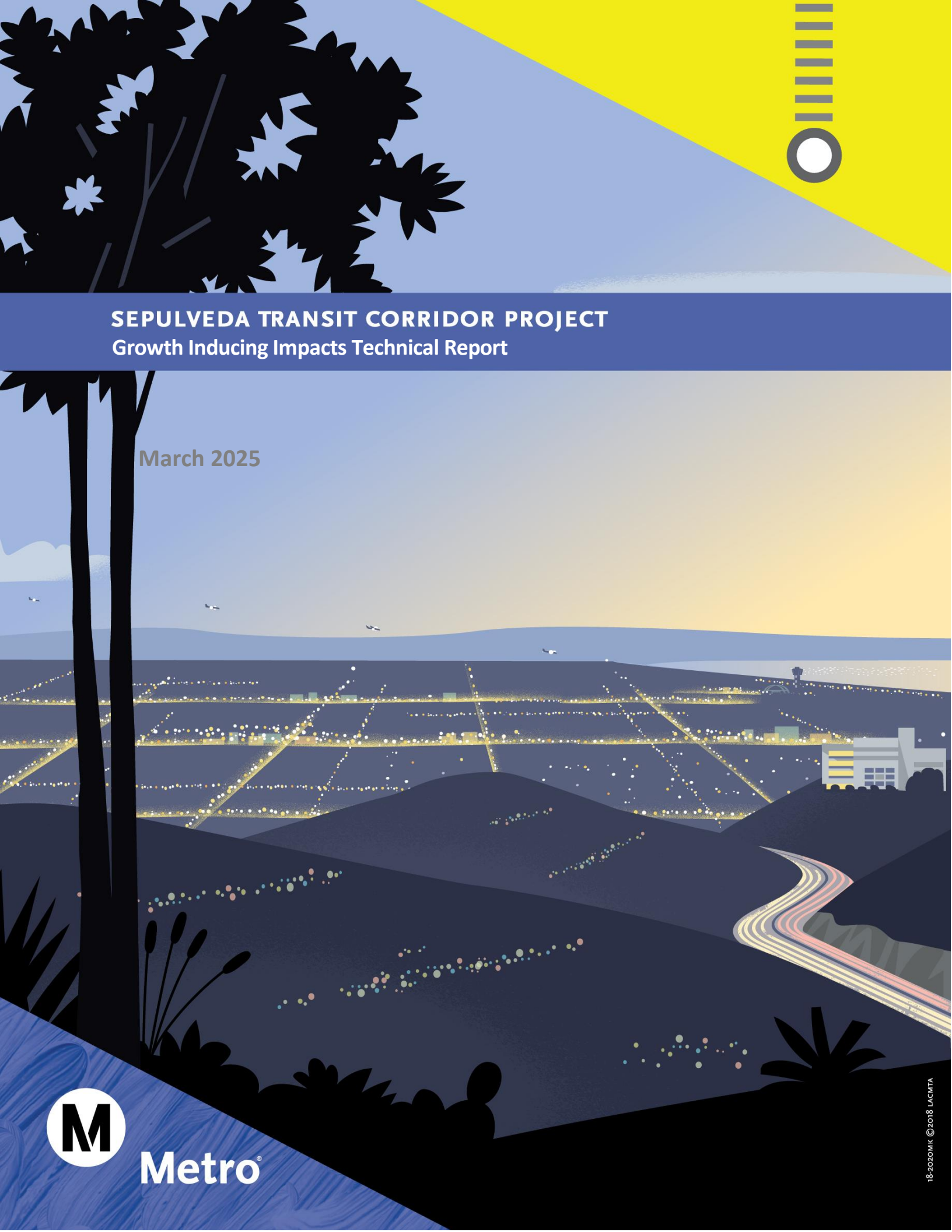
Appendix L. Growth Inducing Impacts Technical Report

SEPULVEDA TRANSIT CORRIDOR PROJECT

Growth Inducing Impacts Technical Report

March 2025



Metro®

SEPULVEDA TRANSIT CORRIDOR PROJECT

Contract No. AE67085000

Growth Inducing Impacts Technical Report

Task 5.24.11

Prepared for:

Metro
Los Angeles County
Metropolitan Transportation Authority

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Abbreviations and Acronyms

AB	Assembly Bill
ABC	Accelerated Bridge Construction
ACS	American Community Survey
APM	Automated People Mover
APTA	American Public Transportation Association
BRT	bus rapid transit
CEQA	California Environmental Quality Act
CIDH	cast-in-drilled hole
DCP	City of Los Angeles Department of City Planning
EIR	Environmental Impact Report
FTIP	Federal Transportation Improvement Program
HCD	California Department of Housing and Community Development
HRT	heavy rail transit
HTA	HTA Partners
HQTS	High Quality Transit Stop
I-10	Interstate 10
I-405	Interstate 405
LADWP	City of Los Angeles Department of Water and Power
LASRE	LA SkyRail Express
LA	Los Angeles
LA Times	Los Angeles Times
LAX	Los Angeles International Airport
LEHD	Longitudinal Employer-Household Dynamics
LODES	LEHD Origin-Destination Employment Statistics
LOSSAN	Los Angeles-San Diego-San Luis Obispo
LRT	Locally Preferred Alternative
LRTP	Long Range Transportation Plan
Metro	Los Angeles County Metropolitan Transportation Authority
MOW	maintenance-of-way
MRT	monorail transit
MSF	maintenance and storage facility
NMA	Neighborhood Mobility Areas
NOP	Notice of Preparation
PDA	Priority Development Area

PRC	Public Resources Code
Project	Sepulveda Transit Corridor Project
RHNA	Regional Housing Needs Assessment
RSA	Resource Study Area
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SCORE	Southern California Optimized Rail Expansion
SCS	Sustainable Communities Strategy
SOI	Spheres of Influence
STCP	Sepulveda Transit Corridor Partners
TAZ	Transportation Analysis Zone
TBM	tunnel boring machine
TDM	Transportation Demand Management
TNP	Transit Neighborhood Plan
TOC	transit-oriented communities
TOD	transit-oriented development
TPA	Transit Priority Area
TPSS	traction power substation
UCLA	University of California, Los Angeles
U.S.	United States
US-101	United States Highway 101
VA	U.S. Department of Veterans Affairs
Valley	San Fernando Valley

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. 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, 2019), 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 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, 2021). 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, 2024). Detailed descriptions of the No Project Alternative and the five remaining "build" alternatives are presented in Sections 5 through 10.

1.3 Project Study Area

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, 2019). 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 growth inducing impacts. It describes existing historical and projected growth 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

There are no federal regulations or policies pertaining to potential growth inducing impacts.

2.2 State

2.2.1 California Environmental Quality Act

Section 15126.2(e) of the California Environmental Quality Act (CEQA) Guidelines requires Lead Agencies to consider potential growth inducing impacts for new projects. Growth inducing impacts are characteristics of a project that could directly or indirectly foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Such projects include those that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant which allows the plant's service area to accommodate additional growth). In addition, increases in the population may tax existing community service facilities requiring construction of new facilities that could cause significant environmental effects. The CEQA Guidelines also state that it must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment. Generally, Section 15126.2(e) of the CEQA Guidelines consider a project to result in growth inducing effects if it would result in one of the following:

- The extension of growth-supporting infrastructure (sewer lines, water mains, roads, etc.) to an area currently undeveloped and/or lacking adequate infrastructure, thus removing an obstacle to growth; and/or
- The provision of housing or employment to an area currently undeveloped or lacking in adequate housing or employment.

2.2.2 Assembly Bill 1560

Passed in 2019, Assembly Bill (AB) 1560 amended the California Public Resources Code (PRC) in regard to environmental quality. AB 1560 revised the definition of "major transit stop" under Section 21064.3 of the PRC to include bus transit stations, as defined: "a site containing an existing rail or bus rapid transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Section 21099 (a)(7) of the PRC) defines Transit Priority Areas (TPA) as the area within a 0.5-mile radius of an existing or planned major transit stop.

2.3 Regional

2.3.1 Southern California Association of Governments Connect SoCal – The 2024-2050 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 goals are to build and maintain an integrated multimodal transportation network; develop, connect, and sustain communities that are livable and thriving; create a healthy region for the people of today and tomorrow; and support a sustainable, efficient, and productive regional economic environment that provides opportunities for all residents (SCAG, 2024a). SCAG uses land use tools to direct new growth toward Priority Development Areas (PDA), which include Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMA), Livable Corridors, and Spheres of Influence (SOI) (SCAG, 2024a). As a general principle, the more overlapping PDAs an area has, the more that growth within the area aligns with the goals of the 2024-2050 RTP/SCS. PDAs are based on both existing conditions and future planned infrastructure, and their boundaries are based on data available at the time of development of the 2024-2050 RTP/SCS (SCAG, 2024a). These elements of PDAs are defined as follows:

- **TPA:** Areas within 0.5 mile of an existing or planned major transit stop, as defined in Section 21099 (a)(7) of the PRC.
- **NMA**: Areas with a high number of intersections, low observed travel speed, high mix of uses, and high accessibility to “everyday” destinations. These are areas where Complete Streets and sustainability policies support and encourage replacing or reducing single- and multi-occupant automobile use with walking, bicycling, skateboarding, and slow-speed electric vehicles (such as e-bikes, scooters, senior mobility devices, and neighborhood electric vehicles).
- **Livable Corridors**: A strategy to increase residential and commercial density along key arterial roadways as well as transit improvements, active transportation improvements, and land use policies.
- **SOI**: A planning boundary outside of a local agency’s legal boundary (such as the city limit line) that designates the agency’s probable future boundary and service area.

These strategies are intended to realize more compact regional development to reduce travel distances, increase mobility options, improve workplace access, and conserve natural resources.

The *Project List Technical Report* (SCAG, 2024b) of the 2024-2050 RTP/SCS (SCAG, 2024a) includes the Sepulveda Transit Corridor Project (Project). PDAs include existing and planned major transit stops that have been approved would be implemented by Horizon Year 20250. However, while the Project is incorporated into the 2024-2050 RTP/SCS, because the Project has not been approved, the proposed stations are not considered planned major transit stops and are not included in the PDAs. Therefore, the PDAs are the same for the No Project Alternative and each of the project alternatives.

The *Demographics and Growth Forecast Technical Report* (SCAG, 2024c) of the 2024-2050 RTP/SCS includes the population, housing, and employment regional growth forecast for the jurisdictions within the SCAG region. The regional growth forecast is used as a key guide for developing regional plans and strategies mandated by federal and state governments such as the RTP/SCS, the Federal Transportation Improvement Program (FTIP), and the Regional Housing Needs Assessment (RHNA) (SCAG, 2021a). The regional growth forecast is used to estimate the population, housing, and employment growth projections for the Project Study Area.

2.3.2 Southern California Association of Governments Regional Housing Needs Assessment Allocation Plan

The *6th Cycle Regional Housing Needs Assessment Allocation Plan* (SCAG, 2021a) (RHNA) is mandated by the State Housing Law Program as part of the periodic process of updating the housing elements of local general plans (HCD, 2024). RHNA quantifies the housing allocation within each jurisdiction during specified planning periods. Communities use RHNA during land use planning, while prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment, and housing growth. RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs.

SCAG adopted the 6th Cycle RHNA (March 4, 2021) to cover the planning period from October 2021 through October 2029 (SCAG, 2021a). The RHNA allocation process occurs every eight years, or every other RTP/SCS cycle. The 6th Cycle RHNA allocation was adopted by SCAG's Regional Council in 2021 and relied on input data from Connect SoCal 2020 regional growth forecast. No RHNA allocation is being developed alongside Connect SoCal 2024 because the next RHNA cycle does not occur until 2029 (SCAG, 2024c).

2.3.3 Metro Transit-Oriented Communities Policy

In 2016, Los Angeles voters approved Measure M, which marked $120 billion in investment in the Metro transit system over the next 40 years, including for transit operations and maintenance and capital costs (Metro, 2016). Measure M includes an expenditure plan for major transportation projects, including the Project. To maximize the benefits of Measure M investments, Metro developed a Transit-Oriented Communities (TOC) Policy that includes policies and procedures to promote the development of TOCs (Metro, 2018). TOCs differ from transit-oriented development (TOD) in that a TOD is a specific building or development project that is fundamentally shaped by close proximity to transit. Goals of the TOC Policy include prioritizing the development and preservation of transit-adjacent affordable housing, protecting residents and businesses from displacement, and promoting sustained economic vitality. These goals provide a framework for other Metro plans and policies, including the First/Last Mile Guidelines, Vision 2028 Strategic Plan, the Equity Framework and Platform, the Active Transportation Strategic Plan, the TOC Implementation Plan, and the Metro Transfers Design Guide (Metro, 2018).

TOC Activities identified in the TOC Policy support, enable, and incentivize TOCs for transportation purposes. Within 0.5 mile of a High-Quality Transit Stop (HQTS) (an existing or environmentally cleared fixed-guideway transit station or the intersection of two buses with 15 minute headways, or fewer, at the peak) (Metro, 2018), eligible TOC Activities include the production, preservation, and protection of affordable housing; small business preservation, and neighborhood-serving Amenities. Because the Project has not been approved, the proposed stations are not considered existing or environmentally cleared HQTSs. Thus, on-going TOC activities within the Project Study Area are the same for the No Project Alternative and each of the project alternatives.

2.4 Local

Growth is regulated at the local government level by a combination of zoning and policy incentives set by the City of Los Angeles and the City of Santa Monica, which are within the Project Study Area. As discussed in the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* (Metro,

2025), these jurisdictions have established land use plans, general plans, and community plans that describe the desired use and intensity of use at full build-out. The following community plans are currently undergoing updates:

- Palms-Mar Vista-Del Rey
- West Los Angeles
- Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass
- Encino-Tarzana
- Reseda-West Van Nuys
- Van Nuys and North Sherman Oaks

The following community plans were last updated in 1998 and 1999:

- Westwood
- Brentwood-Pacific Palisades
- Bel Air-Beverly Crest
- Mission Hills, Panorama City, and North Hills

Other plans and policies may also factor into the jurisdiction's land use planning, such as policies to promote TOCs.

2.4.1 The County of Los Angeles

2.4.1.1 Transit-Oriented Districts Program

The County of Los Angeles Transit-Oriented Districts Program was developed to enable transit-supportive uses and infrastructure in unincorporated communities near existing and new transit facilities. The program is a component of the *Los Angeles County General Plan* (LA County Planning, 2024. The program was developed to update planning of unincorporated communities within a half-mile of existing and new transit facilities. A half-mile radius around each potential new transit station is used for a preliminary study area, which is then refined later as part of a separate Specific Plan effort. The goals of these Specific Plans are to 1) Increase walking, bicycling, and transit ridership and reduce vehicle miles traveled (VMT); 2) Facilitate compact, mixed-use development; 3) Increase economic activity; 4) Facilitate the public investment of infrastructure improvements; and 5) Streamline the environmental review process for future infill development projects (LA County Planning, 2019).

2.4.2 The City of Los Angeles

2.4.2.1 Transit-Oriented Communities Incentive Program

Passed by voters in November 2016, Measure JJJ amended the Los Angeles Municipal Code to create the TOC Incentive Program, which includes incentives to encourage the construction of affordable housing near major transit stops. Measure JJJ requires the Department of City Planning to create TOC Affordable Housing Incentive Program Guidelines (TOC Guidelines), which provide affordable housing incentives for all residential developments within 0.5 mile of a major transit stop. TOC incentives are further categorized into Tiers 1 (Low), 2 (Medium), 3 (High), and 4 (Regional), based on distance to major transit stops by transportation mode (DCP, 2023a). The TOC incentives would encourage the construction of affordable housing units within 0.5 mile of the Project's proposed stations.

2.4.3 The City of Santa Monica

2.4.3.1 Transportation Demand Management Ordinance

The City of Santa Monica's Transportation Demand Management (TDM) Ordinance requires developers to submit a Preliminary Developer TDM Plan for the following types of projects (City of Santa Monica, 2020):

- Non-residential projects 7,500 square feet or more
- Residential projects with 16 or more residential units
- Mixed-use projects with 16 or more residential units with any associated non-residential floor area or 7,500 square feet or more of non-residential floor area with any number of residential units

For projects that meet the previously mentioned criteria, the Preliminary Developer TDM Plan requires the developer to identify public transit stations within 0.5 mile of a project site. The TDM ordinance aims to proactively manage congestion, reduce automobile dependence, and enhance transportation choices within the city by applying the following measures:

- Improving the mobility and general efficiency of circulation and transportation systems by increasing reliance on public transit and focusing development in areas close to transit and employment.
- Promoting and increasing work-related transit use and level of access for residents, employees, customers, and visitors to minimize parking needs, manage congestion, improve transportation choices, and protect the quality of life in Santa Monica's neighborhoods and districts.
- Coordinating transportation system management, TDM, and transportation facility development strategies citywide and with other cities and counties in the region and through regional agencies.

The TDM ordinance would apply to projects within 0.5 mile of the Project's proposed stations which meet the previously mentioned criteria.

3 METHODOLOGY

3.1 Operations and Construction

3.1.1 General Background

Analysis of growth inducing impacts evaluates reasonably anticipated growth in comparison to the population, housing, and employment projections developed by a federally designated metropolitan planning organization, which is the Southern California Association of Governments (SCAG) for Los Angeles County. SCAG develops, refines, and maintains regional and local socioeconomic forecasting and allocation models. The socioeconomic estimates and projections are used for federal and state mandated long-range planning efforts, such as the SCAG *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (2024-2050 RTP/SCS) (SCAG, 2024a).

The SCAG regional growth forecast represents the most likely growth scenario for the southern California region in the future and takes into consideration recent and past trends, key technical assumptions, regional growth policies, and local plans and policies. In determining the projected growth for the region, SCAG incorporates population, housing, and employment estimates maintained by local jurisdictions and unincorporated communities in southern California. The regional forecast growth is estimated by SCAG at the regional and jurisdictional level and at the Transportation Analysis Zone (TAZ) level. The SCAG regional growth forecast is presented in the *Demographics and Growth Forecast Technical Report* (SCAG, 2024c) of the 2024-2050 RTP/SCS.

3.1.2 Definition of Growth Inducing Impacts Project Study Area

The Sepulveda Transit Corridor Project (Project) Study Area intersects or lies adjacent to the boundaries of the jurisdictions of the City of Los Angeles, the City of Santa Monica, and the unincorporated U.S. Department of Veterans Affairs in Sawtelle, Los Angeles (Sawtelle VA) community of Los Angeles County. The City of Santa Monica and Sawtelle VA community are considered affected communities. Additionally, affected communities identified within the City of Los Angeles include the following: North Hills, Panorama City, Sun Valley, Lake Balboa, Van Nuys, North Hollywood, Encino, North Sherman Oaks, Sherman Oaks, Brentwood, Bel Air, Beverly Crest, Westwood, West Los Angeles, Mar Vista, and Palms.

The growth inducing impacts analysis evaluates historical and projected growth pattens by analyzing the SCAG TAZs and U.S. Census Bureau census tracts that lie within the Resource Study Areas (RSA) for each alternative. The RSAs are considered the geographical areas of analysis for each alternative. For the No Project Alternative, the RSA encompasses the entire Project Study Area as described in Section 1.3 and the No Project Alternative analysis evaluates growth at the Affected Community level.[1] For Alternatives 1, 3, 4, 5, and 6, the RSA encompasses areas within 0.5 mile of each respective alternative's proposed stations (proposed station areas), and growth is evaluated at the proposed station area level based on the goals of the 2024-2050 RTP/SCS, the City of Los Angeles Transit Oriented Community (TOC) Incentive Program, and Metro's TOC Policy to prioritize growth within 0.5 mile of transit stations.[2]

[1] To most accurately determine growth at the Affected Community level for the No Project Alternative, the SCAG TAZs and census tracts whose centroid lies within the No Project Alternative RSA were selected for the analysis.

[2] To most accurately determine growth at the RSA level for Alternatives 1, 3, 4, 5, and 6, the analysis selected the SCAG TAZs and census tracts which intersect each proposed station's RSA.

3.1.3 Data Gathering

Generally, the U.S. Census Bureau surveys the U.S. population each decade and gathers population and housing statistics. In addition, the U.S. Census Bureau conducts the American Community Survey (ACS), which is a survey of a random sample of the U.S. population to provide annual estimates of demographic and socioeconomic characteristics. For the purpose of this report, the historical population and housing data presented in this analysis was obtained at the census-tract level for the historical year 2016 with ACS 5-Year Estimates released in 2017 (U.S. Census Bureau, 2017), and for the year 2021 with ACS 5-Year Estimates released in 2022 (U.S. Census Bureau, 2022a).

Historical employment estimates were obtained at the census-block level for years 2016 and 2021 using OntheMap, an online mapping and reporting application managed by the Longitudinal Employer-Household Dynamics (LEHD) program, which is part of the U.S. Census Bureau (U.S. Census Bureau, 2022b). While the ACS employment data estimates demonstrate where workers live within each census tract, OntheMap uses the LEHD Origin-Destination Employment Statistics (LODES) dataset to demonstrate where people work within each census block. The most current version of LODEs, Version 8, was enumerated by 2020 census blocks, and reflects data for year 2021.

Planning Horizon Year 2045 projected population, housing, and employment projections at the TAZ level are derived from the 2024-2050 RTP/SCS.[3] The growth forecast at the TAZ level is controlled to not exceed the maximum density of local general plans as set by each respective jurisdiction, except in the case of existing entitlements and development agreements. The growth forecast assumes that the 2024-2050 RTP/SCS, including all projects identified in the *Project List Technical Report* (SCAG, 2024b) of the 2024-2050 RPT/SCS (SCAG, 2024a), would be fully built out by Horizon Year 2045.

The RSAs for the alternatives were further analyzed based on a thorough review of local general plans, land use and zoning maps, and a desktop aerial survey of each community. On April 4, 2023, a windshield survey of the Project Study Area was conducted by one surveyor driving a personal vehicle to confirm the location of some planned and on-going developments identified within the RSAs for the alternatives.

To establish the PDAs, the 2024-2050 RTP/SCS identified all major transit stops, Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMA), Livable Corridors, and Spheres of Influence (SOI) within the SCAG region that would occur during full implementation of the plan by Horizon Year 2045. Those Priority Development Areas (PDA) that would intersect the Project Study Area are considered in this growth inducing impact analysis. The location of PDAs are the same for the No Project Alternative and Alternatives 1, 3, 4, 5, and 6.

Planned and on-going developments within the Project Study Area refer to new construction of the following:

- Capital projects
- Commercial properties and other facilities resulting in new employment
- Multi-family residences, including affordable housing developments
- Office properties for public entities

[3] The SCAG-derived growth forecast does not include a No Project Alternative scenario, but a portion of projected growth would still occur under the No Project Alternative.

- Changes in zoning that increase allowable density, thereby directly or indirectly resulting in population, housing, and/or employment growth within the Project Study Area

These projects were identified through the City of Los Angeles Planning Department, City of Santa Monica Community Development Department, and Los Angeles County Planning Department databases. Projects considered for this growth inducing impact analysis included the construction of new multi-family residential, mixed-use, and commercial developments that would directly increase population, housing, and employment. Renovations, expansions of existing structures, and the construction of single-family residences were not considered for this analysis. The construction of single-family homes is not included in this growth inducing impact analysis due to their marginal growth potential. Additionally, the land use planning strategies within the SCAG 2024-2050 RTP/SCS focus on the growth of multi-family development within PDAs.

3.1.4 Analysis

According to CEQA Guidelines, Section 15126.2(e) the growth inducing impact analysis evaluates whether a project or density increase could promote economic or population growth in the vicinity of the project or remove obstacles to population growth. Generally, growth inducement may occur if a project fosters economic or population growth or the construction of additional housing, either directly or indirectly, beyond planned growth. Additionally, projects considered to result in growth inducing effects include the provision and/or extension of housing, employment, or growth supporting infrastructure into undeveloped areas or areas lacking adequate infrastructure. Indirect or secondary effects are defined as effects caused by the project that occur later in time or farther in distance but are still reasonably foreseeable. The CEQA Guidelines state that growth in any area should not be assumed to be necessarily beneficial, detrimental, or of little significance to the environment. Projects which remove obstacles to growth may include projects which increase the capacity of a given jurisdiction to physically accommodate for new population, housing, or employment growth, resulting in environmental impacts. An example of such a project would be a major expansion of a wastewater treatment plant which allows the plant's service area to accommodate additional growth beyond current Regional Housing Needs Assessment (RHNA) housing allocations.

The SCAG regional growth forecast was used to identify trends in population, housing, and employment and to determine if the Project would result in direct or indirect unplanned growth beyond growth already anticipated for the SCAG region. The SCAG regional growth forecast for Connect SoCal 2020 informed the jurisdictional housing allocations in the *6th Cycle Regional Housing Needs Assessment (RHNA) Allocation Plan* (SCAG, 2021a). Updates to the SCAG growth projections in future versions of the RTP/SCS would result in a new RHNA cycle, which would then result in updates to the housing elements of local general plans, including potential updates to maximum density determinations. Therefore, the SCAG regional growth forecast would not exceed the maximum density of the housing elements of local general plans, except in the case of existing entitlements and development agreements. The growth inducing analysis compares the historical and projected population, housing, and employment growth rates to demonstrate growth patterns in the RSAs for the project alternatives. Generally, the projected growth estimates for the Project Study Area assume positive and tandem growth trends for population, housing, and employment, although this is not consistent with historical growth trends. The Project Study Area is highly developed, generally growing, and is anticipated to accommodate the Project.

The projected regional development pattern for the 2024-2050 RTP/SCS reflects the plan's growth inducing policies and strategies, including directing and incentivizing growth within PDAs to achieve more compact forms of regional development. Although PDAs identified in the 2024-2050 RTP/SCS

account for only 8.2 percent of the SCAG region's total land area, with implementation of SCAG's recommended growth strategies, the PDAs are anticipated to accommodate 66 percent of projected housing growth and 54 percent of projected employment growth between 2024 and 2050. Thus, PDAs are places where compact development with access to high-quality transit services can be actualized (SCAG, 2024a). Stations constructed outside of an existing PDA may introduce a major transit stop to areas not previously designated for growth by the 2024-2050 RTP/SCS, which could indirectly generate unplanned transit oriented development (TOD) within 0.5 mile of the proposed station, thereby increasing the land use density of the RSAs for the project alternatives beyond the maximum density of the housing elements of local general plans.

The 2024-2050 RTP/SCS projected growth estimates also incorporate the transportation improvement projects of the adopted 2025 Federal Transportation Improvement Program (FTIP). The most current FTIP was adopted by SCAG's Regional Council on September 5, 2024 (SCAG, 2024d). The Project is not included in the 2025 FTIP projects list (SCAG, 2024e). However, the Project is included within the list of financially constrained projects in the 2024-2050 RTP/SCS *Project List Technical Report* as "Sepulveda Transit Corridor (Phase 2)" (RTP ID 1160001) (SCAG, 2024b). Transit and transportation projects, including the Project, are not considered to directly foster population, housing, or employment growth, but rather increase the capacity or improve the efficiency of the transportation and transit network and encourage projected population and economic growth in the greater SCAG region toward PDAs.

This analysis identifies the relevant planned and on-going developments within the RSAs for the project alternatives to demonstrate where planned growth and development is being actualized in the Project Study Area. The analysis compares the total planned and on-going developments within and outside of PDAs for each of the affected communities within the Project Study Area. Assuming that the growth strategies of the 2024-2050 RTP/SCS are currently being implemented throughout the SCAG region, it is anticipated that greater numbers of development projects would occur within PDAs than outside of them.

3.2 CEQA Thresholds of Significance

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

- Foster unplanned economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.
- Remove obstructions to population growth…[or] encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

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**Error! Reference source not found.** 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

[a]Alignment descriptions reflect the project definition as of the date of the Project's Notice of Preparation (Metro, 2021b).

[b]As 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.

[c]The 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

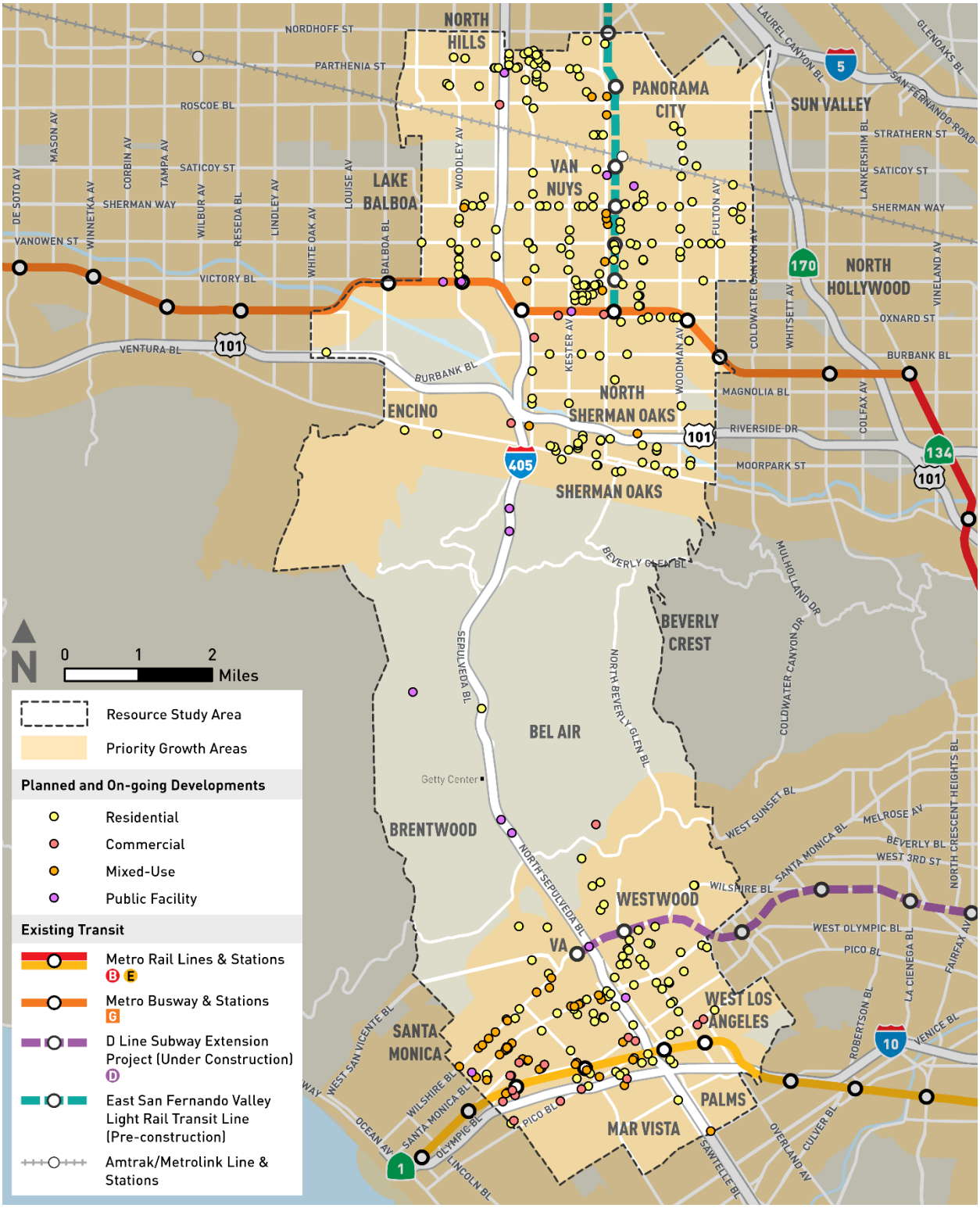
5.1.1 No Project Alternative Resource Study Area

The No Project Alternative Resource Study Area (RSA) would encompass the geometric centers (centroids) of the SCAG Transportation Analysis Zones (TAZ), U.S. Census Bureau census tracts, and U.S. Census Bureau census blocks that would lie within the Project Study Area as described in Section 1.3. The No Project Alternative would encompass portions of the City of Los Angeles, the City of Santa Monica, and the unincorporated U.S. Department of Veterans Affairs in Sawtelle, Los Angeles (Sawtelle VA) community of Los Angeles County. Affected communities and neighborhoods identified within the City of Los Angeles include 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, and Westwood.

As discussed in Section 2.3.1, Priority Development Areas (PDA) are areas designated in the SCAG 2024-2050 RTP/SCS to accommodate concentrated housing, jobs, and transit development (SCAG, 2024a, 2024b). While PDAs are not limited to specific land uses, they are characterized by the location of major existing and planned transit stops and transit corridors, employment density, and residential to non-residential land use connections. The location of PDAs would be the same for the No Project Alternative and Alternatives 1, 3, 4, 5, and 6.

Figure 5-1 displays the No Project Alternative RSA and the PDAs.

Figure 5-1. Resource Study Area and Priority Development Areas



Source: DCP, 2023b; City of Santa Monica, 2023; SCAG, 2024b

As presented in Table 5-1, 64 percent of the No Project Alternative RSA is within a PDA, indicating that the majority of the land uses within the No Project Alternative RSA have been allocated by the 2024-2050 RTP/SCS to accommodate denser, more compact development. Within the No Project Alternative RSA, the affected communities of Mar Vista, North Hollywood, and Palms would be entirely within a PDA. The affected communities of Bel Air, Beverly Crest, and Brentwood have the lowest percentage of their land area within a PDA, therefore indicating that these affected communities would have the lowest capacity to accommodate planned growth within the No Project Alternative RSA, as designated by the 2024-2050 RTP/SCS.

Table 5-1. Existing Communities in the Resource Study Area[a]

Jurisdiction/Affected Community	Acreage within a PDA (%)	Acreage Outside a PDA (%)
Los Angeles County[b]		
Los Angeles County	63.7	36.3
City of Los Angeles[b]		
City of Los Angeles	62.0	38.0
City of Los Angeles Affected Communities[b]		
Bel Air	7.4	92.6
Beverly Crest	10.2	89.8
Brentwood	14.7	85.3
Encino	64.1	35.9
Lake Balboa	82.3	17.7
Mar Vista	100.0	0.0
North Hills	99.8	0.2
North Hollywood	100.0	0.0
North Sherman Oaks	92.3	7.7
Palms	100.0	0.0
Panorama City	87.4	12.6
Sawtelle VA	81.5	18.5
Sherman Oaks	51.8	48.2
Sun Valley	75.5	24.5
Van Nuys	98.7	1.3
West Los Angeles	96.3	3.7
Westwood	91.1	8.9
UCLA Campus[c]	91.9	8.1
City of Santa Monica[b]		
Santa Monica	99.9	0.1
Total[b]	**64.0**	**36.0**

Source: SCAG, 2024b

[a]The No Project Alternative Resource Study Area refers to Transportation Analysis Zones whose centroids would lie within the Project Study Area (Section 3.1.2).

[b]Data at the Los Angeles County and City of Los Angeles jurisdictional level is provided for regional comparison. The total summarizes the affected communities of the City of Los Angeles and the City of Santa Monica and does not include the Los Angeles County or City of Los Angeles jurisdiction level data.

[c]The University of California, Los Angeles (UCLA) campus would be entirely within the affected community of Westwood. The data for Westwood is therefore inclusive of the data for the UCLA campus.

5.1.2 Historical Growth

Measures of historical growth within the No Project Alternative RSA can be assessed through population, housing, and employment trends. Table 5-2 and Table 5-3 present the historical growth trends.

5.1.2.1 Population and Housing

Table 5-2 shows the population and housing growth trend from the year 2016 to 2021 for Los Angeles County and the City of Los Angeles. The table also includes the affected communities within the No Project Alternative RSA. Based on the U.S. Census Bureau estimates for 2016 and 2021, Los Angeles County experienced housing growth and population decline, a trend which is also reflected for the City of Los Angeles (U.S. Census Bureau, 2017, 2022a). Overall, the Project Study Area experienced annual housing growth and annual population decline. Within the No Project Alternative RSA, some of the affected communities experienced both annual population and housing growth. However, the general pattern across most of the affected communities reflects the broader trend of increasing housing availability and declining population numbers. These inconsistencies may be partially indicative of outward migration patterns which occurred due to the 2020 COVID-19 pandemic. In the first year of the pandemic, the population of LA County declined by 160,000, more than any other county in the nation (LA Times, 2022).

Among the affected communities, the UCLA campus experienced the greatest annual population growth (+3.76 percent) but also the greatest decline in annual housing growth (-1.84 percent), which may indicate that growing student enrollment numbers have outpaced the available housing on-campus. Sun Valley experienced the greatest annual population decline (-4.27 percent), and Sawtelle VA community experienced the greatest annual housing growth (+3.43 percent).

Table 5-2. Historical Population and Housing Growth in the Resource Study Area

Jurisdiction/Affected Community	2016-2021 Annual Growth Within RSA[a] (%)	
	Population	Housing
Los Angeles County[b]		
Los Angeles County	-0.07	+0.50
City of Los Angeles[b]		
City of Los Angeles	-1.69	-0.80
City of Los Angeles Affected Communities[b]		
Bel Air	-3.50	-1.37
Beverly Crest	-0.49	-1.02
Brentwood	+0.38	+0.15
Encino	+1.88	+0.63
Lake Balboa	+3.49	+1.56
Mar Vista	-0.75	+0.24
North Hills	+0.82	+0.81
North Hollywood	-0.69	+1.36
North Sherman Oaks	-0.95	+0.11
Palms	-1.80	+0.07
Panorama City	-1.24	+0.81
Sawtelle VA	+1.16	+3.43
Sherman Oaks	-0.28	+0.69
Sun Valley	-4.27	+0.13
Van Nuys	-0.18	+0.84

Jurisdiction/Affected Community	2016-2021 Annual Growth Within RSA[a] (%)	
	Population	Housing
West Los Angeles	-1.85	-0.17
Westwood	+0.06	+0.47
UCLA Campus[c]	+3.76	-1.84
City of Santa Monica		
City of Santa Monica	-0.10	+0.53
Total[b]	**-0.43**	**+0.44**

Source: U.S. Census Bureau, 2017, 2022a

[a]The No Project Alternative Resource Study Area refers to Transportation Analysis Zones whose centroids would lie within the Project Study Area (Section 3.1.2).

[b]Data at the Los Angeles County and City of Los Angeles jurisdictional level is provided for regional comparison. The total summarizes the affected communities of the City of Los Angeles and the City of Santa Monica and does not include the Los Angeles County or City of Los Angeles jurisdiction level data.

[c]The UCLA campus would be entirely within the affected community of Westwood. The data for Westwood is therefore inclusive of the data for the UCLA campus.

5.1.2.2 Employment

Table 5-3 shows the employment growth trend from the year 2016 to 2021 for Los Angeles County and the City of Los Angeles. The table also includes the affected communities within the No Project Alternative RSA. Based on U.S. Census Bureau OntheMap data, the affected communities in the No Project Alternative RSA experienced a mix of gains and losses in employment growth between 2016 and 2021.

Overall, the No Project Alternative RSA experienced annual employment growth (+1.22 percent). The affected community of the UCLA campus (+8.07 percent) saw the greatest annual employment growth rates, while Mar Vista (-8.91 percent) experienced the greatest annual employment decline.

Table 5-3. Historical Employment Growth in the Resource Study Area

Jurisdiction/Affected Community	2016-2021 Annual Growth Within RSA[a] (%)
Los Angeles County[b]	
Los Angeles County[b]	-+0.53
City of Los Angeles[b]	
City of Los Angeles	+0.33
City of Los Angeles Affected Communities[b]	
Bel Air	-3.67
Beverly Crest	+1.05
Brentwood	-3.71
Encino	+0.03
Lake Balboa	+0.30
Mar Vista	-8.91
North Hills	-2.30
North Hollywood	+1.81
North Sherman Oaks	-1.49
Palms	+2.80
Panorama City	+0.41
Sawtelle VA	+1.52
Sherman Oaks	+0.15

Jurisdiction/Affected Community	2016-2021 Annual Growth Within RSA[a] (%)
Sun Valley	-5.60
Van Nuys	-0.62
West Los Angeles	+3.83
Westwood	+5.01
UCLA Campus[c]	+8.07
City of Santa Monica[b]	
City of Santa Monica	-0.60
Total[a]	**+1.22**

Source: U.S. Census Bureau, 2022b

[a]The No Project Alternative Resource Study Area refers to census tracts whose centroids would lie within the Project Study Area (Section 3.1.2).

[b]Data at the Los Angeles County and City of Los Angeles jurisdictional level is provided for regional. The total summarizes the affected communities of the City of Los Angeles and the City of Santa Monica and does not include the Los Angeles County or City of Los Angeles jurisdiction level data.

[c]The UCLA campus would be entirely within the affected community of Westwood. The data for Westwood is therefore inclusive of the data for the UCLA campus.

5.1.2.3 Summary

The No Project Alternative RSA contains established communities that have generally historically experienced housing and employment growth, but with population decline rates that are inconsistent with those trends. The inconsistencies between historical population, housing, and employment growth rates may indicate a redistribution of growth throughout the region. The inconsistencies between historical annual population, housing, and employment growth rates may indicate a redistribution of growth throughout the region or outward migration patterns that occurred due to the 2020 COVID-19 pandemic.

5.1.3 Projected Growth

5.1.3.1 Population, Housing, and Employment

Table 5-4 compares the SCAG-derived forecast for population, housing, and employment growth for the affected communities in the No Project Alternative RSA, which includes the City of Santa Monica and portions of the City of Los Angeles, to Los Angeles County and the City of Los Angeles at the jurisdictional level from 2019 to 2045 (SCAG, 2024b). The table also includes the portions of the City of Los Angeles and the City of Santa Monica affected communities that are within the No Project Alternative RSA. The growth scenario forecast shown in the SCAG 2024-2050 RTP/SCS prioritizes growth in PDAs and considers demographic and economic trend information at the jurisdictional level. The growth forecast is controlled to not exceed the maximum density of local general plans. The model used to generate the SCAG-derived forecast assumes that all proposed transit capital projects in the SCAG 2024-2050 RTP/SCS (SCAG, 2024a), including the Project, would be fully built out by Horizon Year 2045. These projects may influence where projected growth is allocated but are not considered as direct generators of population growth within the forecasting models. The SCAG-derived population, housing, and employment growth forecast does not include different scenarios with or without a given project. Thus, although the No Project Alternative does not include the Project, the SCAG-derived forecast in Table 5-4 does assume that the Project would be built. Refer to the *SCAG 2024-2050 RTP/SCS Demographics and Growth Forecast Appendix* (SCAG, 2024b) for more information on the projected growth scenario methodology.

Historical trends generally demonstrated a mix of population losses and housing gains in the No Project Alternative RSA. These inconsistencies may be indicative of either a redistribution of growth throughout the region or outward migration patterns resulting from the 2020 COVID-19 pandemic. However, based on the SCAG forecast data, population and housing growth rates are expected to trend toward positive growth. The projected numbers show a trend of housing growth matching or exceeding population growth rates. This compares with the historical trend of population decline and housing growth across the affected communities. It indicates an expectation that housing growth patterns would adjust to match existing and future population trends. The affected communities of Beverly Crest and Brentwood are anticipated to experience annual population decline and annual housing growth. The affected community of Palms is anticipated to have the greatest annual population growth rate (+1.07 percent), while the UCLA campus is anticipated to have the greatest annual housing growth rate (+1.75 percent).

Overall, the affected communities in the No Project Alternative RSA are expected to experience annual employment growth rates. Within the No Project Alternative RSA, the affected community of Van Nuys is anticipated to have the greatest annual employment growth rate (+0.34 percent).

Table 5-4. SCAG-Derived Forecast for Population, Housing, and Employment Growth in Affected Communities within the Resource Study Area

Jurisdiction/Affected Community	2019-2045 Annual Growth within RSA[a] (%)		
	Population	Housing	Employment
Los Angeles County[b]			
Los Angeles County	+0.26	+0.74	+0.31
City of Los Angeles[b]			
City of Los Angeles	+0.36	+0.99	+0.35
City of Los Angeles Affected Communities[b]			
Bel Air	+0.16	+0.71	+0.22
Beverly Crest	-0.04	+0.47	+0.30
Brentwood	-0.22	+0.20	+0.03
Encino	+0.26	+0.83	+0.13
Lake Balboa	+0.11	+0.72	+0.30
Mar Vista	+0.35	+0.82	+0.31
North Hills	+0.06	+0.78	+0.26
North Hollywood	+0.13	+0.81	+0.05
North Sherman Oaks	+0.53	+0.98	+0.25
Palms	+1.07	+1.65	+0.07
Panorama City	+0.00	+0.72	+0.29
Sawtelle VA	+0.25	+0.60	+0.07
Sherman Oaks	+0.25	+0.67	+0.25
Sun Valley	+0.12	+0.86	+0.22
Van Nuys	+0.26	+0.91	+0.34
West Los Angeles	+0.63	+1.05	+0.30
Westwood	+0.68	+1.22	+0.23
UCLA Campus[c]	+0.50	+1.75	+0.12
City of Santa Monica[b]			
City of Santa Monica	+0.47	+0.90	0.00
Total[a]	**+0.32**	**+0.88**	**+0.21**

Source: SCAG, 2024b

[a]The No Project Alternative Resource Study Area refers to Transportation Analysis Zones whose centroids are within the Project Study Area (Section 3.1.2).

[b]Data at the Los Angeles County and City of Los Angeles jurisdictional level is provided for regional comparison. The total summarizes the affected communities of the City of Los Angeles and the City of Santa Monica and does not include the Los Angeles County or City of Los Angeles jurisdiction level data.

[c]The UCLA campus would be entirely within the affected community of Westwood. The data for Westwood is therefore inclusive of the data for the UCLA campus.

5.1.3.2 Planned and On-Going Developments

Planned and on-going developments within the No Project Alternative RSA demonstrate the actualization of growth projections. The No Project Alternative would encompass on-going and planned development within the No Project Alternative RSA, which is anticipated to directly, or indirectly result in population, housing, and/or employment growth. On-going developments include multi-family residential housing (including market rate and affordable housing), mixed-use developments, commercial/retail facilities, and public facilities. Residential developments would construct new or expanded housing units and thus would directly result in population and housing growth, while new commercial, retail, office, and public facilities developments would directly result in employment growth.

Redevelopment projects are not anticipated to directly, or indirectly result in permanent growth, unless such projects would construct additional housing units. Student housing projects on the UCLA campus would construct new housing units. However, these units would not directly or indirectly result in unplanned population growth within the UCLA campus or Westwood community but would merely accommodate planned growth of students enrolled at UCLA. According to the UCLA Long Range Development Plan, student enrollment numbers are the primary indicators of population, housing, and employment growth on the UCLA campus (UCLA, 2002). UCLA Housing & Hospitality manages both on-campus and off-campus housing units. Since 2010, Housing & Hospitality-operated on-campus housing has expanded to more than 4,700 undergraduate beds, with the goal of providing 66 percent of all students housing on or within 1 mile of campus. Currently 47 percent of students live on or within 1 mile of campus (UCLA, 2021).

Public facilities development projects include the construction of new facilities which would directly result in employment growth, such as the proposed 92,000-square-foot office building for the City of Los Angeles Department of Water and Power (Appendix A).

Zoning-related projects refer to projects which would directly increase the land use density within a given area, thus increasing the total housing capacity of the applicable jurisdiction. Such projects include parcel maps, specific plans, subdivisions, tentative tract maps, transit neighborhood plans (TNP), and zone change projects. Zoning-related projects may include entitlements and development agreements which increase the land use density of an affected community in exceedance of the maximum density of the housing elements of local general plans. The zoning-related projects may not yet have associated planned developments for the respective parcel[s].

Transportation Improvement Projects refers to transportation and highway projects – including BRT, highway improvement, and rail projects – identified in the SCAG 2024-2050 RTP/SCS (SCAG, 2024a), Metro's *2020 Long Range Transportation Plan* (LRTP) (Metro, 2020), the 2023 FTIP (SCAG, 2022), and Measure M (Metro, 2016), except for the Project. Transit and transportation projects are not considered to directly foster population, housing, or employment growth. Rather, the Transportation Improvement

Projects aim to increase the capacity or improve the efficiency of the transportation and transit network and encourage projected population and economic growth in the greater SCAG region toward PDAs.

Table 5-5 summarizes on-going and planned growth inducing projects in the No Project Alternative RSA. Figure 5-1 displays the planned and on-going developments in the No Project Alternative RSA. A total of 346 planned and on-going developments are within the No Project Alternative RSA, over 33 percent of which are in the affected community of Van Nuys, and nearly 16 percent are in the affected community of West Los Angeles. If fully built out, the planned and on-going developments would construct over 6 million square feet of new commercial real estate and over 23,100 new housing units within the No Project Alternative RSA. The vast majority of planned and on-going developments in the No Project Alternative RSA are within PDAs, which is consistent with the growth strategies and policies of the SCAG 2024-2050 RTP/SCS. All planned commercial square footage within the No Project Alternative RSA would be located within PDAs. The City of Santa Monica is anticipated to have the greatest number of mixed-use and commercial developments of each of the affected communities, while the community of Van Nuys has the greatest number of planned and on-going multi-family residential developments.

The 2025 wildfires are anticipated to affect housing stock in the region. In particular, the Palisades Fire, which occurred west of the Project Study Area, destroyed approximately 5,500 homes, and the Eaton Fire, which occurred approximately 16 miles east of the Project Study Area, destroyed approximately 6,100 homes (Greene, Kambhampti, Shalby, and Haggerty, 2025). As result, it is likely that the housing supply in the region will be affected while homes in the affected areas are rebuilt.

Table 5-5. Planned and On-Going Developments in the Resource Study Area

Affected Community	Total Developments	Total Commercial Square Footage	Total Dwelling Units	Developments in PDAs	Commercial Square Footage in PDAs	Dwelling Units in PDAs
Multi-Family Developments						
Brentwood	4	—	170	3	—	118
Encino	2	—	284	2	—	284
Lake Balboa	1	—	65	1	—	65
Mar Vista	8	—	552	7	—	514
North Hills	34	—	1,383	32	—	1,321
North Hollywood	3	—	91	3	—	91
North Sherman Oaks	7	—	384	7	—	384
Palms	0	—	—	—	—	—
Panorama City	15	—	1,130	15	—	1,130
Santa Monica	2	—	55	2	—	55
Sawtelle VA	1	—	1,200	1	—	1,200
Sherman Oaks	29	—	1,093	29	—	1,093
Sun Valley	1	—	100	1	—	100
Van Nuys	102	—	4,263	98	—	4,149
West Los Angeles	37	—	2,025	36	—	1,991
Westwood	17	—	505	15	—	452
UCLA Campus	0	—	—	—	—	—
Total	**263**	—	**13,300**	**251**	—	**12,947**
Mixed-Use Development						
Brentwood	1	73,984	24	1	73,984	24
Mar Vista	2	11,141	202	2	11,141	202

Affected Community	Total Developments	Total Commercial Square Footage	Total Dwelling Units	Developments in PDAs	Commercial Square Footage in PDAs	Dwelling Units in PDAs
North Sherman Oaks	1	27,000	249	1	27,000	249
Palms	1	60,000	409	1	60,000	409
Panorama City	2	252,450	550	2	252,450	550
Santa Monica	18	360,040	2,907	18	360,040	2,907
Sherman Oaks	1	44,000	325	1	44,000	325
Van Nuys	7	25,705	1,086	7	25,705	1,086
West Los Angeles	12	662,212	4,134	12	662,212	4,134
Total	**45**	**1,516,532**	**9,886**	**45**	**1,516,532**	**9,886**
Commercial						
Bel Air	1	62,615	—	1	62,615	—
Encino	1	1,995	—	1	1,995	—
Lake Balboa	1	123,950	—	1	123,950	—
Mar Vista	1	1,600,000	—	1	1,600,000	—
Santa Monica	9	486,527	—	9	486,527	—
Van Nuys	3	180,731	—	3	180,731	—
West Los Angeles	4	1,069,000	—	4	1,069,000	—
Total	**20**	**3,524,818**	—	**20**	**3,524,818**	—
Public Facility						
Brentwood	1	160,880	—	1	160,880	—
Santa Monica	1	799,000	—	1	799,000	—
Van Nuys	1	23,000	—	1	23,000	—
West Los Angeles	1	92,000	—	1	92,000	—
Total	**4**	**1,074,880**	—	**4**	**1,074,880**	—
Zoning-Related Projects[a]						
Encino	1	—	—	1	—	—
Panorama City	1	—	—	1	—	—
Sun Valley	1	—	13	1	—	13
Van Nuys	2	—	10	2	—	10
West Los Angeles	1	—	11	1	—	11
Westwood	2	—	25	2	—	25
Total	**8**	—	**59**	**8**	—	**59**
Transportation Improvement Projects[b]						
Bel Air/Sherman Oaks	2	—	—	2	—	—
Encino	2	—	—	2	—	—
North Hills	1	—	—	1	—	—
Sawtelle VA	1	—	—	1	—	—
Van Nuys	1	—	—	1	—	—
Total	**7**	—	**—**	**7**	**—**	**—**
Grand Total	**347**	**6,116,230**	**23,245**	**336**	**6,116,230**	**22,892**

Source: City of Los Angeles, 2023; DCP, 2023b; City of Santa Monica, 2023

[a]Zoning-related projects include parcel map, specific plan, subdivision, tentative tract map, transit neighborhood plans, and zone change projects, which aim to increase the allowable density on a given [set of] parcel[s].

[b] Transportation improvement projects include bus rapid transit, highway improvement, and rail projects, which aim to increase the capacity or improve the efficiency of the transportation and transit network. The Project is excluded from the Transportation Improvement Projects shown in this table.

— = no data or no resource

5.2 Impacts Evaluation

5.2.1 Would the project foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment?

5.2.1.1 Operational Impacts

The No Project Alternative would include all existing and under-construction highway and transit services and facilities that would accommodate the existing and future transportation needs of the region, including transit specific improvements to Metro Line 761. Metro Line 761 is an existing Metro bus line that already operates along Sepulveda Boulevard. Under the No Project Alternative, Metro Line 761 would serve as the primary transit option through the Sepulveda Pass in the absence of the Project. Rerouting the existing bus line would have little or no influence on growth within the Project Study Area.

Other existing and under-construction highway and transit projects under the No Project Alternative include the transportation and highway projects identified in the SCAG 2024-2050 RTP/SCS (SCAG, 2024a), Metro's 2020 LRTP (Metro, 2020b), the 2023 FTIP (SCAG, 2022), and Measure M (Metro, 2016), excluding the Project. All transit and transportation projects listed the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, and Measure M, excluding the Project, are expected to be implemented to the fullest extent possible. Transit and transportation projects do not directly foster population, housing, or employment growth. Rather, these types of projects are planned to encourage projected population and economic growth in the greater SCAG region toward PDAs and add capacity to the transportation and transit network. The additional capacity generated by these transit and transportation projects is anticipated to increase workforce and residential access to the local and regional transit network, and likely support economic growth and employment within planned expectations (APTA, 2020).

The No Project Alternative includes SCAG 2024-2050 RTP/SCS (SCAG, 2024a) projected regional population, housing, and employment growth estimates, which are calculated based on the growth-related policies and strategies of the RTP/SCS, including incentivizing growth within PDAs. As discussed in Section 3.1.4, PDAs are anticipated to accommodate 66 percent of projected housing growth and 54 percent of projected employment growth between 2019 and 2050 (SCAG, 2024a). As listed in Table 5-1, 64 percent of the No Project Alternative RSA is within a PDA. The projected growth for the No Project Alternative represents planned growth within the affected communities and the Los Angeles County region. Therefore, the No Project Alternative would not conflict with plans to accommodate population growth with future planning of transit-oriented communities (TOC) within PDAs. Economic growth would also be anticipated in the No Project Alternative through employment opportunities and housing growth throughout the region, which are factored into the growth forecast estimates.

The No Project Alternative also includes growth-driving development in the No Project Alternative RSA identified in Table 5-5. The vast majority of these developments are within PDAs, which is consistent with the growth forecasts in the SCAG 2024-2050 RTP/SCS. These developments would be consistent with the maximum density allowances in local plans on a project-specific basis and are assumed to reflect planned growth in the region, rather than generate unplanned economic or unplanned growth.

Therefore, the growth inducing impacts of the projects included in the No Project Alternative RSA, including planned and on-going developments and transit and transportation projects, are accounted for in existing local and regional plans, and, if fully implemented, would not result in unplanned population, housing, or employment growth. Without the Project, the No Project Alternative would result in lowered access and added capacity to the transit and transportation network in the No Project Alternative RSA. However, the exclusion of the Project would represent unrealized potential increase in access and capacity and, in respect to unplanned economic or population growth, would not result in significant impacts.

In summary, projects included in the No Project Alternative are identified for inclusion in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, and Measure M. These projects include infrastructure and transportation-related projects to accommodate and serve projected growth in the region and would not induce new growth. Therefore, operations of the No Project Alternative would result in less than significant impacts related to unplanned population, housing, or employment growth.

5.2.1.2 Construction Impacts

For the No Project Alternative, the Project would not be constructed. Rerouting the existing Metro Line 761 would result in little or no construction-related impacts. Construction of the planned and on-going developments listed in Table 5-5, as well as all other projects identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, and Measure M, would result in temporary environmental impacts. Construction activities for these projects would result in temporary daytime population and economic growth due to the addition of construction workers to the No Project Alternative RSA. However, these workers would likely be sourced from the local labor pool and commute daily to construction sites from residences in the region, and therefore should not result in a permanent increase in new employment growth in the No Project Alternative RSA. Thus, construction of the projects identified for the No Project Alternative are unlikely to directly result in the construction of additional housing for workers. Thus, construction of the No Project Alternative would result in less than significant impacts related to unplanned population, housing, or employment growth.

5.2.2 Would the project remove obstructions to population growth…[or] encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

5.2.2.1 Operational Impacts

Section 15126.2(e) of the CEQA Guidelines consider a project to remove obstructions to population growth if it would result in one of the following:

- The extension of growth-supporting infrastructure (sewer lines, water mains, roads, etc.) to an area currently undeveloped and/or lacking adequate infrastructure, thus removing an obstacle to growth (i.e., a major expansion of a wastewater treatment plant might allow for more construction in service areas); and/or
- The provision of housing or employment to an area currently undeveloped or lacking in adequate housing or employment. Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

The No Project Alternative RSA is characterized as a densely developed region, and projects within the No Project Alternative RSA would not introduce transportation, commercial, or residential infrastructure or extend environmental impacts into previously undeveloped areas. The existing Metro Line 761 would

be rerouted down Sepulveda Boulevard and would not operate in previously undeveloped areas. The majority of planned and on-going developments identified in Table 5-5 would be constructed predominantly within SCAG-identified PDAs, reflecting the actualization of SCAG growth accommodating and economic strategies to encourage compact development in transit-served areas. The projected population, housing, and employment growth projections of the SCAG 2024-2050 RTP/SCS are calculated so as not to exceed the maximum density of local general plans.

The No Project Alternative includes all transportation projects identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP and Measure M, except for the Project. For the No Project Alternative, all transportation projects identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, and Measure M, except for the Project, are expected to be fully implemented. Therefore, the No Project Alternative may not direct the SCAG-projected growth towards the Project Study Area to the fully planned extent of these plans. Nonetheless, the projected population, housing, and employment growth for the affected communities in the No Project Alternative RSA at the jurisdictional level would remain unchanged with or without the Project.

Therefore, the No Project Alternative would not remove obstructions to population growth, nor encourage or facilitate development or transportation projects that have not already been identified and planned for in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, or Measure M.

Thus, operations of the No Project Alternative would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

5.2.2.2 Construction Impacts

For the No Project Alternative, the Project would not be constructed. Rerouting the existing Metro Line 761 would result in little or no construction-related impacts. Construction of planned and on-going developments and all other transportation projects identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, and Measure M would result in temporary influxes of construction workers, equipment, and vehicular trips in the No Project Alternative RSA. However, because these projects would be within a densely developed region, and because construction workers would likely reside in the wider metropolitan area, construction activities would not induce growth or extend environmental impacts into previously undeveloped areas. Construction activities for the No Project Alternative would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, or Measure M. Thus, construction of the No Project Alternative would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

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; impacts are less than significant.

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

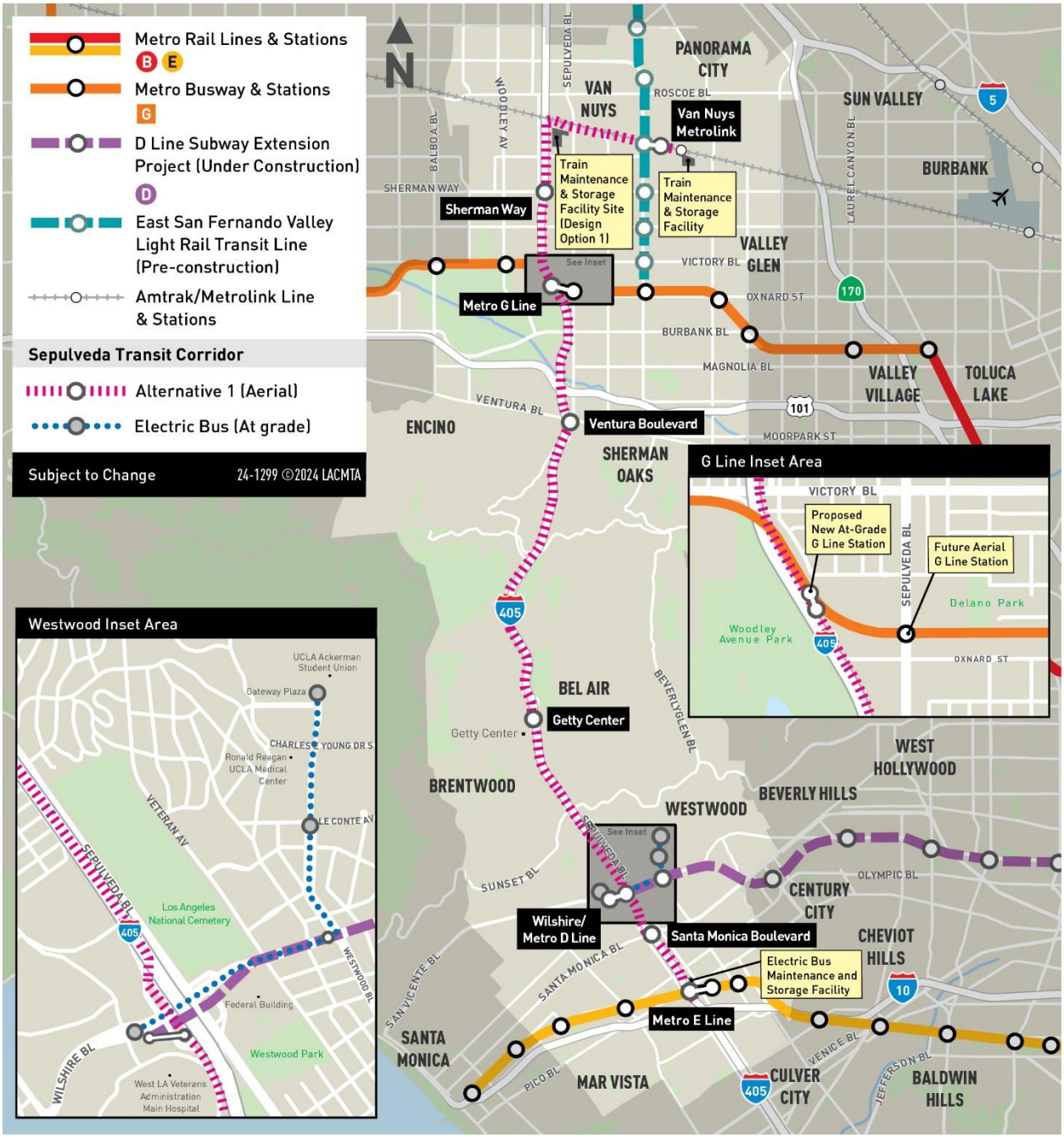
6.1.1.1 Alignment

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 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).

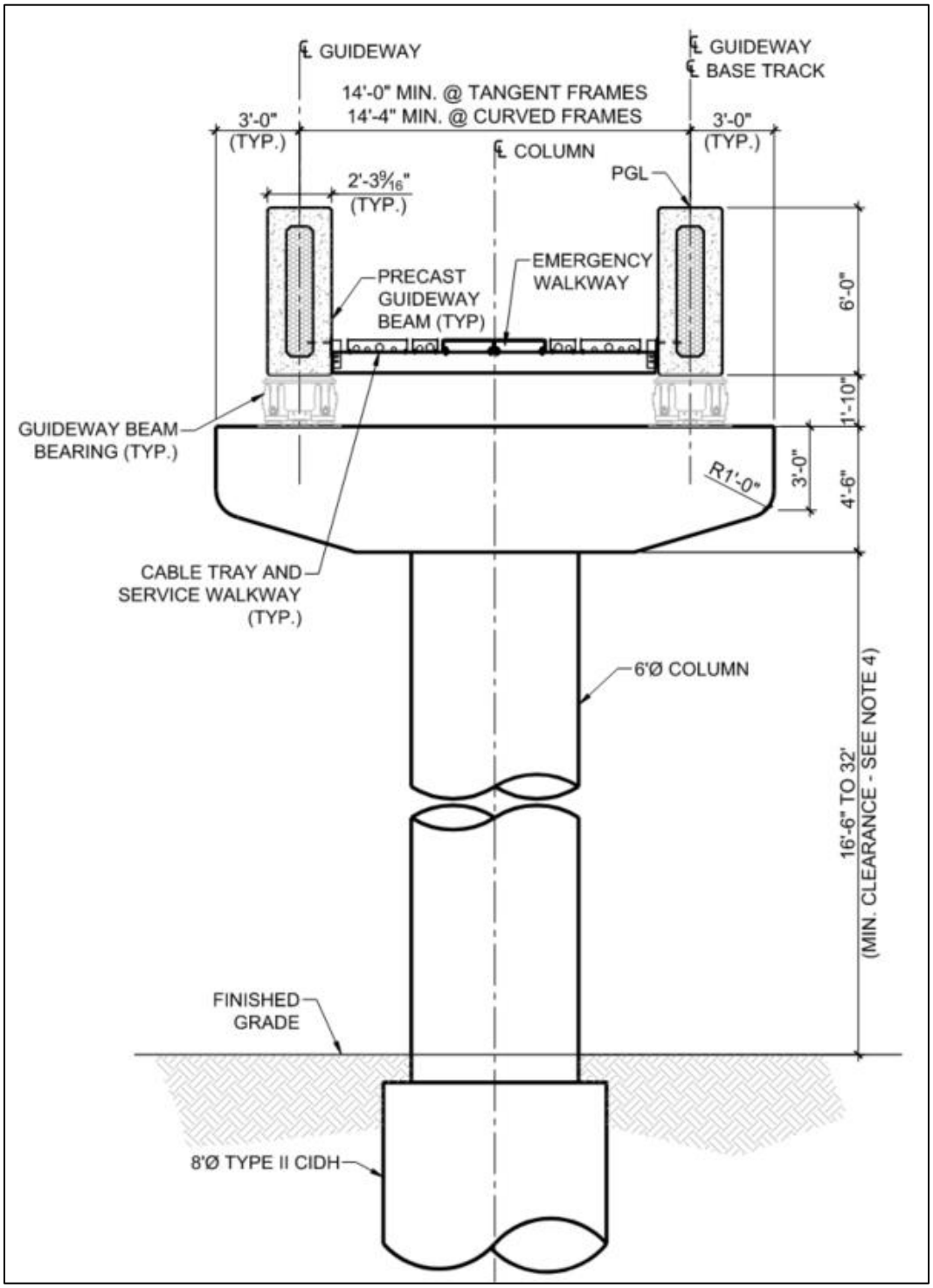
Near Greenleaf Street, the alignment would cross over the northbound freeway lanes and northbound on-ramps toward the proposed Ventura Boulevard Station on the east side of I-405. This station would be located above a transit plaza and would replace an existing segment of Dickens Street adjacent to I-405, 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.

Figure 6-2. Typical Monorail Guideway Cross-Section



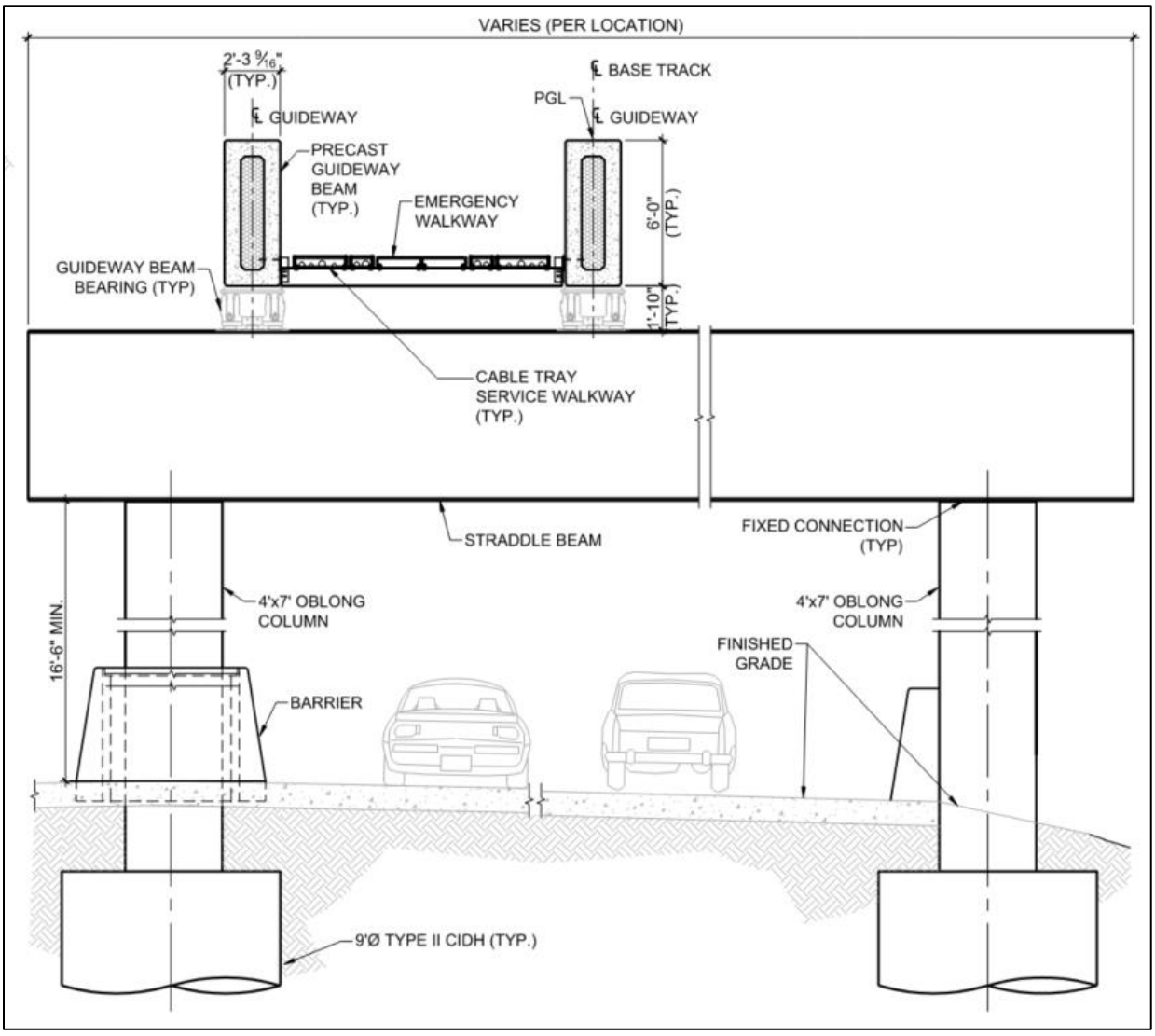
Source: LASRE, 2024

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 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 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)
Metro E Line Station					*30*
Metro E Line	Santa Monica Boulevard	0.9	122	98	—
Santa Monica Boulevard Station					*30*
Santa Monica Boulevard	Wilshire/Metro D Line	0.7	99	104	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	Getty Center	2.9	263	266	—
Getty Center Station					*30*
Getty Center	Ventura Boulevard	4.7	419	418	—
Ventura Boulevard Station					*30*
Ventura Boulevard	Metro G Line	2.0	177	184	—
Metro G Line Station					*30*
Metro G Line	Sherman Way	1.5	135	134	—
Sherman Way Station					*30*
Sherman Way	Van Nuys Metrolink	2.4	284	284	—
Van Nuys Metrolink Station					*30*

Source: LASRE, 2024

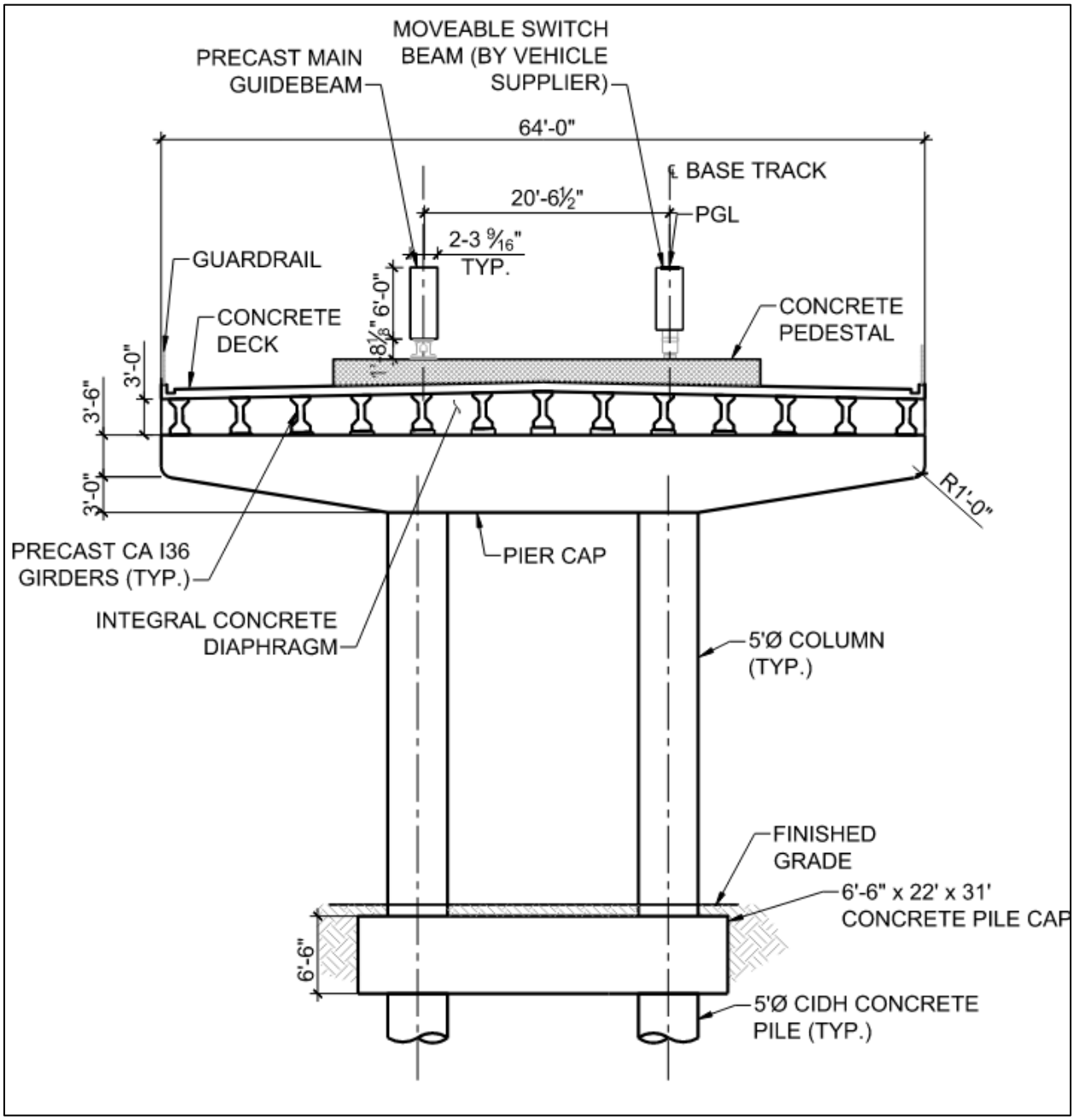
— = no data

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

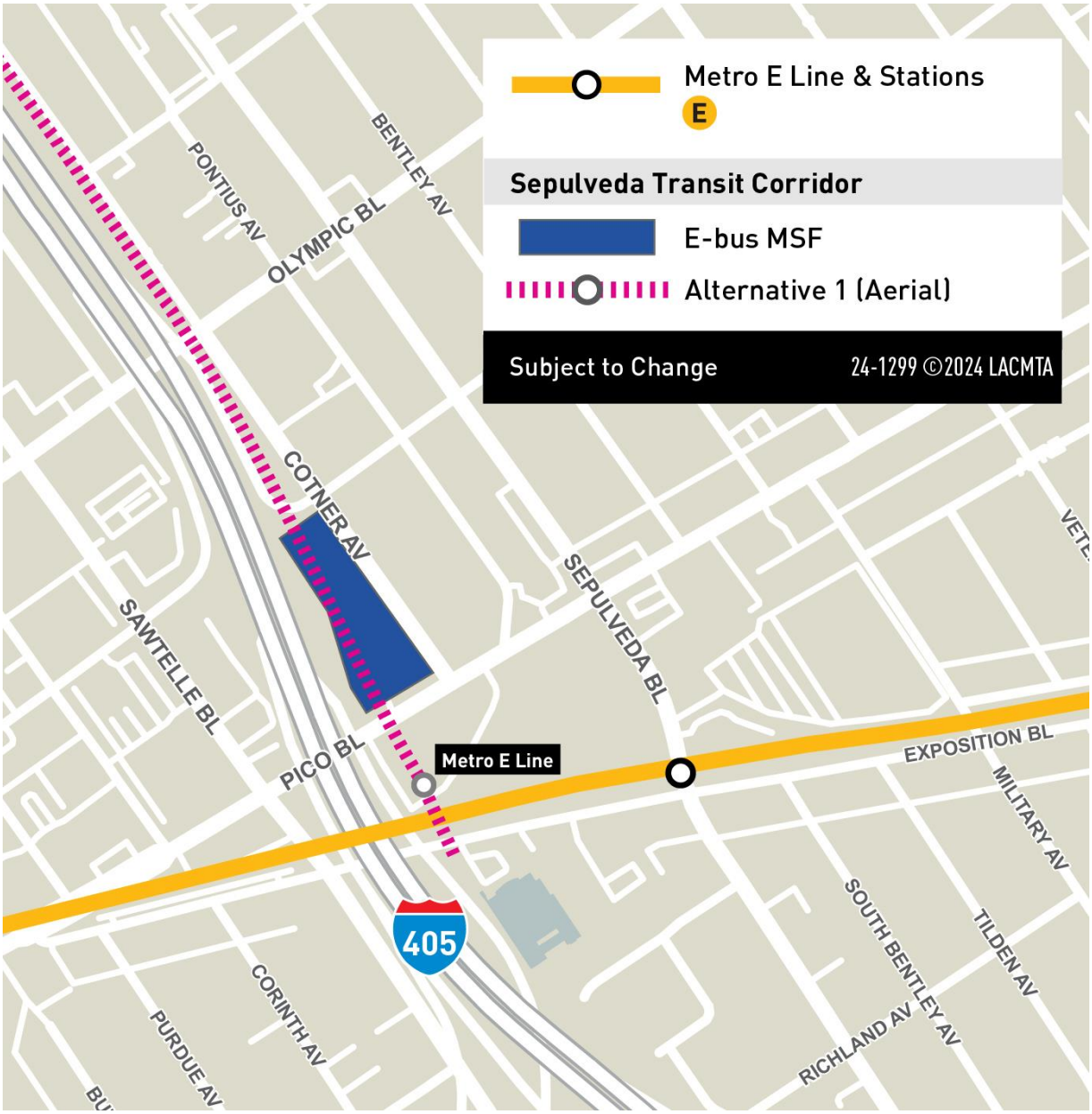
An electric bus MSF would be located on the northwest corner of Pico Boulevard and Cotner Avenue and would be designed to accommodate 14 electric buses. The site would be approximately 2 acres and would comprise six parcels bounded by Cotner Avenue to the east, I-405 to the west, Pico Boulevard to the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

Location	From	To	Description of Change
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 North Sepulveda Boulevard
4	At 1760 North 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

6.2.1 Alternative 1 Resource Study Area

The Alternative 1 Resource Study Area (RSA) is within the jurisdictions of the City of Los Angeles, the City of Santa Monica, and the unincorporated U.S. Department of Veterans Affairs in Sawtelle, Los Angeles (Sawtelle VA) community of Los Angeles County. Affected communities identified within the City of Los Angeles include Bel Air, Brentwood, Encino, Mar Vista, North Sherman Oaks, Palms, Panorama City, Van Nuys, West Los Angeles, and Westwood.

For purposes of the growth inducing impacts analysis, the Alternative 1 RSA would include Transportation Analysis Zones (TAZ) from the Southern California Association of Governments (SCAG) regional growth forecast, U.S. Census Bureau census tracts, and U.S. Census Bureau census blocks that would intersect the areas within 0.5 mile of the Alternative 1 proposed stations. Table 6-5 shows the percentages of the Alternative 1 proposed station areas that would be within a SCAG-designated Priority Development Area (PDA). Nearly all of the Alternative 1 proposed station areas would be within a PDA, except for the proposed Getty Center Station area. Figure 6-10 displays the Alternative 1 RSA and the PDAs.

Table 6-5. Alternative 1: Proposed Station Areas within a SCAG-Designated Priority Development Area

Proposed Station Area[a]	Proposed Station Area within a PDA (%)
Metro E Line Expo/Sepulveda Station (A)	100.0
Santa Monica Boulevard Station (A)	100.0
Wilshire Boulevard/Metro D Line Station (A)	100.0
Wilshire Boulevard/VA Medical Center Station Bus Stop	100.0
Westwood Village Station Bus Stop	100.0
UCLA Gateway Plaza Station Bus Stop	100.0
Getty Center Station (A)	0.0
Ventura Boulevard/Sepulveda Boulevard Station (A)	98.5
Metro G Line Sepulveda Station (A)	99.3
Sherman Way Station (A)	99.8
Van Nuys Metrolink Station (A)	100.0
Total[b]	**88.9**

Source: SCAG, 2024b; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total accounts for overlapping proposed station areas.

(A) = aerial station

Figure 6-10. Alternative 1: Resource Study Area and Priority Development Areas

Source: DCP, 2023b; City of Santa Monica, 2023; SCAG, 2024b

6.2.2 Historical Growth

Historical population and housing growth data for the census tracts that encompass the Alternative 1 RSA discussed in this report were gathered from the American Communities Survey 2016 and 2021 estimates, and the historical employment growth data was gathered from the SCAG *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (2024-2050 RTP/SCS) employment estimates at the TAZ level (SCAG, 2024a).

6.2.2.1 Population and Housing

Table 6-6 shows the annual population and housing growth trend percentages from the year 2016 to 2021 in the Alternative 1 RSA. Overall, the Alternative 1 RSA experienced a greater decline in historical annual population growth and lower annual housing growth compared to the No Project Alternative RSA. As with the No Project Alternative, historical growth in the Alternative 1 RSA included a mix of gains and losses in population and housing, demonstrating the uneven distribution of growth throughout the region. Within the Alternative 1 RSA, the proposed Westwood Village Station bus stop area experienced the greatest annual population growth rate (+0.84 percent), while the Sherman Way Station experienced the greatest annual housing growth rate (+1.08 percent). The proposed Wilshire Boulevard/VA Medical Center Station bus stop area experienced the greatest annual decline in population and housing growth rates (-6.88 percent and -5.73 percent, respectively).

Table 6-6. Alternative 1: Historical Population and Housing Growth Trend in the Resource Study Area

Proposed Station Area[a]	2016-2021 Annual Growth (%)	
	Population	Housing
Metro E Line Expo/Sepulveda Station (A)	-2.97	-1.66
Santa Monica Boulevard Station (A)	-2.90	-1.91
Wilshire Boulevard/Metro D Line Station (A)	-5.59	-5.04
Wilshire Boulevard/VA Medical Center Station Bus Stop	-6.88	-5.73
Westwood Village Station Bus Stop	+0.84	+0.39
UCLA Gateway Plaza Station Bus Stop	+0.63	-0.04
Getty Center Station (A)	-2.48	+0.58
Ventura Boulevard/Sepulveda Boulevard Station (A)	+0.75	+0.60
Metro G Line Sepulveda Station (A)	-1.09	+0.77
Sherman Way Station (A)	+0.07	+1.08
Van Nuys Metrolink Station (A)	-0.64	+0.92
Total[b]	**-0.80**	**+0.04**

Source: U.S. Census Bureau, 2017, 2022; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 1 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station

6.2.2.2 Employment

Table 6-7 shows the historical annual employment growth trend from the year 2016 to 2021 for the Alternative 1 RSA. The proposed station areas experienced a mix of employment growth and decline. Overall, the Alternative 1 RSA experienced greater levels of employment growth than the No Project Alternative RSA. The proposed Getty Center Station area experienced the highest annual employment growth rate (+26.61 percent) in the Alternative 1 RSA, while the proposed Van Nuys Metrolink Station area experienced the greatest annual employment decline rate (-5.13 percent). High employment growth within the Getty Center Station area is due to an increase in educational service jobs.

Table 6-7. Alternative 1: Historical Employment Growth Trend in the Resource Study Area

Proposed Station Area[a]	2016-2021 Annual Growth (%)
Metro E Line Expo/Sepulveda Station (A)	+0.39
Santa Monica Boulevard Station (A)	-0.73
Wilshire Boulevard/Metro D Line Station (A)	+2.42
Wilshire Boulevard/VA Medical Center Station Bus Stop	+2.10
Westwood Village Bus Stop	+6.88
UCLA Gateway Plaza Bus Stop	+8.00
Getty Center Station (A)	+26.61
Ventura Boulevard/Sepulveda Boulevard Station (A)	-1.67
Metro G Line Sepulveda Station (A)	-2.60
Sherman Way Station (A)	+1.77
Van Nuys Metrolink Station (A)	-5.13
Total[b]	**+2.97**

Source: U.S. Census Bureau, 2022b; HTA, 2024

[a]Proposed Station Area refers to census tracts that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 1 RSA). Census tracts that intersect with more than one proposed station areas are not double counted.

(A) = aerial station

6.2.2.3 Summary

The Alternative 1 RSA would be almost entirely within a SCAG-designated PDA, with the exception of the Getty Center station area; therefore, nearly all of its land area would be in areas targeted for the growth inducing strategies and policies of the 2024-2050 RTP/SCS. While the Alternative 1 station areas historically experienced a mix of population and housing gains and losses, overall, the Alternative 1 RSA experienced annual housing and employment growth and annual population decline. These inconsistencies may be indicative of either a redistribution of growth throughout the region or outward migration patterns resulting from the 2020 COVID-19 pandemic. Compared to the No Project Alternative RSA, the Alternative 1 RSA had a greater decline in historical population growth, lower housing growth, and greater levels of employment growth.

6.2.3 Projected Growth

6.2.3.1 Population, Housing, and Employment

Table 6-8 summarizes the SCAG-derived forecast for population, housing, and employment growth in the Alternative 1 RSA from 2019 to 2045. In comparison to the mix of historical population and housing

gains and losses, SCAG projections indicate positive population and housing growth trends. Overall, the Alternative 1 RSA is anticipated to experience higher projected population, housing, and employment growth rates than historical rates.

As with the No Project Alternative, the projected numbers for the Alternative 1 RSA demonstrate a trend of housing growth matching or exceeding population growth rates, which runs contrary to the historical trend of inconsistencies between population and housing rates. It indicates an expectation that housing growth patterns are anticipated to adjust to match existing and future population trends.

Within the Alternative 1 RSA, the proposed Metro E Line Expo/Sepulveda Station area is projected to have the highest annual population growth rate (+0.81 percent), the UCLA Gateway Plaza Station Bus Stop area is projected to have the highest annual housing growth rate (+1.43 percent), and the Sherman Way Station area is projected to have the highest annual employment growth rate (+0.39 percent). In contrast, the proposed Getty Center Station area is projected to have the lowest annual population growth rate (-0.14 percent), the lowest annual housing growth rate (+0.32 percent), and the lowest annual employment growth rate (+0.12 percent), reflecting its relative isolation from denser, urban development, lack of developable land, and lack of PDAs compared to other proposed station areas.

Table 6-8. Alternative 1: SCAG-Derived Forecast for Population, Housing, and Employment Growth in the Resource Study Area

Proposed Station Area[a]	2019-2045 Annual Growth (%)		
	Population	Housing	Employment
Metro E Line Expo/Sepulveda Station (A)	+0.81	+1.33	+0.30
Santa Monica Boulevard Station (A)	+0.66	+1.05	+0.33
Wilshire Boulevard/Metro D Line Station (A)	+0.67	+1.04	+0.35
Wilshire Boulevard/VA Medical Center Station Bus Stop	+0.47	+0.82	+0.29
Westwood Village Station Bus Stop	+0.68	+1.40	+0.22
UCLA Gateway Plaza Station Bus Stop	+0.68	+1.43	+0.15
Getty Center Station (A)	-0.14	+0.32	+0.12
Ventura Boulevard/Sepulveda Boulevard Station (A)	+0.46	+0.97	+0.18
Metro G Line Sepulveda Station (A)	+0.31	+0.91	+0.29
Sherman Way Station (A)	+0.21	+0.83	+0.39
Van Nuys Metrolink Station (A)	+0.15	+0.88	+0.35
Total[b]	**+0.42**	**+0.96**	**+0.25**

Source: SCAG 2020b; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 1 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station

6.2.3.2 Planned and On-Going Developments

Table 6-9 shows the 58 on-going and planned developments for the Alternative 1 RSA, which are anticipated to directly, or indirectly, result in population, housing, and employment growth. These developments are not dependent on the implementation of Alternative 1 and would occur with or without the Project. Figure 6-10 displays the planned and on-going developments throughout the Alternative 1 RSA. As demonstrated, the majority of development would be multi-family residential

projects, which would directly contribute to population and housing growth in the Alternative 1 RSA. If fully built out, the planned and on-going developments would construct over 629,000 square feet of commercial space and over 4,600 dwelling units within the Alternative 1 RSA.

Table 6-9. Alternative 1: Planned and On-Going Developments in the Resource Study Area

Development Type	Total Developments	Total Commercial Square Footage	Total Dwelling Units	Developments In PDAs	Commercial Square Footage in PDAs	Dwelling Units in PDAs
Residential (Multi-family)	44	—	2,356	41	—	2,269
Mixed-Use	6	280,029	2,415	6	280,029	2,415
Commercial	4	256,995	—	4	256,995	—
Public Facility	1	92,000	—	1	92,000	—
Zoning-Related Projects[a]	1	—	11	1	—	—
Transportation Improvement Project[b]	2	—	—	2	—	11
Total	**58**	**629,024**	**4,782**	**55**	**629,024**	**4,695**

Source: City of Los Angeles, 2023; DCP, 2023b; City of Santa Monica, 2023; HTA, 2024

[a]Zoning-related projects include parcel map, specific plan, subdivision, tentative tract map, transit neighborhood plans, and zone change projects, which aim to increase the allowable density on a given [set of] parcel[s].

[b]Transportation improvement projects include bus rapid transit, highway improvement, and rail projects, which aim to increase the capacity or improve the efficiency of the transportation and transit network.

— = no data or no resource

6.3 Impacts Evaluation

6.3.1 Would the project foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment?

6.3.1.1 Operational Impacts

The Project is a transit infrastructure project proposed to serve projected population, housing, and employment growth within the Alternative 1 RSA and SCAG region and to accommodate the existing and future transportation needs of the area. Alternative 1 would not construct any new housing units and, therefore, would not generate direct population growth within the proposed station areas. Instead, Alternative 1 is anticipated to accommodate planned population and economic growth for the affected communities and potentially redirect regional growth to the Alternative 1 RSA. Potential indirect effects as a result of Alternative 1 include the future planning and development of transit-oriented communities (TOC) within the proposed station areas. Compared with the No Project Alternative, Alternative 1 would result in greater levels of access to and capacity of the transit and transportation network within the Project Study Area. However, Alternative 1 is not anticipated to directly or indirectly result in unplanned economic or population growth.

The 2024-2050 RTP/SCS land use and transportation policies incentivize local jurisdictions to explore opportunities to densify the existing land uses within PDAs. Additionally, the existing County of Los Angeles Transit-Oriented District Program, the City of Los Angeles Transit-Oriented Communities (TOC) Incentive Program, the City of Santa Monica Transportation Demand Management Ordinance, and Metro's TOC Policy prioritize the development of TOCs within 0.5 mile of a major transit stop or High-

Quality Transit Stop (HQTS). Other regional and local policies encourage TOC planning and development including the following:

- Intensification of land uses within the proposed station areas and along the corridor
- Development of compact communities around a public transit system
- Alternatives to automobile travel
- Planning for residents, visitors, and employees within the vicinity of the areas

Potential indirect effects as a result of Alternative 1 include the future planning and development of TOCs within the proposed station areas. As demonstrated in Table 6-5, except for the proposed Getty Center Station area, the Alternative 1 proposed station areas would be within PDAs. Alternative 1 would be a catalyst to TOC planning and development within these proposed station areas. Such future planned densification of land uses is incorporated into the forecast SCAG growth data, is central to the growth strategies of the 2024-2050 RTP/SCS and is not considered unplanned growth. Additionally, the Project is included in the list of transportation projects identified in the SCAG 2024-2050 RTP/SCS and Measure M and is thus incorporated into their assumptions for future planning and development in the region.

The proposed Getty Center Station would introduce a major transit stop outside of a PDA, which could indirectly result in new and unplanned TOC activities, and therefore new economic and population growth, within environments outside of areas designated for more compact growth and infill strategies by the 2024-2050 RTP/SCS. However, as stated in the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* (Metro, 2025), the proposed Getty Center Station area would be on land zoned for public facilities and single-family residential. Vacant land uses within the proposed Getty Center Station area are considered protected open space. Thus, infill development of these vacant land uses is unlikely due to adherence to existing zoning. Therefore, the proposed Getty Center Station would not foster unplanned economic or population growth in the Alternative 1 RSA. Except for the proposed Getty Center Station area, the Alternative 1 proposed station areas would be almost entirely within PDAs. Any development that would be constructed within the proposed station areas would be in areas already designated by SCAG for the allocation of denser, more compact development and growth, with the exception of the proposed Getty Center station area. Thus, the projected growth for the proposed Alternative 1 station areas is identified in the 2024-2050 RTP/SCS and is not new unplanned growth.

Thus, Alternative 1 would not induce unplanned economic or population growth beyond growth already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans. Rather, Alternative 1 would redirect planned jurisdiction-wide growth to the proposed station areas. PDAs comprise nearly 89 percent of the Alternative 1 RSA. By developing new transit stations within the SCAG PDAs, Alternative 1 would be consistent with the transit-oriented goals and strategies of the SCAG 2024-2050 RTP/SCS, Metro's TOC Policy, the County of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles TOC Incentive Program, the City of Santa Monica Transportation Demand Management Ordinance regarding prioritization of TOCs within 0.5 mile of a major transit stop. Additionally, the SCAG-derived forecast for population, housing, and employment growth assumes that the Project would be built. Thus, operations of Alternative 1 would provide benefits to jurisdictions in the Alternative 1 RSA and in the SCAG region and would result in less than significant impacts related to unplanned population, housing, and employment growth.

6.3.1.2 Construction Impacts

Construction of Alternative 1 would result in temporary environmental impacts within the RSA due to the necessary addition of construction workers. However, these workers would likely be sourced from the local labor pool, and thus the temporary employment opportunities for Alternative 1 would not directly foster the construction of permanent housing for workers in the Alternative 1 RSA. Thus, construction of Alternative 1 would result in less than significant impacts related to unplanned population, housing, and employment growth.

6.3.1.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design would be an integral part of the infrastructure for Alternative 1 and would support the maintenance, operations, and storage activities for Alternative 1. The MSF Base Design site would improve the regional transportation system and support the SCAG 2024-2050 RTP/SCS mobility goals by providing a reliable, alternative mode of transportation to the region. Construction of the MSF Base Design would not construct any new housing units; therefore, the MSF Base Design would not generate new or unplanned population and housing growth. However, the MSF Base Design would create employment opportunities for approximately 260 to 350 persons for Alternative 1, or approximately 0.1 percent of the total employment growth projected for the Alternative 1 RSA, which could result in nominal employment growth. However, employment opportunities would primarily consist of existing labor who live within the region. Potential employment resulting from the MSF Base Design would not exceed SCAG projections for the Alternative 1 RSA. Thus, construction and operation of the MSF Base Design would result in less than significant impacts related to unplanned population, housing, and employment growth.

MSF Design Option 1

Similar to the MSF Base Design, as a component of Alternative 1, the MSF Design Option 1 would support the mobility goals of the SCAG 2024-2050 RTP/SCS. Construction of the MSF Design Option 1 would not construct any new housing units, and therefore would not generate new or unplanned population and housing growth. As with the MSF Base Design, the MSF Design Option 1 would similarly create employment opportunities for approximately 260 to 350 persons for Alternative 1, or approximately 0.1 percent of the total employment growth projected for the Alternative 1 RSA. Any nominal employment growth that could occur would primarily consist of existing labor, and potential employment resulting from the MSF Option would not exceed SCAG projections for the Alternative 1 RSA. Thus, construction and operation of the MSF Design Option 1 would result in less than significant impacts related to unplanned population, housing, and employment growth.

Electric Bus MSF

Similar to the MSF Base Design, the Electric Bus MSF would be an integral part of the infrastructure and operations for Alternative 1. The Electric Bus MSF is not anticipated to generate population and housing growth, however nominal employment growth of approximately 70 persons for Alternative 1 (less than 0.1 percent of the Alternative 1 RSA projected employment growth), primarily consisting of existing labor in the region, is anticipated. The Electric Bus MSF would not generate employment growth that would exceed SCAG projections for the Alternative 1 RSA. Thus, construction and operation of the Electric Bus MSF would result in less than significant impacts related to unplanned population, housing, and employment growth.

6.3.2 Would the project remove obstructions to population growth…[or] encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

6.3.2.1 Operational Impacts

Alternative 1 would be within a densely developed region, both urban and suburban in character, and would not introduce growth-supporting infrastructure, nor construct any new housing units, nor extend environmental impacts into previously undeveloped areas lacking adequate infrastructure. The projected population, housing, and employment growth projections for the Alternative 1 RSA are calculated so as not to exceed the maximum density of local general plans. The SCAG 2024-2050 RTP/SCS (SCAG, 2024a) and Measure M (Metro, 2016) incorporate the Project into their assumptions for future planning and development in the region. As previously stated, transit projects are not considered growth inducing infrastructure, but rather as infrastructure that would direct planned economic and population jurisdiction-wide growth to the proposed station areas. Alternative 1 would not generate direct or indirect growth within the proposed station areas. Rather, Alternative 1 would potentially redistribute projected growth for each affected community toward the RSAs for the proposed stations, thereby resulting in localized growth related to the development of TOCs within the proposed station areas and increasing transit accessibility.

Alternative 1 would accommodate the SCAG 2024-2050 RTP/SCS growth projections. The construction of a new transit line would increase access to and from the Alternative 1 RSA but would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS (SCAG, 2024a), Metro's *2020 Long Range Transportation Plan* (LRTP) (Metro, 2020b), the 2023 FTIP (SCAG, 2022), or Measure M (Metro, 2016). Planned and on-going developments in the Alternative 1 RSA would all be constructed within SCAG-identified PDAs, reflecting the actualization of SCAG growth accommodating and economic strategies to encourage compact development in transit-served areas. Thus, operations of Alternative 1 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

6.3.2.2 Construction Impacts

Construction of Alternative 1 would result in temporary influxes of construction workers, equipment, and vehicular trips to the Alternative 1 RSA. However, because the Alternative 1 RSA would be within a densely developed region, and because construction workers would likely reside in the wider metropolitan area, construction activities would not induce growth or extend environmental impacts into previously undeveloped areas. Construction activities for Alternative 1 would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, or Measure M. Thus, construction of Alternative 1 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

6.3.2.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design would be within an urbanized region and would be constructed on a previously developed area. The MSF Base Design would not construct any housing units and thus would not generate unplanned population or housing growth. Employment growth would be approximately 260 to 350 persons for Alternative 1, or approximately 0.1 percent of the total employment growth projected for the Alternative 1 RSA, which would be nominal and would not exceed the SCAG employment growth projections for the Alternative 1 RSA. Although the MSF Base Design is considered an integral part of Alternative 1, the MSF Base Design would be an auxiliary transit structure and not a major transit stop, and thus would not result in the development of TOCs in the surrounding areas. The MSF Base Design would not remove obstruction to population growth, nor encourage or facilitate other unplanned projects. Thus, construction and operation of the MSF Base Design would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

MSF Design Option 1

Similar to the MSF Base Design, the MSF Design Option 1 would be constructed in a previously developed area and would not generate unplanned population or housing growth, nor result in the development of TOCs in the surrounding areas. Employment growth would be approximately 260 to 350 persons for Alternative 1, or approximately 0.1 percent of the total employment growth projected for the Alternative 1 RSA, which would be nominal and would not exceed the SCAG employment growth projections for the Alternative 1 RSA. The MSF Design Option 1 would not remove obstruction to population growth, nor encourage or facilitate other unplanned projects. Thus, construction and operation of the MSF Design Option 1 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

Electric Bus MSF

Similar to the MSF Base Design, the Electric Bus MSF would be constructed in a previously developed area and would not generate unplanned population or housing growth, remove obstruction to population growth, encourage or facilitate other unplanned projects, nor result in the development of TOCs in the surrounding areas. Employment growth of 70 persons for Alternative 1 (less than 0.1 percent of the Alternative 1 RSA projected employment growth) generated by the Electric Bus MSF would not exceed the SCAG employment growth projections for the Alternative 1 RSA. Thus, construction and operation of the Electric Bus MSF would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

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 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).

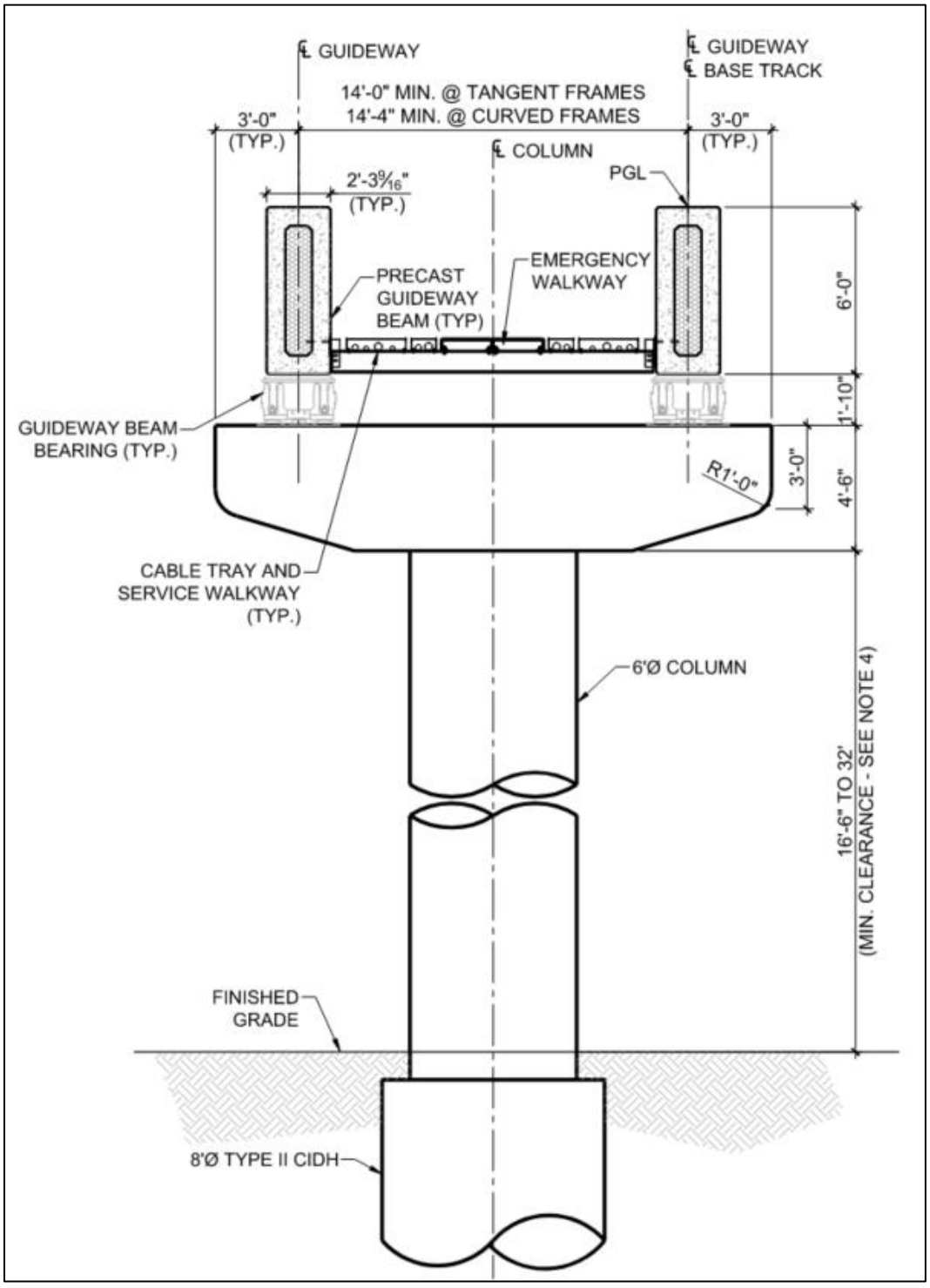
Near Greenleaf Street, the alignment would cross over the northbound freeway lanes and on-ramps toward the proposed Ventura Boulevard Station on the east side of I-405. This station would be located above a transit plaza and replace an existing segment of Dickens Street adjacent to I-405, just south 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



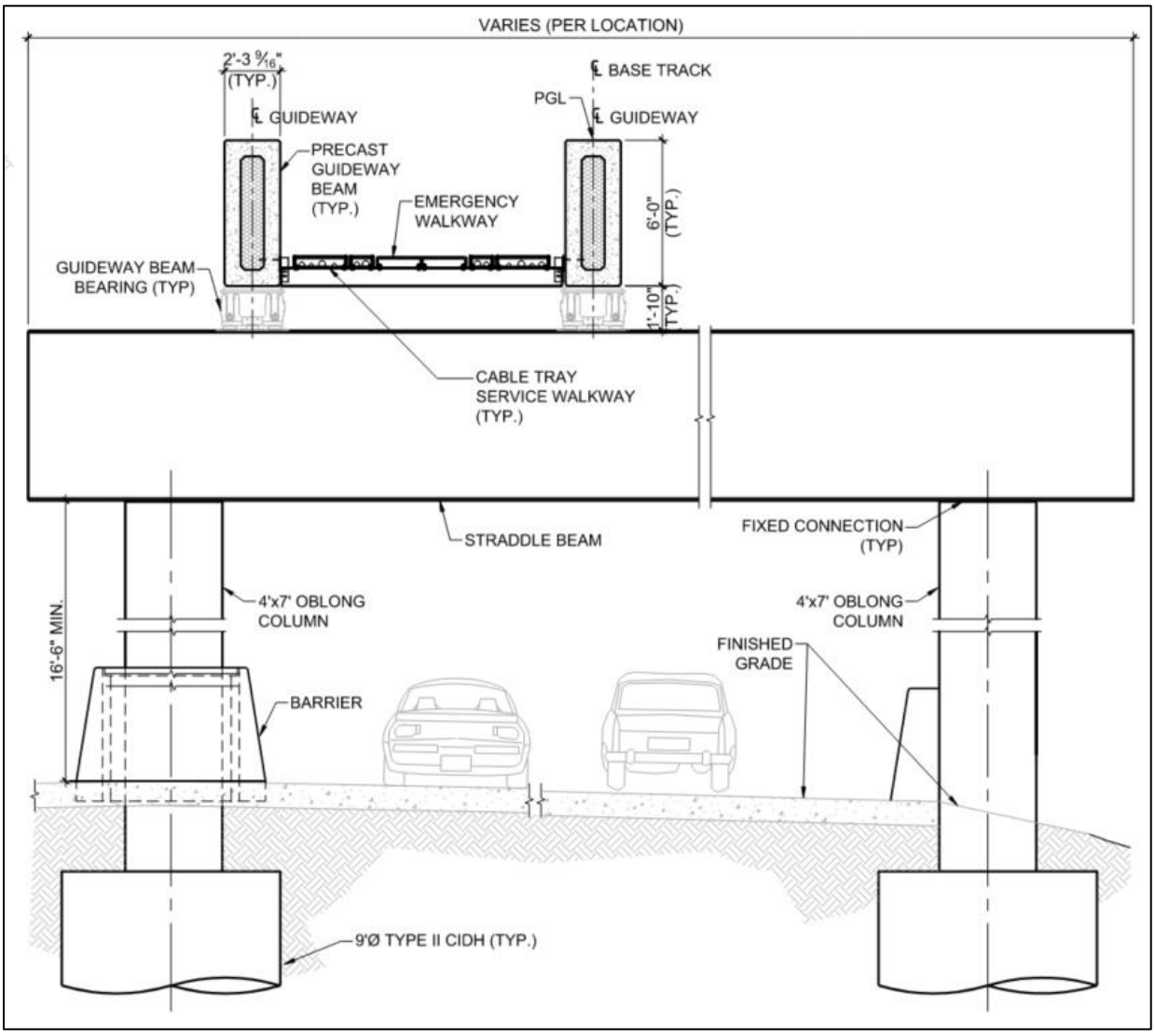
Source: LASRE, 2024

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



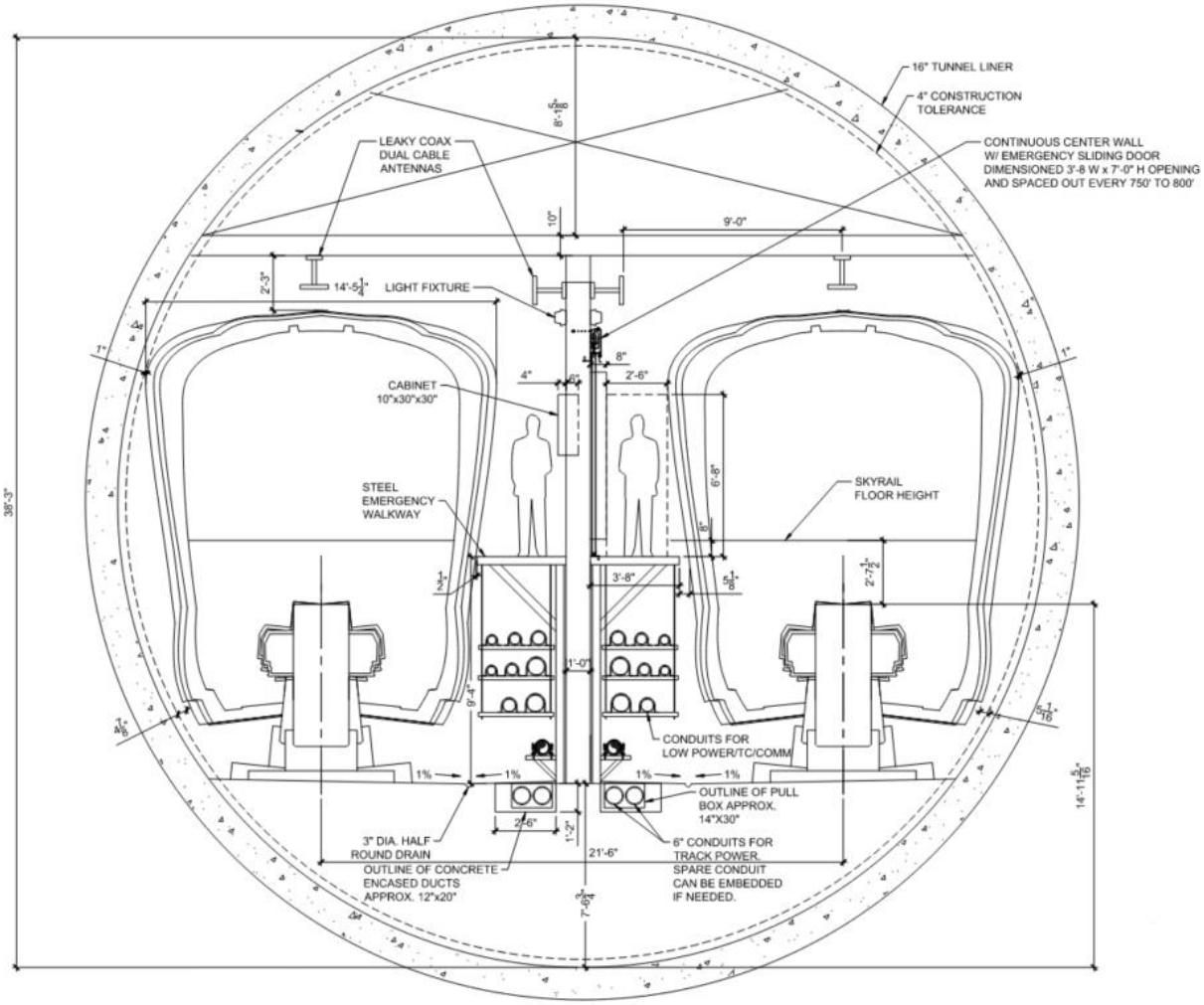
Source: LASRE, 2024

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 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 either 9-foot or 10-foot-diameter columns supporting long-span structures. Crash protection barriers would be used to protect the columns. All 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.

For underground sections, a single 40-foot-diameter tunnel would be needed to accommodate dual-beam configuration. The tunnel would be divided by a 1-foot-thick center wall dividing two compartments with a 14.5-foot-wide space for trains and a 4-foot-wide emergency evacuation walkway. The center wall would include emergency sliding doors placed every 750 to 800 feet. A plenum within the crown of the tunnel, measuring 8 feet tall from the top of the tunnel, would allow for air circulation and ventilation. Figure 7-4 illustrates these components at a typical cross-section of the underground monorail guideway.

Figure 7-4. Typical Underground Monorail Guideway Cross-Section



Source: LASRE, 2024

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 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)
Metro E Line Station					*30*
Metro E Line	Santa Monica Boulevard	0.9	123	97	—
Santa Monica Boulevard Station					*30*
Santa Monica Boulevard	Wilshire/Metro D Line	1.1	192	194	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	UCLA Gateway Plaza	0.9	138	133	—
UCLA Gateway Plaza Station					*30*
UCLA Gateway Plaza	Getty Center	2.6	295	284	—
Getty Center Station					*30*
Getty Center	Ventura Boulevard	4.7	414	424	—
Ventura Boulevard Station					*30*
Ventura Boulevard	Metro G Line	2.0	179	187	—
Metro G Line Station					*30*
Metro G Line	Sherman Way	1.5	134	133	—
Sherman Way Station					*30*
Sherman Way	Van Nuys Metrolink	2.4	284	279	—
Van Nuys Metrolink Station					*30*

Source: LASRE, 2024

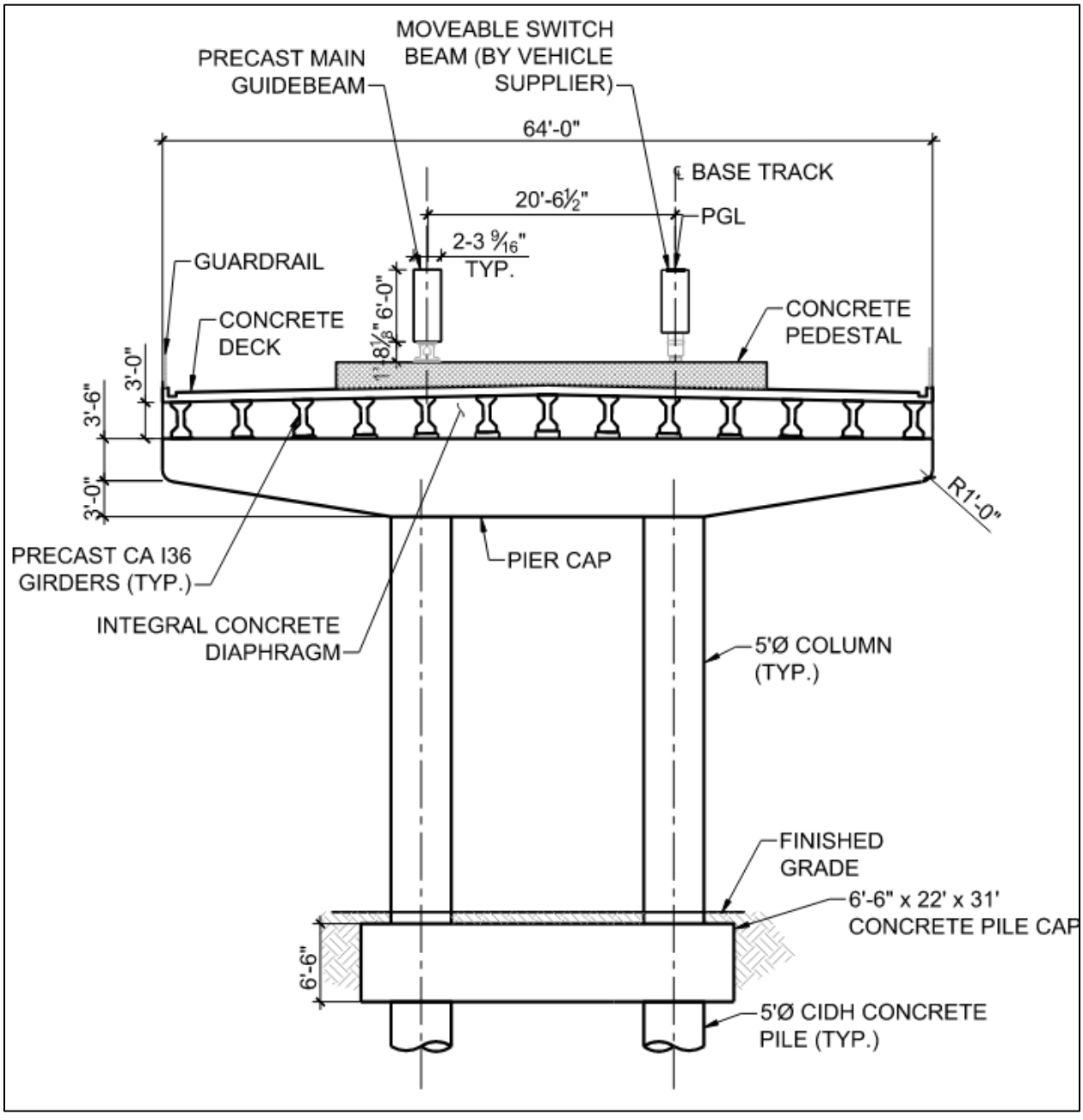
— = no data

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
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 North Sepulveda Boulevard
7	At 1760 North 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

7.2.1 Alternative 3 Resource Study Area

The Alternative 3 Resource Study Area (RSA) is within the jurisdictions of the City of Los Angeles, the City of Santa Monica, and the unincorporated U.S. Department of Veterans Affairs in Sawtelle, Los Angeles (Sawtelle VA) community of Los Angeles County. Affected communities identified within the City of Los Angeles include Bel Air, Brentwood, Encino, Mar Vista, North Sherman Oaks, Palms, Panorama City, Van Nuys, West Los Angeles, and Westwood.

For purposes of the growth inducing impacts analysis, the Alternative 3 RSA would include Transportation Analysis Zones (TAZ) from the Southern California Association of Governments (SCAG) regional growth forecast, U.S. Census Bureau census tracts, and U.S. Census Bureau census blocks that intersect the Alternative 3 proposed station areas. Table 7-5 shows the percentages of the proposed station areas within a SCAG-designated Priority Development Area (PDA) for Alternative 3. Nearly all of the Alternative 3 proposed station areas would be within a PDA, except for the proposed Getty Center Station area. Figure 7-10 displays the Alternative 3 RSA and the PDAs.

Table 7-5. Alternative 3: Proposed Station Areas within a SCAG-Designated Priority Development Area

Proposed Station Area[a]	Proposed Station Area within a PDA (%)
Metro E Line Expo/Sepulveda Station (A)	100.0
Santa Monica Boulevard Station (A)	100.0
Wilshire Boulevard/Metro D Line Station (U)	99.9
UCLA Gateway Plaza Station (U)	100.0
Getty Center Station (A)	0.0
Ventura Boulevard/Sepulveda Boulevard Station (A)	98.5
Metro G Line Sepulveda Station (A)	99.3
Sherman Way Station (A)	99.8
Van Nuys Metrolink Station (A)	100.0
Total[b]	**88.4**

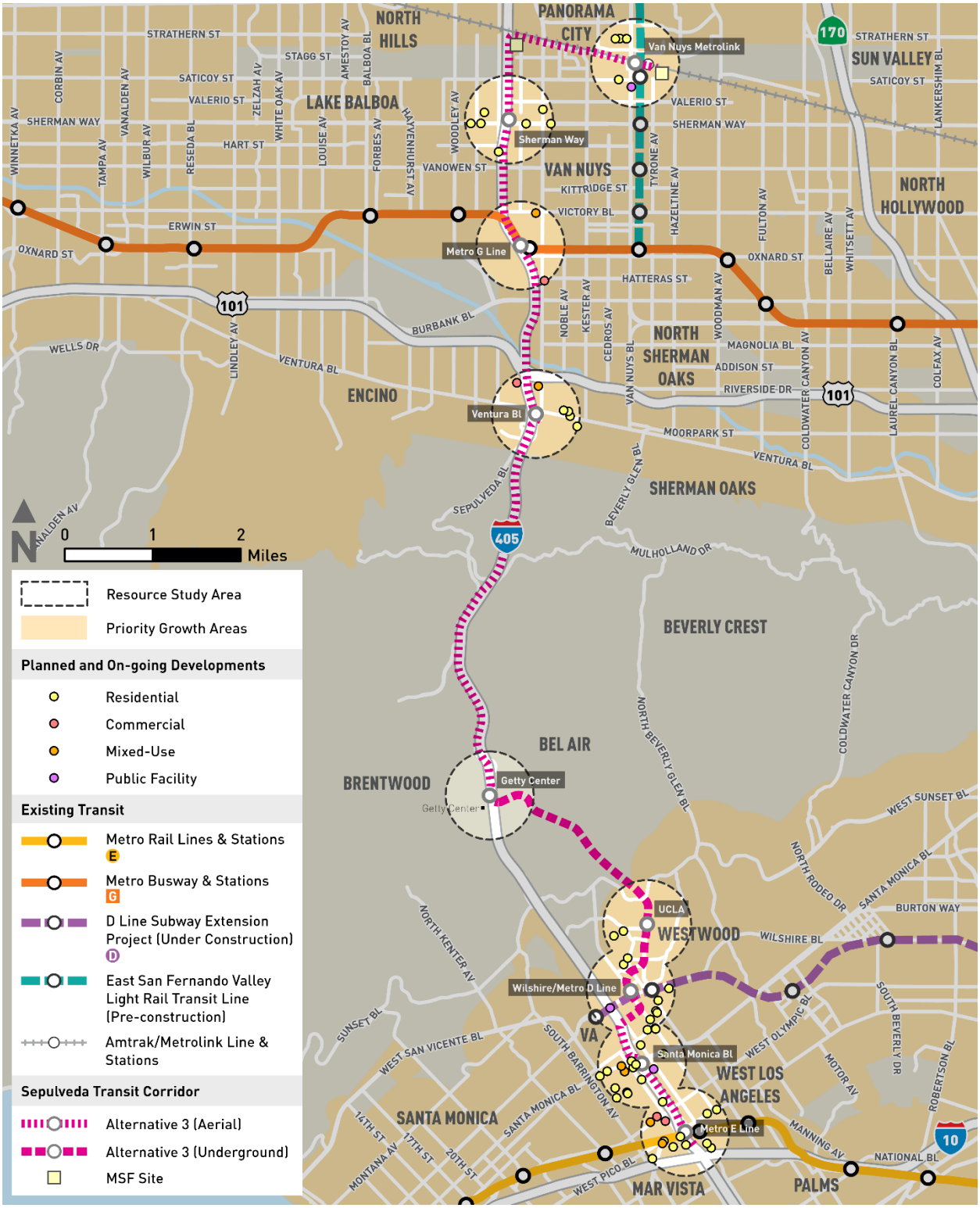
Source: SCAG, 2024b; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total accounts for overlapping proposed station areas (Alternative 3 RSA).

(A) = aerial station
(U) = underground station

Figure 7-10. Alternative 3: Resource Study Area and Priority Development Areas



Source: DCP, 2023b; City of Santa Monica, 2023; SCAG, 2024b

7.2.2 Historical Growth

Historical population and housing growth data for the census tracts that encompass the Alternative 3 RSA discussed in this report were gathered from the American Communities Survey 2016 and 2021 estimates, and the historical employment growth data was gathered from the SCAG *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (2024-2050 RTP/SCS) employment estimates at the TAZ level (SCAG, 2024a).

7.2.2.1 Population and Housing

Table 7-6 shows the historical annual population and housing growth trend from the year 2016 to 2021 for the Alternative 3 RSA. The overall Alternative 3 RSA experienced higher annual historical housing growth rates and lower annual population decline rates than the No Project Alternative. The proposed Wilshire Boulevard/Metro D Line Station area experienced the greatest annual population growth rate (+1.91 percent) and annual housing growth rate (+1.96 percent). For Alternative 3, the proposed Metro E Line Station area experienced the greatest decline in annual population growth rates (-2.98 percent) and the proposed Santa Monica Boulevard Station area experienced the greatest decline in annual housing growth rates (-1.91 percent).

Table 7-6. Alternative 3: Historical Population and Housing Growth

Proposed Station Area[a]	2016 – 2021 Annual Growth (%)	
	Population	Housing
Metro E Line Expo/Sepulveda Station (A)	-2.97	-1.66
Santa Monica Boulevard Station (A)	-2.90	-1.91
Wilshire Boulevard/Metro D Line Station (U)	+1.91	+1.96
UCLA Gateway Plaza Station (U)	+0.63	-0.04
Getty Center Station (A)	-2.48	+0.58
Ventura Boulevard/Sepulveda Boulevard Station (A)	+0.75	+0.60
Metro G Line Sepulveda Station (A)	-1.09	+0.77
Sherman Way Station (A)	+0.07	+1.08
Van Nuys Metrolink Station (A)	-0.64	+0.92
Total[b]	**-0.41**	**+0.63**

Source: U.S. Census Bureau, 2017, 2022; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 3 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station
(U) = underground station

7.2.2.2 Employment

Table 7-7 shows the historical annual employment growth trend from the year 2016 to 2021 for the Alternative 3 RSA. The proposed station areas experienced a mix of employment growth and decline. Overall, the Alternative 3 RSA experienced greater levels of employment growth as the No Project Alternative RSA. The proposed Getty Center Station area experienced the highest annual historical employment growth rates (+26.61 percent) in the Alternative 3 RSA, while the proposed Van Nuys Metrolink Station area experienced the highest annual employment decline growth rate (-5.13 percent). High employment growth within the Getty Center Station area is due to an increase in educational service jobs.

Table 7-7. Alternative 3: Historical Employment Growth in the Resource Study Area

Proposed Station Area[a]	2016 – 2021 Annual Growth (%)
Metro E Line Expo/Sepulveda Station (A)	+0.39
Santa Monica Boulevard Station (A)	-0.73
Wilshire Boulevard/Metro D Line Station (U)	+5.57
UCLA Gateway Plaza Station (U)	+7.99
Getty Center Station (A)	+26.61
Ventura Boulevard/Sepulveda Boulevard Station (A)	-1.67
Metro G Line Sepulveda Station (A)	-2.60
Sherman Way Station (A)	+1.77
Van Nuys Metrolink Station (A)	-5.13
Total[b]	**+3.09**

Source U.S. Census Bureau, 2022b; HTA, 2024

[a]Proposed Station Area refers to census tracts that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 3 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station
(U) = underground station

7.2.2.3 Summary

The Alternative 3 RSA would be almost entirely within a SCAG-designated PDA, with the exception of the Getty Center station area; therefore, nearly all of its land area is in areas targeted for the growth inducing strategies and policies of the 2024-2050 RTP/SCS. While the proposed station areas historically experienced a mix of population and housing gains and losses, overall, the Alternative 3 RSA has experienced annual population decline and annual housing and employment growth. These inconsistencies may be indicative of either a redistribution of growth throughout the region or outward migration patterns resulting from the 2020 COVID-19 pandemic. Compared to the No Project Alternative RSA, the Alternative 3 RSA historically experienced higher rates of housing and employment growth and a lower rate of population decline.

7.2.3 Projected Growth

7.2.3.1 Population, Housing, and Employment

Table 7-8 summarizes the SCAG-derived forecast for population, housing, and employment growth for the Alternative 3 RSA from 2019 to 2045. In comparison to the mix of historical population and housing

gains and losses, SCAG projections indicate positive growth trends. Overall, the Alternative 3 RSA is anticipated to experience higher projected population and housing growth rates and a slightly lower employment growth rate than historical rates.

As with the No Project Alternative, the projected numbers for the Alternative 3 RSA demonstrate a trend of housing growth matching or exceeding population growth rates, which runs contrary to the historical trend of inconsistencies between population and housing rates. It indicates an expectation that housing growth patterns are anticipated to adjust to match existing and future population trends.

Within the Alternative 3 RSA, the proposed Metro E Line Expo/Sepulveda Station area is projected to have the highest population growth rate (+0.81 percent), the UCLA Gateway Plaza Station area is projected to have the highest annual housing growth (+1.43 percent), and the Sherman Way Station area is projected to have the highest annual employment growth (+0.39 percent). In contrast, the proposed Getty Center Station area is projected to have the lowest annual population growth rate (-0.14 percent), annual housing growth rate (+0.32 percent), and the lowest annual employment growth rate (+0.12 percent).

Table 7-8. Alternative 3: SCAG-Derived Forecast for Population, Housing, and Employment Growth in the Resource Study Area

Proposed Station Area[a]	2019 – 2045 Annual Growth (%)		
	Population	Housing	Employment
Metro E Line Expo/Sepulveda Station (A)	+0.81	+1.33	+0.30
Santa Monica Boulevard Station (A)	+0.66	+1.05	+0.33
Wilshire Boulevard/Metro D Line Station (U)	+0.80	+1.32	+0.27
UCLA Gateway Plaza Station (U)	+0.68	+1.43	+0.15
Getty Center Station (A)	-0.14	+0.32	+0.12
Ventura Boulevard/Sepulveda Boulevard Station (A)	+0.46	+0.97	+0.18
Metro G Line Sepulveda Station (A)	+0.31	+0.91	+0.29
Sherman Way Station (A)	+0.21	+0.83	+0.39
Van Nuys Metrolink Station (A)	+0.15	+0.88	+0.35
Total[b]	**+0.44**	**+1.01**	**+0.26**

Source: SCAG 2020b; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 3 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station
(U) = underground station

7.2.3.2 Planned and On-Going Developments

Table 7-9 shows 63 on-going and planned developments in the Alternative 3 RSA, which are anticipated to directly, or indirectly, result in population, housing, and employment growth. These developments are not dependent on the implementation of Alternative 3 and would occur with or without the Project. Figure 7-10 displays the planned and on-going developments throughout the Alternative 3 RSA. The majority of developments would be multi-family residential projects, which would directly contribute to population and housing growth in the Alternative 3 RSA. If fully built out, the planned and on-going

developments would construct over 652,000 square feet of commercial space and over 4,800 dwelling units within the Alternative 3 RSA.

Table 7-9. Alternative 3: Planned and On-Going Developments in the Resource Study Area

Development Type	Total Developments	Total Commercial Square Footage	Total Dwelling Units	Developments Inside PDAs	Commercial Square Footage Inside PDAs	Dwelling Units Inside PDAs
Residential (Multi-family)	48	—	2,430	45	—	2,393
Mixed-Use	6	280,029	2,415	6	280,029	2415
Commercial	4	256,995	—	4	256,995	—
Public Facility	2	115,000	—	2	115,000	—
Zoning-Related Projects[a]	1	—	11	1	—	11
Transportation Improvement Project[b]	2	—	—	2	—	—
Total	**63**	**652,024**	4,856	**60**	**652,024**	**4,819**

Source: City of Los Angeles, 2023; DCP, 2023b; City of Santa Monica, 2023; HTA, 2024

[a]Zoning-related projects include parcel map, specific plan, subdivision, tentative tract map, transit neighborhood plans, and zone change projects, which aim to increase the allowable density on a given [set of] parcel[s].

[b]Transportation improvement projects include bus rapid transit, highway improvement, and rail projects, which aim to increase the capacity or improve the efficiency of the transportation and transit network.

— = no data

7.3 Impacts Evaluation

7.3.1 Would the project foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment?

7.3.1.1 Operational Impacts

The Project is a transit infrastructure project proposed to serve projected population, housing, and employment growth within the Alternative 3 RSA and SCAG region and to accommodate the existing and future transportation needs of the area. Alternative 3 would not construct any new housing units and therefore would not generate direct population growth within the proposed station areas. Instead, Alternative 3 is anticipated to accommodate planned population and economic growth for the affected communities and potentially redirect regional growth to the Alternative 3 RSA. Potential indirect effects as a result of Alternative 3 include the future planning and development of transit-oriented communities (TOC) within the proposed station areas. Compared to existing conditions, Alternative 3 would result in greater levels of access to and capacity of the transit and transportation network within the Project Study Area.

The 2024-2050 RTP/SCS land use and transportation policies incentivize local jurisdictions to explore opportunities to densify the existing land uses within PDAs. Additionally, the existing County of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles Transit-Oriented Communities (TOC) Incentive Program, the City of Santa Monica Transportation Demand Management Ordinance, and Metro's TOC Policy prioritize the development of TOCs within 0.5 mile of a major transit stop or High-Quality Transit Stop (HQTS). Other regional and local policies encourage TOC planning and development including the following:

- Intensification of land uses within the proposed station areas and along the corridor
- Development of compact communities around a public transit system
- Alternatives to automobile travel
- Planning for residents, visitors, and employees within the vicinity of the areas

Potential indirect effects as a result of Alternative 3 include the future planning and development of TOCs within the proposed station areas. As demonstrated in Table 7-5, except for the proposed Getty Center Station area, the Alternative 3 proposed station areas would be within PDAs. Alternative 3 would be a catalyst to TOC planning and development within these proposed station areas. Such future planned densification of land uses is incorporated into the forecast SCAG growth data, is central to the growth strategies of the 2024-2050 RTP/SCS and is not considered unplanned growth. Additionally, the Project is included in the list of transportation projects identified in the SCAG 2024-2050 RTP/SCS and Measure M and is thus incorporated into their assumptions for future planning and development in the region.

The proposed Getty Center Station would introduce a major transit stop outside of PDA, which could indirectly result in new and unplanned TOC, and therefore new economic and population growth, within environments outside of areas designated for more compact growth and infill strategies by the 2024-2050 RTP/SCS. However, as stated in the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* (Metro, 2025), the proposed Getty Center Station area would be on land zoned for public facilities and single-family residential. Vacant land uses within the proposed Getty Center Station area are considered protected open space. Thus, infill development of these vacant land uses is unlikely due to adherence to existing zoning. Therefore, the proposed Getty Center Station would not foster unplanned economic or population growth in the Alternative 3 RSA. Except for the proposed Getty Center Station area, the Alternative 3 proposed station areas would be almost entirely within PDAs. Any development that would be constructed within the proposed station areas would be in areas already designated by SCAG for the allocation of denser, more compact development and growth, with the exception of the proposed Getty Center station area. Thus, the projected growth for the Alternative 3 proposed station areas is identified in the 2024-2050 RTP/SCS and is not new unplanned growth.

Thus, Alternative 3 would not induce unplanned economic or population growth beyond growth already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans. Rather, Alternative 3 would redirect planned jurisdiction-wide growth to the within the proposed station areas. PDAs comprise nearly 88 percent of the Alternative 3 RSA. By developing new transit stations within the SCAG PDAs, Alternative 3 would be consistent with the transit-oriented goals and strategies of the SCAG 2024-2050 RTP/SCS, Metro's TOC Policy, the County of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles TOC Incentive Program, and the City of Santa Monica Transportation Demand Management Ordinance regarding prioritization of TOCs within 0.5 mile of a major transit stop. Additionally, the SCAG-derived forecasted population, housing, and employment growth assumes that the Project would be built. Thus, operations of Alternative 3 would provide benefits to jurisdictions in the Alternative 3 RSA and in the SCAG region and would result in less than significant impacts related to unplanned population, housing, and employment growth.

7.3.1.2 Construction Impacts

Construction of Alternative 3 would result in temporary environmental impacts within the RSA due to the necessary addition of construction workers. However, these workers would likely be sourced from the local labor pool, and thus the temporary employment opportunities for Alternative 3 would not directly foster the construction of permanent housing for workers in the Alternative 3 RSA. Thus,

construction of Alternative 3 would result in less than significant impacts related to unplanned population, housing, and employment growth.

7.3.1.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design would be an integral part of the infrastructure for Alternative 3 and would support the maintenance, operations, and storage activities for Alternative 3. The MSF site would improve the regional transportation system and support the SCAG 2024-2050 RTP/SCS mobility goals by providing a reliable, alternative mode of transportation to the region. Construction of the MSF Base Design would not construct any new housing units; therefore, the MSF Base Design would not generate new or unplanned population and housing growth. However, the MSF Base Design would create employment opportunities for approximately 260 to 350 persons for Alternative 3, or approximately 0.1 percent of the total employment growth projected for the Alternative 3 RSA, which could result in nominal employment growth. However, employment opportunities would primarily consist of existing labor who live within the region. Potential employment resulting from the MSF Base Design would not exceed SCAG projections for the Alternative 3 RSA. Thus, construction and operation of the MSF Base Design would result in less than significant impacts related to unplanned population, housing, and employment growth.

MSF Design Option 1

Similar to the MSF Base Design, as a component of Alternative 3, the MSF Design Option 1 would support the mobility goals of the SCAG 2024-2050 RTP/SCS. Construction of the MSF Design Option 1 would not construct any new housing units and therefore would not generate new or unplanned population and housing growth. As with the MSF Base Design, the MSF Design Option 1 would similarly create employment opportunities for approximately 260 to 350 persons for Alternative 3, or approximately 0.1 percent of the total employment growth projected for the Alternative 3 RSA. Any nominal employment growth that could occur would primarily consist of existing labor in the region, and potential employment resulting from the MSF Option would not exceed SCAG projections for the Alternative 3 RSA. Thus, construction and operation of the MSF Design Option 1 would result in less than significant impacts related to unplanned population, housing, and employment growth.

7.3.2 Would the project remove obstructions to population growth…[or] encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

7.3.2.1 Operational Impacts

Alternative 3 would be within a densely developed region, both urban and suburban in character, and would not introduce growth-supporting infrastructure, nor construct any new housing units, nor extend environmental impacts into previously undeveloped areas lacking adequate infrastructure. The population, housing, and employment growth projections for the Alternative 3 RSA are calculated so as not to exceed the maximum density of local general plans. The SCAG 2024-2050 RTP/SCS (SCAG, 2024a) and Measure M (Metro, 2016) incorporate the Project into their assumptions for future planning and development in the region. As previously stated, transit projects are not considered growth inducing infrastructure, but rather as infrastructure that would direct planned economic and population jurisdiction-wide growth to the proposed station areas. Alternative 3 would not generate direct or indirect growth within the proposed station areas. Rather, Alternative 3 would potentially redistribute projected growth for each affected community toward the proposed station areas, thereby resulting in

localized growth related to the development of TOCs within the Alternative 3 proposed station areas and increasing transit accessibility.

Alternative 3 would accommodate the SCAG 2024-2050 RTP/SCS growth projections. The construction of a new transit line would increase access to and from the Alternative 3 RSA but would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS (SCAG, 2024a), Metro's *2020 Long Range Transportation Plan* (LRTP) (Metro, 2020b), the 2023 FTIP (SCAG, 2022), or Measure M (Metro, 2016). Planned and on-going developments in the Alternative 3 RSA would all be constructed within SCAG-identified PDAs, reflecting the actualization of SCAG growth accommodating and economic strategies to encourage compact development in transit-served areas. Thus, operations of Alternative 3 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

7.3.2.2 Construction Impacts

Construction of Alternative 3 would result in temporary influxes of construction workers, equipment, and vehicular trips to the Alternative 3 RSA. However, because the Alternative 3 RSA would be within a densely developed region, and because construction workers would likely reside in the wider metropolitan area, construction activities would not induce growth or extend environmental impacts into previously undeveloped areas. Construction activities for Alternative 3 would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, or Measure M. Thus, construction of Alternative 3 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

7.3.2.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design would be within an urbanized region and would be constructed on a previously developed area. The MSF Base Design would not construct any housing units and thus would not generate unplanned population or housing growth. However, the MSF Base Design would create employment opportunities for approximately 260 to 350 persons for Alternative 3, or approximately 0.1 percent of the total employment growth projected for the Alternative 3 RSA. Employment growth would be nominal and would not exceed the SCAG employment growth projections for the Alternative 3 RSA. Although the MSF Base Design is considered an integral part of Alternative 3, the MSF Base Design would be an auxiliary transit structure and not a major transit stop, and thus would not result in the development of TOCs in the surrounding areas. The MSF Base Design would not remove obstruction to population growth, nor encourage or facilitate other unplanned projects. Thus, construction and operation of the MSF Base Design would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

MSF Design Option 1

The MSF Design Option 1would be within an urbanized region and would be constructed on a previously developed area. The MSF Design Option 1 would not construct any housing units and thus would not generate unplanned population or housing growth. However, the MSF Design Option 1 would create

employment opportunities for approximately 260 to 350 persons for Alternative 3, or approximately 0.1 percent of the total employment growth projected for the Alternative 3 RSA. Employment growth would be nominal and would not exceed the SCAG employment growth projections for the Alternative 3 RSA. Although the MSF Design Option 1 is considered an integral part of Alternative 3, the MSF Design Option 1would be an auxiliary transit structure and not a major transit stop, and thus would not result in the development of TOCs in the surrounding areas. The MSF Design Option 1 would not remove obstruction to population growth, nor encourage or facilitate other unplanned projects. Thus, construction and operation of the MSF Design Option 1would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

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

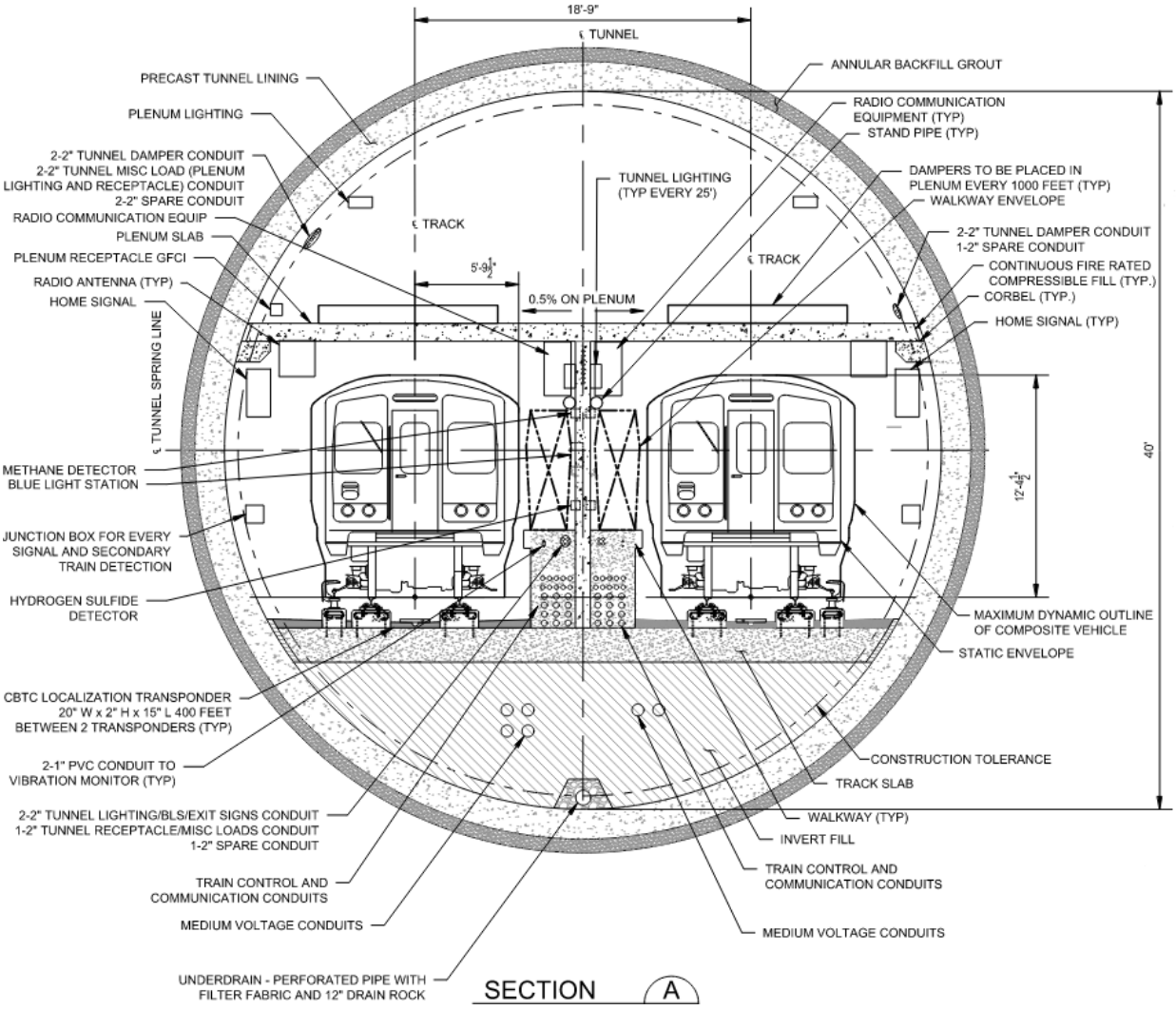
Station located over Dickens Street, immediately west of the Sepulveda Boulevard and Dickens Street intersection. North of the station, the aerial guideway would transition to the center median of Sepulveda Boulevard. The aerial guideway would continue north on Sepulveda Boulevard and cross over U.S. 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

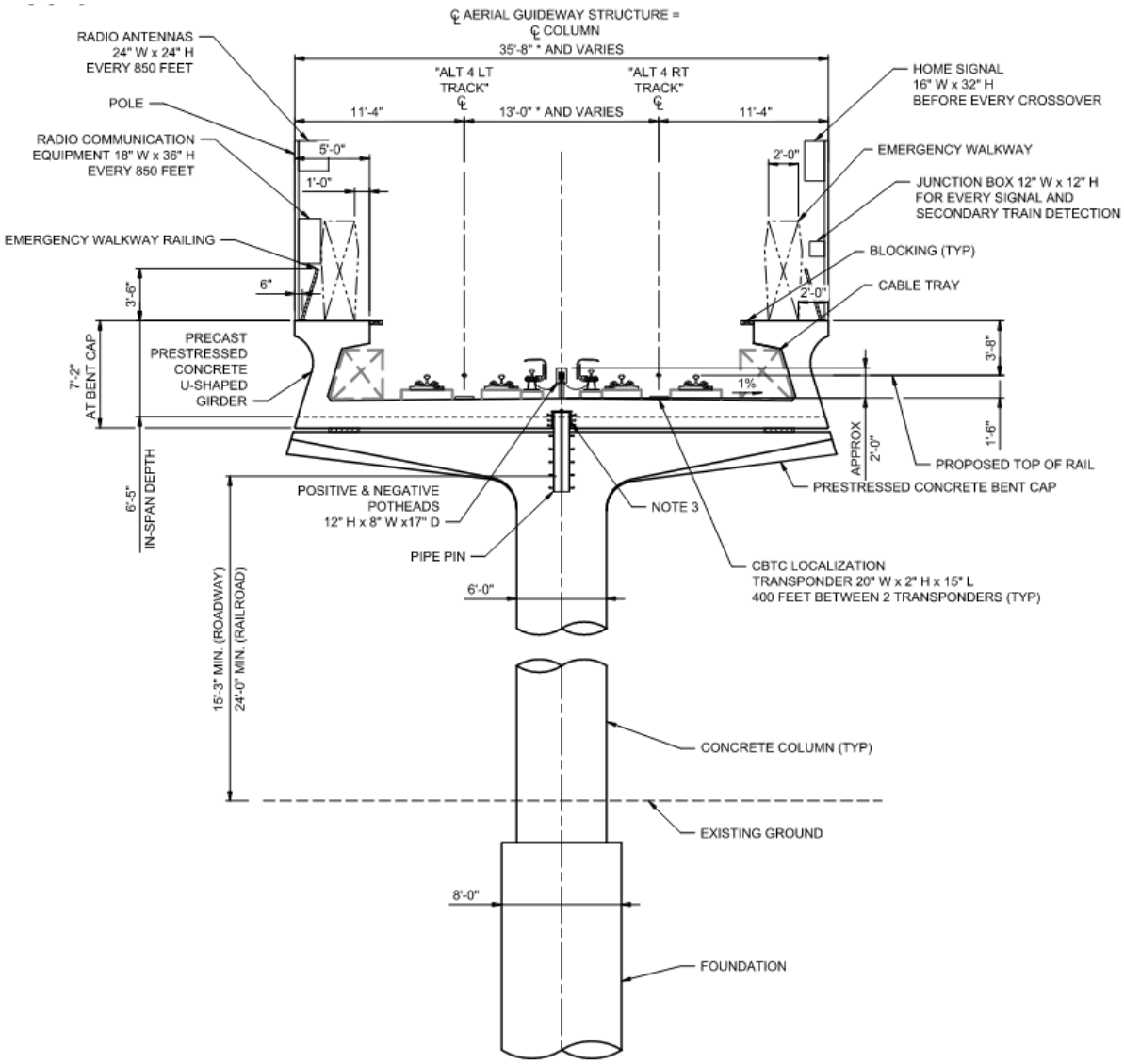


Source: STCP, 2024

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.

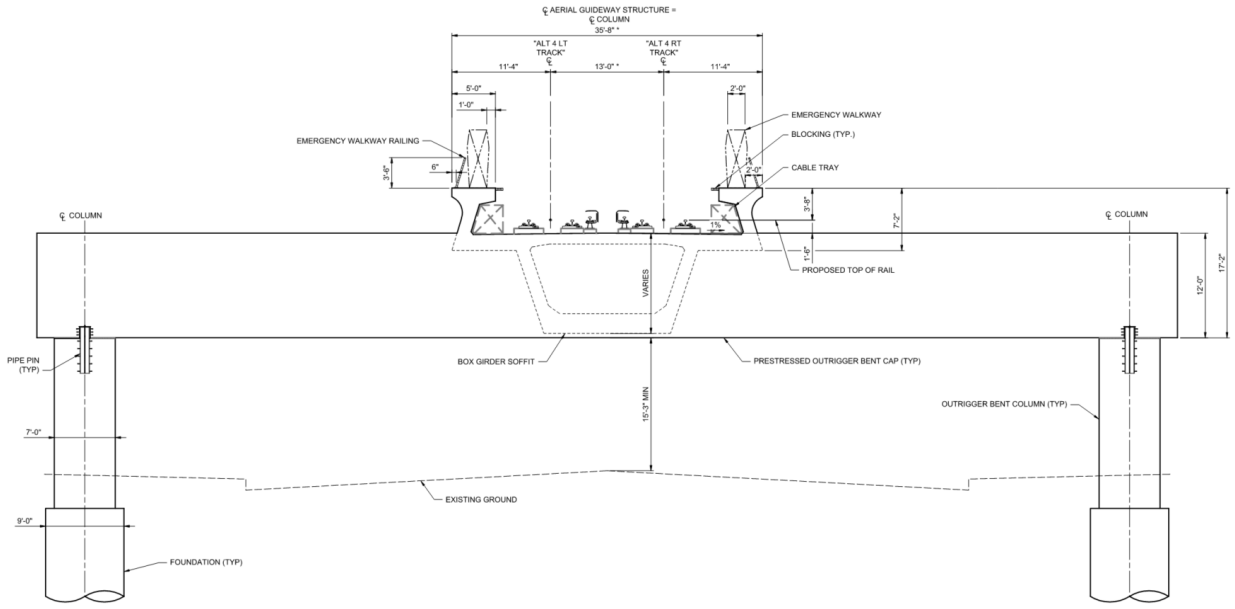
Figure 8-3. Typical Aerial Guideway Cross-Section



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 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)
Metro E Line Station					*30*
Metro E Line	Santa Monica Boulevard	0.9	89	86	—
Santa Monica Boulevard Station					*20*
Santa Monica Boulevard	Wilshire/Metro D Line	0.9	91	92	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	75	68	—
UCLA Gateway Plaza Station					*20*
UCLA Gateway Plaza	Ventura Boulevard	6.1	376	366	—
Ventura Boulevard Station					*20*
Ventura Boulevard	Metro G Line	1.9	149	149	—
Metro G Line Station					*30*
Metro G Line	Sherman Way	1.4	110	109	—
Sherman Way Station					*20*
Sherman Way	Van Nuys Metrolink	1.9	182	180	—
Van Nuys Metrolink Station					*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.

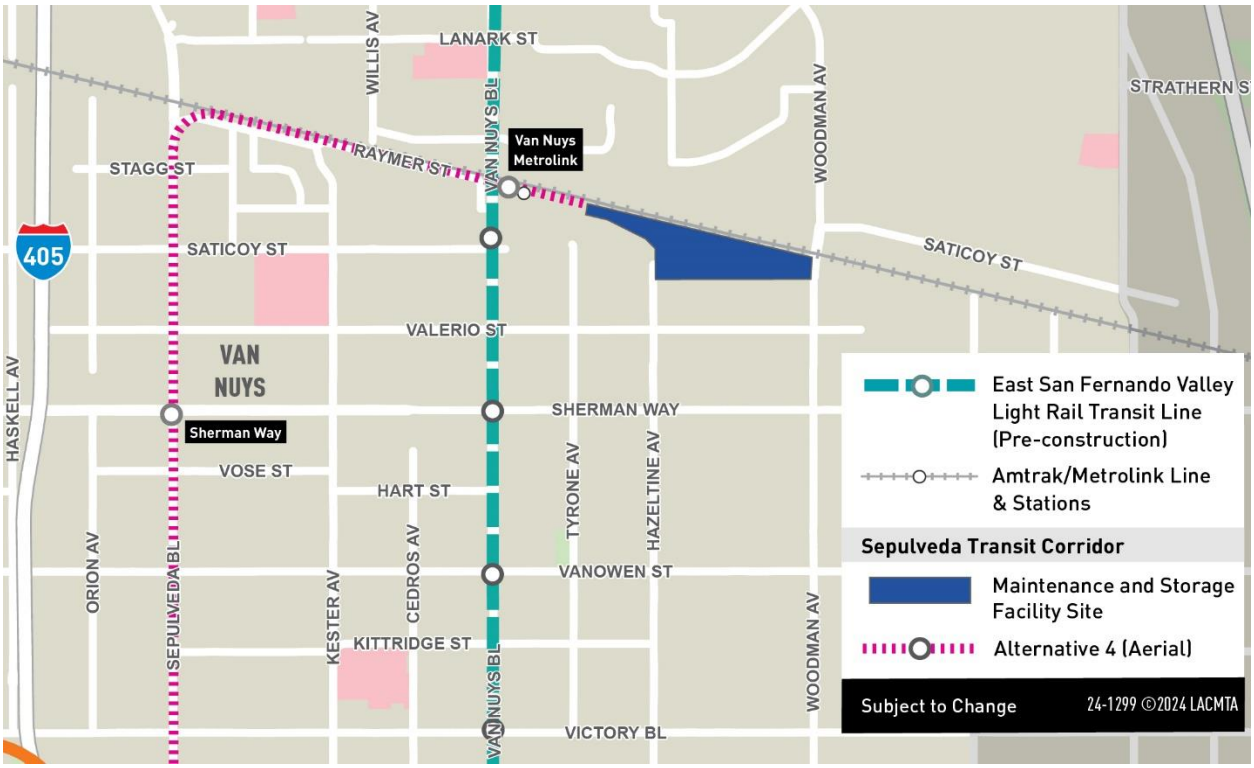
The site would include the following facilities:

- 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)

TPSS No.	Location Description	Configuration
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

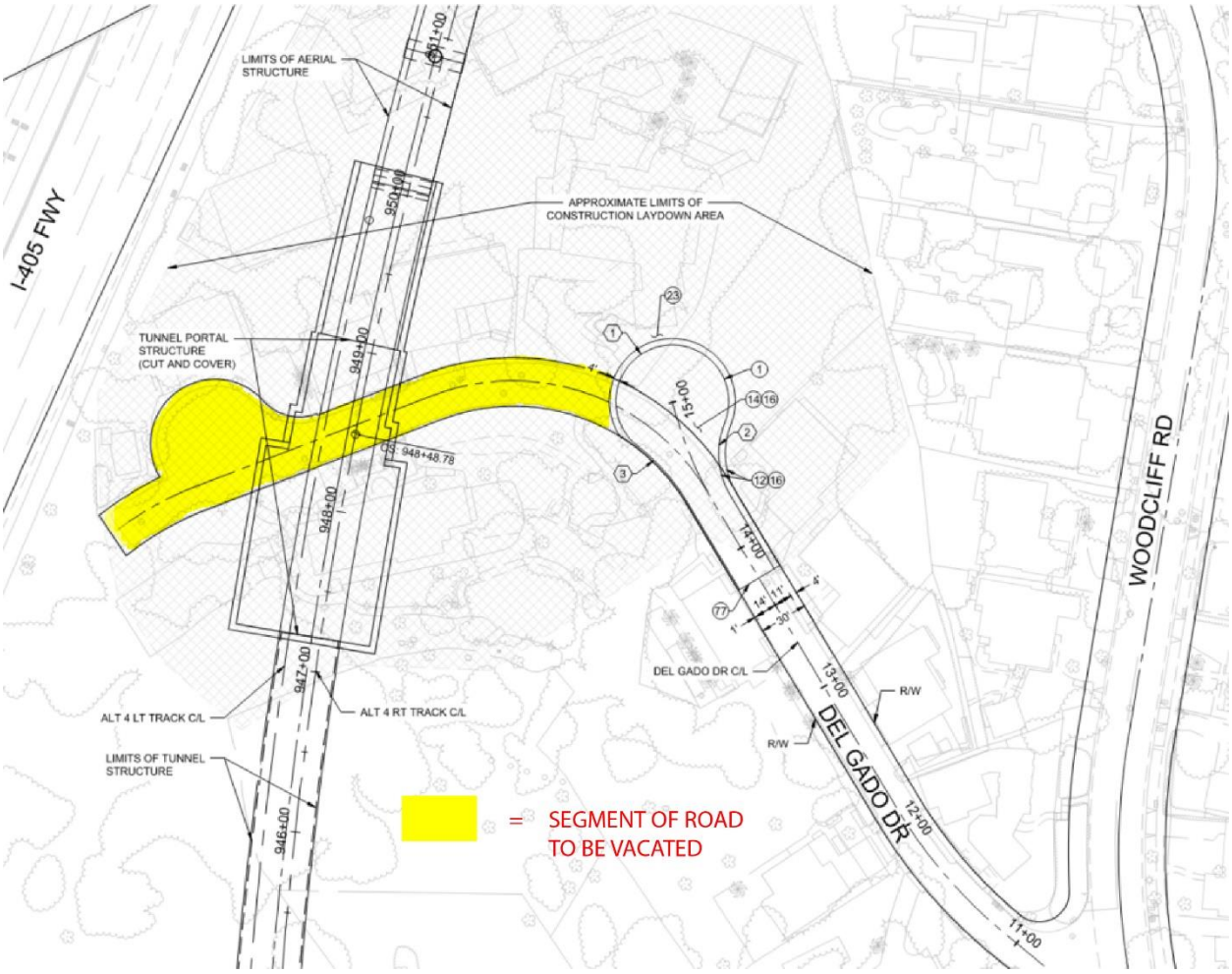
Location	From	To	Description of Change
Del Gado Drive	Woodcliff Road	Not Applicable	Vacation of approximately 325 feet of Del Gado Drive east of I-405 to accommodate tunnel portal
Sepulveda Boulevard	Ventura Boulevard	Raymer Street	Construction of raised median and removal of all on-street parking on 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	Van Nuys Boulevard	Reconstruction and narrowing of width 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

8.2.1 Alternative 4 Resource Study Area

The Alternative 4 Resource Study Area (RSA) is within the jurisdictions of the City of Los Angeles, the City of Santa Monica, and the unincorporated U.S. Department of Veterans Affairs in Sawtelle, Los Angeles (Sawtelle VA) community of Los Angeles County. Affected communities identified within the City of Los Angeles include Bel Air, Encino, Mar Vista, North Sherman Oaks, Palms, Panorama City, Van Nuys, West Los Angeles, and Westwood.

For purposes of the growth inducing impacts analysis, the Alternative 4 RSA would include Transportation Analysis Zones (TAZ) from Southern California Association of Governments (SCAG) regional growth forecast, U.S. Census Bureau census tracts, and U.S. Census Bureau census blocks that intersect the Alternative 4 proposed station areas. Table 8-6 demonstrates the percentage of the Alternative 4 proposed station areas that would be within a SCAG-designated Priority Development Area (PDA). Except for the proposed Ventura Boulevard Station area, the proposed station areas would be entirely within a PDA. Figure 8-11 displays the Alternative 4 RSA and the PDAs.

Table 8-6. Alternative 4: Proposed Station Areas within a SCAG-Designated Priority Development Area

Proposed Station Area[a]	Proposed Station Area within a PDA (%)
Metro E Line Expo/Sepulveda Station (U)	100.0
Santa Monica Boulevard Station (U)	100.0
Wilshire Boulevard/Metro D Line Station (U)	100.0
UCLA Gateway Plaza Station (U)	100.0
Ventura Boulevard/Sepulveda Boulevard Station (A)	95.0
Metro G Line Sepulveda Station (A)	100.0
Sherman Way Station (A)	100.0
Van Nuys Metrolink Station (A)	100.0
Total[b]	**99.4**

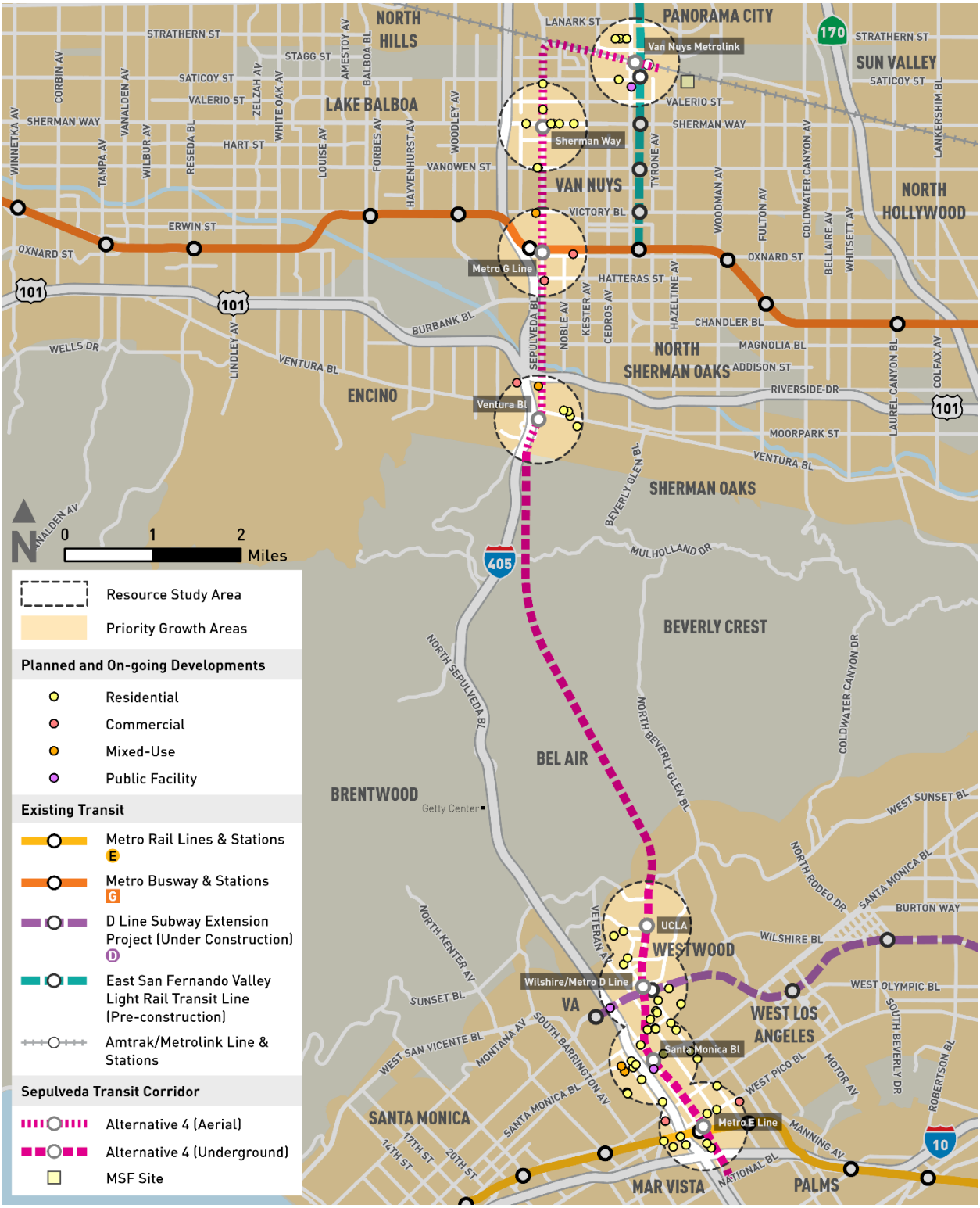
Source: SCAG, 2024b; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total accounts for overlapping proposed station areas.

(A) = aerial station
(U) = underground station

Figure 8-11. Alternative 4: Resource Study Area and Priority Development Areas



Source: DCP, 2023b; City of Santa Monica, 2023; SCAG, 2024b

8.2.2 Historical Growth

Historical population and housing growth data for the census tracts that encompass the Alternative 4 RSA discussed in this report were gathered from the American Communities Survey 2016 and 2021 estimates, and the historical employment growth data was gathered from the SCAG *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (2024-2050 RTP/SCS) employment estimates at the TAZ level (SCAG, 2024a).

8.2.2.1 Population and Housing

Table 8-7 shows the historical annual population and housing growth trend from the year 2016 to 2021 for the Alternative 4 RSA. The overall Alternative 4 RSA experienced lower historical housing growth rates and lower population decline than the No Project Alternative. Historical growth in the Alternative 4 RSA included a mix of gains and losses in population and housing, demonstrating the uneven distribution of growth throughout the region. The proposed Wilshire Boulevard/Metro D Line Station area experienced the greatest annual population growth rate (+1.00 percent), while the Santa Monica Boulevard Station area experienced the greatest annual housing growth rate (+1.37 percent). The proposed Metro E Line Expo/Sepulveda Station area experienced the greatest annual population decline rates (-1.94 percent)and the greatest annual housing decline rates (-1.09 percent).

Table 8-7. Alternative 4: Historical Population and Housing Growth in the Resource Study Area

Proposed Station Area[a]	2016 – 2021 Annual Growth (%)	
	Population	Housing
Metro E Line Expo/Sepulveda Station (U)	-1.94	-1.09
Santa Monica Boulevard Station (U)	+0.97	+1.37
Wilshire Boulevard/Metro D Line Station (U)	+1.00	+0.84
UCLA Gateway Plaza Station (U)	+0.63	-0.04
Ventura Boulevard/Sepulveda Boulevard Station (A)	+0.79	+0.60
Metro G Line Sepulveda Station (A)	-0.80	+0.72
Sherman Way Station (A)	-0.30	+1.08
Van Nuys Metrolink Station (A)	-0.64	+0.92
Total[b]	**-0.29**	**+0.41**

Source: U.S. Census Bureau, 2017, 2022; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 4 RSA). Census tracts that intersect with more than one proposed station areas are not double counted.

(A) = aerial station
(U) = underground station

8.2.2.2 Employment

Table 8-8 shows the historical annual employment growth trend from the year 2016 to 2021 for the Alternative 4 RSA. The proposed station areas experienced a mix of employment growth and decline. Overall, the Alternative 4 RSA experienced greater levels of employment growth than the No Project Alternative RSA. The proposed UCLA Gateway Plaza Station area experienced the greatest annual historical employment growth rates (+7.99 percent) in the Alternative 4 RSA, while the proposed Van Nuys Metrolink Station area experienced the greatest annual employment decline rate (-5.13 percent).

Table 8-8. Alternative 4: Historical Employment Growth in the Resource Study Area

Proposed Station Area[a]	2016–2021 Annual Growth (%)
Metro E Line Expo/Sepulveda Station (U)	+2.14
Santa Monica Boulevard Station (U)	-0.66
Wilshire Boulevard/Metro D Line Station (U)	+6.64
UCLA Gateway Plaza Station (U)	+7.99
Ventura Boulevard/Sepulveda Boulevard Station (A)	-1.90
Metro G Line Sepulveda Station (A)	-0.57
Sherman Way Station (A)	+2.17
Van Nuys Metrolink Station (A)	-5.13
Total[b]	**+3.42**

Source: SCAG 2020b; HTA, 2024

[a]Proposed Station Area refers to census tracts that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 4 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station
(U) = underground station

8.2.2.3 Summary

The Alternative 4 RSA would be almost entirely within a SCAG-designated PDA; therefore, nearly all of its land area is in areas targeted for the growth inducing strategies and policies of the 2024-2050 RTP/SCS. While the proposed station areas historically experienced a mix of population and housing gains and losses, overall, the Alternative 4 RSA has experienced a decline in population and growth in housing and employment. These inconsistencies may be indicative of either a redistribution of growth throughout the region or outward migration patterns resulting from the 2020 COVID-19 pandemic. Compared to the No Project Alternative RSA, the Alternative 4 RSA historically experienced higher rates of employment and housing growth and lower rates of population decline.

8.2.3 Projected Growth

8.2.3.1 Population, Housing, and Employment

Table 8-9 summarizes the SCAG-derived forecast population, housing, and employment growth for the Alternative 4 RSA from 2019 to 2045. In comparison to the mix of historical population and housing gains and losses, SCAG projections indicate positive growth trends. Overall, the Alternative 4 RSA is anticipated to experience higher projected population and housing growth rates and a slightly lower employment growth rate than historical rates. Projected housing growth numbers for Alternative 4 match or exceed population growth rates, which is consistent with historical trends in the Alternative 4 RSA.

Within the Alternative 4 RSA, the proposed Wilshire Boulevard/Metro D Line and Metro E Line Expo/Sepulveda Station areas are projected to have the highest annual population growth rate (+0.83 percent), the proposed Santa Monica Boulevard Station area is projected to have the highest annual employment growth rate (+0.42 percent), and the proposed UCLA Gateway Plaza Station area is projected to have the highest annual housing growth rate (+1.43 percent). In contrast, the proposed Van Nuys Metrolink Station area is projected to have the lowest annual population growth rate (+0.15 percent), the proposed Sherman Way Station area is projected to have the lowest annual housing

growth rate (+0.81 percent), and the proposed UCLA Gateway Plaza Station area is projected to have the lowest annual employment growth rate (+0.15 percent).

Table 8-9. Alternative 4: SCAG Forecast – Population, Housing, and Employment Growth in the Resource Study Area

Proposed Station Area[a]	2019–2045 Annual Growth (%)		
	Population	Housing	Employment
Metro E Line Expo/Sepulveda Station (U)	+0.83	+1.35	+0.27
Santa Monica Boulevard Station (U)	+0.70	+1.10	+0.42
Wilshire Boulevard/Metro D Line Station (U)	+0.83	+1.32	+0.27
UCLA Gateway Plaza Station (U)	+0.68	+1.43	+0.15
Ventura Boulevard/Sepulveda Boulevard Station (A)	+0.43	+0.93	+0.21
Metro G Line Sepulveda Station (A)	+0.32	+0.91	+0.29
Sherman Way Station (A)	+0.22	+0.81	+0.36
Van Nuys Metrolink Station (A)	+0.15	+0.88	+0.35
Total [b]	**+0.49**	**+1.06**	**+0.26**

Source: SCAG 2020b; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station area (Alternative 4 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station
(U) = underground station

8.2.3.2 Planned and On-Going Developments

Table 8-10 shows the 63 on-going and planned developments in Alternative 4 RSA. These developments are not dependent on the implementation of Alternative 4 and would occur with or without the Project. The majority of developments would be multi-family residential projects, which would directly contribute to population and housing growth in the Alternative 4 RSA. Figure 8-11 displays the planned and on-going developments throughout the Alternative 4 RSA. If fully built out, the planned and on-going developments would construct over 1.1 million square feet of commercial space and over 4,600 dwelling units within the Alternative 4 RSA.

Table 8-10. Alternative 4: Planned and On-Going Developments in the Resource Study Area

Development Type	Total Developments	Total Commercial Square Footage	Total Dwelling Units	Developments Inside PDAs	Commercial Square Footage Inside PDAs	Dwelling Units Inside PDAs
Residential (Multi-family)	50	—	2,460	48	—	2,397
Mixed-Use	4	268,213	2,209	4	268,213	2,209
Commercial	5	819,453	—	5	819,453	—
Public Facility	1	92,000-	—	1	92,000-	—
Zoning-Related Projects[a]	1	—	11	1	—	11
Transportation Improvement Project[b]	2	—	—	2	—	—
Total	**63**	**1,179,666**	**4,669**	**61**	**1,179,666**	**4,616**

Source: City of Los Angeles, 2023; DCP, 2023b; City of Santa Monica, 2023; HTA, 2024

[a]Zoning-related projects include parcel map, specific plan, subdivision, tentative tract map, transit neighborhood plans, and zone change projects, which aim to increase the allowable density on a given [set of] parcel[s].

[b]Transportation improvement projects include bus rapid transit, highway improvement, and rail projects, which aim to increase the capacity or improve the efficiency of the transportation and transit network.

— = no data or no resource

8.3 Impacts Evaluation

8.3.1 Would the project foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment?

8.3.1.1 Operational Impacts

The Project is a transit infrastructure project proposed to serve projected population, housing, and employment growth within the Alternative 4 RSA and SCAG region and to accommodate the existing and future transportation needs of the area. Alternative 4 would not construct any new housing units and therefore would not generate direct population growth within the proposed station areas. Instead, Alternative 4 is anticipated to accommodate planned population and economic growth for the affected communities and potentially redirect growth to the Alternative 4 Study Area. Potential indirect effects as a result of Alternative 4 include the future planning and development of transit-oriented communities (TOC) within the proposed station areas. Compared to existing conditions, Alternative 4 would result in greater levels of access to and capacity of the transit and transportation network within the Project Study Area.

The 2024-2050 RTP/SCS land use and transportation policies incentivize local jurisdictions to explore opportunities to densify the existing land uses within PDAs. Additionally, the existing County of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles TOC Incentive Program, the City of Santa Monica Transportation Demand Management Ordinance, and Metro's TOC Policy prioritize the development of TOCs within 0.5 mile of a major transit stop or High-Quality Transit Stop (HQTS). Other regional and local policies encourage TOC planning and development including the following:

- Intensification of land uses within the proposed station areas and along the corridor
- Development of compact communities around a public transit system
- Alternatives to automobile travel
- Planning for residents, visitors, and employees within the vicinity of the areas

Potential indirect effects as a result of Alternative 4 include the future planning and development of transit-oriented communities (TOC) within the proposed station areas. As demonstrated in Table 8-6, the Alternative 4 proposed station areas would be almost entirely within PDAs. Therefore, any development indirectly resulting from the Project would be located in areas already designated by SCAG for the allocation of denser, more compact development. Alternative 4 would be a catalyst to TOC planning and development within these proposed station areas. Such future planned densification of land uses is incorporated into the forecast SCAG growth data, is central to the growth strategies of the 2024-2050 RTP/SCS and is not considered new unplanned growth. Additionally, the Project is included in the list of transportation projects identified in the SCAG 2024-2050 RTP/SCS and Measure M and is thus incorporated into their assumptions for future planning and development in the region.

Thus, Alternative 4 would not induce unplanned economic or population growth beyond what was already anticipated in the regional plans and projections for the SCAG region, or in local land use and

community plans. Rather, Alternative 4 would redirect planned jurisdiction-wide growth to the proposed station areas. PDAs comprise nearly 99 percent of the Alternative 4 RSA. By developing new transit stations within the SCAG PDAs, Alternative 4 would be consistent with the transit-oriented goals and strategies of the SCAG 2024-2050 RTP/SCS, Metro's TOC Policy, the County of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles TOC Incentive Program, and the City of Santa Monica Transportation Demand Management Ordinance regarding prioritization of TOCs within 0.5 mile of a major transit stop. Additionally, the SCAG-derived forecasted population, housing, and employment growth assumes that the Project would be built. Thus, operations of Alternative 4 would provide benefits to jurisdictions in the Alternative 4 RSA and in the SCAG region and would result in less than significant impacts related to unplanned population, housing, or employment growth.

8.3.1.2 Construction Impacts

Construction of Alternative 4 would result in temporary environmental impacts within the RSA due to the necessary addition of construction workers. However, these workers would likely be sourced from the local labor pool, and thus the temporary employment opportunities for Alternative 4 would not directly foster the construction of permanent housing for workers in the Alternative 4 RSA. Thus, construction of Alternative 4 would result in less than significant impacts related to unplanned population, housing, and employment growth.

8.3.1.3 Maintenance and Storage Facility

The MSF would be an integral part of the infrastructure for Alternative 4 and would support the maintenance, operations, and storage activities for Alternative 4. The MSF site would improve the regional transportation system and support the SCAG 2024-2050 RTP/SCS mobility goals by providing a reliable, alternative mode of transportation to the region. Construction of the MSF would not construct any new housing units; therefore, the MSF would not generate new or unplanned population and housing growth. However, the MSF would create employment opportunities for approximately 260 to 350 persons for Alternative 4, or approximately 0.1 percent of the total employment growth projected for the Alternative 4 RSA, which could result in nominal employment growth. However, employment opportunities would primarily consist of existing labor who live within the region. Potential employment resulting from the MSF would not exceed SCAG projections for the Alternative 4 RSA. Thus, construction and operation of the MSF would result in less than significant impacts related to unplanned population, housing, and employment growth.

8.3.2 Would the project remove obstructions to population growth…[or] encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

8.3.2.1 Operational Impacts

Alternative 4 would be within a densely developed region, both urban and suburban in character, and would not introduce growth inducing infrastructure, nor construct any new housing units, nor extend environmental impacts into previously undeveloped areas lacking adequate infrastructure. The population, housing, and employment growth projections for Alternative 4 are calculated so as not to exceed the maximum density of local general plans. The 2024-2050 RTP/SCS growth projections incorporate the Project. As previously stated, transit projects are not considered growth inducing infrastructure, but rather as infrastructure which would direct planned economic and population jurisdiction-wide growth to the proposed station areas. Alternative 4 would not generate direct growth within the proposed station areas. However, Alternative 4 would potentially redistribute projected

growth for each affected community toward the proposed station areas, which may result in localized growth related to the development of TOCs within the RSAs for the proposed stations.

Alternative 4 would accommodate the 2024-2050 RTP/SCS planned growth projections. The construction of a new transit line would increase access to and from the Alternative 4 RSA but would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS (SCAG, 2024a), Metro's *2020 Long Range Transportation Plan* (LRTP) (Metro, 2020b), the 2023 FTIP (SCAG, 2022), or Measure M (Metro, 2016). Planned and on-going developments in the Alternative 4 proposed station areas would all be constructed within SCAG-identified PDAs, reflecting the actualization of SCAG growth accommodating and economic strategies to encourage compact development in transit-served areas. Thus, operations of Alternative 4 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

8.3.2.2 Construction Impacts

Construction of Alternative 4 would result in temporary influxes of construction workers to the Alternative 4 RSA. However, because the Alternative 4 RSA would be within a densely developed region, and because construction workers would likely reside in the wider metropolitan area, construction activities would not induce growth or extend environmental impacts into previously undeveloped areas. Construction activities for Alternative 4 would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, or Measure M. Thus, construction of Alternative 4 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

8.3.2.3 Maintenance and Storage Facility

The MSF would be within an urbanized region and would be constructed on a previously developed area. The MSF would not construct any housing units and thus would not generate unplanned population or housing growth. However, the MSF would create employment opportunities for approximately 260 to 350 persons for Alternative 4, or approximately 0.1 percent of the total employment growth projected for the Alternative 4 RSA. Employment growth would be nominal and would not exceed the SCAG employment growth projections for the Alternative 4 RSA. Although the MSF is considered an integral part of Alternative 4, the MSF would be an auxiliary transit structure and not a major transit stop, and thus would not result in the development of TOCs in the surrounding areas. The MSF would not remove obstruction to population growth, nor encourage or facilitate other unplanned projects. Thus, construction and operation of the MSF would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

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

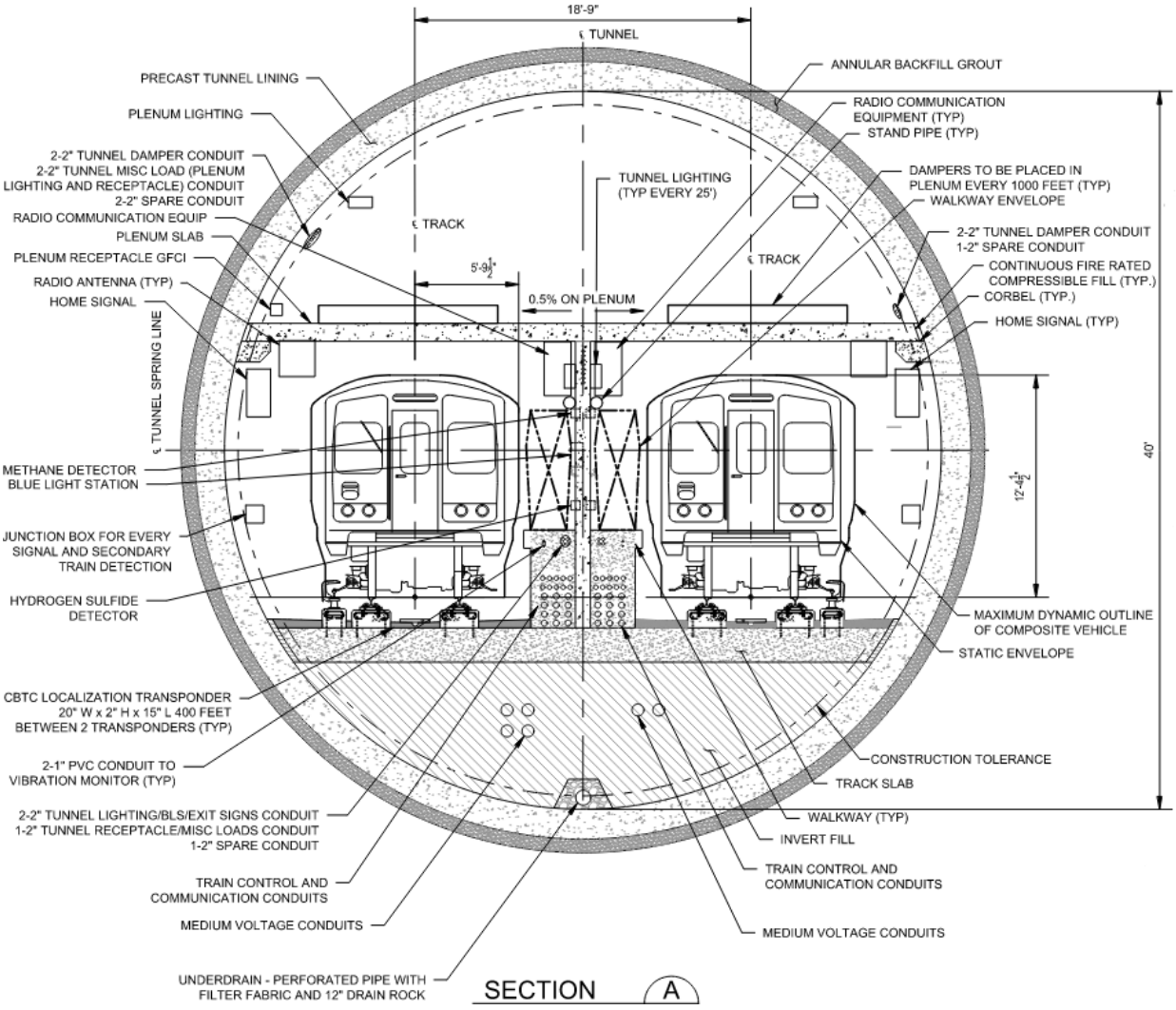
From the UCLA Gateway Plaza Station, the alignment would turn to the northwest beneath the Santa Monica Mountains to the east of Interstate 405 (I-405). South of Mulholland Drive, the alignment would curve to the north, aligning with Saugus Avenue south of Valley Vista Boulevard. The Ventura Boulevard 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.

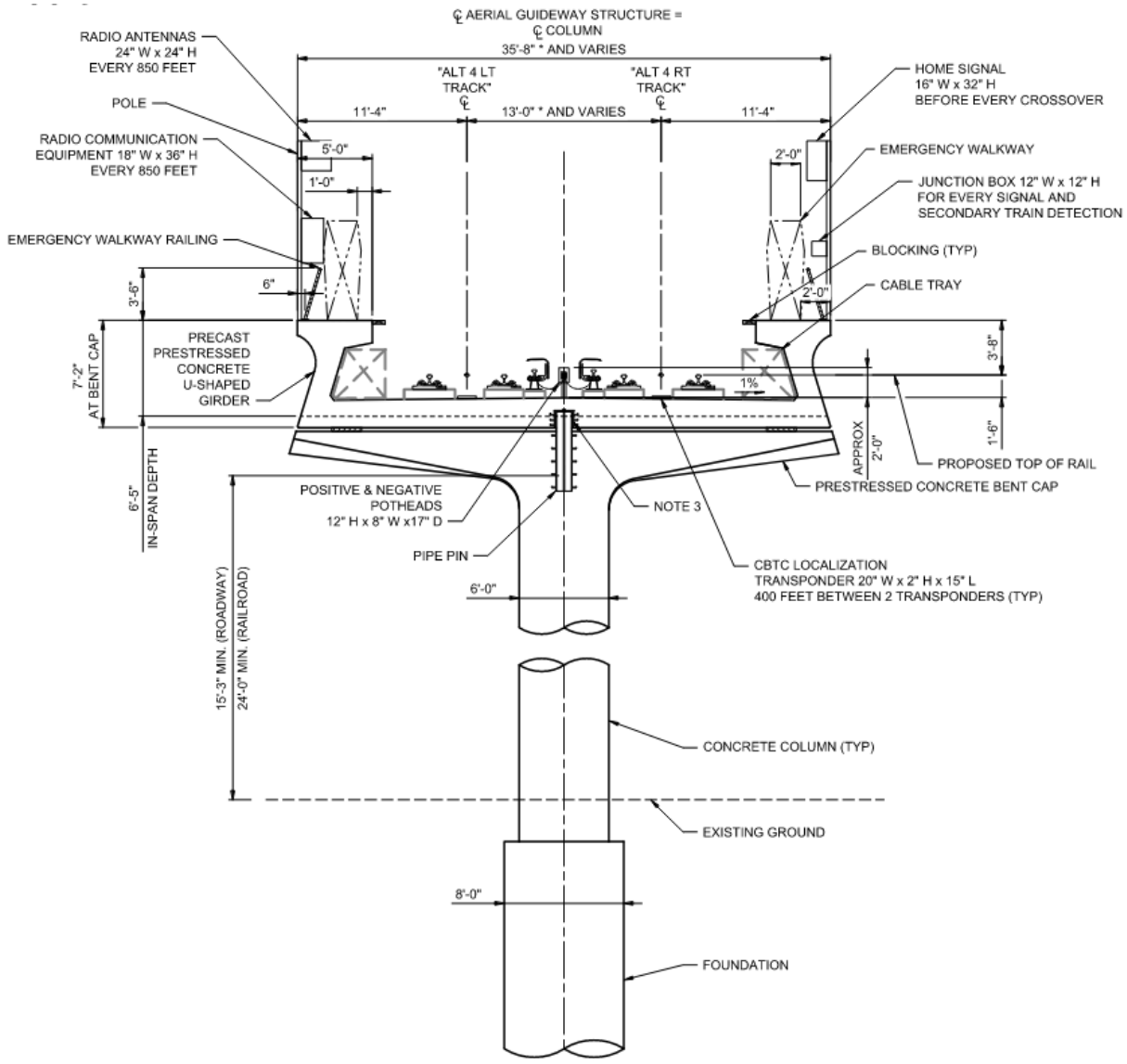
Figure 9-2. Typical Underground Guideway Cross-Section



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)
Metro E Line Station					*30*
Metro E Line	Santa Monica Boulevard	0.9	89	86	—
Santa Monica Boulevard Station					*20*
Santa Monica Boulevard	Wilshire/Metro D Line	0.9	91	92	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	75	69	—
UCLA Gateway Plaza Station					*20*
UCLA Gateway Plaza	Ventura Boulevard	6.0	368	359	—
Ventura Boulevard Station					*20*
Ventura Boulevard	Metro G Line	2.0	137	138	—
Metro G Line Station					*30*
Metro G Line	Sherman Way	1.4	113	109	—
Sherman Way Station					*20*
Sherman Way	Van Nuys Metrolink	1.9	166	162	—
Van Nuys Metrolink Station					*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

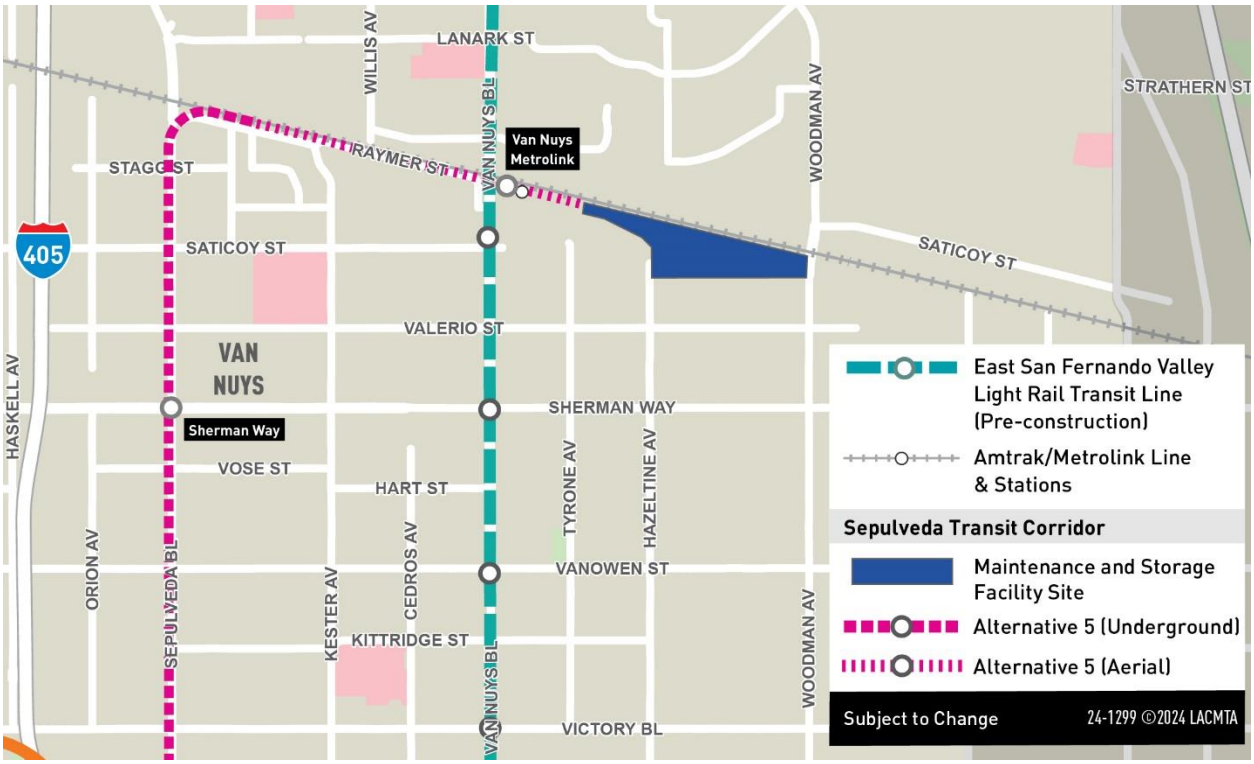
The MSF for Alternative 5 would be located east of the Van Nuys Metrolink Station and would encompass approximately 46 acres. The MSF would be designed to accommodate 184 rail cars and would be bounded by single-family residences to the south, the LOSSAN rail corridor right-of-way to the north, Woodman 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. Thirteen 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 (STCP) 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 (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	Van Nuys Boulevard	Kester Avenue	Reconstruction and narrowing of width 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

9.2.1 Alternative 5 Resource Study Area

The Alternative 5 Resource Study Area (RSA) is within the jurisdictions of the City of Los Angeles, the City of Santa Monica, and the unincorporated U.S. Department of Veterans Affairs in Sawtelle, Los Angeles (Sawtelle VA) community of Los Angeles County. Affected communities identified within the City of Los Angeles include Bel Air, Encino, Mar Vista, North Sherman Oaks, Palms, Panorama City, Van Nuys, West Los Angeles, and Westwood.

For purposes of the growth inducing impacts analysis, the Alternative 5 RSA would include Transportation Analysis Zones (TAZ) from Southern California Association of Governments (SCAG) regional growth forecast, U.S. Census Bureau census tracts, and U.S. Census Bureau census blocks that intersect the Alternative 5 proposed station areas. Table 9-6 provides the percentages of proposed station areas within a SCAG-designated Priority Development Area (PDA) for Alternative 5. Except for the proposed Ventura Boulevard Station area, the proposed station areas would be entirely within a PDA. Figure 9-9 displays the Alternative 5 RSA and the PDAs.

Table 9-6. Alternative 5: Proposed Station Areas within a SCAG-Designated Priority Development Area

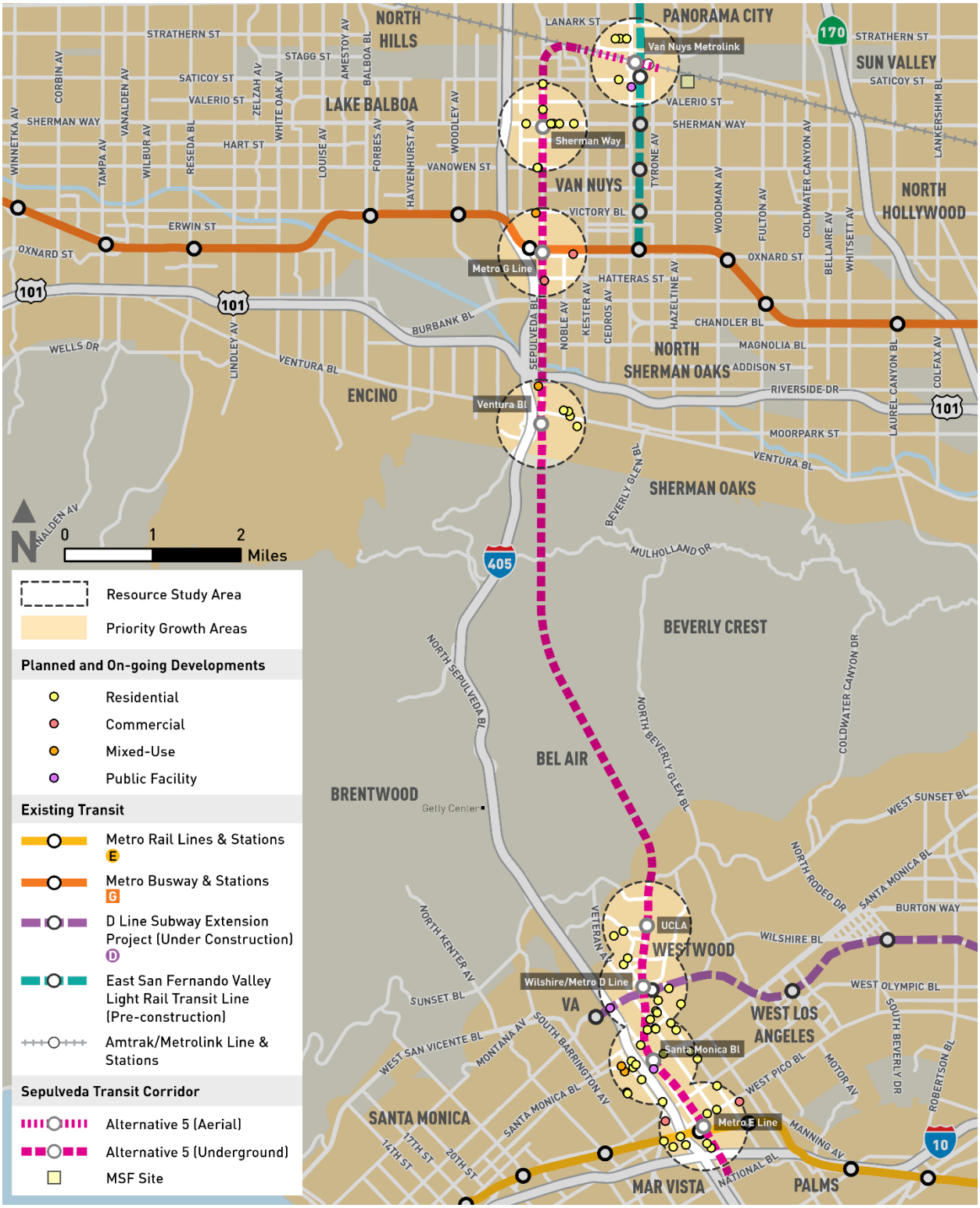
Proposed Station Area[a]	Proposed Station Area within a PDA (%)
Metro E Line Expo/Sepulveda Station (U)	100.0
Santa Monica Boulevard Station (U)	100.0
Wilshire Boulevard/Metro D Line Station (U)	100.0
UCLA Gateway Plaza Station (U)	100.0
Ventura Boulevard/Sepulveda Boulevard Station (U)	91.5
Metro G Line Sepulveda Station (U)	100.0
Sherman Way Station (U)	100.0
Van Nuys Metrolink Station (A)	100.0
Total[b]	**99.0**

Source: SCAG, 2024a; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).
[b]Total accounts for overlapping proposed station areas.

(A) = aerial station
(U) = underground station

Figure 9-9. Alternative 5: Resource Study Area and Priority Development Areas



Source: DCP, 2023b; City of Santa Monica, 2023; SCAG, 2024b

9.2.2 Historical Growth

Historical population and housing growth data for the census tracts that encompass the Alternative 5 RSA discussed in this report were gathered from the American Communities Survey 2016 and 2021 estimates, the historical employment growth data was gathered from the SCAG *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (2024-2050 RTP/SCS) employment estimates at the TAZ level (SCAG, 2024a).

9.2.2.1 Population and Housing

Table 9-7 shows the historical annual population and housing growth trend from the year 2016 to 2021 for the Alternative 5 RSA. The overall Alternative 5 RSA experienced lower historical housing growth rates and lower population decline than the No Project Alternative. Except for the proposed Ventura Boulevard/Sepulveda Boulevard Station area, which captures different census tracts due to its different location, the proposed Alternative 5 station areas experienced the same historical population and housing growth as their Alternative 4 counterparts. For Alternative 5, the proposed Wilshire Boulevard/Metro D Line Station area experienced the greatest annual population growth rate (+1.00 percent) while the Santa Monica Boulevard Station area experienced the greatest annual housing growth rate (+1.37 percent). The proposed Metro E Line Expo/Sepulveda Station area experienced the largest annual decline in population (-1.94 percent) and housing (-1.09 percent).

Table 9-7. Alternative 5: Historical Population and Housing Growth in the Resource Study Area

Proposed Station Area[a]	2016–2021 Annual Growth (%)	
	Population	Housing
Metro E Line Expo/Sepulveda Station (U)	-1.94	-1.09
Santa Monica Boulevard Station (U)	+0.97	+1.37
Wilshire Boulevard/Metro D Line Station (U)	+1.00	+0.84
UCLA Gateway Plaza Station (U)	+0.63	-0.04
Ventura Boulevard/Sepulveda Boulevard Station (U)	+0.68	+0.53
Metro G Line Sepulveda Station (U)	-0.80	+0.72
Sherman Way Station (U)	-0.30	+1.08
Van Nuys Metrolink Station (A)	-0.64	+0.92
Total[b]	**-0.31**	**+0.40**

Source: U.S. Census Bureau, 2017, 2022; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 5 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station
(U) = underground station

9.2.2.2 Employment

Table 9-8 shows the historical annual employment growth trend from the year 2016 to 2021 for the Alternative 5 RSA. The proposed station areas experienced a mix of employment growth and decline. Overall, the Alternative 5 RSA experienced greater levels of employment growth than the No Project Alternative. The proposed UCLA Gateway Plaza Station area experienced the greatest historical annual employment growth rates (+7.99 percent) in the Alternative 5 RSA, while the proposed Van Nuys Metrolink Station area experienced the greatest annual employment decline rate (-5.13 percent).

Table 9-8. Alternative 5: Historical Employment Growth in the Resource Study Area

Proposed Station Area[a]	2016–2021 Annual Growth (%)
Metro E Line Expo/Sepulveda Station (U)	+2.14
Santa Monica Boulevard Station (U)	-0.66
Wilshire Boulevard/Metro D Line Station (U)	+6.64
UCLA Gateway Plaza Station (U)	+7.99
Ventura Boulevard/Sepulveda Boulevard Station (U)	-1.90
Metro G Line Sepulveda Station (U)	-0.57
Sherman Way Station (U)	+2.17
Van Nuys Metrolink Station (A)	-5.13
Total[b]	**+3.43**

Source: SCAG, 2024a; HTA, 2024

[a]Proposed Station Area refers to census tracts that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 5 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station
(U) = underground station

9.2.2.3 Summary

The Alternative 5 RSA would be almost entirely within a SCAG-designated PDA; therefore, nearly all of its land area is in areas targeted for the growth inducing strategies and policies of the 2024-2050 RTP/SCS. While the proposed station areas historically experienced a mix of population and housing gains and losses, overall, the Alternative 5 RSA has experienced population decline and housing and employment growth. These inconsistencies may be indicative of either a redistribution of growth throughout the region or outward migration patterns resulting from the 2020 COVID-19 pandemic. Compared to the No Project Alternative RSA, the Alternative 5 RSA historically experienced higher rates of employment and housing growth and lower rates of population decline.

9.2.3 Projected Growth

9.2.3.1 Population, Housing, and Employment

Table 9-9 summarizes the SCAG-derived forecast population, housing, and employment growth for the Alternative 5 RSA from 2019 to 2045. The Alternative 5 proposed station areas experienced a mix of historical population and housing gains and losses. SCAG projections indicate positive growth trends. Overall, the Alternative 5 RSA is anticipated to experience higher projected population and housing growth rates and a slightly lower employment growth rate than historical rates. The Alternative 5 RSA is anticipated to experience higher projected population and housing growth rates and a slightly lower employment growth rate than historical rates. Projected housing growth numbers for the Alternative 5 RSA match or exceed population growth rates, which is consistent with historical trends in the Alternative 5 RSA.

For Alternative 5, the proposed Wilshire Boulevard/Metro D Line and Metro E Line Expo/Sepulveda Station areas are projected to have the highest population growth rate (+0.83 percent), the proposed Santa Monica Boulevard Station area is projected to have the highest annual employment growth rate (+0.42 percent), and the proposed UCLA Gateway Plaza Station area is projected to have the highest annual housing growth rate (+1.43 percent). In contrast, the proposed Van Nuys Metrolink Station area

is projected to have the lowest annual population growth rate (+0.15 percent), the proposed Sherman Way Station area is projected to have the lowest annual housing growth rate (+0.81 percent), and the proposed UCLA Gateway Plaza Station area is projected to have the lowest annual employment growth rate (+0.15 percent).

Table 9-9. Alternative 5: SCAG Forecast – Population, Housing, and Employment Growth in the Resource Study Area

Proposed Station Area[a]	2019–2045 Annual Growth (%)		
	Population	Housing	Employment
Metro E Line Expo/Sepulveda Station (U)	+0.83	+1.35	+0.27
Santa Monica Boulevard Station (U)	+0.70	+1.10	+0.42
Wilshire Boulevard/Metro D Line Station (U)	+0.83	+1.32	+0.27
UCLA Gateway Plaza Station (U)	+0.68	+1.43	+0.15
Ventura Boulevard/Sepulveda Boulevard Station (U)	+0.41	+0.89	+0.22
Metro G Line Sepulveda Station (U)	+0.32	+0.91	+0.29
Sherman Way Station (U)	+0.22	+0.81	+0.36
Van Nuys Metrolink Station (A)	+0.15	+0.88	+0.35
Total[b]	**+0.48**	**+1.05**	**+0.26**

Source: SCAG 2020b; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 5 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(A) = aerial station
(U) = underground station

9.2.3.2 Planned and On-Going Developments

Table 9-10 shows 62 on-going and planned developments in the Alternative 5 RSA. These developments are not dependent on the implementation of Alternative 5 and would occur with or without the Project. The majority of developments would be multi-family residential projects, which would directly contribute to population and housing growth in the Alternative 5 RSA. Figure 9-9 displays the planned and on-going developments throughout the Alternative 5 RSA. If fully built out, the planned and on-going developments would construct over 1.1 million square feet of commercial space and over 4,600 dwelling units within the Alternative 5 RSA.

Table 9-10. Alternative 5: Planned and On-Going Developments in the Resource Study Area

Development Type	Total Developments	Total Commercial Square Footage	Total Dwelling Units	Developments Inside PDAs	Commercial Square Footage Inside PDAs	Dwelling Units Inside PDAs
Residential (Multi-family)	50	—	2,460	48	—	2,397
Mixed-Use	4	268,213	2,209	4	268,213	2,209
Commercial	4	81,7458	—	4	81,7458	—
Public Facility	1	92,000	—	1	92,000	—
Zoning-Related Projects[a]	1	—	—	1	—	—
Transportation Improvement Project[b]	2	—	—	2	—	—
Total	**62**	**1,177,671**	**4,669**	**60**	**1,177,671**	**4,616**

Source: City of Los Angeles, 2023; DCP, 2023b; City of Santa Monica, 2023; HTA, 2024

[a]Zoning-related projects include parcel map, specific plan, subdivision, tentative tract map, transit neighborhood plans, and zone change projects, which aim to increase the allowable density on a given [set of] parcel[s].

[b]Transportation improvement Projects include bus rapid transit, highway improvement, and rail projects, which aim to increase the capacity or improve the efficiency of the transportation and transit network.

— =no data or no resource.

9.3 Impacts Evaluation

9.3.1 Would the project foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment?

9.3.1.1 Operational Impacts

The Project is a transit infrastructure project proposed to serve projected population, housing, and employment growth within the Alternative 5 RSA and SCAG region and to accommodate the existing and future transportation needs of the area. Alternative 5 would not construct any new housing units and therefore would not generate direct population growth within the proposed station areas. Instead, Alternative 5 is anticipated to accommodate planned population and economic growth for the affected communities and potentially redirect growth to the Alternative 5 RSA. Potential indirect effects as a result of Alternative 5 include the future planning and development of transit-oriented communities (TOC) within the proposed station areas. Compared to existing conditions, Alternative 5 would result in greater levels of access to and capacity of the transit and transportation network within the Project Study Area.

The 2024-2050 RTP/SCS land use and transportation policies incentivize local jurisdictions to explore opportunities to densify the existing land uses within PDAs. Additionally, the existing Count of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles Transit-Oriented Communities (TOC) Incentive Program, the City of Santa Monica Transportation Demand Management Program, and Metro's TOC Policy prioritize the development of TOCs within 0.5 mile of a major transit stop or High-Quality Transit Stop (HQTS). Other regional and local policies encourage TOC planning and development including the following:

- Intensification of land uses within the proposed station areas and along the corridor
- Development of compact communities around a public transit system
- Alternatives to automobile travel

- Planning for residents, visitors, and employees within the vicinity of the areas

Potential indirect effects as a result of Alternative 5 include the future planning and development of TOCs within the proposed station areas. As demonstrated in Table 9-6, the Alternative 5 proposed station areas would be almost entirely within PDAs. Therefore, any development indirectly resulting from the Project would be located in areas already designated by SCAG for the allocation of denser, more compact development. Alternative 5 would be a catalyst to TOC planning and development within these proposed station areas. Such future planned densification of land uses is incorporated into the forecast SCAG growth data, is central to the growth strategies of the 2024-2050 RTP/SCS and is not considered new unplanned growth. Additionally, the Project is included in the list of transportation projects identified in the SCAG 2024-2050 RTP/SCS and Measure M and is thus incorporated into their assumptions for future planning and development in the region.

Thus, Alternative 5 would not induce unplanned economic or population growth beyond growth that is already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans. Rather, Alternative 5 would redirect planned jurisdiction-wide growth to the proposed station areas. PDAs comprise 99 percent of the Alternative 5 RSA. By developing new transit stations within the SCAG PDAs, Alternative 5 would be consistent with the transit-oriented goals and strategies of the SCAG 2024-2050 RTP/SCS, Metro's TOC Policy, the County of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles TOC Incentive Program, and the City of Santa Monica Transportation Demand Management Ordinance regarding prioritization of TOCs within 0.5 mile of a major transit stop. Additionally, the SCAG-derived forecasted population, housing, and employment growth assumes that the Project would be built. Therefore, operations of Alternative 5 would provide benefits to jurisdictions in the Alternative 5 RSA and in the SCAG region and would result in less than significant impacts related to unplanned population, housing, and employment growth.

9.3.1.2 Construction Impacts

Construction of Alternative 5 would result in temporary environmental impacts within the RSA due to the necessary addition of construction workers. However, these workers would likely be sourced from the local labor pool; therefore, the temporary employment opportunities for Alternative 5 would not directly foster the construction of permanent housing for workers in the Alternative 5 RSA. Thus, construction of Alternative 5 would result in less than significant impacts related to unplanned population, housing, and employment growth.

9.3.1.3 Maintenance and Storage Facility

The MSF would be an integral part of the infrastructure for Alternative 5 and would support the maintenance, operations, and storage activities for Alternative 5. The MSF site would improve the regional transportation system and support the SCAG 2024-2050 RTP/SCS mobility goals by providing a reliable, alternative mode of transportation to the region. Construction of the MSF would not construct any new housing units; therefore, the MSF would not generate new or unplanned population and housing growth. However, the MSF would create employment opportunities for approximately 260 to 350 persons for Alternative 5, or approximately 0.1 percent of the total employment growth projected for the Alternative 5 RSA, which could result in nominal employment growth. However, employment opportunities would primarily consist of existing labor who live within the region. Potential employment resulting from the MSF would not exceed SCAG projections for the Alternative 5 RSA. Thus, construction and operation of the MSF would result in less than significant impacts related to unplanned population, housing, and employment growth.

9.3.2 Would the project remove obstructions to population growth…[or] encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

9.3.2.1 Operational Impacts

Alternative 5 would be within a densely developed region—both urban and suburban in character—and would not introduce growth inducing infrastructure, nor construct any new housing units, nor extend environmental impacts into previously undeveloped areas lacking adequate infrastructure. The population, housing, and employment growth projections for Alternative 5 RSA were calculated to not exceed the maximum density of local general plans. The SCAG 2024-2050 RTP/SCS growth projections incorporate the Project. As previously stated, transit projects are not considered growth inducing infrastructure, but rather as infrastructure that would direct planned economic and population jurisdiction-wide growth to the proposed station areas. Alternative 5 would not generate direct growth within the RSAs for the proposed stations. However, Alternative 5 would potentially redistribute projected growth for each affected community toward the proposed station areas, which may result in localized growth related to the development of TOCs within the RSAs for the proposed stations.

Alternative 5 would accommodate the SCAG 2024-2050 RTP/SCS planned growth projections. The construction of a new transit line would increase access to and from the Alternative 5 RSA but would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS (SCAG, 2024a), Metro's *2020 Long Range Transportation Plan* (LRTP) (Metro, 2020b), the 2023 FTIP (SCAG, 2022), or Measure M (Metro, 2016). Planned and on-going developments in the Alternative 5 proposed station areas would all be constructed within SCAG-identified PDAs, reflecting the actualization of SCAG growth accommodating and economic strategies to encourage compact development in transit-served areas. Thus, operations of Alternative 5 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

9.3.2.2 Construction Impacts

Construction of Alternative 5 would result in temporary influxes of construction workers, equipment, and vehicular trips to the Alternative 5 RSA. However, because the Alternative 5 RSA would be within a densely developed region, and because construction workers would likely reside in the wider metropolitan area, construction activities would not induce growth or extend environmental impacts into previously undeveloped areas. Construction activities for Alternative 5 would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, or Measure M. Thus, construction of Alternative 5 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

9.3.2.3 Maintenance and Storage Facility

The MSF would be located within an urbanized region and would be constructed on a previously developed area. The MSF would not construct any housing units and thus would not generate unplanned population or housing growth. However, the MSF would create employment opportunities for approximately 260 to 350 persons for Alternative 5, or approximately 0.1 percent of the total employment growth projected for the Alternative 5 RSA. Employment growth would be nominal and

would not exceed the SCAG employment growth projections for the Alternative 5 RSA. Although the MSF is considered an integral part of Alternative 5, the MSF would be an auxiliary transit structure and not a major transit stop, and thus would not result in the development of TOCs in the surrounding areas. The MSF would not remove obstruction to population growth, nor encourage or facilitate other unplanned projects. Thus, construction and operation of the MSF would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

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

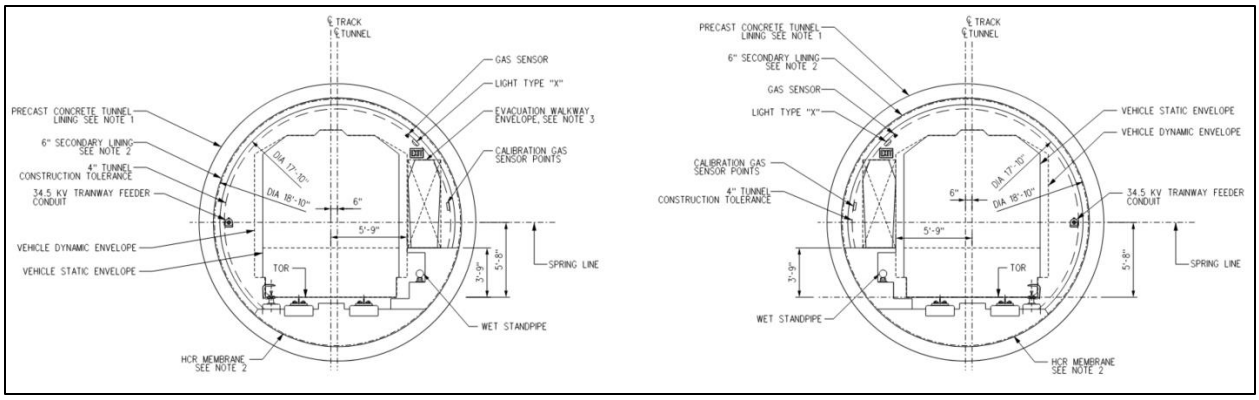
After leaving the UCLA Gateway Plaza Station, the alignment would continue to the north and travel under the Santa Monica Mountains. While still under the mountains, the alignment would shift slightly to the west to travel under the City of Los Angeles Department of Water and Power (LADWP) Stone Canyon 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 10-2 shows a typical cross-section of the underground guideway. Cross-passages would be constructed at regular intervals in accordance with Metro Rail Design Criteria. 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 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)
Metro E Line Station					*20*
Metro E Line	Santa Monica Boulevard	1.1	111	121	—
Santa Monica Boulevard Station					*20*
Santa Monica Boulevard	Wilshire/Metro D Line	1.3	103	108	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	69	71	—
UCLA Gateway Plaza Station					*30*
UCLA Gateway Plaza	Ventura Boulevard	5.9	358	358	—
Ventura Boulevard Station					*20*
Ventura Boulevard	Metro G Line	1.8	135	131	—
Metro G Line Station					*30*
Metro G Line	Van Nuys Metrolink	2.1	211	164	—
Van Nuys Metrolink Station					*30*

Source: HTA, 2024

— = no data

10.1.1.6 Special Trackwork

Alternative 6 would include six 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

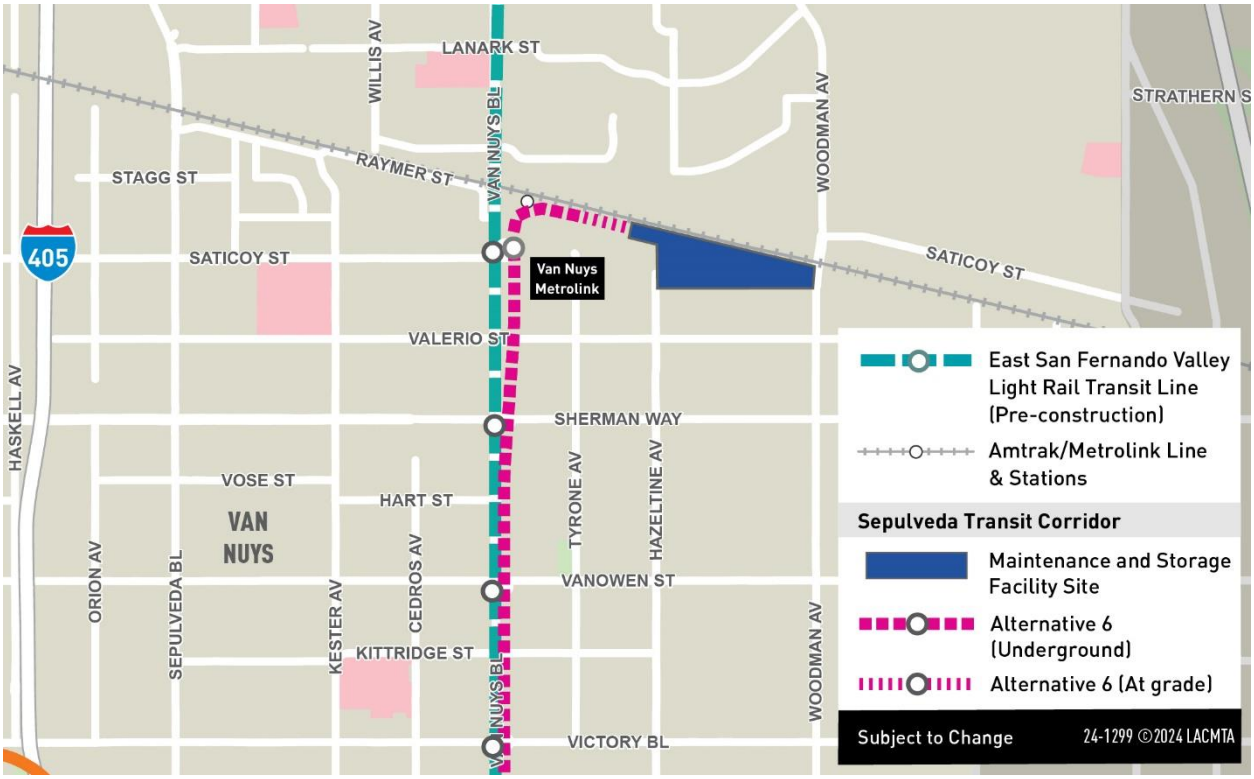
The MSF for Alternative 6 would be located east of the Van Nuys Metrolink Station and would encompass approximately 41 acres. The MSF would be designed to accommodate 94 vehicles and would be bounded by single-family residences to the south, the LOSSAN rail corridor right-of-way to the north, Woodman 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. Eleven 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)
13	TPSS 13 would be located immediately south of Magnolia Boulevard and west of Van Nuys Boulevard.	At-grade
14 and 15	TPSSs 14 and 15 would be located along Van Nuys Boulevard between Emelita Street and Califa Street.	Underground (within station)
16	TPSS 16 would be located east of Van Nuys Boulevard and immediately north of Vanowen Street.	At-grade
17 and 18	TPSSs 17 and 18 would be located east of Van Nuys Boulevard between Saticoy Street and Keswick Street.	Underground (within station)
19 and 20	TPSSs 19 and 20 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 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:

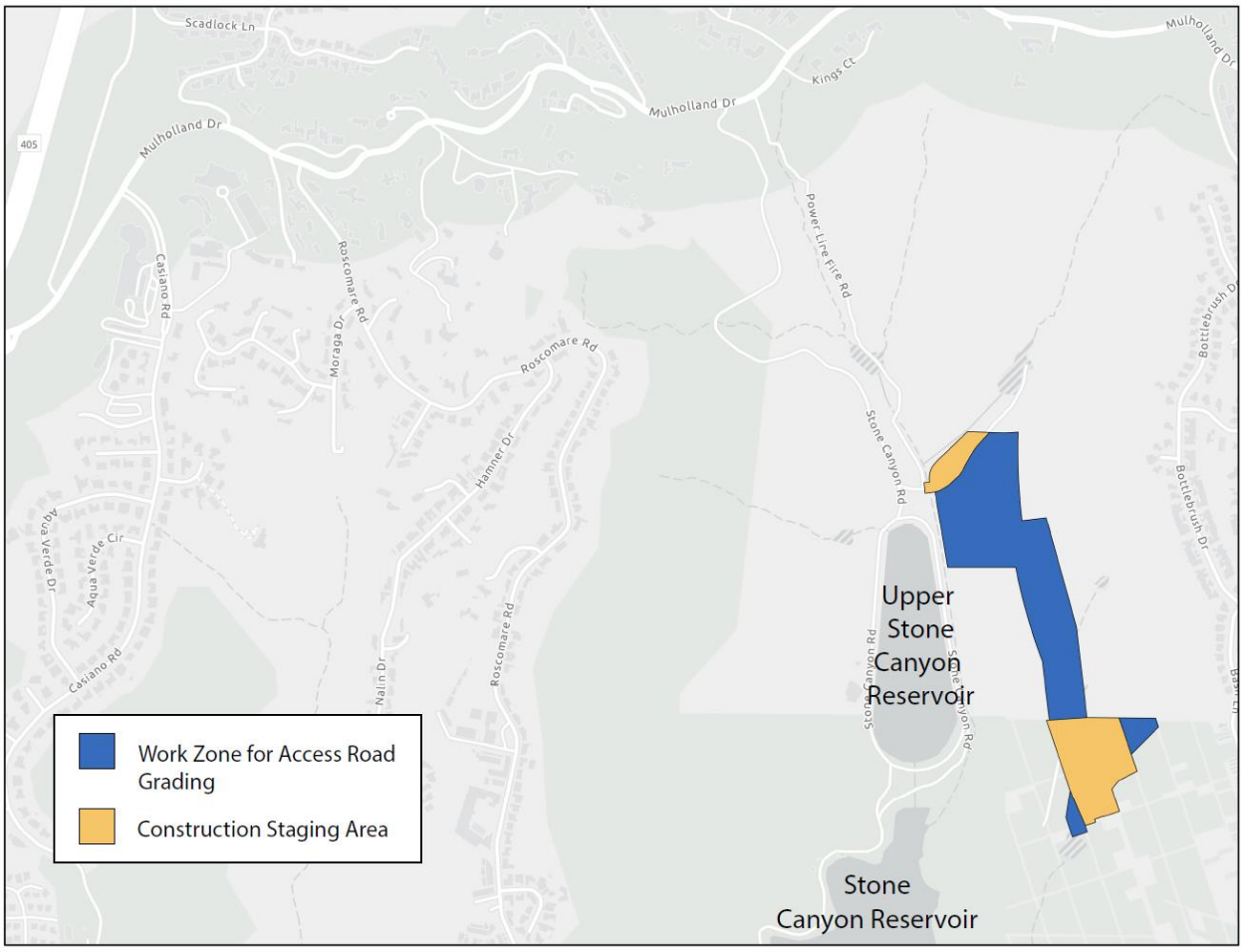
- Contractors' equipment
- Receiving deliveries
- Testing of soils for minerals or hazards
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and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

Figure 10-5. Alternative 6: Mid-Mountain Construction Staging Site



Source: HTA, 2024

Alternative 6 would utilize precast tunnel lining segments in the construction of the transit tunnels. These tunnel lining segments would be similar to those used in recent Metro underground transit projects. Therefore, it is expected that the tunnel lining segments would be obtained from an existing casting facility in Los Angeles County and no additional permits or approvals would be necessary specific to the facility.

10.2 Existing Conditions

10.2.1 Alternative 6 Resource Study Area

The Alternative 6 Resource Study Area (RSA) is within the jurisdictions of the City of Los Angeles, the City of Santa Monica, and the unincorporated U.S. Department of Veterans Affairs in Sawtelle, Los Angeles (Sawtelle VA) community of Los Angeles County. Affected communities identified within the City of Los Angeles include Bel Air, Mar Vista, North Sherman Oaks, Panorama City, Sherman Oaks, Van Nuys, West Los Angeles, and Westwood.

For purposes of the growth inducing impacts analysis, the Alternative 6 RSA would include Transportation Analysis Zones (TAZ) from Southern California Association of Governments (SCAG)

regional growth forecast, U.S. Census Bureau census tracts, and U.S. Census Bureau census blocks that would intersect the Alternative 6 proposed station areas. Table 10-3 demonstrates the percentages of the Alternative 6 proposed station areas that would be within a SCAG-designated Priority Development Area (PDA). The entirety of the Alternative 6 RSA would be within a PDA. Figure 10-6 displays the Alternative 6 RSA and the PDAs.

Table 10-3. Alternative 6: Proposed Station Areas within a SCAG-Designated Priority Development Area

Proposed Station Area[a]	Proposed Station Area within a PDA (%)
Metro E Line Expo/Bundy Station (U)	100.0
Santa Monica Boulevard Station (U)	100.0
Wilshire Boulevard/Metro D Line Station (U)	100.0
UCLA Gateway Plaza Station (U)	100.0
Ventura Boulevard/Van Nuys Boulevard Station (U)	100.0
Metro G Line/Van Nuys Station (U)	100.0
Van Nuys Metrolink Station (U)	100.0
Total[b]	**100.0**

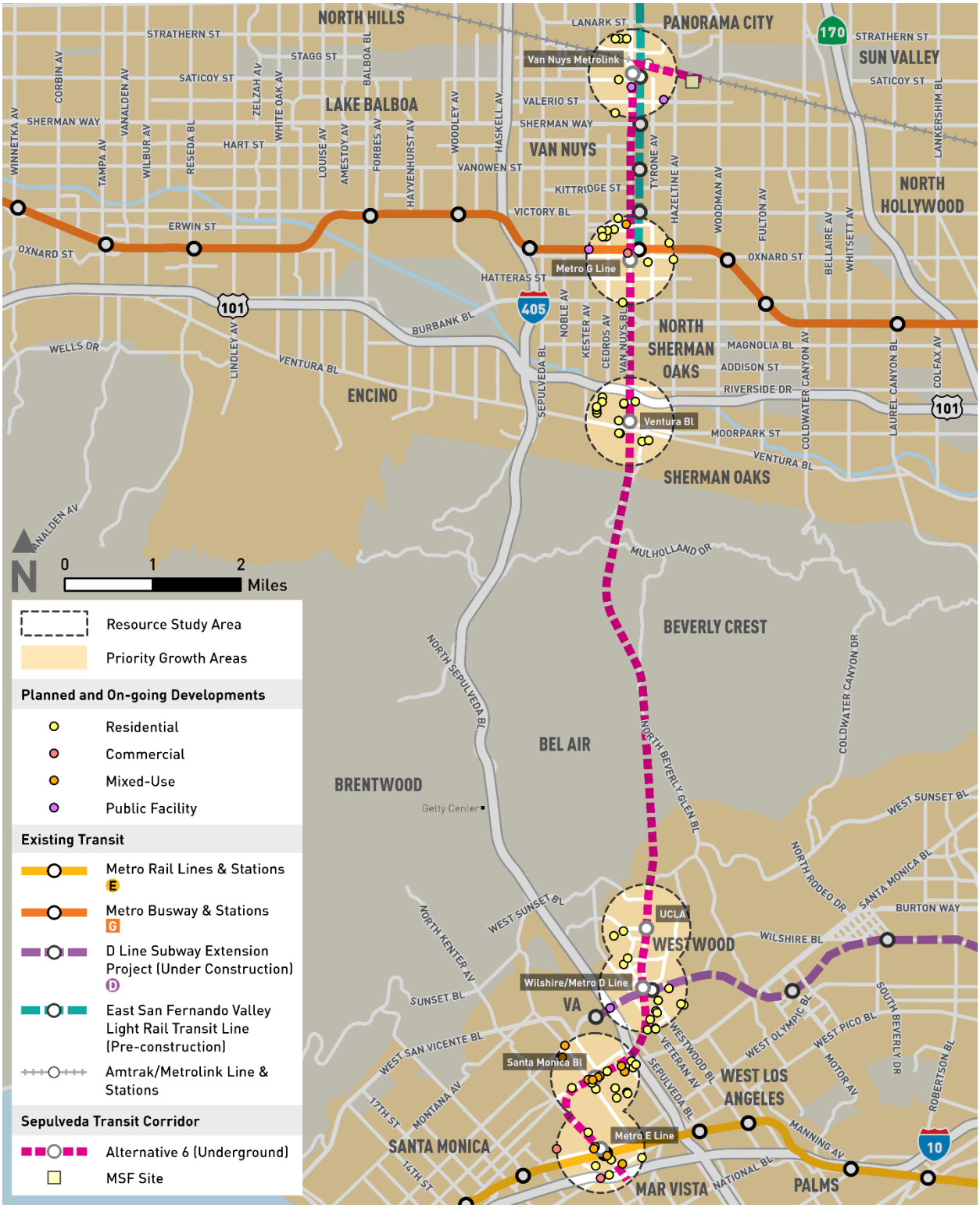
Source: SCAG, 2024b; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total accounts for overlapping proposed station areas.

(U) = underground station

Figure 10-6. Alternative 6: Resource Study Area and Priority Development Areas



Source: DCP, 2023b; City of Santa Monica, 2023; SCAG, 2024b

10.2.2 Historical Growth

Historical population and housing growth data for the census tracts that encompass the Alternative 6 RSA discussed in this report were gathered from the American Communities Survey 2016 and 2021 estimates, and the historical employment growth data was gathered from the SCAG *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (2024-2050 RTP/SCS) employment estimates at the TAZ level (SCAG, 2024a).

10.2.2.1 Population and Housing

Table 10-4 shows the historical annual population and housing growth trend from the year 2016 to 2021 for the Alternative 6 RSA. The Alternative 6 proposed station areas experienced a mix of gains and losses in population and housing, potentially reflecting an uneven distribution of growth in the region. Overall, the Alternative 6 Study Area experienced population and housing decline. The proposed Wilshire Boulevard/Metro D Line Station area experienced the greatest annual population growth rate (+1.00 percent), while the proposed Metro E Line Expo/Bundy Station area experienced the greatest annual housing growth rate (+1.04 percent). The proposed Santa Monica Boulevard Station area experienced the greatest decline in annual population growth rates (-3.83 percent) and annual housing growth rates (-2.75 percent).

Table 10-4. Alternative 6: Historical Population and Housing Growth in the Resource Study Area

Proposed Station Area[a]	2016–2021 Annual Growth Trend (%)	
	Population	Housing
Metro E Line Expo/Bundy Station (U)	-0.83	+1.04
Santa Monica Boulevard Station (U)	-3.83	-2.75
Wilshire Boulevard/Metro D Line Station (U)	+1.00	+0.84
UCLA Gateway Plaza Station (U)	+0.81	+0.16
Ventura Boulevard/Van Nuys Boulevard Station (U)	-2.92	-2.42
Metro G Line Van Nuys Station (U)	-0.18	+0.64
Van Nuys Metrolink Station (U)	-0.64	+0.92
Total[b]	**-1.18**	**-0.61**

Source: U.S. Census Bureau, 2017, 2022; HTA, 2024

[a]Proposed Station Area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station area (Alternative 6 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(U) = underground station

10.2.2.2 Employment

Table 10-5 shows the historical annual employment growth trend from the year 2016 to 2021 for the Alternative 6 RSA. While the Alternative 6 RSA experienced a decline in annual population and housing growth rates, overall, the RSA still experienced employment growth. The proposed Metro E Line Expo/Bundy Station area experienced the greatest historical annual employment growth rates (+13.87 percent) in the Alternative 6 RSA, while the proposed Santa Monica Boulevard Station area experienced the greatest annual employment decline rate (-7.41 percent).

Table 10-5. Alternative 6: Historical Employment Growth in the Resource Study Area

Proposed Station Area[a]	2016 – 2021 Annual Growth (%)
Metro E Line Expo/Bundy Station (U)	+13.87
Santa Monica Boulevard Station (U)	-7.41
Wilshire Boulevard/Metro D Line Station (U)	+6.64
UCLA Gateway Plaza Station (U)	+7.24
Ventura Boulevard/Van Nuys Boulevard Station (U)	+3.16
Metro G Line/Van Nuys Station (U)	+1.67
Van Nuys Metrolink Station (U)	-3.82
Total[b]	**+6.08**

Source: SCAG 2020b; HTA, 2024

[a]Proposed Station Area refers to area refers to census tracts that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 6 RSA). Census tracts that intersect with more than one proposed station area are not double counted.

(U) = underground station

10.2.2.3 Summary

The entirety of Alternative 6 Study Area is in areas targeted for the growth inducing strategies and policies of the SCAG 2024-2050 RTP/SCS. Overall, the Alternative 6 RSA has historically experienced population and housing decline and employment growth. These inconsistencies may be indicative of either a redistribution of growth throughout the region or outward migration patterns resulting from the 2020 COVID-19 pandemic. Compared to the No Project Alternative RSA, the Alternative 6 RSA historically experienced lower rates of population and housing decline and higher rates of employment growth.

10.2.3 Projected Growth

10.2.3.1 Population, Housing, and Employment

Table 10-6 summarizes the SCAG-derived forecast population, housing, and employment growth for the Alternative 6 RSA from 2019 to 2045. The overall Alternative 6 RSA is projected to experience population and housing growth trends in contrast with its historical decline. The Alternative 6 RSA is anticipated to experience higher projected population and housing growth rates and a slightly lower employment growth rate than historical rates. The projected housing growth numbers for the Alternative 6 RSA match or exceed population growth rates, which is inconsistent with historical trends.

Within the Alternative 6 RSA, the proposed Metro E Line Expo/Bundy Station area is projected to have the highest annual population growth rate (+0.91 percent), the Van Nuys Metrolink Station area is projected to have the highest annual employment growth rate (+0.36 percent), while the proposed UCLA Gateway Plaza Station area is projected to have the highest annual housing growth rate (+1.50 percent). In contrast, the proposed Van Nuys Metrolink Station area is projected to have the lowest annual population growth rate (+0.20 percent), the proposed Ventura Boulevard/Van Nuys Boulevard Station area is projected to have the lowest annual housing growth rate (+0.65 percent), and proposed UCLA Gateway Plaza Station area is projected to have the lowest annual employment growth rate (+0.15 percent).

Table 10-6. Alternative 6: SCAG Forecast – Population, Housing, and Employment Growth in the Resource Study Area

Proposed Station Area[a]	2019 – 2045 Annual Growth (%)		
	Population	Housing	Employment
Metro E Line Expo/Bundy Station (U)	+0.91	+1.49	+0.16
Santa Monica Boulevard Station (U)	+0.53	+0.89	+0.22
Wilshire Boulevard/Metro D Line Station (U)	+0.83	+1.32	+0.27
UCLA Gateway Plaza Station (U)	+0.69	+1.50	+0.15
Ventura Boulevard/Van Nuys Boulevard Station (U)	+0.23	+0.65	+0.30
Metro G Line/Van Nuys Station (U)	+0.46	+1.09	+0.30
Van Nuys Metrolink Station (U)	+0.20	+0.93	+0.36
Total[b]	**+0.54**	**+1.08**	**+0.23**

Source: SCAG 2020b; HTA, 2024

[a]Proposed Station Area refers to area refers to Transportation Analysis Zones that intersect (lie within) 0.5 mile of each proposed station (Section 3.1.2).

[b]Total represents the combined proposed station areas (Alternative 6 RSA). Census tracts that intersect with more than one proposed study area are not double counted.

(U) = underground station

10.2.3.2 Planned and On-Going Developments

Table 10-7 shows 80 on-going and planned developments in the Alternative 6 RSA. These developments are not dependent on the implementation of Alternative 6 and would occur with or without the Project. The Alternative 6 RSA contains the most developments of all the Alternative Study Areas, and the majority of developments would be multi-family residential projects. Figure 10-6 displays the planned and on-going developments throughout the Alternative 6 RSA. If fully built out, the planned and on-going developments would construct nearly 922,000 square feet of commercial space and over 6,500 dwelling units within the Alternative 6 RSA.

Table 10-7. Alternative 6: Planned and On-Going Developments in the Resource Study Area

Development Type	Total Developments	Total Commercial Square Footage	Total Dwelling Units	Developments Inside PDAs	Commercial Square Footage Inside PDAs	Dwelling Units Inside PDAs
Residential (Multi-family)	60	—	2,562	55	—	2,417
Mixed-Use	12	730,863	4,120	12	730,863	4,120
Commercial	3	168,065	—	3	168,065	—
Public Facility	1	23,000	—	1	23,000	—
Zoning-Related Projects[a]	2	—	11	2	—	11
Transportation Improvement Project[b]	2	—	—	2	—	—
Total	**80**	**921,928**	**6,693**	**75**	**921,928**	**6,548**

Source: City of Los Angeles, 2023; DCP, 2023b; City of Santa Monica, 2023; HTA, 2024

[a]Zoning-related projects include parcel map, specific plan, subdivision, tentative tract map, transit neighborhood plans, and zone change projects, which aim to increase the allowable density on a given [set of] parcel[s].

[b]Transportation improvement projects include bus rapid transit, highway improvement, and rail projects, which aim to increase the capacity or improve the efficiency of the transportation and transit network.

— = no data or no resource

10.3 Impacts Evaluation

10.3.1 Would the project foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment?

10.3.1.1 Operational Impacts

The Project is a transit infrastructure project that would serve projected population, housing, and employment growth within the Alternative 6 RSA and SCAG region and would accommodate the existing and future transportation needs of the area. Alternative 6 would not construct any new housing units and therefore would not generate direct population growth within the proposed station areas. Instead, Alternative 6 is anticipated to accommodate planned population and economic growth for the affected communities and potentially redirect growth to the Alternative 6 RSA. Potential indirect effects as a result of Alternative 6 include the future planning and development of transit-oriented communities (TOC) within the proposed station areas. Compared to existing conditions, Alternative 6 would result in greater levels of access to and capacity of the transit and transportation network within the Project Study Area.

The 2024-2050 RTP/SCS land use and transportation policies incentivize local jurisdictions to explore opportunities to densify the existing land uses within PDAs. Additionally, the existing County of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles Transit-Oriented Communities (TOC) Incentive Program, the City of Santa Monica Transportation Demand Management Ordinance, and Metro's TOC Policy prioritize the development of TOCs within 0.5 mile of a major transit stop or High-Quality Transit Stop (HQTS). Other regional and local policies encourage TOC planning and development including the following:

- Intensification of land uses within the proposed station areas and along the corridor
- Development of compact communities around a public transit system
- Alternatives to automobile travel
- Planning for residents, visitors, and employees within the vicinity of the areas

Potential indirect effects as a result of Alternative 6 include the future planning and development of TOCs within the proposed station areas. As demonstrated in Table 10-3, the Alternative 6 proposed station areas would be entirely within PDAs. Therefore, any development indirectly resulting from the Project would be located in areas already designated by SCAG for the allocation of denser, more compact development. Alternative 6 would be a catalyst to TOC planning and development within these proposed station areas. Such future planned densification of land uses is incorporated into the forecast SCAG growth data, is central to the growth strategies of the 2024-2050 RTP/SCS and is not considered new unplanned growth. Additionally, the Project is included in the list of transportation projects identified in the SCAG 2024-2050 RTP/SCS and Measure M and is thus incorporated into their assumptions for future planning and development in the region.

Thus, Alternative 6 would not induce unplanned economic or population growth beyond what was already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans. Rather, Alternative 6 would redirect planned jurisdiction-wide growth to the proposed station areas. PDAs comprise 100 percent of the Alternative 6 RSA. By developing new transit stations within the SCAG PDAs, Alternative 6 would be consistent with the transit-oriented goals and strategies of the SCAG 2024-2050 RTP/SCS, Metro's TOC Policy, the County of Los Angeles Transit-Oriented Districts Program, the City of Los Angeles TOC Incentive Program, and the City of Santa Monica

Transportation Demand Management Ordinance regarding prioritization of TOCs within 0.5 mile of a major transit stop. Additionally, the SCAG-derived forecasted population, housing, and employment growth assumes that the Project would be built. Therefore, operations of Alternative 6 would provide benefits to jurisdictions in the Alternative 6 RSA and in the SCAG region and would result in less than significant impacts related to unplanned population, housing, and employment growth.

10.3.1.2 Construction Impacts

Construction of Alternative 6 would result in temporary environmental impacts within the RSA due to the necessary addition of construction workers. However, these workers would likely be sourced from the local labor pool and therefore the temporary employment opportunities for Alternative 6 would not directly foster the construction of permanent housing for workers in the Alternative 6 RSA. Thus, construction of Alternative 6 would result in less than significant impacts related to unplanned population, housing, and employment growth.

10.3.1.3 Maintenance and Storage Facility

The MSF would be an integral part of the infrastructure for Alternative 6 and would support the maintenance, operations, and storage activities for Alternative 6. The MSF site would improve the regional transportation system and support the SCAG 2024-2050 RTP/SCS mobility goals by providing a reliable, alternative mode of transportation to the region. Construction of the MSF would not construct any new housing units; therefore, the MSF site would not generate new or unplanned population and housing growth. However, the MSF would create employment opportunities for approximately 260 to 350 persons for Alternative 6, or approximately 0.1 percent of the total employment growth projected for the Alternative 6 RSA, which could result in nominal employment growth. However, employment opportunities would primarily consist of existing Metro employees who live within the region. Potential employment resulting from the MSF would not exceed SCAG projections for the Alternative 6 RSA. Thus, construction and operation of the MSF would result in less than significant impacts related to unplanned population, housing, and employment growth.

10.3.1 Would the project remove obstructions to population growth…[or] encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

10.3.1.1 Operational Impacts

Alternative 6 would be within a densely developed region, both urban and suburban in character, and would not introduce growth inducing infrastructure, nor construct any new housing units, nor extend environmental impacts into previously undeveloped areas lacking adequate infrastructure. The population, housing, and employment growth projections for Alternative 6 are calculated so as not to exceed the maximum density of local general plans. The SCAG 2024-2050 RTP/SCS growth projections incorporate the Project. As previously stated, transit projects are not considered growth inducing infrastructure, but rather as infrastructure which would direct planned economic and population jurisdiction-wide growth to the proposed station areas. Alternative 6 would not generate direct growth within the within the proposed station areas. However, Alternative 6 would potentially redistribute projected growth for each affected community toward the proposed station areas, thereby resulting in localized growth related to the development of TOCs within the proposed station areas and increasing transit accessibility.

Alternative 6 would accommodate the SCAG 2024-2050 RTP/SCS planned growth projections. The construction of a new transit line would increase access to and from the Alternative 6 RSA but would not directly remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS (SCAG, 2024a), Metro's *2020 Long Range Transportation Plan* (LRTP) (Metro, 2020b), the 2023 FTIP (SCAG, 2022), or Measure M (Metro, 2016). Planned and on-going developments in the Alternative 6 proposed station areas would all be constructed within SCAG-identified PDAs, reflecting the actualization of SCAG growth accommodating and economic strategies to encourage compact development in transit-served areas. Thus, operations of Alternative 6 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

10.3.1.2 Construction Impacts

Construction of Alternative 6 would result in temporary influxes of construction workers, equipment, and vehicular trips to the Alternative 6 RSA. However, because the Alternative 6 RSA would be within a densely developed region, and because construction workers would likely reside in the wider metropolitan area, construction activities would not induce growth or extend environmental impacts into previously undeveloped areas. Construction activities for Alternative 6 would not remove obstructions to population growth, nor encourage or facilitate other projects that have not already been identified in the SCAG 2024-2050 RTP/SCS, Metro's 2020 LRTP, the 2023 FTIP, or Measure M. Thus, construction of Alternative 6 would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

10.3.1.3 Maintenance and Storage Facility

The MSF would be within an urbanized region and would be constructed on a previously developed area. The MSF would not construct any housing units and thus would not generate unplanned population or housing growth. However, the MSF would create employment opportunities for approximately 260 to 350 persons for Alternative 6, or approximately 0.1 percent of the total employment growth projected for the Alternative 6 RSA. Employment growth would be nominal and would not exceed the SCAG employment growth projections for the Alternative 6 RSA. Although the MSF is considered an integral part of Alternative 6, the MSF would be an auxiliary transit structure and not a major transit stop, and thus would not result in the development of TOCs in the surrounding areas. The MSF would not remove obstruction to population growth, nor encourage or facilitate other unplanned projects. Thus, construction and operation of the MSF would result in less than significant impacts related to the removal of obstructions to population growth or encouragement and facilitation of other activities that could significantly affect the environment, either individually or cumulatively.

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.

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Appendix A. Planned and Ongoing Developments