Bike Path	1.2	Woodley Avenue between Burbank Boulevard and Victory Boulevard
<i>Class II - Bike Lanes</i>	<i>57.0</i>	<i>Various paths</i>
<i>Class III - Bike Routes</i>	<i>42.0</i>	<i>Various paths</i>
Total	116.9	—

Source: SCAG, 2024b

— = not applicable

5.1.3 Recreational Hiking Trails

Approximately 13 miles of recreational hiking trails are identified in the parklands and open space areas within the Project Study Area. Table 5-3 lists the recreational hiking trails within Project Study Area, and Figure 5-1 and Figure 5-2 show the locations of these facilities.

Table 5-3. Recreational Hiking Trails within the Project Study Area

Name	City	Length (miles)
Canyonback Road	Los Angeles	0.4
Casiano Fire Road	Los Angeles	1.4
Deervale Trail	Los Angeles	1.1
Getty Center Access	Los Angeles	0.6
Getty View Trail	Los Angeles	0.6
Hollyhock Fire Road	Los Angeles	0.7
Lower East Mandeville Fire Road	Los Angeles	2.1
Mount Saint Mary's Fire Road	Los Angeles	1.3
Mulholland Drive (unpaved)	Los Angeles	0.8
North Kenter Fire Road	Los Angeles	0.9
Saint Mary's Connector	Los Angeles	0.2
Tigertail Trail	Los Angeles	1.4
Upper East Mandeville Fire Road	Los Angeles	1.5
Total	—	13.1

Source: U.S. Department of Homeland Security Geospatial Management Office, 2020

— = not applicable

5.2 Impact Evaluation

5.2.1 Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Or

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?

5.2.1.1 Operational Impacts

The No Project Alternative would maintain existing transit service within the Project Study Area and would not operate a new high-capacity rail transit service that would connect the northern terminus Van Nuys Metrolink/Amtrak Station with the southern terminus at the Metro E Line. Under the No Project Alternative, the only reasonably foreseeable transit improvement within the Project Study Area would be rerouting Metro Line 761 to the Van Nuys Metrolink station. Metro Line 761 is an existing bus line and would not create permanent physical impacts in the Project Study Area that would increase the use of existing parks and recreational facilities such that substantial physical deterioration of existing

parks would occur or be accelerated or require new or expansion of parks or recreational facilities. Therefore, no impact would occur.

5.2.1.2 Construction Impacts

The No Project Alternative would not result in Project-related construction impacts that would increase the use of existing neighborhood and regional parks or other recreational facilities resulting in permanent physical deterioration. While the rerouted Metro Line 761 may require some construction work associated with potential new bus stops, all construction activities would occur within the street ROW and sidewalks with no potential to affect any parkland resources. The No Project Alternative would not create temporary construction-related physical impacts in the Project Study Area that would increase the use of existing parks and recreational facilities such that substantial physical deterioration of existing parks would occur or be accelerated; or require new or expansion of parks or recreational facilities. Therefore, no impact would occur.

5.2.2 Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

5.2.2.1 Operational Impacts

The No Project Alternative would not operate a new high-capacity rail transit service that would connect the northern terminus Van Nuys Metrolink/Amtrak Station with the southern terminus at the Metro E Line. The rerouted Metro Line 761 is an existing bus route that would operate entirely along existing streets and highways with no potential to require new or expanded recreational facilities. The No Project Alternative would not result in the construction of recreational facilities or require the construction or expansion of recreational facilities in the Project Study Area. Therefore, no impact would occur.

5.2.2.2 Construction Impacts

The No Project Alternative would not result in Project-related construction impacts and would not include the construction of recreational facilities or require the construction or expansion of recreational facilities in the Project Study Area. While the rerouted Metro Line 761 may require some construction work associated with potential new bus stops, all construction activities would occur within the street ROW and sidewalks with no potential to affect any parkland resources. Therefore, no impact would occur.

5.3 Mitigation Measures

5.3.1 Operational Impacts

No mitigation measures are required.

5.3.2 Construction Impacts

No mitigation measures are required.

5.3.3 Impacts After Mitigation

No mitigation measures are required, no impacts.

6 ALTERNATIVE 1

6.1 Alternative Description

Alternative 1 is an entirely aerial monorail alignment that would run along the Interstate 405 (I-405) corridor and would include eight aerial monorail transit (MRT) stations and a new electric bus route from the Los Angeles County Metropolitan Transportation Authority's (Metro) D Line Westwood/VA Hospital Station to the University of California, Los Angeles (UCLA) Gateway Plaza via Wilshire Boulevard and Westwood Boulevard. This alternative would provide transfers to five high-frequency fixed guideway transit and commuter rail lines, including the Metro E, Metro D, and Metro G Lines, the East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 15.1 miles. The length of the bus route would be 1.5 miles.

The eight aerial MRT stations and three bus stops would be as follows:

1. Metro E Line Expo/Sepulveda Station (aerial)
2. Santa Monica Boulevard Station (aerial)
3. Wilshire Boulevard/Metro D Line Station (aerial)
 - a. Wilshire Boulevard/VA Medical Center bus stop
 - b. Westwood Village bus stop
 - c. UCLA Gateway Plaza bus stop
4. Getty Center Station (aerial)
5. Ventura Boulevard/Sepulveda Boulevard Station (aerial)
6. Metro G Line Sepulveda Station (aerial)
7. Sherman Way Station (aerial)
8. Van Nuys Metrolink Station (aerial)

6.1.1 Operating Characteristics

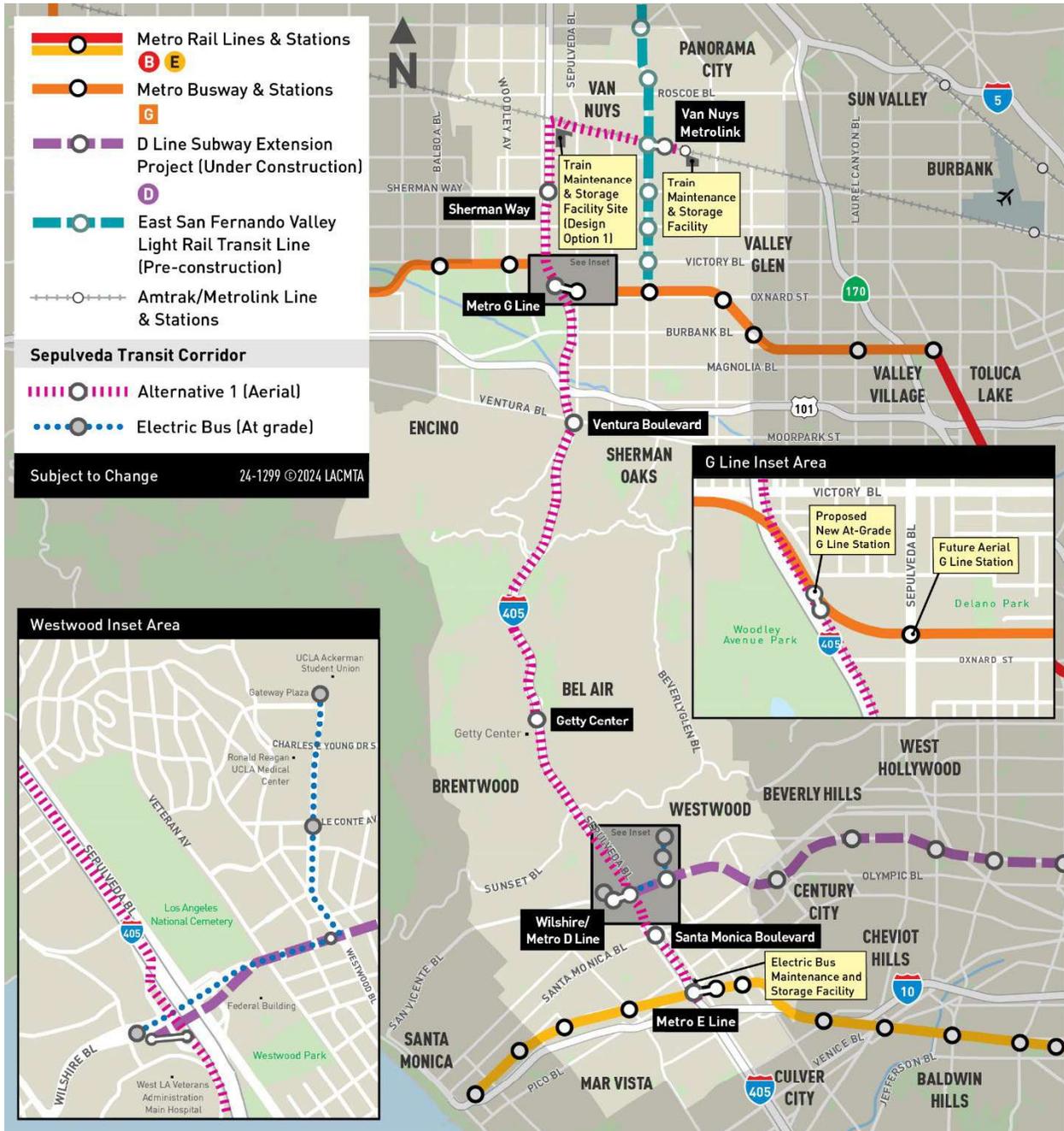
6.1.1.1 Alignment

As shown on Figure 6-1, from its southern terminus at the Metro E Line Expo/Sepulveda Station, the alignment of Alternative 1 would generally follow I-405 to the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor near the alignment's northern terminus at the Van Nuys Metrolink Station. At several points, the alignment would transition from one side of the freeway to the other or to the median. North of U.S. Highway 101 (US-101), the alignment would be on the east side of the I-405 right-of-way (ROW) and would then curve eastward along the south side of the LOSSAN rail corridor to Van Nuys Boulevard.

The proposed southern terminus station would be located west of the existing Metro E Line Expo/Sepulveda Station and east of I-405 between Pico Boulevard and Exposition Boulevard. Tail tracks would extend just south of the station adjacent to the eastbound Interstate 10 to northbound I-405 connector over Exposition Boulevard. North of the Metro E Line Expo/Sepulveda Station, a storage track would be located off the main alignment north of Pico Boulevard between I-405 and Cotner Avenue. The alignment would continue north along the east side of I-405 until just south of Santa Monica Boulevard, where a proposed station would be located between the I-405 northbound travel lanes and Cotner Avenue. The alignment would cross over the northbound and southbound freeway lanes north of Santa Monica Boulevard and travel along the west side of I-405, before reaching a proposed station within the

I-405 southbound-to-eastbound loop off-ramp to Wilshire Boulevard, near the Metro D Line Westwood/VA Hospital Station.

Figure 6-1. Alternative 1: Alignment



Source: LASRE, 2024; HTA, 2024

An electric bus would serve as a shuttle between the Wilshire Boulevard/Metro D Line Station and UCLA Gateway Plaza. From the Wilshire Boulevard/Metro D Line Station, the bus would travel east on Wilshire Boulevard and turn north on Westwood Boulevard to UCLA Gateway Plaza and make an intermediate stop in Westwood Village near the intersection of Le Conte Avenue and Westwood Boulevard.

North of Wilshire Boulevard, the monorail alignment would transition over the southbound I-405 freeway lanes to the freeway median, where it would continue north over the Sunset Boulevard overcrossing. The alignment would remain in the median to Getty Center Drive, where it would cross over the southbound freeway lanes to the west side of I-405, just north of the Getty Center Drive undercrossing, to the proposed Getty Center Station located north of the Getty Center tram station. The alignment would return to the median for a short distance before curving back to the west side of I-405, south of the Sepulveda Boulevard undercrossing north of the Getty Center Drive interchange. After crossing over Bel Air Crest Road and Skirball Center Drive, the alignment would return to the median and run under the Mulholland Drive Bridge, then continue north within the I-405 median to descend into the San Fernando Valley (Valley).

Near Greenleaf Street, the alignment would cross over the northbound freeway lanes and northbound on-ramps toward the proposed Ventura Boulevard Station on the east side of I-405. This station would be located above a transit plaza and would replace an existing segment of Dickens Street adjacent to I-405, just south of Ventura Boulevard. Immediately north of the Ventura Boulevard Station, the alignment would cross over northbound I-405 to the US-101 connector and continue north between the connector and the I-405 northbound travel lanes. The alignment would continue north along the east side of I-405 — crossing over US-101 and the Los Angeles River — to a proposed station on the east side of I-405 near the Metro G Line Busway. A new at-grade station on the Metro G Line would be constructed for Alternative 1 adjacent to the proposed monorail station. These proposed stations are shown on the Metro G Line inset area on Figure 6-1.

The alignment would then continue north along the east side of I-405 to the proposed Sherman Way Station. The station would be located inside the I-405 northbound loop off-ramp to Sherman Way. North of the station, the alignment would continue along the eastern edge of I-405, then curve to the southeast parallel to the LOSSAN rail corridor. The alignment would remain aerial along Raymer Street east of Sepulveda Boulevard and cross over Van Nuys Boulevard to the proposed terminus station adjacent to the Van Nuys Metrolink/Amtrak Station. Overhead utilities along Raymer Street would be undergrounded where they would conflict with the guideway or its supporting columns. Tail tracks would be located southeast of this terminus station.

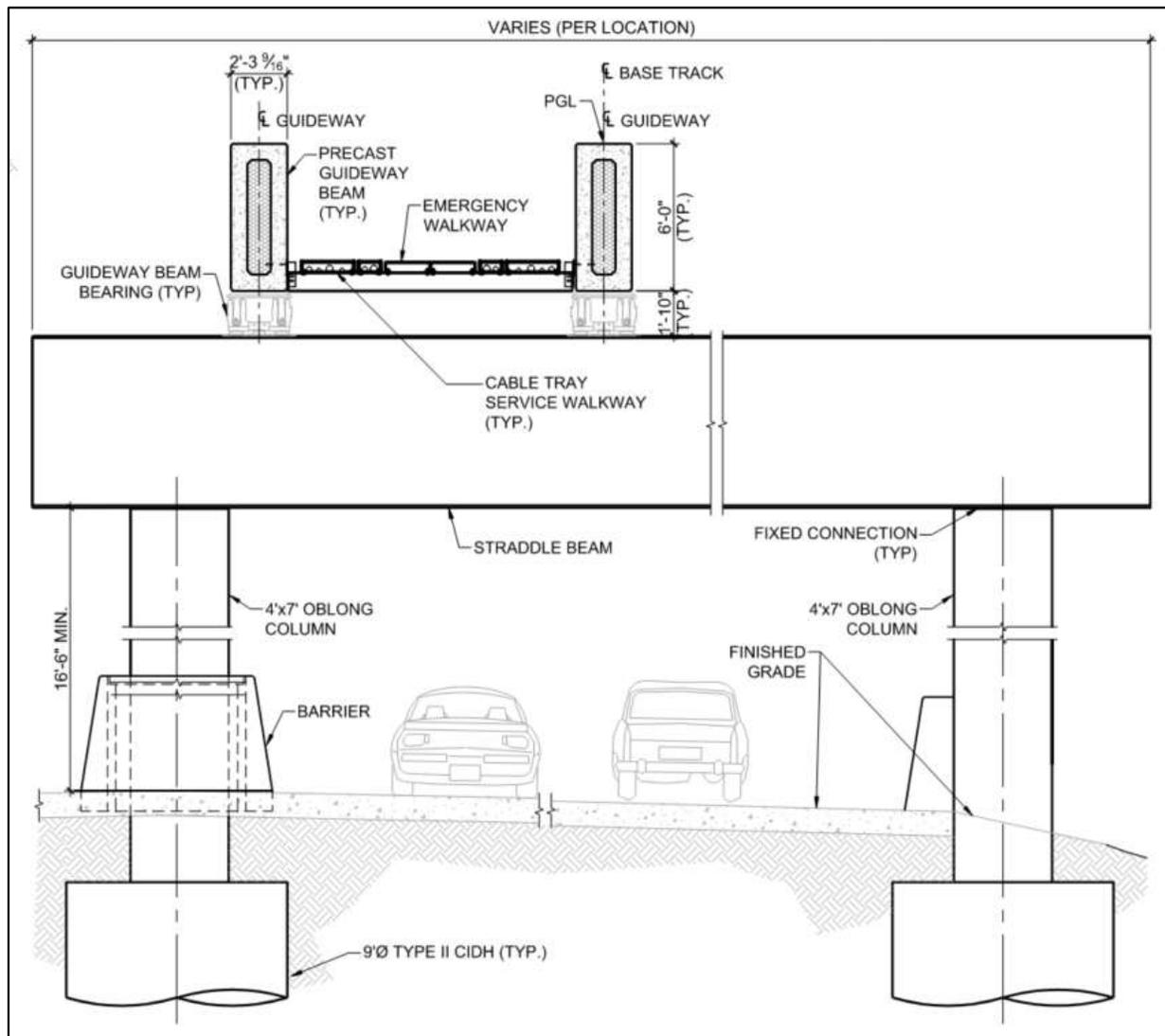
6.1.1.2 Guideway Characteristics

The monorail alignment of Alternative 1 would be entirely aerial, utilizing straddle-beam monorail technology, which allows the monorail vehicle to straddle a guide beam that both supports and guides the vehicle. Northbound and southbound trains would travel on parallel beams supported by either a single-column or a straddle-bent structure. Figure 6-2 shows a typical cross-section of the aerial monorail guideway.

distance between columns) ranging from 70 to 190 feet. The bottom of the column caps would typically be between 16.5 feet and 32 feet above ground level.

Over certain segments of roadway and freeway facilities, a straddle-bent configuration, as shown on Figure 6-3, consisting of two concrete columns constructed outside of the underlying roadway would be used to support the guide beams and column cap. Typical spans for these structures would range between 65 and 70 feet. A minimum 16.5-foot clearance would be maintained between the underlying roadway and the bottom of the column caps.

Figure 6-3. Typical Monorail Straddle-Bent Cross-Section



Source: LASRE, 2024

Structural support columns would vary in size and arrangement by alignment location. Columns would be 6 feet in diameter along main alignment segments adjacent to I-405 and be 4 feet wide by 6 feet long in the I-405 median. Straddle-bent columns would be 4 feet wide by 7 feet long. At stations, six rows of dual 5-foot by- 8-foot columns would support the aerial guideway. Beam switch locations and long-span structures would also utilize different sized columns, with dual 5-foot columns supporting switch

locations and 9-foot- or 10-foot-diameter columns supporting long-span structures. Crash protection barriers would be used to protect the columns. Columns would have a cast-in-drilled-hole (CIDH) pile foundation extending 1 foot in diameter beyond the column width with varying depths for appropriate geotechnical considerations and structural support.

6.1.1.3 Vehicle Technology

Alternative 1 would utilize straddle-beam monorail technology, which allows the monorail vehicle to straddle a guide beam that both supports and guides the vehicle. Rubber tires would sit both atop and on each side of the guide beam to provide traction and guide the train. Trains would be automated and powered by power rails mounted to the guide beam, with planned peak-period headways of 166 seconds and off-peak-period headways of 5 minutes. Monorail trains could consist of up to eight cars. Alternative 1 would have a maximum operating speed of 56 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations.

Monorail train cars would be 10.5 feet wide, with two double doors on each side. End cars would be 46.1 feet long with a design capacity of 97 passengers, and intermediate cars would be 35.8 feet long and have a design capacity of 90 passengers.

The electric bus connecting the Wilshire Boulevard/Metro D Line Station, Westwood Village, and UCLA Gateway Plaza would be a battery electric, low-floor transit bus, either 40 or 60 feet in length. The buses would run with headways of 2 minutes during peak periods. The electric bus service would operate in existing mixed-flow travel lanes.

6.1.1.4 Stations

Alternative 1 would include eight aerial MRT stations with platforms approximately 320 feet long, elevated 50 feet to 75 feet above the existing ground level. The Metro E Line Expo/Sepulveda, Santa Monica Boulevard, Ventura Boulevard/Sepulveda Boulevard, Sherman Way, and Van Nuys Metrolink Stations would be center-platform stations where passengers would travel up to a shared platform that would serve both directions of travel. The Wilshire Boulevard/Metro D Line, Getty Center, and Metro G Line Sepulveda Stations would be side-platform stations where passengers would select and travel up to one of two station platforms, depending on their direction of travel. Each station, regardless of whether it has side or center platforms, would include a concourse level prior to reaching the train platforms. Each station would have a minimum of two elevators, two escalators, and one stairway from ground level to the concourse.

Station platforms would be approximately 320 feet long and would be supported by six rows of dual 5-foot by 8-foot columns. Station platforms would be covered, but not enclosed. Side-platform stations would be 61.5 feet wide to accommodate two 13-foot-wide station platforms with a 35.5-foot-wide intermediate gap for side-by-side trains. Center-platform stations would be 49 feet wide, with a 25-foot-wide center platform.

Monorail stations would include automatic, bi-parting fixed doors along the edges of station platforms. These doors would be integrated into the automatic train control system and would not open unless a train is stopped at the platform.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Sepulveda Station

- This aerial station would be located near the existing Metro E Line Expo/Sepulveda Station, just east of I-405 between Pico Boulevard and Exposition Boulevard.
- A transit plaza and station entrance would be located on the east side of the station.
- An off-street passenger pick-up/drop-off loop would be located south of Pico Boulevard west of Cotner Avenue.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the Metro E Line Expo/Sepulveda Station within the fare paid zone.
- Passengers would be able to park at the existing Metro E Line Expo/Sepulveda Station parking facility, which provides 260 parking spaces. No additional automobile parking would be provided at the proposed station.

Santa Monica Boulevard Station

- This aerial station would be located just south of Santa Monica Boulevard, between the I-405 northbound travel lanes and Cotner Avenue.
- Station entrances would be located on the southeast and southwest corners of Santa Monica Boulevard and Cotner Avenue. The entrance on the southeast corner of the intersection would be connected to the station concourse level via an elevated pedestrian walkway spanning Cotner Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This aerial station would be located west of I-405 and south of Wilshire Boulevard within the southbound I-405 loop off-ramp to eastbound Wilshire Boulevard.
- An elevated pedestrian walkway spanning the adjacent I-405 ramps would connect the concourse level of the proposed station to a station plaza adjacent to the Metro D Line Westwood/VA Hospital Station within the fare paid zone. The station plaza would be the only entrance to the proposed station.
- The station plaza would include an electric bus stop and provide access to the Metro D Line Station via a new station entrance and concourse constructed using a knock-out panel provided in the Metro D Line Station.
- The passenger pick-up/drop-off facility at the Metro D Line Station would be reconfigured, maintaining the original capacity.
- No dedicated station parking would be provided at this station.

Getty Center Station

- This aerial station would be located on the west side of I-405 near the Getty Center, approximately 1,000 feet north of the Getty Center tram station.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the Getty Center tram station. The proposed connection would occur outside the fare paid zone.
- The pedestrian walkway would provide the only entrance to the proposed station.

- No dedicated station parking would be provided at this station.

Ventura Boulevard/Sepulveda Boulevard Station

- This aerial station would be located east of I-405, just south of Ventura Boulevard.
- A transit plaza, including two station entrances, would be located on the east side of the station. The plaza would require the closure of a 0.1-mile segment of Dickens Street between Sepulveda Boulevard and Ventura Boulevard, with a passenger pick-up/drop-off loop and bus stops provided south of the station, off Sepulveda Boulevard.
- No dedicated station parking would be provided at this station.

Metro G Line Sepulveda Station

- This aerial station would be located near the Metro G Line Sepulveda Station, between I-405 and the Metro G Line Busway.
- Entrances to the MRT station would be located on both sides of a proposed new Metro G Line bus rapid transit (BRT) station.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the proposed new Metro G Line BRT station outside of the fare paid zone.
- Passengers would be able to park at the existing Metro G Line Sepulveda Station parking facility, which has a capacity of 1,205 parking spaces. Currently, only 260 parking spaces are used for transit parking. No additional automobile parking would be provided at the proposed station.

Sherman Way Station

- This aerial station would be located inside the I-405 northbound loop off-ramp to Sherman Way.
- A station entrance would be located on the north side of Sherman Way.
- An on-street passenger pick-up/drop-off area would be provided on the north side of Sherman Way west of Firmament Avenue.
- No dedicated station parking would be provided at this station.

Van Nuys Metrolink Station

- This aerial station would be located on the east side of Van Nuys Boulevard, just south of the LOSSAN rail corridor, incorporating the site of the current Amtrak ticket office.
- A station entrance would be located on the east side of Van Nuys Boulevard just south of the LOSSAN rail corridor. A second entrance would be located north of the LOSSAN rail corridor with an elevated pedestrian walkway connecting to both the concourse level of the proposed station and the platform of the Van Nuys Metrolink/Amtrak Station.
- Existing Metrolink station parking would be reconfigured, maintaining approximately the same number of spaces, but 180 parking spaces would be relocated north of the LOSSAN rail corridor. Metrolink parking would not be available to Metro transit riders.

6.1.1.5 Station-to-Station Travel Times

Table 6-1 presents the station-to-station distance and travel times for Alternative 1. The travel times include both run time and dwell time. Dwell time is 30 seconds per station. Northbound and southbound travel times vary slightly because of grade differentials and operational considerations at end-of-line stations.

Table 6-1. Alternative 1: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
<i>Metro E Line Station</i>					30
Metro E Line	Santa Monica Boulevard	0.9	122	98	—
<i>Santa Monica Boulevard Station</i>					30
Santa Monica Boulevard	Wilshire/Metro D Line	0.7	99	104	—
<i>Wilshire/Metro D Line Station</i>					30
Wilshire/Metro D Line	Getty Center	2.9	263	266	—
<i>Getty Center Station</i>					30
Getty Center	Ventura Boulevard	4.7	419	418	—
<i>Ventura Boulevard Station</i>					30
Ventura Boulevard	Metro G Line	2.0	177	184	—
<i>Metro G Line Station</i>					30
Metro G Line	Sherman Way	1.5	135	134	—
<i>Sherman Way Station</i>					30
Sherman Way	Van Nuys Metrolink	2.4	284	284	—
<i>Van Nuys Metrolink Station</i>					30

Source: LASRE, 2024

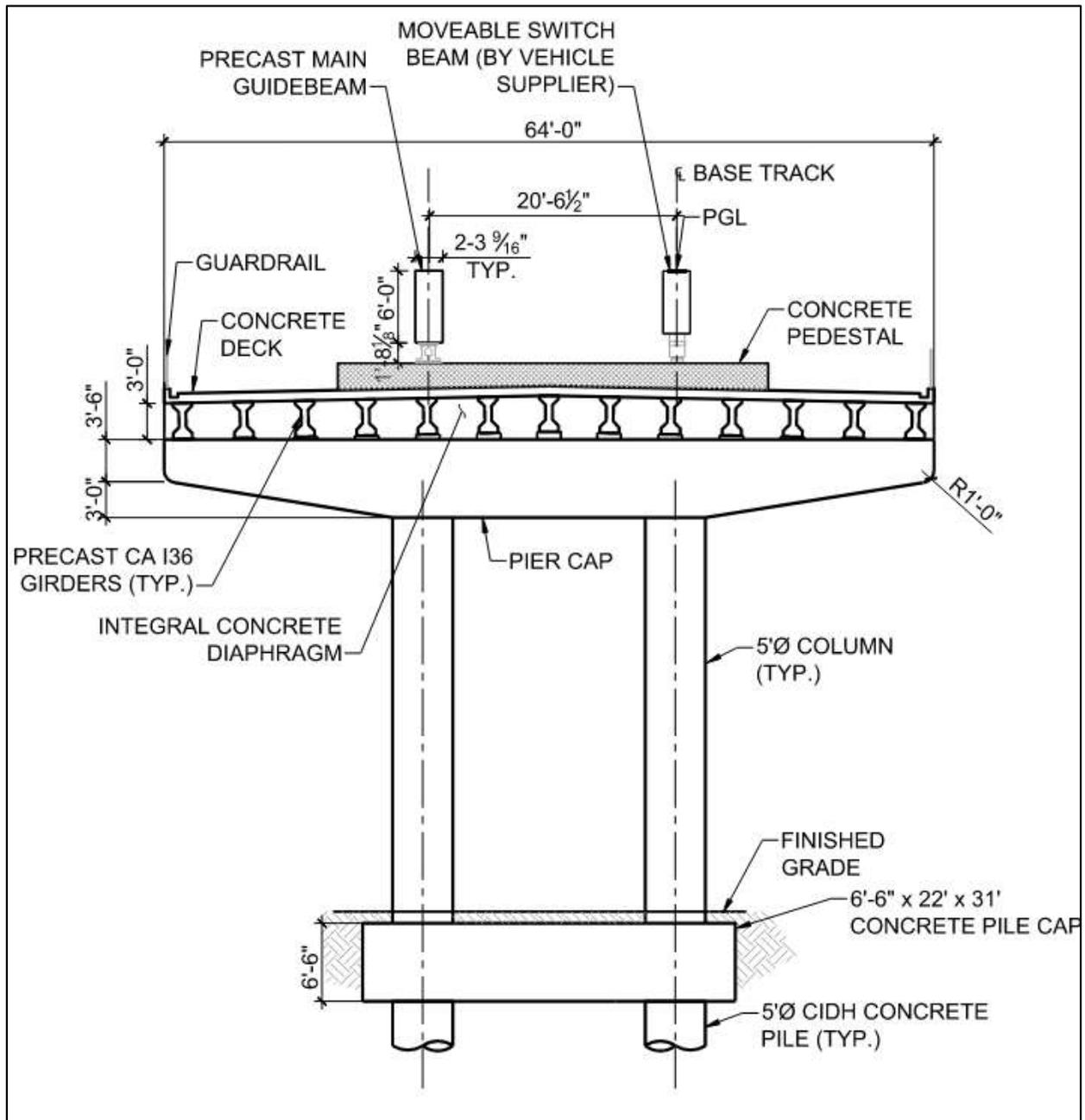
— = no data

6.1.1.6 Special Trackwork

Alternative 1 would include five pairs of beam switches to enable trains to cross over to the opposite beam. From south to north, the first pair of beam switches would be located just north of the Metro E Line Expo/Sepulveda Station. The second pair of beam switches would be located near the Wilshire Boulevard/Metro D Line Station on the north side of Wilshire Boulevard, within the Wilshire Boulevard westbound to I-405 southbound loop on-ramp. A third pair of beam switches would be located in the Sepulveda Pass just south of Mountaingate Drive and Sepulveda Boulevard. A fourth pair of beam switches would be located south of the Metro G Line Station between the I-405 northbound lanes and the Metro G Line Busway. The final pair would be located near the Van Nuys Metrolink Station.

At beam switch locations, the typical cross-section of the guideway would increase in column and column cap width. The column cap at these locations would be 64 feet wide, with dual 5-foot-diameter columns. Underground pile caps for additional structural support would also be required at beam switch locations. Figure 6-4 shows a typical cross-section of the monorail beam switch.

Figure 6-4. Typical Monorail Beam Switch Cross-Section



Source: LASRE, 2024

6.1.1.7 Monorail Maintenance and Storage Facility

MSF Base Design

In the maintenance and storage facility (MSF) Base Design for Alternative 1, the MSF would be located on City of Los Angeles Department of Water and Power (LADWP) property east of the Van Nuys Metrolink Station. The MSF Base Design site would be approximately 18 acres and would be designed to accommodate a fleet of 208 monorail vehicles. The site would be bounded by the LOSSAN rail corridor

to the north, Saticoy Street to the south, and property lines extending north of Tyrone and Hazeltine Avenues to the east and west, respectively.

Monorail trains would access the site from the main alignment's northern tail tracks at the northwest corner of the site. Trains would travel parallel to the LOSSAN rail corridor before curving southeast to maintenance facilities and storage tracks. The guideway would remain in an aerial configuration within the MSF Base Design, including within maintenance facilities.

The site would include the following facilities:

- Primary entrance with guard shack
- Primary maintenance building that would include administrative offices, an operations control center, and a maintenance shop and office
- Train car wash building
- Emergency generator
- Traction power substation (TPSS)
- Maintenance-of-way (MOW) building
- Parking area for employees

MSF Design Option 1

In the MSF Design Option 1, the MSF would be located on industrial property, abutting Orion Avenue, south of the LOSSAN rail corridor. The MSF Design Option 1 site would be approximately 26 acres and would be designed to accommodate a fleet of 224 monorail vehicles. The site would be bounded by I-405 to the west, Stagg Street to the south, the LOSSAN rail corridor to the north, and Orion Avenue and Raymer Street to the east. The monorail guideway would travel along the northern edge of the site.

Monorail trains would access the site from the monorail guideway east of Sepulveda Boulevard, requiring additional property east of Sepulveda Boulevard and north of Raymer Street. From the northeast corner of the site, trains would travel parallel to the LOSSAN rail corridor before turning south to maintenance facilities and storage tracks parallel to I-405. The guideway would remain in an aerial configuration within the MSF Design Option 1, including within maintenance facilities.

The site would include the following facilities:

- Primary entrance with guard shack
- Primary maintenance building that would include administrative offices, an operations control center, and a maintenance shop and office
- Train car wash building
- Emergency generator
- TPSS
- MOW building
- Parking area for employees

Figure 6-5 shows the locations of the MSF Base Design and MSF Design Option 1 for Alternative 1.

Figure 6-5. Alternative 1: Maintenance and Storage Facility Options



Source: LASRE, 2024; HTA, 2024

6.1.1.8 Electric Bus Maintenance and Storage Facility

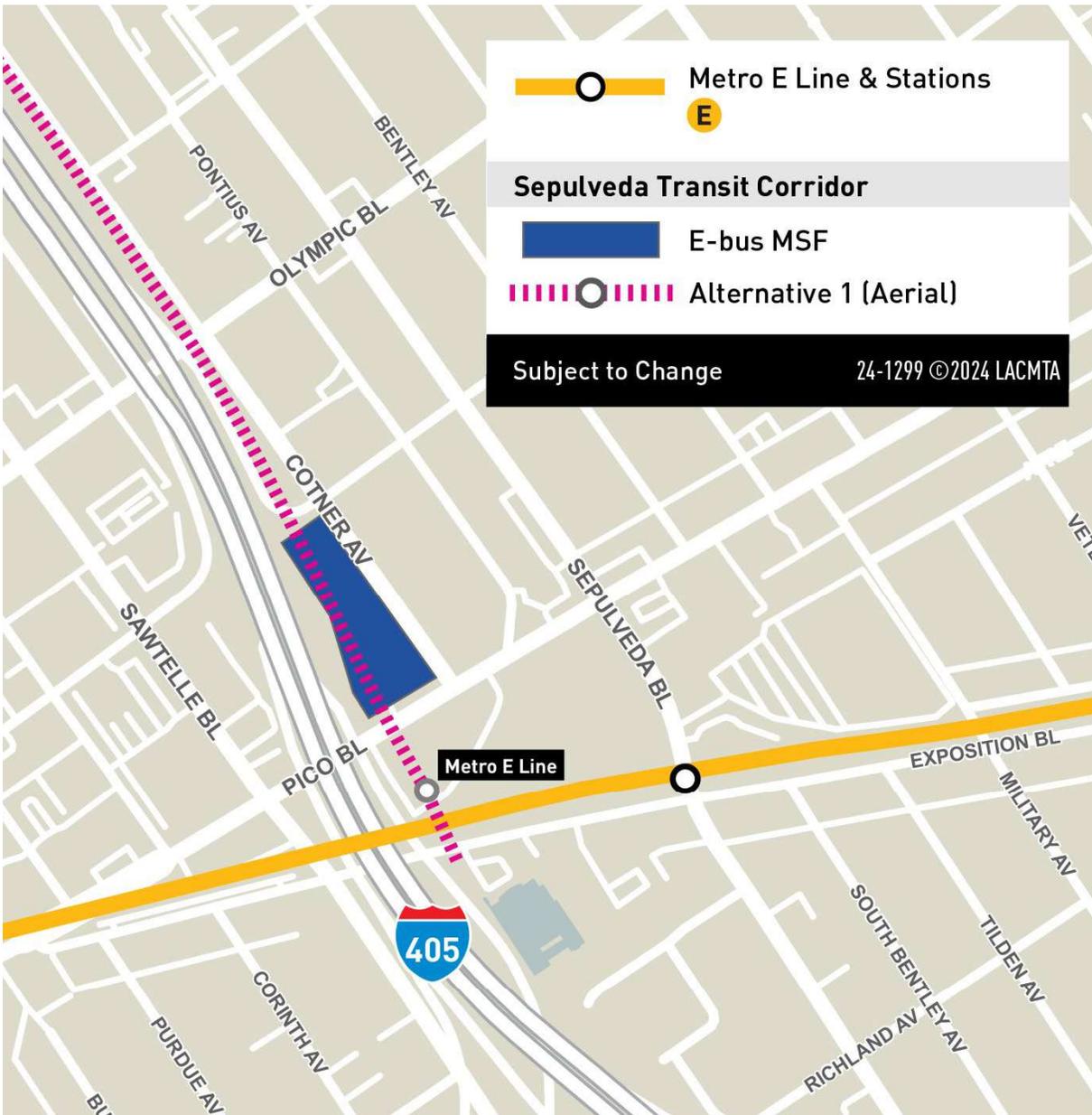
An electric bus MSF would be located on the northwest corner of Pico Boulevard and Cotner Avenue and would be designed to accommodate 14 electric buses. The site would be approximately 2 acres and would comprise six parcels bounded by Cotner Avenue to the east, I-405 to the west, Pico Boulevard to the south, and the I-405 northbound on-ramp to the north.

The site would include approximately 45,000 square feet of buildings and include the following facilities:

- Maintenance shop and bay
- Maintenance office
- Operations center
- Bus charging equipment
- Parts storeroom with service areas
- Parking area for employees

Figure 6-6 shows the location of the proposed electric bus MSF.

Figure 6-6. Alternative 1: Electric Bus Maintenance and Storage Facility



Source: LASRE, 2024; HTA, 2024

6.1.1.9 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. A TPSS on a site of approximately 8,000 square feet would be located approximately every 1 mile along the alignment. Table 6-2 lists the TPSS locations proposed for Alternative 1.

Figure 6-7 shows the TPSS locations along the Alternative 1 alignment.

Table 6-2. Alternative 1: Traction Power Substation Locations

TPSS No.	TPSS Location Description	Configuration
1	TPSS 1 would be located east of I-405, just south of Exposition Boulevard and the monorail guideway tail tracks.	At-grade
2	TPSS 2 would be located west of I-405, just north of Wilshire Boulevard, inside the Westbound Wilshire Boulevard to I-405 Southbound Loop On-Ramp.	At-grade
3	TPSS 3 would be located west of I-405, just north of Sunset Boulevard, inside the Church Lane to I-405 Southbound Loop On-Ramp.	At-grade
4	TPSS 4 would be located east of I-405 and Sepulveda Boulevard, just north of the Getty Center Station.	At-grade
5	TPSS 5 would be located west of I-405, just east of the intersection between Promontory Road and Sepulveda Boulevard.	At-grade
6	TPSS 6 would be located between I-405 and Sepulveda Boulevard, just north of the Skirball Center Drive Overpass.	At-grade
7	TPSS 7 would be located east of I-405, just south of Ventura Boulevard Station, between Sepulveda Boulevard and Dickens Street.	At-grade
8	TPSS 8 would be located east of I-405, just south of the Metro G Line Sepulveda Station.	At-grade
9	TPSS 9 would be located east of I-405, just east of the Sherman Way Station, inside the I-405 Northbound Loop Off-Ramp to Sherman Way westbound.	At-grade
10	TPSS 10 would be located east of I-405, at the southeast quadrant of the I-405 overcrossing with the LOSSAN rail corridor.	At-grade
11	TPSS 11 would be located east of I-405, at the southeast quadrant of the I-405 overcrossing with the LOSSAN rail corridor.	At-grade (within MSF Design Option)
12	TPSS 12 would be located between Van Nuys Boulevard and Raymer Street, south of the LOSSAN rail corridor.	At-grade
13	TPSS 13 would be located south of the LOSSAN rail corridor, between Tyrone Avenue and Hazeltine Avenue.	At-grade (within MSF Base Design)

Source: LASRE, 2024; HTA, 2024

Figure 6-7. Alternative 1: Traction Power Substation Locations



Source: LASRE, 2024; HTA, 2024

6.1.1.10 Roadway Configuration Changes

Table 6-3 lists the roadway changes necessary to accommodate the guideway of Alternative 1. Figure 6-8 shows the location of these roadway changes in the Sepulveda Transit Corridor Project (Project) Study Area, except for I-405 configuration changes, which would occur throughout the corridor.

Table 6-3. Alternative 1: Roadway Changes

Location	From	To	Description of Change
Cotner Avenue	Nebraska Avenue	Santa Monica Boulevard	Roadway realignment to accommodate aerial guideway columns and station access
Beloit Avenue	Massachusetts Avenue	Ohio Avenue	Roadway narrowing to accommodate aerial guideway columns
I-405 Southbound On-Ramp, Southbound Off-Ramp, and Northbound On-Ramp at Wilshire Boulevard	Wilshire Boulevard	I-405	Ramp realignment to accommodate aerial guideway columns and I-405 widening
Sunset Boulevard	Gunston Drive	I-405 Northbound Off-Ramp at Sunset Boulevard	Removal of direct eastbound to southbound on-ramp to accommodate aerial guideway columns and I-405 widening. Widening of Sunset Boulevard bridge with additional westbound lane
I-405 Southbound On-Ramp and Off-Ramp at Sunset Boulevard and North Church Lane	Sunset Boulevard	Not Applicable	Ramp realignment to accommodate aerial guideway columns and I-405 widening
I-405 Northbound On-Ramp and Off-Ramp at Sepulveda Boulevard near I-405 Exit 59	Sepulveda Boulevard near I-405 Northbound Exit 59	Sepulveda Boulevard/I-405 Undercrossing (near Getty Center)	Ramp realignment to accommodate aerial guideway columns and I-405 widening
Sepulveda Boulevard	I-405 Southbound Skirball Center Drive Ramps (north of Mountaingate Drive)	Skirball Center Drive	Roadway realignment into existing hillside to accommodate aerial guideway columns and I-405 widening
I-405 Northbound On-Ramp at Mulholland Drive	Mulholland Drive	Not Applicable	Roadway realignment into the existing hillside between the Mulholland Drive Bridge pier and abutment to accommodate aerial guideway columns and I-405 widening
Dickens Street	Sepulveda Boulevard	Ventura Boulevard	Vacation and permanent removal of street for Ventura Boulevard Station construction. Pick-up/drop-off area would be provided along Sepulveda Boulevard at the truncated Dickens Street

Location	From	To	Description of Change
Sherman Way	Haskell Avenue	Firmament Avenue	Median improvements, passenger drop-off and pick-up areas, and bus pads within existing travel lanes
Raymer Street	Sepulveda Boulevard	Van Nuys Boulevard	Curb extensions and narrowing of roadway width to accommodate aerial guideway columns
I-405	Sunset Boulevard	Bel Terrace	I-405 widening to accommodate aerial guideway columns in the median
I-405	Sepulveda Boulevard Northbound Off-Ramp (Getty Center Drive interchange)	Sepulveda Boulevard Northbound On-Ramp (Getty Center Drive interchange)	I-405 widening to accommodate aerial guideway columns in the median
I-405	Skirball Center Drive	I-405 Northbound On-Ramp at Mulholland Drive	I-405 widening to accommodate aerial guideway columns in the median

Source: LASRE, 2024; HTA, 2024

Figure 6-8. Alternative 1: Roadway Changes



Source: LASRE, 2024; HTA, 2024

In addition to the changes made to accommodate the guideway, as listed in Table 6-3, roadways and sidewalks near stations would be reconstructed, which would result in modifications to curb ramps and driveways.

6.1.1.11 Fire/Life Safety – Emergency Egress

Continuous emergency evacuation walkways would be provided along the guideway. The walkways would typically consist of structural steel frames anchored to the guideway beams to support non-slip walkway panels. The walkways would be located between the two guideway beams for most of the alignment; however, where the beams split apart, such as entering center-platform stations, short portions of the walkway would be located on the outside of the beams.

6.1.2 Construction Activities

Construction activities for Alternative 1 would include constructing the aerial guideway and stations, widening I-405, and constructing ancillary facilities. Construction of the transit through substantial completion is expected to have a duration of 6½ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

Aerial guideway construction would begin at the southern and northern ends of the alignment and connect in the middle. Constructing the guideway would require a combination of freeway and local street lane closures throughout the work limits to provide sufficient work area. The first stage of I-405 widening would include a narrowing of adjacent freeway lanes to a minimum width of 11 feet (which would eliminate shoulders) and placing K-rail on the outside edge of the travel lanes to create outside work areas. Within these outside work zones, retaining walls, drainage infrastructure, and outer pavement widenings would be constructed to allow for I-405 widening. The reconstruction of on- and off-ramps would be the final stage of I-405 widening.

A median work zone along I-405 for the length of the alignment would be required for erection of the guideway structure. In the median work zone, demolition of the existing median and drainage infrastructure would be followed by the installation of new K-rail and installation of guideway structural components, which would include full directional freeway closures when guideway beams must be transported into the median work areas during late-night hours. Additional night and weekend directional closures would be required for installation of long-span structures over I-405 travel lanes where the guideway would transition from the median.

Aerial station construction is anticipated to last the duration of construction activities for Alternative 1 and would include the following general sequence of construction:

- Site clearing
- Utility relocation
- Construction fencing and rough grading
- CIDH pile drilling and installation
- Elevator pit excavation
- Soil and material removal
- Pile cap and pier column construction
- Concourse level and platform level falsework for cast-in-place structural concrete
- Guideway beam installation
- Elevator and escalator installation
- Completion of remaining concrete elements such as pedestrian bridges
- Architectural finishes and mechanical, electrical, and plumbing installation

Alternative 1 would require construction of a concrete casting facility for columns and beams associated with the elevated guideway. A specific site has not been identified; however, it is expected that the

facility would be located on industrially zoned land adjacent to a truck route in either the Antelope Valley or Riverside County. When a site is identified, the contractor would obtain all permits and approvals necessary from the relevant jurisdiction, the appropriate air quality management entity, and other regulatory entities.

TPSS construction would require additional lane closures. Large equipment including transformers, rectifiers, and switchgears would be delivered and installed through prefabricated modules where possible in at-grade TPSSs. The installation of transformers would require temporary lane closures on Exposition Boulevard, Beloit Avenue, Sepulveda Boulevard just north of Cashmere Street, and the I-405 northbound on-ramp at Burbank Boulevard.

Table 6-4 and Figure 6-9 show the potential construction staging areas for Alternative 1. Staging areas would provide the necessary space for the following activities:

- Contractors' equipment
- Receiving deliveries
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment)

Table 6-4. Alternative 1: Construction Staging Locations

No.	Location Description
1	Public Storage between Pico Boulevard and Exposition Boulevard, east of I-405
2	South of Dowlen Drive and east of Greater LA Fisher House
3	At 1400 N Sepulveda Boulevard
4	At 1760 N Sepulveda Boulevard
5	East of I-405 and north of Mulholland Drive Bridge
6	Inside of I-405 Northbound to US-101 Northbound Loop Connector, south of US-101
7	ElectroRent Building south of Metro G Line Busway, east of I-405
8	Inside the I-405 Northbound Loop Off-Ramp at Victory Boulevard
9	Along Cabrito Road east of Van Nuys Boulevard

Source: LASRE, 2024; HTA, 2024

Figure 6-9. Alternative 1: Construction Staging Locations



Source: LASRE, 2024; HTA, 2024

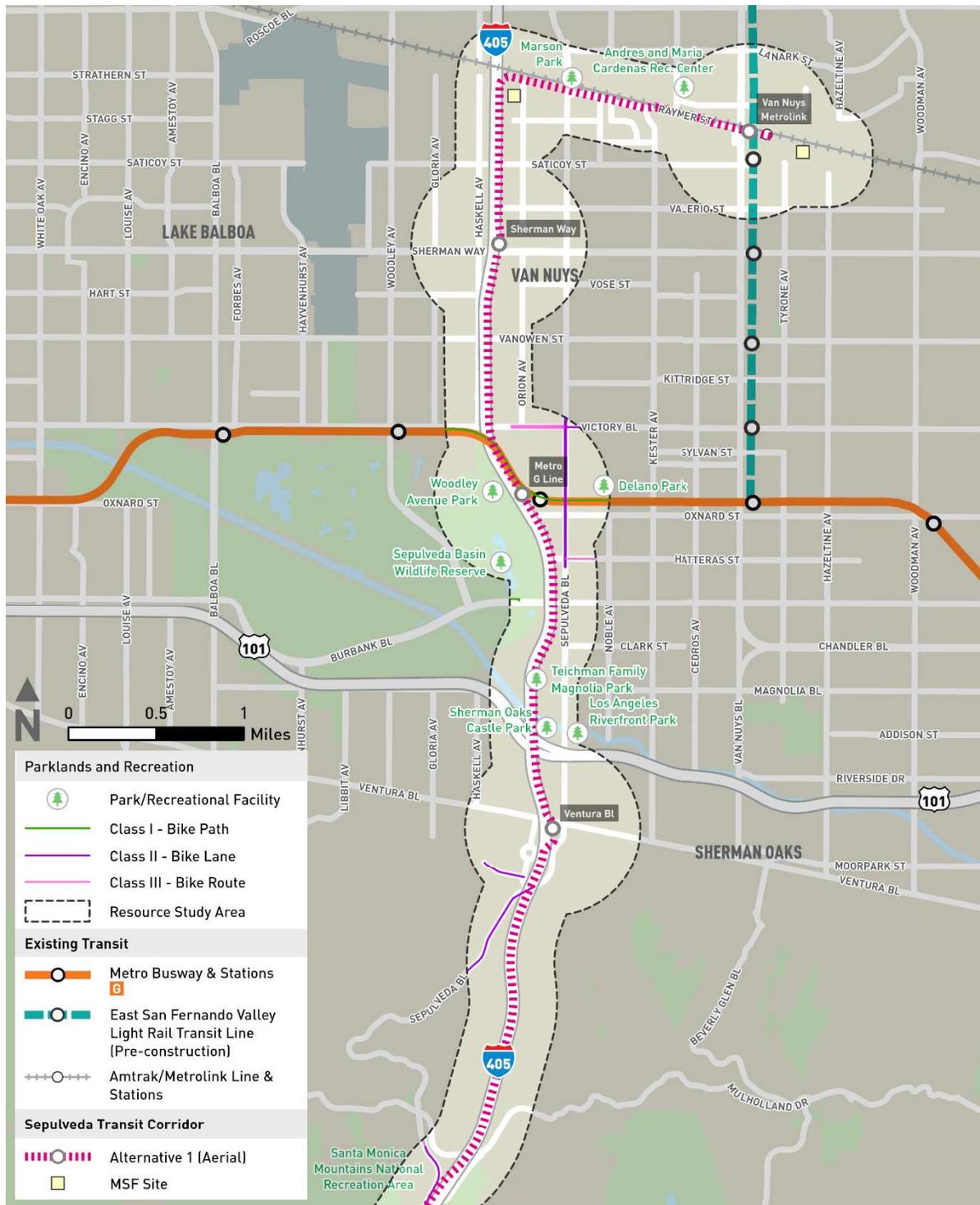
6.2 Existing Conditions

The Alternative 1 Resource Study Area (RSA) is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries. The Alternative 1 RSA consists of portions of the City of Los Angeles, City of Santa Monica, and unincorporated Los Angeles County community of West Los Angeles, which contains the Department of Veterans Affairs complex. Affected communities identified within the City of Los Angeles include the following:

- Bel Air
- Beverly Crest
- Brentwood
- Encino
- Lake Balboa
- Mar Vista
- North Hills
- North Hollywood
- North Sherman Oaks
- Palms
- Panorama City
- Sherman Oaks
- Sun Valley
- Van Nuys
- West Los Angeles
- Westwood

Figure 6-10 and Figure 6-11 show the location of the parks and recreational facilities within the Alternative 1 RSA, including bicycle facilities and recreational hiking trails.

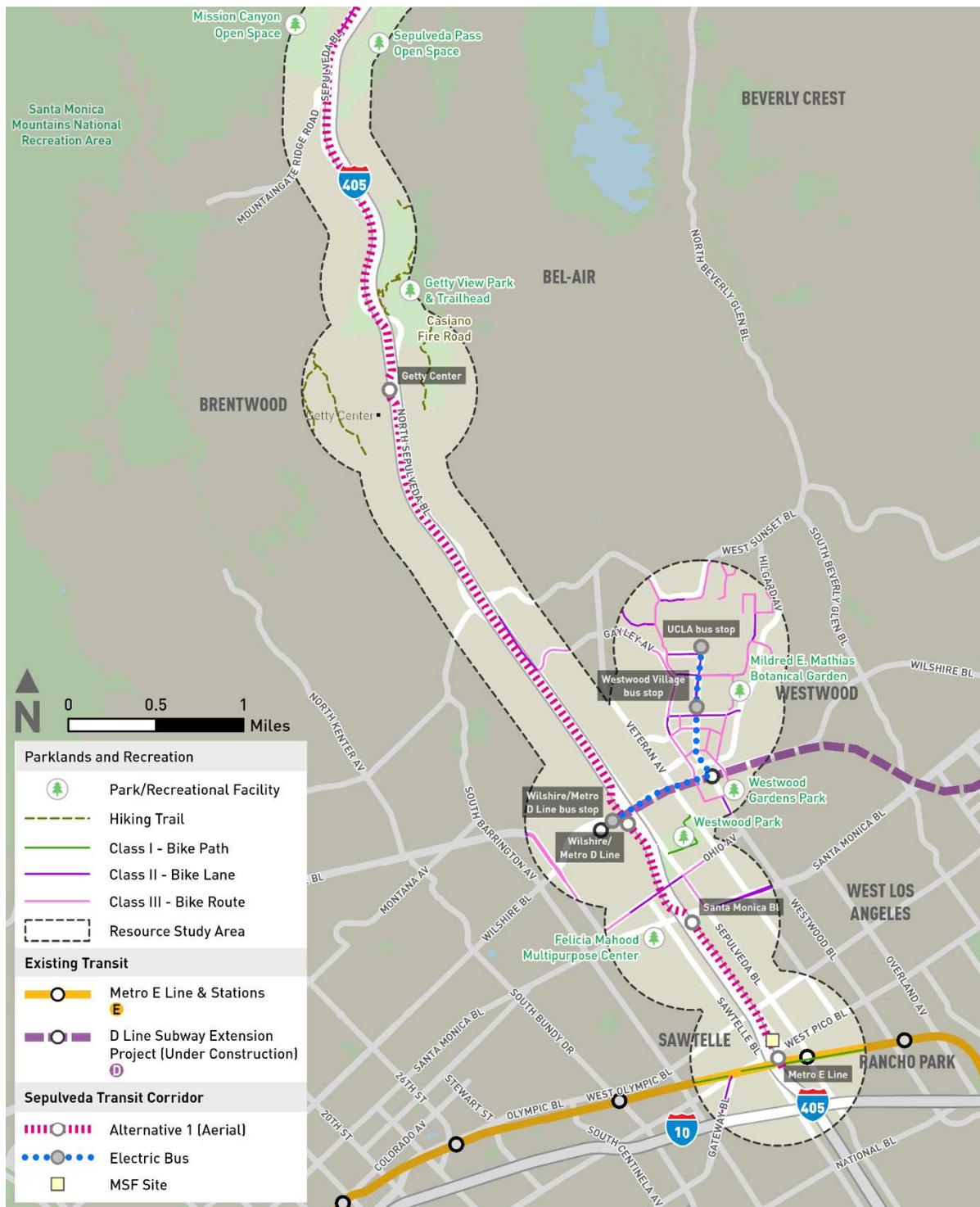
Figure 6-10. Alternative 1: Parks and Recreational Facilities within the Resource Study Area (from Panorama City to Brentwood)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

Figure 6-11. Alternative 1: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

6.2.1 Parks and Recreational Facilities

The Alternative 1 RSA includes approximately 15 park and recreational facilities, including 8 parks, 5 nature/wildlife preserves and regional open spaces, 1 botanical garden, and 1 amusement park, comprising approximately 1,324 acres. The 15 parks and recreational facilities identified in the Alternative 1 RSA are all located in the City of Los Angeles. Several agencies own and manage the park and recreational facilities identified, including the U.S. Army Corps of Engineers, Los Angeles County, City of Los Angeles, Santa Monica Mountains Conservancy, National Park Service, Los Angeles Neighborhood Land Trust, and the UCLA.

Table 6-5 lists the parks and recreational facilities within the Alternative 1 RSA and respective distances from the Alternative 1 alignment or station area. Table 6-6 identifies the parks and recreational facilities within the 0.5-mile radius of proposed Alternative 1 stations. Figure 6-10 and Figure 6-11 show the locations of these facilities.

Table 6-5. Alternative 1: Parks and Recreational Facilities within the Resource Study Area

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 1 (feet) ^b
Andres and Maria Cardenas Recreation Center	14740 Blythe Street, Panorama City	City of Los Angeles	Local Park	Skate park, splash pad, community center	0.7	702
Delano Park	15100 Erwin Street, Van Nuys	City of Los Angeles	Local Park	Baseball field, soccer field, playground, community center	6.1	1,916
Felicia Mahood Multipurpose Center	11338 Santa Monica Boulevard, Los Angeles	City of Los Angeles	Local Park	Senior Center	4.3	791
Getty View Park & Trailhead	1399 Casiano Road, Los Angeles	SMMC	Regional Open Space	Open space	180.1	278
Los Angeles Riverfront Greenway	Sherman Oaks	City of Los Angeles	Regional Open Space	Open space	6.2	995
Marson Park	15262 Marson Street, Panorama City	Los Angeles Neighborhood Land Trust	Local Park	Playground	0.3	327
Mildred E. Mathia Botanical Garden	707 Tiverton Drive, Los Angeles	University of California, Los Angeles	Botanical Garden	Botanical garden	8.2	979
Mission Canyon Open Space	8260 Mulholland Drive	County of Los Angeles	Natural Areas	Open space	479.9	95
Sepulveda Basin Wildlife Reserve	17017 Burbank Boulevard, Encino	USACE	Regional Open Space	Open space	327.3	319
Sepulveda Pass Open Space	457 N Fairfax Avenue, Los Angeles	SMMC	Regional Open Space	Open space	155.0	307

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 1 (feet) ^b
Sherman Oaks Castle Park	4989 Sepulveda Boulevard, Sherman Oaks	City of Los Angeles	Amusement Park	Amusement Park	5.0	0
Teichman Family Magnolia Park	15365 Magnolia Boulevard, Sherman Oaks	City of Los Angeles	Local Park	Basketball court	3.9	0
Westwood Gardens Park	1246 Glendon Avenue, Los Angeles	City of Los Angeles	Local Park	Open space	0.3	781
Westwood Park	1350 Sepulveda Boulevard, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, multipurpose field, playground, pool, gym	26.7	260
Woodley Avenue Park	6350 Woodley Avenue, Encino	USACE	Regional Recreation Park	Fitness zone, picnic shelter, playgrounds	119.8	179
Total					1,323.7	—

Source: LA County Planning, 2024a; City of Los Angeles, 2024

^aSize (acres) refers to the full size of the resource, not the acreage within the RSA.

^bA distance of “0 feet” from the alternative indicates that the alternative would cross over the resource.

SMMC = Santa Monica Mountains Conservancy

USACE = U.S. Army Corps of Engineers

— = not applicable

Notes:

- The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-mile from MSF site boundaries.
- Facility Type is a categorizing based on the Los Angeles County Department of Regional Planning and City of Los Angeles, and includes the following types:
 - Amusement Park: Family entertainment, managed by the City of Los Angeles.
 - Botanical Garden: Public garden.
 - Local Park: Designed to serve residents of all ages in several surrounding neighborhoods and may include facilities such as a community building, multipurpose fields, hard court areas, parking, maintenance service areas, and play areas.
 - Natural Area: a place that has a unique value that is scenic, historic, geologic, ecological, or educational. Natural areas are maintained in a natural state to preserve their wilderness, native ecosystems, and their processes.
 - Regional Recreation Park: Regional parks are typically greater than 100 acres in size and have a service radius of 25 miles or more. They include unique areas such as lakes, wetlands, auditoriums, water bodies, and campgrounds, in addition to the active recreational facilities offered in community and community regional parks.

- Regional Open Space: Undeveloped land in its natural state, as well as active and passive park space that is regional in size.

Table 6-6. Alternative 1: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations

Stations	Parks and Recreational Facilities
Metro E Line Expo/Sepulveda	Exposition Corridor Bike Path
Santa Monica Boulevard	<ul style="list-style-type: none"> • Felicia Mahood Multipurpose Center • Westwood Park • Westwood Park Bike Path
Wilshire Boulevard/Metro D Line	<ul style="list-style-type: none"> • Westwood Park • Westwood Park Bike Path
Wilshire Boulevard/VA Medical Center Bus Stop	<ul style="list-style-type: none"> • Westwood Park • Westwood Park Bike Path
Westwood Village Bus Stop	Mildred E. Mathias Botanical Garden
UCLA Bus Stop	<ul style="list-style-type: none"> • Mildred E. Mathias Botanical Garden • Various UCLA bike lanes/routes
Getty Center	<ul style="list-style-type: none"> • Getty View Park and Trailhead • Casiano Fire Road • Getty View Trail • Mount Saint Mary's Fire Road • Getty Center Access
Ventura Boulevard/Sepulveda Boulevard	None
Metro G Line Sepulveda	<ul style="list-style-type: none"> • Delano Park • Sepulveda Basin Wildlife Reserve • Woodley Avenue Park • Metro G Line Bike Path
Sherman Way	None
Van Nuys Metrolink	Andres and Maria Cardenas Recreation Center

Source: LA County Planning, 2024a; SCAG, 2024a; U.S. Department of Homeland Security Geospatial Management Office, 2020

Note: Only Class 1 Bike Paths and "Various UCLA bike lanes/routes" are included in this table. Class II Bike Lanes and Class III Bike Routes are not included in this table.

6.2.2 Bicycle Facilities

The existing bicycle facilities in the Alternative 1 RSA consists of a network of approximately 20 miles of Class I, Class II, and Class III bicycle facilities, including approximately 3 miles of Class I bicycle facilities, approximately 9 miles of Class II bicycle facilities, and approximately 8 miles of Class III bicycle facilities. There are no Class IV bicycle facilities within the Alternative 1 RSA.

Table 6-7 lists the bicycle facilities within the Alternative 1 RSA and respective distances from the Alternative 1 alignment and station areas. Figure 6-10 and Figure 6-11 show the locations of these facilities. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* (Metro, 2025a) for additional information regarding active transportation facilities.

Table 6-7. Alternative 1: Bicycle Facilities within the Resource Study Area

Bicycle Facilities	Length (miles)	Location	Distance from Alternative 1 (feet) ^a
<i>Class I – Bike Paths</i>	2.9	—	—
Burbank Boulevard Bike Path	0.1	Burbank Boulevard between Balboa Boulevard and I-405	1,038
Exposition Corridor Bikeway	0.9	Along Metro E Line	0
Metro G Line Bikeway	1.1	Along Metro G Line Busway	0
Westwood Park Bike Path	0.8	Westwood Park	578
<i>Class II – Bike Lanes</i>	8.9	<i>Various paths</i>	—
<i>Class III – Bike Routes</i>	8.0	<i>Various paths</i>	—
Total	19.8	—	—

Source: SCAG, 2024b

^aA distance of “0 feet” from the alternative indicates that the alternative would cross over the resource.

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

— = not applicable

6.2.3 Recreational Hiking Trails

Approximately 3 miles of recreational hiking trails exist within the parklands and open space areas identified in the Alternative 1 RSA. Table 6-8 lists the recreational hiking trails within the Alternative 1 RSA. Figure 6-10 and Figure 6-11 show the locations of these facilities.

Table 6-8. Alternative 1: Recreational Hiking Trails within the Resource Study Area

Name	City	Length (miles)	Distance from Alternative 1 (feet)
Casiano Fire Road	Los Angeles	0.9	808
Getty Center Access	Los Angeles	0.6	1,077
Getty View Trail	Los Angeles	0.6	304
Mount Saint Mary’s Fire Road	Los Angeles	0.5	2,167
Total	—	2.6	—

Source: U.S. Department of Homeland Security Geospatial Management Office, 2020

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

— = not applicable

6.3 Impact Evaluation

6.3.1 Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Or

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?

6.3.1.1 Operational Impacts

Alternative 1 would provide a new mode of transportation, accessibility, and connectivity in the surrounding communities. As a transportation infrastructure project that does not include housing, Alternative 1 would not directly generate permanent residences or increase the existing residential population of the surrounding communities that would increase the use of existing parks and recreational facilities or result in substantial adverse physical impacts associated with the provision of new or physically altered parks or other recreational facilities. Instead, accessibility to nearby parks and recreational facilities located within 0.5 mile of proposed Alternative 1 stations listed in Table 6-5 and Table 6-6 would be improved by having nearby transit stations. Alternative 1 would also help achieve Metro's *First/Last Mile Guidelines* (Metro, 2021b) objectives to facilitate multimodal transportation and provide connectivity to the station areas and surrounding communities, and enhance the existing active transportation corridors for the cities.

Alternative 1 would cross over portions of Sherman Oaks Castle Park and Teichman Family Magnolia Park (Table 6-5). Alternative 1 would cross over portions of the following Class I bike paths: Exposition Corridor Bikeway and the Metro G Line Bikeway (Table 6-7).

Alternative 1 would require partial property acquisitions of land designated as open space or recreational land. Table 6-9 summarizes the property acquisitions that would be required.

Table 6-9. Alternative 1: Parkland and Recreational Facilities Property Acquisitions Summary

Resource	Permanent Acquisition Area	Description of Acquisition
Sepulveda Pass Open Space	0.4 acre	Vacant hillside land would be acquired to accommodate the proposed Getty Center Station. Acquisition would be less than 1 percent of the park resource total acreage.
Mission Canyon Open Space	0.6 acre	Vacant hillside land is currently undeveloped but planned for future development of recreational park use that would be acquired to accommodate the proposed aerial guideway, retaining walls, and realignment of Sepulveda Boulevard. Acquisition would be less than 1 percent of the park resource total acreage.
Teichman Family Magnolia Park	0.6 acre	Landscaped area along the western edge of the park property would be acquired to accommodate the proposed aerial alignment. The landscaped area serves as a buffer between park uses and I-405 ROW. No park facilities or features would be acquired or displaced.

Source: HTA, 2024

ROW = right-of-way

The potential permanent acquisition of these open space and recreational areas would not impact existing buildings or change the primary function of the existing uses. Neither the Sepulveda Pass Open Space nor the Mission Canyon Open Space have recreational uses in the areas to be acquired, and these areas are inaccessible to the public. As such, there is no potential for acquisition of these areas to result in physical impacts that would have any effect on recreation, though there would be potential conflicts with conservation policies governing these areas. Details regarding potential conflicts with land use plans and policies are further discussed in the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* (Metro, 2025b). The acquisition of the landscaped areas along the western edge of the Teichman Family Magnolia Park property for the Alternative 1 alignment would not cause substantial physical impacts to the park's primary features. Therefore, no alteration or expansion would be necessary to maintain the park's existing function and service objectives, as the portion to be acquired does not serve any recreational purpose.

Alternative 1 would enhance bicycle and pedestrian access in the immediate station areas for improved bicycle-to-transit connections through bike parking and connections to existing nearby bicycle facilities, as proposed in Metro's *Transit to Parks Strategic Plan* (Metro, 2019b). At some locations along the alignment, sidewalks would be widened or replaced where needed to accommodate the aerial guideway and station infrastructure. Alternative 1 would maintain adequate sidewalk widths at station locations and along the aerial alignment. Additional enhancements, including crosswalk and Americans with Disabilities Act-compliant sidewalk improvements, would further improve pedestrian circulation and non-motorized access to transit stations. Along the Alternative 1 alignment, pedestrian and bicycle circulation would be maintained where the aerial viaduct would cross roadways that serve as I-405 or LOSSAN rail corridor underpasses (Santa Monica Boulevard, Constitution Avenue, Montana Avenue, Church Lane, Getty Center Drive, Sepulveda, and Ventura Boulevard). The height of the aerial viaduct would provide sufficient vertical clearance between the existing roadways and MRT so that bicycle movements would not be inhibited underneath the structure. In addition, the locations of the aerial stations and their supporting columns would be placed outside of the existing roadway and sidewalks and would thereby not preclude any planned bicycle facilities nor alter any existing bicycle facilities at the proposed station areas. The MRT rail cars would also be equipped with areas for temporary storage of bicycles during transit to facilitate bicycle-to-transit opportunities between the San Fernando Valley and the Los Angeles Basin. Operation of Alternative 1 would not affect access or use of surrounding recreational hiking trails.

Table 6-6 lists the 14 recreational or trail facilities located within 0.5-mile of one or more of the Alternative 1 stations. Based on their proximity to Alternative 1 stations, it is anticipated that some increase in the use of these facilities would occur. Each of these facilities has existing operations and maintenance requirements that are not anticipated to be affected by Alternative 1 operations. The communities within the RSA are all well served by existing state, regional, and local recreation facilities, and while a modest increase in use of these facilities is anticipated, Alternative 1 is not anticipated to increase the use of existing parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Occasional large community events typically increase the use of parks, recreational facilities, and bicycle facilities such that recreational users may originate beyond the surrounding communities. However, these park community events would be similar to those that are currently held in the Alternative 1 RSA, and Alternative 1 would not alter the operations or frequency of these locally held community events. Similar to existing conditions, the departments and public entities that maintain the facilities would

provide services and resources to serve the attendees of these events. As a transportation infrastructure project, Alternative 1 may provide residents of the surrounding communities who choose not to drive an alternative means of accessing locally held community events. During such events, the use of parks, recreational facilities, and bikeways may potentially increase. However, the increased use would be occasional and specific to the community event. Thus, Alternative 1 would provide improved connections to such community events and would not directly accelerate or result in a substantial deterioration of existing parks, recreational facilities, or bicycle facilities.

The potential partial acquisitions would not cause physical deterioration of the parks to occur or be accelerated because parks and open space land to be acquired would consist of small strips of land along the property boundaries of the affected resources where there are no recreational facilities. Alternative 1 would comply with all applicable federal and state requirements, including the Uniform Relocation Assistance and Real Property Acquisition Act of 1971 and Public Park Preservation Act of 1971. USDOT environmental review would trigger the requirements of Section 4(f) of the USDOT Act of 1966, including review of these open space and parkland resource property acquisitions. Details regarding property acquisitions are further discussed in the *Sepulveda Transit Corridor Project Real Estate and Acquisitions Technical Report* (Metro, 2025c).

For these reasons, Alternative 1 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Alternative 1 would not result in substantial adverse physical impacts associated with the need for new or physically altered parks. Impacts would be less than significant.

6.3.1.2 Construction Impacts

Construction of Alternative 1 would be temporary and would not generate permanent residences that would increase the use of existing parks and recreational facilities resulting in accelerated physical deterioration of the facilities or require the expansion of existing recreational facilities. While construction workers may utilize nearby parks and recreational facilities during lunchtime breaks, such use would be temporary and nominal.

Construction of the aerial viaduct, retaining walls, and I-405 on- and off-ramps would require street detours that would temporarily impact bicycle facilities and affect access to bicycle facilities. In locations where the alignment is adjacent to the I-405 corridor or LOSSAN rail corridor, or where I-405 corridor widening is necessary for Alternative 1, temporary street detours would inhibit the circulation of pedestrians and bicyclists. In locations where the aerial viaduct would cross roadways that serve as I-405 or LOSSAN rail corridor underpasses (Santa Monica Boulevard, Constitution Avenue, Montana Avenue, Church Lane, Getty Center Drive, Sepulveda, and Ventura Boulevard), the installation of the supporting columns and erection of bent caps and guideway beams would affect sidewalk and bicycle access. Pedestrian and bicycle through-access underneath existing underpasses would require detours and thereby inhibit bicyclists. The bike lane along Sepulveda Boulevard in the Sepulveda Pass would be removed and rebuilt. As a result, the sidewalk would be relocated and temporarily decommissioned, and bicycle routes would be temporarily disrupted during construction and would require detours to maintain continuity with other portions of the bike lanes. Although street detours would disrupt bicycle and pedestrian circulation, bicycle movements would be maintained during construction. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* for more information related to construction traffic and access. (Metro, 2025a). Construction activities would not affect access or use of surrounding recreational hiking trails. Therefore, construction-related impacts to parks and recreational facilities would be less than significant.

6.3.1.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design would not create new residential populations that directly increase the use of existing parks, recreational facilities, and bicycle facilities in the surrounding communities. The MSF Base Design site would be a support facility for Alternative 1 and would provide maintenance and storage services and would not provide improved access to parks, recreational facilities, and bicycle facilities that may result in increased use.

The MSF Base Design site is currently developed as a materials storage site supporting LADWP operations. No parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the MSF Base Design. The nearest parkland is the Andres and Maria Cardenas Recreation Center located approximately 0.65 mile northwest of the MSF Base Design site. The MSF Base Design would not affect on-site or street parking used by visitors to the Andres and Maria Cardenas Recreation Center.

MSF Base Design site construction activities would be temporary and would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bike facilities in the surrounding communities. Temporary construction activities would be located entirely on-site, would not be located on parklands or recreational facilities, and would not disrupt the essential functions of these facilities. Therefore, impacts to parks and recreational facilities associated with the MSF Base Design would be less than significant.

MSF Design Option 1

The MSF Design Option 1 site would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bicycle facilities in the surrounding communities. The MSF Design Option 1 site would be a support facility for Alternative 1 and would provide maintenance and storage services and would not provide improved access to parks, recreational facilities, and bicycle facilities that may result in increased use.

The MSF Design Option 1 site is currently developed with industrial uses and there are no parkland or bicycle facilities located on or adjacent to the site nor are recreational facilities proposed as part of MSF Design Option 1. The nearest parkland is Marson Park, located approximately 620 feet northeast of the MSF Design Option 1 site. MSF Design Option 1 would not affect on-site or street parking used by visitors to Marson Park.

MSF Design Option 1 construction activities would be temporary and would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bike facilities in the surrounding communities. Therefore, impacts to parks and recreational facilities associated with MSF Design Option 1 would be less than significant.

Electric Bus MSF

The Electric Bus MSF site would not create new residential populations that directly increase the use of existing parks, recreational facilities, and bicycle facilities in the surrounding communities. The Electric Bus MSF site is a support facility for Alternative 1 and would provide maintenance and storage services and would not provide improved access to parks, recreational facilities, and bicycle facilities that may result in increased use.

The Electric Bus MSF site is currently developed with commercial and light industrial uses adjacent to the I-405 freeway and there are no parkland or bicycle facilities located on or adjacent to the site. The

nearest parkland is Felicia Mahood Multipurpose Center located approximately 0.75-mile northwest of the proposed Electric Bus MSF site. The nearest bicycle facility is the Exposition Corridor Bikeway located approximately 500 feet south of the proposed Electric Bus MSF site. The Electric Bus MSF would not affect on-site or street parking used by visitors to the Felicia Mahood Multipurpose Center or impede access to the Exposition Corridor Bikeway.

Electric Bus MSF construction activities are temporary and would not create new residential populations that directly increase the use of existing parks, recreational facilities, and bike facilities in the surrounding communities. Therefore, impacts to parks and recreational facilities associated with the Electric Bus MSF would be less than significant.

6.3.2 Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

6.3.2.1 Operational Impacts

Alternative 1 is a transportation infrastructure project that would provide new transit options to the surrounding community. Alternative 1 would not include the construction of recreational facilities or require the expansion of existing park facilities or bicycle facilities that might have an adverse physical effect on the environment. As previously described in Section 6.3.1.1, bicycle facilities would be largely maintained along the Alternative 1 alignment and would not preclude any planned bicycle facilities nor alter any existing bicycle facilities at station areas. Therefore, impacts would be less than significant.

6.3.2.2 Construction Impacts

Construction of Alternative 1 would be temporary and would not include the construction of recreational facilities or require the expansion of existing recreational facilities. Therefore, no impacts would occur.

6.3.2.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design site is currently developed as a materials storage site owned by LADWP. MSF site construction activities would not include the construction of recreational facilities or require the expansion of existing recreational facilities. Therefore, no impacts would occur.

MSF Design Option 1

MSF Design Option 1 construction activities would not include the construction of recreational facilities or require the expansion of existing recreational facilities. Therefore, no impacts would occur.

Electric Bus MSF

Electric Bus MSF construction activities would not include the construction of recreational facilities or require the expansion of existing recreational facilities. Therefore, no impacts would occur.

6.4 Mitigation Measures

6.4.1 Operational Impacts

No mitigation measures are required.

6.4.2 Construction Impacts

No mitigation measures are required.

6.4.3 Impacts After Mitigation

No mitigation measures are required; impacts are less than significant.

7 ALTERNATIVE 3

7.1 Alternative Description

Alternative 3 is an aerial monorail alignment that would run along the I-405 corridor and would include seven aerial monorail transit (MRT) stations and an underground tunnel alignment between the Getty Center and Wilshire Boulevard with two underground stations. This alternative would provide transfers to five high-frequency fixed guideway transit and commuter rail lines, including the Los Angeles County Metropolitan Transportation Authority's (Metro) E, Metro D, and Metro G Lines, the East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 16.1 miles, with 12.5 miles of aerial guideway and 3.6 miles of underground configuration.

The seven aerial and two underground MRT stations would be as follows:

1. Metro E Line Expo/Sepulveda Station (aerial)
2. Santa Monica Boulevard Station (aerial)
3. Wilshire Boulevard/Metro D Line Station (underground)
4. UCLA Gateway Plaza Station (underground)
5. Getty Center Station (aerial)
6. Ventura Boulevard/Sepulveda Boulevard Station (aerial)
7. Metro G Line Sepulveda Station (aerial)
8. Sherman Way Station (aerial)
9. Van Nuys Metrolink Station (aerial)

7.1.1 Operating Characteristics

7.1.1.1 Alignment

As shown on Figure 7-1, from its southern terminus at the Metro E Line Expo/Sepulveda Station, the alignment of Alternative 3 would generally follow I-405 to the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor, except for an underground segment between Wilshire Boulevard and the Getty Center.

The proposed southern terminus station would be located west of the existing Metro E Line Expo/Sepulveda Station, east of I-405 between Pico Boulevard and Exposition Boulevard. Tail tracks would extend just south of the station adjacent to the eastbound Interstate 10 to northbound I-405 connector over Exposition Boulevard. North of the Metro E Line Expo/Sepulveda Station, a storage track would be located off of the main alignment north of Pico Boulevard between I-405 and Cotner Avenue. The alignment would continue north along the east side of I-405 until just south of Santa Monica Boulevard, where a proposed station would be located between the I-405 northbound travel lanes and Cotner Avenue. The alignment would cross over the northbound and southbound freeway lanes north of Santa Monica Boulevard and travel along the west side of I-405. Once adjacent to the U.S. Department of Veterans Affairs (VA) Hospital site, the alignment would cross back over the I-405 lanes and Sepulveda Boulevard, before entering an underground tunnel south of the Federal Building parking lot.

Figure 7-1. Alternative 3: Alignment



Source: LASRE, 2024; HTA, 2024

The alignment would proceed east underground and turn north under Veteran Avenue toward the proposed Wilshire Boulevard/Metro D Line Station located under the University of California, Los Angeles (UCLA) Lot 36 on the east side of Veteran Avenue north of Wilshire Boulevard. North of this station, the underground alignment would curve northeast parallel to Weyburn Avenue before curving north and traveling underneath Westwood Plaza at Le Conte Avenue. The alignment would follow Westwood Plaza until the underground UCLA Gateway Plaza Station in front of the Luskin Conference

Center. The alignment would then continue north under the UCLA campus until Sunset Boulevard, where the tunnel would curve northwest for approximately 2 miles to rejoin I-405.

The Alternative 3 alignment would transition from an underground configuration to an aerial guideway structure after exiting the tunnel portal located at the northern end of the Leo Baeck Temple parking lot. The alignment would cross over Sepulveda Boulevard and the I-405 lanes to the proposed Getty Center Station on the west side of I-405, just north of the Getty Center tram station. The alignment would return to the median for a short distance before curving back to the west side of I-405 south of the Sepulveda Boulevard undercrossing north of the Getty Center Drive interchange. After crossing over Bel Air Crest Road and Skirball Center Drive, the alignment would again return to the median and run under the Mulholland Drive Bridge, then continue north within the I-405 median to descend into the San Fernando Valley (Valley).

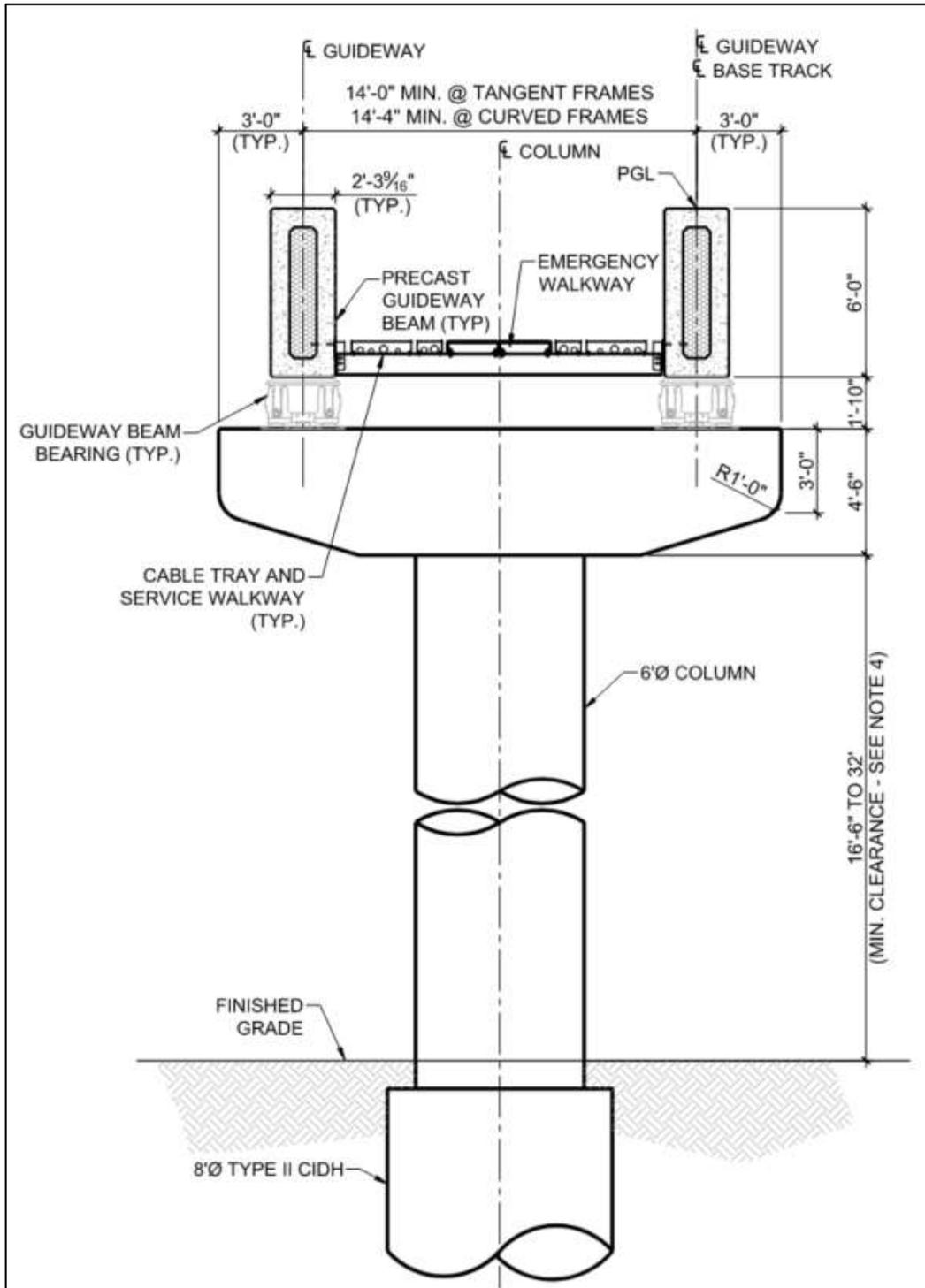
Near Greenleaf Street, the alignment would cross over the northbound freeway lanes and on-ramps toward the proposed Ventura Boulevard Station on the east side of I-405. This station would be located above a transit plaza and replace an existing segment of Dickens Street adjacent to I-405, just south of Ventura Boulevard. Immediately north of the Ventura Boulevard Station, the alignment would cross over the northbound I-405 to U.S. Highway 101 (US-101) connector and continue north between the connector and the I-405 northbound travel lanes. The alignment would continue north along the east side of I-405 — crossing over US-101 and the Los Angeles River — to a proposed station on the east side of I-405 near the Metro G Line Busway. A new at-grade station on the Metro G Line would be constructed for Alternative 3 adjacent to the proposed station. These proposed stations are shown on the Metro G Line inset area on Figure 7-1.

The alignment would then continue north along the east side of I-405 to the proposed Sherman Way Station. The station would be located inside the I-405 northbound loop off-ramp to Sherman Way. North of the station, the alignment would continue along the eastern edge of I-405, then curve to the southeast parallel to the LOSSAN rail corridor. The alignment would run elevated along Raymer Street east of Sepulveda Boulevard and cross over Van Nuys Boulevard to the proposed terminus station adjacent to the Van Nuys Metrolink/Amtrak Station. Overhead utilities along Raymer Street would be undergrounded where they would conflict with the guideway or its supporting columns. Tail tracks would be located southeast of this terminus station.

7.1.1.2 Guideway Characteristics

Alternative 3 would utilize straddle-beam monorail technology, which allows the monorail vehicle to straddle a guide beam that both supports and guides the vehicle. Alternative 3 would operate on aerial and underground guideways with dual-beam configurations. Northbound and southbound trains would travel on parallel beams either in the same tunnel or supported by a single-column or straddle-bent aerial structure. Figure 7-2 shows a typical cross-section of the aerial monorail guideway.

Figure 7-2. Typical Aerial Monorail Guideway Cross-Section

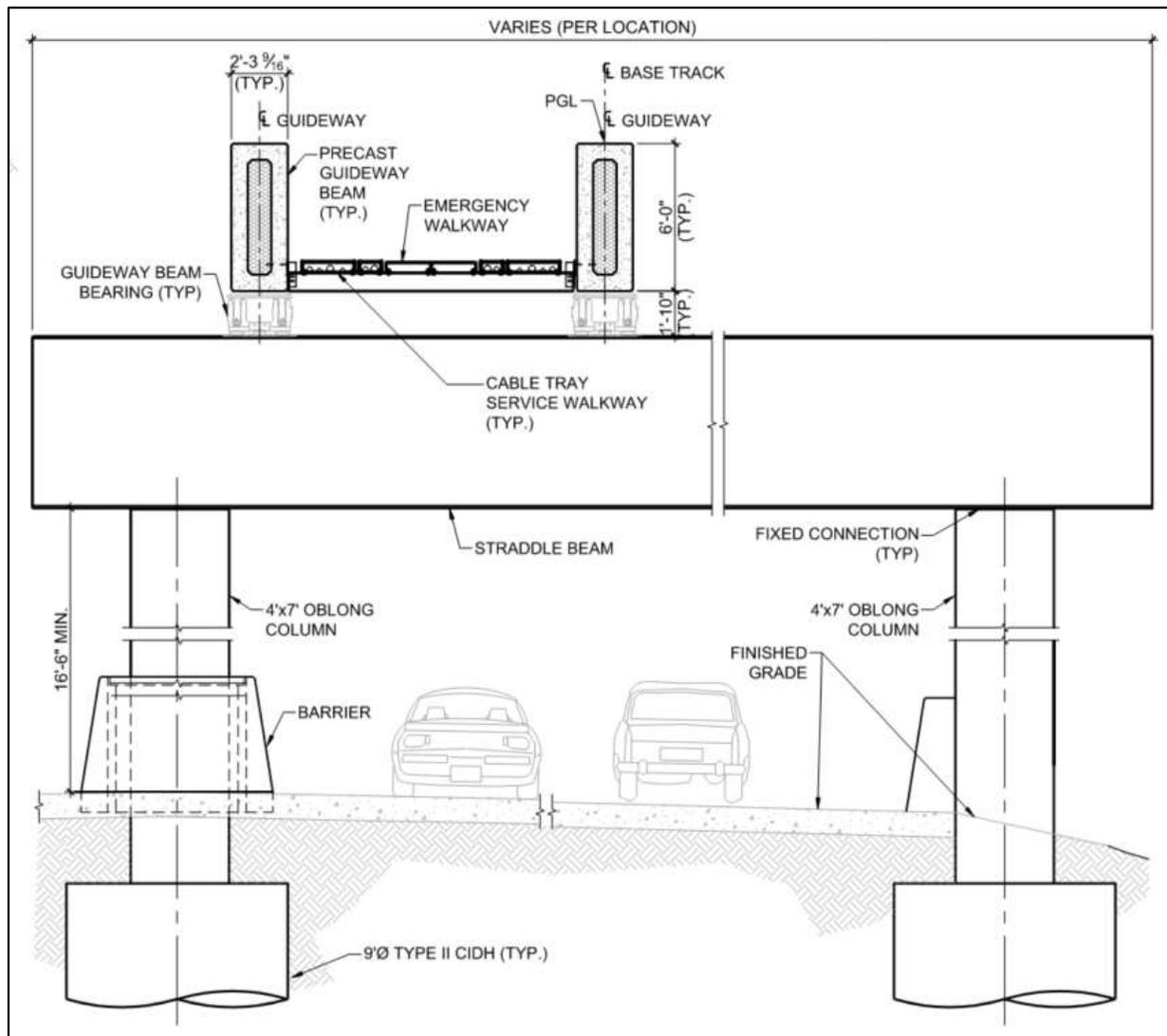


Source: LASRE, 2024

On a typical guideway section (i.e., not at a station), guide beams would rest on 20-foot-wide column caps (i.e., the structure connecting the columns and the guide beams), with typical spans (i.e., the distance between columns) ranging from 70 to 190 feet. The bottom of the column caps would typically be between 16.5 feet and 32 feet above ground level.

Over certain segments of roadway and freeway facilities, a straddle-bent configuration, as shown on Figure 7-3, consisting of two concrete columns constructed outside of the underlying roadway would be used to support the guide beams and column cap. Typical spans for these structures would range between 65 and 70 feet. A minimum 16.5-foot clearance would be maintained between the underlying roadway and the bottom of the column caps.

Figure 7-3. Typical Monorail Straddle-Bent Cross-Section



Source: LASRE, 2024

Structural support columns would vary in size and arrangement by alignment location. Columns would be 6 feet in diameter along main alignment segments adjacent to I-405 and be 4 feet wide by 6 feet long in the I-405 median. Straddle-bent columns would be 4 feet wide by 7 feet long. At stations, six rows of

7.1.1.3 Vehicle Technology

Alternative 3 would utilize straddle-beam monorail technology, which allows the monorail vehicle to straddle a guide beam that both supports and guides the vehicle. Rubber tires would sit both atop and on each side of the guide beam to provide traction and guide the train. Trains would be automated and powered by power rails mounted to the guide beam, with planned peak-period headways of 166 seconds and off-peak-period headways of 5 minutes. Monorail trains could consist of up to eight cars. Alternative 3 would have a maximum operating speed of 56 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations.

Monorail train cars would be 10.5 feet wide, with two double doors on each side. End cars would be 46.1 feet long with a design capacity of 97 passengers, and intermediate cars would be 35.8 feet long and have a design capacity of 90 passengers.

7.1.1.4 Stations

Alternative 3 would include seven aerial and two underground MRT stations with platforms approximately 320 feet long. Aerial stations would be elevated 50 feet to 75 feet above the ground level, and underground stations would be 80 feet to 110 feet underneath the existing ground level. The Metro E Line Expo/Sepulveda, Santa Monica Boulevard, Ventura Boulevard/Sepulveda Boulevard, Sherman Way, and Van Nuys Metrolink Stations would be center-platform stations where passengers would travel up to a shared platform that would serve both directions of travel. The Wilshire Boulevard/Metro D Line, UCLA Gateway Plaza, Getty Center, and Metro G Line Sepulveda Stations would be side-platform stations where passengers would select and travel up or down to station platforms depending on their direction of travel. Each station, regardless of whether it has side or center platforms, would include a concourse level prior to reaching the train platforms. Each station would have a minimum of two elevators, two escalators, and one stairway from ground level to the concourse.

Aerial station platforms would be approximately 320 feet long and would be supported by six rows of dual 5-foot by- 8-foot columns. The platforms would be covered, but not enclosed. Side-platform stations would be 61.5 feet wide to accommodate two 13-foot-wide station platforms with a 35.5-foot-wide intermediate gap for side-by-side trains. Center-platform stations would be 49 feet wide, with a 25-foot-wide center platform.

Underground side platforms would be 320 feet long and 26 feet wide, separated by a distance of 31.5 feet for side-by-side trains.

Monorail stations would include automatic, bi-parting fixed doors along the edges of station platforms. These doors would be integrated into the automatic train control system and would not open unless a train is stopped at the platform.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Sepulveda Station

- This aerial station would be located near the existing Metro E Line Expo/Sepulveda Station, just east of I-405 between Pico Boulevard and Exposition Boulevard.
- A transit plaza and station entrance would be located on the east side of the station.
- An off-street passenger pick-up/drop-off loop would be located south of Pico Boulevard west of Cotner Avenue.

- An elevated pedestrian walkway would connect the concourse level of the proposed station to the Metro E Line Expo/Sepulveda Station within the fare paid zone.
- Passengers would be able to park at the existing Metro E Line Expo/Sepulveda Station parking facility, which provides 260 parking spaces. No additional automobile parking would be provided at the proposed station.

Santa Monica Boulevard Station

- This aerial station would be located just south of Santa Monica Boulevard, between the I-405 northbound travel lanes and Cotner Avenue.
- Station entrances would be located on the southeast and southwest corners of Santa Monica Boulevard and Cotner Avenue. The entrance on the southeast corner of the intersection would be connected to the station concourse level via an elevated pedestrian walkway spanning Cotner Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This underground station would be located under UCLA Lot 36 on the east side of Veteran Avenue north of Wilshire Boulevard.
- A station entrance would be located on the northeast corner of the intersection of Veteran Avenue and Wilshire Boulevard.
- An underground pedestrian walkway would connect the concourse level of the proposed station to the Metro D Line Westwood/UCLA Station using a knock-out panel provided in the Metro D Line Station box. This connection would occur within the fare paid zone.
- No dedicated station parking would be provided at this station.

UCLA Gateway Plaza Station

- This underground station would be located beneath Gateway Plaza.
- Station entrances would be located on the northern end and southeastern end of the plaza.
- No dedicated station parking would be provided at this station.

Getty Center Station

- This aerial station would be located on the west side of I-405 near the Getty Center, approximately 1,000 feet north of the Getty Center tram station.
- An elevated pedestrian walkway would connect the proposed station's concourse level with the Getty Center tram station. The proposed connection would occur outside the fare paid zone.
- An entrance to the walkway above the Getty Center's parking lot would be the proposed station's only entrance.
- No dedicated station parking would be provided at this station.

Ventura Boulevard/Sepulveda Boulevard Station

- This aerial station would be located east of I-405, just south of Ventura Boulevard.

- A transit plaza, including two station entrances, would be located on the east side of the station. The plaza would require the closure of a 0.1-mile segment of Dickens Street between Sepulveda Boulevard and Ventura Boulevard, with a passenger pick-up/drop-off loop and bus stops provided south of the station, off Sepulveda Boulevard.
- No dedicated station parking would be provided at this station.

Metro G Line Sepulveda Station

- This aerial station would be located near the Metro G Line Sepulveda Station, between I-405 and the Metro G Line Busway.
- Entrances to the MRT station would be located on both sides of the new proposed Metro G Line bus rapid transit (BRT) station.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the proposed new Metro G Line BRT station outside of the fare paid zone.
- Passengers would be able to park at the existing Metro G Line Sepulveda Station parking facility, which has a capacity of 1,205 parking spaces. Currently, only 260 parking spaces are used for transit parking. No additional automobile parking would be provided at the proposed station.

Sherman Way Station

- This aerial station would be located inside the I-405 northbound loop off-ramp to Sherman Way.
- A station entrance would be located on the north side of Sherman Way, directly across the street from the I-405 northbound off-ramp to Sherman Way East.
- An on-street passenger pick-up/drop-off area would be provided on the north side of Sherman Way west of Firmament Avenue.
- No dedicated station parking would be provided at this station.

Van Nuys Metrolink Station

- This aerial station would be located on the east side of Van Nuys Boulevard, just south of the LOSSAN rail corridor, incorporating the site of the current Amtrak ticket office.
- A station entrance would be located on the east side of Van Nuys Boulevard just south of the LOSSAN rail corridor. A second entrance would be located to the north of the LOSSAN rail corridor with an elevated pedestrian walkway connecting to both the concourse level of the proposed station and the platform of the Van Nuys Metrolink/Amtrak Station.
- Existing Metrolink Station parking would be reconfigured, maintaining approximately the same number of spaces, but 180 parking spaces would be relocated north of the LOSSAN rail corridor. Metrolink parking would not be available to Metro transit riders.

7.1.1.5 Station-to-Station Travel Times

Table 7-1 presents the station-to-station distance and travel times for Alternative 3. The travel times includes both running time and dwelling time. The travel times differ between northbound and southbound trips because of grade differentials and operational considerations at end-of-line stations.

Table 7-1. Alternative 3: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
<i>Metro E Line Station</i>					30
Metro E Line	Santa Monica Boulevard	0.9	123	97	—
<i>Santa Monica Boulevard Station</i>					30
Santa Monica Boulevard	Wilshire/Metro D Line	1.1	192	194	—
<i>Wilshire/Metro D Line Station</i>					30
Wilshire/Metro D Line	UCLA Gateway Plaza	0.9	138	133	—
<i>UCLA Gateway Plaza Station</i>					30
UCLA Gateway Plaza	Getty Center	2.6	295	284	—
<i>Getty Center Station</i>					30
Getty Center	Ventura Boulevard	4.7	414	424	—
<i>Ventura Boulevard Station</i>					30
Ventura Boulevard	Metro G Line	2.0	179	187	—
<i>Metro G Line Station</i>					30
Metro G Line	Sherman Way	1.5	134	133	—
<i>Sherman Way Station</i>					30
Sherman Way	Van Nuys Metrolink	2.4	284	279	—
<i>Van Nuys Metrolink Station</i>					30

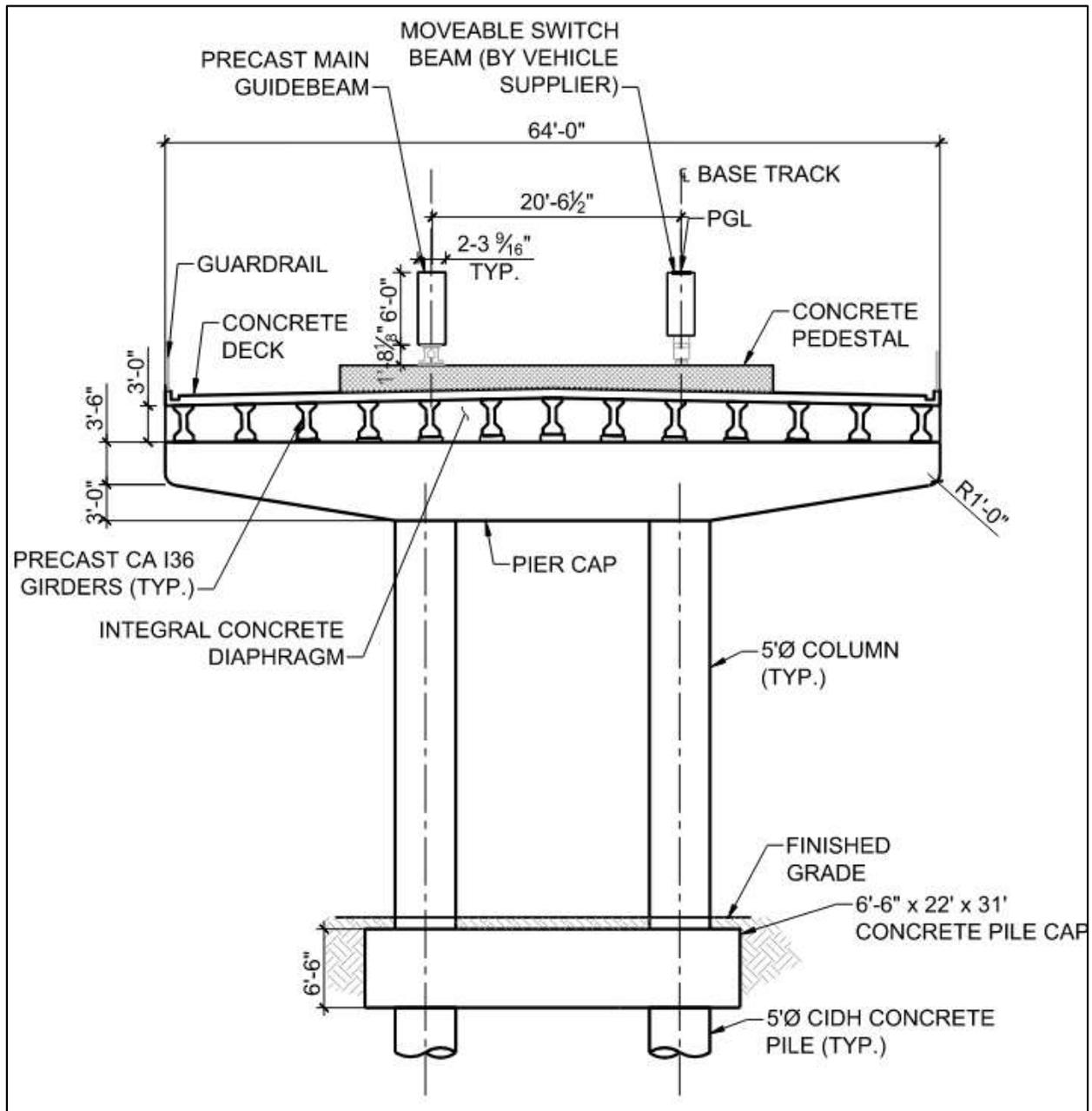
Source: LASRE, 2024

— = no data

7.1.1.6 Special Trackwork

Alternative 3 would include five pairs of beam switches to enable trains to cross over and reverse direction on the opposite beam. All beam switches would be located on aerial portions of the alignment of Alternative 3. From south to north, the first pair of beam switches would be located just north of the Metro E Line Expo/Sepulveda Station. A second pair of beam switches would be located on the west side of I-405, directly adjacent to the VA Hospital site, south of the Wilshire Boulevard/Metro D Line Station. A third pair of beam switches would be located in the Sepulveda Pass just south of Mountaingate Drive and Sepulveda Boulevard. A fourth pair of beam switches would be located south of the Metro G Line Station between the I-405 northbound lanes and the Metro G Line Busway. The final pair would be located near the Van Nuys Metrolink Station.

At beam switch locations, the typical cross-section of the guideway would increase in column and column cap width. The column cap width at these locations would be 64 feet, with dual 5-foot-diameter columns. Underground pile caps for additional structural support would also be required at these locations. Figure 7-5 shows a typical cross-section of the monorail beam switch.

Figure 7-5. Typical Monorail Beam Switch Cross-Section


Source: LASRE, 2024

7.1.1.7 Maintenance and Storage Facility

MSF Base Design

In the maintenance and storage facility (MSF) Base Design for Alternative 3, the MSF would be located on City of Los Angeles Department of Water and Power (LADWP) property east of the Van Nuys Metrolink Station. The MSF Base Design site would be approximately 18 acres and would be designed to accommodate a fleet of 208 monorail vehicles. The site would be bounded by the LOSSAN rail corridor

to the north, Saticoy Street to the south, and property lines extending north of Tyrone and Hazeltine Avenues to the east and west, respectively.

Monorail trains would access the site from the main alignment's northern tail tracks at the northwest corner of the site. Trains would travel parallel to the LOSSAN rail corridor before curving southeast to maintenance facilities and storage tracks. The guideway would remain in an aerial configuration within the MSF Base Design, including within maintenance facilities.

The site would include the following facilities:

- Primary entrance with guard shack
- Primary maintenance building that would include administrative offices, an operations control center, and a maintenance shop and office
- Train car wash building
- Emergency generator
- Traction power substation (TPSS)
- Maintenance-of-way (MOW) building
- Parking area for employees

MSF Design Option 1

In the MSF Design Option 1, the MSF would be located on industrial property, abutting Orion Avenue, south of the LOSSAN rail corridor. The MSF Design Option 1 site would be approximately 26 acres and would be designed to accommodate a fleet of 224 monorail vehicles. The site would be bounded by I-405 to the west, Stagg Street to the south, the LOSSAN rail corridor to the north, and Orion Avenue and Raymer Street to the east. The monorail guideway would travel along the northern edge of the site.

Monorail trains would access the site from the monorail guideway east of Sepulveda Boulevard, requiring additional property east of Sepulveda Boulevard and north of Raymer Street. From the northeast corner of the site, trains would travel parallel to the LOSSAN rail corridor before turning south to maintenance facilities and storage tracks parallel to I-405. The guideway would remain in an aerial configuration within the MSF Design Option 1, including within maintenance facilities.

The site would include the following facilities:

- Primary entrance with guard shack
- Primary maintenance building that would include administrative offices, an operations control center, and a maintenance shop and office
- Train car wash building
- Emergency generator
- TPSS
- MOW building
- Parking area for employees

Figure 7-6 shows the locations of the MSF Base Design and MSF Design Option 1 for Alternative 3.

Figure 7-6. Alternative 3: Maintenance and Storage Facility Options



Source: LASRE, 2024; HTA, 2024

7.1.1.8 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. A TPSS on a site of approximately 8,000 square feet would be located approximately every 1 mile along the alignment. Table 7-2 lists the TPSS locations proposed for Alternative 3.

Figure 7-7 shows the TPSS locations along the Alternative 3 alignment.

Table 7-2. Alternative 3: Traction Power Substation Locations

TPSS No.	TPSS Location Description	Configuration
1	TPSS 1 would be located east of I-405, just south of Exposition Boulevard and the monorail guideway tail tracks.	At-grade
2	TPSS 2 would be located east of I-405 and Sepulveda Boulevard, just north of the Getty Center Station.	At-grade
3	TPSS 3 would be located west of I-405, just east of the intersection between Promontory Road and Sepulveda Boulevard.	At-grade
4	TPSS 4 would be located between I-405 and Sepulveda Boulevard, just north of the Skirball Center Drive Overpass.	At-grade
5	TPSS 5 would be located east of I-405, just south of Ventura Boulevard Station, between Sepulveda Boulevard and Dickens Street.	At-grade
6	TPSS 6 would be located east of I-405, just south of the Metro G Line Sepulveda Station.	At-grade
7	TPSS 7 would be located east of I-405, just east of the Sherman Way Station, inside the I-405 Northbound Loop Off-Ramp to Sherman Way westbound.	At-grade
8	TPSS 8 would be located east of I-405, at the southeast quadrant of the I-405 overcrossing with the LOSSAN rail corridor.	At-grade
9	TPSS 9 would be located east of I-405, at the southeast quadrant of the I-405 overcrossing with the LOSSAN rail corridor.	At-grade (within MSF Design Option)
10	TPSS 10 would be located between Van Nuys Boulevard and Raymer Street, south of the LOSSAN rail corridor.	At-grade
11	TPSS 11 would be located south of the LOSSAN rail corridor, between Tyrone Avenue and Hazeltine Avenue.	At-grade (within MSF Base Design)
12	TPSS 12 would be located southwest of Veteran Avenue at Wellworth Avenue.	Underground
13	TPSS 13 would be located within the Wilshire Boulevard/Metro D Line Station.	Underground (adjacent to station)
14	TPSS 14 would be located underneath UCLA Gateway Plaza.	Underground (adjacent to station)

Source: LASRE, 2024; HTA, 2024

Figure 7-7. Alternative 3: Traction Power Substation Locations



Source: LASRE, 2024; HTA, 2024

7.1.1.9 Roadway Configuration Changes

Table 7-3 lists the roadway changes necessary to accommodate the guideway of Alternative 3. Figure 7-8 shows the location of these roadway changes in the Sepulveda Transit Corridor Project (Project) Study Area, except for the I-405 configuration changes, which occur throughout the corridor.

Table 7-3. Alternative 3: Roadway Changes

Location	From	To	Description of Change
Cotner Avenue	Nebraska Avenue	Santa Monica Boulevard	Roadway realignment to accommodate aerial guideway columns
Beloit Avenue	Massachusetts Avenue	Ohio Avenue	Roadway narrowing to accommodate aerial guideway columns
Sepulveda Boulevard	Getty Center Drive	Not Applicable	Southbound right turn lane to Getty Center Drive shortened to accommodate aerial guideway columns
I-405 Northbound On-Ramp and Off-Ramp at Sepulveda Boulevard near I-405 Exit 59	Sepulveda Boulevard near I-405 Northbound Exit 59	Sepulveda Boulevard/I-405 Undercrossing (near Getty Center)	Ramp realignment to accommodate aerial guideway columns and I-405 widening
Sepulveda Boulevard	I-405 Southbound Skirball Center Drive Ramps (north of Mountaingate Drive)	Skirball Center Drive	Roadway realignment into existing hillside to accommodate aerial guideway columns and I-405 widening
I-405 Northbound On-Ramp at Mulholland Drive	Mulholland Drive	Not Applicable	Roadway realignment into the existing hillside between the Mulholland Drive Bridge pier and abutment to accommodate aerial guideway columns and I-405 widening
Dickens Street	Sepulveda Boulevard	Ventura Boulevard	Permanent removal of street for Ventura Boulevard Station construction Pick-up/drop-off area would be provided along Sepulveda Boulevard at the truncated Dickens Street
Sherman Way	Haskell Avenue	Firmament Avenue	Median improvements, passenger drop-off and pick-up areas, and bus pads within existing travel lanes
Raymer Street	Sepulveda Boulevard	Van Nuys Boulevard	Curb extensions and narrowing of roadway width to accommodate aerial guideway columns
I-405	Sepulveda Boulevard Northbound Off-Ramp (Getty Center Drive interchange)	Sepulveda Boulevard Northbound On-Ramp (Getty Center Drive interchange)	I-405 widening to accommodate aerial guideway columns in the median
I-405	Skirball Center Drive	U.S. Highway 101	I-405 widening to accommodate aerial guideway columns in the median

Source: LASRE, 2024; HTA, 2024

Figure 7-8. Alternative 3: Roadway Changes



Source: LASRE, 2024; HTA, 2024

In addition to the changes made to accommodate the guideway, as listed in Table 7-3, roadways and sidewalks near stations would be reconstructed, which would result in modifications to curb ramps and driveways.

7.1.1.10 Ventilation Facilities

For ventilation of the monorail’s underground portion, a plenum within the crown of the tunnel would provide a separate compartment for air circulation and allow multiple trains to operate between

stations. Vents would be located at the southern portal near the Federal Building parking lot, Wilshire/Metro D Line Station, UCLA Gateway Plaza Station, and at the northern portal near the Leo Baeck Temple parking lot. Emergency ventilation fans would be located at the UCLA Gateway Plaza Station and at the northern and southern tunnel portals.

7.1.1.11 Fire/Life Safety – Emergency Egress

Continuous emergency evacuation walkways would be provided along the guideway. Walkways along the alignment's aerial portions would typically consist of structural steel frames anchored to the guideway beams to support non-slip walkway panels. The walkways would be located between the two guideway beams for most of the aerial alignment; however, where the beams split apart, such as entering center-platform stations, short portions of the walkway would be located on the outside of the beams. For the underground portion of Alternative 3, 3.5-foot-wide emergency evacuation walkways would be located on both sides of the beams. Access to tunnel segments for first responders would be through stations.

7.1.2 Construction Activities

Construction activities for Alternative 3 would include constructing the aerial guideway and stations, underground tunnel and stations, and ancillary facilities, and widening I-405. Construction of the transit facilities through substantial completion is expected to have a duration of 8 ½ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

Aerial guideway construction would begin at the southern and northern ends of the alignment and connect in the middle. Constructing the guideway would require a combination of freeway and local street lane closures throughout the working limits to provide sufficient work area. The first stage of I-405 widening would include a narrowing of adjacent freeway lanes to a minimum width of 11 feet (which would eliminate shoulders) and placing K-rail on the outside edge of the travel lanes to create outside work areas. Within these outside work zones, retaining walls, drainage, and outer pavement widenings would be constructed to allow for I-405 widening. The reconstruction of on- and off-ramps would be the final stage of I-405 widening.

A median work zone along I-405 for the length of the alignment would be required for erection of the guideway structure. In the median work zone, demolition of existing median and drainage infrastructure would be followed by the installation of new K-rails and installation of guideway structural components, which would include full directional freeway closures when guideway beams must be transported into the median work areas during late-night hours. Additional night and weekend directional closures would be required for installation of long-span structures over I-405 travel lanes where the guideway would transition from the median.

Aerial station construction is anticipated to last the duration of construction activities for Alternative 3 and would include the following general sequence of construction:

- Site clearing
- Utility relocation
- Construction fencing and rough grading
- CIDH pile drilling and installation
- Elevator pit excavation
- Soil and material removal

- Pile cap and pier column construction
- Concourse level and platform level falsework and cast-in-place structural concrete
- Guideway beam installation
- Elevator and escalator installation
- Completion of remaining concrete elements such as pedestrian bridges
- Architectural finishes and mechanical, electrical, and plumbing installation

Underground stations, including the Wilshire Boulevard/Metro D Line Station and the UCLA Gateway Plaza Station, would use a “cut-and-cover” construction method whereby the station structure would be constructed within a trench excavated from the surface that is covered by a temporary deck and backfilled during the later stages of station construction. Traffic and pedestrian detours would be necessary during underground station excavation until decking is in place and the appropriate safety measures are taken to resume cross traffic.

A tunnel boring machine (TBM) would be used to construct the underground segment of the guideway. The TBM would be launched from a staging area on Veteran Avenue south of Wilshire Boulevard, and head north toward an exit portal location north of Leo Baeck Temple. The southern portion of the tunnel between Wilshire Boulevard and the Bel Air Country Club would be at a depth between 80 to 110 feet from the surface to the top of the tunnel. The UCLA Gateway Plaza Station would be constructed using cut-and-cover methods. Through the Santa Monica Mountains, the tunnel would range between 30 to 300 feet deep.

Alternative 3 would require construction of a concrete casting facility for columns and beams associated with the elevated guideway. A specific site has not been identified; however, it is expected that the facility would be located on industrially zoned land adjacent to a truck route in either the Antelope Valley or Riverside County. When a site is identified, the contractor would obtain all permits and approvals necessary from the relevant jurisdiction, the appropriate air quality management entity, and other regulatory entities.

TPSS construction would require additional lane closures. Large equipment, including transformers, rectifiers, and switchgears would be delivered and installed through prefabricated modules where possible in at-grade TPSSs. The installation of transformers would require temporary lane closures on Exposition Boulevard, Beloit Avenue, and the I-405 northbound on-ramp at Burbank Boulevard.

Table 7-4 and Figure 7-9 show the potential construction staging areas for Alternative 3. Staging areas would provide the necessary space for the following activities:

- Contractors’ equipment
- Receiving deliveries
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment)

Table 7-4. Alternative 3: Construction Staging Locations

No.	Location Description
1	Public Storage between Pico Boulevard and Exposition Boulevard, east of I-405

No.	Location Description
2	South of Dowlen Drive and east of Greater LA Fisher House
3	Federal Building Parking Lot
4	Kinross Recreation Center and UCLA Lot 36
5	North end of the Leo Baeck Temple Parking Lot (tunnel boring machine retrieval)
6	At 1400 N Sepulveda Boulevard
7	At 1760 N Sepulveda Boulevard
8	East of I-405 and north of Mulholland Drive Bridge
9	Inside of I-405 Northbound to US-101 Northbound Loop Connector, south of US-101
10	ElectroRent Building south of G Line Busway, east of I-405
11	Inside the I-405 Northbound Loop Off-Ramp at Victory Boulevard
12	Along Cabrito Road east of Van Nuys Boulevard

Source: LASRE, 2024; HTA, 2024

Figure 7-9. Alternative 3: Construction Staging Locations



Source: LASRE, 2024; HTA, 2024

7.2 Existing Conditions

The Alternative 3 Resource Study Area (RSA) is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-mile from MSF site boundaries. The Alternative 3 RSA consists of portions of the City of Los Angeles, the City of Santa Monica, and the unincorporated Los Angeles County of West Los Angeles, which contains the Department of Veterans Affairs complex. Affected communities identified within the City of Los Angeles include the following:

- Bel Air
- Beverly Crest
- Brentwood
- Encino
- Lake Balboa
- Mar Vista
- North Hills
- North Hollywood
- North Sherman Oaks
- Palms
- Panorama City
- Sherman Oaks
- Sun Valley
- Van Nuys
- West Los Angeles
- Westwood

Figure 7-10 and Figure 7-11 show the location of parks and recreational facilities within the Alternative 3 Resource Study Area, including bicycle facilities and recreational hiking trails.

Figure 7-10. Alternative 3: Parks and Recreational Facilities within the Resource Study Area (from Panorama City to Brentwood)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

Figure 7-11. Alternative 3: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

7.2.1 Parks and Recreational Facilities

The Alternative 3 RSA includes 15 park and recreational facilities, including 8 parks, 5 nature/wildlife preserves and regional open spaces, 1 botanical garden, and 1 amusement park, comprising approximately 1,324 acres. The 15 parks and recreational facilities identified are all located in the City of Los Angeles. Several agencies own and manage the park and recreational facilities identified, including the U.S. Army Corps of Engineers, Los Angeles County, City of Los Angeles, Santa Monica Mountains Conservancy, National Park Service, Los Angeles Neighborhood Land Trust, and the UCLA.

Table 7-5 lists the parks and recreational facilities within the Alternative 3 RSA and respective distances from the Alternative 3 alignment or station area. Table 7-6 lists the parks and recreational facilities within the 0.5-mile radius of proposed Alternative 3 stations. Figure 7-10 and Figure 7-11 show the locations of these facilities.

Table 7-5. Alternative 3: Parks and Recreational Facilities within the Resource Study Area

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 3 (feet) ^b
Andres and Maria Cardenas Recreation Center	14740 Blythe Street, Panorama City	City of Los Angeles	Local Park	Skate park, splash pad, community center	0.7	702
Delano Park	15100 Erwin Street, Van Nuys	City of Los Angeles	Local Park	Baseball field, soccer field, playground, community center	6.1	1,916
Felicia Mahood Multipurpose Center	11338 Santa Monica Boulevard, Los Angeles	City of Los Angeles	Local Park	Senior Center	4.3	791
Getty View Park & Trailhead	1399 Casiano Road, Los Angeles	SMMC	Regional Open Space	Open space	180.1	0
Los Angeles Riverfront Greenway	Sherman Oaks	City of Los Angeles	Regional Open Space	Open space	6.2	995
Marson Park	15262 Marson Street, Panorama City	Los Angeles Neighborhood Land Trust	Local Park	Playground	0.3	327
Mildred E. Mathia Botanical Garden	707 Tiverton Drive, Los Angeles	University of California, Los Angeles	Botanical Garden	Botanical garden	8.2	979
Mission Canyon Open Space	8260 Mulholland Drive	County of Los Angeles	Natural Areas	Open space	479.9	95
Sepulveda Basin Wildlife Reserve	17017 Burbank Boulevard, Encino	USACE	Regional Open Space	Open space	327.3	319

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 3 (feet) ^b
Sepulveda Pass Open Space	457 N Fairfax Avenue, Los Angeles	SMMC	Regional Open Space	Open space	155.0	307
Sherman Oaks Castle Park	4989 Sepulveda Boulevard, Sherman Oaks	City of Los Angeles	Amusement Park	Amusement Park	5.0	0
Teichman Family Magnolia Park	15365 Magnolia Boulevard, Sherman Oaks	City of Los Angeles	Local Park	Basketball court	3.9	0
Westwood Gardens Park	1246 Glendon Avenue, Los Angeles	City of Los Angeles	Local Park	Open space	0.3	1,456
Westwood Park	1350 Sepulveda Boulevard, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, multipurpose field, playground, pool, gym	26.7	54
Woodley Avenue Park	6350 Woodley Avenue, Encino	USACE	Regional Recreation Park	Fitness zone, picnic shelter, playgrounds	119.8	179
Total					1,324	

Source: LA County Planning, 2024a

^aSize (acres) refers to the full size of the resource, not the acreage within the RSA.

^bA distance of “0 feet” from the alternative indicates that the alternative would cross over the resource.

SMMC = Santa Monica Mountains Conservancy

USACE = U.S. Army Corps of Engineers

Notes:

- The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.
- Facility Type is a categorizing based on the Los Angeles County Department of Regional Planning and City of Los Angeles, and includes the following types:
 - Amusement Park: Family entertainment, managed by the City of Los Angeles.
 - Botanical Garden: Public garden.
 - Local Park: Designed to serve residents of all ages in several surrounding neighborhoods and may include facilities such as a community building, multipurpose fields, hard court areas, parking, maintenance service areas, and play areas.
 - Natural Area: A place that has a unique value that is scenic, historic, geologic, ecological, or educational. Natural areas are maintained in a natural state to preserve their wilderness, native ecosystems, and their processes.

- Regional Recreation Park: Regional parks are typically greater than 100 acres in size and have a service radius of 25 miles or more. They include unique areas such as lakes, wetlands, auditoriums, water bodies, and campgrounds, in addition to the active recreational facilities offered in community and community regional parks.
- Regional Open Space: Undeveloped land in its natural state, as well as active and passive park space that is regional in size.

Table 7-6. Alternative 3: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations

Stations	Parks and Recreational Facilities
Metro E Line Expo/Sepulveda	Exposition Corridor Bike Path
Santa Monica Boulevard	<ul style="list-style-type: none"> • Felicia Mahood Multipurpose Center • Westwood Park • Westwood Park Bike Path
Wilshire Boulevard/Metro D Line	<ul style="list-style-type: none"> • Westwood Park • Westwood Park Bike Path
UCLA Gateway Plaza	<ul style="list-style-type: none"> • Mildred E. Mathias Botanical Garden • Various UCLA bike lanes/routes
Getty Center	<ul style="list-style-type: none"> • Getty View Park and Trailhead • Casiano Fire Road • Getty View Trail • Mount Saint Mary's Fire Road • Getty Center Access
Ventura Boulevard/Sepulveda Boulevard	None
Metro G Line Sepulveda	<ul style="list-style-type: none"> • Delano Park • Sepulveda Basin Wildlife Reserve • Woodley Avenue Park • Metro G Line Bike Path
Sherman Way	None
Van Nuys Metrolink	Andres and Maria Cardenas Recreation Center

Source: LA County Planning, 2024a; SCAG, 2024a; U.S. Department of Homeland Security Geospatial Management Office, 2020

Note: Only Class 1 Bike Paths and "Various UCLA bike lanes/routes" are included in this table. Class II Bike Lanes and Class III Bike Routes are not included in this table.

7.2.2 Bicycle Facilities

The existing bicycle facilities in the Alternative 3 RSA consists of a network of approximately 19 miles of Class I, Class II, and Class III bicycle facilities, including approximately 3 miles of Class I bicycle facilities, approximately 9 miles of Class II bicycle facilities, and approximately 7 miles of Class III bicycle facilities. There are no Class IV bicycle facilities within the Alternative 3 RSA.

Table 7-7 lists the bicycle facilities within the Alternative 3 RSA and respective distances from the Alternative 3 alignment and station areas. Figure 7-10 and Figure 7-11 show the locations of these facilities. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* (Metro, 2025a) for additional information pertaining to active transportation facilities.

Table 7-7. Alternative 3: Bicycle Facilities within the Resource Study Area

Bicycle Facilities	Length (miles)	Location	Distance from Alternative 3 (feet) ^a
<i>Class I - Bike Paths</i>	2.9	—	—
Burbank Boulevard Bike Path	0.1	Burbank Boulevard between Balboa Boulevard and I-405	1,038
Exposition Corridor Bikeway	0.9	Along Metro E Line	0
G Line Bikeway	1.1	Along Metro G Line Busway	0
Westwood Park Bike Path	0.8	Westwood Park	45
<i>Class II - Bike Lanes</i>	8.6	<i>Various paths</i>	—
<i>Class III - Bike Routes</i>	7.2	<i>Various paths</i>	—
Total	18.7	—	—

Source: SCAG, 2024b

^aA distance of “0 feet” from the alternative indicates that the alternative would cross over the resource.

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

— = not applicable

7.2.3 Recreational Hiking Trails

Approximately 3 miles of recreational hiking trails exist within the parklands and open space areas identified in the Alternative 3 RSA. Table 7-8 identifies the trails within the Alternative 3 RSA. Figure 7-10 and Figure 7-11 show the locations of these facilities.

Table 7-8. Alternative 3: Recreational Hiking Trails within the Resource Study Area

Name	City	Length (miles)	Distance from Alternative 3 (feet) ^a
Casiano Fire Road	Los Angeles	0.9	0
Getty Center Access	Los Angeles	0.6	1,497
Getty View Trail	Los Angeles	0.6	304
Mount Saint Mary’s Fire Road	Los Angeles	0.5	2,167
Total		2.6	—

Source: U.S. Department of Homeland Security Geospatial Management Office, 2020

^aA distance of “0 feet” from the alternative indicates that the alternative would either cross over the resource or be underground through the resource.

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

— = not applicable

7.3 Impact Evaluation

7.3.1 Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Or

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?

7.3.1.1 Operational Impacts

Alternative 3 would provide a new mode of transportation, accessibility, and connectivity in the surrounding communities. As a transportation infrastructure project that does not include housing, Alternative 3 would not directly generate permanent residences or increase the existing residential population of the surrounding communities that would increase the use of existing parks and recreational facilities or result in substantial adverse physical impacts associated with the provision of new or physically altered parks or recreational facilities. Instead, accessibility to nearby parks and recreational facilities located within 0.5-miles of proposed Alternative 3 stations listed in Table 7-5 and Table 7-6 would be improved by having nearby transit stations. Alternative 3 would also help achieve Metro's *First/Last Mile Guidelines* (Metro, 2021b) objectives to facilitate multimodal transportation and connectivity for pedestrians and cyclists, provide connectivity to the station areas and surrounding communities, and enhance the existing active transportation corridors for the cities.

Alternative 3 would be aerial and cross over portions of Sherman Oaks Castle Park and Teichman Family Magnolia Park (Table 7-5) until the transition to an underground tunnel under the Getty View Park and Trailhead on the east side of I-405 (Figure 7-10 and Figure 7-11). Alternative 3 would cross over portions of the following Class I bike paths: Exposition Corridor Bikeway and the Metro G Line Bikeway, and the Westwood Park Bike Path would be adjacent to Alternative 3 (Table 7-7). Alternative 3 would cross over the Casiano Fire Road recreational hiking trail located east of I-405 and under the fire road alignment (Table 7-8) (Figure 7-10 and Figure 7-11).

Alternative 3 would require partial property acquisitions of land designated as open space or recreational land. Table 7-9 summarizes the property acquisitions that would be required.

Table 7-9. Alternative 3: Parkland and Recreational Facilities Property Acquisitions Summary

Resource	Permanent Acquisition Area	Description of Acquisition
Sepulveda Pass Open Space	0.4 acre	Vacant hillside land would be acquired to accommodate the proposed Getty Center Station. Acquisition would be less than 1 percent of the park resource total acreage.
Mission Canyon Open Space	0.6 acre	Vacant hillside land is currently undeveloped but planned for future development of recreational park use that would be acquired to accommodate the proposed aerial guideway, retaining walls, and realignment of Sepulveda Boulevard. Acquisition would be less than 1 percent of the park resource total acreage.

Resource	Permanent Acquisition Area	Description of Acquisition
Teichman Family Magnolia Park	0.6 acre	Landsaped area along the western edge of the park property would be acquired to accommodate the proposed aerial alignment. The landscaped area serves as a buffer between park uses and I-405 ROW. No park facilities or features would be acquired or displaced.

Source: HTA, 2024

ROW = right-of-way

The potential permanent acquisition of these open space and recreational areas would not impact existing buildings or change the primary function of the existing use. The Sepulveda Pass Open Space and the Mission Canyon Open Space are remote parklands inaccessible to the general public. Neither the Sepulveda Pass Open Space nor the Mission Canyon Open Space have recreational uses in the areas to be acquired and these areas are inaccessible to the public. As such, there is no potential for acquisition of these areas to result in physical impacts that would have any effect on recreation, though there would be potential conflicts with conservation policies governing these areas. Details regarding potential conflicts with land use plans and policies are further discussed in the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* (Metro, 2025b). The acquisition of the landscaped areas along the western edge of the Teichman Family Magnolia Park property for the Alternative 3 alignment would not cause substantial physical impacts to the park’s primary features. Therefore, no alteration or expansion would be necessary to maintain the park’s existing function and service objectives, as the portion to be acquired does not serve any recreational purpose.

Alternative 3 would enhance bicycle and pedestrian access in the immediate station areas for improved bicycle-to-transit connections, through bike parking and connections to existing nearby bicycle facilities, as proposed in Metro’s *Transit to Parks Strategic Plan* (Metro, 2019b). At some locations along the alignment, sidewalks would be widened or replaced where needed to accommodate the aerial guideway and station infrastructure. Alternative 3 would maintain adequate sidewalk widths at station locations and along the aerial alignment. Additional enhancements, including crosswalk and Americans with Disabilities Act–compliant sidewalk improvements, would further improve pedestrian circulation and non-motorized access to transit stations. Along the Alternative 3 alignment, bicycle facilities would be maintained where the aerial viaduct would cross roadways that serve as I-405 or LOSSAN rail corridor underpasses (Santa Monica Boulevard, Constitution Avenue, Montana Avenue, Church Lane, Getty Center Drive, Sepulveda, and Ventura Boulevard). The height of the aerial viaduct would provide sufficient vertical clearance between the existing roadways and MRT so that bicycle movements would not be inhibited underneath the structure. In addition, the locations of the aerial stations and their supporting columns would be placed outside of the existing roadway and sidewalks and would thereby not preclude any planned bicycle facilities nor alter any existing bicycle facilities at the proposed station areas. The MRT rail cars would also be equipped with areas for temporary storage of bicycles during transit to facilitate bicycle-to-transit opportunities between the San Fernando Valley and the Los Angeles Basin. Operation of Alternative 3 would operate under the Casiano Fire Road recreational hiking trail and would not affect access or use of this hiking trail or the surrounding recreational hiking trails.

Table 7-6 lists the 15 recreational or trail facilities located within 0.5-mile of one or more Alternative 3 stations. Based on their proximity to Alternative 3 stations, it is anticipated that a modest increase in the use of these facilities would occur. Each of these facilities has existing operations and maintenance requirements that are not anticipated to be affected by Alternative 3 operations. The communities within the RSA are all well served by existing state, regional, and local recreation facilities, and while a modest increase in use of these facilities is anticipated, Alternative 3 is not anticipated to increase the use of existing parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Occasional large community events typically increase the use of parks, recreational facilities, and bicycle facilities in which recreational users may originate beyond the surrounding communities. However, these park community events would be similar to those that are currently held in the Alternative 3 RSA, and Alternative 3 would not alter the operations or frequency of these locally held community events. Similar to existing conditions, the departments and public entities that maintain the facilities would provide services and resources to serve the attendees of these events. As a transportation infrastructure project, Alternative 3 may provide residents of the surrounding communities who choose not to drive an alternative means of accessing locally held community events. During such events, the use of parks, recreational facilities, and bicycle facilities may potentially increase. However, the increased use would be occasional and specific to the community event. Thus, Alternative 3 would provide improved connections to such community events and would not directly accelerate or result in a substantial deterioration of existing parks, recreational facilities, and bicycle facilities.

The potential partial acquisitions would not cause physical deterioration of the parks to occur or be accelerated because parks and open space land to be acquired would consist of small strips of land along the property boundaries of the affected resources where there are no recreational facilities. Alternative 3 would comply with all applicable federal and state requirements, including the Uniform Relocation Assistance and Real Property Acquisition Act of 1971 and Public Park Preservation Act of 1971. USDOT environmental review would trigger the requirements of Section 4(f) of the USDOT Act of 1966, including review of these open space and parkland resource property acquisitions. Details regarding property acquisitions are further discussed in the *Sepulveda Transit Corridor Project Real Estate and Acquisitions Technical Report* (Metro, 2025c).

For these reasons, Alternative 3 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Alternative 3 would not result in substantial adverse physical impacts associated with the provision, or the need, for new or physically altered parks. Impacts would be less than significant.

7.3.1.2 Construction Impacts

Construction of Alternative 3 would be temporary and would not generate permanent residences that would increase the use of existing parks and recreational facilities resulting in accelerated physical deterioration of the facilities or require the expansion of existing recreational facilities. While construction workers may utilize nearby parks and recreational facilities during lunchtime breaks, such use would be temporary and nominal.

Construction of the aerial viaduct, retaining walls, and I-405 on- and off-ramps would require street detours that would temporarily impact bicycle facilities. While much of the aerial viaduct would be constructed within the I-405 median where bicycle facilities would not be impacted, in locations where the alignment would be adjacent to the I-405 corridor or the LOSSAN rail corridor or where the I-405 corridor widening is necessary for Alternative 3, temporary street detours would inhibit the circulation

of pedestrians and bicycles. In locations where the aerial viaduct would cross roadways that serve as I-405 or LOSSAN rail corridor underpasses (Santa Monica Boulevard, Constitution Avenue, Montana Avenue, Church Lane, Getty Center Drive, Sepulveda, and Ventura Boulevard), the installation of the supporting columns and erection of bent caps and guideway beams would affect sidewalk and bicycle access. Pedestrian and bicycle through-access underneath existing underpasses would require detours and thereby inhibit bicyclists. As a result, the sidewalk would be relocated and temporarily decommissioned, and bicycle routes would be temporarily disrupted during construction and would require detours to maintain continuity with other portions of the bike lanes. Although street detours would disrupt bicycle and pedestrian circulation, bicycle movements would be maintained during construction. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* for more information related to construction traffic and access (Metro, 2025a). Construction activities would be temporary and would not affect access or use of surrounding recreational hiking trails. Therefore, construction-related impacts to parks and recreational facilities would be less than significant.

7.3.1.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bicycle facilities in the surrounding communities. The MSF Base Design site is a support facility for Alternative 3 and would provide maintenance and storage services and would not provide improved access to parks, recreational facilities, and bicycle facilities that may result in increased use.

The MSF Base Design site is currently developed as a materials storage site owned by LADWP. No parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the MSF Base Design. The nearest parkland is the Andres and Maria Cardenas Recreation Center, which is located approximately 0.65 mile northwest of the MSF Base Design site. The MSF Base Design would not affect on-site or street parking used by visitors to the Andres and Maria Cardenas Recreation Center.

MSF Base Design site construction activities would be temporary and would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bike facilities in the surrounding communities. Temporary construction activities would be located entirely on-site; would not be located on parklands, recreational facilities; and would not disrupt their essential functions. Therefore, impacts to parks and recreational facilities associated with the MSF Base Design would be less than significant.

MSF Design Option 1

The MSF Design Option 1 site would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bicycle facilities in the surrounding communities. The MSF Design Option 1 site is a support facility for Alternative 3 and would provide maintenance and storage services and would not provide improved access to parks, recreational facilities, and bicycle facilities that may result in increased use.

The MSF Design Option 1 site is currently developed with industrial uses and there are no parkland or bicycle facilities located on or adjacent to the site nor are recreational facilities proposed as part of MSF Design Option 1. The nearest parkland is Marson Park located approximately 620 feet northeast of the MSF Design Option 1 site. MSF Design Option 1 would not affect on-site or street parking used by visitors to the Marson Park.

MSF Design Option 1 construction activities would be temporary and would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bike facilities in the surrounding communities. Therefore, impacts to parks and recreational facilities associated with MSF Design Option 1 would be less than significant.

7.3.2 Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

7.3.2.1 Operational Impacts

Alternative 3 is a transportation infrastructure project that would provide new transit options to the surrounding community. Alternative 3 would not include the construction of recreational facilities or require the expansion of existing park facilities or bicycle facilities that might have an adverse physical effect on the environment. As previously described in Section 7.3.1.1, bicycle facilities would be largely maintained along the Alternative 3 alignment and would not preclude any planned bicycle facilities nor alter any existing bicycle facilities at station areas. Therefore, impacts would be less than significant.

7.3.2.2 Construction Impacts

Construction of Alternative 3 would not include the construction of recreational facilities or require the expansion of existing recreational facilities. Therefore, no impacts would occur.

7.3.2.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design site is currently developed as a materials storage site owned by LADWP. MSF Base Design site construction activities would not include construction of recreational facilities or require the expansion of existing recreational facilities.

As discussed in Section 7.3.1.3, no parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the MSF Base Design. The MSF Base Design would not affect on-site or street parking used by visitors to the Andres and Maria Cardenas Recreation Center. Therefore, impacts to parklands associated with the MSF Base Design would be less than significant.

MSF Design Option 1

The MSF Design Option 1 site is currently developed with industrial uses. MSF Design Option 1 construction activities would not include construction of recreational facilities or require the expansion of existing recreational facilities.

As discussed in Section 7.3.1.3, no parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the MSF Design Option 1. MSF Design Option 1 would not affect on-site or street parking used by visitors to the Marson Park. Therefore, impacts to parklands associated with MSF Design Option 1 would be less than significant.

7.4 Mitigation Measures

7.4.1 Operational Impacts

No mitigation measures are required.

7.4.2 Construction Impacts

No mitigation measures are required.

7.4.3 Impacts After Mitigation

No mitigation measures are required; impacts are less than significant.

8 ALTERNATIVE 4

8.1 Alternative Description

Alternative 4 is a heavy rail transit (HRT) system with a hybrid underground and aerial guideway track configuration that would include four underground stations and four aerial stations. This alternative would provide transfers to five high-frequency fixed guideway transit and commuter rail lines, including the Los Angeles County Metropolitan Transportation Authority's (Metro) E, Metro D, and Metro G Lines, the East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 13.9 miles, with 5.7 miles of aerial guideway and 8.2 miles of underground configuration.

The four underground and four aerial HRT stations would be as follows:

1. Metro E Line Expo/Sepulveda Station (underground)
2. Santa Monica Boulevard Station (underground)
3. Wilshire Boulevard/Metro D Line Station (underground)
4. UCLA Gateway Plaza Station (underground)
5. Ventura Boulevard/Sepulveda Boulevard Station (aerial)
6. Metro G Line Sepulveda Station (aerial)
7. Sherman Way Station (aerial)
8. Van Nuys Metrolink Station (aerial)

8.1.1 Operating Characteristics

8.1.1.1 Alignment

As shown on Figure 8-1, from its southern terminus station at the Metro E Line Expo/Sepulveda Station, the alignment of Alternative 4 would run underground north through the Westside of Los Angeles (Westside) and the Santa Monica Mountains to a tunnel portal south of Ventura Boulevard in the San Fernando Valley (Valley). At the tunnel portal, the alignment would transition to an aerial guideway that would generally run above Sepulveda Boulevard before curving eastward along the south side of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor to the northern terminus station adjacent to the Van Nuys Metrolink/Amtrak Station.

The proposed southern terminus station would be located underground east of Sepulveda Boulevard between the existing elevated Metro E Line tracks and Pico Boulevard. Tail tracks for vehicle storage would extend underground south of National Boulevard east of Sepulveda Boulevard. The alignment would continue north beneath Bentley Avenue before curving northwest to an underground station at the southeast corner of Santa Monica Boulevard and Sepulveda Boulevard. From the Santa Monica Boulevard Station, the alignment would continue and curve eastward toward the Wilshire Boulevard/Metro D Line Station beneath the Metro D Line Westwood/UCLA Station, which is currently under construction as part of the Metro D Line Extension Project. From there, the underground alignment would curve slightly to the northeast and continue beneath Westwood Boulevard before reaching the UCLA Gateway Plaza Station.

Figure 8-1. Alternative 4: Alignment



Source: STCP, 2024; HTA, 2024

From the UCLA Gateway Plaza Station, the alignment would turn to the northwest beneath the Santa Monica Mountains to the east of Interstate 405 (I-405). South of Mulholland Drive, the alignment would curve to the north to reach a tunnel portal at Del Gado Drive, just east of I-405 and south of Sepulveda Boulevard.

The alignment would transition from an underground configuration to an aerial guideway structure after exiting the tunnel portal and would continue northeast to the Ventura Boulevard/Sepulveda Boulevard

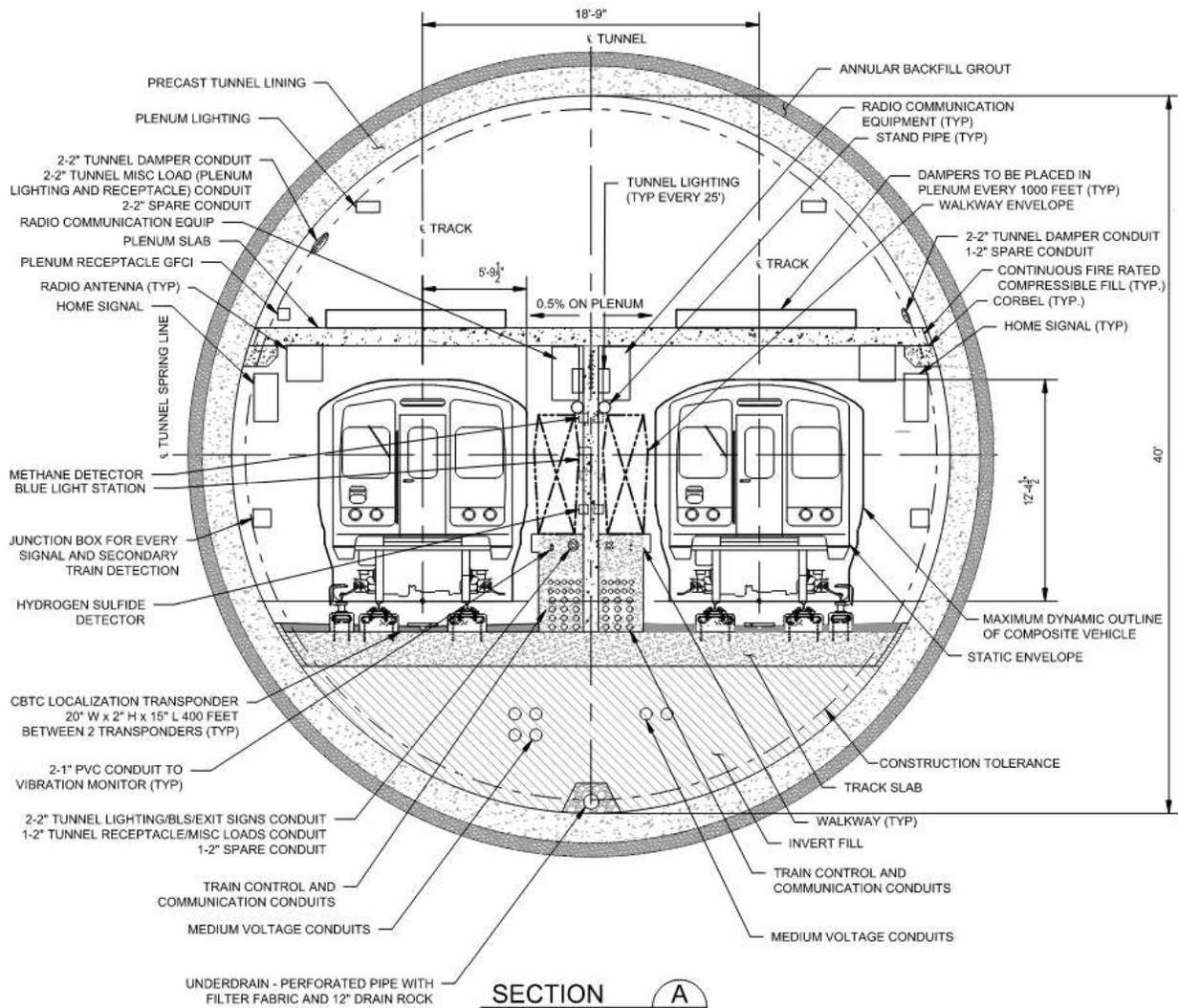
Station located over Dickens Street, immediately west of the Sepulveda Boulevard and Dickens Street intersection. North of the station, the aerial guideway would transition to the center median of Sepulveda Boulevard. The aerial guideway would continue north on Sepulveda Boulevard and cross over U.S. Highway 101 (US-101) and the Los Angeles River before continuing to the Metro G Line Sepulveda Station, immediately south of the Metro G Line Busway. Overhead utilities along Sepulveda Boulevard in the Valley would be undergrounded where they would conflict with the guideway or its supporting columns.

The aerial guideway would continue north above Sepulveda Boulevard where it would reach the Sherman Way Station just south of Sherman Way. After leaving the Sherman Way Station, the alignment would continue north before curving to the southeast to parallel the LOSSAN rail corridor on the south side of the existing tracks. Parallel to the LOSSAN rail corridor, the guideway would conflict with the existing Willis Avenue Pedestrian Bridge, which would be demolished. The alignment would follow the LOSSAN rail corridor before reaching the proposed northern terminus Van Nuys Metrolink Station located adjacent to the existing Metrolink/Amtrak Station. Tail tracks and yard lead tracks would descend to a proposed at-grade maintenance and storage facility (MSF) east of the northern terminus station. Modifications to the existing pedestrian underpass to the Metrolink platforms to accommodate these tracks would result in reconfiguration of an existing rail spur serving City of Los Angeles Department of Water and Power (LADWP) property.

8.1.1.2 Guideway Characteristics

Alternative 4 would utilize a single-bore tunnel configuration for underground tunnel sections, with an outside diameter of approximately 43.5 feet. The tunnel would include two parallel tracks with 18.75-foot track spacing in tangent sections separated by a continuous central dividing wall throughout the tunnel. Inner walkways would be constructed adjacent to the two tracks. Inner and outer walkways would be constructed within tunnel sections near the track crossovers. At the crown of tunnel, a dedicated air plenum would be provided by constructing a concrete slab above the railway corridor. The air plenum would allow for ventilation throughout the underground portion of the alignment. Figure 8-2 illustrates these components at a typical cross-section of the underground guideway.

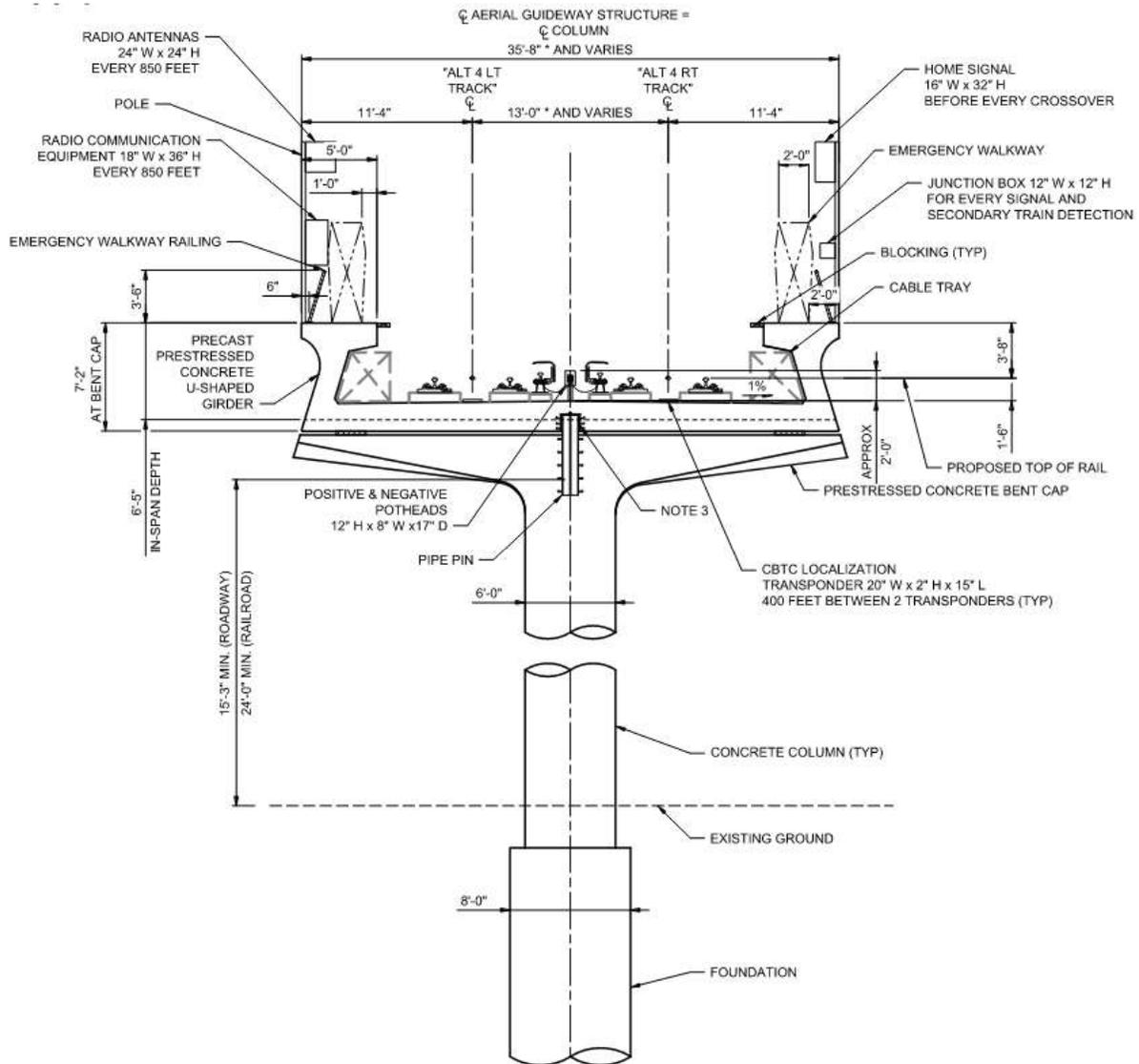
Figure 8-2. Typical Underground Guideway Cross-Section



Source: STCP, 2024

In aerial sections, the guideway would be supported by either single columns or straddle-bents. Both types of structures would support a U-shaped concrete girder and the HRT track. The aerial guideway would be approximately 36 feet wide. The track would be constructed on the concrete girders with direct fixation and would maintain a minimum of 13 feet between the centerlines of the two tracks. On the outer side of the tracks, emergency walkways would be constructed with a minimum width of 2 feet.

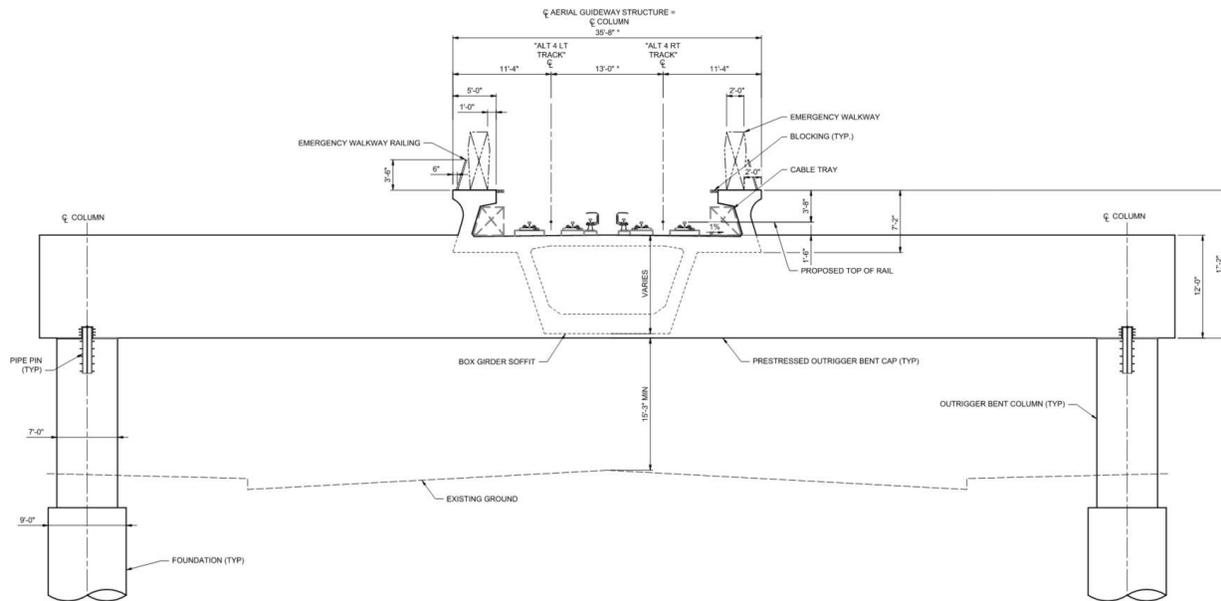
The single-column pier would be the primary aerial structure throughout the aerial portion of the alignment. Crash protection barriers would be used to protect columns located in the median of Sepulveda Boulevard in the Valley. Figure 8-3 shows a typical cross-section of the single-column aerial guideway.

Figure 8-3. Typical Aerial Guideway Cross-Section


Source: STCP, 2024

In order to span intersections and maintain existing turn movements, sections of the aerial guideway would be supported by straddle bents, a concrete straddle-beam placed atop two concrete columns constructed outside of the underlying roadway. Figure 8-4 illustrates a typical straddle-bent configuration.

Figure 8-4. Typical Aerial Straddle-Bent Cross-Section



Source: STCP, 2024

8.1.1.3 Vehicle Technology

Alternative 4 would utilize steel-wheel HRT trains, with automated train operations and planned peak-period headways of 2.5 minutes and off-peak-period headways ranging from 4 to 6 minutes. Each train could consist of three or four cars with open gangways between cars. The HRT vehicle would have a maximum operating speed of 70 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations. Train cars would be approximately 10 feet wide with three double doors on each side. Each car would be approximately 72 feet long with capacity for 170 passengers. Trains would be powered by a third rail.

8.1.1.4 Stations

Alternative 4 would include four underground stations and four aerial stations with station platforms measuring 280 feet long for both station configurations. The aerial stations would be constructed a minimum of 15.25 feet above ground level, supported by rows of dual columns with 8-foot diameters. The southern terminus station would be adjacent to the Metro E Line Expo/Sepulveda Station, and the northern terminus station would be adjacent to the Van Nuys Metrolink/Amtrak Station.

All stations would be side-platform stations where passengers would select and travel to station platforms depending on their direction of travel. All stations would include 20-foot-wide side platforms separated by 30 feet for side-by-side trains. Aerial station platforms would be covered, but not enclosed. Each underground station would include an upper and lower concourse level prior to reaching the train platforms. Each aerial station, except for the Sherman Way Station, would include a mezzanine level prior to reaching the station platforms. At the Sherman Way Station, separate entrances on opposite sides of the street would provide access to either the northbound or southbound platform with an overhead pedestrian walkway providing additional connectivity across platforms. Each station would have a minimum of two elevators, two escalators, and one stairway from the ground level to the concourse or mezzanine.

Stations would include automatic, bi-parting fixed doors along the edges of station platforms. These platform screen doors would be integrated into the automatic train control system and would not open unless a train is stopped at the platform.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Sepulveda Station

- This underground station would be located just north of the existing Metro E Line Expo/Sepulveda Station, on the east side of Sepulveda Boulevard.
- A station entrance would be located on the east side of Sepulveda Boulevard north of the Metro E Line.
- A walkway to transfer to the Metro E Line would be provided at street level within the fare paid zone.
- A 126-space parking lot would be located immediately north of the station entrance, east of Sepulveda Boulevard. Passengers would also be able to park at the existing Metro E Line Expo/Sepulveda Station parking facility, which provides 260 parking spaces.

Santa Monica Boulevard Station

- This underground station would be located under the southeast corner of Santa Monica Boulevard and Sepulveda Boulevard.
- The station entrance would be located on the south side of Santa Monica Boulevard between Sepulveda Boulevard and Bentley Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This underground station would be located beneath the Metro D Line tracks and platform under Gayley Avenue between Wilshire Boulevard and Lindbrook Drive.
- Station entrances would be provided on the northeast corner of Wilshire Boulevard and Gayley Avenue and on the northeast corner of Lindbrook Drive and Gayley Avenue. Passengers would also be able to use the Metro D Line Westwood/UCLA Station entrances to access the station platform.
- A direct internal station transfer to the Metro D Line would be provided at the south end of the station.
- No dedicated station parking would be provided at this station.

UCLA Gateway Plaza Station

- This underground station would be located underneath Gateway Plaza on the University of California, Los Angeles (UCLA) campus.
- Station entrances would be provided on the north side of Gateway Plaza and on the east side of Westwood Boulevard across from Strathmore Place.
- No dedicated station parking would be provided at this station.

Ventura Boulevard/Sepulveda Boulevard Station

- This aerial station would be located west of Sepulveda Boulevard spanning over Dickens Street.

- A station entrance would be provided on the west side of Sepulveda Boulevard south of Dickens Street.
- A 52-space parking lot would be located adjacent to the station entrance on the southwest corner of the Sepulveda Boulevard and Dickens Street intersection, and an additional 40-space parking lot would be located on the northwest corner of the same intersection.

Metro G Line Sepulveda Station

- This aerial station would be located over Sepulveda Boulevard immediately south of the Metro G Line Busway.
- A station entrance would be provided on the west side of Sepulveda Boulevard south of the Metro G Line Busway.
- An elevated pedestrian walkway would connect the platform level of the proposed station to the planned aerial Metro G Line Busway platforms within the fare paid zone.
- Passengers would be able to park at the existing Metro G Line Sepulveda Station parking facility, which has a capacity of 1,205 parking spaces. Currently, only 260 parking spaces are used for transit parking. No additional automobile parking would be provided at the proposed station.

Sherman Way Station

- This aerial station would be located over Sepulveda Boulevard between Sherman Way and Gault Street.
- Station entrances would be provided on either side of Sepulveda Boulevard south of Sherman Way.
- A 46-space parking lot would be located on the northwest corner of the Sepulveda Boulevard and Gault Street intersection, and an additional 76-space parking lot would be located west of the station along Sherman Way.

Van Nuys Metrolink Station

- This aerial station would span Van Nuys Boulevard, just south of the LOSSAN rail corridor.
- The primary station entrance would be located on the east side of Van Nuys Boulevard just south of the LOSSAN rail corridor. A secondary station entrance would be located between Raymer Street and Van Nuys Boulevard.
- An underground pedestrian walkway would connect the station plaza to the existing pedestrian underpass to the Metrolink/Amtrak platform outside the fare paid zone.
- Existing Metrolink Station parking would be reconfigured, maintaining approximately the same number of spaces, but 66 parking spaces would be relocated west of Van Nuys Boulevard. Metrolink parking would not be available to Metro transit riders.

8.1.1.5 Station-to-Station Travel Times

Table 8-1 presents the station-to-station distance and travel times at peak period for Alternative 4. The travel times include both run time and dwell time. Dwell time is 30 seconds for transfer stations and 20 seconds for other stations. Northbound and southbound travel times vary slightly because of grade differentials and operational considerations at end-of-line stations.

Table 8-1. Alternative 4: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
<i>Metro E Line Station</i>					30
Metro E Line	Santa Monica Boulevard	0.9	89	86	—
<i>Santa Monica Boulevard Station</i>					20
Santa Monica Boulevard	Wilshire/Metro D Line	0.9	91	92	—
<i>Wilshire/Metro D Line Station</i>					30
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	75	68	—
<i>UCLA Gateway Plaza Station</i>					20
UCLA Gateway Plaza	Ventura Boulevard	6.1	376	366	—
<i>Ventura Boulevard Station</i>					20
Ventura Boulevard	Metro G Line	1.9	149	149	—
<i>Metro G Line Station</i>					30
Metro G Line	Sherman Way	1.4	110	109	—
<i>Sherman Way Station</i>					20
Sherman Way	Van Nuys Metrolink	1.9	182	180	—
<i>Van Nuys Metrolink Station</i>					30

Source: STCP, 2024

— = no data

8.1.1.6 Special Trackwork

Alternative 4 would include 10 double crossovers throughout the alignment, enabling trains to cross over to the parallel track. Each terminus station would include a double crossover immediately north and south of the station. Except for the Santa Monica Boulevard Station, each station would have a double crossover immediately south of the station. The remaining crossovers would be located along the alignment midway between the UCLA Gateway Plaza Station and the Ventura Boulevard Station.

8.1.1.7 Maintenance and Storage Facility

The MSF for Alternative 4 would be located east of the Van Nuys Metrolink Station and would encompass approximately 46 acres. The MSF would be designed to accommodate 184 rail cars and would be bounded by single-family residences to the south, the LOSSAN rail corridor to the north, Woodman Avenue on the east, and Hazeltine Avenue and industrial manufacturing enterprises to the west. Trains would access the site from the fixed guideway's tail tracks at the northwest corner of the site. Trains would then travel southeast to maintenance facilities and storage tracks.

The site would include the following facilities:

- Two entrance gates with guard shacks
- Main shop building
- Maintenance-of-way building
- Storage tracks
- Carwash building
- Cleaning and inspections platforms
- Material storage building
- Hazmat storage locker

- Traction power substation (TPSS) located on the west end of the MSF to serve the mainline
- TPSS located on the east end of the MSF to serve the yard and shops
- Parking area for employees
- Grade separated access roadway (over the HRT tracks at the east end of the facility, and necessary drainage)

Figure 8-5 shows the location of the MSF site for Alternative 4.

Figure 8-5. Alternative 4: Maintenance and Storage Facility Site



Source: STCP, 2024; HTA, 2024

8.1.1.8 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. Twelve TPSS facilities would be located along the alignment and would be spaced approximately 0.5 to 2.5 miles apart. TPSS facilities would generally be located within the stations, adjacent to the tunnel through the Santa Monica Mountains, or within the MSF. TPSSs would be approximately 2,000 to 3,000 square feet. Table 8-2 lists the TPSS locations for Alternative 4.

Figure 8-6 shows the TPSS locations along the Alternative 4 alignment.

Table 8-2. Alternative 4: Traction Power Substation Locations

TPSS No.	Location Description	Configuration
1	TPSS 1 would be located east of Sepulveda Boulevard and north of the Metro E Line.	Underground (within station)
2	TPSS 2 would be located south of Santa Monica Boulevard between Sepulveda Boulevard and Bentley Avenue.	Underground (within station)
3	TPSS 3 would be located at the southeast corner of UCLA Gateway Plaza.	Underground (within station)
4	TPSS 4 would be located south of Bellagio Road and west of Stone Canyon Road.	Underground (adjacent to tunnel)
5	TPSS 5 would be located west of Roscomare Road between Donella Circle and Linda Flora Drive.	Underground (adjacent to tunnel)
6	TPSS 6 would be located east of Loom Place between Longbow Drive and Vista Haven Road.	Underground (adjacent to tunnel)
7	TPSS 7 would be located west of Sepulveda Boulevard between the I-405 Northbound On-Ramp and Dickens Street.	At-grade (within station)
8	TPSS 8 would be located west of Sepulveda Boulevard between the Metro G Line Busway and Oxnard Street.	At-grade (within station)
9	TPSS 9 would be located at the southwest corner of Sepulveda Boulevard and Sherman Way.	At-grade (within station)
10	TPSS 10 would be located south of the LOSSAN rail corridor and north of Raymer Street and Kester Avenue.	At-grade
11	TPSS 11 would be located south of the LOSSAN rail corridor and east of the Van Nuys Metrolink Station.	At-grade (within MSF)
12	TPSS 12 would be located south of the LOSSAN rail corridor and east of Hazeltine Avenue.	At-grade (within MSF)

Source: STCP, 2024; HTA, 2024

Figure 8-6. Alternative 4: Traction Power Substation Locations



Source: STCP, 2024; HTA, 2024

8.1.1.9 Roadway Configuration Changes

Table 8-3 lists the roadway changes necessary to accommodate the guideway of Alternative 4. Figure 8-7 shows the location of roadway changes in the Sepulveda Transit Corridor Project (Project) Study Area, and Figure 8-8 shows detail of the street vacation at Del Gado Drive.

In addition to the changes made to accommodate the guideway, as listed in Table 8-3, roadways and sidewalks near stations would be reconstructed, resulting in modifications to curb ramps and driveways.

Table 8-3. Alternative 4: Roadway Changes

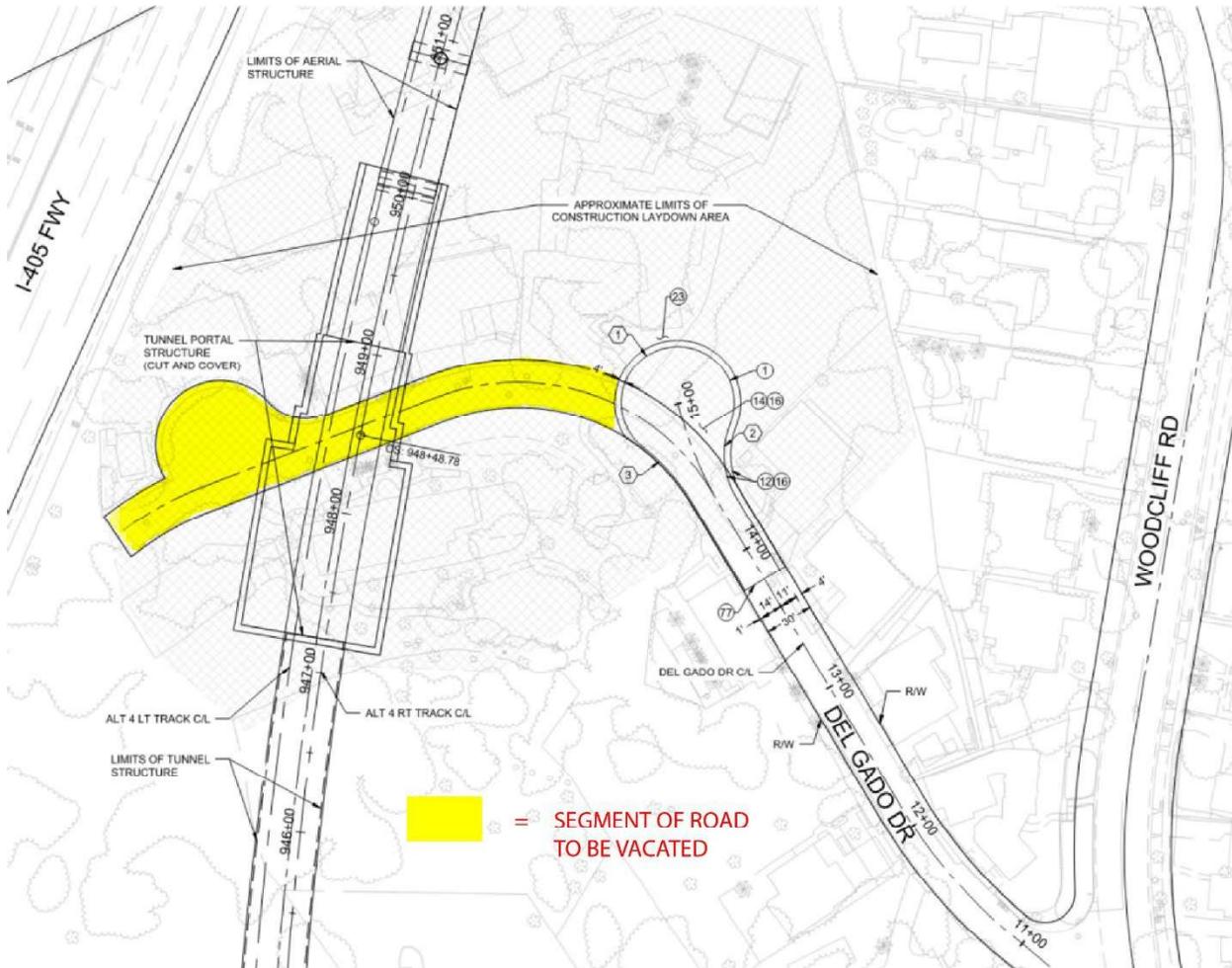
Location	From	To	Description of Change
Del Gado Drive	Woodcliff Road	Not Applicable	Vacation of approximately 325 feet of Del Gado Drive east of I-405 to accommodate tunnel portal
Sepulveda Boulevard	Ventura Boulevard	Raymer Street	Construction of raised median and removal of all on-street parking on the southbound side of the street and some on-street parking on the northbound side of the street to accommodate aerial guideway columns
Sepulveda Boulevard	La Maida Street	Not Applicable	Prohibition of left turns to accommodate aerial guideway columns
Sepulveda Boulevard	Valleyheart Drive South, Hesby Street, Hartsook Street, Archwood Street, Hart Street, Leadwell Street, Covello Street	Not Applicable	Prohibition of left turns to accommodate aerial guideway columns
Raymer Street	Kester Avenue	Keswick Street	Reconstruction resulting in narrowing of width and removal of parking on the westbound side of the street to accommodate aerial guideway columns

Source: STCP, 2024; HTA, 2024

Figure 8-7. Alternative 4: Roadway Changes



Source: STCP, 2024; HTA, 2024

Figure 8-8. Alternative 4: Street Vacation at Del Gado Drive


Source: STCP, 2024; HTA, 2024

8.1.1.10 Ventilation Facilities

For ventilation of the alignment's underground portion, a plenum within the crown of the tunnel would provide a separate compartment for air circulation and allow multiple trains to operate between stations. Each underground station would include a fan room with additional ventilation facilities. Alternative 4 would also include a stand-alone ventilation facility at the tunnel portal on the northern end of the tunnel segment, located east of I-405 and south of Del Gado Drive. Within this facility, ventilation fan rooms would provide both emergency ventilation, in case of a tunnel fire, and regular ventilation, during non-revenue hours. The facility would also house sump pump rooms to collect water from various sources, including storm water; wash water (from tunnel cleaning); and water from a fire-fighting incident, system testing, or pipe leaks.

8.1.1.11 Fire/Life Safety – Emergency Egress

Within the tunnel segment, emergency walkways would be provided between the center dividing wall and each track. Sliding doors would be located in the central dividing wall at required intervals to connect the two sides of the railway with a continuous walkway to allow for safe egress to a point of safety (typically at a station) during an emergency. Similarly, the aerial guideway would include two

emergency walkways with safety railing located on the outer side of the tracks. Access to tunnel segments for first responders would be through stations and the portal.

8.1.2 Construction Activities

Temporary construction activities for Alternative 4 would occur within project work zones at permanent facility locations, construction staging and laydown areas, and construction office areas. Construction of the transit facilities through substantial completion is expected to have a duration of 8 ¼ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

For the guideway, Alternative 4 would consist of a single-bore tunnel through the Westside and Santa Monica Mountains. The tunnel would be comprised of two separate segments, one running north from the southern terminus to the UCLA Gateway Plaza Station (Westside segment), and the other running south from the portal in the San Fernando Valley to the UCLA Gateway Plaza Station (Santa Monica Mountains segment). Two tunnel boring machines (TBM) with approximately 45-foot-diameter cutting faces would be used to construct the two tunnel segments underground. For the Westside segment, the TBM would be launched from Staging Area No. 1 in Table 8-4 at Sepulveda Boulevard and National Boulevard. For the Santa Monica Mountains segment, the TBM would be launched from Staging Area No. 4 in the San Fernando Valley. Both TBMs would be extracted from the UCLA Gateway Plaza Station Staging Area No. 3 in Table 8-4. Figure 8-9 shows the location of construction staging locations along the Alternative 4 alignment.

Table 8-4. Alternative 4: On-Site Construction Staging Locations

No.	Location Description
1	Commercial properties on southeast corner of Sepulveda Boulevard and National Boulevard
2	North side of Wilshire Boulevard between Veteran Avenue and Gayley Avenue
3	UCLA Gateway Plaza
4	Residential properties on both sides of Del Gado Drive and south side of Sepulveda Boulevard adjacent to I-405
5	West of Sepulveda Boulevard between Valley Vista Boulevard and Sutton Street
6	West of Sepulveda Boulevard between US-101 and Sherman Oaks Castle Park
7	Lot behind Los Angeles Fire Department Station 88
8	Commercial property on southeast corner of Sepulveda Boulevard and Raymer Street
9	South of the LOSSAN rail corridor east of Van Nuys Metrolink Station, west of Woodman Avenue

Source: STCP, 2024; HTA, 2024

Figure 8-9. Alternative 4: On-Site Construction Staging Locations



Source: STCP, 2024; HTA, 2024

The distance from the surface to the top of the tunnel for the Westside tunnel segment would vary from approximately 40 feet to 90 feet depending on the depth needed to construct the underground stations. The depth of the Santa Monica Mountains tunnel segment would vary from approximately 470 feet as it passes under the Santa Monica Mountains to 50 feet near UCLA. The tunnel segment through the Westside would be excavated in soft ground, while the tunnel through the Santa Monica Mountains would be excavated primarily in hard ground or rock as geotechnical conditions transition from soft to hard ground near the UCLA Gateway Plaza Station.

The aerial guideway viaduct would be primarily situated in the center of Sepulveda Boulevard in the San Fernando Valley, with guideway columns located in both the center and outside of the right-of-way of Sepulveda Boulevard. This would result in a linear work zone spanning the full width of Sepulveda Boulevard along the length of the aerial guideway. Three to five main phases would be required to construct the aerial guideway. A phased approach would allow travel lanes along Sepulveda Boulevard to remain open as construction individually occupies either the center, left, or right side of the roadway via the use of lateral lane shifts. Additional lane closures on side streets may be required along with appropriate detour routing.

The aerial guideway would comprise a mix of simple spans and longer balanced cantilever spans ranging from 80 to 250 feet in length. The repetitive simple spans would be utilized when guideway bent is located within the center median of Sepulveda Boulevard and would be constructed using Accelerated Bridge Construction (ABC) segmental span-by-span technology. Longer balanced cantilever spans would be provided at locations such as freeways, arterials, or street crossings, and would be constructed using ABC segmental balance cantilever technology. Foundations would consist of cast-in-drilled-hole (CIDH) shafts with both precast and cast-in-place structural elements. During construction of the aerial guideway, multiple crews would work on components of the guideway simultaneously.

Construction work zones would also be co-located with future MSF and station locations. All work zones would comprise the permanent facility footprint with additional temporary construction easements from adjoining properties.

The Metro E Line, Santa Monica Boulevard, Wilshire Boulevard/Metro D Line, and UCLA Gateway Plaza Stations would be constructed using a “cut-and-cover” method whereby the station structure would be constructed within a trench excavated from the surface with a portion or all being covered by a temporary deck and backfilled during the later stages of station construction. Traffic and pedestrian detours would be necessary during underground station excavation until decking is in place and the appropriate safety measures are taken to resume cross traffic. Constructing the Ventura Boulevard/Sepulveda Boulevard, Metro G Line Sepulveda, Sherman Way, and Van Nuys Metrolink Stations would include construction of CIDH elevated viaduct with two parallel side platforms supported by outrigger bents.

In addition to work zones, Alternative 4 would require construction staging and laydown areas at multiple locations along the alignment as well as off-site staging areas. Construction staging areas would provide the necessary space for the following activities:

- Contractors’ equipment
- Receiving deliveries
- Testing of soils for minerals or hazards
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment)

A larger, off-site staging area would be used for temporary storage of excavated material from both tunneling and station cut-and-cover excavation activities. Table 8-4 and Figure 8-9 present potential construction staging areas along the alignment for Alternative 4. Table 8-5 and Figure 8-10 present candidate sites for off-site staging and laydown areas.

Table 8-5. Alternative 4: Potential Off-Site Construction Staging Locations

No.	Location Description
S1	East of Santa Monica Airport Runway
S2	Ralph's Parking Lot in Westwood Village
N1	West of Sepulveda Basin Sports Complex, south of the Los Angeles River
N2	West of Sepulveda Basin Sports Complex, north of the Los Angeles River
N3	Metro G Line Sepulveda Station Park & Ride Lot
N4	North of Roscoe Boulevard and Hayvenhurst Avenue
N5	LADWP property south of the LOSSAN rail corridor, east of Van Nuys Metrolink Station

Source: STCP, 2024; HTA, 2024

Figure 8-10. Alternative 4: Potential Off-Site Construction Staging Locations



Source: STCP, 2024; HTA, 2024

Construction of the HRT guideway between the Van Nuys Metrolink Station and the MSF would require reconfiguration of an existing rail spur serving LADWP property. The new location of the rail spur would require modification to the existing pedestrian undercrossing at the Van Nuys Metrolink Station.

Alternative 4 would require construction of a concrete casting facility for tunnel lining segments because no existing commercial fabricator capable of producing tunnel lining segments for a large-diameter tunnel exists within a practical distance of the Project Study Area. The site of the MSF would initially be

used for this casting facility. The casting facility would include casting beds and associated casting equipment, storage areas for cement and aggregate, and a field quality control facility, which would need to be constructed on-site. When a more detailed design of the facility is completed, the contractor would obtain all permits and approvals necessary from the City of Los Angeles, the South Coast Air Quality Management District, and other regulatory entities.

As areas of the MSF site begin to become available following completion of pre-casting operations, construction of permanent facilities for the MSF would begin, including construction of surface buildings such as maintenance shops, administrative offices, train control, traction power and systems facilities. Some of the yard storage track would also be constructed at this time to allow delivery and inspection of passenger vehicles that would be fabricated elsewhere. Additional activities occurring at the MSF during the final phase of construction would include staging of trackwork and welding of guideway rail.

8.2 Existing Conditions

The Alternative 4 Resource Study Area (RSA) is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries. The Alternative 4 RSA consists of portions of the City of Los Angeles, the City of Santa Monica, and the unincorporated Los Angeles County community of West Los Angeles, which contains the Department of Veterans Affairs complex. Affected communities identified within the City of Los Angeles include the following:

- Bel Air
- Beverly Crest
- Brentwood
- Encino
- Lake Balboa
- Mar Vista
- North Hills
- North Hollywood
- North Sherman Oaks
- Palms
- Panorama City
- Sherman Oaks
- Sun Valley
- Van Nuys
- West Los Angeles
- Westwood

Figure 8-11 and Figure 8-12 show the parks and recreational facilities within the Alternative 4 RSA, including bicycle facilities.

Figure 8-11. Alternative 4: Parks and Recreational Facilities within the Resource Study Area (from Panorama City to Brentwood)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

Figure 8-12. Alternative 4: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

8.2.1 Parks and Recreational Facilities

The Alternative 4 RSA includes 13 park and recreational facilities, including 8 parks, 3 regional open spaces, 1 botanical garden, and 1 amusement park, all of which comprise approximately 664 acres. Alternative 4 include temporary off-site construction staging areas. Seven park and recreational facilities are located within 0.25 mile from the proposed temporary construction staging areas. These park and recreation facilities include five parks, one regional open space, and one botanical garden. All 13 parks and recreational facilities identified are located in the City of Los Angeles, with the exception of one park located in the City of Santa Monica. Several agencies own and manage the park and recreational facilities identified, including the U.S. Army Corps of Engineers, Los Angeles County, City of Los Angeles, City of Santa Monica, Santa Monica Mountains Conservancy, National Park Service, Los Angeles Neighborhood Land Trust, and the UCLA.

Table 8-6 lists the parks and recreational facilities within the Alternative 4 RSA and respective distances from the Alternative 4 alignment or station area and temporary off-site construction staging areas. Table 8-7 lists the parks and recreational facilities within the 0.5-mile radius of proposed Alternative 4 stations. Figure 8-11 and Figure 8-12 show the locations of these facilities.

Table 8-6. Alternative 4: Parks and Recreational Facilities within the Resource Study Area

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 4 (feet) ^b
Airport Park	3201 Airport Avenue, Santa Monica	City of Santa Monica	Local Park	Soccer field, playground, dog park	8.3	S1 Staging Area: 1,294
Andres and Maria Cardenas Recreation Center	14740 Blythe Street, Panorama City	City of Los Angeles	Local Park	Skate park, splash pad, community center	0.7	695
Balboa Sports Center	17015 Burbank Boulevard, Encino	USACE	Local Park	Tennis court, basketball court, baseball field, soccer field, playgrounds, gym	81.9	N2 Staging Area: 563
Delano Park	15100 Erwin Street, Van Nuys	City of Los Angeles	Local Park	Baseball field, soccer field, playground, community center	6.1	990 N3 Staging Area: 1,269
Felicia Mahood Multipurpose Center	11338 Santa Monica Boulevard, Los Angeles	City of Los Angeles	Local Park	Senior Center	4.3	1,733
Los Angeles Riverfront Greenway	Sherman Oaks	City of Los Angeles	Regional Open Space	Open space	6.2	66
Marson Park	15262 Marson Street, Panorama City	Los Angeles Neighborhood Land Trust	Local Park	Playground	0.3	436

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 4 (feet) ^b
Mildred E. Mathia Botanical Garden	707 Tiverton Drive, Los Angeles	University of California, Los Angeles	Botanical Garden	Botanical garden	8.2	1,042 S3 Staging Area: 197
Sepulveda Basin Wildlife Reserve	17017 Burbank Boulevard, Encino	USACE	Regional Open Space	Open space	327.3	678 N2 and N3 Staging Area: 915
Sepulveda Pass Open Space	457 N Fairfax Avenue, Los Angeles	SMMC	Regional Open Space	Open space	155.0	127
Sepulveda Basin Recreation Area	17017 Burbank Boulevard, Encino	USACE	Regional Open Space	Baseball field, soccer field, multi-purpose field, fitness zone, skate park, dog park, senior center	268.4	N1, N2 Staging Area: 0
Sherman Oaks Castle Park	4989 Sepulveda Boulevard, Sherman Oaks	City of Los Angeles	Amusement Park	Amusement Park	5.0	51
Teichman Family Magnolia Park	15365 Magnolia Boulevard, Sherman Oaks	City of Los Angeles	Local Park	Basketball court	3.9	569
Westwood Gardens Park	1246 Glendon Avenue, Los Angeles	City of Los Angeles	Local Park	Open space	0.3	1,053
Westwood Park	1350 Sepulveda Boulevard, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, multipurpose field, playground, pool, gym	26.7	0
Woodley Avenue Park	6350 Woodley Avenue, Encino	USACE	Regional Recreation Park	Fitness zone, picnic shelter, playgrounds	119.8	1,185 N3 Staging Area: 550
Total					1,022	

Source: LA County Planning, 2024a

^aSize (acres) refers to the full size of the resource, not the acreage within the RSA.

^bA distance of “0 feet” from the alternative indicates that the alternative would either cross over the resource or be underground through the resource.

SMMC = Santa Monica Mountains Conservancy
 USACE = U.S. Army Corps of Engineers

Notes:

1. The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.
2. Facility Type is a categorizing based on the Los Angeles County Department of Regional Planning and City of Los Angeles, and includes the following types:
 - Amusement Park: Family entertainment, managed by the City of Los Angeles.
 - Botanical Garden: Public garden.
 - Local Park: Designed to serve residents of all ages in several surrounding neighborhoods and may include facilities such as a community building, multipurpose fields, hard court areas, parking, maintenance service areas, and play areas.
 - Natural Area: A place that has a unique value that is scenic, historic, geologic, ecological, or educational. Natural areas are maintained in a natural state to preserve their wilderness, native ecosystems, and their processes.
 - Regional Recreation Park: Regional parks are typically greater than 100 acres in size and have a service radius of 25 miles or more. They include unique areas such as lakes, wetlands, auditoriums, water bodies, and campgrounds, in addition to the active recreational facilities offered in community and community regional parks.
 - Regional Open Space: Undeveloped land in its natural state, as well as active and passive park space that is regional in size.

Table 8-7. Alternative 4: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations

Stations	Parks and Recreational Facilities
Metro E Line Expo/Sepulveda	Exposition Corridor Bike Path
Santa Monica Boulevard Station	<ul style="list-style-type: none"> ● Felicia Mahood Multipurpose Center ● Westwood Park ● Westwood Park Bike Path
Wilshire Boulevard/Metro D Line	<ul style="list-style-type: none"> ● Mildred E. Mathias Botanical Garden ● Westwood Park ● Westwood Gardens Park ● Westwood Park Bike Path
UCLA Gateway Plaza	<ul style="list-style-type: none"> ● Mildred E. Mathias Botanical Garden ● Various UCLA bike lanes/routes
Ventura Boulevard/Sepulveda Boulevard	None
Metro G Line Sepulveda	<ul style="list-style-type: none"> ● Delano Park ● Sepulveda Basin Wildlife Reserve ● Woodley Avenue Park ● Metro G Line Bike Path
Sherman Way	None
Van Nuys Metrolink	Andres and Maria Cardenas Recreation Center

Source: LA County Planning, 2024a; SCAG, 2024a; U.S. Department of Homeland Security Geospatial Management Office, 2020

Note: Only Class 1 Bike Paths and "Various UCLA bike lanes/routes" are included in this table. Class II Bike Lanes and Class III Bike Routes are not included in this table.

8.2.2 Bicycle Facilities

The existing bicycle facilities in the Alternative 4 RSA consists of a network of approximately 20 miles of Class I, Class II, and Class III bicycle facilities, including approximately 3 miles of Class I bicycle facilities, approximately 8 miles of Class II bicycle facilities, and approximately 8 miles of Class III bicycle facilities. There are no Class IV bicycle facilities within the Alternative 4 RSA.

Table 8-8 lists the bicycle facilities within the Alternative 4 RSA. Figure 8-11 and Figure 8-12 show the locations of these facilities. The *Sepulveda Transit Corridor Project Transportation Technical Report* (Metro, 2025a) provides additional information on active transportation facilities.

Table 8-8. Alternative 4: Bicycle Facilities within the Resource Study Area

Bicycle Facilities	Length (miles)	Location	Distance from Alternative 4 (feet) ^a
<i>Class I — Bike Paths</i>	2.7	—	—
Exposition Corridor Bikeway	0.9	Along Metro E Line	0
Metro G Line Bikeway	1.0	Along Metro G Line Busway	0
Westwood Park Bike Path	0.8	Westwood Park	45
<i>Class II — Bike Lanes</i>	8.3	<i>Various paths</i>	—
<i>Class III — Bike Routes</i>	8.8	<i>Various paths</i>	—
Total	19.8	—	—

Source: SCAG, 2024b; HTA, 2024

^aA distance of “0 feet” from the alternative indicates that the alternative would cross underground through the resource.

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

— = not applicable

8.2.3 Recreational Hiking Trails

There are no hiking trails identified within the Alternative 4 RSA.

8.3 Impact Evaluation

8.3.1 Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Or

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?

8.3.1.1 Operational Impacts

Alternative 4 would provide a new mode of transportation, accessibility, and connectivity in the surrounding communities. As a transportation infrastructure project that does not include housing,

Alternative 4 would not directly generate permanent residences or increase the existing residential population of the surrounding communities that would increase the use of existing parks and recreational facilities or result in substantial adverse physical impacts associated with the provision of new or physically altered parks or recreational facilities. Instead, accessibility to nearby parks and recreational facilities located within 0.5-mile of proposed Alternative 4 stations listed in Table 8-6 and Table 8-7 would be improved by having nearby transit stations. Alternative 4 would also help achieve Metro's *First/Last Mile Guidelines* (Metro, 2021b) objectives to facilitate multimodal transportation and connectivity for pedestrians and cyclist, provide connectivity to the station areas and surrounding communities, and enhance the existing active transportation corridors for the cities.

Alternative 4 would be within 100 feet of Sherman Oaks Castle Park and Los Angeles Riverfront Greenway in an aerial configuration and would be situated in a below-ground tunnel where the alignment would cross under Westwood Park (Table 8-6). Alternative 4 would cross under the Exposition Corridor Bikeway and the Metro G Line Bikeway and would be adjacent to the Westwood Park Bike Path (Table 8-8).

No permanent acquisition of parkland or recreational facilities would be required under Alternative 4.

Alternative 4 would enhance bicycle and pedestrian access in the immediate station areas for improved bicycle-to-transit connections through bike parking and connections to existing nearby bicycle facilities, as proposed in Metro's *Transit to Parks Strategic Plan* (Metro, 2019b). At some locations along the alignment, sidewalks would be widened or replaced where needed to accommodate the aerial guideway and station infrastructure. For areas where the alignment would affect Class II bicycle facilities, restriping travel lanes and bike lanes would occur to maintain continuity with the bicycle facilities. Alternative 4 would maintain adequate sidewalk widths at station locations and along the aerial alignment. Additional enhancements, including crosswalk and Americans with Disabilities Act-compliant sidewalk improvements, would further improve pedestrian circulation and non-motorized access to transit stations.

Table 8-7 list the 11 recreational or trail facilities located within 0.5-mile of one or more Alternative 4 stations. Based on their proximity to Alternative 4 stations, it is anticipated that a modest increase in the use of these facilities would occur. Each of these facilities have existing operations and maintenance requirements that are not anticipated to be affected by Alternative 4 operations. The communities within the RSA are all well served by existing state, regional, and local recreation facilities, and while a modest increase in use of these facilities is anticipated, Alternative 4 is not anticipated to increase the use of existing parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Occasional large community events typically increase the use of parks, recreational facilities, and bicycle facilities in which recreational users may originate beyond the surrounding communities. However, these park community events would be similar to those that are currently held in the Alternative 4 RSA, and Alternative 4 would not alter the operations or frequency of these locally held community events. Similar to existing conditions, the departments and public entities that maintain the facilities would provide services and resources to serve the attendees of these events. As a transportation infrastructure project, Alternative 4 may provide residents of the surrounding communities who choose not to drive an alternative means of accessing locally held community events. During such events, the use of parks, recreational facilities, and bicycle facilities may potentially increase. However, the increased use would be occasional and specific to the community event. Thus, Alternative 4 would provide improved

connections to such community events and would not directly accelerate or result in a substantial deterioration of existing parks, recreational facilities, and bicycle facilities.

For these reasons, Alternative 4 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and it would not result in substantial adverse physical impacts associated with the provision, or the need for, new or physically altered parks. Impacts would be less than significant.

8.3.1.2 Construction Impacts

Construction of Alternative 4 would be temporary and would not generate permanent residences that would increase the use of existing parks and recreational facilities resulting in accelerated physical deterioration of the facilities or require the expansion of existing recreational facilities. While construction workers may utilize nearby parks and recreational facilities during lunchtime breaks, such use would be temporary and nominal.

Construction of Alternative 4 would require temporary street detours at proposed underground stations during cut-and-cover activities and the construction of the aerial viaduct on Sepulveda Boulevard. Although bike lane reductions and street closures would inhibit the flow of bicycle traffic and may require detours, bicycle movements would be maintained during construction. At the underground segments of the Alternative 4 alignment, street detours would be concentrated at areas surrounding proposed underground station boxes and would disrupt bicycle circulation. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* for more information related to construction traffic and access (Metro, 2025a). The underground guideway would be constructed using a TBM, and therefore, would not disrupt bicycle facilities. Therefore, construction-related impacts to parks and recreational facilities would be less than significant.

8.3.1.3 Maintenance and Storage Facility

The proposed MSF site is currently developed as a materials storage site owned by LADWP and an auto storage lot. The proposed MSF would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bicycle facilities or increase the need for new recreational facilities in the surrounding communities. The MSF site would be a support facility for Alternative 4 and would provide maintenance and storage services and would not provide improved access to parks, recreational facilities, and bicycle facilities that may result in increased use.

No parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the proposed MSF. The nearest parkland is the Andres and Maria Cardenas Recreation Center located approximately 0.65 mile northwest of the proposed MSF site. The proposed MSF would not affect on-site or street parking used by visitors to the Andres and Maria Cardenas Recreation Center.

MSF construction activities would be temporary and would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bike facilities in the surrounding communities. Therefore, impacts to parklands associated with the proposed MSF would be less than significant.

8.3.2 Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

8.3.2.1 Operational Impacts

Alternative 4 is a transportation infrastructure project that would provide new transit options to the surrounding community. Alternative 4 would not include the construction of recreational facilities or require the expansion of existing parklands, and recreational and bicycle facilities that might have an adverse physical effect on the environment. As previously described in Section 8.3.1.1, bicycle facilities would be largely maintained along the Alternative 4 alignment and would not preclude any planned bicycle facilities nor alter any existing bicycle facilities at station areas. For areas where the alignment would affect Class II bicycle facilities, restriping travel lanes and bike lanes would occur to maintain continuity with the bicycle facilities. Therefore, impacts would be less than significant.

8.3.2.2 Construction Impacts

Construction of Alternative 4 would be temporary and would not include the construction of recreational facilities or require the expansion of existing recreational facilities. Therefore, no impacts would occur.

8.3.2.3 Maintenance and Storage Facility

The proposed MSF site is currently developed as a materials storage site owned by LADWP and an auto storage lot. MSF site construction activities would not include construction of recreational facilities or require the expansion of existing recreational facilities.

As discussed in Section 8.3.1.3, no parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the MSF. The MSF would not affect on-site or street parking used by visitors to Andres and Maria Cardenas Recreation Center. Therefore, impacts to park and recreational facilities associated with the MSF would be less than significant.

8.4 Mitigation Measures

8.4.1 Operational Impacts

No mitigation measures are required.

8.4.2 Construction Impacts

No mitigation measures are required.

8.4.3 Impacts After Mitigation

No mitigation measures are required; impacts are less than significant.

9 ALTERNATIVE 5

9.1 Alternative Description

Alternative 5 consists of a heavy rail transit (HRT) system with a primarily underground guideway track configuration, including seven underground stations and one aerial station. This alternative would include five transfers to high-frequency fixed guideway transit and commuter rail lines, including the Los Angeles County Metropolitan Transportation Authority's (Metro) E, Metro D, and Metro G Lines, East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 13.8 miles, with 0.7 miles of aerial guideway and 13.1 miles of underground configuration.

The seven underground and one aerial HRT stations would be as follows:

1. Metro E Line Expo/Sepulveda Station (underground)
2. Santa Monica Boulevard Station (underground)
3. Wilshire Boulevard/Metro D Line Station (underground)
4. UCLA Gateway Plaza Station (underground)
5. Ventura Boulevard/Sepulveda Boulevard Station (underground)
6. Metro G Line Sepulveda Station (underground)
7. Sherman Way Station (underground)
8. Van Nuys Metrolink Station (aerial)

9.1.1 Operating Characteristics

9.1.1.1 Alignment

As shown on Figure 9-1, from its southern terminus station at the Metro E Line Expo/Sepulveda Station, the alignment of Alternative 5 would run underground north through the Westside of Los Angeles (Westside), the Santa Monica Mountains, and the San Fernando Valley (Valley) to a tunnel portal east of Sepulveda Boulevard and south of Raymer Street. As it approaches the tunnel portal, the alignment would curve eastward and begin to transition to an aerial guideway along the south side of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor that would continue to the northern terminus station adjacent to the Van Nuys Metrolink/Amtrak Station.

The proposed southern terminus station would be located underground east of Sepulveda Boulevard between the existing elevated Metro E Line tracks and Pico Boulevard. Tail tracks for vehicle storage would extend underground south of National Boulevard east of Sepulveda Boulevard. The alignment would continue north beneath Bentley Avenue before curving northwest to an underground station at the southeast corner of Santa Monica Boulevard and Sepulveda Boulevard. From the Santa Monica Boulevard Station, the alignment would continue and curve eastward to the Wilshire Boulevard/Metro D Line Station beneath the Metro D Line Westwood/UCLA Station, which is currently under construction as part of the Metro D Line Extension Project. From there, the underground alignment would curve slightly to the northeast and continue beneath Westwood Boulevard before reaching the UCLA Gateway Plaza Station.

Figure 9-1. Alternative 5: Alignment



Source: STCP, 2024; HTA, 2024

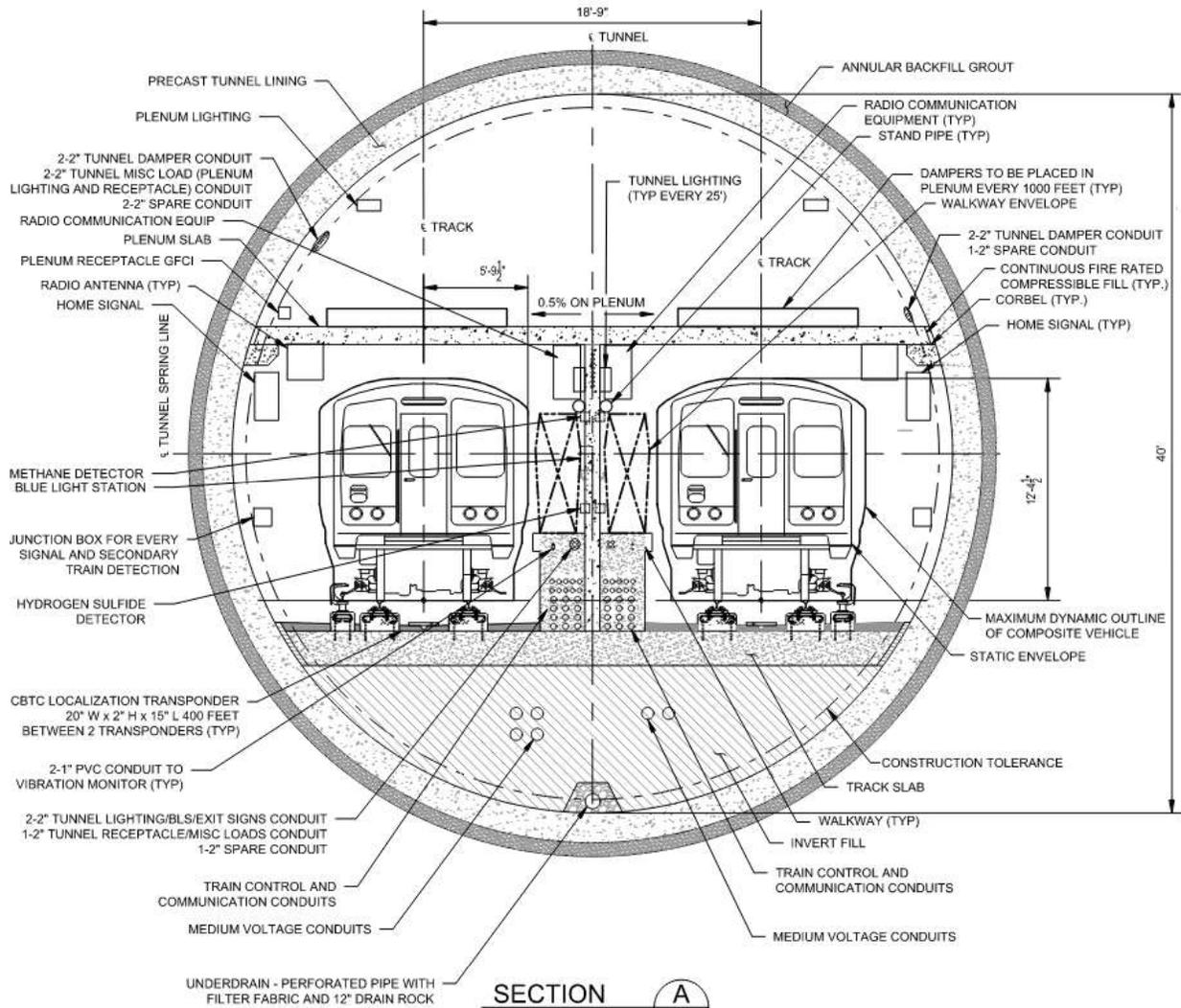
From the UCLA Gateway Plaza Station, the alignment would turn to the northwest beneath the Santa Monica Mountains to the east of Interstate 405 (I-405). South of Mulholland Drive, the alignment would curve to the north, aligning with Saugus Avenue south of Valley Vista Boulevard. The Ventura Boulevard Station would be located under Saugus Avenue between Greenleaf Street and Dickens Street. The alignment would then continue north beneath Sepulveda Boulevard to the Metro G Line Sepulveda Station immediately south of the Metro G Line Busway. After leaving the Metro G Line Sepulveda Station, the alignment would continue beneath Sepulveda Boulevard to reach the Sherman Way Station,

the final underground station along the alignment, immediately south of Sherman Way. From the Sherman Way Station, the alignment would continue north before curving slightly to the northeast to the tunnel portal south of Raymer Street. The alignment would then transition from an underground configuration to an aerial guideway structure after exiting the tunnel portal. East of the tunnel portal, the alignment would transition to a cut-and-cover U-structure segment followed by a trench segment before transitioning to an aerial guideway that would run east along the south side of the LOSSAN rail corridor. Parallel to the LOSSAN rail corridor, the guideway would conflict with the existing Willis Avenue Pedestrian Bridge, which would be demolished. The alignment would follow the LOSSAN rail corridor before reaching the proposed northern terminus Van Nuys Metrolink Station located adjacent to the existing Metrolink/Amtrak Station. The tail tracks and yard lead tracks would descend to the proposed at-grade maintenance and storage facility (MSF) east of the proposed northern terminus station. Modifications to the existing pedestrian underpass to the Metrolink platforms to accommodate these tracks would result in reconfiguration of an existing rail spur serving City of Los Angeles Department of Water and Power (LADWP) property.

9.1.1.2 Guideway Characteristics

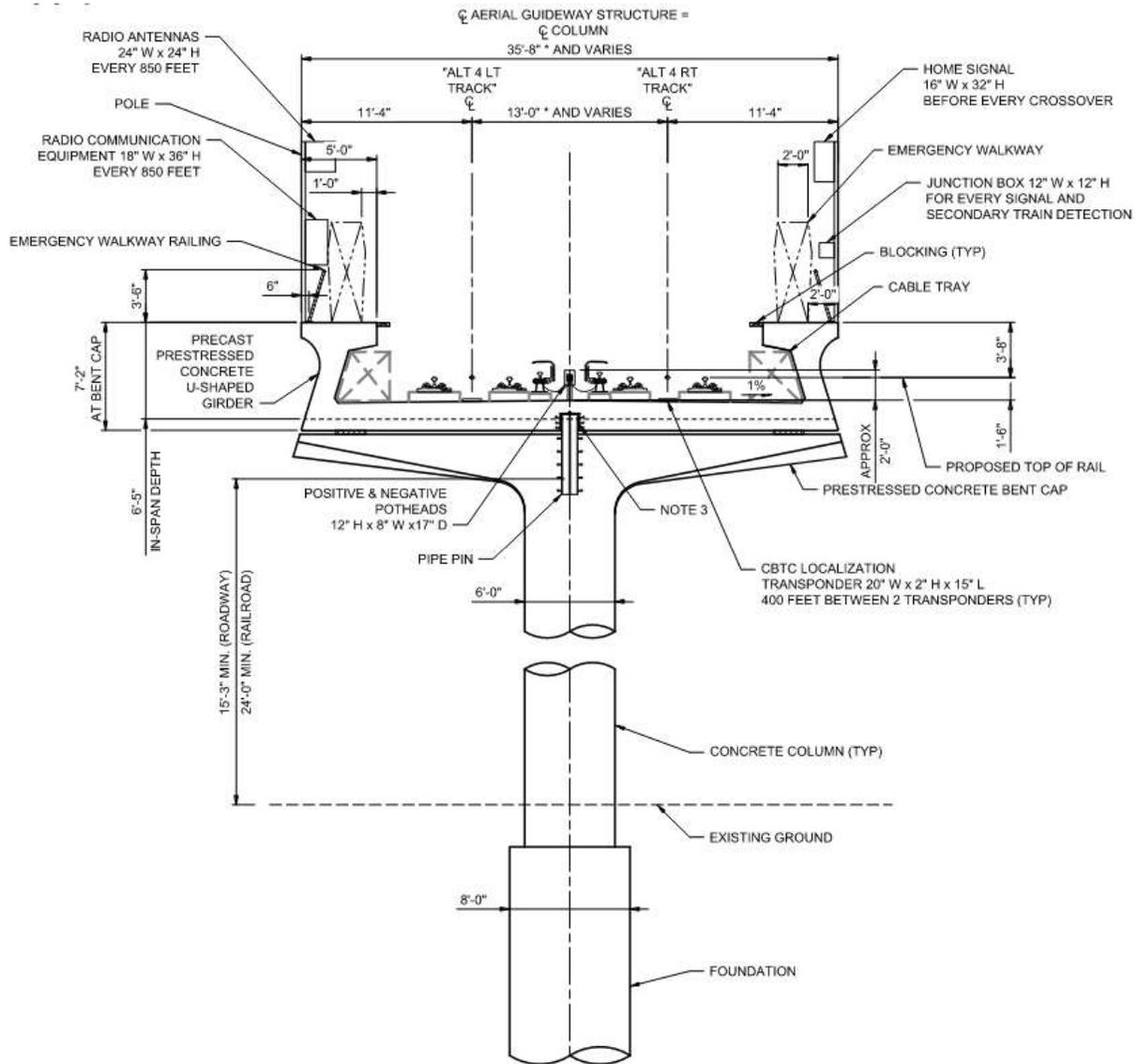
For underground sections, Alternative 5 would utilize a single-bore tunnel configuration with an outside diameter of approximately 43.5 feet. The tunnel would include two parallel tracks at 18.75-foot spacing in tangent sections separated by a continuous central dividing wall throughout the tunnel. Inner walkways would be constructed adjacent to the two tracks. Inner and outer walkways would be constructed within tunnel sections near the track crossovers. At the crown of tunnel, a dedicated air plenum would be provided by constructing a concrete slab above the railway corridor. The air plenum would allow for ventilation throughout the underground portion of the alignment. Figure 9-2 illustrates these components at a typical cross-section of the underground guideway.

Figure 9-2. Typical Underground Guideway Cross-Section



Source: STCP, 2024

In aerial sections adjacent to Raymer Street and the LOSSAN rail corridor, the guideway would consist of single-column spans. The single-column spans would include a U-shaped concrete girder structure that supports the railway track atop a series of individual columns. The single-column aerial guideway would be approximately 36 feet wide. The track would be constructed on the concrete girders with direct fixation and would maintain a minimum of 13 feet between the two-track centerlines. On the outer side of the tracks, emergency walkways would be constructed with a minimum width of 2 feet. The single-column aerial guideway would be the primary aerial structure throughout the aerial portion of the alignment. Figure 9-3 shows a typical cross-section of the single-column aerial guideway.

Figure 9-3. Typical Aerial Guideway Cross-Section


Source: STCP, 2024

9.1.1.3 Vehicle Technology

Alternative 5 would utilize steel-wheel HRT trains, with automated train operations and planned peak-period headways of 2.5 minutes and off-peak-period headways ranging from 4 to 6 minutes. Each train could consist of three or four cars with open gangways between cars. The HRT vehicle would have a maximum operating speed of 70 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations. Train cars would be approximately 10 feet wide with three double doors on each side. Each car would be approximately 72 feet long with capacity for 170 passengers. Trains would be powered by a third rail.

9.1.1.4 Stations

Alternative 5 would include seven underground stations and one aerial station with station platforms measuring 280 feet long for both station configurations. The aerial station would be constructed a minimum of 15.25 feet above ground level, supported by rows of dual columns with 8-foot diameters. The southern terminus station would be adjacent to the Metro E Line Expo/Sepulveda Station, and the northern terminus station would be adjacent to the Van Nuys Metrolink/Amtrak Station.

All stations would be side-platform stations where passengers would select and travel up to station platforms depending on their direction of travel. All stations would include 20-foot-wide side platforms separated by 30 feet for side-by-side trains. Each underground station would include an upper and lower concourse level prior to reaching the train platforms. The Van Nuys Metrolink Station would include a mezzanine level prior to reaching the station platforms. Each station would have a minimum of two elevators, two escalators, and one stairway from ground level to the concourse or mezzanine.

Stations would include automatic, bi-parting fixed doors along the edges of station platforms. These platform screen doors would be integrated into the automatic train control system and would not open unless a train is stopped at the platform.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Sepulveda Station

- This underground station would be located just north of the existing Metro E Line Expo/Sepulveda Station, on the east side of Sepulveda Boulevard.
- A station entrance would be located on the east side of Sepulveda Boulevard north of the Metro E Line.
- A direct internal transfer to the Metro E Line would be provided at street level within the fare paid zone.
- A 126-space parking lot would be located immediately north of the station entrance, east of Sepulveda Boulevard. Passengers would also be able to park at the existing Metro E Line Expo/Sepulveda Station parking facility, which provides 260 parking spaces.

Santa Monica Boulevard Station

- This underground station would be located under the southeast corner of Santa Monica Boulevard and Sepulveda Boulevard.
- The station entrance would be located on the south side of Santa Monica Boulevard between Sepulveda Boulevard and Bentley Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This underground station would be located beneath the Metro D Line tracks and platform under Gayley Avenue between Wilshire Boulevard and Lindbrook Drive.
- Station entrances would be provided on the northeast corner of Wilshire Boulevard and Gayley Avenue and on the northeast corner of Lindbrook Drive and Gayley Avenue. Passengers would also be able to use the Metro D Line Westwood/UCLA Station entrances to access the station platform.

- A direct internal station transfer to the Metro D Line would be provided at the south end of the station.
- No dedicated station parking would be provided at this station.

UCLA Gateway Plaza Station

- This underground station would be located underneath Gateway Plaza on the University of California, Los Angeles (UCLA) campus.
- Station entrances would be provided on the north side of Gateway Plaza and on the east side of Westwood Boulevard across from Strathmore Place.
- No dedicated station parking would be provided at this station.

Ventura Boulevard/Sepulveda Boulevard Station

- This underground station would be located under Saugus Avenue between Greenleaf Street and Dickens Street.
- A station entrance would be located on the southeast corner of Saugus Avenue and Dickens Street.
- Approximately 92 parking spaces would be supplied at this station west of Sepulveda Boulevard between Dickens Street and the U.S. Highway 101 (US-101) On-Ramp.

Metro G Line Sepulveda Station

- This underground station would be located under Sepulveda Boulevard immediately south of the Metro G Line Busway.
- A station entrance would be provided on the west side of Sepulveda Boulevard south of the Metro G Line Busway.
- Passengers would be able to park at the existing Metro G Line Sepulveda Station parking facility, which has a capacity of 1,205 parking spaces. Currently, only 260 parking spaces are currently used for transit parking. No new parking would be constructed.

Sherman Way Station

- This underground station would be located below Sepulveda Boulevard between Sherman Way and Gault Street.
- The station entrance would be located near the southwest corner of Sepulveda Boulevard and Sherman Way.
- Approximately 122 parking spaces would be supplied at this station on the west side of Sepulveda Boulevard with vehicle access from Sherman Way.

Van Nuys Metrolink Station

- This aerial station would span Van Nuys Boulevard, just south of the LOSSAN rail corridor.
- The primary station entrance would be located on the east side of Van Nuys Boulevard just south of the LOSSAN rail corridor. A secondary station entrance would be located between Raymer Street and Van Nuys Boulevard.
- An underground pedestrian walkway would connect the station plaza to the existing pedestrian underpass to the Metrolink/Amtrak platform outside the fare paid zone.

- Existing Metrolink Station parking would be reconfigured, maintaining approximately the same number of spaces, but 66 parking spaces would be relocated west of Van Nuys Boulevard. Metrolink parking would not be available to Metro transit riders.

9.1.1.5 Station-to-Station Travel Times

Table 9-1 presents the station-to-station distance and travel times at peak period for Alternative 5. The travel times include both run time and dwell time. Dwell time is 30 seconds for transfer stations and 20 seconds for other stations. Northbound and southbound travel times vary slightly because of grade differentials and operational considerations at end-of-line stations.

Table 9-1. Alternative 5: Station-to-Station Travel Time and Station Dwell Time

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
<i>Metro E Line Station</i>					30
Metro E Line	Santa Monica Boulevard	0.9	89	86	—
<i>Santa Monica Boulevard Station</i>					20
Santa Monica Boulevard	Wilshire/Metro D Line	0.9	91	92	—
<i>Wilshire/Metro D Line Station</i>					30
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	75	69	—
<i>UCLA Gateway Plaza Station</i>					20
UCLA Gateway Plaza	Ventura Boulevard	6.0	368	359	—
<i>Ventura Boulevard Station</i>					20
Ventura Boulevard	Metro G Line	2.0	137	138	—
<i>Metro G Line Station</i>					30
Metro G Line	Sherman Way	1.4	113	109	—
<i>Sherman Way Station</i>					20
Sherman Way	Van Nuys Metrolink	1.9	166	162	—
<i>Van Nuys Metrolink Station</i>					30

Source: STCP, 2024

— = no data

9.1.1.6 Special Trackwork

Alternative 5 would include 10 double crossovers throughout the alignment enabling trains to cross over to the parallel track. Each terminus station would include a double crossover immediately north and south of the station. Except for the Santa Monica Boulevard Station, each station would have a double crossover immediately south of the station. The remaining crossover would be located along the alignment midway between the UCLA Gateway Plaza Station and the Ventura Boulevard Station.

9.1.1.7 Maintenance and Storage Facility

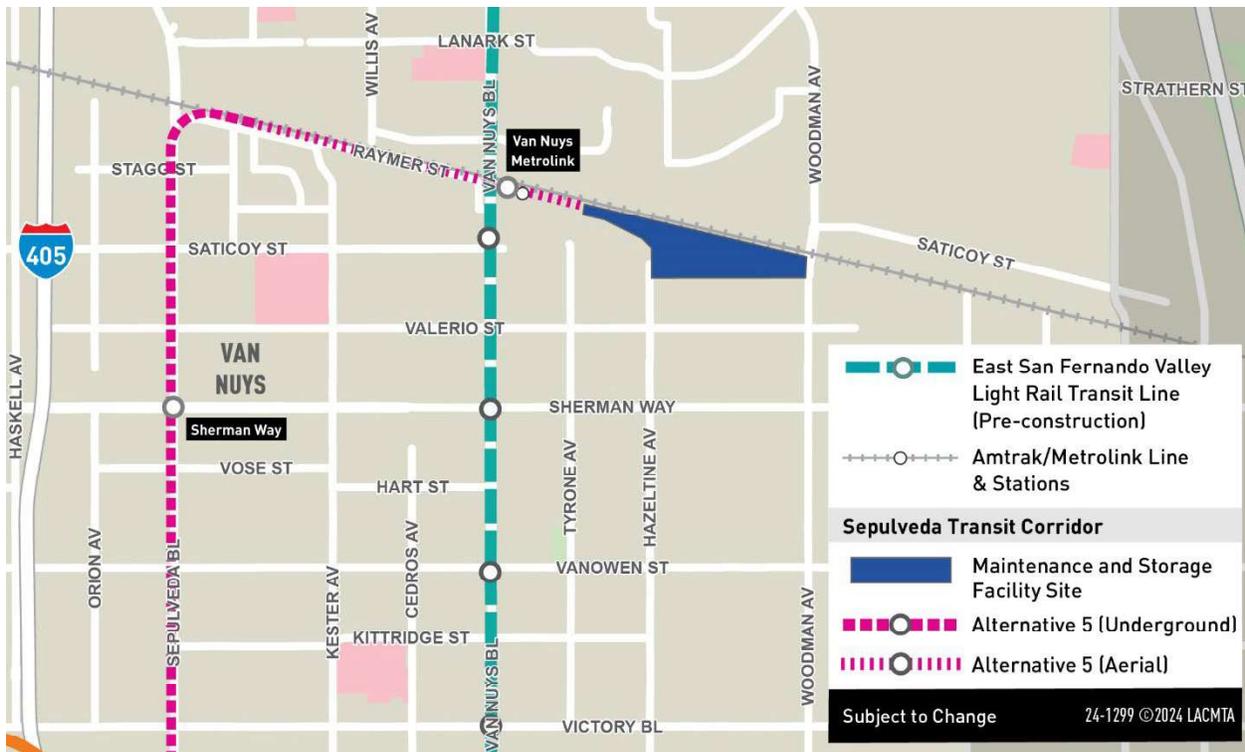
The MSF for Alternative 5 would be located east of the Van Nuys Metrolink Station and would encompass approximately 46 acres. The MSF would be designed to accommodate 184 rail cars and would be bounded by single-family residences to the south, the LOSSAN rail corridor to the north, Woodman Avenue on the east, and Hazeltine Avenue and industrial manufacturing enterprises to the west. Trains would access the site from the fixed guideway's tail tracks at the northwest corner of the site. Trains would then travel southeast to maintenance facilities and storage tracks.

The site would include the following facilities:

- Two entrance gates with guard shacks
- Main shop building
- Maintenance-of-way building
- Storage tracks
- Carwash building
- Cleaning and inspections platforms
- Material storage building
- Hazmat storage locker
- Traction power substation (TPSS) located on the west end of the MSF to serve the mainline
- TPSS located on the east end of the MSF to serve the yard and shops
- Parking area for employees
- Grade separated access roadway (over the HRT tracks at the east end of the facility) and necessary drainage

Figure 9-4 shows the location of the MSF site for Alternative 5.

Figure 9-4. Alternative 5: Maintenance and Storage Facility Site



Source: STCP, 2024; HTA, 2024

9.1.1.8 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. Twelve TPSS facilities would be located along the alignment and would be spaced approximately 0.5 to 2.5 miles apart. All TPSS facilities would be located within the stations, adjacent to the tunnel through the Santa Monica Mountains, or within the MSF. Table 9-2 lists the TPSS locations for Alternative 5.

Figure 9-5 shows the TPSS locations along the Alternative 5 alignment.

Table 9-2. Alternative 5: Traction Power Substation Locations

TPSS No.	TPSS Location Description	Configuration
1	TPSS 1 would be located east of Sepulveda Boulevard and north of the Metro E Line.	Underground (within station)
2	TPSS 2 would be located south of Santa Monica Boulevard between Sepulveda Boulevard and Bentley Avenue.	Underground (within station)
3	TPSS 3 would be located at the southeast corner of UCLA Gateway Plaza.	Underground (within station)
4	TPSS 4 would be located south of Bellagio Road and west of Stone Canyon Road.	Underground (adjacent to tunnel)
5	TPSS 5 would be located west of Roscomare Road between Donella Circle and Linda Flora Drive.	Underground (adjacent to tunnel)
6	TPSS 6 would be located east of Loom Place between Longbow Drive and Vista Haven Road.	Underground (adjacent to tunnel)
7	TPSS 7 would be located west of Sepulveda Boulevard between the I-405 Northbound On-Ramp and Dickens Street.	Underground (within station)
8	TPSS 8 would be located west of Sepulveda Boulevard between the Metro G Line Busway and Oxnard Street.	Underground (within station)
9	TPSS 9 would be located at the southwest corner of Sepulveda Boulevard and Sherman Way.	Underground (within station)
10	TPSS 10 would be located south of the LOSSAN rail corridor and north of Raymer Street and Kester Avenue.	At-grade
11	TPSS 11 would be located south of the LOSSAN rail corridor and east of the Van Nuys Metrolink Station.	At-grade (within MSF)
12	TPSS 12 would be located south of the LOSSAN rail corridor and east of Hazeltine Avenue.	At-grade (within MSF)

Source: STCP, 2024; HTA, 2024

Note: Sepulveda Transit Corridor Partners has stated that Alternative 5 TPSS locations are derived from and assumed to be similar to the Alternative 4 TPSS locations.

Figure 9-5. Alternative 5: Traction Power Substation Locations



Source: STCP, 2024; HTA, 2024

9.1.1.9 Roadway Configuration Changes

Table 9-3 lists the roadway changes necessary to accommodate the guideway of Alternative 5. Figure 9-6 shows the location of the roadway changes within the Sepulveda Transit Corridor Project Study Area. In addition to the changes made to accommodate the guideway, as listed in Table 9-3, roadways and sidewalks near stations would be reconstructed, resulting in modifications to curb ramps and driveways.

Table 9-3. Alternative 5: Roadway Changes

Location	From	To	Description of Change
Raymer Street	Kester Avenue	Keswick Street	Reconstruction resulting in narrowing of width and removal of parking on the westbound side of the street to accommodate aerial guideway columns.
Cabrito Road	Raymer Street	Marson Street	Closure of Cabrito Road at the LOSSAN rail corridor at-grade crossing. A new segment of Cabrito Road would be constructed from Noble Avenue and Marson Street to provide access to extra space storage from the north.

Source: STCP, 2024; HTA, 2024

Figure 9-6. Alternative 5: Roadway Changes



Source: STCP, 2024; HTA, 2024

9.1.1.10 Ventilation Facilities

For ventilation, a plenum within the crown of the tunnel would provide a separate compartment for air circulation and allow multiple trains to operate between stations. Each underground station would include a fan room with additional ventilation facilities. Alternative 5 would also include a stand-alone ventilation facility at the tunnel portal on the northern end of the tunnel segment, located east of Sepulveda Boulevard and south of Raymer Street. Within this facility, ventilation fan rooms would

provide both emergency ventilation, in case of a tunnel fire, and regular ventilation, during non-revenue hours. The facility would also house sump pump rooms to collect water from various sources, including storm water; wash water (from tunnel cleaning); and water from a fire-fighting incident, system testing, or pipe leaks.

9.1.1.11 Fire/Life Safety – Emergency Egress

Within the tunnel segment, emergency walkways would be provided between the center dividing wall and each track. Sliding doors would be located in the central dividing wall at required intervals to connect the two sides of the railway with a continuous walkway to allow for safe egress to a point of safety (typically at a station) during an emergency. Similarly, the aerial guideway near the LOSSAN rail corridor would include two emergency walkways with safety railing located on the outer side of the tracks. Access to tunnel segments for first responders would be through stations and the portal.

9.1.2 Construction Activities

Temporary construction activities for Alternative 5 would include project work zones at permanent facility locations, construction staging and laydown areas, and construction office areas. Construction of the transit facilities through substantial completion is expected to have a duration of 8 ¼ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

For the guideway, Alternative 5 would consist of a single-bore tunnel through the Westside, Valley, and Santa Monica Mountains. The tunnel would comprise three separate segments, one running north from the southern terminus to the UCLA Gateway Plaza Station (Westside segment), one running south from the Ventura Boulevard Station to the UCLA Gateway Plaza Station (Santa Monica Mountains segment), and one running north from the Ventura Boulevard Station to the portal near Raymer Street (Valley segment). Tunnel boring machines (TBM) with approximately 45-foot-diameter cutting faces would be used to construct the tunnel segments underground. For the Westside segment, the TBM would be launched from Staging Area No. 1 in Table 9-4 at Sepulveda Boulevard and National Boulevard. For the Santa Monica Mountains segment, the TBMs would be launched from the Ventura Boulevard Station. Both TBMs would be extracted from the UCLA Gateway Plaza Station Staging Area No. 3 in Table 9-4. For the Valley segment, the TBM would be launched from Staging Area No. 8 as shown in Table 9-4 and extracted from the Ventura Boulevard Station. Figure 9-7 shows the location of construction staging locations along the Alternative 5 alignment.

Table 9-4. Alternative 5: On-Site Construction Staging Locations

No.	Location Description
1	Commercial properties on southeast corner of Sepulveda Boulevard and National Boulevard
2	North side of Wilshire Boulevard between Veteran Avenue and Gayley Avenue
3	UCLA Gateway Plaza
4	Commercial property on southwest corner of Sepulveda Boulevard and Dickens Street
5	West of Sepulveda Boulevard between US-101 and Sherman Oaks Castle Park
6	Lot behind Los Angeles Fire Department Station 88
7	Property on the west side of Sepulveda Boulevard between Sherman Way and Gault Street
8	Industrial property on both sides of Raymer Street, west of Burnet Avenue
9	South of the LOSSAN rail corridor east of Van Nuys Metrolink Station, west of Woodman Avenue

Source: STCP, 2024; HTA, 2024

Figure 9-7. Alternative 5: On-Site Construction Staging Locations



Source: STCP, 2024; HTA, 2024

The distance from the surface to the top of the tunnel for the Westside tunnel would vary from approximately 40 feet to 90 feet depending on the depth needed to construct the underground stations. The depth of the Santa Monica Mountains tunnel segment varies greatly from approximately 470 feet as it passes under the Santa Monica Mountains to 50 feet near UCLA. The depth of the Valley segment would vary from approximately 40 feet near the Ventura Boulevard/Sepulveda Station and north of the Metro G Line Sepulveda Station to 150 feet near Weddington Street. The tunnel segments through the Westside and Valley would be excavated in soft ground while the tunnel through the Santa Monica Mountains would be excavated primarily in hard ground or rock as geotechnical conditions transition from soft to hard ground near the UCLA Gateway Plaza Station.

Construction work zones would also be co-located with future MSF and station locations. All work zones would comprise the permanent facility footprint with additional temporary construction easements from adjoining properties.

All underground stations would be constructed using a “cut-and-cover” method whereby the underground station structure would be constructed within a trench excavated from the surface with a portion or all being covered by a temporary deck and backfilled during the later stages of station construction. Traffic and pedestrian detours would be necessary during underground station excavation until decking is in place and the appropriate safety measures are taken to resume cross traffic.

In addition to work zones, Alternative 5 would include construction staging and laydown areas at multiple locations along the alignment as well as off-site staging areas. Construction staging areas would provide the necessary space for the following activities:

- Contractors’ equipment
- Receiving deliveries
- Testing of soils for minerals or hazards
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment).

A larger, off-site staging area would be used for temporary storage of excavated material from both tunneling and station cut-and-cover excavation activities. Table 9-4 and Figure 9-7 present the potential construction staging areas along the alignment for Alternative 5. Table 9-5 and Figure 9-8 present candidate sites for off-site staging and laydown areas.

Table 9-5. Alternative 5: Potential Off-Site Construction Staging Locations

No.	Location Description
S1	East of Santa Monica Airport Runway
S2	Ralph’s Parking Lot in Westwood Village
N1	West of Sepulveda Basin Sports Complex, south of the Los Angeles River
N2	West of Sepulveda Basin Sports Complex, north of the Los Angeles River
N3	Metro G Line Sepulveda Station Park & Ride Lot
N4	North of Roscoe Boulevard and Hayvenhurst Avenue
N5	LADWP property south of the LOSSAN rail corridor, east of Van Nuys Metrolink Station

Source: STCP, 2024; HTA, 2024

Figure 9-8. Alternative 5: Potential Off-Site Construction Staging Locations



Source: STCP, 2024; HTA, 2024

Construction of the HRT guideway between the Van Nuys Metrolink Station and the MSF would require reconfiguration of an existing rail spur serving LADWP property. The new location of the rail spur would require modification to the existing pedestrian undercrossing at the Van Nuys Metrolink Station.

Alternative 5 would require construction of a concrete casting facility for tunnel lining segments because no existing commercial fabricator capable of producing tunnel lining segments for a large-diameter tunnel exists within a practical distance of the Project Study Area. The site of the MSF would initially be

used for this casting facility. The casting facility would include casting beds and associated casting equipment, storage areas for cement and aggregate, and a field quality control facility, which would need to be constructed on-site. When a more detailed design of the facility is completed, the contractor would obtain all permits and approvals necessary from the City of Los Angeles, the South Coast Air Quality Management District, and other regulatory entities.

As areas of the MSF site begin to become available following completion of pre-casting operations, construction of permanent facilities for the MSF would begin, including construction of surface buildings such as maintenance shops, administrative offices, train control, traction power, and systems facilities. Some of the yard storage track would also be constructed at this time to allow delivery and inspection of passenger vehicles that would be fabricated elsewhere. Additional activities occurring at the MSF during the final phase of construction would include staging of trackwork and welding of guideway rail.

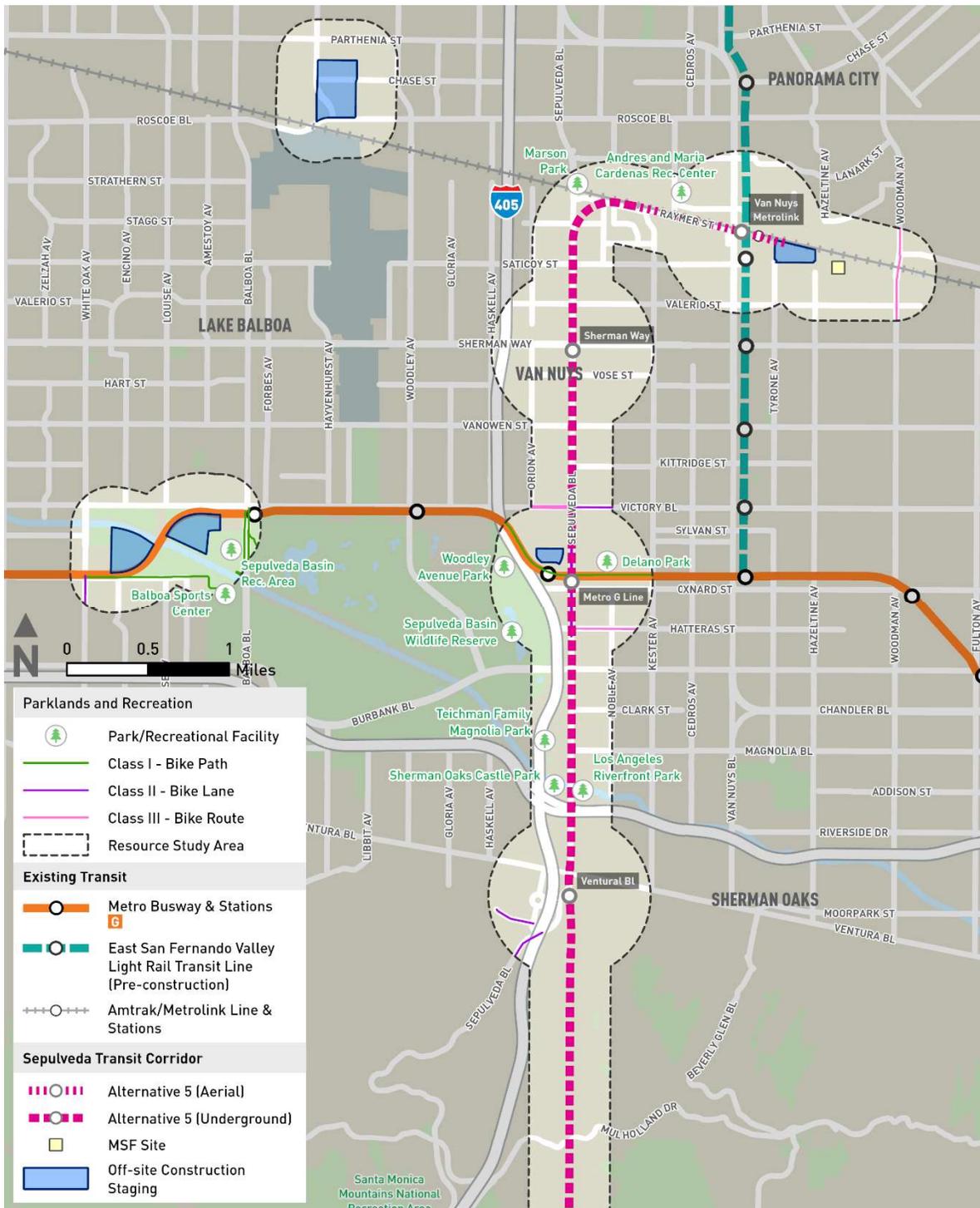
9.2 Existing Conditions

The Alternative 5 Resource Study Area (RSA) is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries. The Alternative 5 RSA consists of portions of the City of Los Angeles, City of Santa Monica, and unincorporated Los Angeles County of West Los Angeles, which contains the Department of Veterans Affairs complex. Affected communities identified within the City of Los Angeles include the following:

- Bel Air
- Beverly Crest
- Brentwood
- Encino
- Lake Balboa
- Mar Vista
- North Hills
- North Hollywood
- North Sherman Oaks
- Palms
- Panorama City
- Sherman Oaks
- Sun Valley
- Van Nuys
- West Los Angeles
- Westwood

Figure 9-9 and Figure 9-10 show the parks and recreational facilities within the Alternative 5 RSA, including bicycle facilities.

Figure 9-9. Alternative 5: Parks and Recreational Facilities within the Resource Study Area (from Panorama City to Brentwood)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

Figure 9-10. Alternative 5: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

9.2.1 Parks and Recreational Facilities

The Alternative 5 RSA includes 13 park and recreational facilities, including 8 parks, 3 regional open spaces, 1 botanical garden and 1 amusement park, all of which comprise approximately 664 acres. Alternative 5 include temporary off-site construction staging areas. Seven park and recreational facilities are located within 0.25 mile from the proposed temporary construction staging areas. These park and recreation facilities include five parks, one regional open space, and one botanical garden. All 13 parks and recreational facilities identified are all located in the City of Los Angeles, with the exception of one park located in the City of Santa Monica. Several agencies own and manage the park and recreational facilities identified, including the U.S. Army Corps of Engineers, Los Angeles County, City of Los Angeles, Santa Monica Mountains Conservancy, National Park Service, UCLA, and the Los Angeles Neighborhood Land Trust.

Table 9-6 lists the parks and recreational facilities within the Alternative 5 RSA and respective distances from the Alternative 5 alignment or station area and temporary off-site construction staging areas. Table 9-7 lists the parks and recreational facilities within 0.5-mile radius of proposed Alternative 5 stations. Figure 9-9 and Figure 9-10 show the locations of these facilities.

Table 9-6. Alternative 5: Parks and Recreational Facilities within the Resource Study Area

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 5 (feet) ^b
Airport Park	3201 Airport Avenue, Santa Monica	City of Santa Monica	Local Park	Soccer field, playground, dog park	8.3	S1 Staging Area: 1,294
Andres and Maria Cardenas Recreation Center	14740 Blythe Street, Panorama City	City of Los Angeles	Local Park	Skate park, splash pad, community center	0.7	695
Balboa Sports Center	17015 Burbank Boulevard, Encino	USACE	Local Park	Tennis court, basketball court, baseball field, soccer field, playgrounds, gym	81.9	N2 Staging Area: 563
Delano Park	15100 Erwin Street, Van Nuys	City of Los Angeles	Local Park	Baseball field, soccer field, playground, community center	6.1	990
Felicia Mahood Multipurpose Center	11338 Santa Monica Boulevard, Los Angeles	City of Los Angeles	Local Park	Senior Center	4.3	1,733
Los Angeles Riverfront Greenway	Sherman Oaks	City of Los Angeles	Regional Open Space	Open space	6.2	66
Marson Park	15262 Marson Street, Panorama City	Los Angeles Neighborhood Land Trust	Local Park	Playground	0.3	436

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 5 (feet) ^b
Mildred E. Mathia Botanical Garden	707 Tiverton Drive, Los Angeles	University of California, Los Angeles	Botanical Garden	Botanical garden	8.2	1,042 S3 Staging Area: 197
Sepulveda Basin Wildlife Reserve	17017 Burbank Boulevard, Encino	USACE	Regional Open Space	Open space	327.3	678 N2 and N3 Staging Area: 915
Sepulveda Pass Open Space	457 N Fairfax Avenue, Los Angeles	SMMC	Regional Open Space	Open space	155.0	127
Sepulveda Basin Recreation Area	17017 Burbank Boulevard, Encino	USACE	Regional Open Space	Baseball field, soccer field, multi-purpose field, fitness zone, skate park, dog park, senior center	268.4	N1, N2 Staging Area: 0
Sherman Oaks Castle Park	4989 Sepulveda Boulevard, Sherman Oaks	City of Los Angeles	Amusement Park	Amusement Park	5.0	51
Teichman Family Magnolia Park	15365 Magnolia Boulevard, Sherman Oaks	City of Los Angeles	Local Park	Basketball court	3.9	569
Westwood Gardens Park	1246 Glendon Avenue, Los Angeles	City of Los Angeles	Local Park	Open space	0.3	1,053
Westwood Park	1350 Sepulveda Boulevard, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, multipurpose field, playground, pool, gym	26.7	0
Woodley Avenue Park	6350 Woodley Avenue, Encino	USACE	Regional Recreation Park	Fitness zone, picnic shelter, playgrounds	119.8	1,185 N3 Staging Area: 550
Total					1,022	

Source: LA County Planning, 2024a

^aSize (acres) refers to the full size of the resource, not the acreage within the RSA.

^bA distance of “0 feet” from the alternative indicates that the alternative would cross underground through the resource.

SMMC = Santa Monica Mountains Conservancy

USACE = U.S. Army Corps of Engineers

Notes:

1. The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

2. Facility Type is a categorizing based on the Los Angeles County Department of Regional Planning and City of Los Angeles, and includes the following types:
- Amusement Park: Family entertainment, managed by the City of Los Angeles.
 - Botanical Garden: Public garden.
 - Local Park: Designed to serve residents of all ages in several surrounding neighborhoods and may include facilities such as a community building, multipurpose fields, hard court areas, parking, maintenance service areas, and play areas.
 - Natural Area: A place that has a unique value that is scenic, historic, geologic, ecological, or educational. Natural areas are maintained in a natural state to preserve their wilderness, native ecosystems, and their processes.
 - Regional Recreation Park: Regional parks are typically greater than 100 acres in size and have a service radius of 25 miles or more. They include unique areas such as lakes, wetlands, auditoriums, water bodies, and campgrounds, in addition to the active recreational facilities offered in community and community regional parks.

Table 9-7. Alternative 5: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations

Stations	Parks and Recreational Facilities
Metro E Line Expo/Sepulveda	Exposition Corridor Bike Path
Santa Monica Boulevard	<ul style="list-style-type: none"> • Felicia Mahood Multipurpose Center • Westwood Park • Westwood Park Bike Path
Wilshire Boulevard/Metro D Line	<ul style="list-style-type: none"> • Mildred E. Mathias Botanical Garden • Westwood Park • Westwood Gardens Park • Westwood Park Bike Path
UCLA Gateway Plaza	<ul style="list-style-type: none"> • Mildred E. Mathias Botanical Garden • Various UCLA bike lanes/routes
Ventura Boulevard/Sepulveda Boulevard	None
Metro G Line Sepulveda	<ul style="list-style-type: none"> • Delano Park • Sepulveda Basin Wildlife Reserve • Woodley Avenue Park • Metro G Line Bike Path
Sherman Way	None
Van Nuys Metrolink	Andres and Maria Cardenas Recreation Center

Source: LA County Planning, 2024a; SCAG, 2024a; U.S. Department of Homeland Security Geospatial Management Office, 2020

Note: Only Class 1 Bike Path and “Various UCLA bike lanes/route” are included in this table. Class II Bike Lanes and Class III Bike Routes are not included in this table.

9.2.2 Bicycle Facilities

The existing bicycle facilities in the Alternative 5 RSA consists of a network of approximately 20 miles of Class I, Class II, and Class III bicycle facilities, including approximately 3 miles of Class I bicycle facilities, approximately 8 miles of Class II bicycle facilities, and approximately 8 miles of Class III bicycle facilities. There are no Class IV bicycle facilities within the Alternative 5 RSA.

Table 9-8 lists the bicycle facilities within the Alternative 5 RSA. Figure 9-9 and Figure 9-10 show the locations of these facilities. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* (Metro, 2025a) for additional information regarding active transportation facilities.

Table 9-8. Alternative 5: Bicycle Facilities within the Resource Study Area

Bicycle Facilities	Length (miles)	Location	Distance from Alternative 5 (feet) ^a
<i>Class I — Bike Paths</i>	2.7	—	—
Exposition Corridor Bikeway	0.9	Along Metro E Line	0
Metro G Line Bikeway	1.0	Along Metro G Line Busway	0
Westwood Park Bike Path	0.8	Westwood Park	45
<i>Class II — Bike Lanes</i>	8.1	<i>Various paths</i>	—
<i>Class III — Bike Routes</i>	8.8	<i>Various paths</i>	—
Total	19.6	—	—

Source: SCAG, 2024b; HTA, 2024

^aA distance of “0 feet” from the alternative indicates that the alternative would either cross over the resource or be underground through the resource.

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

— = not applicable

9.2.3 Recreational Hiking Trails

There are no hiking trails identified within the Alternative 5 RSA.

9.3 Impact Evaluation

9.3.1 Impact REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Or

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?

9.3.1.1 Operational Impacts

Alternative 5 would provide a new mode of transportation, accessibility, and connectivity in the surrounding communities. As a transportation infrastructure project that does not include housing, Alternative 5 would not directly generate permanent residences or increase the existing residential population of the surrounding communities that would increase the use of existing parks and recreational facilities or result in substantial adverse physical impacts associated with the provision of new or physically altered parks or recreational facilities. Instead, accessibility to nearby parks and recreational facilities located within 0.5-mile of proposed Alternative 5 stations listed in Table 9-6 and Table 9-7 would be improved by having nearby transit stations. Alternative 5 would also help achieve

Metro's *First/Last Mile Guidelines* (Metro, 2021b) objectives to facilitate multimodal transportation and connectivity for pedestrians and cyclists, provide connectivity to the station areas and surrounding communities, and enhance the existing active transportation corridors for the cities.

The Alternative 5 guideway would be situated in a below-ground tunnel where the alignment would cross Westwood Park and Los Angeles Riverfront Greenway (Table 9-6). Alternative 5 would cross under Class I bike paths Exposition Corridor Bikeway and the Metro G Line Bikeway and would be adjacent to the Westwood Park Bike Path (Table 9-8).

No permanent acquisition of parkland or recreational facilities would be required under Alternative 5.

Alternative 5 would enhance bicycle and pedestrian access in the immediate station areas for improved bicycle-to-transit connections through bike parking and connections to existing nearby bicycle facilities, as proposed in Metro's *Transit to Parks Strategic Plan* (Metro, 2019b). At some locations along the alignment, sidewalks would be widened or replaced where needed to accommodate the aerial guideway and station infrastructure. Alternative 5 would maintain adequate sidewalk widths at station locations and along the aerial alignment. Additional enhancements, including crosswalk and Americans with Disabilities Act–compliant sidewalk improvements, would further improve pedestrian circulation and non-motorized access to transit stations.

Table 9-7 lists the 11 recreational or trail facilities located within 0.5-mile of one or more Alternative 5 stations. Based on their proximity to Alternative 5 stations, it is anticipated that a modest increase in the use of these facilities would occur. Each of these facilities have existing operations and maintenance requirements that are not anticipated to be affected by Alternative 5 operations. The communities within the RSA are all well served by existing state, regional, and local recreation facilities, and while a modest increase in use of these facilities is anticipated, Alternative 5 is not anticipated to increase the use of existing parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Occasional large community events may also increase the use of parks, recreational facilities, and bicycle facilities in which recreational users may originate beyond the surrounding communities. However, these park community events would be similar to those that are currently held in the Alternative 5 RSA, and Alternative 5 would not alter the operations or frequency of these locally held community events. Similar to existing conditions, the departments and public entities that maintain the facilities would provide services and resources to serve the attendees of these events. As a transportation infrastructure project, Alternative 5 may provide residents of the surrounding communities who choose not to drive an alternative means of accessing locally held community events. During such events, the use of parks, recreational facilities, and bikeways may potentially increase. However, the increased use would be occasional and specific to the community event. Thus, Alternative 5 would provide improved connections to such community events and would not directly accelerate or result in a substantial deterioration of existing parks, recreational facilities, and bicycle facilities.

For these reasons, Alternative 5 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and would not result in substantial adverse physical impacts associated with the provision, or the need, for new or physically altered parks. Impacts would be less than significant.

9.3.1.2 Construction Impacts

Construction of Alternative 5 would be temporary and would not generate permanent residences that would increase the use of existing parks and recreational facilities resulting in accelerated physical

deterioration of the facilities or require the expansion of existing recreational facilities. While construction workers may utilize nearby parks and recreational facilities during lunchtime breaks, such use would be temporary and nominal.

Construction of Alternative 5 would require temporary street detours at proposed underground stations during cut-and-cover activities. Street detours would be concentrated at areas surrounding proposed underground station boxes, which would require cut-and-cover construction. Street detours would disrupt bicycle and pedestrian circulation. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* for more information related to construction traffic and access. (Metro, 2025a). The underground guideway would be constructed using a TBM, and therefore, would not disrupt bicycle facilities. Therefore, construction-related impacts to parks and recreational facilities would be less than significant.

9.3.1.3 Maintenance and Storage Facility

The proposed MSF site is currently developed as a materials storage site owned by LADWP and an auto storage lot. The proposed MSF would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bicycle facilities or increase the need for new recreational facilities in the surrounding communities. The MSF site would be a support facility for Alternative 5 and would provide maintenance and storage services and would not provide improved access to parks, recreational facilities, and bicycle facilities that may result in increased use.

No parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the proposed MSF. The nearest parkland is the Andres and Maria Cardenas Recreation Center, which is located approximately 0.65 mile northwest of the proposed MSF site. The proposed MSF would not affect on-site or street parking used by visitors to the Andres and Maria Cardenas Recreation Center.

MSF construction activities would be temporary and would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bike facilities in the surrounding communities. Therefore, impacts to parklands associated with the proposed MSF would be less than significant.

9.3.2 Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

9.3.2.1 Operational Impacts

Alternative 5 is a transportation infrastructure project that would provide new transit options to the surrounding community. Alternative 5 would not include construction of recreational facilities or require expansion of existing parkland, and recreational and bicycle facilities that might have an adverse physical effect on the environment.

As previously described in Section 9.3.1.1, bicycle facilities would be largely maintained along the Alternative 5 alignment and would not preclude any planned bicycle facilities nor alter any existing bicycle facilities at station areas. Therefore, impacts would be less than significant.

9.3.2.2 Construction Impacts

Construction of Alternative 5 would be temporary and would not include the construction of recreational facilities or require the expansion of existing recreational facilities. Therefore, no impacts would occur.

9.3.2.3 Maintenance and Storage Facility

The proposed MSF site is currently developed as a materials storage site owned by LADWP and an auto storage lot. MSF site construction activities would not include construction of recreational facilities or require the expansion of existing recreational facilities.

As discussed in Section 9.3.1.3, no parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the MSF. The MSF would not affect on-site or street parking used by visitors to Andres and Maria Cardenas Recreation Center. Therefore, impacts to parks and recreational facilities associated with the MSF would be less than significant.

9.4 Mitigation Measures

9.4.1 Operational Impacts

No mitigation measures are required.

9.4.2 Construction Impacts

No mitigation measures are required.

9.4.3 Impacts After Mitigation

No mitigation measures are required; impacts are less than significant.

10 ALTERNATIVE 6

10.1 Alternative Description

Alternative 6 is a heavy rail transit (HRT) system with an underground track configuration. This alternative would provide transfers to five high-frequency fixed guideway transit and commuter rail lines, including the Los Angeles County Metropolitan Transportation Authority's (Metro) E, Metro D, and Metro G Lines, East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 12.9 miles.

The seven underground HRT stations would be as follows:

1. Metro E Line Expo/Bundy Station (underground)
2. Santa Monica Boulevard Station (underground)
3. Wilshire Boulevard/Metro D Line Station (underground)
4. UCLA Gateway Plaza Station (underground)
5. Ventura Boulevard/Van Nuys Boulevard Station (underground)
6. Metro G Line Van Nuys Station (underground)
7. Van Nuys Metrolink Station (underground)

10.1.1 Operating Characteristics

10.1.1.1 Alignment

As shown on Figure 10-1, from its southern terminus station at the Metro E Line Expo/Bundy Station, the alignment of Alternative 6 would run underground through the Westside of Los Angeles (Westside), the Santa Monica Mountains, and the San Fernando Valley (Valley) to the alignment's northern terminus adjacent to the Van Nuys Metrolink/Amtrak Station.

The proposed southern terminus station would be located beneath the Bundy Drive and Olympic Boulevard intersection. Tail tracks for vehicle storage would extend underground south of the station along Bundy Drive for approximately 1,500 feet, terminating just north of Pearl Street. The alignment would continue north beneath Bundy Drive before turning to the east near Iowa Avenue to run beneath Santa Monica Boulevard. The Santa Monica Boulevard Station would be located between Barrington Avenue and Federal Avenue. After leaving the Santa Monica Boulevard Station, the alignment would turn to the northeast and pass under Interstate 405 (I-405) before reaching the Wilshire Boulevard/Metro D Line Station beneath the Metro D Line Westwood/UCLA Station, which is currently under construction as part of the Metro D Line Extension Project. From there, the underground alignment would curve slightly to the northeast and continue beneath Westwood Boulevard before reaching the UCLA Gateway Plaza Station.

Figure 10-1. Alternative 6: Alignment



Source: HTA, 2024

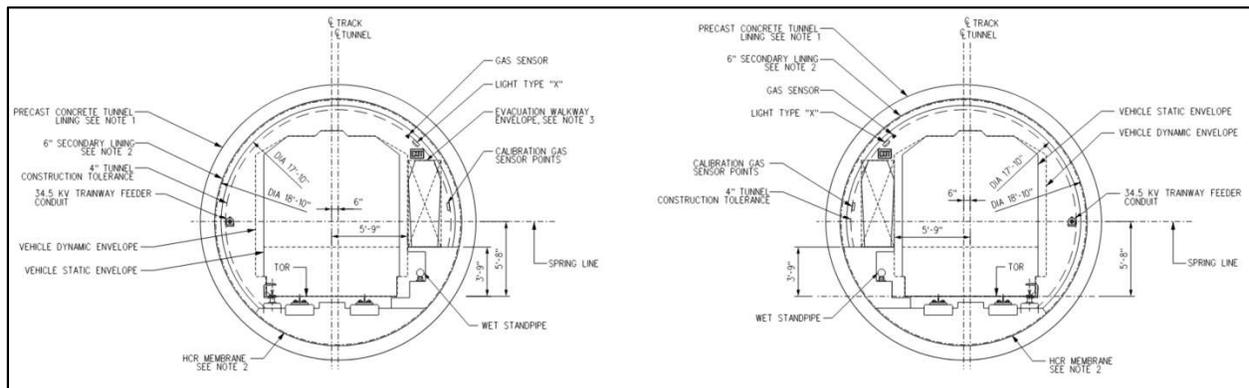
After leaving the UCLA Gateway Plaza Station, the alignment would continue to the north and travel under the Santa Monica Mountains. While still under the mountains, the alignment would shift slightly to the west to travel under the City of Los Angeles Department of Water and Power (LADWP) Stone Canyon Reservoir property to facilitate placement of a ventilation shaft on that property east of the reservoir. The alignment would then continue to the northeast to align with Van Nuys Boulevard at Ventura Boulevard as it enters the San Fernando Valley. The Ventura Boulevard Station would be beneath Van Nuys Boulevard at Moorpark Street. The alignment would then continue under Van Nuys

Boulevard before reaching the Metro G Line Van Nuys Station just south of Oxnard Street. North of the Metro G Line Van Nuys Station, the alignment would continue under Van Nuys Boulevard until reaching Sherman Way, where it would shift slightly to the east and run parallel to Van Nuys Boulevard before entering the Van Nuys Metrolink Station. The Van Nuys Metrolink Station would serve as the northern terminus station and would be located between Saticoy Street and Keswick Street. North of the station, a yard lead would turn sharply to the southeast and transition to an at-grade configuration and continue to the proposed maintenance and storage facility (MSF) east of the Van Nuys Metrolink Station.

10.1.1.2 Guideway Characteristics

The alignment of Alternative 6 would be underground using Metro’s standard twin-bore tunnel design. Figure 9-2 shows a typical cross-section of the underground guideway. Cross-passages would be constructed at regular intervals in accordance with Metro Rail Design Criteria (MRDC). Each of the tunnels would have a diameter of 19 feet (not including the thickness of wall). Each tunnel would include an emergency walkway that measures a minimum of 2.5 feet wide for evacuation.

Figure 10-2. Typical Underground Guideway Cross-Section



Source: HTA, 2024

10.1.1.3 Vehicle Technology

Alternative 6 would utilize driver-operated steel-wheel HRT trains, as used on the Metro B and D Lines, with planned peak headways of 4 minutes and off-peak-period headways ranging from 8 to 20 minutes. Trains would consist of four or six cars and are expected to consist of six cars during the peak period. The HRT vehicle would have a maximum operating speed of 67 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations. Train cars would be 10.3 feet wide with three double doors on each side. Each car would be approximately 75 feet long with capacity for 133 passengers. Trains would be powered by a third rail.

10.1.1.4 Stations

Alternative 6 would include seven underground stations with station platforms measuring 450 feet long. The southern terminus underground station would be adjacent to the existing Metro E Line Expo/Bundy Station, and the northern terminus underground station would be located south of the existing Van Nuys Metrolink/Amtrak Station. Except for the Wilshire Boulevard/Metro D Line, UCLA Gateway Plaza, and Metro G Line Van Nuys Stations, all stations would have a 30-foot-wide center platform. The Wilshire/Metro D Line Station would have a 32-foot-wide platform to accommodate the anticipated passenger transfer volumes, and the UCLA Gateway Plaza Station would have a 28-foot-wide platform because of the width constraint between the existing buildings. At the Metro G Line Van Nuys Station,

the track separation would increase significantly in order to straddle the future East San Fernando Valley Light Rail Transit Line Station piles. The platform width at this station would increase to 58 feet.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Bundy Station

- This underground station would be located under Bundy Drive at Olympic Boulevard.
- Station entrances would be located on either side of Bundy Drive between the Metro E Line and Olympic Boulevard, as well as on the northeast corner of Bundy Drive and Mississippi Avenue.
- At the existing Metro E Line Expo/Bundy Station, escalators from the plaza to the platform level would be added to improve inter-station transfers.
- An 80-space parking lot would be constructed east of Bundy Drive and north of Mississippi Avenue. Passengers would also be able to park at the existing Metro E Line Expo/Bundy Station parking facility, which provides 217 parking spaces.

Santa Monica Boulevard Station

- This underground station would be located under Santa Monica Boulevard between Barrington Avenue and Federal Avenue.
- Station entrances would be located on the southwest corner of Santa Monica Boulevard and Barrington Avenue and on the southeast corner of Santa Monica Boulevard and Federal Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This underground station would be located under Gayley Avenue between Wilshire Boulevard and Lindbrook Drive.
- A station entrance would be provided on the northwest corner of Midvale Avenue and Ashton Avenue. Passengers would also be able to use the Metro D Line Westwood/UCLA Station entrances to access the station platform.
- Direct internal station transfers to the Metro D Line would be provided at the south end of the station.
- No dedicated station parking would be provided at this station.

UCLA Gateway Plaza Station

- This underground station would be located underneath Gateway Plaza on the University of California, Los Angeles (UCLA) campus.
- Station entrances would be provided on the north side of Gateway Plaza, north of the Luskin Conference Center, and on the east side of Westwood Boulevard across from Strathmore Place.
- No dedicated station parking would be provided at this station.

Ventura Boulevard/Van Nuys Boulevard Station

- This underground station would be located under Van Nuys Boulevard at Moorpark Street.
- The station entrance would be located on the northwest corner of Van Nuys Boulevard and Ventura Boulevard.
- Two parking lots with a total of 185 parking spaces would be provided on the west side of Van Nuys Boulevard between Ventura Boulevard and Moorpark Street.

Metro G Line Van Nuys Station

- This underground station would be located under Van Nuys Boulevard south of Oxnard Street.
- The station entrance would be located on the southeast corner of Van Nuys Boulevard and Oxnard Street.
- Passengers would be able to park at the existing Metro G Line Van Nuys Station parking facility, which provides 307 parking spaces. No additional automobile parking would be provided at the proposed station.

Van Nuys Metrolink Station

- This underground station would be located immediately east of Van Nuys Boulevard between Saticoy Street and Keswick Street.
- Station entrances would be located on the northeast corner of Van Nuys Boulevard and Saticoy Street and on the east side of Van Nuys Boulevard just south of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor.
- Existing Metrolink Station parking would be reconfigured, maintaining approximately the same number of spaces. Metrolink parking would not be available to Metro transit riders.

10.1.1.5 Station-to-Station Travel Times

Table 10-1 presents the station-to-station distance and travel times for Alternative 6. The travel times include both run time and dwell time. Dwell time is 30 seconds for stations anticipated to have higher passenger volumes and 20 seconds for other stations. Northbound and southbound travel times vary slightly because of grade differentials and operational considerations at end-of-line stations.

Table 10-1. Alternative 6: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
<i>Metro E Line Station</i>					20
Metro E Line	Santa Monica Boulevard	1.1	111	121	—
<i>Santa Monica Boulevard Station</i>					20
Santa Monica Boulevard	Wilshire/Metro D Line	1.3	103	108	—
<i>Wilshire/Metro D Line Station</i>					30
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	69	71	—
<i>UCLA Gateway Plaza Station</i>					30
UCLA Gateway Plaza	Ventura Boulevard	5.9	358	358	—
<i>Ventura Boulevard Station</i>					20
Ventura Boulevard	Metro G Line	1.8	135	131	—

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
<i>Metro G Line Station</i>					30
Metro G Line	Van Nuys Metrolink	2.1	211	164	—
<i>Van Nuys Metrolink Station</i>					30

Source: HTA, 2024

— = no data

10.1.1.6 Special Trackwork

Alternative 6 would include seven double crossovers within the revenue service alignment, enabling trains to cross over to the parallel track with terminal stations having an additional double crossover beyond the end of the platform.

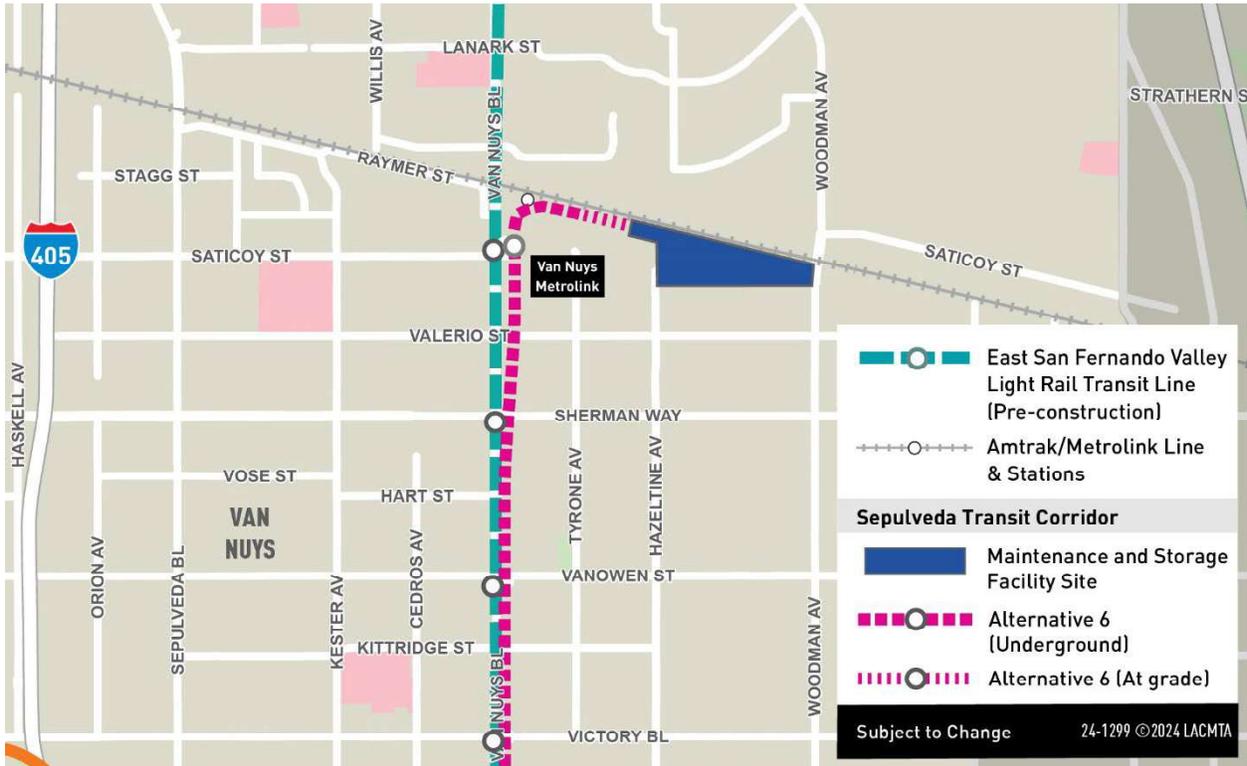
10.1.1.7 Maintenance and Storage Facility

The MSF for Alternative 6 would be located east of the Van Nuys Metrolink Station and would encompass approximately 41 acres. The MSF would be designed to accommodate 94 vehicles and would be bounded by single-family residences to the south, the LOSSAN rail corridor to the north, Woodman Avenue to the east, and Hazeltine Avenue and industrial manufacturing enterprises to the west. Heavy rail trains would transition from underground to an at-grade configuration near the MSF, the northwest corner of the site. Trains would then travel southeast to maintenance facilities and storage tracks.

The site would include the following facilities:

- Two entrance gates with guard shacks
- Maintenance facility building
- Maintenance-of-way facility
- Storage tracks
- Carwash
- Cleaning platform
- Administrative offices
- Pedestrian bridge connecting the administrative offices to employee parking
- Two traction power substations (TPSS)

Figure 10-3 shows the location of the MSF for Alternative 6.

Figure 10-3. Alternative 6: Maintenance and Storage Facility Site


Source: HTA, 2024

10.1.1.8 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. Twenty-two TPSS facilities would be located along the alignment and would be spaced approximately 1 mile apart except within the Santa Monica Mountains. Each at-grade TPSS along the alignment would be approximately 5,000 square feet. Table 10-2 lists the TPSS locations for Alternative 6.

Figure 10-4 shows the TPSS locations along the Alternative 6 alignment.

Table 10-2. Alternative 6: Traction Power Substation Locations

TPSS No.	TPSS Location Description	Configuration
1 and 2	TPSSs 1 and 2 would be located immediately north of the Bundy Drive and Mississippi Avenue intersection.	Underground (within station)
3 and 4	TPSSs 3 and 4 would be located east of the Santa Monica Boulevard and Stoner Avenue intersection.	Underground (within station)
5 and 6	TPSSs 5 and 6 would be located southeast of the Kinross Avenue and Gayley Avenue intersection.	Underground (within station)
7 and 8	TPSSs 7 and 8 would be located at the north end of the UCLA Gateway Plaza Station.	Underground (within station)
9 and 10	TPSSs 9 and 10 would be located east of Stone Canyon Reservoir on LADWP property.	At-grade
11 and 12	TPSSs 11 and 12 would be located at the Van Nuys Boulevard and Ventura Boulevard intersection.	Underground (within station)

TPSS No.	TPSS Location Description	Configuration
13 and 14	TPSSs 13 and 14 would be located immediately south of Magnolia Boulevard and west of Van Nuys Boulevard.	At-grade
15 and 16	TPSSs 15 and 16 would be located along Van Nuys Boulevard between Emelita Street and Califa Street.	Underground (within station)
17 and 18	TPSSs 17 and 18 would be located east of Van Nuys Boulevard and immediately north of Vanowen Street.	At-grade
19 and 20	TPSSs 19 and 20 would be located east of Van Nuys Boulevard between Saticoy Street and Keswick Street.	Underground (within station)
21 and 22	TPSSs 21 and 22 would be located south of the Metrolink tracks and east of Hazeltine Avenue.	At-grade (within MSF)

Source: HTA, 2024

Figure 10-4. Alternative 6: Traction Power Substation Locations



Source: HTA, 2024

10.1.1.9 Roadway Configuration Changes

In addition to the access road described in the following section, Alternative 6 would require reconstruction of roadways and sidewalks near stations.

10.1.1.10 Ventilation Facilities

Tunnel ventilation for Alternative 6 would be similar to existing Metro ventilation systems for light and heavy rail underground subways. In case of emergency, smoke would be directed away from trains and extracted through the use of emergency ventilation fans installed at underground stations and crossover locations adjacent to the stations. In addition, a mid-mountain facility located on LADWP property east of Stone Canyon Reservoir in the Santa Monica Mountains would include a ventilation shaft for the extraction of air, along with two TPSSs. An access road from the Stone Canyon Reservoir access road would be constructed to the location of the shaft, requiring grading of the hillside along its route.

10.1.1.11 Fire/Life Safety – Emergency Egress

Each tunnel would include an emergency walkway that measures a minimum of 2.5 feet wide for evacuation. Cross-passages would be provided at regular intervals to connect the two tunnels to allow for safe egress to a point of safety (typically at a station) during an emergency. Access to tunnel segments for first responders would be through stations.

10.1.2 Construction Activities

Temporary construction activities for Alternative 6 would include construction of ancillary facilities, as well as guideway and station construction and construction staging and laydown areas, which would be co-located with future MSF and station locations. Construction of the transit facilities through substantial completion is expected to have a duration of 7½ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

For the guideway, twin-bore tunnels would be constructed using two tunnel boring machines (TBM). The tunnel alignment would be constructed over three segments—including the Westside, Santa Monica Mountains, and Valley—using a different pair of TBMs for each segment. For the Westside segment, the TBMs would be launched from the Metro E Line Station and retrieved at the UCLA Gateway Plaza Station. For the Santa Monica Mountains segment, the TBMs would operate from the Ventura Boulevard Station in a southerly direction for retrieval from UCLA Gateway Plaza Station. In the Valley, TBMs would be launched from the Van Nuys Metrolink Station and retrieved at the Ventura Boulevard Station.

The distance from the surface to the top of the tunnels would vary from approximately 50 feet to 130 feet in the Westside, between 120 feet and 730 feet in the Santa Monica Mountains, and between 40 feet and 75 feet in the Valley.

Construction work zones would also be co-located with future MSF and station locations. All work zones would comprise the permanent facility footprint with additional temporary construction easements from adjoining properties. In addition to permanent facility locations, TBM launch at the Metro E Line Station would require the closure of Interstate 10 (I-10) westbound off-ramps at Bundy Drive for the duration of the Sepulveda Transit Corridor Project (Project) construction.

Alternative 6 would include seven underground stations. All stations would be constructed using a “cut-and-cover” method whereby the station structure would be constructed within a trench excavated from the surface that is covered by a temporary deck and backfilled during the later stages of station construction. Traffic and pedestrian detours would be necessary during underground station excavation until decking is in place and the appropriate safety measures have been taken to resume cross traffic. In addition, portions of the Wilshire Boulevard/Metro D Line Station crossing underneath the Metro D Line Westwood/UCLA Station and underneath a mixed-use building at the north end of the station would be

constructed using sequential excavation method as it would not be possible to excavate the station from the surface.

Construction of the MSF site would begin with demolition of existing structures, followed by earthwork and grading. Building foundations and structures would be constructed, followed by yard improvements and trackwork, including paving, parking lots, walkways, fencing, landscaping, lighting, and security systems. Finally, building mechanical, electrical, and plumbing systems, finishes, and equipment would be installed. The MSF site would also be used as a staging site.

Station and MSF sites would be used for construction staging areas. A construction staging area, shown on Figure 10-5, would also be located off Stone Canyon Road northeast of the Upper Stone Canyon Reservoir. In addition, temporary construction easements outside of the station and MSF footprints would be required along Bundy Drive, Santa Monica Boulevard, Wilshire Boulevard, and Van Nuys Boulevard. The westbound to southbound loop off-ramp of the I-10 interchange at Bundy Drive would also be used as a staging area and would require extended ramp closure. Construction staging areas would provide the necessary space for the following activities:

- Contractors' equipment
- Receiving deliveries
- Testing of soils for minerals or hazards
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment)

The size of proposed construction staging areas for each station would depend on the level of work to be performed for a specific station and considerations for tunneling, such as TBM launch or extraction. Staging areas required for TBM launching would include areas for launch and access shafts, cranes, material and equipment, precast concrete segmental liner storage, truck wash areas, mechanical and electrical shops, temporary services, temporary power, ventilation, cooling tower, plants, temporary construction driveways, storage for spoils, and space for field offices.

Alternative 6 would also include several ancillary facilities and structures, including TPSS structures, a deep vent shaft structure at Stone Canyon Reservoir, as well as additional vent shafts at stations and crossovers. TPSSs would be co-located with MSF and station locations, except for two TPSSs at the Stone Canyon Reservoir vent shaft and four along Van Nuys Boulevard in the Valley. The Stone Canyon Reservoir vent shaft would be constructed using a vertical shaft sinking machine that uses mechanized shaft sinking equipment to bore a vertical hole down into the ground. Operation of the machine would be controlled and monitored from the surface. The ventilation shaft and two TPSSs in the Santa Monica Mountains would require an access road within the LADWP property at Stone Canyon Reservoir. Construction of the access road would require grading east of the reservoir. Construction of all mid-mountain facilities would take place within the footprint shown on Figure 10-5.

Additional vent shafts would be located at each station with one potential intermediate vent shaft where stations are spaced apart. These vent shafts would be constructed using the typical cut-and-cover method, with lateral bracing as the excavation proceeds. During station construction, the shafts would likely be used for construction crew, material, and equipment access.

10.2 Existing Conditions

The Alternative 6 Resource Study Area (RSA) is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries. The Alternative 6 RSA consists of portions of the City of Los Angeles, City of Santa Monica, and unincorporated Los Angeles County community of West Los Angeles, which contains the Department of Veterans Affairs complex. Affected communities identified within the City of Los Angeles include the following:

- Bel Air
- Beverly Crest
- Brentwood
- Encino
- Lake Balboa
- Mar Vista
- North Hills
- North Hollywood
- North Sherman Oaks
- Palms
- Panorama City
- Sherman Oaks
- Sun Valley
- Van Nuys
- West Los Angeles
- Westwood

Figure 10-6 and Figure 10-7 show the parks and recreational facilities within the Alternative 6 RSA, including bicycle facilities.

Figure 10-6. Alternative 6: Parks and Recreational Facilities within the Resource Study Area (from Panorama City to Brentwood)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

Figure 10-7. Alternative 6: Parks and Recreational Facilities within the Resource Study Area (from Brentwood to Mar Vista)



Source: HTA, 2024

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

10.2.1 Parks and Recreational Facilities

The Alternative 6 RSA includes 18 parks and recreational facilities, including 9 parks, 8 nature/wildlife preserves and regional open spaces, and 1 botanical garden, all of which comprise approximately 384 acres. The parks and recreational facilities identified in the Alternative 6 RSA are all located in the City of Los Angeles and City of Santa Monica. Several agencies own and manage the park and recreational facilities identified, including the U.S. Army Corps of Engineers, Los Angeles County, City of Los Angeles, City of Santa Monica, Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority, UCLA, and the Mountains Restoration Trust.

Table 10-3 lists the parks and recreational facilities within the Alternative 6 RSA and respective distances from the Alternative 6 alignment or station area. Table 10-4 lists the parks and recreational facilities within 0.5-mile radius of proposed Alternative 6 stations. Figure 10-6 and Figure 10-7 show the locations of these facilities.

Table 10-3. Alternative 6: Parks and Recreational Facilities within the Resource Study Area

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 6 (feet) ^b
Andres and Maria Cardenas Recreation Center	14740 Blythe Street, Panorama City	City of Los Angeles	Local Park	Skate park, splash pad, community center	0.7	2,280
Beverly Glen East Open Space	Los Angeles	MRCA	Natural Areas	Open space	0.4	214
Beverly Glen Park	2448 Angelo Drive, Los Angeles	MRCA	Natural Areas	Open space	95.5	453
Ohio and Bundy Triangle	Santa Monica Boulevard; South Bundy Drive; and Ohio Avenue, Los Angeles	City of Los Angeles	Regional Open Space	Open space	0.2	547
Deervale-Stone Canyon Park	14700 Deervale Place, Sherman Oaks	City of Los Angeles	Regional Open Space	Open space	79.4	802
Felicia Mahood Multipurpose Center	11338 Santa Monica Boulevard, Los Angeles	City of Los Angeles	Local Park	Senior Center	4.3	140
Fossil Ridge Park	Sherman Oaks	SMMC	Regional Open Space	Open space	57.7	1,249
Ishihara Park	2909 Exposition Boulevard, Santa Monica	City of Santa Monica	Local Park	Picnic shelter, playground	2.4	2,230
Mountains Restoration Trust Parkland	3815 Old Topanga Canyon Road, Topanga	Mountains Restoration Trust	Regional Open Space	Open space	18.1	682
Mildred E. Mathia Botanical Garden	707 Tiverton Drive, Los Angeles	University of California, Los Angeles	Botanical Garden	Botanical garden	8.2	1,049

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 6 (feet) ^b
Multipurpose Senior Citizens Center	6514 Sylmar Avenue, Van Nuys	City of Los Angeles	Local Park	Senior center	1.4	695
Oak Forest Canyon Natural Area	Sherman Oaks	MRCA	Regional Open Space	Open space	1.1	1,256
Oak Forest West	Sherman Oaks	SMMC	Regional Open Space	Open space	9.7	997
Stoner Recreation Center	1835 Stoner Avenue, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, multipurpose field, skate park, playground, pool, gym, community center	8.7	1,027
Van Nuys Recreation Center	14301 Vanowen Street, Van Nuys	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, playground, community center	3.9	1,018
Van Nuys Sherman Oaks Recreation Center	14201 Huston Street, Sherman Oaks	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, fitness zone, picnic shelter, playground, pool, community center, senior center	65.5	44
Westwood Gardens Park	1246 Glendon Avenue, Los Angeles	City of Los Angeles	Local Park	Open space	0.3	1,074

Name	Address	Agency	Facility Type	Amenities	Size (acres) ^a	Distance from Alternative 6 (feet) ^b
Westwood Park	1350 Sepulveda Boulevard, Los Angeles	City of Los Angeles	Local Park	Tennis court, basketball court, baseball field, soccer field, multipurpose field, playground, pool, gym	26.7	0
Total					384	—

Source: LA County Planning, 2024a

^aSize (acres) refers to the full size of the resource, not the acreage within the RSA.

^bA distance of “0 feet” from the alternative indicates that the alternative would cross underground through the resource.

MRCA = Mountains Recreation and Conservation Authority

SMMC = Santa Monica Mountains Conservancy

USACE = U.S. Army Corps of Engineers

— = not applicable

Notes:

- The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.
- Facility Type is a categorizing based on the Los Angeles County Department of Regional Planning and City of Los Angeles, and includes the following types:
 - Amusement Park: Family entertainment, managed by the City of Los Angeles.
 - Botanical Garden: Public garden.
 - Local Park: Designed to serve residents of all ages in several surrounding neighborhoods and may include facilities such as a community building, multipurpose fields, hard court areas, parking, maintenance service areas, and play areas.
 - Natural Area: A place that has a unique value that is scenic, historic, geologic, ecological, or educational. Natural areas are maintained in a natural state to preserve their wilderness, native ecosystems, and their processes.
 - Regional Recreation Park: Regional parks are typically greater than 100 acres in size and have a service radius of 25 miles or more. They include unique areas such as lakes, wetlands, auditoriums, water bodies, and campgrounds, in addition to the active recreational facilities offered in community and community regional parks.

Table 10-4. Alternative 6: Parks and Recreational Facilities within 0.5-Mile Radius of Proposed Stations

Stations	Parks and Recreational Facilities
Metro E Line Expo/Bundy	<ul style="list-style-type: none"> Ishihara Park Stoner Recreation Center Exposition Corridor Bike Path
Santa Monica Boulevard	<ul style="list-style-type: none"> Felicia Mahood Multipurpose Center Ohio Bundy Triangle Stoner Recreation Center
Wilshire Boulevard/Metro D Line	<ul style="list-style-type: none"> Mildred E. Mathias Botanical Garden Westwood Park Westwood Gardens Park Westwood Park Bike Path
UCLA Gateway Plaza	<ul style="list-style-type: none"> Mildred E. Mathias Botanical Garden Various UCLA bike lanes/routes
Ventura Boulevard/Van Nuys Boulevard	None
Metro G Line Van Nuys	Metro G Line Bike Path
Van Nuys Metrolink	Andres and Maria Cardenas Recreation Center

Source: LA County Planning, 2024a; SCAG, 2024a; U.S. Department of Homeland Security Geospatial Management Office, 2020

Note: Only Class 1 Bike Paths and "Various UCLA bike lanes/routes" are included in this table. Class II Bike Lanes and Class III Bike Routes are not included in this table.

10.2.2 Bicycle Facilities

The existing bicycle facilities in the Alternative 6 RSA consists of a network of approximately 20 miles of Class I, Class II, and Class III bicycle facilities, including approximately 3 miles of Class I bicycle facilities, approximately 7 miles of Class II bicycle facilities, and approximately 10 miles of Class III bicycle facilities. There are no Class IV bicycle facilities within the Alternative 6 RSA.

Table 10-5 lists the bicycle facilities within the Alternative 6 RSA. Figure 10-6 and Figure 10-7 show the locations of these facilities. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* (Metro, 2025a) for additional information regarding active transportation facilities.

Table 10-5. Alternative 6: Bicycle Facilities within the Resource Study Area

Bicycle Facilities	Length (miles)	Location	Distance from Alternative 6 (feet) ^a
<i>Class I - Bike Paths</i>	2.8	—	—
Exposition Corridor Bikeway	1.0	Along Metro E Line	0
G Line Bikeway	1.0	Along Metro G Line Busway	0
Westwood Park Bike Path	0.8	Westwood Park	76
<i>Class II - Bike Lanes</i>	6.7	<i>Various paths</i>	—
<i>Class III - Bike Routes</i>	10.0	<i>Various paths</i>	—
Total	19.5	—	—

Source: SCAG, 2024b; HTA, 2024

^aA distance of "0 feet" from the alternative indicates that the alternative would either cross over the resource or be underground through the resource.

Note: The RSA for parks and recreational facilities is defined as the area 0.25-miles on both sides of the alignment, a 0.5-mile radius from stations, and 0.25-miles from MSF site boundaries.

— = not applicable

10.2.3 Recreational Hiking Trails

There are no hiking trails identified within the Alternative 6 RSA.

10.3 Impact Evaluation

10.3.1 Impact REC-1: Would the project to increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Or

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks?

10.3.1.1 Operational Impacts

Alternative 6 would provide a new mode of transportation, accessibility, and connectivity in the surrounding communities. As a transportation infrastructure project that does not include housing, Alternative 6 would not directly generate permanent residences or increase the existing residential population of the surrounding communities that would increase the use of existing parks and recreational facilities or result in substantial adverse physical impacts associated with the provision of new or physically altered parks or recreational facilities. Instead, accessibility to nearby parks and recreational facilities located within 0.5-mile of proposed Alternative 6 stations listed in Table 10-3 and Table 10-4 would be improved by having nearby transit stations. Alternative 6 would also help achieve Metro's *First/Last Mile Guidelines* (Metro, 2021b) objectives to facilitate multimodal transportation and connectivity for pedestrians and cyclists, provide connectivity to the station areas and surrounding communities, and enhance the existing active transportation corridors for the cities.

The Alternative 6 guideway would be situated in a below-ground tunnel where the alignment would cross Westwood Park and operate adjacent to (within 50 feet) the Van Nuys Sherman Oaks Recreation Center (Table 10-3). Alternative 6 would cross under Class I bike paths Exposition Corridor Bikeway and G Line Bikeway and would be adjacent to the Westwood Park Bike Path (Table 10-5).

No permanent acquisition of parkland or recreational facilities would be required under Alternative 6.

Table 10-4 lists the 12 recreational or trail facilities located within 0.5 mile of one or more Alternative 6 stations. Based on their proximity to Alternative 6 stations, it is anticipated that a modest increase in the use of these facilities would occur. Each of these facilities have existing operations and maintenance requirements that are not anticipated to be affected by Alternative 6 operations. The communities within the RSA are all well served by existing state, regional, and local recreation facilities, and while a modest increase in use of these facilities is anticipated, Alternative 6 is not anticipated to increase the use of existing parks and recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Occasional large community events may also increase the use of parks, recreational facilities, and bicycle facilities in which recreational users may originate beyond the surrounding communities. However, these park community events would be similar to those that are currently held in the Alternative 6 RSA, and Alternative 6 would not alter the operations or frequency of these locally held community events. Similar to existing conditions, the departments and public entities that maintain the facilities would provide services and resources to serve the attendees of these events. As a transportation infrastructure project, Alternative 6 may provide residents of the surrounding communities who choose not to drive an alternative means of accessing locally held community events. During such events, the use of parks, recreational facilities, and bikeways may potentially increase. However, the increased use would be occasional and specific to the community event. Thus, Alternative 6 would provide improved connections to such community events and would not directly accelerate or result in a substantial deterioration of existing parks, recreational facilities, and bicycle facilities.

For these reasons, Alternative 6 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Alternative 6 would not result in substantial adverse physical impacts associated with the provision, or the need for, new or physically altered parks. Impacts would be less than significant.

10.3.1.2 Construction Impacts

Construction of Alternative 6 would be temporary and would not generate permanent residences that would increase the use of existing parks and recreational facilities, resulting in accelerated physical deterioration of the facilities or require the expansion of existing recreational facilities. While construction workers may utilize nearby parks and recreational facilities during lunchtime breaks, such use would be temporary and nominal.

Construction of Alternative 6 would require temporary street detours at proposed underground stations during cut-and-cover activities. Street detours would be concentrated at areas surrounding proposed underground station boxes, which would require cut-and-cover construction. Street detours would disrupt bicycle and pedestrian circulation. Refer to the *Sepulveda Transit Corridor Project Transportation Technical Report* for more information related to construction traffic and access (Metro, 2025a). Therefore, construction-related impacts to parks and recreational facilities would be less than significant.

10.3.1.3 Maintenance and Storage Facility

The proposed MSF site is currently developed as a materials storage site owned by LADWP and an auto storage lot. The proposed MSF would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bicycle facilities or increase the need for new recreational facilities in the surrounding communities. The MSF site would be a support facility for Alternative 6 and would provide maintenance and storage services and would not provide improved access to parks, recreational facilities, and bicycle facilities that may result in increased use.

No parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the MSF. The nearest parkland is the Andres and Maria Cardenas Recreation Center located approximately 0.65 mile northwest of the MSF site. The proposed MSF would not affect on-site or street parking used by visitors to the Andres and Maria Cardenas Recreation Center.

MSF construction activities would be temporary and would not create new residential populations that would directly increase the use of existing parks, recreational facilities, and bike facilities in the

surrounding communities. Therefore, impacts to parklands associated with the proposed MSF would be less than significant.

10.3.2 Impact REC-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

10.3.2.1 Operational Impacts

Alternative 6 is a transportation infrastructure project that would provide new transit options to the surrounding community. Alternative 6 would not include construction of recreational facilities or require expansion of existing parkland, and recreational and bicycle facilities that might have an adverse physical effect on the environment.

As previously described in Section 10.3.1.1, bicycle facilities would largely be maintained along the Alternative 6 alignment and would not preclude any planned bicycle facilities nor alter any existing bicycle facilities at station areas. Therefore, impacts would be less than significant.

10.3.2.2 Construction Impacts

Construction of Alternative 6 would be temporary and would not include the construction of recreational facilities or require the expansion of existing recreational facilities. Therefore, no impacts would occur.

10.3.2.3 Maintenance and Storage Facility

The proposed MSF site is currently developed as a materials storage site owned by LADWP and an auto storage lot. MSF site construction activities would not include construction of recreational facilities or require the expansion of existing recreational facilities.

As discussed in Section 10.3.1.3, no parkland or bicycle facilities are located on or adjacent to the proposed site nor are recreational facilities proposed as part of the MSF. The MSF would not affect on-site or street parking used by visitors to the Andres and Maria Cardenas Recreation Center. Therefore, impacts to parks and recreational facilities associated with the MSF would be less than significant.

10.4 Mitigation Measures

10.4.1 Operational Impacts

No mitigation measures are required.

10.4.2 Construction Impacts

No mitigation measures are required.

10.4.3 Impacts After Mitigation

No mitigation measures are required; impacts are less than significant.

11 PREPARERS OF THE TECHNICAL REPORT

Name	Title	Experience (Years)
Terry A. Hayes, AICP	Chief Executive Officer	48
Kevin Ferrer	Senior Planner	21
Allyson Dong	Senior Planner	17
Peter Feldman	Senior Planner	14
Henry Haprov	GIS Specialist	4

12 REFERENCES

- City of Los Angeles. 2001. *City of Los Angeles General Plan*. Updates 2001, 2003, and 2013.
- City of Los Angeles. 2024. Los Angeles GeoHub. geohub.lacity.org. Accessed April 9, 2024.
- City of Los Angeles Department of Recreation and Parks (LADRP). 2009. *2009 Citywide Community Needs Assessment*.
- City of Los Angeles Department of City Planning (DCP). 1992. *Mulholland Scenic Parkway Specific Plan*. May 13.
- City of Los Angeles Department of City Planning (DCP). 1996a. *Bel Air-Beverly Crest Community Plan*. November 6.
- City of Los Angeles Department of City Planning (DCP). 1996b. *North Hollywood-Valley Village Community Plan*. May 14.
- City of Los Angeles Department of City Planning (DCP). 1997. *Palms – Mar Vista-Del Rey Community Plan*. September 16.
- City of Los Angeles Department of City Planning (DCP). 1998a. *Brentwood-Pacific Palisades Community Plan*. June 17.
- City of Los Angeles Department of City Planning (DCP). 1998b. *Encino-Tarzana Community Plan*. December 16.
- City of Los Angeles Department of City Planning (DCP). 1998c. *Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan*. May 13.
- City of Los Angeles Department of City Planning (DCP). 1998d. *Van Nuys-North Sherman Oaks Community Plan*. September 9.
- City of Los Angeles Department of City Planning (DCP). 1999a. *Mission Hills-Panorama City-North Hills Community Plan*. June 9.
- City of Los Angeles Department of City Planning (DCP). 1999b. *Reseda-West Van Nuys Community Plan*. November 17.
- City of Los Angeles Department of City Planning (DCP). 1999c. *Sun Valley-La Tuna Canyon Community Plan*. August 13.
- City of Los Angeles Department of City Planning (DCP). 1999d. *West Los Angeles Community Plan*. July 27.
- City of Los Angeles Department of City Planning (DCP). 1999e. *Westwood Community Plan*. July 27.
- City of Los Angeles Department of City Planning (DCP). 2001a. *The Citywide General Plan Framework*. Adopted December 1996. Re-adopted August 8, 2001.
- City of Los Angeles Department of City Planning (DCP). 2011. *2010 Bicycle Plan: A Component of the City of Los Angeles Transportation Element*. March 1.
- City of Los Angeles Mayor’s Office. 2019. Mayor Eric Garcetti. *L.A.’s Green New Deal, Sustainable City pLAN*.
- City of Santa Monica. 1975. *City of Santa Monica General Plan, “Conservation Element.”* September 10.

- City of Santa Monica. 1997. *City of Santa Monica General Plan*, “Open Space Element.” March.
- City of Santa Monica. 2010. *City of Santa Monica General Plan*, “Land Use and Circulation Element.” Adopted July 6. Amended May 2023.
- City of Santa Monica. 2017. *City of Santa Monica General Plan*. santamonica.gov/planning-resources#:~:text=Find%20a%20Property's%20Zoning%20District.%20Check. Accessed April 9, 2024.
- Federal Transit Administration (FTA). 2015. *General Acquisition and Relocation Information Brochure*. transit.dot.gov/sites/fta.dot.gov/files/FTA_Trifold.pdf.
- Los Angeles County. 2012. *County of Los Angeles Bicycle Master Plan*. March.
- Los Angeles County. 2019. *OurCounty: Los Angeles Countywide Sustainability Plan*. Adopted August 6.
- Los Angeles County Department of Parks and Recreation. 2016. *Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment*. June. lacountyparkneeds.org/final-report/. Accessed April 9, 2024.
- Los Angeles County Department of Parks and Recreation. 2022. *Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment Plus*. December 6. lacountyparkneeds.org/pnaplus-home/. Accessed April 9, 2024.
- Los Angeles County Department of Public Works (LADPW). 2022. *LA River Master Plan*. June.
- Los Angeles County Department of Regional Planning (LA County Planning). 2015. *Los Angeles County General Plan 2035*. Adopted October 6. Updated July 2022.
- Los Angeles County Department of Regional Planning (LA County Planning). 2024a. *Countywide Parks and Open Space. County of Los Angeles Enterprise GIS*. Published May 2022. Updated April 2024.
- Los Angeles County Department of Regional Planning (LA County Planning). 2024b. *Los Angeles County 2045 Climate Action Plan*. Adopted June 2024.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2008. *Measure R Expenditure Plan*. [July.metro.net/about/measure-r/](https://www.metro.net/about/measure-r/). Amended July 2021. Accessed April 9, 2024.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2016. *Proposed Ordinance #16-01 Measure M Los Angeles County Traffic Improvement Plan. Attachment A, Measure M Expenditure Plan*. libraryarchives.metro.net/dpqt/MeasureM/201609-proposed-ordinance-16-01-county-traffic%20improvement-plan.pdf.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2019a. *Sepulveda Transit Corridor Project Final Feasibility Report*.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2019b. *Transit to Parks Strategic Plan*. Adopted May 1.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2021a. *Sepulveda Transit Corridor Project Notice of Preparation*. November 30, 2021. ceqanet.opr.ca.gov/2021110432. Accessed October 4, 2024.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2021b. *First/Last Mile Guidelines*. Adopted May 2021.

- Los Angeles County Metropolitan Transportation Authority (Metro). 2024a. *Sepulveda Transit Corridor Project Alternative 2 Update*. July 3.
boardarchives.metro.net/BoardBox/2024/240703_Sepulveda_Transit_Corridor_Alternative_2_Update.pdf.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2025a. *Sepulveda Transit Corridor Project Transportation Technical Report*.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2025b. *Sepulveda Transit Corridor Project Land Use and Development Technical Report*.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2025c. *Sepulveda Transit Corridor Project Real Estate and Acquisitions Technical Report*.
- National Park Service (NPS). 2002. *Santa Monica Mountains National Recreation Area General Management Plan and Environmental Impact Statement*. July.
[nps.gov/samo/learn/management/gmp-general-management-plan-documents.htm#:~:text=For%20Download:%20General%20Management%20Plan%20and](https://www.nps.gov/samo/learn/management/gmp-general-management-plan-documents.htm#:~:text=For%20Download:%20General%20Management%20Plan%20and). Accessed April 9, 2024.
- Santa Monica Mountains Comprehensive Planning Commission. 1979. *Santa Monica Mountains Comprehensive Plan*. February.
- Santa Monica Mountains Conservancy (SMMC). 2021. *Eastern Santa Monica Mountains Natural Resources Protection Plan*. December 13.
- Southern California Association of Governments (SCAG). 2020a. *Connect SoCal, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*. September 3.
https://scaq.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176
- Southern California Association of Governments (SCAG). 2020b. *Connect SoCal, 2020-2045 RTP/SCS Final Connect SoCal Project List Technical Report*.
https://scaq.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_project-list_0.pdf?1606000813
- Southern California Association of Governments (SCAG). 2021a. *Final 2021 Federal Transportation Improvement Program Technical Appendix*. Volume II of III. March.
- Southern California Association of Governments (SCAG). 2021b. *Final 2021 Federal Transportation Improvement Program*. Consistency Amendment #21-05.
https://aecom.sharepoint.com/sites/extranet-SepulvedaTransitCorridorDEIR/5_DEIS_and_DEIR_Preparation_Circulation_Review_a/5.24_Administrative_DEIR_DEIS_Preparation/5.24.07_2nd_Draft_Admin_DEIR/2nd_Administrative_DEIR_-_Submittal_to_Metro/Appendix_P_-_Parklands_Technical_Report/scaq.ca.gov/sites/main/files/file-attachments/21-05-la-finalcomparison.pdf?1624490178
- Southern California Association of Governments (SCAG). 2024a. *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy*. April 4.
<https://scaq.ca.gov/sites/main/files/file-attachments/23-2987-connect-social-2024-final-complete-040424.pdf?1714175547>
- Southern California Association of Governments (SCAG). 2024b. *Bike Routes - SCAG Region*. SCAG GIS Open Data Portal. March 2016. Data updated January 2022.

U.S. Army Corps of Engineers. 2011. *Sepulveda Dam Basin Master Plan and Draft Environmental Assessment*. August.

U.S. Department of Homeland Security Geospatial Management Office. 2020. Homeland Infrastructure Foundation-Level Data (HIFLD). hifld-geoplatform.hub.arcgis.com/pages/hifld-open. Accessed April 9, 2024.