Los Angeles County
Metropolitan Transportation Authority

Vermont Transit Corridor Project

Senate Bill 922 Reports

Racial Equity Analysis, Residential Displacement Analysis, and Business Case Analysis

Metro

Metro is applying a statutory exemption from the California Environmental Quality Act (CEQA) per Senate Bill (SB) 922 for the Vermont Transit Corridor Project (Project). SB 922, codified as California Public Resources Code Sections 21080.20 and 21080.25, exempts certain transit and sustainable transportation projects from the requirements of CEQA, including bus rapid transit projects. SB 922 requires the preparation of three analyses for projects that exceed $100 million: 1) racial equity analysis, 2) residential displacement, and 3) business case.

Metro has prepared a racial equity analysis, residential displacement, and business case for the Project. This document is a compendium of the three reports.

Los Angeles County
Metropolitan Transportation Authority

Racial Equity Analysis

Metro®

VERMONT TRANSIT CORRIDOR PROJECT

Contract No. AE97976000

Racial Equity Analysis

Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

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ABBREVIATIONS/ACRONYMS

ACS	American Community Survey
ADA	Americans with Disabilities Act
AMI	area's median income
BIPOC	Black, Indigenous and other People of Color
BRT	bus rapid transit
CBO	Community Based Outreach
CEQA	California Environmental Quality Act
DASH	Downtown Area Short Hop
EFC	Equity Focus Community
HUD	United States Department of Housing and Urban Development
I-10	Interstate 10; Santa Monica Freeway
I-105	Interstate 105; Glen Anderson Freeway
I-110	Interstate 110; Harbor Freeway
LACC	Los Angeles City College
LADOT	Los Angeles Department of Transportation
LCD	liquid-crystal-display
LED	light-emitting-diode
LOS	level of service
MENI	Metro Equity Need Index
Metro	Los Angeles County Metropolitan Transportation Authority
Metro Board	Metro Board of Directors
MTA	Los Angeles Metropolitan Transit Authority
OPR	State of California Governor's Office of Planning and Research
PRC	California Public Resources Code
ROW	right-of-way
Project	Vermont Transit Corridor Project
SB	Senate Bill
U.S.	United States
US-101	United States Highway 101
USC	University of Southern California
VTC	Vermont Transit Corridor Project
%	percent
$	United States dollars

EXECUTIVE SUMMARY

The Vermont Transit Corridor Project (VTC; the "Project") proposes a 12.4-mile-long, high-quality transit alternative along Vermont Avenue from 120th Street on the south to Sunset Boulevard on the north with 26 bus rapid transit (BRT) stations at 13 station locations.

Metro is seeking a statutory exemption under the California Environmental Quality Act through Senate Bill 922 codified as California Public Resources Code (PRC) Sections 21080.20 and 21080.25. Under PRC Section 21080.25, this Racial Equity Analysis Report will substantiate the case for the applicability of the statutory exemption to the Project by: identifying the racial equity impacts of the Project; identifying who will benefit from and be burdened by the Project and suggesting strategies, designs or actions to mitigate impacts where significant or disproportionate impacts exist.

This executive summary provides the framework of Metro's Equity Platform, descriptions of the communities and neighborhoods, and the conclusions of the Racial Equity Analysis in this report.

Metro's Equity Platform

Metro's Equity Platform, adopted in 2018, is a policy framework for addressing disparities in access to opportunity resulting from historical disinvestment in low-income communities and communities of color. Metro recognizes that vast disparities exist in access to opportunities, including jobs, housing, community resources, healthy communities and mobility options. As such, transportation is an essential lever to enabling access and improving quality of life for Los Angeles County. Under the Equity Platform, Metro is committed to identifying and implementing projects or programs that reduce and ultimately eliminate mobility disparities in access to opportunities.

Communities and Neighborhoods Findings

The Project Study Area is a diverse area made up of several neighborhoods and distinct ethnic communities, including Koreatown, South Los Angeles, Byzantine-Latino Quarter, Little Bangladesh, Little Armenia and El Salvadorian Community Corridor. The Project Study Area is divided into three subareas: North, Central, and South. The North subarea extends from Venice Boulevard to Sunset Boulevard, the Central subarea extends from Gage Avenue to Venice Boulevard, and the South subarea extends from 120th Street to Gage Avenue. Each of the subareas has a high percentage of Black, Indigenous, and other People of Color communities, low-income households and zero-car households compared to the City of Los Angeles and Los Angeles County.

Overall, based on race and ethnicity, low-income households and zero-car households, 91.2 percent of the census tracts in the Project Study Area are considered Metro Equity Focus Communities (EFCs). Based on the socioeconomic data presented and the EFCs identified in each subarea, communities in the Central subarea face the highest inequities related to jobs, housing, and mobility options, followed by the South subarea. Communities in the Central and South subareas are predominately made up of Hispanic and Black populations. Aside from large investments at Exposition Park and the USC Campus and regional access with the Metro E Line, these communities in the Central and South subareas have been historically underserved by transit and continue to experience systemic disparities from mobility inequities in transportation and urban planning. The Central subarea has historical systemic disparities compared to the other subareas.

Compared to the other subareas, the North subarea has more affluent neighborhoods and better Metro access and connectivity with the local buses and the Metro B and D lines. Communities in the

North subarea have also experienced systematic disparities similar to the Central and South subareas. However, in contrast to the Central and South subareas, the North subarea has had the most investment and growth.

The Role of the Project in Advancing Equity in Vermont Corridor

Historical racism and discrimination in land use, transportation and transit planning have resulted in present-day gaps in transit access across race, income and other characteristics, thus perpetuating social inequities in the Vermont Corridor. Metro is committed to equitable outcomes such that areas that have been historically affected by systemic disparities are provided opportunities to combat such disparities. The Project would improve north-south transit services in the Vermont Corridor, which would improve access to jobs, education and essential services within the corridor and regionally. The Project would construct enhanced bus shelters, improve connections to the regional transit network and access to important regional destinations, increase transit services to meet growing demand and improve services for riders. The Project would make bus services along the Vermont Corridor safer, more frequent, faster and more reliable. As a result of the Project, accessible, high-quality transit would improve access to opportunities for transit-dependent individuals and make transit a more enticing option for those individuals who do not currently ride transit. Communities in the Central and South subareas have experienced more disparities compared to the North subarea; however, the Project would provide equitable improvements and opportunities throughout the entire Vermont Corridor to help alleviate the existing inequities.

Several strategies and recommendations are provided to meet the Project goals of improving transit performance, enhancing the customer experience, investing in the community and developing a cost-effective project within a desired timeline. The development of the BRT would reduce overall current headways and passenger travel times, increase ridership along the Vermont Corridor and improve overall transit performance. The Project would enhance the customer experience and invest in the community through Project design elements and amenities and through continued community engagement. The Project would also be cost-effective by pursuing local and federal funding and continuing future first/last-mile planning efforts. The Project development process will continue to focus on future mobility improvements including light rail transit over the long-term.

Summary of Community Engagement

Metro's Community-Based Outreach (CBO) partnership program provides community stakeholders with opportunities to engage with Metro throughout the planning process to build a common vision for the corridor, listen to their transit needs and concerns and incorporate their feedback into the development of an equitable transit solution for the corridor (Metro, 2021). Metro collaborates with CBOs to ensure that public transit services meet the needs of diverse communities. The CBO partnership program allows Metro staff the chance to listen and learn from community members to know what they want and need–which is the guiding principle of Metro's Equity Platform framework. Community engagement for the Project included briefings with public institutions and schools, business associations, neighborhood councils, advocacy groups and officials representing Los Angeles City Council Districts 1, 8, 9, 10, 13, and 15; public meetings and workshops; stakeholder meetings; information booths at community events; pop-up information tables; and social media (i.e., Facebook, X, Instagram and YouTube). Public meetings are scheduled for December 2024 to present the SB 922 documents and Project updates. Additional public meetings will be scheduled during the construction phase to keep the community informed of Project updates and progress.

1 INTRODUCTION

The Los Angeles County Metropolitan Transportation Authority (Metro) is conducting the planning and environmental study for the Vermont Transit Corridor (VTC; the "Project"). The Project is intended to provide a high-quality transit alternative along Vermont Avenue from 120th Street on the south to Sunset Boulevard on the north (approximately 12.4 miles). Vermont Avenue is the busiest north-south travel corridor in the entire Metro bus system with approximately 36,000 daily boardings, connecting the Metro B/D Lines (Red/Purple), E Line (Expo) and C Line (Green), as well as various east-west bus lines, to many key activity centers, including educational, cultural, medical, governmental and faith-based institutions (**Figure 1-1**). The Project Study Area also includes several densely populated and Metro-defined Equity Focus Communities (EFCs).[1] The Project would also offer a vital north-south transit alternative to residents and businesses west of the Interstate 110 (I-110; Harbor Freeway) and an opportunity to reinvest in communities along the Vermont Corridor.

1.1 Project Background

Two previous studies were completed evaluating the feasibility of implementing bus rapid transit (BRT) and rail alternatives along Vermont Avenue, including the 2017 *Vermont Bus Rapid Transit Corridor Technical Study* (2017 BRT Technical Study) (Metro, 2017) and the 2019 *Vermont Transit Corridor – Rail Conversion/Feasibility Study* (2019 Rail Feasibility Study) (Metro, 2019). The 2017 BRT Technical Study identified strategies for improving bus service along Vermont Avenue, focusing on the feasibility of implementing BRT, which could include several elements such as dedicated bus lanes, enhanced station stops, all-door boarding, and transit signal priority (TSP). The purpose of the 2019 Rail Feasibility Study was to further evaluate the most promising BRT concepts developed earlier as part of the 2017 BRT Technical Study to ensure that their implementation would not preclude a potential conversion to rail in the future. The study was to also look at and assess the feasibility of potential future rail alternatives for the Vermont Corridor.

Additionally, in Winter/Spring 2022, Metro partnered with several CBOs to conduct a pre-environmental community-based planning effort to engage with community partners and stakeholders early to build a common vision for the Vermont Corridor, listen to their transit needs and concerns and incorporate their feedback into the development of an equitable transit solution for the corridor.

Based on what was heard during that effort, the Metro Board of Directors (Metro Board) directed staff to advance the Project using a three-pronged approach, including:

- Near-term improvements to the existing bus service that could be implemented in a relatively short time frame
- Mid-term BRT to be implemented after the near-term improvements
- Long-term rail subject to funding availability

[1] Metro's Equity Platform defines Equity Focus Communities as "areas in which at least 40% of residents are low-income, and 80% of residents are people of color [Black, Indigenous, and other People of Color (BIPOC)], or 10% of the households do not have a car" (Metro, 2024b).

Figure 1-1 Vermont Transit Corridor Study Area

Source: Vermont Corridor Partners, 2024

1.2 Project Study Area

Figure 1-1 shows the Project's Study Area, which is bordered by El Segundo Boulevard to the south, Los Feliz Boulevard to the north, I-110 to the east and transitions between Western Avenue and Normandie Avenue to the west. The proposed Project alignment would extend approximately 12.4 miles from 120th Street, south of the Vermont/Athens Metro C Line Station, to Sunset Boulevard, at the Vermont/Sunset Metro B Line Station in Hollywood. The majority of the Project Study Area is located within the City of Los Angeles with approximately 2.5 miles at the southern end (western side of Vermont Avenue only) in unincorporated Los Angeles County.

The Study Area includes several City of Los Angeles communities, including East Hollywood/Los Feliz, University Park/Exposition Park, Koreatown, and South Los Angeles. The Study Area also includes the West Athens and Westmont communities in unincorporated Los Angeles County. These communities have some of the highest population densities in the region and have a disproportionately high proportion of transit-dependent residents.

The Study Area is filled with several cultural and institutional amenities as well as many major activity centers, including, but not limited to, University of Southern California (USC), BMO Stadium, Exposition Park Museums, Kaiser Permanente Los Angeles Medical Center, Children's Hospital Los Angeles and Los Angeles City College (LACC).

1.3 Purpose of Report and Structure

Metro is seeking a statutory exemption under the California Environmental Quality Act (CEQA) through Senate Bill (SB) 922 codified as California Public Resources Code (PRC) Sections 21080.20 and 21080.25. As required under PRC Section 21080.25, this Racial Equity Analysis Report will substantiate the case for the applicability of the statutory exemption to the Project by:

- Identifying the racial equity impacts of the Project
- Identifying who will benefit from and be burdened by the Project
- Suggesting strategies, designs or actions to mitigate impacts where significant or disproportionate impacts exist

This Racial Equity Analysis Report is organized into the following sections:

- Executive Summary
- Section 1: Introduction
- Section 2: Project Description
- Section 3: Equity Methodology
- Section 4: Regulatory Framework
- Section 5: Communities and Neighborhoods
- Section 6: Racial Equity Analysis
- Section 7: Community Engagement
- Section 8: Strategies and Recommendations
- Section 9: Conclusions
- Section 10: References

2 PROJECT DESCRIPTION

2.1 Project Goals and Objectives

The Project would address the mobility needs of the Vermont Corridor's historically underserved and underinvested communities, including alleviating existing transit and multimodal network challenges, through fulfillment of the Goals and Objectives identified in **Table 2-1**. The Project's Goals include improving transit performance, enhancing the customer experience, investing in the community, and developing a cost-effective project within a desired timeline. The screening and evaluation approach is designed to evaluate each Project concept's ability to meet the Project's Goals and Objectives.

Table 2-1: Project Goals and Objectives

Goal	Objective
Improve Transit Performance	Improve and maintain service reliability Reduce passenger travel times
Enhance Customer Experience	Enhance stations and passenger amenities Improve pedestrian/bicycle access Improve safety and security
Invest in Community	Improve mobility options to provide access to destinations Address disparities identified in the Equity Analysis Acknowledge and integrate community assets in planning/design
Develop a Cost-Effective Project within Desired Timeline	Maximize benefits within funding constraints Implement a project by the 2028 Olympics Maximize sustainability by reducing throwaway work, aligning with Metro's NextGen Bus Plan (Metro, 2020a) and future rail conversion

Source: Vermont Corridor Partners, 2024

2.2 Study Area Description

Vermont Avenue is the most heavily traveled bus corridor in Los Angeles County. Carrying over 36,000 daily riders, the north-south oriented corridor experiences significant performance deficiencies in terms of vehicle speeds, schedule reliability and passenger comfort due to severe traffic congestion and challenging operating conditions.

This planning effort for the Project divides the 12.4-mile Study Area into three subareas and six segments for the purpose of analysis. The three subareas are referred to as the South, Central and North subareas. These subareas are used to organize and analyze high-level data for areas with distinct land use and development characteristics. These three subareas are further divided into six segments. These six segments are used to differentiate lengths of the corridor with unique roadway configurations and other characteristics that present design constraints or opportunities when developing a project alignment.

2.2.1 Study Area Subareas

The physical, cultural and community attributes of Vermont Avenue vary significantly along the corridor as it connects a cross-section of the Los Angeles metropolitan area. To effectively characterize the range of conditions experienced within the Study Area, this study identified three subareas defined geographically by South, Central and North, as shown in **Figure 2-1**.

Figure 2-1: Study Area Subarea Boundaries

Source: Vermont Corridor Partners, 2024.

2.2.1.1 South Subarea: 120th Street to Gage Avenue

The South subarea is approximately 4.1 miles long, extending from 120th Street north to Gage Avenue. This subarea transverses through several historically African American and Hispanic or Latino communities of South Los Angeles. The land use is characterized by commercial and public facilities along Vermont Avenue, with low- to medium-density residential in the surrounding Study Area.

2.2.1.2 Central Subarea: Gage Avenue to Venice Boulevard

The Central subarea is approximately 4.4 miles long, extending from Gage Avenue north to Venice Boulevard. The corridor has many public, institutional (educational and faith based) and regional attractions at Exposition Park and the USC campus area and commercial uses north of Interstate 10 (I-10). The subarea is offset on both sides with low- to medium-density residential land uses. The commercial and residential land uses densify north near Venice Boulevard and Koreatown.

2.2.1.3 North Subarea: Venice Boulevard to Sunset Boulevard

The North subarea is approximately 3.9 miles long, extending from Venice Boulevard north to Hollywood Boulevard. The North subarea has high densities of commercial land use, such as shopping centers, medical centers, and higher densities along this portion of the corridor are suited for pedestrian activity. This subarea includes the neighborhoods of Pico-Union, Koreatown and Westlake. The variety of restaurants and retail stores in this subarea reflects the Vermont Corridor's cultural diversity and service to Los Angeles' immigrant communities, including Salvadorian, Korean, Oaxacan, and Thai.

2.2.2 Study Area Segments

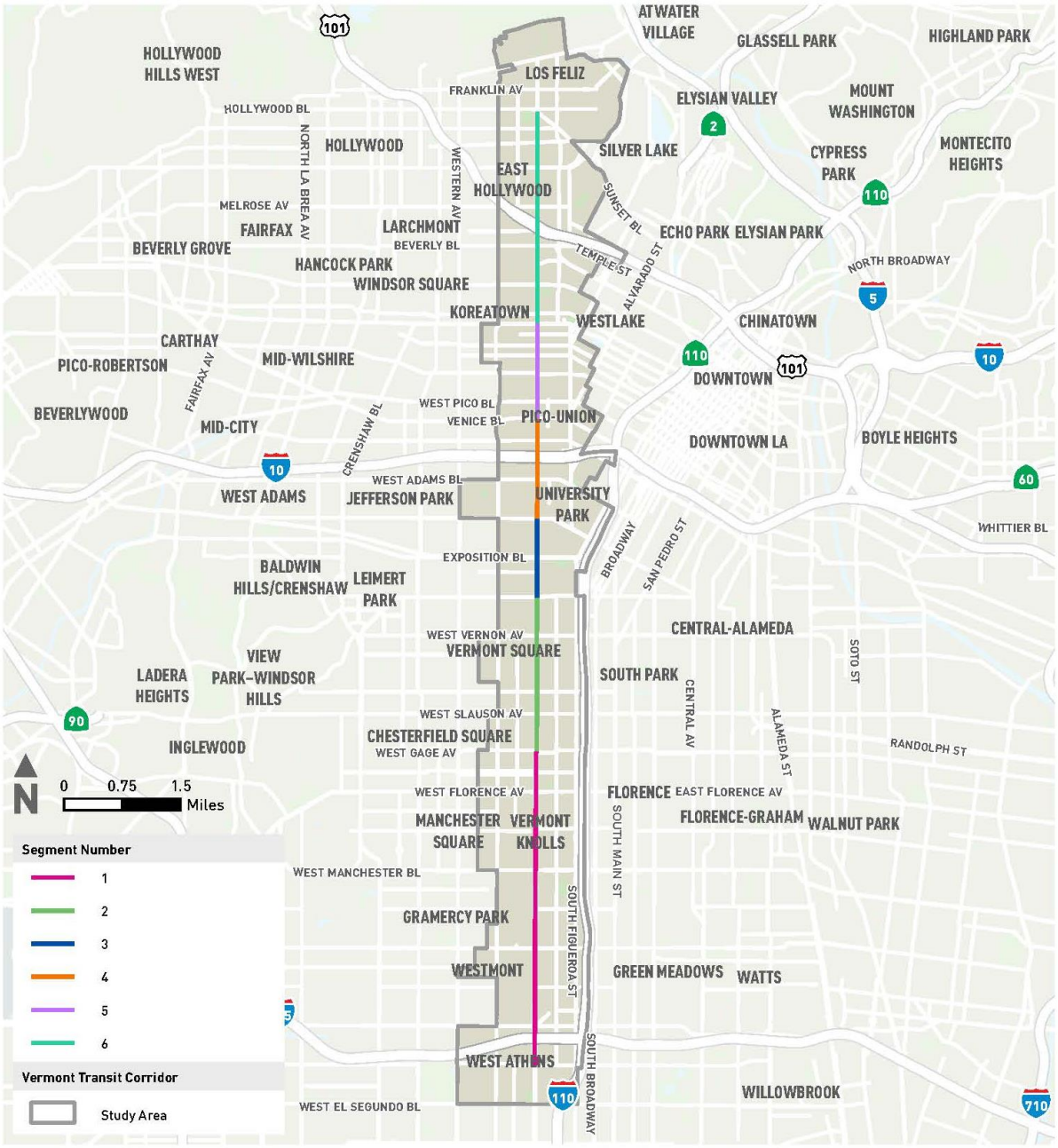
In addition to the three subareas, this study divides the Vermont Corridor into six segments. The six segments are used to differentiate lengths of the corridor with unique roadway configurations and having unique infrastructure characteristics, such as right-of-way (ROW) width and roadway lane configurations, that influence the design of a consistent set of transit priority investments and multimodal treatments in each segment. **Table 2-2** and **Figure 2-2** present the corridor segment boundaries.

Table 2-2: Vermont Corridor Segment Boundaries

Segment	Length (miles)	From	To
1	4.1	120th Street	Gage Avenue
2	2.0	Gage Avenue	Martin Luther King Jr. Boulevard
3	1.0	Martin Luther King Jr. Boulevard	Jefferson Boulevard
4	1.3	Jefferson Boulevard	Venice Boulevard
5	1.3	Venice Boulevard	Wilshire Boulevard
6	2.7	Wilshire Boulevard	Sunset Boulevard

Source: Vermont Corridor Partners, 2024.

Figure 2-2: Vermont Corridor by Segment



Source: Vermont Corridor Partners, 2024

Across these six segments, the proposed Project connects several distinct communities, both within the City of Los Angeles and in unincorporated Los Angeles County. Beginning at the southern terminus, the Project proceeds northward from 120th Street. Along this segment from 120th Street to Imperial Highway, the Project straddles the jurisdictional boundary between the City of Los Angeles (West Athens neighborhood) on the eastern side of Vermont Avenue and the unincorporated Los Angeles County community of West Athens on the western side of Vermont Avenue. At Imperial Highway, the Project continues northward along the City-County line, with the City of Los Angeles (Vermont Vista neighborhood) on the eastern side of Vermont Avenue and the unincorporated Los Angeles County community of Westmont on the western side of Vermont Avenue. At Manchester Avenue, the Project proceeds northward on Vermont Avenue, staying within the bounds of the City of Los Angeles for the remainder of its alignment. The Project continues northward for approximately 10 more miles through numerous neighborhoods, including Manchester Square, Vermont Knolls, Vermont-Slauson, Vermont Square, Exposition Park, University Park, Adams-Normandie, Pico-Union, Westlake, Koreatown and East Hollywood before terminating at Sunset Boulevard in Los Feliz.

2.2.2.1 Segment 1: 120th Street to Gage Avenue

Segment 1 starts at 120th Street and proceeds north towards Interstate 105 (I-105; Glen Anderson Freeway) overpass where the existing Vermont/Athens Metro C Line Station entrances are located. Segment 1 transverses through south Los Angeles and includes the neighborhoods of Vermont Vista and Vermont-Knolls. Vermont Avenue features six lanes of traffic with a total width ranging from approximately 140 to 160 feet curb to curb. Median islands with mature trees span between 120th Street and 89th Street. As the corridor approaches north, frontage roads with median islands exist between 89th Street and Gage Avenue. Segment 1 features striped northbound and southbound bicycle lanes and sidewalks on both sides of Vermont Avenue. This segment also features on-street parking on both sides of Vermont Avenue between 120th Street and 89th Street, while parking is located on the frontage roads between 89th Street and Gage Avenue in the northern portion of Segment 1.

2.2.2.2 Segment 2: Gage Avenue to Martin Luther King Jr. Boulevard

Segment 2 extends from Gage Avenue to Martin Luther King Jr. Boulevard. As Vermont Avenue approaches north towards Gage Avenue, the roadway significantly narrows and no longer features a center-running median or frontage roads. The roadway has four traffic lanes with street parking in both directions, and the roadway width is reduced to approximately 60 to 70 feet from curb to curb. The corridor is characterized by commercial and public facilities such as churches, restaurants, schools, government agency buildings, markets, and retail stores, along with some industrial uses from Slauson Avenue to Martin Luther King Jr. Boulevard. Segment 2 features sidewalks along both sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.3 Segment 3: Martin Luther King Jr. Boulevard to Jefferson Boulevard

Segment 3 extends from Martin Luther King Jr. Boulevard to Jefferson Boulevard. The roadway has an approximate width of 60 feet from curb to curb between Martin Luther King Jr. Boulevard and Exposition Boulevard and does not accommodate street parking. The road widens to approximately 80 feet from curb to curb with street parking from Exposition Boulevard to Jefferson Boulevard. A surface connection to the Metro E Line via the Expo/Vermont Station, as well as entrances to USC and Exposition Park, are located at Exposition Boulevard. A center-running landscaped median island

runs throughout Segment 3. Segment 3 features sidewalks on both sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.4 Segment 4: Jefferson Boulevard to Venice Boulevard

Segment 4 extends from Jefferson Boulevard to Venice Boulevard. The corridor has a similar neighborhood character and roadway features as Segment 3, with a 60-foot roadway curb-to-curb width with street parking. However, as it approaches the I-10, I-10 serves as a physical boundary, and Vermont Avenue shifts to a more vehicle-oriented environment to accommodate the high volumes of traffic flow at the I-10 on- and off-ramps. Segment 4 features on-street parking and sidewalks on both the northbound and southbound sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.5 Segment 5: Venice Boulevard to Wilshire Boulevard

Segment 5 extends from Venice Boulevard to Wilshire Boulevard. Vermont Avenue is approximately 60 feet wide from curb to curb, generally consisting of four through lanes until it approaches intersections to accommodate turn pockets. On-street parking exists throughout this segment. A transit plaza at the northeastern corner of Wilshire Boulevard and Vermont Avenue provides access to Metro's B Line and D Line Wilshire/Vermont Station. Segment 5 features sidewalks on both the northbound and southbound sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.6 Segment 6: Wilshire Boulevard to Sunset Boulevard

Segment 6 extends from Wilshire Boulevard to Sunset Boulevard. Vermont Avenue serves as the border between Koreatown and Rampart Village until it crosses United States Highway 101 and transitions into the neighborhood of East Hollywood. The roadway varies in width throughout this segment, ranging from approximately 70 to 90 feet from curb to curb, maintaining four traffic lanes with sidewalks on both sides. This segment has a strong presence of existing transit infrastructure. When traveling north throughout the segment, there are existing Metro B Line transit stations including Wilshire/Vermont Station, Vermont/Beverly Station, Vermont/Santa Monica Station and Vermont/Sunset Station. Segment 6 features on-street parking on both the northbound and southbound sides of Vermont Avenue, though parking in this segment features peak-hour restrictions to allow the curb-adjacent lane to function as a general travel lane during these times. Segment 6 does not contain bicycle lanes.

2.3 Project Overview and Design Elements

The Project proposes side-running dedicated BRT lanes for the extent of the Vermont Avenue corridor from 120th Street to Sunset Boulevard. There are no improvements planned between Sunset Boulevard and Hollywood Boulevard.

2.3.1 Project Overview

The Project extends approximately 12.4 miles from 120th Street at its southern terminus to Sunset Boulevard at its northern terminus. The Project is divided into six segments which are used to differentiate lengths of the corridor with unique roadway configurations and having unique infrastructure characteristics, such as right-of-way width and roadway lane configurations, that influence the design of a consistent set of transit priority investments and multimodal treatments in each segment. The six segments, along with the stations present within each segment, are detailed in **Table 2-3**.

Table 2-3: Study Area Segment Boundaries and Stations

Segment	From	To	BRT Stations
1	120th Street	Gage Avenue	Athens Century Manchester Florence
2	Gage Avenue	Martin Luther King Jr. Boulevard	Slauson Vernon
3	Martin Luther King Jr. Boulevard	Jefferson Boulevard	Expo
4	Jefferson Boulevard	Venice Boulevard	Adams
5	Venice Boulevard	Wilshire Boulevard	Pico Wilshire
6	Wilshire Boulevard	Sunset Boulevard	3rd Street Santa Monica Sunset

Source: Vermont Corridor Partners, 2024

In addition to the 13 proposed BRT station locations, two existing bus layover facilities are proposed to continue to be used as a part of the Project at both the northern and southern terminus of the Project. These layovers exist on the northbound side of Vermont Avenue at Hollywood Boulevard at the northern end of the Project and on the northbound side of Vermont Avenue at 120th Street at the southern end of the Project. These locations would facilitate passenger boarding and alighting but are not considered full BRT stations for the purposes of the Project and would not be upgraded to include station canopies and other passenger amenities like the 13 proposed BRT stations.

2.3.2 Project Design Elements

To ensure the Project remains feasible within its cost and schedule constraints, the Project's design emphasizes the importance of investing in accessible, functional BRT station elements while limiting major changes between stations to only those elements that are required to support efficient, reliable BRT service. The Project is comprised of eight categories of design elements:

- **Roadway Elements:** Roadway elements are defined as those components of the project that exist within the existing roadway curb to curb, including the curbs and adjacent sidewalks and ramps. These elements include BRT lane striping and pavement repairs; striping and pavement markings for general travel lanes, turn lanes, shared bus and turn lanes, bicycle lanes, parking and crosswalks; and modifications to frontage road medians. Roadway elements also include improvements to station-adjacent sidewalks, ramps and curbs to facilitate station access for riders.
- **Station Elements:** Station elements are those elements of the project that exist within immediate BRT station areas and facilitate patron access, use and comfort. These elements

may include BRT platforms, canopies, lighting, signage, security systems, integrated artwork, fare collection systems and landscaping.

- **Systems:** Project systems are defined as corridor-wide electrical components that support the functioning of the Project. These elements include traffic signals and BRT vehicle charging infrastructure.
- **Utilities:** Utilities are aboveground systems and underground systems that connect the Project to the local utility grid. Utilities include water/sewer, electrical and communications systems.
- **Support Facilities:** Support facilities are those facilities that maintain the Project's operations, such as operator comfort facilities and BRT vehicle maintenance and storage facilities. The Project does not propose the addition of any new support facilities, as existing facilities are anticipated to be sufficient to support the BRT service on Vermont Avenue.
- **ROW:** ROW can be both public and private. Public ROW is the physical space between building faces and lot lines along Vermont Avenue, including sidewalks, curbs, roadways, medians, and bus stops and stations. Private ROW is the physical space owned by private entities along the corridor, including most space behind lot lines and building faces. Activity would take place entirely within the public ROW during both the construction and operational phases of the Project.
- **Vehicles:** Vehicles are defined as the buses that would provide BRT service to patrons of the Project. The Project will include the use of 40-foot buses in opening year 2028 but could potentially go to 60-foot articulated buses in the future if passenger demand warrants it.
- **Traffic Handling and Construction Staging:** Traffic handling and construction staging elements are those components of the Project that facilitate the construction phase of the Project's lifecycle. Temporary traffic control measures and construction staging areas are proposed as a part of the project. These measures would exist entirely within the existing public ROW.

Generally, civil improvements such as changes to sidewalk widths or realignments of existing curbs are not proposed between Project stations. Civil improvements are generally limited to station areas, such as the construction of station platforms, and are complemented by investments in transit-supportive infrastructure at stations like station amenities.

Between BRT stations, Project improvements are generally limited to dedicated lane striping where feasible. This striping would feature the use of shared bus and turn lanes at several right-turn locations throughout the corridor, both between stations and at specific station locations.

The Project is proposed to be constructed solely within the existing public ROW, meaning that no permanent ROW takings are anticipated to support project implementation. Construction staging is also proposed to occur solely within the public ROW, eliminating the need for temporary ROW takings or easements to facilitate construction activities.

The construction depth of the Project is anticipated to be shallow, both to limit impacts to utilities and to contain the cost of the Project to the prescribed budget. Proposed paving improvements are intended to only be to the extent required to incorporate the proposed BRT station and lane

configuration. The proposed Project profile will mimic the existing pavement profile throughout the corridor.

2.4 Project Elements

The Project spans 12.4 miles along Vermont Avenue and includes roadway modifications and construction of 26 BRT stations at 13 station locations (1 northbound and 1 southbound station at each station location).

2.4.1 Roadway Elements

The roadway would be modified to accommodate a dedicated BRT lane along the entire project length. Additionally, intersections at the 13 proposed stations would be reconstructed to accommodate platforms and canopy structures constructed on curb bulb-outs, on the sidewalk or on frontage road median islands. The following describes the design features of the roadway elements:

- **BRT Lanes:** Two 12-foot-wide dedicated BRT lanes (northbound and southbound) would be implemented along the length of the Project using a mix of solid white-line striping and dashed white-line striping. The dedicated BRT lanes reduce to 11 feet wide in Segment 2 to accommodate maintaining existing parking and increase to 16 feet at station locations where additional ROW is present. Shared bus and turn lanes are proposed throughout the corridor to accommodate right-turning movements where right-turn pockets do not fit. The existing asphalt concrete pavement within the dedicated BRT lane would be sandblasted, patched, repaired and sealed before striping. Full-width BRT lane painting is not proposed as a component of the Project. However, hatched striping would be provided at the beginning and end of each block as well as in bus/vehicle conflict zones to delineate where vehicles can merge into or cross the bus lane. Vehicles would be permitted to cross the BRT lane at any point to access on-street parking. Concrete bus pads would be constructed within the BRT lanes in front of 24 of the 26 BRT station locations and at the 120th Street Layover in compliance with local design standards. No bus pads would be provided at the proposed Athens Station to avoid impacting the existing bridge structure.
- **General Travel Lanes, Bicycle Lanes, and Parking:** Asphalt concrete pavement reconstruction is proposed adjacent to BRT station locations to accommodate bulb-outs and/or lane reconfigurations adjacent to the intersections. The asphalt concrete repair for the remainder of the corridor would be limited to the dedicated BRT lane and is not included for the other general-purpose travel lanes. General purpose lanes, bicycle lanes and parking boxes would be restriped to match existing striping. Crosswalks would be re-striped at the 13 station intersections and at the 120th Street Layover to enhance visibility at the pedestrian crossings to and from the proposed stations. Pavement markings and directional arrows for all lanes would be marked throughout the corridor to facilitate overall modal interaction and safety.
- **Medians:** Frontage road medians along Segment 1 south of Gage Avenue would be modified to accommodate station platforms and canopy structures. Reconstruction of the frontage road medians is limited to the stations at southbound Manchester Avenue and northbound and southbound Florence Avenue. At Century Boulevard, where frontage road medians do not exist, it is proposed that the northbound and southbound stations have median islands on which station platforms would be constructed. Frontage road medians and center

medians would be protected in place along the remainder of Segment 1 where they currently exist.

- **Sidewalk and Curb Modifications:** Sidewalk and curb modifications include the following components:
    - **Sidewalks and Sidewalk Bulb-Out Extension:** Station platforms would generally be constructed on bulb-outs to accommodate station platforms and canopy structures that allow for Americans with Disabilities Act (ADA)-compliant pedestrian circulation and boarding/alighting access. In locations where the existing public ROW does not accommodate a bulb-out platform, the station platform and canopy would be constructed on the existing sidewalk. The existing sidewalk immediately adjacent to the bulb-out or station platform would be repaired to accommodate ADA circulation. Sidewalk reconstruction and bulb-out extensions would be designed to include curb and gutter reconstruction to ensure positive drainage flow.
    - **Americans with Disabilities Act (ADA) Compliant Curb Ramps:** Existing curb ramps would be upgraded at the 13 station intersections and at the 120th Street Layover. The design and location of curb ramps would be in accordance with the applicable provisions of the City of Los Angeles Department of Public Works, Los Angeles County Department of Public Works, United States Access Board Public ROW Accessibility Guidelines and any other applicable design codes and standards. Tactile warning strips would be installed at all pedestrian curb ramps. Dual/directional curb ramps would be provided where it is possible to do so without impacting private ROW.

2.4.2 Station Elements

The proposed Project includes 13 station locations. Each station location would have two bus stops, one northbound and one southbound, for a total of 26 BRT stops. All 26 BRT stop locations include platforms, canopies and patron amenities. Station design elements include the following:

- **Platforms:** Station platforms would be provided at each bus stop, except in a few locations where station platforms are not feasible. The platforms range in length depending on the specific location and include platforms that are 65, 75, 90 or 100 feet long. Platforms are generally 10 feet wide and are built as bulb-outs, extending the existing sidewalk at the stop locations. In constrained locations where the roadway ROW cannot accommodate a bulb-out, the station canopy would be located within the sidewalk area. Curbside platforms are proposed to be 6 inches high, with accessible boarding achieved through the utilization of bus ramps and vehicle kneeling. Station platforms would also include all associated infrastructure, including ramps, railings and other related accessories.
- **Canopies:** Overhead canopies are proposed at station areas to provide protection to passengers from severe weather conditions. Canopies are generally proposed to cover approximately 37 percent of the platform footprint depending on platform size, with canopies set back at least 2 feet from the platform edge to avoid interference with buses stopping to pick up or drop off passengers. The canopies are generally 49 feet and six inches in length and consist of tempered glazing with integrated shading, lighting and side panels.

- **Lighting:** Station lighting would be integrated into the underside of the canopy roof and project down onto the platform surface. Additional street light poles may be provided where the station platform extends substantially beyond the canopy structure.
- **Signage:** Wayfinding and station identification signs would be located in station areas at visible locations. Station signage may include station marker signs with system logo and other branding elements, route maps and schedules, station identification and neighborhood wayfinding. Wayfinding and station identification signs may be internally illuminated as appropriate but may also be illuminated by general area/station lighting. Variable message signs may be provided using light-emitting-diode (LED) or liquid-crystal-display (LCD) screens to provide information to patrons, such as real-time travel information. Messaging signage would be integrated into the design of the canopy by suspending the message boards from the canopy outriggers.
- **Security Systems:** Security equipment may be included at some stations with high levels of ridership and pedestrian activity. The security equipment could consist of closed-circuit television cameras and/or emergency call buttons. The equipment would be integrated into the systems cabinet adjacent to the waiting area.
- **Public Art:** Integrated public art will be included in accordance with the Metro Art Program Policy and in coordination with Metro Art. Artwork locations, materials, lighting, and electrical and mechanical requirements would be incorporated into the Project drawings and technical specifications.
- **Fare Collection Systems:** Some stations may have ticket vending machine kiosks in the station canopy area. Ticket vending machines are not required at all stations, as patrons can purchase fares at the four connecting rail stations, the multiple Metro designated vendor locations or directly on the vehicles.
- **Landscaping:** Landscaping elements would be provided at station locations where existing street trees and plantings are affected by the construction of new stations. Additional plantings may be provided along the sidewalk immediately adjacent to station locations.

2.4.3 Systems

The proposed Project includes multiple systems that span the length of the Vermont Corridor, including the following elements:

- **Traffic Signals:** Transit signal prioritization is expected to be implemented by the City of Los Angeles prior to implementation of this Project, in coordination with Metro Operations. Traffic signal modifications for this Project would be limited to pole adjustment and reprogramming. Traffic signal pole adjustments would be required at station intersections where the existing hardscape is modified. No traffic signal pole adjustments are expected beyond the station intersections. Traffic signal digital reprogramming may occur at signalized intersections along the Project alignment, as needed. Traffic signal replacements or upgrades are not expected.
- **BRT Vehicle Charging Infrastructure:** The Project would be designed to accommodate on-route charging for BRT vehicles. Charging infrastructure may be provided as part of a separate project or may be provided as a part of the Project and is anticipated to be located

at the Hollywood Boulevard layover, if implemented. These facilities are anticipated to be an overhead charger/pantograph system with supporting utility cabinets at one end of the Project alignment.

2.4.4 Utilities

The Project would require minor utility work to accommodate changes to the roadway and new BRT station infrastructure at station locations where the roadway is proposed to be reconstructed. The proposed project design is expected to minimize impacts to existing utilities along the Vermont Corridor. Utility modification is limited to manhole and vault lid adjustments. Widespread utility relocation, replacement, adjustment, protection, and/or abandonment of existing utility facilities is not anticipated. However, spot utility adjustments may be required in some station locations where curb modifications are proposed. Utility elements include the following:

- **Storm Drainage:** Surface drainage would be impacted in locations where curb bulb-outs are constructed for stations. The modifications are expected to be minor and not require regrading of the entire roadway ROW. Additionally, there are no major modifications or impacts expected to existing storm drainage culverts or lines. Some minor modifications of manholes and vaults may be required. For example, stormwater drains may be impacted by curb reconstruction at station locations.
- **Domestic Water and Sanitary Sewer:** New water and sewer infrastructure is not proposed as a part of the Project. Where existing water and sewer infrastructure are impacted as a part of Project implementation, these elements would be retained in their current configurations. Some minor modifications of manholes and vaults may be required. For example, manhole covers located within the proposed BRT lanes may be impacted by asphalt patching and sealing.
- **Electrical:** New electrical power infrastructure would be required to support the proposed BRT stations, including to accommodate station lighting, security systems, and message boards. Connections for electrical elements would be routed to the nearest power sources to the shelter locations. Utility conduit would be routed from the source within public ROW, including associated saw cutting, patching, and repairing of existing hardscape. Additionally, there may be minor modifications of electrical vault lids required where the BRT lane is repaired or the curb is adjusted to accommodate bulb-outs.
- **Communications:** New communications infrastructure would be required to support the proposed BRT stations, including to accommodate security systems and real-time bus information signage. Connections for fiber optic elements would be routed to the nearest communication sources to the shelter locations. Utility conduit would be routed from the source within public ROW, including associated saw cutting, patching, and repairing of existing hardscape. Additionally, there may be minor modifications of communication vault lids required where the BRT lane is repaired or the curb is adjusted to accommodate bulb-outs.

2.4.5 Support Facilities

The Project does not propose the addition of any new support facilities, as existing facilities are anticipated to be sufficient to support BRT service on Vermont Avenue. Existing Metro operator comfort facilities would be retained as-is through the implementation of the Project. Existing bus

maintenance facility yards are expected to have capacity for storage, charging and maintenance of the Project's fleet vehicles.

2.4.6 ROW

The Project would take place entirely within the existing public ROW for both the construction and operating phases. Neither permanent private property acquisitions nor temporary construction easements are anticipated for this Project.

2.4.7 Vehicles

The Project will open with the use of 40-foot buses to provide BRT service along the Vermont Corridor. BRT vehicles are proposed to be electric and would have the capacity to utilize on-route charging infrastructure. Vehicles are proposed to accommodate all-door boarding to facilitate efficient passenger loading and unloading, enhancing overall service efficiency.

2.4.8 Traffic Handling and Construction Staging

The Project proposes the use of temporary traffic control measures to accommodate Project construction. These measures would take into consideration all modes of transportation including buses, passenger vehicles, trucks, bicycles, and pedestrian traffic. The design of these measures would also consider construction staging in coordination with the construction team. Both the temporary traffic control measures and construction staging are anticipated to be carried out entirely within the existing public ROW, obviating the need for temporary easements to facilitate Project implementation.

2.5 Project Segment and Station Descriptions

The following sections describes the Project alignment for each Study Area segment. The Project proposes 26 BRT stations at 13 station locations.

2.5.1 Segment 1: 120th Street to Gage Avenue

Segment 1 spans 4.1 miles from the south terminus at 120th Street to Gage Avenue. This segment has the widest ROW of the Project at 140 feet to 160 feet from curb to curb, including three lanes of through-traffic in each direction, on-street parking on both sides, dedicated bike lanes and a median up to 40-feet wide curb to curb. This segment also features frontage roads, frontage road medians and parking on one or both sides of the median roads. This segment includes a connection to the Metro C Line at the Vermont/Athens Station. Segment 1 includes the following components:

- **Segment 1 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot to 14-foot-wide dedicated BRT lanes, resulting in two through lanes and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for at station platform locations. Existing bicycle lanes would be maintained and enhanced, with the BRT lane acting as a buffer between the bicycle lane and general traffic lanes. Existing left- and right-turn pockets would be maintained. Existing frontage road medians would be maintained in place. Existing landscaped medians would be maintained, and all median trees would be retained.

- **South Terminus – 120th Street Layover:** 120th Street serves as the existing southern terminus for the Metro Line 204 and Metro Rapid Line 754 service and bus layover facility. This layover would continue to serve as the local bus layover area for the existing bus service as well as the new proposed service. 120th Street is not considered one of the 13 BRT stations proposed for implementation as a part of the Project, though passengers would be allowed to board and alight BRT buses at this location. The layover area would feature an extended platform from the intersection of 120th Street and Vermont Avenue northward about 580 feet to a point just beyond the intersection of Vermont Avenue and 119th Street. This extended platform length would allow for the continued queuing of more than 10 buses at a time, including both local bus and BRT services. The platform would utilize the existing bus layover space to widen the existing 5- to 6-foot sidewalks to 11 to 16 feet wide, allowing for safer and easier access to transit services for the projected increase in passengers along the corridor. The extended platform would fix the existing sidewalk issues, remove obstructions and provide space for pedestrian flow and access for patrons boarding and alighting at this location. The 12-foot-wide dedicated BRT lane would be implemented within the existing right-most travel lane and would serve as the future bus layover lane.
- **Athens Station:** The Athens Station would require a custom, non-standard kit-of-parts station due to design limitations on the existing overpass. This station would have modular rubber boarding platforms placed on the surface of the bridge structure, with an integrated bicycle lane for the length of the platform. The northbound platform would be 11 feet wide, and the southbound platform would be 9 feet wide. The existing bicycle lane would be maintained and situated between the proposed BRT platforms and the existing sidewalk on a raised platform. Curb space north and south of the proposed platforms would be reserved as a layover for local Metro bus services. Both station canopies would be constructed to minimize impacts to the existing Metro C Line rail station entrances. New station elements will be coordinated with Metro Art to minimize impact to existing artwork at the Metro C Line Station entrances. The canopy would be built on a cantilever so as not to add structural load onto the existing Caltrans bridge.
- **Century Station:** Beginning at the Century Station and heading north, all station stops would feature concrete platforms on both the northbound and southbound sides of Vermont Avenue. The Century Station would feature station platforms on bulb-outs measuring 100 feet long and 10 feet wide on both the northbound and southbound sides of Vermont Avenue. The southbound platform is proposed 20 feet south of 101st Street due to a lack of curb space available closer to Century Boulevard, while the northbound platform is proposed 56 feet north of Century Boulevard. Both the northbound and southbound sides of Vermont Avenue would feature unprotected bicycle lanes running between the station platforms and existing sidewalks. The existing bicycle lane would be kept in place with a width of 5 feet, except for immediately adjacent to the northbound BRT platform, where the bicycle lane would be 6 feet wide.
- **Manchester Station:** The Manchester Station features station platforms measuring 100 feet long and 10 feet wide on both the northbound and southbound sides of Vermont Avenue. The southbound platform is proposed to be approximately 63 feet south of Manchester Avenue, while the northbound platform is proposed to be located approximately 60 feet north of Manchester Avenue. On the southbound side, the BRT platform would be located on

the frontage road median, between the southbound lanes on Vermont Avenue and the adjacent southbound frontage road south of Manchester Avenue. Pedestrian access to this platform would be enhanced with a raised crosswalk between the existing sidewalk and the frontage road. The northbound platform would be located on the far side of the intersection on the northeast corner adjacent to a new development. The ROW in this location cannot accommodate a bulb-out platform. Therefore, the station platform and canopy would be constructed fully on the sidewalk. A custom canopy may be constructed at this location to maximize pedestrian flow along the sidewalk.

- **Florence Station:** The Florence Station features station platforms measuring 100 feet long and 10 feet wide on the far side of the intersection within the existing frontage road medians. The northbound station platform is proposed approximately 79 feet north of Florence Avenue and the southbound station platform is proposed approximately 83 feet south of Florence Avenue. Pedestrian access to these platforms would be enhanced with a raised crosswalk between the existing sidewalk and the frontage road. The existing bicycle lane would be realigned between the BRT lane and the frontage road medians. A portion of the frontage road at the southeast corner of Vermont Avenue and Florence Avenue is proposed to be replaced by a larger curb bump-out to maintain retail access for vehicles, while avoiding a complex traffic mixing zone for vehicles entering the BRT lane. In front of the southbound station, the BRT lane widens to between 13 feet and 15 feet and 5 inches wide for the portion of the alignment between Florence Avenue and 73rd Street due to available ROW at this location.

2.5.2 Segment 2: Gage Avenue to Martin Luther King Jr. Boulevard

Segment 2 spans 2.0 miles from Gage Avenue to Martin Luther King Jr. Boulevard. The roadway width narrows north of Gage Avenue to about 60 feet to 70 feet curb to curb with two northbound lanes, two southbound lanes, one turning lane and street parking along both sides of the roadway. Segment 2 includes the following elements:

- **Segment 2 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. In the most constrained locations, the BRT lane configuration in Segment 2 narrows to 11 feet and the parking lane width is reduced to 7 feet to accommodate maintaining parking on both sides of the street. Segment 2 has the only locations where the BRT lane and parking dimensions vary from the standard configuration. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Slauson Station:** The Slauson Station features two station platforms, both south of Slauson Avenue, due to limited ROW and the layout of existing driveways north of Slauson Avenue. The northbound station would be on the near side of the intersection at the southeastern corner. The northbound platform is 100 feet long, 10 feet wide and located approximately 104 feet south of Slauson Avenue. The southbound platform is 90 feet long, 10 feet wide and located approximately 35 feet south of Slauson Avenue. The southbound station is close to

the intersection due to the constrained length between Slauson Avenue and 58th Place. At the southbound station platform, the BRT lane widens to 16 feet due to available ROW in this segment. On-street parking does not currently exist at this intersection south of Slauson Avenue, and limited new on-street parking is proposed on the northbound side of Vermont Avenue south of 58th Place.

- **Vernon Station:** The Vernon Station features BRT station platforms measuring 90 feet in length and 10 feet wide on the far side of the intersection on both the northbound and southbound side of Vermont Avenue. The southbound station platform is proposed to be located 24 feet south of Vernon Avenue and the northbound station platform is proposed to be located approximately 51 feet north of Vernon Avenue. The existing Metro Local Line 204 stop at the northwestern corner of Vermont Avenue and Vernon Avenue would be relocated to the southern side of the intersection about 180 feet south of Vernon Avenue. Similarly, the existing DASH stop at the northeastern corner of Vernon Avenue and Vermont Avenue is proposed to be relocated about 150 feet to the north to the opposite side of the proposed northbound BRT station platform. The ROW in this location cannot accommodate full bulb-out platforms. Therefore, the station platform and canopy would be constructed fully on the sidewalk for the southbound station and partially on the sidewalk for the northbound station, which can accommodate a partial 4-foot-wide bulb-out to host a portion of the station canopy. Custom canopies may be constructed at these locations to maximize pedestrian flow along the sidewalk.

2.5.3 Segment 3: Martin Luther King Jr. Boulevard to Jefferson Boulevard

Segment 3 spans 1 mile from Martin Luther King Jr. Boulevard to Jefferson Boulevard. The roadway has a width of about 60 feet curb to curb between Martin Luther King Jr. Boulevard and Exposition Boulevard, with two northbound lanes, two southbound lanes, one turning lane, an 8-foot-wide median and no on-street parking. The roadway widens to about 80 feet curb to curb between Exposition Boulevard and Jefferson Boulevard, with two northbound lanes, two southbound lanes, one turning lane and street parking along both sides. The turning lane becomes a landscaped median mid-block through this segment. This segment includes a connection to the Metro E Line at the Exposition Station. Segment 3 includes the following elements:

- **Segment 3 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets and the landscaped median would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Exposition Station:** The Exposition Station features two platforms, both on the northern side of Exposition Boulevard. The northbound platform is proposed to be 100 feet long by 10 feet wide and located 64 feet north of Exposition Boulevard and the southbound platform is proposed to be 90 feet long by 10 feet wide and located 31 feet north of Exposition Boulevard. The existing Metro Local (Lines 204 and 550) and Dash (Line F) services would be relocated north of their current locations.

2.5.4 Segment 4: Jefferson Boulevard to Venice Boulevard

Segment 4 spans 1.3 miles from Jefferson Boulevard to Venice Boulevard. This portion of the corridor has similar roadway features to Segment 3, with a 60-foot roadway width curb to curb with two northbound lanes, two southbound lanes, one turning lane, and street parking along both sides of the roadway. The corridor becomes more vehicle-oriented in this segment, with narrower sidewalks to accommodate the high volume of traffic at the I-10 on- and off-ramps. Segment 4 includes the following elements:

- **Segment 4 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Adams Station:** The Adams Station features two platforms on the far side of the intersection. The northbound platform is 100 feet long and 10 feet wide and about 130 feet north of the intersection. The southbound platform is 90 feet long and 10 feet wide and about 26 feet south of Adams Boulevard. The southbound platform is close to the intersection due to the constraint of an existing driveway. The existing Metro Local Line 204 stop on the southwestern corner of the intersection would be relocated about 100 feet to the south to accommodate the BRT station platform and avoid conflicts with the driveway.

2.5.5 Segment 5: Venice Boulevard to Wilshire Boulevard

Segment 5 spans 1.3 miles from Venice Boulevard to Wilshire Boulevard. Vermont Avenue is about 60 feet wide curb to curb in this segment, with two northbound lanes, two southbound lanes, one turning lane and on-street parking along both sides of the roadway. This segment includes connections to the Metro B and D Lines at the Wilshire/Vermont Station. Segment 5 includes the following elements:

- **Segment 5 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Pico Station:** The Pico Station features two platforms on the far side of the intersection. The northbound platform would be 90 feet long and 10 feet wide, about 131 feet north of Pico Boulevard, situated between existing driveways. The southbound BRT platform would be 100 feet long and 10 feet wide, located approximately 25 feet south of Pico Boulevard to avoid a conflict with an existing driveway. The ROW in this location cannot accommodate full bulb-out platforms. Therefore, the station platforms and canopies would be constructed mostly

on the sidewalk, with partial 4-foot-wide bulb-outs constructed to host a portion of the station canopies. Custom canopies may be constructed at these locations to maximize pedestrian flow along the sidewalk.

- **Wilshire Station:** The Wilshire Station features station platforms on the north side of Wilshire Boulevard due to limited ROW south of Wilshire Boulevard. The curb-to-curb ROW is 80 feet north of Wilshire Boulevard and 60 feet south of Wilshire Boulevard. Both platforms are proposed to be 100 feet long by 10 feet wide, with the northbound station proposed to be about 59 feet north of Wilshire Boulevard and the southbound station proposed to be about 34 feet north of Wilshire Boulevard. Given the proximity of the southbound platform to Wilshire Boulevard, curb bump-outs are proposed at the northwestern and northeastern corners of the intersection to better protect pedestrians and passengers who are boarding and alighting BRT vehicles. To accommodate the southbound platform, an existing driveway located approximately 90 feet north of Wilshire Boulevard that serves a vacant lot is proposed to be closed as a part of any future development at this location. To support the northbound platform, the existing Metro Local Line 204 bus stop on the northeastern corner of Vermont Avenue and Wilshire Boulevard would be moved about 100 feet north. The BRT service connects with the existing Metro B Line and D Line heavy rail service at the Wilshire/Vermont Station, allowing for transfers at the northeastern corner of the intersection.

2.5.6 Segment 6: Wilshire Boulevard to Sunset Boulevard

Segment 6 spans 2.7 miles from Wilshire Boulevard to the north terminus at Sunset Boulevard. There are no improvements planned between Sunset Boulevard and Hollywood Boulevard. Vermont Avenue varies from 70 feet to 90 feet curb to curb in this segment. This segment has two northbound lanes, two southbound through lanes, a turning lane, and on-street parking along both sides of the roadway. This segment includes connections to the Metro B Line at Santa Monica and Sunset Stations.

Metro's related Near-Term Improvements project is anticipated to be implemented prior to this Project. The near-term improvements consist of taking the existing curb lanes between Wilshire Boulevard and Sunset Boulevard (currently used as a third travel lane during peak hours) and converting them to peak-period bi-directional bus lanes. During non-peak hours, buses would operate in the right-most through lane.

Segment 6 includes the following elements:

- **Segment 6 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 11- to 12-foot-wide dedicated BRT lanes, resulting in one through-lane and one BRT lane in each direction between Wilshire Boulevard and Sunset Boulevard. The existing peak-hour dedicated bus lanes would be removed and replaced by permanent full-time parking except for at station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations. At the US-101 freeway overpass between 3rd Street Station and Santa Monica Station, the proposed alignment differs from the typical alignment in Segment 6 to accommodate the increased traffic flow entering and exiting the freeway. The southbound direction of Vermont Avenue would feature three general-purpose through lanes including

one mixed-flow traffic lane between the US-101 northbound on-ramp and Council Street. At Council Street, the southbound roadway would return to one dedicated BRT lane and one general-purpose through lane. The northbound direction of Vermont Avenue would maintain a dedicated BRT lane through the US-101 overpass with a mixing zone to accommodate an extended general-purpose turning lane.

- **3rd Street Station:** The 3rd Street Station features two shortened platforms due to constraints of existing driveways. The northbound station would be 75 feet long and 10 feet wide, located about 80 feet north of 3rd Street. The southbound station would be 67 feet long and 10 feet wide, located about 102 feet south of 3rd Street. The existing Dash stop at the southwestern corner of Vermont Avenue and 3rd Street would be co-located with the proposed BRT station platform.
- **Santa Monica Station:** The Santa Monica Station features two station platforms on the far side of the intersection. The northbound platform would be 100 feet long and 10 feet wide, and 48 feet north of Santa Monica Boulevard to avoid a conflict with a driveway to the north. The southbound platform would be 100 feet long and 10 feet wide, and about 81 feet south of Santa Monica Boulevard. The southbound platform would be adjacent to the access point for the existing Metro B Line heavy rail station.
- **Sunset Station:** The Sunset Station features two BRT station platforms on the far side of the intersection. The northbound station platform is about 90 feet long and 10 feet wide, and about 85 feet north of Sunset Boulevard. The southbound station platform would be 100 feet long and 10 feet wide, and about 88 feet south of Sunset Boulevard. Existing Metro Local bus stops (Lines 175, 204, 206 and 217) and the existing Dash stop would be co-located with the proposed BRT station platforms. This station connects to the existing Vermont/Sunset Metro B Line heavy rail station at the northeastern corner of Vermont Avenue and Sunset Boulevard.
- **North Terminus – Hollywood Boulevard Layover:** Hollywood Boulevard is the north terminus of the Project. Hollywood Boulevard is not considered one of the 13 BRT stations proposed for implementation as a part of the Project, though passengers would be allowed to board and alight BRT buses at this location. Hollywood Boulevard is the existing bus layover location for the Metro Line 204 and Metro Rapid Line 754 service. This location would continue to serve as the layover for both local and BRT service. No civil improvements are proposed at this location.

2.6 Project Implementation Schedule

Project implementation is anticipated to take approximately 42 months from the start of Preliminary Engineering in fall 2024 to Project opening in spring 2028. This schedule includes approximately 12 months for preliminary engineering, 12 months for final engineering and 18 months for construction.

3 REGULATORY FRAMEWORK

The following section discusses SB 288, SB 922 and Metro's Equity Platform.

3.1 Senate Bill 288 and Senate Bill 922

SB 288 was signed into law in October 2020 to reduce the time and cost of delivering sustainable transportation projects across California by providing an exemption from CEQA. SB 288 is codified in PRC Sections 21080.20 and 21080.25 (added on January 1, 2021). Specifically, SB 288 provided statutory exemptions to CEQA for certain projects that are in the public ROW and are in an environmentally cleared long-term plan. SB 288 targeted a set of sustainable transit projects, active transportation (walking and biking) projects and projects that expand sustainable mobility. This set includes projects that make streets safer for walking and biking; speed up bus service on streets; enable running bus service on highways; expand carpooling and modernize and build new bus and light rail stations. SB 288 designates these types of projects necessary to facilitate development of sustainable transportation alternatives and related infrastructure, encouraging broader use of sustainable transit throughout California.

SB 288 exemptions must meet the following criteria:

- A public agency is carrying out the project and is the lead agency for the project.
- The project is located in an urbanized area.
- The project is located on or within an existing public ROW.
- The project shall not add physical infrastructure that increases new automobile capacity on existing ROWs except for minor modifications needed for the efficient and safe movement of transit vehicles, such as extended merging lanes. The project shall not include the addition of any auxiliary lanes.
- The construction of the project shall not require the demolition of affordable housing units.

For projects that exceed $100 million, SB 288 also requires that such projects are incorporated into a regional transportation plan or other plan that has undergone programmatic-level environmental review; has all construction impacts fully mitigated and is committed to using a skilled and trained workforce, including by use of a project labor agreement. SB 288 requires that a business case analysis and a racial equity analysis are prepared; at least three public meetings are held prior to approving the project (including one to review the project's business case and racial equity analysis to receive public comments); and two public meetings are held annually during project construction to receive public comments. SB 288 was originally expected to remain in effect until only January 1, 2023.

On September 30, 2022, SB 922 was signed into law and amended PRC sections 21080.20 and 21080.25. SB 922 extended and improved upon SB 288 by easing implementation, targeting expansions for electric fleet conversion and adding an anti-displacement analysis requirement. SB 922 exemption continues to apply to active transportation plans; feasibility studies for active transportation; and bicycle, pedestrian and transit projects. These include bicycle parking; signal timing; wayfinding; transit prioritization projects; pedestrian and bicycle facilities or BRT, bus or light rail services including dedicated transit lanes, transit queue jump lanes, high-occupancy vehicle lanes, transit stop boarding islands and pedestrian improvements such as widening sidewalks and adding

pedestrian refuge islands. SB 922 also adds carpool lanes to the list of projects granted by CEQA streamlining, but only projects that convert existing lanes to high-occupancy vehicle lanes and do not add new lanes. For projects that exceed $100 million, SB 922 requires a residential displacement analysis in addition to the project business case, racial equity analyses and noticed public meetings required under SB 288. SB 922 extended the SB 288 CEQA exemption to January 1, 2030.

3.2 Metro Equity Platform

Metro's Equity Platform, adopted in 2018, is a policy framework for addressing disparities in access to opportunity resulting from historical disinvestment in low-income communities and communities of color. The Equity Platform guides how Metro works to address inequity and creates more equitable access to opportunity through four main pillars, or areas of action: Define and Measure, Listen and Learn, Focus and Deliver, and Train and Grow. The platform centers around conducting comprehensive and inclusive engagement processes that ensure community members are heard, reflected and respected in the work and empowered in the decision-making process.

The Equity Platform is designed to inform, shape and guide every facet of Metro's business, on a continuing basis, to shape projects, investments and new initiatives. Since 2020, there has been a spotlight on the systemic racism, anti-Blackness and broader injustices in America stemming from discriminatory housing policies, exclusionary zoning, disproportionate law enforcement, infrastructure investments and environmental burdens (Metro, 2024b). Metro recognizes that vast disparities exist in access to opportunities, including jobs, housing, community resources, healthy communities and mobility options. Transportation is an essential lever to enabling access and improving quality of life for Los Angeles County.

Under the Equity Platform, Metro is committed to identifying and implementing projects or programs that reduce and ultimately eliminate disparities in access to opportunities.

4 EQUITY METHODOLOGY

The following section presents the methodology for data collection and racial equity analysis.

4.1 Project Study Area

For purposes of this Racial Equity Analysis Report, the Project Study Area is defined as the census tracts with boundaries that lie within 0.5 miles of the Vermont Corridor (**Figure 1-1** and **Figure 2-1**). The analysis also uses the North, Central and South subareas to characterize the populations within the Project Study Area.

4.2 Socioeconomic and Demographic Data

Socioeconomic and demographic data include race and ethnicity, low-income households and zero-car households. The data presented are from the United States (U.S.) Census Bureau's 2018-2022 American Community Survey (ACS) 5-Year estimates and aggregated at the census tract level (U.S. Census Bureau, 2023a; 2023b; 2023c).

The U.S. Census Bureau defines race using the following categories: White, Black or African-American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Some Other Race or of Two or More Races. The U.S. Census Bureau also uses a minimum of two ethnicities in collecting and reporting data: Hispanic or Latino, or Non-Hispanic or Latino. For the purposes of this analysis, Black, Indigenous and other People of Color (BIPOC) include persons of: Hispanic or Latino origin regardless of race; Non-Hispanic or Latino, Black or African American Alone; Non-Hispanic or Latino, American Indian or Alaska Native Alone; Non-Hispanic or Latino, Asian Alone; Non-Hispanic or Latino, Native Hawaiian or Other Pacific Islander Alone; Non-Hispanic or Latino, Some Other Race; and Non-Hispanic or Latino, Two or More Races.

U.S. Department of Housing and Urban Development (HUD) defines low-income as 80% of an area's median income (AMI) and very low-income as 50% of AMI. The HUD low-income threshold of 80% of AMI is used to define low-income households for this analysis. In May 2022, Metro published the 2022 EFC update, which adjusted the low-income definition to align with other agency programs and HUD very low-income threshold (Metro, 2022a). HUD typically sets the limit at 50% of AMI, adjusted for family size or county based on cost of living. Based on the 2022 EFC update, the low-income threshold for a family of four in Los Angeles County is set at $60,000 (U.S. dollars), or approximately 72% of the 2022 AMI for Los Angeles County ($83,411). Therefore, households with a median income less than $60,000 are considered low-income for this analysis.

Zero-car households consist of households that do not possess or have access to any personal automobiles, including cars, trucks or motorcycles.

The percentage for each race/ethnicity, low-income households and zero-car households is presented for Los Angeles County; the City of Los Angeles; the Project Study Area; and the North, Central and South Subareas. The concentration of race/ethnicity, low-income households and zero-car households presented in the analysis refers to the percentage of the data set within a given subarea, compared to the total of the data set within the Project Study Area.

4.3 Metro Equity Focus Communities

In June 2019, Metro adopted a definition of EFCs under the Equity Platform (Metro, 2024a) Define and Measure pillar to identify communities most in need of improved access to opportunity from a mobility standpoint. Metro's Equity Platform specifically defines EFCs as "areas in which at least 40% of residents are low-income, and 80% of residents are people of color [Black, Indigenous, and other (sic) People of Color (BIPOC)], or 10% of the households do not have a car" (Metro, 2024b). Communities where less than 40% of households are low-income cannot be considered EFCs. Communities where more than 40% of households are low-income, but less than 80% of residents are BIPOC and less than 10% of households are zero-car, also cannot be considered EFCs. The identification of Metro EFCs is based on the race/ethnicity, household income and household car ownership data from the U.S. Census Bureau 2018-2022 ACS 5-Year Estimates.

Using the combined data for the indicators discussed above (BIPOC population, low-income households and zero-car households), Metro's Equity Need Index (MENI) methodology from Metro's 2022 EFC update calculates and assigns a percentile ranking for each census tract in Los Angeles County. A census tract is considered an EFC if its percentile ranking falls within the "Very High Need" (80th to 99th percentile) or "High Need" (60th to 79th percentile) MENI equity tiers.

4.4 Racial Equity Analysis

This racial equity analysis is based on the requirements codified in PRC Section 21080.25(d)(1)(C) and also considers Metro's Equity Platform, Metro's Rapid Equity Assessment Tool and the State of California Governor's Office of Planning and Research (OPR) *Technical Advisory: CEQA Review of Sustainable Transportation Projects* (OPR, 2021). PRC Section 21080.25(d)(1)(C) requires the racial equity analysis to "identify the racial equity impacts of the project; identify who will benefit from and be burdened by the project; and provide strategies, designs or actions to mitigate impacts where significant or disproportionate impacts exist". This racial equity analysis uses socioeconomic and demographic data and the examination of existing conditions in the Vermont Corridor to identify and assess racial and socioeconomic disparities in the historically marginalized communities in the Vermont Corridor. The purpose, goals and benefits of the Project are considered in the development of strategies to enhance positive impacts and reduce negative impacts as a result of the Project to these communities.

5 COMMUNITIES AND NEIGHBORHOODS

The following section presents the communities, neighborhoods and socioeconomic and demographic characteristics in the Project Study Area.

5.1 Neighborhoods

The Project would traverse and serve approximately 20 neighborhoods adjacent to the Project: City of Los Angeles neighborhoods of Los Feliz, East Hollywood, Silver Lake, Koreatown, Westlake, Harvard Heights, Pico-Union, Adams-Normandie, University Park, Exposition Park, Vermont Square, Harvard Park, Vermont-Slauson, Manchester Square, Vermont Knolls, Gramercy Park, Vermont Vista; the unincorporated Los Angeles County neighborhoods of Westmont, Athens, and Harbor Gateway; and the City of Gardena.

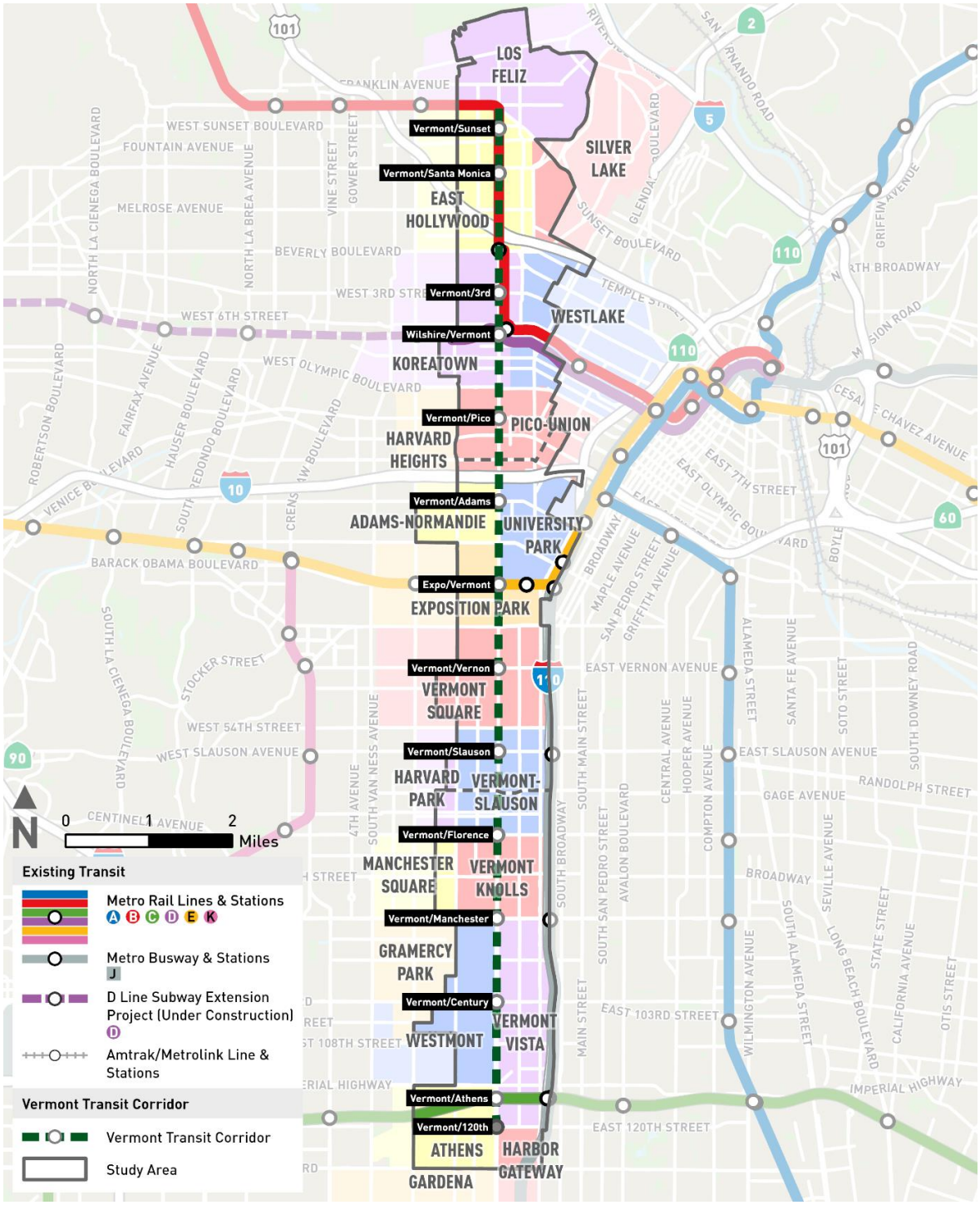
Additionally, several distinct ethnic communities are within the Project Study Area: Koreatown, South Los Angeles, Byzantine-Latino Quarter, Little Bangladesh, Little Armenia and El Salvadorian Community Corridor. **Figure 5-1** and **Figure 5-2** show the neighborhoods and the ethnic communities in the Project Study Area.

Koreatown: Koreatown is bounded by Wilshire Avenue to the north, Olympic Boulevard to the south, Vermont Avenue to the east and Crenshaw Boulevard to the west (Herbst, 2015). Koreatown is named for the Korean immigrant population which settled there after the Hart-Celler Act of 1965, which lifted national-origins quotas. Although the Koreatown identity has roots in the Korean diaspora, Koreatown is a multiethnic community (City of Los Angeles Public Library, 2022). Koreatown was officially designated by the City of Los Angeles in 2008. The area is served by the Metro D Line at the Wilshire/Vermont Station. Koreatown is in the North subarea of the Project Study Area.

South Los Angeles: South Los Angeles is a large area of the City of Los Angeles delineated as the South Los Angeles Community Plan Area and is roughly bounded by I-10 to the north, unincorporated Los Angeles County to the south, I-110 to the east and the City of Inglewood to the west. Although South Los Angeles is not a City of Los Angeles-designated ethnic neighborhood, South Los Angeles has historically been home to a large Black community for much of the 20th century, largely shaped by a legacy of redlining and racial discrimination (California State University, Northridge, Center for Geospatial Science and Technology, 2023). The area is served by the Metro E Line at the Expo/Vermont Station and Expo Park/USC Station within the Project Study Area. South Los Angeles is in the Central and South subareas of the Project Study Area.

Byzantine-Latino Quarter: The Byzantine-Latino Quarter is roughly bounded by 11th Street on the north, Venice Boulevard on the south, Hobart Boulevard on the west and Alvarado Street on the east. (Hansen, 1999). The neighborhood is named for its cross-cultural mix of Greek and Latino populations and was designated in 1997 by the California State Assembly (Hansen, 1999). The community is anchored by St. Sophia's Greek Orthodox Church and independent businesses along Pico Boulevard. The area does not include any Metro rail stations. Byzantine-Latino Quarter is a neighborhood located in the North and Central subareas of the Project Study Area.

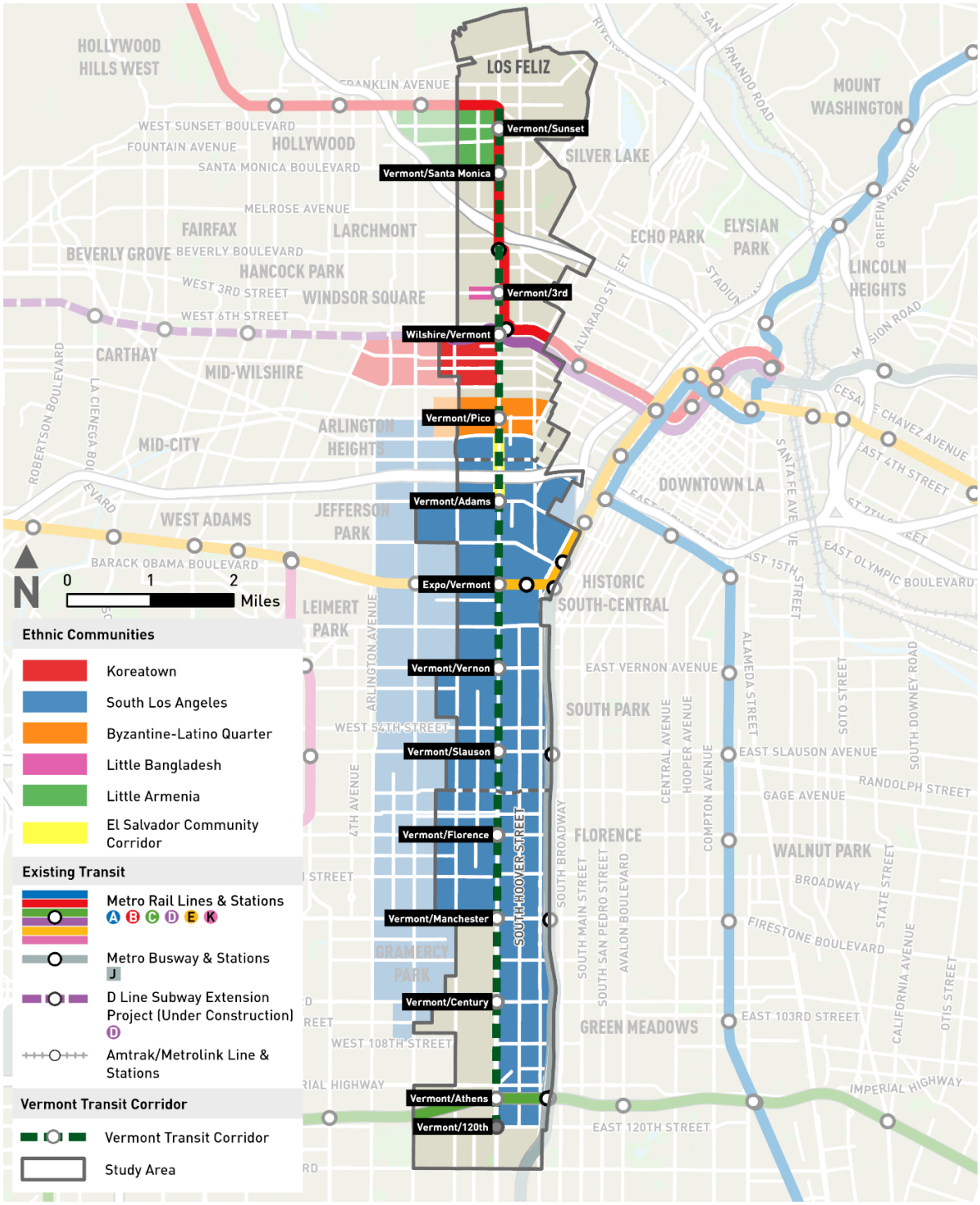
Figure 5-1 Neighborhoods in the Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dashed lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

Figure 5-2 Ethnic Communities in the Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dashed lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

Little Bangladesh: Little Bangladesh is a four-block area along 3rd Street between Alexandria and New Hampshire avenues. It is a tree-lined residential community that also includes restaurants, shops and art galleries. Little Bangladesh was officially designated by the City of Los Angeles in 2010 as the cultural and commercial hub of the City of Los Angeles's Bangladeshi community (Little Bangladesh, 2024). The neighborhood is surrounded by Koreatown (Herbst, 2015). The area does not include any Metro rail stations. Little Bangladesh is in the North subarea of the Project Study Area.

Little Armenia: Little Armenia is a neighborhood bounded by Hollywood Boulevard on the north, Santa Monica Boulevard on the south, US-101 on the west and Vermont Avenue on the east (Los Angeles Times, 2000). It is named after the Armenians who escaped genocide and made their way to Los Angeles County during the early part of the 20th century. Little Armenia was officially designated by the City of Los Angeles in 2000. The area is served by the Metro B Line at the Hollywood/Western, Vermont/Sunset and Vermont/Santa Monica stations. Little Armenia is in the North subarea of the Project Study Area.

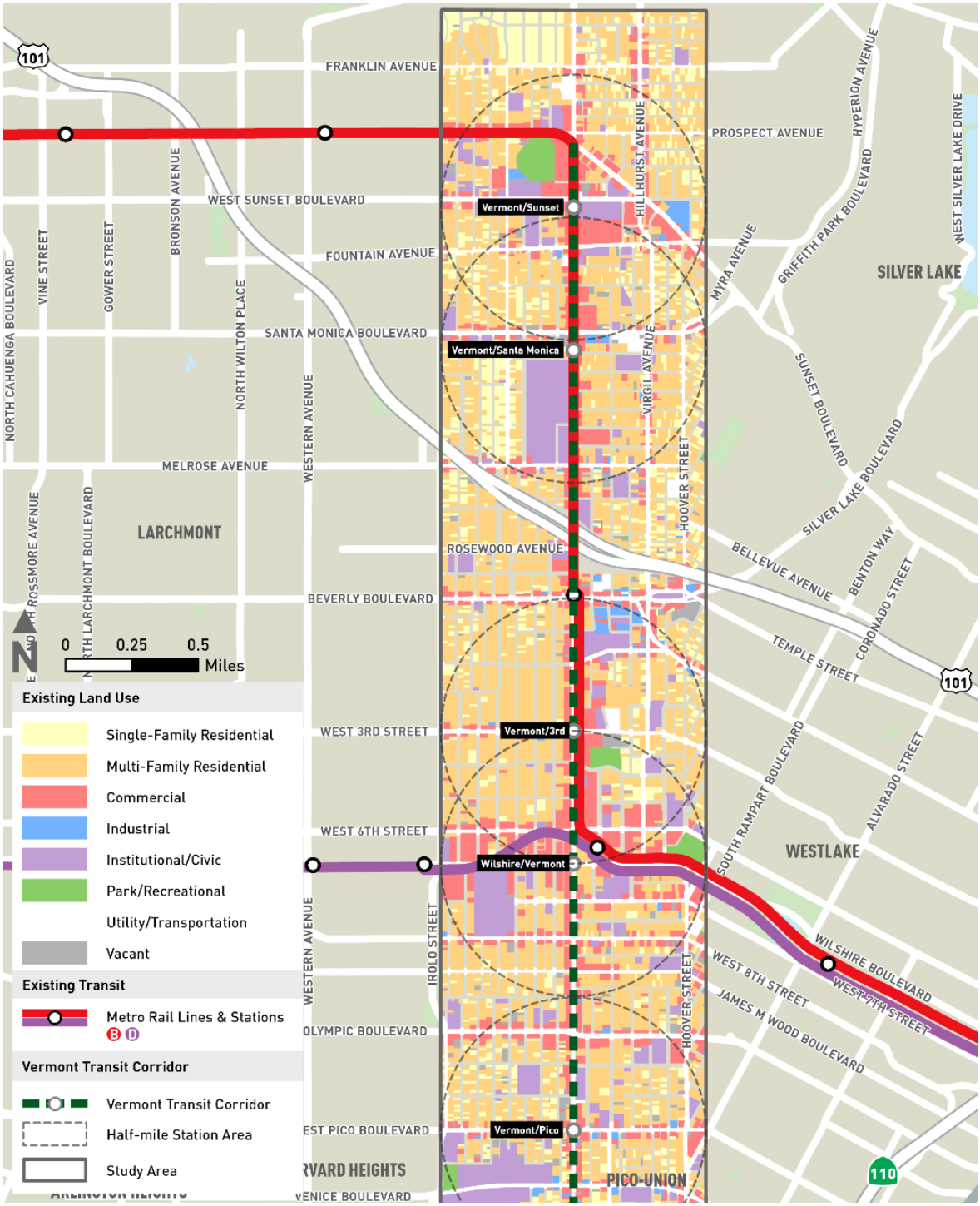
El Salvador Community Corridor: The El Salvador Community Corridor is a 14-block strip of Vermont Avenue that runs from West 11th Street down to Adams Boulevard. The corridor is an officially designated Los Angeles neighborhood, dedicated in 2012 (Diano, 2019). The corridor features El Salvadorian restaurants and shops. The area does not include any Metro rail stations. The El Salvador Community Corridor is located in the Central and North subareas.

5.1.1 North Subarea: Venice Boulevard to Sunset/Hollywood Boulevards

As described in Section 2.2.1.3, this subarea includes the neighborhoods of University Park, Pico-Union, Koreatown, Westlake, East Hollywood, Silverlake and Los Feliz. Koreatown, Byzantine-Latino Quarter, Little Armenia and El Salvador Community Corridor are located in this subarea. The North subarea is characterized with predominately residential uses (73.8%) followed by commercial uses (13.7%) as shown in **Figure 5-3**.

Major public institutions and parks include medical centers, LACC adjacent to the Vermont Corridor and the Barnsdall Art Park. The North subarea has access to the Metro D Line that provides connectivity to Koreatown, Westlake, downtown Los Angeles and the Metro B Line, which provides connectivity between North Hollywood, Hollywood, East Hollywood, Koreatown, Westlake and downtown Los Angeles. The presence of high-density residential and commercial uses, as well as access to the other bus lines and the Metro B and D lines, indicates that this portion of the corridor is highly connected and well suited for pedestrian activity. The North subarea has experienced the most investment and growth compared to the Central and South subareas and includes more affluent neighborhoods and growing communities than the other subareas.

Figure 5-3 Land Uses in the North Subarea



Source: Vermont Corridor Partners, 2024.

5.1.2 Central Subarea: Gage Avenue to Venice Boulevard

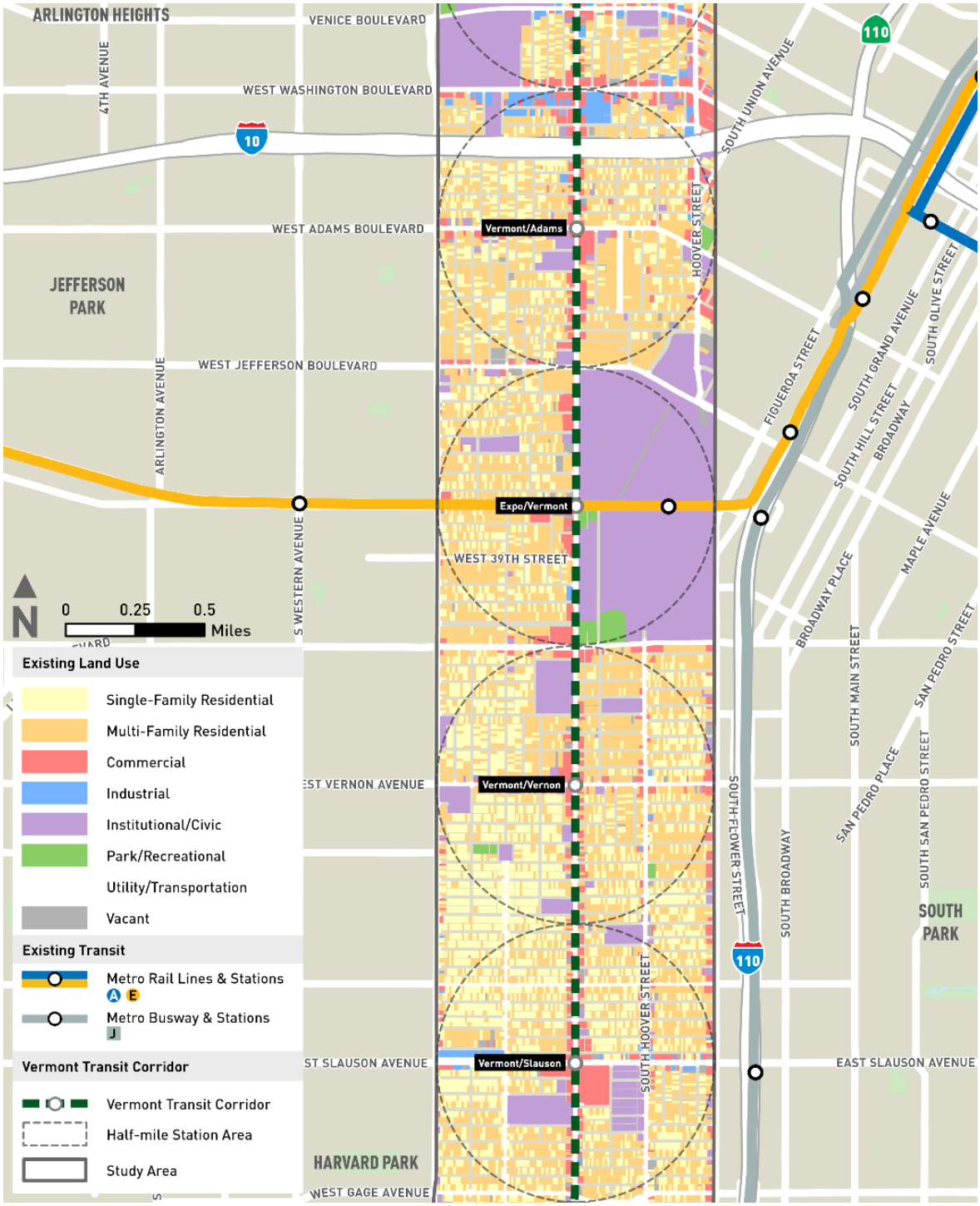
As described in Section 2.2.1.2, this subarea includes the neighborhoods of University Park, Adams-Normandie, Exposition Park, Vermont Square, Harvard Park and Vermont-Slauson. South Los Angeles, Byzantine-Latino Quarter and El Salvador Community Corridor are located in this subarea. The Central subarea is characterized with predominately residential uses (62.0%) followed by institutional/civic uses (26.3%) as shown in **Figure 5-4**.

Residential land uses in the subarea are characterized with low- to medium-density. Commercial land uses are concentrated along the Vermont Corridor north of the I-10. The commercial and residential land uses are denser in the north near Venice Boulevard and Koreatown. Major institutional and public facilities in the subarea include, but are not limited to, Exposition Park and the USC Campus. Access to other bus lines and the Metro E Line provides connectivity to downtown Los Angeles, Boyle Heights, East Los Angeles, West Los Angeles, Culver City and Santa Monica. Based on existing access to the Metro E Line and the presence of major institutional and public facilities, this subarea is moderately well connected and suitable for pedestrian activity. However, aside from large investments at Exposition Park and the USC Campus, the Central subarea has regional access with the Metro E Line but has been historically underserved by transit and has historical systemic disparities compared to the other subareas.

5.1.3 South Subarea: 120th Street to Gage Avenue

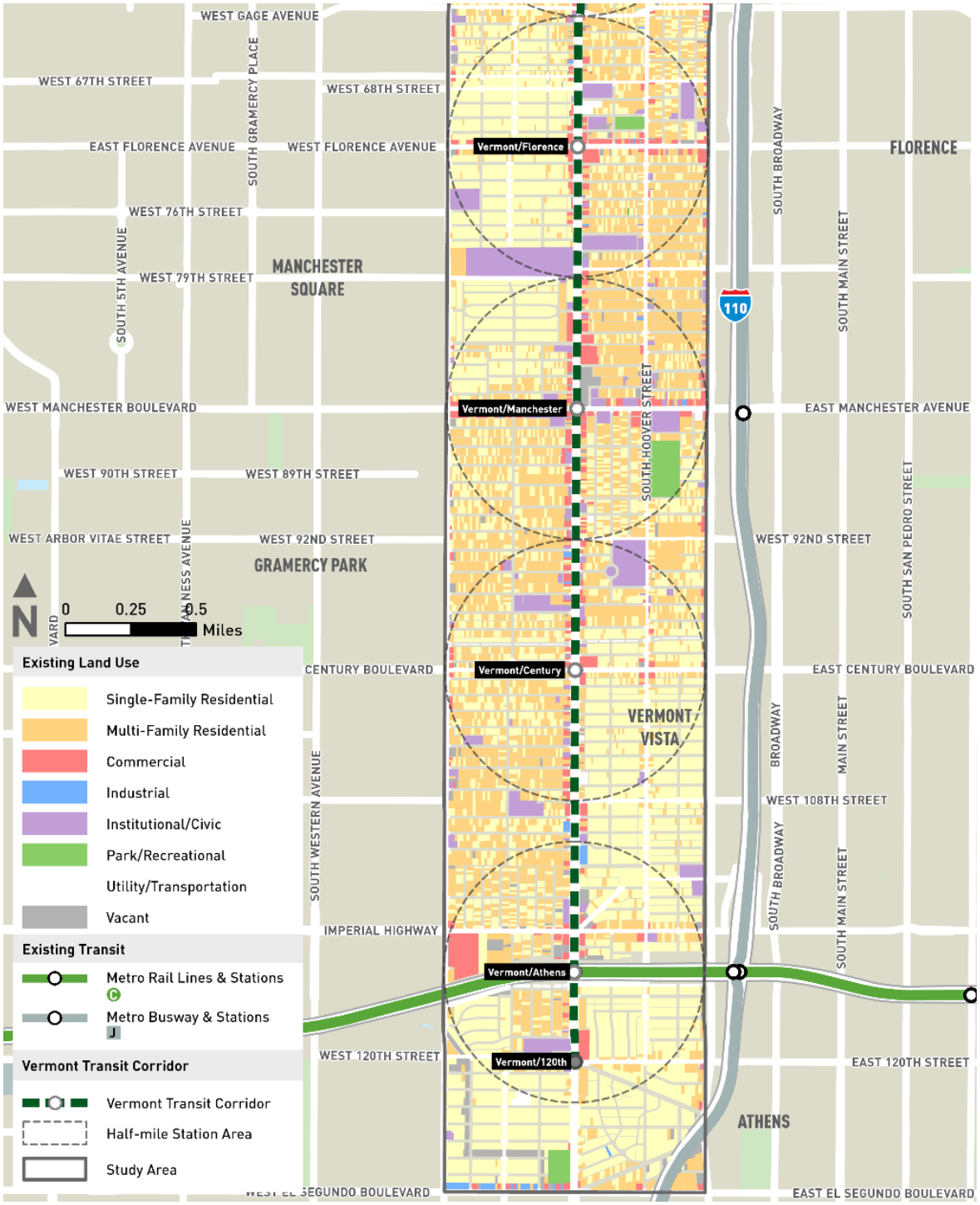
As described in Section 2.2.1.1, this subarea includes the neighborhoods of Harvard Park, Vermont-Slauson, Manchester Square, Vermont Knolls, Westmont, Vermont Vista, Athens and Unincorporated Los Angeles Harbor Gateway. The South Los Angeles Community is in this subarea. The South subarea is characterized with predominately residential uses (82.3%) followed by institutional/civic uses (8.8%) as shown in **Figure 5-5**. Residential land uses in the South subarea consist of low- to medium-density and commercial strip malls. Access to other bus lines and the Metro C Line provides connectivity to the Los Angeles International Airport, unincorporated Los Angeles County communities, South Los Angeles, Lynwood, Paramount and Downey. Based on predominance of lower-density residential uses, wide ROW, and access to the Metro C Line, this segment is poorly suited to pedestrian activity, but moderately well-connected. The South subarea is predominately made up of Hispanics or Latino and Blacks, has been historically underserved by transit and has experienced historical systemic disparities similar to the Central subarea.

Figure 5-4 Land Uses in the Central Subarea



Source: Vermont Corridor Partners, 2024.

Figure 5-5 Land Uses in the South Subarea



Source: Vermont Corridor Partners, 2024.

5.2 Socioeconomic and Demographics

The following section presents the socioeconomic and demographic characteristics of the Project Study Area. Racial/ethnic demographics, low-income households and zero-car households at the Los Angeles County and City of Los Angeles jurisdictional levels provide a regional and jurisdictional context compared to the Project Study Area.

5.2.1 Race and Ethnicity

The U.S. Census Bureau census defines “race” as a social definition recognized in the U.S. and does not attempt to define race biologically, anthropologically or genetically. The U.S. Census Bureau defines “ethnicity” as either “Hispanic or Latino” or “Not Hispanic or Latino.” "Hispanic or Latino" is defined as a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin regardless of race. People who identify as Hispanic, Latino or Spanish may be any race. BIPOC includes all individuals who identify as any race or ethnicity except for non-Hispanic/Latino White Alone.

Table 5-1 shows the racial and ethnic composition at the Los Angeles County and City of Los Angeles levels, in the Project Study Area, and further broken down by the Project Study Area’s subareas. The BIPOC population of Los Angeles County and the City of Los Angeles is 74.8% and 71.9%, respectively. In comparison, the BIPOC population in the Project Study Area is 88.8%. Of the Project Study Area’s subareas, the South subarea has the highest BIPOC population at 98.7%, composed of primarily Hispanics of Any Race (63.8%) and Black Only (32.3%). The North subarea has the lowest BIPOC population at 80.8% composed of primarily Hispanics of Any Race (51.5%) and Asian Only (21.8%). **Figure 5-6** shows the percentage of population identified as BIPOC in the Project Study Area.

Table 5-1 Racial and Ethnic Characteristics of the Project Study Area

Geographic Area [a, b]	Total Population	Percent Share of Total Population (%)								
		Total BIPOC [c]	Hispanic of Any Race	Non-Hispanic						
				White Only	Black Only	American Indian / Alaskan Native Only	Asian Only	Native Hawaiian/ Pacific Islander Only	Some Other Race Only	Two or More Races
Los Angeles County	9,936,690	74.8	48.7	25.2	7.6	0.2	14.6	0.2	0.5	3.0
City of Los Angeles	3,881,041	71.9	48.1	28.1	8.2	0.2	11.6	0.1	0.5	3.2
Project Study Area	**402,864**	**88.8**	**59.0**	**11.2**	**14.7**	**0.2**	**12.3**	**0.2**	**0.4**	**2.0**
North Subarea	179,439	80.8	51.5	19.2	4.3	0.2	21.8	0.1	0.4	2.5
Central Subarea	112,374	91.8	66.0	8.2	14.0	0.1	8.7	0.1	0.4	2.5
South Subarea	111,051	98.7	63.8	1.3	32.3	0.3	0.7	0.3	0.4	0.9

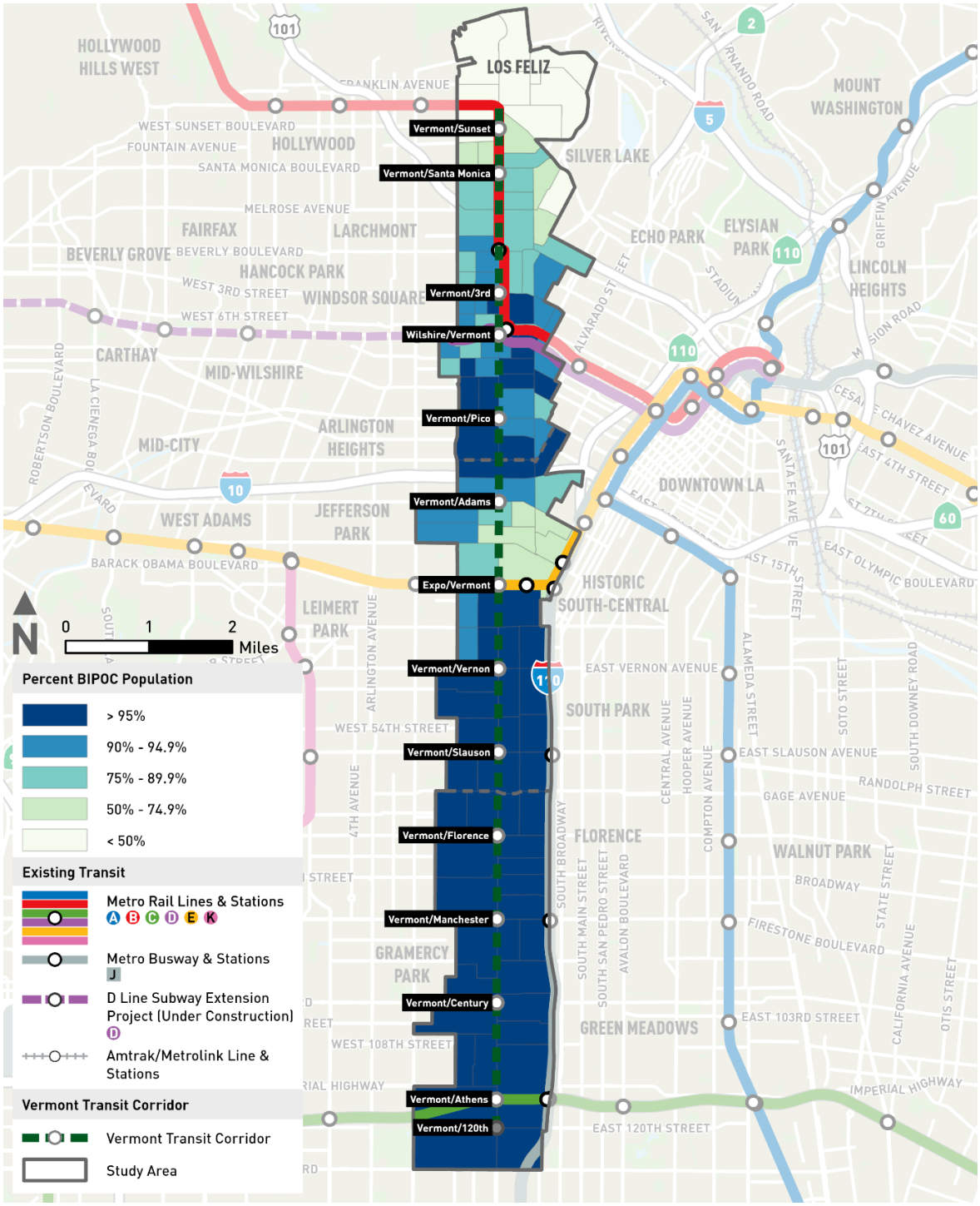
Source: U.S. Census Bureau, 2023a.

[a] Los Angeles County census data are collected at the county level and are provided for county-level context. City of Los Angeles census data are collected at the city level and is provided for city-level context.

[b] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor.

[c] BIPOC is defined as persons of Hispanic or Latino origin regardless of race, and Non-Hispanic or Latino, Black or African American Alone; Non-Hispanic or Latino, American Indian or Alaska Native Alone; Non-Hispanic or Latino, Asian Alone; Non-Hispanic or Latino, Native Hawaiian or Other Pacific Islander Alone, Non-Hispanic or Latino, Some Other Race and Non-Hispanic or Latino, Two or More Races.

Figure 5-6 Percent of Population Identified as BIPOC in the Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dashed lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area. BIPOC includes all individuals who identify as any race or ethnicity except for non-Hispanic/Latino White Alone.

Table 5-2 shows the distribution of BIPOC population within the Project Study Area. Distribution is the proportion of the BIPOC population in each subarea compared to the total BIPOC population in the Project Study Area. Although the North subarea has the lowest BIPOC population percentage compared to the other two subareas, due to its higher-density residential land uses compared to the Central and South subareas, the largest concentration of the Project Study Area's BIPOC population is in the North subarea (40.5%), and the smallest concentration of BIPOC population is in the Central subarea (28.8%).

Table 5-2 Distribution of BIPOC Population in the Project Study Area

Geographic Area [a]	Total BIPOC Population	Distribution of BIPOC Population (%) [b]
Project Study Area	**357,796**	—
North Subarea	145,006	40.5
Central Subarea	103,181	28.8
South Subarea	109,609	30.6

Source: U.S. Census Bureau, 2023a.

[a] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor.

[b] Distribution is the proportion of the BIPOC population in each subarea compared to the total BIPOC population in the Project Study Area.

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5.2.2 Low-Income Households

Based on Metro's 2022 EFC update, the low-income threshold for a family of four in Los Angeles County is set at $60,000, or approximately 72% of the 2022 AMI for a family of four for Los Angeles County ($83,411).

Table 5-3 shows the total and percentage of low-income households at the county and city levels in the Project Study Area, and further broken down by the Project's subareas. Based on the $60,000 low-income threshold used by Metro, 37.3% and 41.2% of the households in Los Angeles County and the City of Los Angeles are considered low-income households, respectively. In comparison, 55.6% of the households in the Project Study Area are considered low-income. Of the Project Study Area's subareas, the Central subarea has the highest percentage of low-income households at 59.1%, and the North subarea has the lowest percentage of low-income households at 53.4%. **Figure 5-7** shows the percentage of low-income households in the Project Study Area.

Table 5-3 Low-Income Households in the Project Study Area

Geographic Area [a, b]	Total Households	Low-Income Households [c]	Percent Low-Income Households (%)
Los Angeles County	3,363,093	1,255,123	37.3
City of Los Angeles	1,399,442	577,096	41.2
Project Study Area	**134,562**	**74,807**	**55.6**
North Subarea	73,164	39,076	53.4
Central Subarea	29,942	17,681	59.1
South Subarea	31,456	18,050	57.4

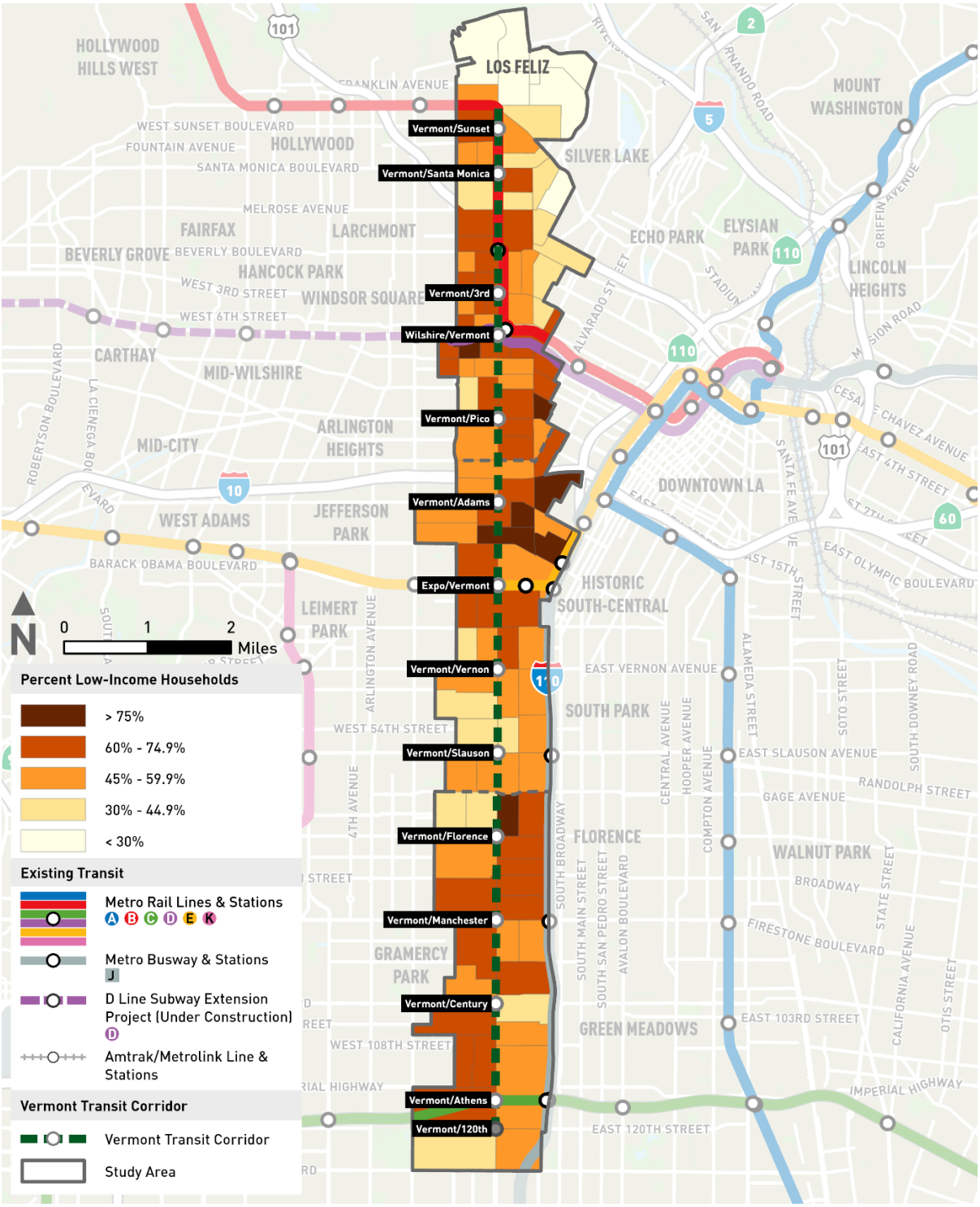
Source: U.S. Census Bureau, 2023b.

[a] Los Angeles County census data are collected at the county level and are provided for county-level context. City of Los Angeles census data are collected at the city level and are provided for city-level context.

[b] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor.

[c] Low-income is defined as households with income less than $60,000, or approximately 72% of the 2022 AMI for Los Angeles County ($83,411).

Figure 5-7 Percent of Low-Income Households in Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dashed lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

Table 5-4 shows the distribution of low-income households within the Project Study Area. Distribution is the proportion of low-income households in each subarea to the total number of low-income households in the Project Study Area. Although the North subarea has the lowest low-income population percentage, due to its higher-density residential land uses compared to the Central and South subareas, the largest concentration of low-income households is in the North subarea (52.2%), and smallest concentration of low-income households is in the Central subarea (23.6%).

Table 5-4 Distribution of Low-Income Households in the Project Study Area

Geographic Area [a]	Low-Income Households [b]	Distribution of Low-Income Households (%) [c]
Project Study Area	**74,807**	—
North Subarea	39,076	52.2
Central Subarea	17,681	23.6
South Subarea	18,050	24.1

Source: U.S. Census Bureau, 2023b.

[a] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor.

[b] Low-income is defined as households with income less than $60,000, or approximately 72% of the 2022 AMI for Los Angeles County ($83,411).

[c] Distribution is the proportion of low-income households in each subarea to the total number of low-income households in the Project Study Area.

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5.2.3 Zero-Car Households

Metro's Equity Platform defines zero-car households as households that do not have access to a car. Zero-car households are considered dependent on alternative transportation, including transit and active transportation, for their mobility needs.

Table 5-5 shows the total and percentage of zero-car households at the county and city levels in the Project Study Area, and further broken down by the Project's subareas. Approximately 8.7% and 11.7% of the households in Los Angeles County and the City of Los Angeles are considered zero-car households, respectively. In comparison, 20.4% of the households in the Project Study Area are considered zero-car households. Of the Project Study Area's subareas, the North subarea has the highest percentage of zero-car households at 22.0%, and the South subarea has the lowest percentage of zero-car households at 16.1%. **Figure 5-8** shows the percentage of zero-car households in the Project Study Area.

Table 5-5 Zero-Car Households in the Project Study Area

Geographic Area [a, b]	Total Households	Zero-Car Households [c]	Percent Zero-Car Households (%)
Los Angeles County	3,363,093	291,082	8.7
City of Los Angeles	1,399,442	163,788	11.7
Project Study Area	**134,562**	**27,390**	**20.4**
North Subarea	73,164	16,075	22.0
Central Subarea	29,942	6,259	20.9
South Subarea	31,456	5,056	16.1

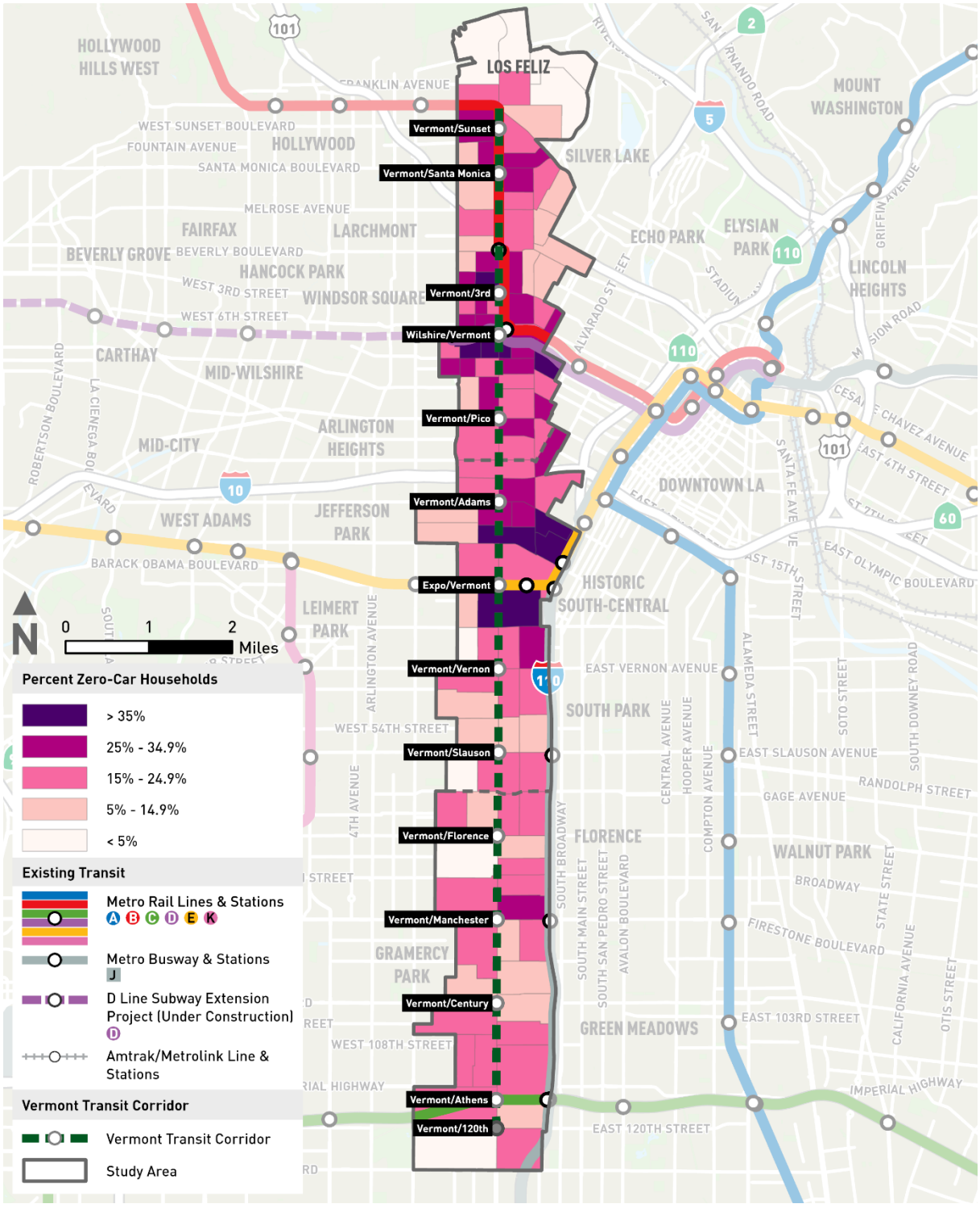
Source: U.S. Census Bureau, 2023b.

[a] Los Angeles County census data are collected at the county level and are provided for county-level context. City of Los Angeles census data are collected at the city level and is provided for city-level context.

[b] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor.

[c] Zero-car households are defined as households that do not have access to a car.

Figure 5-8 Percent of Zero-Car Households in the Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dashed lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

Table 5-6 shows the distribution of zero-car households within the Project Study Area. Distribution is the proportion of zero-car households in each subarea to the total number of zero-car households in the Project Study Area. Due to its higher-density residential land uses compared to the Central and South subareas, the largest concentration of zero-car households is in North subarea (58.7%), and the smallest concentration of zero-car households is in the South subarea (18.5%).

Table 5-6 Distribution of Zero-Car Households in the Project Study Area

Geographic Area	Zero-Car Households [a]	Distribution of Zero-Car Households (%) [b]
Project Study Area [c]	**27,390**	—
North Subarea	16,075	58.7
Central Subarea	6,259	22.9
South Subarea	5,056	18.5

Source: U.S. Census Bureau, 2023b.

[a] Zero-car households are defined as households that do not have access to a car.

[b] Distribution is the proportion of zero-car households in each subarea to the total number of zero-car households in the Project Study Area.

[c] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor.

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5.2.4 Metro Equity Focus Communities

As discussed in Section 4.3, Metro EFCs are identified as areas in which at least 40% of residents are low-income (less than $60,000 per year), and 80% of residents are BIPOC or 10% of the households do not have a car. In addition, a census tract is considered an EFC if its percentile ranking falls within the "Very High Need" (80th to 99th percentile) or "High Need" (60th to 79th percentile) in the MENI equity tiers (Metro, 2022a). Based on the data summarized in Sections 5.2.1 through 5.2.3 and Metro's definition of an EFC, the Project Study Area and each of the subareas include EFCs.

Table 5-7 summarizes the demographic and socioeconomic characteristics used to identify the EFCs in the Project Study Area. Within the Project Study Area, 88.8% of the total population is BIPOC, 55.6% of households are low-income and 20.4% of households are zero-car. Based on the MENI analysis from Metro's 2022 EFC update, within the Project Study Area, 91.2% of the census tracts are considered EFCs. The North subarea has 84.5%; the Central subarea has 100%, and the South subarea has 96.0%. **Figure 5-9** shows the EFCs in the Project Study Area.

Table 5-7 Summary of Equity Focus Community Indicators in the Project Study Area

Geographic Area [a,b]	Percent BIPOC Population (%) [c]	Percent Low-Income (%) [d]	Percent Zero-Car Households (%) [e]	Is the Area an EFC? [f]	Percent Census Tracts are Metro EFCs based on MENI Index (%) [g]
Los Angeles County	74.8	37.3	8.7	—	—
City of Los Angeles	71.9	41.2	11.7	—	—
Project Study Area	**88.8**	**55.6**	**20.4**	**Yes**	**91.2**
North Subarea	80.8	53.4	22.0	Yes	84.5
Central Subarea	91.8	59.1	20.9	Yes	100.0
South Subarea	98.7	57.4	16.1	Yes	96.0

Source: U.S. Census Bureau, 2023a, 2023b, 2023c; Metro, 2022b.

[a] Los Angeles County census data are collected at the county level and are provided for county-level context. City of Los Angeles census data are collected at the city level and is provided for city-level context.

[b] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor.

[c] BIPOC is defined as an individual who identifies as Hispanic or Latino origin regardless of race, and Non-Hispanic or Latino, Black or African American Alone; Non-Hispanic or Latino, American Indian or Alaska Native Alone; Non-Hispanic or Latino, Asian Alone; Non-Hispanic or Latino, Native Hawaiian or Other Pacific Islander Alone, Non-Hispanic or Latino, Some Other Race and Non-Hispanic or Latino, Two or More Races.

[d] Low-income is defined as households with income less than $60,000, or approximately 72% of the 2022 AMI for Los Angeles County ($83,411).

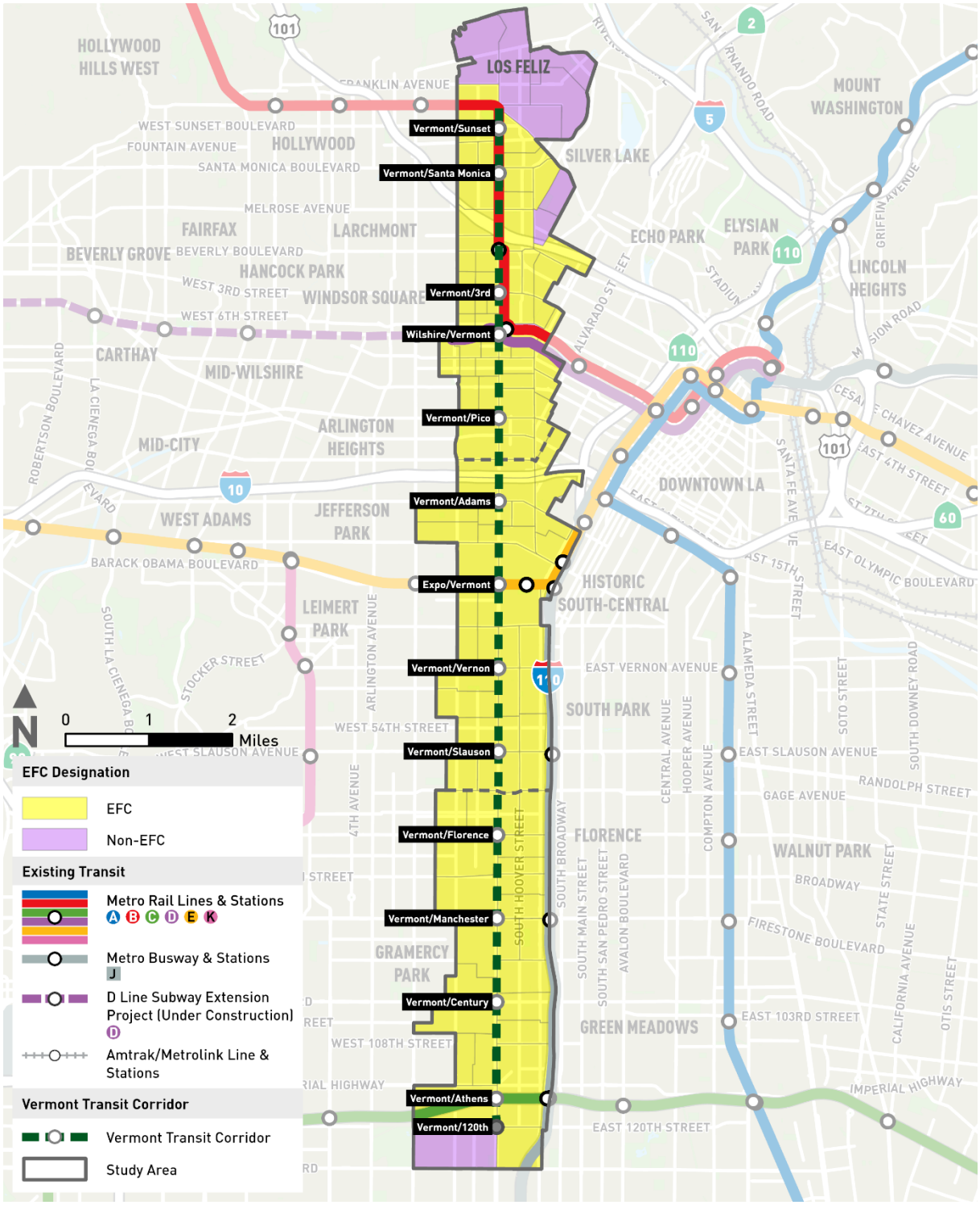
[e] Zero-car households are households which do not have a car.

[f] Metro EFCs are identified as areas in which at least 40% of residents are low-income (less than $60,000 per year), and 80% of residents are BIPOC, or 10% of the households do not have a car.

[g] A census tract is considered an EFC if its percentile ranking falls within the "Very High Need" (80th to 99th percentile) or "High Need" (60th to 79th percentile) in the MENI equity tiers from Metro's 2022 EFC update.

— indicates that the cell does not contain applicable information.

Figure 5-9 Equity Focus Communities in the Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dashed lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

6 RACIAL EQUITY ANALYSIS

Metro's Equity Platform is a policy framework for addressing disparities in access to opportunity resulting from historical disinvestment in low-income communities and communities of color. Under the Equity Platform, Metro is working to identify and implement projects or programs that reduce and ultimately eliminate disparities in access to opportunities. The Vermont Corridor has historically faced racism and discrimination in land use, transportation and transit planning that have resulted in historical inequities and inequitable investments and services. These inequitable investments and services have created vast disparities between communities that are visible in air quality, traffic congestion, mobility, housing, open space options, food access, quality infrastructure and few community development opportunities (Metro, 2024b).

Metro is committed to equitable outcomes. However, to reach equality, equity needs to be prioritized to counter systemic inequalities. Metro's Equity Platform aims to identify and implement programs that reduce and ultimately eliminate these disparities (Metro, 2024b). The intersection of race, poverty and mobility inequities in the Project Study Area demonstrates the importance of transit investment in the Vermont Corridor.

6.1 Clarifying the Purpose of the Project

The Project would narrow the existing inequities by investing in a transit system that supports a broad base of current users and reflects the needs of each distinct community by improving access, safety and comfort.

The purpose of the Project is to provide a multimodal transit solution that improves transit service, enhances customer experience and supports equitable community development in an historically underinvested corridor in alignment with Metro's strategic plans and policies. The Project would improve north-south transit services within the Vermont Corridor and improve access to jobs, education and essential services. The Project would construct enhanced bus shelters, improve connections to the regional transit network and access to important regional destinations, increase transit services to meet growing demand and improve services for riders. With the improvements focused in the Project Study Area (consistent with improvements in other bus transit corridors), the Project would provide equitable investments to alleviate existing racial, economic and mobility disparities throughout the Vermont Corridor.

6.2 Considering Potential Environmental Impacts

A high-level environmental scan was conducted for the Project to evaluate potential environmental impacts during the construction and operation phases. The Project is in an area characterized as highly urbanized, currently served by several public transit systems including the City of Los Angeles Department of Transportation's (LADOT) DASH bus system, Metro bus lines and Metro B, C and D rail lines. Bicycle routes maintained by LADOT also intersect through areas of the Project Study Area.

All construction activities would occur within temporary construction staging areas. All operational activities would occur solely within the Vermont Avenue ROW. The Project would not construct any housing, commercial facilities, or other structures that could directly lead to gentrification or displacement in the Project Study Area. The Project would not remove driveways connecting to the Vermont Avenue ROW. As construction activities and operations would occur within the Vermont Avenue ROW, no permanent property acquisitions would occur. Lane and street closures are

anticipated during the construction of station areas and the re-striping of Vermont Avenue for the BRT lane. A Traffic Management Plan would be implemented to ensure ADA-compliant detours for motor vehicles, bicycles, and pedestrians. The Project may result in temporary construction impacts related to air quality, biological resources, greenhouse gas emissions, noise, vibration and traffic. However, construction activities would comply with all applicable local, regional and state regulations and ordinances. A Construction Management Plan would be implemented, and Project Features are incorporated in the Project that would ensure potential environmental impacts remain less than significant.

The Project would operate within a bus-only lane in the Vermont Avenue ROW. The BRT buses would be zero-emission, and operation would not result in air quality impacts. Any greenhouse gas emissions impacts during construction would be offset by transportation mode share shifts away from automobile use to public transit during operations. The Project would result in reduced or similar ambient noise levels compared with existing conditions. Furthermore, operations of the surface-running BRT would have no potential to impact subsurface artifacts or resources. Project impacts would occur equally throughout the Project Study Area and would not be concentrated only in one subarea or affect only a single community. Project Features as part of the Project would also be implemented throughout the entire Project Study Area.

A transportation impact analysis was conducted for the Project to assess potential impacts to transit, vehicular traffic, vehicle miles traveled, parking, pedestrian, bicycle, and transit access, freeway safety, and residential cut-through traffic. The following summarizes the conclusions of the transportation analysis.

Transit: The Project would increase the capacity, frequency, and quality of bus transit service by implementing a new BRT service and improving travel times of existing bus services. The Project would increase total corridor bus ridership by about 30,000 daily riders for a total of 66,200 new daily riders. With new bus lanes and the reconfiguration of existing lanes, auto capacity on Vermont Avenue would be reduced. However, with the introduction of a bus lane, the total person-throughput would be increased.

Project Access, Safety and Circulation (Traffic Level of Service [LOS]): The Project would introduce about 27 new right-turn pockets to support right turning movements and avoid blocking through-traffic. Compared to the No-Build Conditions in 2045 with the planned Near-Term Improvements in place, the traffic conditions on Vermont Avenue would result in one additional intersection operating at a LOS E/F (total of eight) and increased queuing at 13 additional intersections. However, mitigation measures such as repurposing curb space, reconfiguring intersections, and implementing employer-based transit subsidy programs could potentially reduce the delays and queuing.

Vehicle Miles Travelled: The Project is expected to yield a vehicle miles traveled savings of approximately 85,000 by shifting person-trips from automobiles to transit, based on projected trip distances for various service scenarios.

Parking: The Project would impact approximately 146 existing on-street parking spaces (approximately 6% of the total) along the corridor. The impacts are primarily limited to station areas.

Freeway Safety: The safety analysis of six freeway off-ramps in the Project Study Area were evaluated. As a transit project, the Project would not result in additional auto trips. Therefore, the Project would not generate peak-hour trips greater than the threshold indicated in the City of Los Angeles Department of Transportation's Transportation Assessment Guidelines.

Pedestrian, Bicycle and Transit Access: The Project would improve pedestrian, bicycle and transit access and safety by providing 26 modern BRT shelters with lighting, security elements, seating and wayfinding. The Project would maintain existing bicycle lanes along Vermont Avenue between 120th Street and Gage Avenue. The Project would not preclude implementation of new bicycle lanes or other betterments outlined in Mobility Plan 2035 by the City of Los Angeles under separate projects.

Residential Cut-Through: Travelers may use alternative arterial routes within the Study Area or other streets outside of the Study Area to avoid potential delays on Vermont Avenue as a result of the Project. Mitigation measures may be implemented, such as traffic calming, traffic signal optimization, navigation app coordination, and adaptive traffic management, that could reduce the diversion potential.

6.3 Identifying and Documenting Racial Inequities

The following examines the historical inequities and present-day challenges related to race, economics and mobility in the Vermont Corridor.

6.3.1 Historical Inequities

6.3.1.1 Race and Economics

In the 1930s, the federal government developed a grading system of "A (Best), B (Still Desirable), C (Declining), and D (Hazardous)" to rank the desirability of neighborhoods for banks to offer loans to residents. Neighborhoods inhabited by BIPOC and immigrant populations, including in the Vermont Corridor, were given a C or D grade, the latter of which was considered "redlined." Neighborhoods redlined along racial lines were systematically denied access to loans and other forms of credit. Neighborhoods in the North subarea were given grades A through D, while neighborhoods in the Central subarea were given grades C and D, and neighborhoods in the South subarea were given grades B and C (Reft, 2017). Although this practice was made illegal under the Fair Housing Act of 1968, it remains a major root cause of disparities in community investment (Rothstein, 2017).

Redlining resulted in urban blight, as neighborhoods of color struggled to access funds needed to maintain and improve infrastructure. In 1964, Proposition 14 was passed, which led to the reduction of federal housing funds to BIPOC neighborhoods and further contributed to urban blight. Construction of I-10 took place in redlined communities, which displaced and damaged many Black communities in South Central Los Angeles. Construction of US-101 and I-105 also displaced communities of color along Vermont Avenue.

The impoverished neighborhood conditions, government neglect, and tensions with police in communities along the Vermont Corridor eventually contributed to the Watts riots of 1965, which led to the destruction of over 600 buildings, many of which were on Vermont Avenue. It also led to the departure of many White-owned businesses and institutions in the area that provided many basic necessities like grocery stores, banks, schools and healthcare centers. In the 1980s, Black unemployment and poverty rose significantly due to the decrease in manufacturing jobs and fewer industries (Sonksen, 2017).

The Los Angeles Uprising of 1992 followed the Rodney King trial. The uprising was a culmination of the racial tensions, tensions between the community and police, and a growing frustration with the disinvestment in South-Central Los Angeles neighborhoods along the Vermont Corridor. During the riots, 55 people died, and over 1,100 buildings were damaged or destroyed, many of which were

along Vermont Avenue. The intersections of Vermont Avenue/Wilshire Boulevard and Vermont Avenue/Manchester Boulevard were hit particularly hard (Krbechek and Bates, 2017). To address the disinvestment that led to the riots, the City of Los Angeles developed Rebuild LA, a non-profit organization tasked with directing private sector investment into areas affected by the riots. However, the effort was unsuccessful (Jaffe, 2012).

6.3.1.2 Mobility

Mobility disparities exist throughout the Vermont Corridor as a result of the long-term historical decline in the streetcar system and subsequent growth in the automobile industry. As one of the longest running north-south streets in Los Angeles County, Vermont Avenue is one of the oldest and most important transportation corridors in the region. Between 1914 and 1963, Vermont Avenue was served by several Los Angeles Railway Yellow Car streetcar lines. The Vermont-Vernon (V) line was the only cross-town line to serve Angelinos' transportation needs (Metro, 2024c). In the post-World War II era, the use of personal automobiles proliferated in the Los Angeles County region, which resulted in more convenient forms of travel but also increased congestion, eroding the advantages of the historic streetcar system. Additionally, population migrations out of the urban core and into the suburbs led to declines in ridership (Los Angeles Streetcar, 2024). The streetcar system, previously operated under the Metropolitan Coach Lines and the Los Angeles Railway, was acquired by Los Angeles Metropolitan Transit Authority (MTA) in 1953. MTA operated the lines from 1958 to 1964, when MTA was taken over by the Southern California Rapid Transit District. During the MTA's tenure, the last remaining rail transit lines in Los Angeles were abandoned; the remaining tracks were torn up and replaced with diesel buses (Los Angeles Times, 1963).

The growth of suburbs and automobile use was further hastened by the U.S. Interstate Highway System, created by President Eisenhower in 1956. Multiple freeways, including I-5, I-10 and US-101, were subsequently constructed in tandem with contemporary urban renewal efforts, which aimed to replace areas deemed substandard with new development and easy commutes for suburbanites. Through a combination of intention and indifference, these freeways resulted in the demolition of distinct Black and Latino neighborhoods, leading to displacement (Dillon and Poston, 2021). While the construction of the freeways increased suburbanization and served as regional connectors, the freeways also subdivided previously unified neighborhoods, thereby decreasing mobility by making it more difficult for residents to access local amenities and jobs (Yudhisthu, 2023). Specifically, US-101, I-10 and I-105 divided and affected Black and Latino neighborhoods in the Vermont Corridor.

Recently, the government has attempted to rectify historical mobility inequities in transportation and urban planning. The Biden Administration's Bipartisan Infrastructure Plan includes $20 billion for programs to reconnect neighborhoods cut off by historical investments (King, 2021). The Biden Administration has also invested $4 billion for transportation infrastructure in underserved communities, including Black communities (The White House, 2024). In Los Angeles County, Measure M was approved by voters in 2016. Measure M is a permanent sales tax increase to fund a major expansion of the public transit system. Measure M partially funds many Metro projects as well as projects to ease traffic congestion, repair local streets and sidewalks and subsidize fares for students, seniors and persons with disabilities (Metro, 2024d). The Project is included as a Major Project in Measure M (Metro, 2017b).

6.3.2 Present-Day Inequities

6.3.2.1 Race and Economics

Today, the Vermont Corridor is home to many racially diverse populations and ethnic neighborhoods, including Koreatown, South Los Angeles, Byzantine-Latino Quarter, Little Bangladesh, Little Armenia and El Salvador Community Corridor. As discussed in Sections 5.2.1 and 5.2.2 above, BIPOC communities within the Project Study Area represent 88.8% of the total population, while low-income households represent 55.6% of the total population. The 2022 Metro rider survey indicated that the majority of riders on the Metro bus network belong to BIPOC communities (89%) and earn less than $50,000 per year (89%) (Metro, 2022c). Based on recent Metro on board survey results generated from riders that currently use Metro Lines 204 and 754 on Vermont Avenue, it was discovered that these heavily depend on transit and reflect the diversity and needs of many of its residents. Hispanic or Latinos and Blacks make up approximately 85% of Metro riders on Vermont Avenue, while 92% of all Metro riders on Vermont Avenue are considered low-income. In 2022, 59.9% of all Metro riders on Vermont Avenue used Metro at least 5 times per week, 21.6% used Metro 3 to 4 times per week, and 18.5% used Metro 2 times or less per week.

A Transit Rider Intercept Survey was also conducted for the Project between August 19 and 29, 2024. The survey indicated that the majority of riders in this corridor belong to BIPOC communities. The survey also indicated that the Metro network serves a racially diverse and transit-dependent population with a high demand. Therefore, the Metro network serves racially diverse, low-income and transit-dependent populations along the Vermont Corridor.

Historical discrimination in land use, transportation and transit planning have resulted in present-day gaps in transit access across race, income and other characteristics, thus perpetuating social inequities. Populations using Metro's service due to its affordability, which include BIPOC communities, have identified that Metro services are not meeting the needs of those riders who rely on the service to make essential trips. For example, within the Metro service area on a weekend morning, it takes nearly four times longer to reach the closest hospital using transit than using a car, and more than three times longer to reach the nearest college or university (Transit Center, 2021). In 2020, Metro created the Office of Equity and Race to address inequalities related to access to transit. The Office of Equity and Race develops and manages equity assessment tools to operationalize Metro's Equity Platform, which is the agency's commitment to pursue equitable outcomes in Metro projects and operations (Metro, 2024a).

6.3.2.2 Mobility Inequities

Vermont Avenue is the busiest bus corridor in Los Angeles County, with 36,000 daily boardings. Many riders use the Metro system due to lack of other mobility options such as a personal automobile (78%) (Metro, 2022c). In 2021, approximately 86,902 workers were employed in the Project Study Area. Of these workers, 89.2% resided outside the Project Study Area and commuted into the Project Study Area for employment, while 10.8% of the workers lived within the Project Study Area (U.S. Census Bureau, 2024). As discussed in Section 5.2.3 above, zero-car households represent 20.4% of the total population of the Project Study Area. The loss of the streetcar system and proliferation of automobiles during the 20th century have resulted in mobility inequities which persist to this day. Existing challenges to mobility equity within the Vermont Corridor are summarized below and further documented in the *2017 BRT Technical Study* (Metro, 2017a).

The impact of traffic on slow bus speeds. Heavy traffic along the Vermont Corridor has resulted in slow bus service and poor on-time performance, which negatively impacts the populations who rely on transit services along the Vermont Corridor, especially zero-car households. Slow bus speeds result in poor on-time performance and system delays for the bus network.

Intersection delays due to poor LOS and long traffic queues. LOS is a qualitative measurement of the relative level of traffic flow at an intersection or roadway segment, ranging from LOS A (free flow) to LOS F (extreme congestion). The overall LOS in the Vermont Corridor ranges from acceptable conditions (LOS B and C) to poor operating conditions (LOS E and F). North of Exposition Boulevard, the Vermont Corridor experiences high traffic volumes, reduced traffic lanes, heavy pedestrian activity at intersections and heavy right-turn movements, which collectively contribute to poor LOS.

Excessive dwell time at busy bus stops. Dwell time refers to the time buses spend loading and unloading passengers at bus stops. Dwell time is related to the number of passengers waiting at a given bus stop, general passenger boarding and alighting, disabled and elderly passenger onboarding and alighting and on-board fare payment. Thirty-four percent of Metro bus riders pay in cash, which can result in slower boarding times than for passengers who pay for fare using a Transit Access Pass TAP) card.

The absence of customer-friendly amenities at stop locations. Additional mobility inequities stem from the lack of customer-friendly amenities in the Vermont Corridor, including overhead bus shelters. There are an estimated 6,000 bus stops in the Metro network without dedicated shade (Tu, 2023). Fourteen bus shelters have been built since 2002 within the Project Study Area, including five bus shelters in the North subarea, eight bus shelters in the Central subarea and one bus shelter in the South subarea (Outfront/Decaux, 2024).

Poor pedestrian access between bus stops and Metro rail stations. Several bus stop locations in the Vermont Corridor pre-date the introduction of Metro rail stations, resulting in circuitous and lengthy travel routes between legacy Metro bus stops and Metro rail stations for pedestrians. The absence of good signage creates further challenges to pedestrian connectivity.

6.3.3 Current Socioeconomic Inequities

As discussed in detail in Section 5.2 and summarized in **Table 5-7**, the Project Study Area and each of the subareas have a high percentage of BIPOC communities, low-income households and zero-car households compared to the City of Los Angeles and Los Angeles County. The Project Study Area also includes census tracts identified as EFCs. Based on these factors, the Project Study Area experiences disparities in access to opportunities including jobs, housing and mobility options.

Based on the socioeconomic data presented and the EFCs identified in each subarea, communities in the Central subarea face the highest inequities related to jobs, housing and mobility options followed by the South subarea.

The North subarea has the lowest BIPOC population (80.8%) and low-income households (83.4%), but the highest zero-car households (22.0%). Approximately 84.5% of the North subarea is identified as EFCs. Compared to the other subareas, the North subarea has more affluent neighborhoods and better Metro access and connectivity with the local buses and the Metro B and D lines. Communities in the North subarea have experienced the most investment and growth compared to the Central and South subareas in recent years.

The Central subarea has the second highest BIPOC population (91.8%), the highest low-income households (59.1%) and moderate zero-car households (20.9%) compared to the other subareas. Approximately 100% of the Central subarea is identified as EFCs. Aside from large investments at Exposition Park and the USC Campus, that have benefited students and visitors to the area, the Central subarea has regional access with the Metro E Line but has been historically underserved by transit and has historical systemic disparities compared to the other subareas. The Central subarea is predominately made up of Hispanics or Latino and Blacks and has been historically underserved by transit, and communities in this subarea continue to experience systemic disparities.

The South subarea has the highest BIPOC population (98.7%), moderate low-income households (59.1%) and the lowest zero-car households (16.1%) compared to the other subareas. Approximately 96% of the South subarea is identified as EFCs. The South subarea is predominately made up of Hispanics or Latino and Blacks and has been historically underserved by transit, and communities in this subarea continue to experience systemic disparities similar to the Central subarea.

6.4 Advancing Equity in the Vermont Corridor

As discussed in Section 6.1, the Project would provide a multimodal transit solution that improves transit service, enhances customer experience and supports equitable community development in an historically underinvested corridor. This would be in alignment with Metro's strategic plans and policies. As such, the Project would provide equitable investments throughout the corridor through design that considers existing disparities in each subarea to effectively reduce disparities between the communities in the Vermont Corridor. The Project would also improve mobility and connectivity within the Project Study Area. Accessible, high-quality transit would improve access to opportunities for transit-dependent individuals and make transit a more enticing option for those individuals who do not currently ride transit. The Project would address the mobility needs of the Vermont Corridor's historically underserved and underinvested communities by improving local and regional connections to surrounding communities.

6.4.1 Project Design and Elements

Improvements in the Central and South subareas would be similar to improvements in the North subarea. Where necessary and to provide equity throughout the Vermont Corridor, additional elements and resources would be considered for each subarea. For example, bus station design elements that would occur in the North subarea would also occur in the Central and South subareas. Section 2.3 and 2.4 provide additional detail on Project design elements and Projects elements. With the implementation of this Project, communities along the Vermont Corridor that have experienced racial, economic and mobility inequities would have increased access to jobs, education and other opportunities. The BRT would provide a critical transportation service for the diverse populations who utilize it. The north-south connectivity within the Project Study Area would be improved and would also offer new connections to other transit lines, especially for the communities dependent on transit services. Improved access to opportunities would help alleviate existing inequities.

The proposed BRT would operate within a bus-only lane and have signal prioritization through intersections, resulting in reduced headways, faster travel times along the route and more frequent service. Of the 13 proposed station locations, the North subarea would have five stations (Sunset, Santa Monica, 3rd Street, Wilshire and Pico); the Central subarea would have four stations (Adams,

Expo, Vernon and Slauson), and the South subarea would have four stations (Florence, Manchester, Century, and Athens).

The Central and South subareas have the greatest needs. The design elements of the Project emphasize the importance of investing in accessible, functional BRT station elements while limiting major changes between stations to only those elements that are required to support efficient, reliable BRT service. Project improvement considers equity within each subarea and would be applied throughout the Vermont Corridor. For instance, roadway designs and improvements, sidewalk and curb modifications and station design and elements would be focused on the needs of the immediate surrounding communities and would be applied throughout the Vermont Corridor. Community focused elements include enhanced security and safety, integrated site-specific artwork to promote connection with the surrounding community and communication infrastructure such as information signage.

6.4.2 Community Engagement

Project community engagement efforts have given the local communities an opportunity to engage with Metro throughout the planning process, allowing them to voice their transit needs and concerns and discuss equitable transit solutions for the corridor. Community events, meetings and workshops have been hosted in each subarea strategically throughout the corridor to inform and engage local community members and residents that reside in that specific subarea. Section 7 details the community engagement efforts of the Project.

7 COMMUNITY ENGAGEMENT

This section summarizes the community engagement efforts throughout the Project process. Project stakeholders have been involved in each phase of the Project through a variety of forums and platforms, including public meetings, community workshops, technical advisory committee meetings, information booths at community events, pop-up information tables and social media (i.e., Facebook, X, Instagram, and YouTube). The *2022 Community-Based Partnership Program Documentation Report* (Metro, 2022d), *Vermont Transit Corridor Project Urban Design Station Workshops Summary Report* (Metro, 2024e) and *Vermont Transit Corridor Project Community Engagement Program Report* (Metro, 2024f) have additional details.

Metro's CBO Partnership Program provides community stakeholders with opportunities to engage with Metro throughout the planning process to build a common vision for the corridor, listen to their transit needs and concerns and incorporate their feedback into the development of an equitable transit solution for the corridor (Metro, 2021). Metro's CBO Partnership Program plays a vital role in ensuring the Vermont Transit Corridor project is responsive to the needs and priorities of the diverse communities it serves. The CBO Partnership Program for the Project focuses on establishing meaningful partnerships with CBOs, faith-based organizations, and local neighborhood groups to facilitate deeper engagement with diverse communities along the corridor. This program involves collaborating with a total of 38 CBOs and faith-based organizations along the corridor. These organizations have deep roots in their communities and a strong understanding of local needs and priorities.

7.1 Communication Resources

Metro used several means of communication to inform the public about the Project and for upcoming meetings. Methods of communication include the Project website, interactive map, The Source/El Pasajero blog, Project fact sheets, e-mails, social media, newsletters, business and street vendor canvassing, door-to-door canvassing, transit outreach and pop-ups at community events. Outreach materials were provided in several languages including Armenian, Braille, K'iche', Korean, Spanish and Zapotec. Language services at meetings included English, Spanish, Armenian, Korean and Thai. ADA accommodations and services were provided at all outreach events.

7.2 Community Outreach Activities, Meetings and Workshops

Project stakeholders have been involved in each phase of the Project through a variety of forums and platforms, including briefings with public institutions and schools, business associations, neighborhood councils, advocacy groups and officials representing Los Angeles City Council Districts 1, 8, 9, 10, 13, and 15; public meetings and workshops; stakeholder meetings; information booths at community events; pop-up information tables; and social media (i.e., Facebook, X, Instagram and YouTube).

Metro initiated a comprehensive outreach program for the Project beginning in 2021 to inform the local community of the Project and to welcome community feedback on the Project. The following summarizes the community outreach activities conducted for the Project.

7.2.1 2022 Community Outreach Events

In 2022, Metro conducted a pre-environmental, community-based planning effort aligned with Metro's Equity Platform framework to engage with community partners and stakeholders early to build a common vision for the corridor, listen to their transit needs and concerns and incorporate their feedback into the development of equitable transit solutions for the corridor. Over a 7-month period, from December 2021 to June 2022, Metro partnered with CBOs, faith-based groups and local neighborhood groups to solicit feedback about the types of improvements that should be planned for the Project. These outreach efforts included:

- Market Research Surveys (nine focus groups, one telephone survey and one online survey targeting transit riders at six key bus stops along Vermont Avenue and via Metro's Transit app)
- 22 pop-ups at community and school events
- 19 briefings with key institutional stakeholders
- 32 virtual and in-person community conversations hosted by 20 CBO partners

Through these various engagement activities, more than 6,000 stakeholders actively participated in sharing their thoughts for future transit improvements along the Vermont Corridor.

7.2.2 Transit Rider Intercept Survey

A Transit Rider Intercept Survey was conducted for the Project from August 19 through August 29, 2024, during the peak times of 5:00 am to 9:00 am and 3:30pm to 7:00pm. Digital surveys via QR codes were offered for riders who preferred participating online from August 19 through September 6, 2024. The survey reached approximately 371 bus riders and provided critical insights into the effectiveness of the improvements and helped ensure the Project met the community's needs. Key findings of the survey highlighted the need for increased frequency and capacity; safety and cleanliness; equity for accessibility, amenities, and bus shelters; and fare enforcement.

The survey was conducted at the following existing bus stations:

- Sunset/Vermont
- Santa Monica/Vermont
- Beverly/Vermont
- 3rd/Vermont
- Wilshire/Vermont
- Vermont
- Florence/Vermont
- Manchester/Vermont
- Century/Vermont
- Athens/Vermont

7.2.3 Briefings and Public Meetings

Project outreach efforts have included several community events and meetings to notify and update the local community on the progress of the Project.

Regular briefings were held with City Council offices and the 2nd Supervisorial District, institutions, and CBOs along the corridor. These briefings are essential throughout the Project's lifecycle to provide updates, seek guidance, and gather input from our elected officials, representing many communities and business owners along the corridor. The following lists the City Council district representatives and institutions that have been part of the public engagement efforts:

Council District:

- District 1- Representative Hernandez
- District 8 - Representative Harris-Dawson
- District 9 - Representative Price
- District 10 - Representative Hutt
- District 13 - Representative Soto- Martinez
- District 15 - Representative McOsker

Institutions:

- Braille Institute of America
- Central City Association
- CHA Hollywood Presbyterian Medical Center
- Children's Hospital Los Angeles
- Church of Scientology
- East Hollywood Business Improvement District
- Exposition Parkwide Leadership Meeting
- LA Coliseum Commission
- Los Angeles City College Foundation
- Masjid Omar ibn Al-Khattab
- Slate-Z Transit Working Group
- University of Southern California (USC)
- West Coast University/American Career College

Community Organizations:

CBOs and Neighborhood Councils play a vital role in representing the community's diverse interests and serve as trusted partners in outreach and engagement efforts. They provide valuable insights into community needs and help connect the Project with residents who may not be easily reached through traditional means. Community organizations include 38 CBOs, 11 Neighborhood Councils, and nine advocacy groups. To date 19 community briefings have been held.

7.2.4 Public Meetings

Metro organized a series of public meetings along the Vermont Transit Corridor.

7.2.4.1 Cultural and Historical Assets

Metro hosted three workshops in February 2024 focused on the cultural and historical assets in the Project Study Area. Specifically, the workshops included the presentation of the study area cultural assets and key findings from the asset identification efforts; requested input from the participating community members and stakeholders on the initial asset list, including identifying missing assets and which assets were most important to the community; and sought input on current transit service

and proposed BRT stations that would serve the existing residents and commuters. Breakout sessions offered participants to discuss, review, and mark up study area maps with identified community assets and provide input and ideas on key community places, landmarks, destinations, and pedestrian areas. **Table 7-1** summarizes the cultural and historical assets workshops conducted.

Table 7-1 Cultural and Historical Assets Workshops Summary

Date	Time	Subarea	Location	Number of Participants
February 12, 2024	9:30 am	South	**Weingart YMCA Wellness & Aquatic Center** 9900 S Vermont Ave, Los Angeles, CA	12
February 12, 2024	2:00 pm	Central	**Ward AME Church** 1177 West 25th St, Los Angeles, CA	16
February 16, 2024	9:30 am	North	**Los Angeles County Department of Children & Family Services Building, Terrace Conference Room** 8300 South Vermont Ave, Los Angeles, CA	22

Source: Vermont Corridor Partners, 2024.

7.2.4.2 Urban Design Workshops

Metro hosted seven Urban Design Workshops in May and June of 2024 along the Vermont corridor. The workshops featured an interactive open house with five activity areas, a presentation and a bus station workshop to learn and share feedback collaboratively. The Urban Design Workshops included over 700 participants and over 900 feedback responses. Stakeholders included residents and business owners in the Project Study Area, 28 CBOs and faith-based organizations, street vendors, and transit-dependent populations. Comments received from the workshops helped shape the design and location of the BRT bus stations. Comments received were about safety and security, accessibility, information and technology interface, cleanliness, bicycle facilities and amenities, bus shelters, cultural and community integration and sustainable strategies. **Table 7-2** summarizes the urban workshops conducted.

Table 7-2 Urban Design Workshops Summary

Date	Time	Subarea	Location	Number of Participants
May 21, 2024	6:00 pm	Central	**First African Methodist Episcopal (AME) Church Renaissance Center** 1968 W Adams Blvd, Los Angeles	156
May 23, 2024	6:00 pm	South	**Weingart Young Men's Christian Association Wellness & Aquatic Center** 9900 S Vermont Ave, Los Angeles	108
May 28, 2024	10:00 am	South	**Irmas Youth Center** 11911 Vermont Ave, Los Angeles	113
May 31, 2024	10:00 am	North	**Los Angeles County Department of Mental Health Administration Building** 523 Shatto Pl, Los Angeles	69
June 1, 2024	10:00 am	Central	**Masjid Omar ibn Al-Khattab** 1025 W Exposition Blvd, Los Angeles	62
June 6, 2024	6:00 pm	North	**Los Angeles City College – Student Union Room A** 798 N Heliotrope Dr, Los Angeles	109
June 27, 2024	6:00 pm	Central	**Masjid Omar ibn Al-Khattab** 1025 W Exposition Blvd, Los Angeles	83

Source: Vermont Corridor Partners, 2024.

7.2.4.3 Project Update Meetings

During October 2024, Metro held three community meetings (two in-person and one virtual meeting) and one Board staff meeting. The community meetings focused on updating the Project stakeholders, community members, and Metro Board staff members on the current Project status and next steps, leading up to Board approval for early 2025. As of October 2024, community outreach efforts have engaged with approximately 22,400 people. **Table 7-3** summarizes the project update meetings conducted.

Table 7-3 Project Update Meetings Summary

Date	Time	Subarea	Location	Number of Participants
October 8, 2024	10:00 am	South	**Irmas Youth Center** 11911 S. Vermont Ave, Los Angeles, CA 90044	67
October 8, 2024	6:00 pm	North	**Los Angeles Community College** 798 N. Heliotrope Dr, Los Angeles 90026	182
October 9, 2024	12:00 pm	—	Via Zoom	76

Source: Vermont Corridor Partners, 2024.
— indicates that the cell does not contain applicable information.

7.2.4.4 SB 922 Public Meetings

SB 922 requires that at least three public meetings are held prior to approving the Project to receive public comments and two public meetings annually during Project construction. Public meetings to present the SB 922 documents and Project updates are scheduled for December 2024. **Table 7-4** summarizes the SB 922 meetings.

Table 7-4 SB 922 Meetings

Date	Time	Subarea	Location
December 7, 2024	10:00 am	Central	**Masjid Omar ibn Al-Khattab** 1025 W Exposition Blvd, Los Angeles
December 9, 2024	6:00 pm	South	**Crenshaw Christian Center** 7901 Vermont Ave, Los Angeles, CA
December 11, 2024	6:00 pm	North	**Los Angeles Community College, Student Union, Room A** 798 N. Heliotrope Dr, Los Angeles 90026
December 11, 2024	12:00 pm	—	Via Zoom
December 16, 2024	6:00 pm	—	Via Zoom

Source: Vermont Corridor Partners, 2024.
— indicates that the cell does not contain applicable information.

7.3 Future Outreach Efforts

In addition to the public meetings to present the SB 922 documents, SB 922 also requires public meetings annually during Project construction. Additional public meetings will be scheduled during the construction phase to keep the community informed of Project updates and progress. The public would be notified of all future Project updates and meetings through the Project website (metro.net/projects/vermont-corridor/), social media and e-mail.

8 STRATEGIES AND RECOMMENDATIONS

As discussed in Section 2.1, Project goals include improving transit performance, enhancing the customer experience, investing in the community and developing a cost-effective Project. **Table 8-1** summarizes the Project goals, and strategies and recommendations to improve equitable mobility opportunities in the Project Study Area.

Table 8-1 Strategies, Goals and Recommendations for Equity in Project Study Area

Goal	Strategies and Recommendations
Improve Transit Performance	• Increase ridership through reduce headways and reduced passenger travel times
Enhance Customer Experience	• Introduce new BRT stations and passenger amenities • Design bus stations according to Metro's *Systemwide Station Design Standards* • Provide signage that clearly connects bus network to nearby existing transit • Integrate safety amenities into bus stations, including lighting and security systems
Invest in Community	• Identify and energize Project advocates and stakeholders • Engage stakeholders, CBOs and local communities through the CBO process, meetings and workshops • Welcome riders to use the Metro bus network to connect to destinations within the Vermont Corridor and regionally • Improve mobility and connectivity for BIPOC populations, low-income and zero-car households who use transit in the Vermont Corridor • Integrate public art into BRT stations per the Metro Art Program Policy
Develop a Cost-Effective Project within Desired Timeline	• Pursue local and federal funding opportunities • Consider proposed station area multimodal improvements as part of the future first/last-mile planning efforts • Align the Project with future plans to convert the Vermont Corridor to light rail

Source: Vermont Corridor Partners, 2024.

The Project would improve transit performance with the proposed BRT that would reduce overall current headways and passenger travel times and increase ridership along the Vermont Corridor. Strategies to enhance customer experience would include new BRT stations, passenger amenities, safety amenities and signage throughout the corridor that would ensure that the Central and South subareas have equitable opportunities and improvements as the North subarea. The Project would also invest in the community by recognizing the uniqueness and needs of each community throughout the Vermont Corridor. By identifying the Project advocates and stakeholders and engaging the local communities and residents through the CBO process, the Project would continue to engage each subarea so that each community is equitably represented and have opportunities to be part of the Project process. Furthermore, integrated site-specific artwork at the BRT stations allows for elements of variability to promote a sense of place and connection with the surrounding community. Lastly, in order to develop a cost-effective Project, the Project would pursue local and federal funding opportunities and continue to plan for transit-oriented community and multimodal improvements as part of future first/last-mile planning. The Project development process will continue to focus on future mobility improvements including the light rail transit over the long-term.

9 CONCLUSIONS

The Project Study Area and each of the subareas have a high percentage of BIPOC communities, low-income households and zero-car households compared to the City of Los Angeles and Los Angeles County. Approximately 91% of the Project Study Area is considered EFCs. Based on these factors, the Project Study Area currently experiences disparities in access to opportunities including jobs and housing and limited mobility options. Based on the socioeconomic data presented and the EFCs identified in each subarea, communities in the Central subarea face the highest inequities as they relate to jobs, housing and mobility options, followed by the South subarea. The North subarea also has disparities within its communities but has also experienced the most investment and growth compared to the Central and South subareas. The North subarea has more affluent neighborhoods and growth and is comparatively denser, better connected to transit and more suitable for pedestrian activity than the Central and South subareas.

Metro is committed to equitable outcomes in which areas that have been historically affected by systemic disparities are provided opportunities to combat such disparities. The Project would improve north-south transit services within the Vermont Corridor that would improve access to jobs, education and essential services within the corridor and regionally. The Project would construct enhanced bus shelters, improve connections to the regional transit network and access to important regional destinations (including key medical centers at the proposed Vermont/Sunset station, LACC, The Braille Institute of America Los Angeles Center, USC, Exposition Park museums and sporting venues, several government buildings and numerous religious institutions), increase transit services to meet growing demand and improve services for riders. The Project would make bus services along the Vermont Corridor safer, more frequent, faster and more reliable. Accessible, high-quality transit would also improve access to opportunities for transit-dependent individuals and make transit a more enticing option for those individuals who do not currently ride transit. Communities in the Central and South subareas have experienced more disparities compared to the North subarea; however, the Project would provide equitable improvements and opportunities throughout the Vermont Corridor to help alleviate the existing inequities.

Several strategies and recommendations are provided to meet the Project goals of improving transit performance, enhancing the customer experience, investing in the community and developing a cost-effective Project within a desired timeline. The development of the BRT would reduce overall current headways and passenger travel times, increase ridership along the Vermont Corridor and overall improve transit performance. The Project would enhance customer experience and invest in the community through Project design elements and amenities and through continued community engagement. The Project would also develop a cost-effective project by pursuing local and federal funding and continue future first/last mile-planning efforts. The Vermont Project development process will continue to focus on future mobility improvements including the light rail transit over the long term.

Public meetings are scheduled for December 2024 to present the SB 922 documents and Project updates. Additional public meetings will be scheduled during the construction phase to keep the community informed of Project updates and progress.

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Los Angeles County
Metropolitan Transportation Authority

Residential Displacement Analysis

Metro®

VERMONT TRANSIT CORRIDOR PROJECT

Contract No. AE97976000

Residential Displacement Analysis

Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

Prepared by:

VCP
Vermont Corridor Partners

300 South Grand Avenue
Los Angeles, California 90071

November 2024

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ABBREVIATIONS/ACRONYMS

ACS	American Community Survey
ADA	Americans with Disabilities Act
AMI	area's median income
BIPOC	Black, Indigenous, and other People of Color
BRT	bus rapid transit
CBO	community-based organization
CEQA	California Environmental Quality Act
CPIO	Community Plan Implementation Overlay
DASH	Downtown Area Short Hop
EFC	Equity Focus Communities
FHEO	Office of Fair Housing and Equal Opportunity
HUD	United States Department of Housing and Urban Development
I-10	Interstate 10; Santa Monica Freeway
I-110	Interstate 110; Harbor Freeway
LACC	Los Angeles City College
LACCD	Los Angeles Community College District
LACDA	Los Angeles County Development Authority
LAPL	City of Los Angeles Public Library
LAUSD	Los Angeles Unified School District
LCD	liquid-crystal-display
LED	light-emitting-diode
Metro	Los Angeles County Metropolitan Transportation Authority
Metro Board	Metro Board of Directors
PDA	Priority Development Areas
PRC	California Public Resources Code
Project	Vermont Transit Corridor Project
ROW	right-of-way
RSO	Rent Stabilization Ordinance
SB	Senate Bill
SCAG	Southern California Association of Governments
TNP	Transit Neighborhood Plans
TOC	transit-oriented community
TSP	transit signal priority
U.S.	United States
US-101	United States Highway 101
USC	University of Southern California
USPS	United States Postal Service
VTC	Vermont Transit Corridor Project
—	Not Applicable
%	Percent
$	United States dollars

EXECUTIVE SUMMARY

The Vermont Transit Corridor Project (VTC; the "Project") proposes a 12.4-mile-long, high-quality transit alternative along Vermont Avenue from 120th Street on the south to Sunset Boulevard on the north with 26 bus rapid transit (BRT) stations at 13 station locations.

The Los Angeles County Metropolitan Transportation Authority (Metro) is seeking a statutory exemption under the California Environmental Quality Act through Senate Bill 922 codified as California Public Resources Code (PRC) Sections 21080.20 and 21080.25. Under PRC Section 21080.25, this Residential Displacement Analysis Report will substantiate the case for the applicability of the statutory exemption to the Project by: defining or identifying areas at risk of residential displacement, analyzing the potential for residential displacement and suggesting strategies, designs, or actions to mitigate the potential risks.

This executive summary presents the conclusions of the Residential Displacement Analysis in this report.

Metro's Equity Platform

Metro's Equity Platform, adopted in 2018, is a policy framework for addressing disparities in access to opportunity resulting from historical disinvestment in low-income communities and communities of color (Metro, 2024a). Metro recognizes that vast disparities exist in access to opportunities, including jobs, housing, community resources, healthy communities and mobility options. As such, transportation is an essential lever to enabling access and improving quality of life for Los Angeles County. Under the Equity Platform, Metro is committed to identifying and implementing projects or programs that reduce and ultimately eliminate mobility disparities in access to opportunities.

Communities and Neighborhoods Findings

The Project Study Area is a diverse area made up of several distinct neighborhoods and ethnic communities, including Koreatown, South Los Angeles, Byzantine-Latino Quarter, Little Bangladesh, Little Armenia and El Salvadorian Community Corridor.

Vulnerable communities that would experience the most effects from residential and development market changes would be Black, Indigenous and other People of Color (BIPOC) populations, low-income households and renter-occupied households. The Project Study Area and each of its subareas (North, Central and South) have a high percentage of BIPOC populations, low-income households and renter-occupied households and include vulnerable communities that may be affected by residential displacement.

Factors of Residential Displacement

Residential displacement includes physical (direct) displacement and economic (indirect) displacement. Physical displacement is the result of eviction, acquisition, rehabilitation, demolition of property or the expiration of covenants on rent- or income-restricted housing. The Project is a BRT project located entirely within the Vermont public right-of-way and would not directly contribute to residential displacement during the construction or operation phases.

Economic displacement may occur when residents and businesses can no longer afford escalating rents or property taxes due to changes in the market. Development activities and land use factors

may contribute to changes in the residential market. Development activities include public and private sector views of development opportunities in the proposed station areas, as reflected in affordable housing and related development projects, as well as assessment of potential community housing impacts resulting from development activity and market trends. Land use factors include land use plans and presence of vacant, underutilized and publicly owned parcels that may become development sites.

Based on the presence of rent-stabilized residential zoning and the availability of existing affordable housing in the Project Study Area, there is residential stability for renters living in each of the Project subareas. However, the housing crisis continues to affect the Project Study Area, as most new housing developments are market-rate. Vacant parcels identified in the Project Study Area are non-contiguous, which also limits future housing development opportunities. However, there may be housing opportunities in the existing and proposed station areas that have moderate to high levels of underutilized parcels or on the larger parcels and opportunities to increase housing densities in the North subarea, while the existing residential parcels are built at the allowable density in the Central subarea.

Although the Project would not directly contribute to residential displacement, the Project would provide better transit connectivity in the Vermont Corridor which may indirectly spur new opportunities and interest for housing development near transit stations that may benefit the community and increase the overall housing supply in the area. Thus, the Project may indirectly contribute to the changing residential market in the Project Study Area that may affect vulnerable communities.

Strategies to Reduce the Potential for Indirect Residential Displacement

Metro does not have jurisdiction over land use or other community development efforts that address residential market changes, population and housing growth or strategies to address residential displacement. The implementation of development in the corridor would fall outside of the jurisdiction of Metro. Development and other improvement projects would be implemented by the City of Los Angeles, Los Angeles County and private developers. Thus, strategies to address and reduce the potential for indirect residential displacement identified in this Residential Displacement Analysis Report is focused on Metro coordination and partnerships with Los Angeles County, the City of Los Angeles, public agencies, private developers, community-based organizations (CBOs) and other community organizations. Through such coordination and partnership efforts, Metro would encourage jurisdictional land use planning efforts to include a wider range of plan types and districts such as transit neighborhood plans, Community Plan Implementation Overlay districts, specific plans at station areas, pedestrian- and community-focused districts, streetscape plans and housing stabilization plans that focus on affordable housing and higher-density development in the Project Study Area and existing and proposed station areas. Coordination efforts would also include encouraging or amending general, community and specific plans and zoning codes with stronger requirements and incentives for affordable housing in the station areas. Strategies to reduce the potential of indirect residential development also include future partnership opportunities with landowners of public-owned parcels that could serve a public purpose, such as provision of housing. BRT projects typically do not require acquisition of significant amounts of property; therefore, Metro is unlikely to undertake joint development at a large scale. Metro owns 29 parcels in the Project Study Area located in the rail station areas serving Metro lines B, C, D and E. These parcels could

potentially serve the BRT users. The Metro park-and-ride lot in the Vermont/Athens Metro C Line station area is Caltrans-owned property.

Metro will continue to engage communities in the Project Study Area through CBO community engagement efforts. Metro will also determine the appropriate public and private coordination and partnerships to reduce the potential of indirect residential displacements that may affect vulnerable communities in the Project Study Area.

1 INTRODUCTION

The Los Angeles County Metropolitan Transportation Authority (Metro) is conducting the planning and environmental study for the Vermont Transit Corridor (VTC; the "Project"). The Project is intended to provide a high-quality transit alternative along Vermont Avenue from 120th Street on the south to Sunset Boulevard on the north (approximately 12.4 miles). Vermont Avenue is the busiest north-south travel corridor in the entire Metro bus system with approximately 36,000 daily boardings, connecting the Metro B/D Lines (Red/Purple), E Line (Expo) and C Line (Green), as well as various east-west bus lines, to many key activity centers, including educational, cultural, medical, governmental and faith-based institutions (**Figure 1-1**). The Project Study Area also includes several densely populated and Metro-defined Equity Focus Communities (EFC).[1] The Project would also offer a vital north-south transit alternative to residents and businesses west of the Interstate 110 (I-110; Harbor Freeway) and an opportunity to reinvest in communities along the Vermont Corridor.

1.1 Project Background

Two previous studies were completed evaluating the feasibility of implementing bus rapid transit (BRT) and rail alternatives along Vermont Avenue, including the 2017 *Vermont Bus Rapid Transit Corridor Technical Study* (2017 BRT Technical Study) (Metro, 2017) and the 2019 *Vermont Transit Corridor – Rail Conversion/Feasibility Study* (2019 Rail Feasibility Study) (Metro, 2019). The 2017 BRT Technical Study identified strategies for improving bus service along Vermont Avenue, focusing on the feasibility of implementing BRT, which could include several elements such as dedicated bus lanes, enhanced station stops, all-door boarding and transit signal priority (TSP). The purpose of the 2019 Rail Feasibility Study was to further evaluate the most promising BRT concepts developed earlier as part of the 2017 BRT Technical Study to ensure that their implementation would not preclude a potential conversion to rail in the future. The study was to also look at and assess the feasibility of potential future rail alternatives for the Vermont Corridor.

Additionally, in Winter/Spring 2022, Metro partnered with several CBOs to conduct a pre-environmental community-based planning effort to engage with community partners and stakeholders early to build a common vision for the Vermont Corridor, listen to their transit needs and concerns and incorporate their feedback into the development of an equitable transit solution for the corridor.

Based on what was heard during that effort, the Metro Board of Directors (Metro Board) directed staff to advance the Project using a three-pronged approach, including:

- Near-term improvements to the existing bus service that could be implemented in a relatively short time frame
- Mid-term BRT to be implemented after the near-term improvements
- Long-term rail subject to funding availability

[1] Metro's Equity Platform defines EFCs as "areas in which at least 40% of residents are low-income, and 80% of residents are people of color [Black, Indigenous, and other People of Color (BIPOC)], or 10% of the households do not have a car" (Metro, 2024a).

Figure 1-1 Vermont Transit Corridor Study Area

Source: Vermont Corridor Partners, 2024

1.2 Project Study Area

Figure 1-1 shows the Project's Study Area, which is bordered by El Segundo Boulevard to the south, Los Feliz Boulevard to the north, I-110 to the east and transitions between Western Avenue and Normandie Avenue to the west. The proposed Project alignment would extend approximately 12.4 miles from 120th Street, south of the Vermont/Athens Metro C Line Station, to Sunset Boulevard, at the Vermont/Sunset Metro B Line Station in Hollywood. The majority of the Project Study Area is located within the City of Los Angeles with approximately 2.5 miles at the southern end (western side of Vermont Avenue only) in unincorporated Los Angeles County.

The Study Area includes several City of Los Angeles communities, including East Hollywood/Los Feliz, University Park/Exposition Park, Koreatown and South Los Angeles. The Study Area also includes the West Athens and Westmont communities in unincorporated Los Angeles County. These communities have some of the highest population densities in the region and have a disproportionately high proportion of transit-dependent residents.

The Study Area is filled with several cultural and institutional amenities as well as many major activity centers, including, but not limited to, University of Southern California (USC), BMO Stadium, Exposition Park Museums, Kaiser Permanente Los Angeles Medical Center, Children's Hospital Los Angeles and Los Angeles City College (LACC).

1.3 Purpose of Report and Structure

Metro is seeking a statutory exemption under the California Environmental Quality Act (CEQA) through Senate Bill (SB) 922 codified as California Public Resources Code (PRC) Sections 21080.20 and 21080.25. As required under PRC Section 21080.25, this Residential Displacement Analysis Report will substantiate the case for the applicability of the statutory exemption to the Project by:

- Analyzing the potential for residential displacement and suggesting anti-displacement strategies, designs or actions for those projects for which at least 50 percent of the project or projects' stops and stations are located in an area at risk of residential displacement and will have a maximum of 15-minute peak headways
- Defining or identifying areas at risk of residential displacement

This Residential Displacement Analysis Report is organized into the following sections:

- Executive Summary
- Section 1: Introduction
- Section 2: Project Description
- Section 3: Regulatory Framework
- Section 4: Methodology
- Section 5: Communities and Neighborhoods
- Section 6: Socioeconomic Characteristics
- Section 7: Factors of Residential Displacement
- Section 8: Strategies to Reduce Potential Indirect Residential Displacement
- Section 9: Conclusion
- Section 10: References

2 PROJECT DESCRIPTION

2.1 Project Goals and Objectives

The Project would address the mobility needs of the Vermont Corridor's historically underserved and underinvested communities, including alleviating existing transit and multimodal network challenges, through fulfillment of the Goals and Objectives identified in **Table 2-1**. The Project's Goals include improving transit performance, enhancing the customer experience, investing in the community, and developing a cost-effective project within a desired timeline. The screening and evaluation approach is designed to evaluate each Project concept's ability to meet the Project's Goals and Objectives.

Table 2-1: Project Goals and Objectives

Goal	Objective
Improve Transit Performance	Improve and maintain service reliability Reduce passenger travel times
Enhance Customer Experience	Enhance stations and passenger amenities Improve pedestrian/bicycle access Improve safety and security
Invest in Community	Improve mobility options to provide access to destinations Address disparities identified in the Equity Analysis Acknowledge and integrate community assets in planning/design
Develop a Cost-Effective Project within Desired Timeline	Maximize benefits within funding constraints Implement a project by the 2028 Olympics Maximize sustainability by reducing throwaway work, aligning with Metro's NextGen Bus Plan (Metro, 2020a) and future rail conversion

Source: Vermont Corridor Partners, 2024

2.2 Study Area Description

Vermont Avenue is the most heavily traveled bus corridor in Los Angeles County. Carrying over 36,000 daily riders, the north-south oriented corridor experiences significant performance deficiencies in terms of vehicle speeds, schedule reliability and passenger comfort due to severe traffic congestion and challenging operating conditions.

This planning effort for the Project divides the 12.4-mile Study Area into three subareas and six segments for the purpose of analysis. The three subareas are referred to as the South, Central and North subareas. These subareas are used to organize and analyze high-level data for areas with distinct land use and development characteristics. These three subareas are further divided into six segments. These six segments are used to differentiate lengths of the corridor with unique roadway configurations and other characteristics that present design constraints or opportunities when developing a project alignment.

2.2.1 Study Area Subareas

The physical, cultural and community attributes of Vermont Avenue vary significantly along the corridor as it connects a cross-section of the Los Angeles metropolitan area. To effectively characterize the range of conditions experienced within the Study Area, this study identified three subareas defined geographically by South, Central and North, as shown in **Figure 2-1**.

Figure 2-1: Study Area Subarea Boundaries

Source: Vermont Corridor Partners, 2024.

2.2.1.1 South Subarea: 120th Street to Gage Avenue

The South subarea is approximately 4.1 miles long, extending from 120th Street north to Gage Avenue. This subarea transverses through several historically African American and Hispanic or Latino communities of South Los Angeles. The land use is characterized by commercial and public facilities along Vermont Avenue, with low- to medium-density residential in the surrounding Study Area.

2.2.1.2 Central Subarea: Gage Avenue to Venice Boulevard

The Central subarea is approximately 4.4 miles long, extending from Gage Avenue north to Venice Boulevard. The corridor has many public, institutional (educational and faith based) and regional attractions at Exposition Park and the USC campus area and commercial uses north of Interstate 10 (I-10). The subarea is offset on both sides with low- to medium-density residential land uses. The commercial and residential land uses densify north near Venice Boulevard and Koreatown.

2.2.1.3 North Subarea: Venice Boulevard to Sunset Boulevard

The North subarea is approximately 3.9 miles long, extending from Venice Boulevard north to Hollywood Boulevard. The North subarea has high densities of commercial land use, such as shopping centers, medical centers, and higher densities along this portion of the corridor are suited for pedestrian activity. This subarea includes the neighborhoods of Pico-Union, Koreatown and Westlake. The variety of restaurants and retail stores in this subarea reflects the Vermont Corridor's cultural diversity and service to Los Angeles' immigrant communities, including Salvadorian, Korean, Oaxacan, and Thai.

2.2.2 Study Area Segments

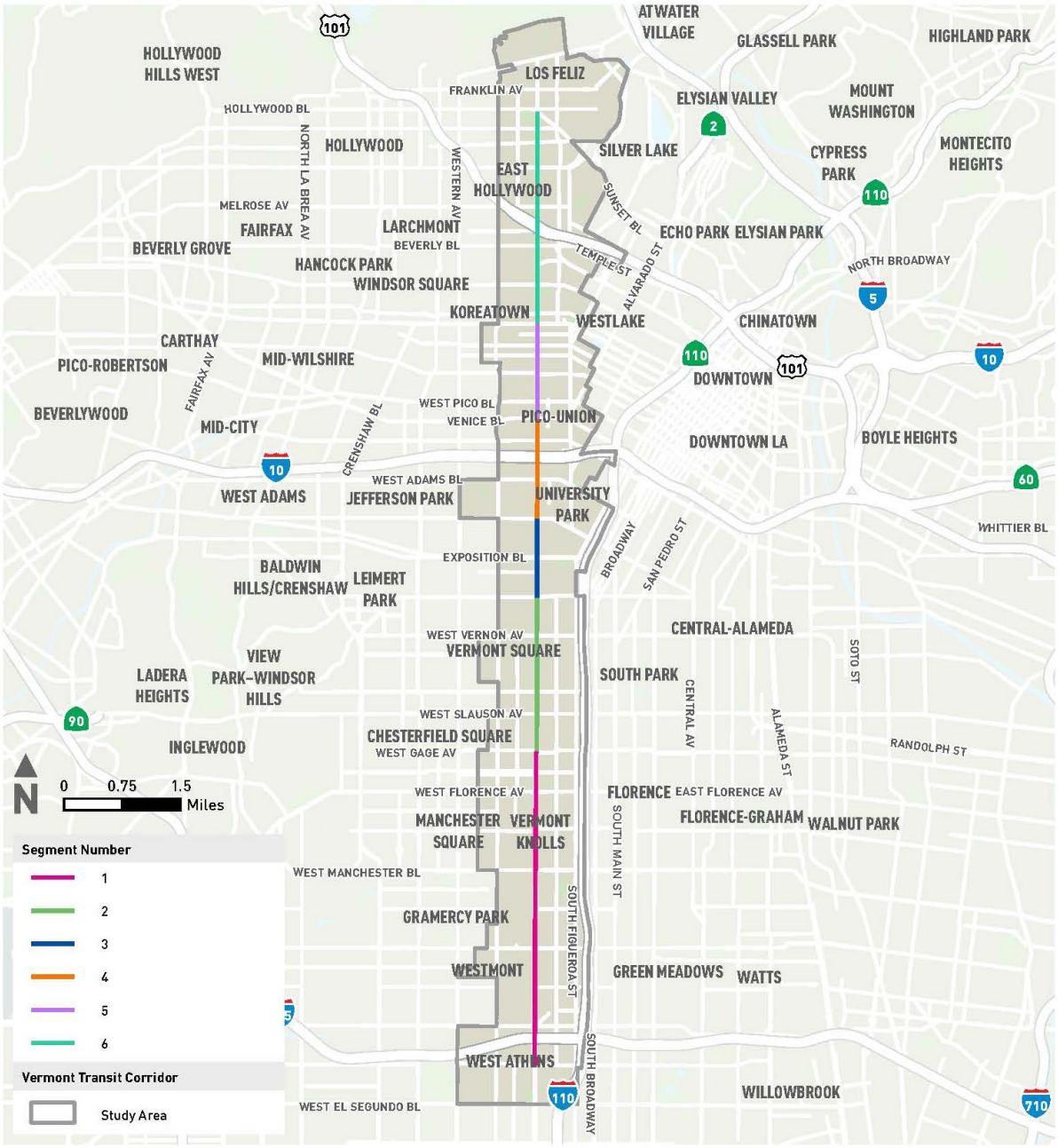
In addition to the three subareas, this study divides the Vermont Corridor into six segments. The six segments are used to differentiate lengths of the corridor with unique roadway configurations and having unique infrastructure characteristics, such as right-of-way (ROW) width and roadway lane configurations, that influence the design of a consistent set of transit priority investments and multimodal treatments in each segment. **Table 2-2** and **Figure 2-2** present the corridor segment boundaries.

Table 2-2: Vermont Corridor Segment Boundaries

Segment	Length (miles)	From	To
1	4.1	120th Street	Gage Avenue
2	2.0	Gage Avenue	Martin Luther King Jr. Boulevard
3	1.0	Martin Luther King Jr. Boulevard	Jefferson Boulevard
4	1.3	Jefferson Boulevard	Venice Boulevard
5	1.3	Venice Boulevard	Wilshire Boulevard
6	2.7	Wilshire Boulevard	Sunset Boulevard

Source: Vermont Corridor Partners, 2024.

Figure 2-2: Vermont Corridor by Segment



Source: Vermont Corridor Partners, 2024

Across these six segments, the proposed Project connects several distinct communities, both within the City of Los Angeles and in unincorporated Los Angeles County. Beginning at the southern terminus, the Project proceeds northward from 120th Street. Along this segment from 120th Street to Imperial Highway, the Project straddles the jurisdictional boundary between the City of Los Angeles (West Athens neighborhood) on the eastern side of Vermont Avenue and the unincorporated Los Angeles County community of West Athens on the western side of Vermont Avenue. At Imperial Highway, the Project continues northward along the City-County line, with the City of Los Angeles (Vermont Vista neighborhood) on the eastern side of Vermont Avenue and the unincorporated Los Angeles County community of Westmont on the western side of Vermont Avenue. At Manchester Avenue, the Project proceeds northward on Vermont Avenue, staying within the bounds of the City of Los Angeles for the remainder of its alignment. The Project continues northward for approximately 10 more miles through numerous neighborhoods, including Manchester Square, Vermont Knolls, Vermont-Slauson, Vermont Square, Exposition Park, University Park, Adams-Normandie, Pico-Union, Westlake, Koreatown and East Hollywood before terminating at Sunset Boulevard in Los Feliz.

2.2.2.1 Segment 1: 120th Street to Gage Avenue

Segment 1 starts at 120th Street and proceeds north towards Interstate 105 (I-105; Glen Anderson Freeway) overpass where the existing Vermont/Athens Metro C Line Station entrances are located. Segment 1 transverses through south Los Angeles and includes the neighborhoods of Vermont Vista and Vermont-Knolls. Vermont Avenue features six lanes of traffic with a total width ranging from approximately 140 to 160 feet curb to curb. Median islands with mature trees span between 120th Street and 89th Street. As the corridor approaches north, frontage roads with median islands exist between 89th Street and Gage Avenue. Segment 1 features striped northbound and southbound bicycle lanes and sidewalks on both sides of Vermont Avenue. This segment also features on-street parking on both sides of Vermont Avenue between 120th Street and 89th Street, while parking is located on the frontage roads between 89th Street and Gage Avenue in the northern portion of Segment 1.

2.2.2.2 Segment 2: Gage Avenue to Martin Luther King Jr. Boulevard

Segment 2 extends from Gage Avenue to Martin Luther King Jr. Boulevard. As Vermont Avenue approaches north towards Gage Avenue, the roadway significantly narrows and no longer features a center-running median or frontage roads. The roadway has four traffic lanes with street parking in both directions, and the roadway width is reduced to approximately 60 to 70 feet from curb to curb. The corridor is characterized by commercial and public facilities such as churches, restaurants, schools, government agency buildings, markets, and retail stores, along with some industrial uses from Slauson Avenue to Martin Luther King Jr. Boulevard. Segment 2 features sidewalks along both sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.3 Segment 3: Martin Luther King Jr. Boulevard to Jefferson Boulevard

Segment 3 extends from Martin Luther King Jr. Boulevard to Jefferson Boulevard. The roadway has an approximate width of 60 feet from curb to curb between Martin Luther King Jr. Boulevard and Exposition Boulevard and does not accommodate street parking. The road widens to approximately 80 feet from curb to curb with street parking from Exposition Boulevard to Jefferson Boulevard. A surface connection to the Metro E Line via the Expo/Vermont Station, as well as entrances to USC and Exposition Park, are located at Exposition Boulevard. A center-running landscaped median island

runs throughout Segment 3. Segment 3 features sidewalks on both sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.4 Segment 4: Jefferson Boulevard to Venice Boulevard

Segment 4 extends from Jefferson Boulevard to Venice Boulevard. The corridor has a similar neighborhood character and roadway features as Segment 3, with a 60-foot roadway curb-to-curb width with street parking. However, as it approaches the I-10, I-10 serves as a physical boundary, and Vermont Avenue shifts to a more vehicle-oriented environment to accommodate the high volumes of traffic flow at the I-10 on- and off-ramps. Segment 4 features on-street parking and sidewalks on both the northbound and southbound sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.5 Segment 5: Venice Boulevard to Wilshire Boulevard

Segment 5 extends from Venice Boulevard to Wilshire Boulevard. Vermont Avenue is approximately 60 feet wide from curb to curb, generally consisting of four through lanes until it approaches intersections to accommodate turn pockets. On-street parking exists throughout this segment. A transit plaza at the northeastern corner of Wilshire Boulevard and Vermont Avenue provides access to Metro's B Line and D Line Wilshire/Vermont Station. Segment 5 features sidewalks on both the northbound and southbound sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.6 Segment 6: Wilshire Boulevard to Sunset Boulevard

Segment 6 extends from Wilshire Boulevard to Sunset Boulevard. Vermont Avenue serves as the border between Koreatown and Rampart Village until it crosses United States Highway 101 and transitions into the neighborhood of East Hollywood. The roadway varies in width throughout this segment, ranging from approximately 70 to 90 feet from curb to curb, maintaining four traffic lanes with sidewalks on both sides. This segment has a strong presence of existing transit infrastructure. When traveling north throughout the segment, there are existing Metro B Line transit stations including Wilshire/Vermont Station, Vermont/Beverly Station, Vermont/Santa Monica Station and Vermont/Sunset Station. Segment 6 features on-street parking on both the northbound and southbound sides of Vermont Avenue, though parking in this segment features peak-hour restrictions to allow the curb-adjacent lane to function as a general travel lane during these times. Segment 6 does not contain bicycle lanes.

2.3 Project Overview and Design Elements

The Project proposes side-running dedicated BRT lanes for the extent of the Vermont Avenue corridor from 120th Street to Sunset Boulevard. There are no improvements planned between Sunset Boulevard and Hollywood Boulevard.

2.3.1 Project Overview

The Project extends approximately 12.4 miles from 120th Street at its southern terminus to Sunset Boulevard at its northern terminus. The Project is divided into six segments which are used to differentiate lengths of the corridor with unique roadway configurations and having unique infrastructure characteristics, such as right-of-way width and roadway lane configurations, that influence the design of a consistent set of transit priority investments and multimodal treatments in each segment. The six segments, along with the stations present within each segment, are detailed in **Table 2-3**.

Table 2-3: Study Area Segment Boundaries and Stations

Segment	From	To	BRT Stations
1	120th Street	Gage Avenue	Athens Century Manchester Florence
2	Gage Avenue	Martin Luther King Jr. Boulevard	Slauson Vernon
3	Martin Luther King Jr. Boulevard	Jefferson Boulevard	Expo
4	Jefferson Boulevard	Venice Boulevard	Adams
5	Venice Boulevard	Wilshire Boulevard	Pico Wilshire
6	Wilshire Boulevard	Sunset Boulevard	3rd Street Santa Monica Sunset

Source: Vermont Corridor Partners, 2024

In addition to the 13 proposed BRT station locations, two existing bus layover facilities are proposed to continue to be used as a part of the Project at both the northern and southern terminus of the Project. These layovers exist on the northbound side of Vermont Avenue at Hollywood Boulevard at the northern end of the Project and on the northbound side of Vermont Avenue at 120th Street at the southern end of the Project. These locations would facilitate passenger boarding and alighting but are not considered full BRT stations for the purposes of the Project and would not be upgraded to include station canopies and other passenger amenities like the 13 proposed BRT stations.

2.3.2 Project Design Elements

To ensure the Project remains feasible within its cost and schedule constraints, the Project's design emphasizes the importance of investing in accessible, functional BRT station elements while limiting major changes between stations to only those elements that are required to support efficient, reliable BRT service. The Project is comprised of eight categories of design elements:

- **Roadway Elements:** Roadway elements are defined as those components of the project that exist within the existing roadway curb to curb, including the curbs and adjacent sidewalks and ramps. These elements include BRT lane striping and pavement repairs; striping and pavement markings for general travel lanes, turn lanes, shared bus and turn lanes, bicycle lanes, parking and crosswalks; and modifications to frontage road medians. Roadway elements also include improvements to station-adjacent sidewalks, ramps and curbs to facilitate station access for riders.
- **Station Elements:** Station elements are those elements of the project that exist within immediate BRT station areas and facilitate patron access, use and comfort. These elements may include BRT platforms, canopies, lighting, signage, security systems, integrated artwork, fare collection systems and landscaping.

- **Systems:** Project systems are defined as corridor-wide electrical components that support the functioning of the Project. These elements include traffic signals and BRT vehicle charging infrastructure.
- **Utilities:** Utilities are aboveground systems and underground systems that connect the Project to the local utility grid. Utilities include water/sewer, electrical and communications systems.
- **Support Facilities:** Support facilities are those facilities that maintain the Project's operations, such as operator comfort facilities and BRT vehicle maintenance and storage facilities. The Project does not propose the addition of any new support facilities, as existing facilities are anticipated to be sufficient to support the BRT service on Vermont Avenue.
- **ROW:** ROW can be both public and private. Public ROW is the physical space between building faces and lot lines along Vermont Avenue, including sidewalks, curbs, roadways, medians, and bus stops and stations. Private ROW is the physical space owned by private entities along the corridor, including most space behind lot lines and building faces. Activity would take place entirely within the public ROW during both the construction and operational phases of the Project.
- **Vehicles:** Vehicles are defined as the buses that would provide BRT service to patrons of the Project. The Project will include the use of 40-foot buses in opening year 2028 but could potentially go to 60-foot articulated buses in the future if passenger demand warrants it.
- **Traffic Handling and Construction Staging:** Traffic handling and construction staging elements are those components of the Project that facilitate the construction phase of the Project's lifecycle. Temporary traffic control measures and construction staging areas are proposed as a part of the project. These measures would exist entirely within the existing public ROW.

Generally, civil improvements such as changes to sidewalk widths or realignments of existing curbs are not proposed between Project stations. Civil improvements are generally limited to station areas, such as the construction of station platforms, and are complemented by investments in transit-supportive infrastructure at stations like station amenities.

Between BRT stations, Project improvements are generally limited to dedicated lane striping where feasible. This striping would feature the use of shared bus and turn lanes at several right-turn locations throughout the corridor, both between stations and at specific station locations.

The Project is proposed to be constructed solely within the existing public ROW, meaning that no permanent ROW takings are anticipated to support project implementation. Construction staging is also proposed to occur solely within the public ROW, eliminating the need for temporary ROW takings or easements to facilitate construction activities.

The construction depth of the Project is anticipated to be shallow, both to limit impacts to utilities and to contain the cost of the Project to the prescribed budget. Proposed paving improvements are intended to only be to the extent required to incorporate the proposed BRT station and lane configuration. The proposed Project profile will mimic the existing pavement profile throughout the corridor.

2.4 Project Elements

The Project spans 12.4 miles along Vermont Avenue and includes roadway modifications and construction of 26 BRT stations at 13 station locations (1 northbound and 1 southbound station at each station location).

2.4.1 Roadway Elements

The roadway would be modified to accommodate a dedicated BRT lane along the entire project length. Additionally, intersections at the 13 proposed stations would be reconstructed to accommodate platforms and canopy structures constructed on curb bulb-outs, on the sidewalk or on frontage road median islands. The following describes the design features of the roadway elements:

- **BRT Lanes:** Two 12-foot-wide dedicated BRT lanes (northbound and southbound) would be implemented along the length of the Project using a mix of solid white-line striping and dashed white-line striping. The dedicated BRT lanes reduce to 11 feet wide in Segment 2 to accommodate maintaining existing parking and increase to 16 feet at station locations where additional ROW is present. Shared bus and turn lanes are proposed throughout the corridor to accommodate right-turning movements where right-turn pockets do not fit. The existing asphalt concrete pavement within the dedicated BRT lane would be sandblasted, patched, repaired and sealed before striping. Full-width BRT lane painting is not proposed as a component of the Project. However, hatched striping would be provided at the beginning and end of each block as well as in bus/vehicle conflict zones to delineate where vehicles can merge into or cross the bus lane. Vehicles would be permitted to cross the BRT lane at any point to access on-street parking. Concrete bus pads would be constructed within the BRT lanes in front of 24 of the 26 BRT station locations and at the 120th Street Layover in compliance with local design standards. No bus pads would be provided at the proposed Athens Station to avoid impacting the existing bridge structure.
- **General Travel Lanes, Bicycle Lanes, and Parking:** Asphalt concrete pavement reconstruction is proposed adjacent to BRT station locations to accommodate bulb-outs and/or lane reconfigurations adjacent to the intersections. The asphalt concrete repair for the remainder of the corridor would be limited to the dedicated BRT lane and is not included for the other general-purpose travel lanes. General purpose lanes, bicycle lanes and parking boxes would be restriped to match existing striping. Crosswalks would be re-striped at the 13 station intersections and at the 120th Street Layover to enhance visibility at the pedestrian crossings to and from the proposed stations. Pavement markings and directional arrows for all lanes would be marked throughout the corridor to facilitate overall modal interaction and safety.
- **Medians:** Frontage road medians along Segment 1 south of Gage Avenue would be modified to accommodate station platforms and canopy structures. Reconstruction of the frontage road medians is limited to the stations at southbound Manchester Avenue and northbound and southbound Florence Avenue. At Century Boulevard, where frontage road medians do not exist, it is proposed that the northbound and southbound stations have median islands on which station platforms would be constructed. Frontage road medians and center medians would be protected in place along the remainder of Segment 1 where they currently exist.
- **Sidewalk and Curb Modifications:** Sidewalk and curb modifications include the following components:

- **Sidewalks and Sidewalk Bulb-Out Extension:** Station platforms would generally be constructed on bulb-outs to accommodate station platforms and canopy structures that allow for Americans with Disabilities Act (ADA)-compliant pedestrian circulation and boarding/alighting access. In locations where the existing public ROW does not accommodate a bulb-out platform, the station platform and canopy would be constructed on the existing sidewalk. The existing sidewalk immediately adjacent to the bulb-out or station platform would be repaired to accommodate ADA circulation. Sidewalk reconstruction and bulb-out extensions would be designed to include curb and gutter reconstruction to ensure positive drainage flow.
- **Americans with Disabilities Act (ADA) Compliant Curb Ramps:** Existing curb ramps would be upgraded at the 13 station intersections and at the 120th Street Layover. The design and location of curb ramps would be in accordance with the applicable provisions of the City of Los Angeles Department of Public Works, Los Angeles County Department of Public Works, United States Access Board Public ROW Accessibility Guidelines and any other applicable design codes and standards. Tactile warning strips would be installed at all pedestrian curb ramps. Dual/directional curb ramps would be provided where it is possible to do so without impacting private ROW.

2.4.2 Station Elements

The proposed Project includes 13 station locations. Each station location would have two bus stops, one northbound and one southbound, for a total of 26 BRT stops. All 26 BRT stop locations include platforms, canopies and patron amenities. Station design elements include the following:

- **Platforms:** Station platforms would be provided at each bus stop, except in a few locations where station platforms are not feasible. The platforms range in length depending on the specific location and include platforms that are 65, 75, 90 or 100 feet long. Platforms are generally 10 feet wide and are built as bulb-outs, extending the existing sidewalk at the stop locations. In constrained locations where the roadway ROW cannot accommodate a bulb-out, the station canopy would be located within the sidewalk area. Curbside platforms are proposed to be 6 inches high, with accessible boarding achieved through the utilization of bus ramps and vehicle kneeling. Station platforms would also include all associated infrastructure, including ramps, railings and other related accessories.
- **Canopies:** Overhead canopies are proposed at station areas to provide protection to passengers from severe weather conditions. Canopies are generally proposed to cover approximately 37 percent of the platform footprint depending on platform size, with canopies set back at least 2 feet from the platform edge to avoid interference with buses stopping to pick up or drop off passengers. The canopies are generally 49 feet and six inches in length and consist of tempered glazing with integrated shading, lighting and side panels.
- **Lighting:** Station lighting would be integrated into the underside of the canopy roof and project down onto the platform surface. Additional street light poles may be provided where the station platform extends substantially beyond the canopy structure.
- **Signage:** Wayfinding and station identification signs would be located in station areas at visible locations. Station signage may include station marker signs with system logo and other branding elements, route maps and schedules, station identification and neighborhood wayfinding. Wayfinding and station identification signs may be internally illuminated as

appropriate but may also be illuminated by general area/station lighting. Variable message signs may be provided using light-emitting-diode (LED) or liquid-crystal-display (LCD) screens to provide information to patrons, such as real-time travel information. Messaging signage would be integrated into the design of the canopy by suspending the message boards from the canopy outriggers.

- **Security Systems:** Security equipment may be included at some stations with high levels of ridership and pedestrian activity. The security equipment could consist of closed-circuit television cameras and/or emergency call buttons. The equipment would be integrated into the systems cabinet adjacent to the waiting area.
- **Public Art:** Integrated public art will be included in accordance with the Metro Art Program Policy and in coordination with Metro Art. Artwork locations, materials, lighting, and electrical and mechanical requirements would be incorporated into the Project drawings and technical specifications.
- **Fare Collection Systems:** Some stations may have ticket vending machine kiosks in the station canopy area. Ticket vending machines are not required at all stations, as patrons can purchase fares at the four connecting rail stations, the multiple Metro designated vendor locations or directly on the vehicles.
- **Landscaping:** Landscaping elements would be provided at station locations where existing street trees and plantings are affected by the construction of new stations. Additional plantings may be provided along the sidewalk immediately adjacent to station locations.

2.4.3 Systems

The proposed Project includes multiple systems that span the length of the Vermont Corridor, including the following elements:

- **Traffic Signals:** Transit signal prioritization is expected to be implemented by the City of Los Angeles prior to implementation of this Project, in coordination with Metro Operations. Traffic signal modifications for this Project would be limited to pole adjustment and reprogramming. Traffic signal pole adjustments would be required at station intersections where the existing hardscape is modified. No traffic signal pole adjustments are expected beyond the station intersections. Traffic signal digital reprogramming may occur at signalized intersections along the Project alignment, as needed. Traffic signal replacements or upgrades are not expected.
- **BRT Vehicle Charging Infrastructure:** The Project would be designed to accommodate on-route charging for BRT vehicles. Charging infrastructure may be provided as part of a separate project or may be provided as a part of the Project and is anticipated to be located at the Hollywood Boulevard layover, if implemented. These facilities are anticipated to be an overhead charger/pantograph system with supporting utility cabinets at one end of the Project alignment.

2.4.4 Utilities

The Project would require minor utility work to accommodate changes to the roadway and new BRT station infrastructure at station locations where the roadway is proposed to be reconstructed. The proposed project design is expected to minimize impacts to existing utilities along the Vermont

Corridor. Utility modification is limited to manhole and vault lid adjustments. Widespread utility relocation, replacement, adjustment, protection, and/or abandonment of existing utility facilities is not anticipated. However, spot utility adjustments may be required in some station locations where curb modifications are proposed. Utility elements include the following:

- **Storm Drainage:** Surface drainage would be impacted in locations where curb bulb-outs are constructed for stations. The modifications are expected to be minor and not require regrading of the entire roadway ROW. Additionally, there are no major modifications or impacts expected to existing storm drainage culverts or lines. Some minor modifications of manholes and vaults may be required. For example, stormwater drains may be impacted by curb reconstruction at station locations.
- **Domestic Water and Sanitary Sewer:** New water and sewer infrastructure is not proposed as a part of the Project. Where existing water and sewer infrastructure are impacted as a part of Project implementation, these elements would be retained in their current configurations. Some minor modifications of manholes and vaults may be required. For example, manhole covers located within the proposed BRT lanes may be impacted by asphalt patching and sealing.
- **Electrical:** New electrical power infrastructure would be required to support the proposed BRT stations, including to accommodate station lighting, security systems, and message boards. Connections for electrical elements would be routed to the nearest power sources to the shelter locations. Utility conduit would be routed from the source within public ROW, including associated saw cutting, patching, and repairing of existing hardscape. Additionally, there may be minor modifications of electrical vault lids required where the BRT lane is repaired or the curb is adjusted to accommodate bulb-outs.
- **Communications:** New communications infrastructure would be required to support the proposed BRT stations, including to accommodate security systems and real-time bus information signage. Connections for fiber optic elements would be routed to the nearest communication sources to the shelter locations. Utility conduit would be routed from the source within public ROW, including associated saw cutting, patching, and repairing of existing hardscape. Additionally, there may be minor modifications of communication vault lids required where the BRT lane is repaired or the curb is adjusted to accommodate bulb-outs.

2.4.5 Support Facilities

The Project does not propose the addition of any new support facilities, as existing facilities are anticipated to be sufficient to support BRT service on Vermont Avenue. Existing Metro operator comfort facilities would be retained as-is through the implementation of the Project. Existing bus maintenance facility yards are expected to have capacity for storage, charging and maintenance of the Project's fleet vehicles.

2.4.6 ROW

The Project would take place entirely within the existing public ROW for both the construction and operating phases. Neither permanent private property acquisitions nor temporary construction easements are anticipated for this Project.

2.4.7 Vehicles

The Project will open with the use of 40-foot buses to provide BRT service along the Vermont Corridor. BRT vehicles are proposed to be electric and would have the capacity to utilize on-route charging infrastructure. Vehicles are proposed to accommodate all-door boarding to facilitate efficient passenger loading and unloading, enhancing overall service efficiency.

2.4.8 Traffic Handling and Construction Staging

The Project proposes the use of temporary traffic control measures to accommodate Project construction. These measures would take into consideration all modes of transportation including buses, passenger vehicles, trucks, bicycles, and pedestrian traffic. The design of these measures would also consider construction staging in coordination with the construction team. Both the temporary traffic control measures and construction staging are anticipated to be carried out entirely within the existing public ROW, obviating the need for temporary easements to facilitate Project implementation.

2.5 Project Segment and Station Descriptions

The following sections describes the Project alignment for each Study Area segment. The Project proposes 26 BRT stations at 13 station locations.

2.5.1 Segment 1: 120th Street to Gage Avenue

Segment 1 spans 4.1 miles from the south terminus at 120th Street to Gage Avenue. This segment has the widest ROW of the Project at 140 feet to 160 feet from curb to curb, including three lanes of through-traffic in each direction, on-street parking on both sides, dedicated bike lanes and a median up to 40-feet wide curb to curb. This segment also features frontage roads, frontage road medians and parking on one or both sides of the median roads. This segment includes a connection to the Metro C Line at the Vermont/Athens Station. Segment 1 includes the following components:

- **Segment 1 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot to 14-foot-wide dedicated BRT lanes, resulting in two through lanes and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for at station platform locations. Existing bicycle lanes would be maintained and enhanced, with the BRT lane acting as a buffer between the bicycle lane and general traffic lanes. Existing left- and right-turn pockets would be maintained. Existing frontage road medians would be maintained in place. Existing landscaped medians would be maintained, and all median trees would be retained.
- **South Terminus – 120th Street Layover:** 120th Street serves as the existing southern terminus for the Metro Line 204 and Metro Rapid Line 754 service and bus layover facility. This layover would continue to serve as the local bus layover area for the existing bus service as well as the new proposed service. 120th Street is not considered one of the 13 BRT stations proposed for implementation as a part of the Project, though passengers would be allowed to board and alight BRT buses at this location. The layover area would feature an extended platform from the intersection of 120th Street and Vermont Avenue northward about 580 feet to a point just beyond the intersection of Vermont Avenue and 119th Street. This extended platform length would allow for the continued queuing of more than 10 buses at a time, including both local bus and BRT services. The platform would utilize the existing

bus layover space to widen the existing 5- to 6-foot sidewalks to 11 to 16 feet wide, allowing for safer and easier access to transit services for the projected increase in passengers along the corridor. The extended platform would fix the existing sidewalk issues, remove obstructions and provide space for pedestrian flow and access for patrons boarding and alighting at this location. The 12-foot-wide dedicated BRT lane would be implemented within the existing right-most travel lane and would serve as the future bus layover lane.

- **Athens Station:** The Athens Station would require a custom, non-standard kit-of-parts station due to design limitations on the existing overpass. This station would have modular rubber boarding platforms placed on the surface of the bridge structure, with an integrated bicycle lane for the length of the platform. The northbound platform would be 11 feet wide, and the southbound platform would be 9 feet wide. The existing bicycle lane would be maintained and situated between the proposed BRT platforms and the existing sidewalk on a raised platform. Curb space north and south of the proposed platforms would be reserved as a layover for local Metro bus services. Both station canopies would be constructed to minimize impacts to the existing Metro C Line rail station entrances. New station elements will be coordinated with Metro Art to minimize impact to existing artwork at the Metro C Line Station entrances. The canopy would be built on a cantilever so as not to add structural load onto the existing Caltrans bridge.
- **Century Station:** Beginning at the Century Station and heading north, all station stops would feature concrete platforms on both the northbound and southbound sides of Vermont Avenue. The Century Station would feature station platforms on bulb-outs measuring 100 feet long and 10 feet wide on both the northbound and southbound sides of Vermont Avenue. The southbound platform is proposed 20 feet south of 101st Street due to a lack of curb space available closer to Century Boulevard, while the northbound platform is proposed 56 feet north of Century Boulevard. Both the northbound and southbound sides of Vermont Avenue would feature unprotected bicycle lanes running between the station platforms and existing sidewalks. The existing bicycle lane would be kept in place with a width of 5 feet, except for immediately adjacent to the northbound BRT platform, where the bicycle lane would be 6 feet wide.
- **Manchester Station:** The Manchester Station features station platforms measuring 100 feet long and 10 feet wide on both the northbound and southbound sides of Vermont Avenue. The southbound platform is proposed to be approximately 63 feet south of Manchester Avenue, while the northbound platform is proposed to be located approximately 60 feet north of Manchester Avenue. On the southbound side, the BRT platform would be located on the frontage road median, between the southbound lanes on Vermont Avenue and the adjacent southbound frontage road south of Manchester Avenue. Pedestrian access to this platform would be enhanced with a raised crosswalk between the existing sidewalk and the frontage road. The northbound platform would be located on the far side of the intersection on the northeast corner adjacent to a new development. The ROW in this location cannot accommodate a bulb-out platform. Therefore, the station platform and canopy would be constructed fully on the sidewalk. A custom canopy may be constructed at this location to maximize pedestrian flow along the sidewalk.
- **Florence Station:** The Florence Station features station platforms measuring 100 feet long and 10 feet wide on the far side of the intersection within the existing frontage road

medians. The northbound station platform is proposed approximately 79 feet north of Florence Avenue and the southbound station platform is proposed approximately 83 feet south of Florence Avenue. Pedestrian access to these platforms would be enhanced with a raised crosswalk between the existing sidewalk and the frontage road. The existing bicycle lane would be realigned between the BRT lane and the frontage road medians. A portion of the frontage road at the southeast corner of Vermont Avenue and Florence Avenue is proposed to be replaced by a larger curb bump-out to maintain retail access for vehicles, while avoiding a complex traffic mixing zone for vehicles entering the BRT lane. In front of the southbound station, the BRT lane widens to between 13 feet and 15 feet and 5 inches wide for the portion of the alignment between Florence Avenue and 73rd Street due to available ROW at this location.

2.5.2 Segment 2: Gage Avenue to Martin Luther King Jr. Boulevard

Segment 2 spans 2.0 miles from Gage Avenue to Martin Luther King Jr. Boulevard. The roadway width narrows north of Gage Avenue to about 60 feet to 70 feet curb to curb with two northbound lanes, two southbound lanes, one turning lane and street parking along both sides of the roadway. Segment 2 includes the following elements:

- **Segment 2 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. In the most constrained locations, the BRT lane configuration in Segment 2 narrows to 11 feet and the parking lane width is reduced to 7 feet to accommodate maintaining parking on both sides of the street. Segment 2 has the only locations where the BRT lane and parking dimensions vary from the standard configuration. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Slauson Station:** The Slauson Station features two station platforms, both south of Slauson Avenue, due to limited ROW and the layout of existing driveways north of Slauson Avenue. The northbound station would be on the near side of the intersection at the southeastern corner. The northbound platform is 100 feet long, 10 feet wide and located approximately 104 feet south of Slauson Avenue. The southbound platform is 90 feet long, 10 feet wide and located approximately 35 feet south of Slauson Avenue. The southbound station is close to the intersection due to the constrained length between Slauson Avenue and 58th Place. At the southbound station platform, the BRT lane widens to 16 feet due to available ROW in this segment. On-street parking does not currently exist at this intersection south of Slauson Avenue, and limited new on-street parking is proposed on the northbound side of Vermont Avenue south of 58th Place.
- **Vernon Station:** The Vernon Station features BRT station platforms measuring 90 feet in length and 10 feet wide on the far side of the intersection on both the northbound and southbound side of Vermont Avenue. The southbound station platform is proposed to be located 24 feet south of Vernon Avenue and the northbound station platform is proposed to be located approximately 51 feet north of Vernon Avenue. The existing Metro Local Line 204 stop at the northwestern corner of Vermont Avenue and Vernon Avenue would be relocated

to the southern side of the intersection about 180 feet south of Vernon Avenue. Similarly, the existing DASH stop at the northeastern corner of Vernon Avenue and Vermont Avenue is proposed to be relocated about 150 feet to the north to the opposite side of the proposed northbound BRT station platform. The ROW in this location cannot accommodate full bulb-out platforms. Therefore, the station platform and canopy would be constructed fully on the sidewalk for the southbound station and partially on the sidewalk for the northbound station, which can accommodate a partial 4-foot-wide bulb-out to host a portion of the station canopy. Custom canopies may be constructed at these locations to maximize pedestrian flow along the sidewalk.

2.5.3 Segment 3: Martin Luther King Jr. Boulevard to Jefferson Boulevard

Segment 3 spans 1 mile from Martin Luther King Jr. Boulevard to Jefferson Boulevard. The roadway has a width of about 60 feet curb to curb between Martin Luther King Jr. Boulevard and Exposition Boulevard, with two northbound lanes, two southbound lanes, one turning lane, an 8-foot-wide median and no on-street parking. The roadway widens to about 80 feet curb to curb between Exposition Boulevard and Jefferson Boulevard, with two northbound lanes, two southbound lanes, one turning lane and street parking along both sides. The turning lane becomes a landscaped median mid-block through this segment. This segment includes a connection to the Metro E Line at the Exposition Station. Segment 3 includes the following elements:

- **Segment 3 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets and the landscaped median would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Exposition Station:** The Exposition Station features two platforms, both on the northern side of Exposition Boulevard. The northbound platform is proposed to be 100 feet long by 10 feet wide and located 64 feet north of Exposition Boulevard and the southbound platform is proposed to be 90 feet long by 10 feet wide and located 31 feet north of Exposition Boulevard. The existing Metro Local (Lines 204 and 550) and Dash (Line F) services would be relocated north of their current locations.

2.5.4 Segment 4: Jefferson Boulevard to Venice Boulevard

Segment 4 spans 1.3 miles from Jefferson Boulevard to Venice Boulevard. This portion of the corridor has similar roadway features to Segment 3, with a 60-foot roadway width curb to curb with two northbound lanes, two southbound lanes, one turning lane, and street parking along both sides of the roadway. The corridor becomes more vehicle-oriented in this segment, with narrower sidewalks to accommodate the high volume of traffic at the I-10 on- and off-ramps. Segment 4 includes the following elements:

- **Segment 4 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be

maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.

- **Adams Station:** The Adams Station features two platforms on the far side of the intersection. The northbound platform is 100 feet long and 10 feet wide and about 130 feet north of the intersection. The southbound platform is 90 feet long and 10 feet wide and about 26 feet south of Adams Boulevard. The southbound platform is close to the intersection due to the constraint of an existing driveway. The existing Metro Local Line 204 stop on the southwestern corner of the intersection would be relocated about 100 feet to the south to accommodate the BRT station platform and avoid conflicts with the driveway.

2.5.5 Segment 5: Venice Boulevard to Wilshire Boulevard

Segment 5 spans 1.3 miles from Venice Boulevard to Wilshire Boulevard. Vermont Avenue is about 60 feet wide curb to curb in this segment, with two northbound lanes, two southbound lanes, one turning lane and on-street parking along both sides of the roadway. This segment includes connections to the Metro B and D Lines at the Wilshire/Vermont Station. Segment 5 includes the following elements:

- **Segment 5 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Pico Station:** The Pico Station features two platforms on the far side of the intersection. The northbound platform would be 90 feet long and 10 feet wide, about 131 feet north of Pico Boulevard, situated between existing driveways. The southbound BRT platform would be 100 feet long and 10 feet wide, located approximately 25 feet south of Pico Boulevard to avoid a conflict with an existing driveway. The ROW in this location cannot accommodate full bulb-out platforms. Therefore, the station platforms and canopies would be constructed mostly on the sidewalk, with partial 4-foot-wide bulb-outs constructed to host a portion of the station canopies. Custom canopies may be constructed at these locations to maximize pedestrian flow along the sidewalk.
- **Wilshire Station:** The Wilshire Station features station platforms on the north side of Wilshire Boulevard due to limited ROW south of Wilshire Boulevard. The curb-to-curb ROW is 80 feet north of Wilshire Boulevard and 60 feet south of Wilshire Boulevard. Both platforms are proposed to be 100 feet long by 10 feet wide, with the northbound station proposed to be about 59 feet north of Wilshire Boulevard and the southbound station proposed to be about 34 feet north of Wilshire Boulevard. Given the proximity of the southbound platform to Wilshire Boulevard, curb bump-outs are proposed at the northwestern and northeastern corners of the intersection to better protect pedestrians and passengers who are boarding

and alighting BRT vehicles. To accommodate the southbound platform, an existing driveway located approximately 90 feet north of Wilshire Boulevard that serves a vacant lot is proposed to be closed as a part of any future development at this location. To support the northbound platform, the existing Metro Local Line 204 bus stop on the northeastern corner of Vermont Avenue and Wilshire Boulevard would be moved about 100 feet north. The BRT service connects with the existing Metro B Line and D Line heavy rail service at the Wilshire/Vermont Station, allowing for transfers at the northeastern corner of the intersection.

2.5.6 Segment 6: Wilshire Boulevard to Sunset Boulevard

Segment 6 spans 2.7 miles from Wilshire Boulevard to the north terminus at Sunset Boulevard. There are no improvements planned between Sunset Boulevard and Hollywood Boulevard. Vermont Avenue varies from 70 feet to 90 feet curb to curb in this segment. This segment has two northbound lanes, two southbound through lanes, a turning lane, and on-street parking along both sides of the roadway. This segment includes connections to the Metro B Line at Santa Monica and Sunset Stations.

Metro's related Near-Term Improvements project is anticipated to be implemented prior to this Project. The near-term improvements consist of taking the existing curb lanes between Wilshire Boulevard and Sunset Boulevard (currently used as a third travel lane during peak hours) and converting them to peak-period bi-directional bus lanes. During non-peak hours, buses would operate in the right-most through lane.

Segment 6 includes the following elements:

- **Segment 6 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 11- to 12-foot-wide dedicated BRT lanes, resulting in one through-lane and one BRT lane in each direction between Wilshire Boulevard and Sunset Boulevard. The existing peak-hour dedicated bus lanes would be removed and replaced by permanent full-time parking except for at station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations. At the US-101 freeway overpass between 3rd Street Station and Santa Monica Station, the proposed alignment differs from the typical alignment in Segment 6 to accommodate the increased traffic flow entering and exiting the freeway. The southbound direction of Vermont Avenue would feature three general-purpose through lanes including one mixed-flow traffic lane between the US-101 northbound on-ramp and Council Street. At Council Street, the southbound roadway would return to one dedicated BRT lane and one general-purpose through lane. The northbound direction of Vermont Avenue would maintain a dedicated BRT lane through the US-101 overpass with a mixing zone to accommodate an extended general-purpose turning lane.
- **3rd Street Station:** The 3rd Street Station features two shortened platforms due to constraints of existing driveways. The northbound station would be 75 feet long and 10 feet wide, located about 80 feet north of 3rd Street. The southbound station would be 67 feet long and 10 feet wide, located about 102 feet south of 3rd Street. The existing Dash stop at the southwestern corner of Vermont Avenue and 3rd Street would be co-located with the proposed BRT station platform.

- **Santa Monica Station:** The Santa Monica Station features two station platforms on the far side of the intersection. The northbound platform would be 100 feet long and 10 feet wide, and 48 feet north of Santa Monica Boulevard to avoid a conflict with a driveway to the north. The southbound platform would be 100 feet long and 10 feet wide, and about 81 feet south of Santa Monica Boulevard. The southbound platform would be adjacent to the access point for the existing Metro B Line heavy rail station.
- **Sunset Station:** The Sunset Station features two BRT station platforms on the far side of the intersection. The northbound station platform is about 90 feet long and 10 feet wide, and about 85 feet north of Sunset Boulevard. The southbound station platform would be 100 feet long and 10 feet wide, and about 88 feet south of Sunset Boulevard. Existing Metro Local bus stops (Lines 175, 204, 206 and 217) and the existing Dash stop would be co-located with the proposed BRT station platforms. This station connects to the existing Vermont/Sunset Metro B Line heavy rail station at the northeastern corner of Vermont Avenue and Sunset Boulevard.
- **North Terminus** – **Hollywood Boulevard Layover:** Hollywood Boulevard is the north terminus of the Project. Hollywood Boulevard is not considered one of the 13 BRT stations proposed for implementation as a part of the Project, though passengers would be allowed to board and alight BRT buses at this location. Hollywood Boulevard is the existing bus layover location for the Metro Line 204 and Metro Rapid Line 754 service. This location would continue to serve as the layover for both local and BRT service. No civil improvements are proposed at this location.

2.6 Project Implementation Schedule

Project implementation is anticipated to take approximately 42 months from the start of Preliminary Engineering in fall 2024 to Project opening in spring 2028. This schedule includes approximately 12 months for preliminary engineering, 12 months for final engineering and 18 months for construction.

3 REGULATORY FRAMEWORK

The following section discusses SB 922 and Metro's Equity Platform.

3.1 Senate Bill 288 and Senate Bill 922

SB 288 was signed into law in October 2020 to reduce the time and cost of delivering sustainable transportation projects across California by providing an exemption from CEQA. SB 288 is codified in PRC Sections 21080.20 and 21080.25 (added on January 1, 2021). Specifically, SB 288 provided statutory exemptions to CEQA for certain projects that are in the public ROW and are in an environmentally cleared long-term plan. SB 288 targeted a set of sustainable transit projects, active transportation (walking and bicycling) projects and projects that expand sustainable mobility. This includes projects that make streets safer for walking and bicycling; speed up bus service on streets; make it possible to run bus service on highways; expand carpooling; and modernize and build new bus and light rail stations. SB 288 designates these types of projects necessary to facilitate development of sustainable transportation alternatives and related infrastructure, encouraging broader use of sustainable transit throughout the state.

SB 288 exemptions must meet the following criteria:

- A public agency is carrying out the project and is the lead agency for the project.
- The project is located in an urbanized area.
- The project is located on or within an existing public ROW.
- The project shall not add physical infrastructure that increases new automobile capacity on existing ROWs except for minor modifications needed for the efficient and safe movement of transit vehicles, such as extended merging lanes. The project shall not include the addition of any auxiliary lanes.
- The construction of the project shall not require the demolition of affordable housing units.

For projects that exceed $100 million (U.S. dollars), SB 288 also requires such projects: are incorporated into a regional transportation plan or other plan that has undergone programmatic-level environmental review; have all construction impacts fully mitigated; and are committed to using a skilled and trained workforce, including by use of a project labor agreement. SB 288 requires that a business case analysis and a racial equity analysis are prepared; at least three public meetings are held prior to approving the project (including one to review the project's business case and racial equity analysis to receive public comments); and two public meetings are held annually during project construction to receive public comments. SB 288 was expected to remain in effect until only January 1, 2023.

On September 30, 2022, SB 922 was signed into law and amended PRC Sections 21080.20 and 21080.25. SB 922 extends and improves upon SB 288 by easing implementation, targeting expansions for electric fleet conversion and adding an anti-displacement analysis requirement. SB 922 exemption continues to apply to active transportation plans, feasibility studies for active transportation, and bicycle, pedestrian and transit projects. These include bicycle parking, signal timing, wayfinding, transit prioritization projects, pedestrian and bicycle facilities, or BRT, bus or light rail services including dedicated transit lanes, transit queue jump lanes, high-occupancy vehicle lanes, transit stop boarding islands and pedestrian improvements such as widening sidewalks and adding pedestrian refuge islands. SB 922 also adds carpool lanes to the list of projects granted CEQA

streamlining, but only projects that convert existing lanes to high-occupancy vehicle lanes and does not add new lanes. For projects that exceed $100 million, SB 922 requires a residential displacement analysis in addition to the project business case, racial equity analyses and noticed public meetings required under SB 288. SB 922 extended the SB 288 CEQA exemption to January 1, 2030.

3.2 Metro Equity Platform

Metro's Equity Platform, adopted in 2018, is a policy framework for addressing disparities in access to opportunity resulting from historical disinvestment in low-income communities and communities of color. The Equity Platform guides how Metro works to address inequity and create more equitable access to opportunity through four main pillars, or areas of action: Define and Measure, Listen and Learn, Focus and Deliver, and Train and Grow. The platform centers around conducting comprehensive and inclusive engagement processes that ensure community members are heard, reflected and respected in the work and empowered in the decision-making process.

The Equity Platform is designed to inform, shape and guide every facet of the Metro's business, on a continuing basis, to shape projects, investments and new initiatives. Since 2020, there has been a spotlighting of the systemic racism, anti-Blackness and broader injustices in America stemming from discriminatory housing policies, exclusionary zoning, disproportionate law enforcement, infrastructure investments and environmental burdens (Metro, 2024a). Metro recognizes that vast disparities exist in access to opportunities, including jobs, housing, community resources, healthy communities and mobility options. Transportation is an essential lever to enabling access and improving quality of life for Los Angeles County.

Under the Equity Platform, Metro is committed to identifying and implementing projects or programs that reduce and ultimately eliminate disparities in access to opportunities.

4 METHODOLOGY

The following section presents the methodology for data collection and residential displacement analysis.

4.1 Project Study Area

For purposes of this Residential Displacement Analysis Report, the Project Study Area is defined as the census tracts with boundaries that lie within 0.5 miles of the Vermont Corridor (**Figure 1-1**). The analysis also uses the North, Central and South subareas to characterize the communities and neighborhoods within the Project Study Area and examines the 0.5 miles from each station area.

4.2 Socioeconomic Characteristics Data

Socioeconomic and demographic data include race and ethnicity, low-income households and renter-occupied households. The data presented are from the United States (U.S.) Census Bureau's 2018-2022 American Community Survey (ACS) 5-Year estimates and aggregated at the census tract level. The following socioeconomic characteristics serve as indicators of risk of displacement: Black, Indigenous, and Other People of Color (BIPOC) populations, low-income households, and renter-occupied households.

The U.S. Census Bureau defines race using the following categories: White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Some Other Race, and Two or More Races. The U.S. Census Bureau also uses two ethnicities in collecting and reporting data: Hispanic or Latino, and Non-Hispanic or Latino. BIPOC populations include persons of: Hispanic or Latino origin regardless of race; Non-Hispanic or Latino, Black or African American Alone; Non-Hispanic or Latino, American Indian or Alaska Native Alone; Non-Hispanic or Latino, Asian Alone; Non-Hispanic or Latino, Native Hawaiian or Other Pacific Islander Alone; Non-Hispanic or Latino, Some Other Race; and Non-Hispanic or Latino, Two or More Races. "Hispanic or Latino" is defined as a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin regardless of race. People who identify as Hispanic, Latino or Spanish may be any race.

U.S. Department of Housing and Urban Development (HUD) defines low-income as 80% of an area's median income (AMI) and very low-income as 50% of AMI. The HUD low-income threshold of 80% of AMI is used to define low-income households. The HUD defines extremely low-income households as households with incomes at or below 30% of AMI. In May 2022, Metro published the *2022 Equity Focus Communities Update* (Metro, 2022), which adjusted the low-income definition to align with other agency programs and HUD's "Very Low" annual household income threshold. HUD typically sets the limit at 50% of AMI, adjusted for family size or county based on cost of living. Based on the 2022 Equity Focus Communities Update, the low-income threshold for a family of four in Los Angeles County is set at $60,000, or approximately 72% of the 2022 median household income for Los Angeles County ($83,411). Therefore, households with a median income less than $60,000 are considered low-income for this analysis.

A list of subsidized affordable housing units within the Project Study Area is compiled from HUD's list of affordable rental housing units in the City of Los Angeles and from the City of Los Angeles GeoHub (Los Angeles GeoHub, 2020; 2024). These listed affordable housing units are partially or wholly subsidized by local, state, or federal programs and strategies, as opposed to naturally occurring

affordable housing, which maintains affordable rents without government subsidies. The Los Angeles County Development Authority's (LACDA's) list of affordable housing sites in Los Angeles County indicates that there are no county-operated affordable housing sites within the Project Study Area (LACDA, 2024).

The U.S. Census Bureau distinguishes between owner-occupied and renter-occupied households. Renter-occupied households consist of households which rent, rather than own, their dwelling unit.

4.3 Residential Displacement Analysis

This analysis is based on the requirements codified in PRC Sections 21080.20 and 21080.25. PRC Section 21080.25(d)(2) requires the identification of areas at risk of residential displacement and to suggest strategies, designs or actions to reduce these risks.

Residential displacement includes physical (direct) displacement and economic (indirect) displacement. Physical displacement is the result of eviction, acquisition, rehabilitation or demolition of property, or the expiration of covenants on rent- or income-restricted housing. Economic displacement occurs when residents and businesses can no longer afford escalating rents or property taxes due to changes in the market (Planetizen, 2024).

The analysis evaluates how the Project may directly or indirectly contribute to residential displacement in the Project Study Area. Using socioeconomic and demographic data for the Vermont Corridor, this analysis identifies the vulnerable communities that may experience direct or indirect residential displacements as a result of the Project. The analysis also identifies residential market factors and land use factors that contribute to economic residential displacement. These factors include projected housing growth, existing affordable housing stock, rent-stabilized areas, future development opportunities, vacant parcels and new residential projects in the Project Study Area. Strategies are also identified to reduce the potential of indirect residential displacement impacts to the vulnerable communities in the Project Study Area.

5 COMMUNITIES AND NEIGHBORHOODS

This section presents the communities and neighborhoods in the Project Study Area.

5.1 Communities and Neighborhoods

The Project would traverse and serve approximately 20 neighborhoods adjacent to the Project: City of Los Angeles neighborhoods of Los Feliz, East Hollywood, Silver Lake, Koreatown, Westlake, Harvard Heights, Pico-Union, Adams-Normandie, University Park, Exposition Park, Vermont Square, Harvard Park, Vermont-Slauson, Manchester Square, Vermont Knolls, Gramercy Park, and Vermont Vista; unincorporated Los Angeles County neighborhoods of Westmont, Athens, and Harbor Gateway; and the City of Gardena. Additionally, several distinct ethnic communities officially recognized by the City of Los Angeles are in the Project Study Area: Koreatown, South Los Angeles, Byzantine-Latino Quarter, Little Bangladesh, Little Armenia and El Salvador Community Corridor. **Figure 5-1** and **Figure 5-2** show the neighborhoods and ethnic communities in the Project Study Area.

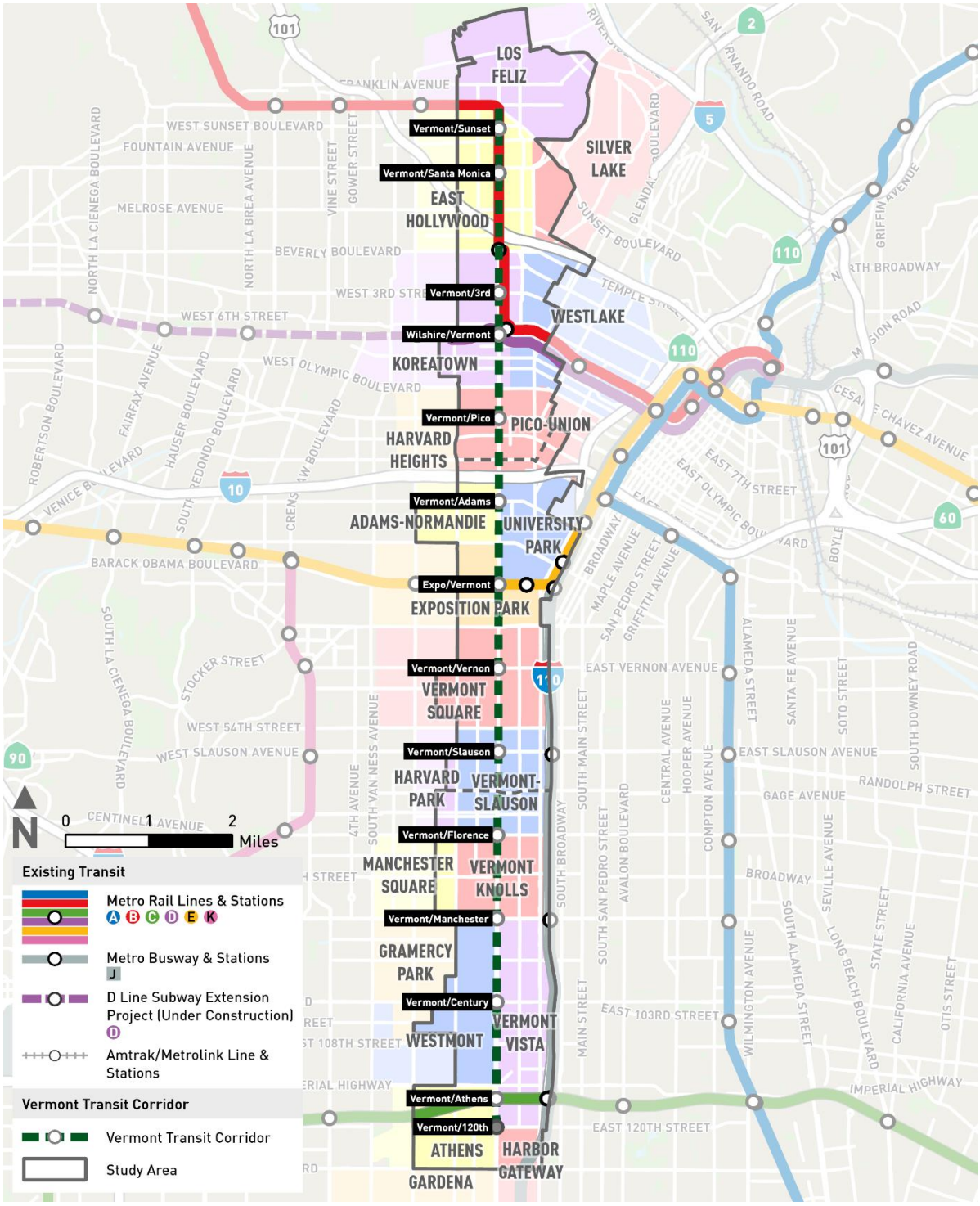
Koreatown: Koreatown is bounded by Wilshire Avenue to the north, Olympic Boulevard to the south, Vermont Avenue to the east and Crenshaw Boulevard to the west (Herbst, 2015). Koreatown is named for the Korean immigrant population which settled there after the Hart-Celler Act of 1965, which lifted national-origins quotas. Although Koreatown's identity has roots in the Korean diaspora, Koreatown is a multiethnic community (City of Los Angeles Public Library [LAPL], 2022). Koreatown was officially designated by the City of Los Angeles in 2008. The area is served by the Metro D Line at the Wilshire/Vermont Station. Koreatown is in the North subarea of the Project Study Area.

South Los Angeles: South Los Angeles is a large area of the City of Los Angeles, delineated as the South Los Angeles Community Plan Area and is roughly bounded by I-10 to the north, unincorporated Los Angeles County to the south, I-110 to the east and the City of Inglewood to the west. Although South Los Angeles is not a city-designated ethnic neighborhood, South Los Angeles has historically been home to a large Black community for much of the 20th century, largely shaped by a legacy of redlining and racial discrimination (California State University, Northridge, Center for Geospatial Science and Technology, 2023). The area is served by the Metro E Line at the Expo/Vermont and Expo Park/USC stations in the Project Study Area. South Los Angeles is in the Central and South subareas of the Project Study Area.

Byzantine-Latino Quarter: Byzantine-Latino Quarter is roughly bounded by 11th Street on the north, Venice Boulevard on the south, Hobart Boulevard on the west and Alvarado Street on the east. (Hansen, 1999). The neighborhood is named for its cross-cultural mix of Greek and Latino populations and was designated in 1997 by the California State Assembly (Hansen, 1999). The community is anchored by St. Sophia's Greek Orthodox Church and independent businesses along Pico Boulevard. The area does not include any Metro rail stations. Byzantine-Latino Quarter is a neighborhood located within the North and Central subareas of the Project Study Area.

Little Bangladesh: Little Bangladesh is a four-block area along 3rd Street between Alexandria and New Hampshire avenues. It is a tree-lined residential community that also includes restaurants, shops and art galleries. Little Bangladesh was officially designated by the City of Los Angeles in 2010 as the cultural and commercial hub of the City of Los Angeles's Bangladeshi community (Little Bangladesh, 2024). The neighborhood is surrounded by Koreatown (Herbst, 2015). The area does not include any Metro rail stations. Little Bangladesh is in the North subarea of the Project Study Area.

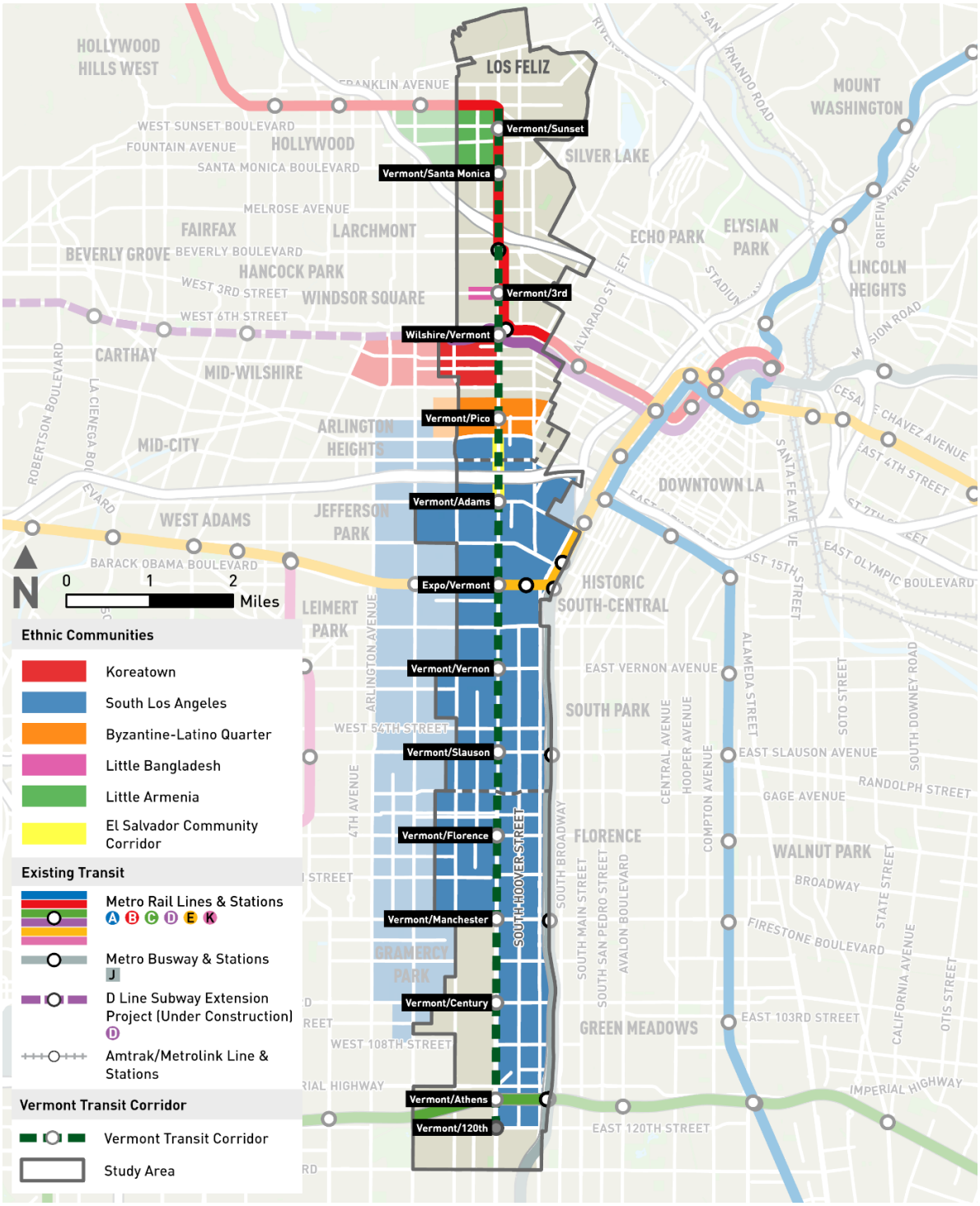
Figure 5-1 Neighborhoods in Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dashed lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

Figure 5-2 Ethnic Communities in Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dotted lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

Little Armenia: Little Armenia is a neighborhood bounded by Hollywood Boulevard on the north, Santa Monica Boulevard on the south, US-101 on the west and Vermont Avenue on the east (Los Angeles Times, 2000). It is named after the Armenians who escaped genocide and made their way to the City of Los Angeles during the early part of the 20th century. Little Armenia was officially designated by the City Los Angeles in 2000. The area is served by the Metro B Line at the Hollywood/Western, Vermont/Sunset and Vermont/Santa Monica stations. Little Armenia is in the North subarea of the Project Study Area.

El Salvador Community Corridor: El Salvador Community Corridor is a 14-block strip of Vermont Avenue that runs from West 11th Street down to Adams Boulevard. The corridor is an officially designated Los Angeles neighborhood, dedicated in 2012 (Diano, 2019). The corridor features El Salvadorian restaurants and shops. The area does not include any Metro rail stations. El Salvador Community Corridor is located within the Central and North subareas.

5.2 North Subarea: Venice Boulevard to Sunset/Hollywood Boulevards

The North subarea includes the neighborhoods of Adams-Normandie, University Park, Pico-Union, Koreatown, Westlake, East Hollywood, Silverlake and Los Feliz. The Byzantine-Latino Quarter, Little Armenia and El Salvador Community Corridor are also in this subarea. The North subarea is characterized with predominately residential uses (73.8%) followed by commercial uses (13.7%).

Major public institutions and parks include medical centers, LACC adjacent to the Vermont Corridor and the Barnsdall Art Park. The North subarea has access to the Metro D Line that provides connectivity to Koreatown, Westlake and downtown Los Angeles and the Metro B Line that provides connectivity between North Hollywood, Hollywood, East Hollywood, Koreatown, Westlake and downtown Los Angeles. The presence of high-density residential and commercial uses, as well as access to the Metro B and D lines, indicate that this portion of the corridor is highly connected and well suited for pedestrian activity. The North subarea has experienced the most investment and growth compared to the Central and South subareas and includes more affluent neighborhoods and growing communities than the other subareas.

5.3 Central Subarea: Gage Avenue to Venice Boulevard

The Central subarea includes the neighborhoods of University Park, Adams-Normandie, Exposition Park, Vermont Square, Harvard Park and Vermont-Slauson. South Los Angeles, Byzantine-Latino Quarter and El Salvador Community Corridor are in this subarea. The Central subarea is characterized with predominately residential uses (62.0%) followed by institutional and public facility uses (26.3%).

Residential land uses in the subarea are characterized with low- to medium-density. Commercial land uses are concentrated along the Vermont Corridor north of I-10. The commercial and residential land uses are denser in the north near Venice Boulevard and Koreatown. Major institutional and public facilities in the subarea include Exposition Park and the USC Campus. Access to the Metro E Line provides connectivity to downtown Los Angeles, Boyle Heights, East Los Angeles, West Los Angeles, Culver City and Santa Monica. Based on existing access to the Metro E Line and the presence of major institutional and public facilities, this subarea is moderately well connected and suitable for pedestrian activity. However, aside from large investments at Exposition Park and the USC Campus, the Central subarea has regional access with the Metro E Line but has been historically underserved by transit and has historical systemic disparities compared to the other subareas.

5.4 South Subarea: 120th Street to Gage Avenue

The South subarea includes the neighborhoods of Harvard Park, Vermont-Slauson, Manchester Square, Vermont Knolls, Westmont, Vermont Vista, Athens and Unincorporated Los Angeles Harbor Gateway. The South Los Angeles community is in this subarea. The South subarea is characterized with predominately residential uses (82.3%) followed by institutional and public facility uses (8.8%). Residential land uses in the South subarea consist of low- to medium-density and commercial strip malls. Access to the Metro C Line provides connectivity to the Los Angeles International Airport, unincorporated Los Angeles County communities, South Los Angeles, Lynwood, Paramount and Downey. Based on predominance of lower-density residential uses, wide ROW and access to the Metro C Line, this segment is poorly suited to pedestrian activity but moderately well-connected. The South subarea is predominately composed of Hispanics and Blacks, has been historically underserved by transit and has experienced historical systemic disparities similar to the Central subarea.

6 SOCIOECONOMIC CHARACTERISTICS

This section describes the socioeconomic characteristics of the Project Study Area and station areas. Vulnerable communities that would experience the most effects from residential and development market changes would be BIPOC populations, low-income households and renter-occupied households compared to the general population in the Project Study Area. The following discussion analyzes the demographics of these populations within the Project Study Area.

6.1 BIPOC Populations

Historical discrimination in land use, transportation and transit planning have resulted in present-day gaps in transit access across race, income and other characteristics, thus perpetuating social inequities. Riders using Metro's service due to its affordability, which include BIPOC communities, have identified that Metro services are not meeting the needs of those riders who rely on the service to make essential trips (Transit Center, 2021). Metro's on-board survey results of riders that currently use Metro Lines 204 and 754 on Vermont Avenue showed that these riders heavily depend on transit and reflect the diversity and needs of many of its residents. Hispanic or Latinos and Blacks make up approximately 85% of Metro riders on Vermont Avenue, while 92% of all Metro riders on Vermont Avenue are considered low-income. In 2022, 59.9% of all Metro riders on Vermont Avenue used Metro at least 5 times per week, 21.6% used Metro 3 to 4 times per week, and 18.5% used Metro 2 times or less per week. A study conducted in the aftermath of the pandemic showed that, across socioeconomic status, Black and Latinx households were more likely to be unable to pay rent compared to non-Hispanic White and Asian Americans, and more than twice as likely as White residents to experience rent-related hardships (Ong, 2020). Therefore, BIPOC populations are more vulnerable to changes in the residential market than non-BIPOC populations.

The U.S. Census Bureau census defines "race" as a social definition recognized in the U.S. and does not attempt to define race biologically, anthropologically or genetically. The U.S. Census Bureau defines "ethnicity" as either "Hispanic or Latino" or "Not Hispanic or Latino." BIPOC includes all individuals who identify as any race or ethnicity except for non-Hispanic/Latino White Alone.

Table 6-1 shows the BIPOC population at the county and city level, in the Project Study Area, Project's subareas and station areas. The BIPOC population of Los Angeles County and the City of Los Angeles is 74.8% and 71.9%, respectively. In comparison, the BIPOC population in the Project Study Area is 88.8%. Of the Project's subareas, the South subarea has the highest BIPOC population at 98.7%, and the North subarea has the lowest BIPOC population at 80.8%. At the station area level, the Vermont/Manchester and Vermont/Century station areas in the South subarea have the largest percentage of BIPOC residents (98.9%), and the Vermont/Sunset station area in the North subarea has the smallest percentage of BIPOC residents (56.7%).

Figure 6-1 shows the BIPOC population in the Project Study Area.

Table 6-1 Percent of Population Identified as BIPOC in the Project Study Area

Geographic Area and Station Area [a, b]	BIPOC Population (%) [c]
Los Angeles County	74.8
City of Los Angeles	71.9
Project Study Area	**88.8**
North Subarea	**80.8**
Vermont/Sunset	56.7
Vermont/Santa Monica	71.2
Vermont/3rd	90.0
Wilshire/Vermont	92.9
Vermont/Pico	95.8
Central Subarea	**91.8**
Vermont/Adams	82.9
Expo/Vermont	83.0
Vermont/Vernon	98.3
Vermont/Slauson	98.7
South Subarea	**98.7**
Vermont/Florence	98.7
Vermont/Manchester	98.9
Vermont/Century	98.9
Vermont/Athens	98.8

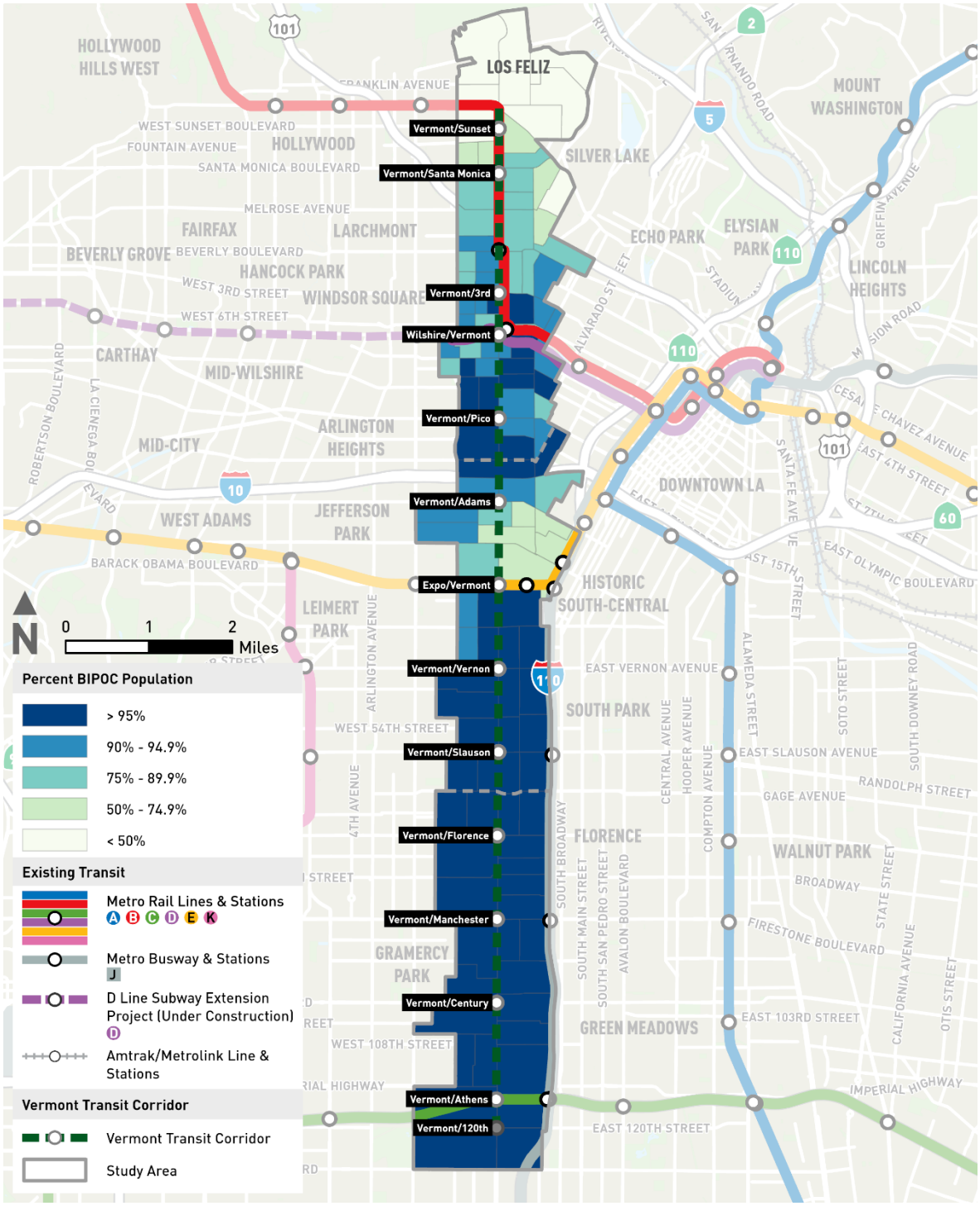
Source: U.S. Census Bureau, 2023a.

[a] Los Angeles County census data are collected at the county level and is provided for county-level context. The City of Los Angeles census data are collected at the city level and is provided for city-level context.

[b] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is defined as 0.5 miles from each station area.

[c] BIPOC is defined as persons of Hispanic or Latino origin regardless of race, and Non-Hispanic or Latino, Black or African American Alone; Non-Hispanic or Latino, American Indian or Alaska Native Alone; Non-Hispanic or Latino, Asian Alone; Non-Hispanic or Latino, Native Hawaiian or Other Pacific Islander Alone, Non-Hispanic or Latino, Some Other Race and Non-Hispanic or Latino, Two or More Races

Figure 6-1 Percent of Population Identified as BIPOC in the Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dotted lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area. BIPOC includes all individuals who identifies as any race or ethnicity except for non-Hispanic/Latino White Alone

6.2 Low-Income Households

Low-income households are considered more vulnerable to residential displacement than higher-income households (Metro, 2024b). Low-income households are more likely to be housing cost burdened (paying more than 30% of their income towards housing costs), and the share of low-income renters who are housing cost-burdened has increased since the 1990s. Additionally, the number of affordable rental units in the U.S. has decreased by 2.5 million units between 2001 and 2015, leaving low-income households with fewer housing options (HUD, 2024). In Los Angeles County, there is a shortage of nearly 500,000 affordable units for low-income renter households, and nearly 77% of extremely low-income households pay more than half of their income, compared to 3% of moderate-income households (California Housing Partnership, 2024). The combination of increased housing costs and loss of affordable housing has led to a greater risk of low-income households facing economic displacement.

As discussed in Section 4.2, Metro's 2022 Equity Focus Communities Update defines low-income households using the updated threshold from HUD (Metro, 2022). HUD defines low-income as 80% of AMI and very low-income as 50% of AMI. HUD typically sets the limit at 50% of AMI, adjusted for family size or county based on cost of living. Based on Metro's 2022 Equity Focus Communities Update, the low-income threshold for a family of four in Los Angeles County is set at $60,000, or approximately 72% of the 2022 median household income for Los Angeles County ($83,411) (Metro, 2022).

Table 6-2 shows the percentage of low-income households at the county and city level, in the Project Study Area, Project's subareas and station areas. Based on the $60,000 low-income threshold used by Metro's Equity Platform, 37.3% and 41.2% of the households in Los Angeles County and the City of Los Angeles are considered low-income households, respectively. In comparison, 55.6% of the households in the Project Study Area are considered low-income. Of the Project's subareas, the Central subarea has the highest percentage of low-income households at 59.1%, and the North subarea has the lowest percentage of low-income households at 53.4%. At the station area level, the Expo/Vermont Station area in the Central subarea has the largest percentage of low-income households (67.1%), and the Vermont/Sunset Station area in the North subarea has the smallest percentage of low-income households (45.2%)

Figure 6-2 shows the percentage of low-income households in the Project Study Area.

Table 6-2 Low-Income Households in the Project Study Area

Geographic Area and Station Area [a, b]	Low-Income Households (%) [a]
Los Angeles County	37.3
City of Los Angeles	41.2
Project Study Area	**55.6**
North Subarea	**53.4**
Vermont/Sunset	45.2
Vermont/Santa Monica	54.3
Vermont/3rd	55.3
Wilshire/Vermont	59.6
Vermont/Pico	61.8
Central Subarea	**59.1**
Vermont/Adams	63.0
Expo/Vermont	67.1
Vermont/Vernon	55.9
Vermont/Slauson	50.8
South Subarea	**57.4**
Vermont/Florence	58.9
Vermont/Manchester	61.8
Vermont/Century	58.8
Vermont/Athens	54.2

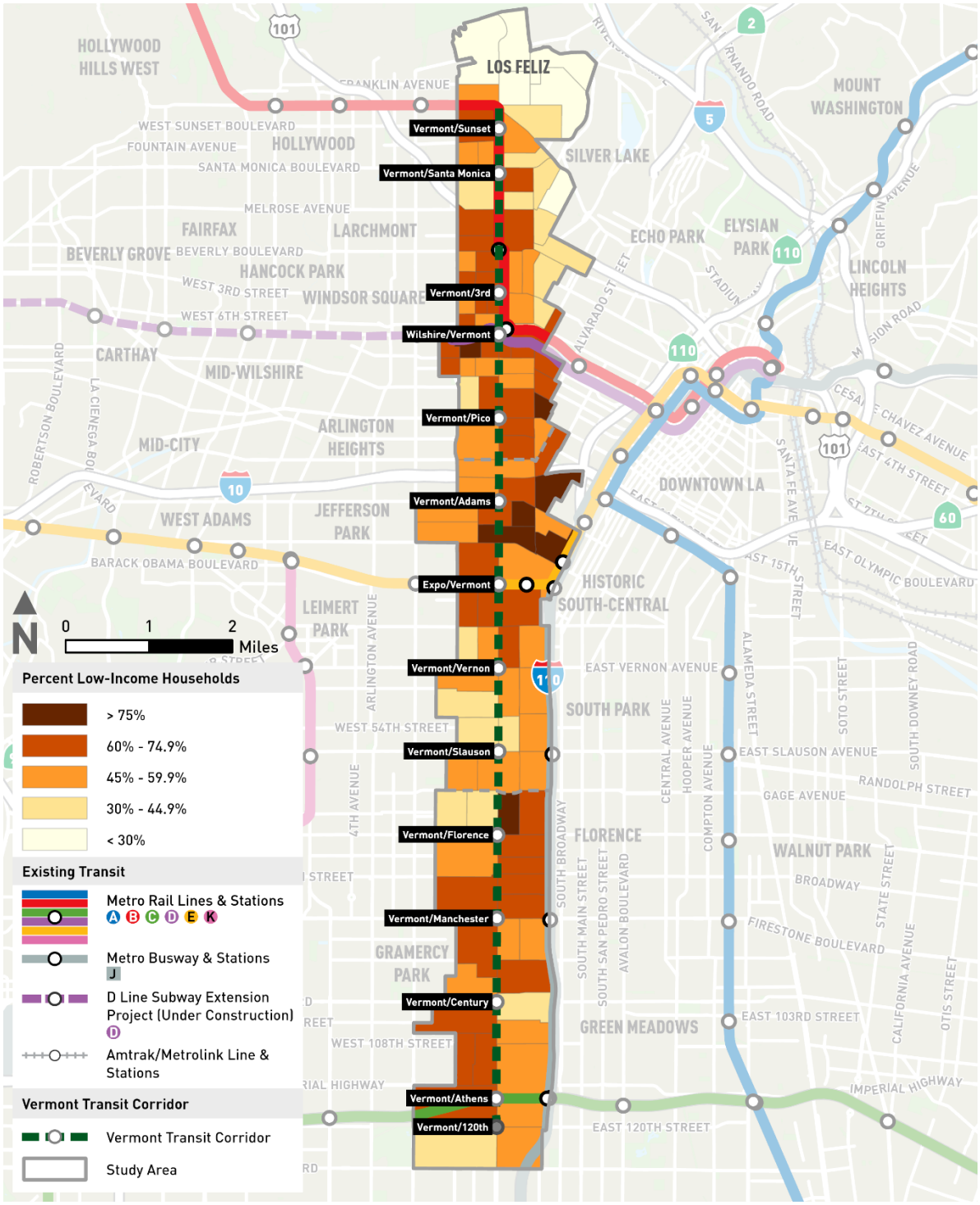
Source: U.S. Census Bureau, 2023b.

[a] Los Angeles County census data are collected at the county level and are provided for county-level context. City of Los Angeles census data are collected at the city level and is provided for city-level context.

[b] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is 0.5 miles from each station area.

[c] Low-income is defined as households with income less than $60,000, or approximately 72% of the 2022 median household income for Los Angeles County ($83,411).

Figure 6-2 Percent of Low-Income Households in the Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dotted lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

6.3 Renter-Occupied Households

Renters are more vulnerable to changes in the residential market compared to homeowners as they are more susceptible to increases in housing costs. Housing costs for rental units can increase on an annual basis, which can lead to economic displacement. Lower-income renters are more susceptible to development pressures that can lead to displacement through higher market rents and higher-paying tenants (Strong, Prosperous, and Resilient Communities Challenge, 2018). Additionally, converting rental units to condominiums and closing a rental building for renovation are other risk factors faced by renters (Puget Sound Regional Council, 2022). However, because renters can also be moderate- and high-income households, renters have a range of abilities to adapt to housing cost increases.

Table 6-3 shows the percentage of renter-occupied households at the county and city level, in the Project Study Area, Project's subareas and station areas.

Of the housing units in Los Angeles County and the City of Los Angeles, 64.2% and 82.3% of the households in Los Angeles County and the City of Los Angeles are identified as renter-occupied households, respectively. In comparison, 82.3% of the housing units in the Project Study Area is identified as renter-occupied. Of the Project Study subareas, the North subarea has the highest percentage of renter-occupied units at 92.0%, and the South subarea has the lowest percentage of renter-occupied units at 70.8%. At the station area level, the Vermont/3rd Station area in the North subarea has the largest percentage of renter-occupied units (96.1%) and the Vermont/ Vernon Station area in the Central subarea has the smallest percentage of renter-occupied units (61.1%).

Figure 6-3 shows the percentage of renter-occupied households in the Project Study Area.

Table 6-3 Renter-Occupied Households in Project Study Area

Geographic Area and Station Area [a, b]	Renter-Occupied Households (%) [c]
Los Angeles County	64.2
City of Los Angeles	82.3
Project Study Area	**82.3**
North Subarea	**92.0**
Vermont/Sunset	89.9
Vermont/Santa Monica	94.0
Vermont/3rd	96.1
Wilshire/Vermont	89.9
Vermont/Pico	85.3
Central Subarea	**76.5**
Vermont/Adams	90.3
Expo/Vermont	74.0
Vermont/Vernon	61.1
Vermont/Slauson	67.6
South Subarea	**70.8**
Vermont/Florence	78.1
Vermont/Manchester	73.3
Vermont/Century	63.1
Vermont/Athens	64.2

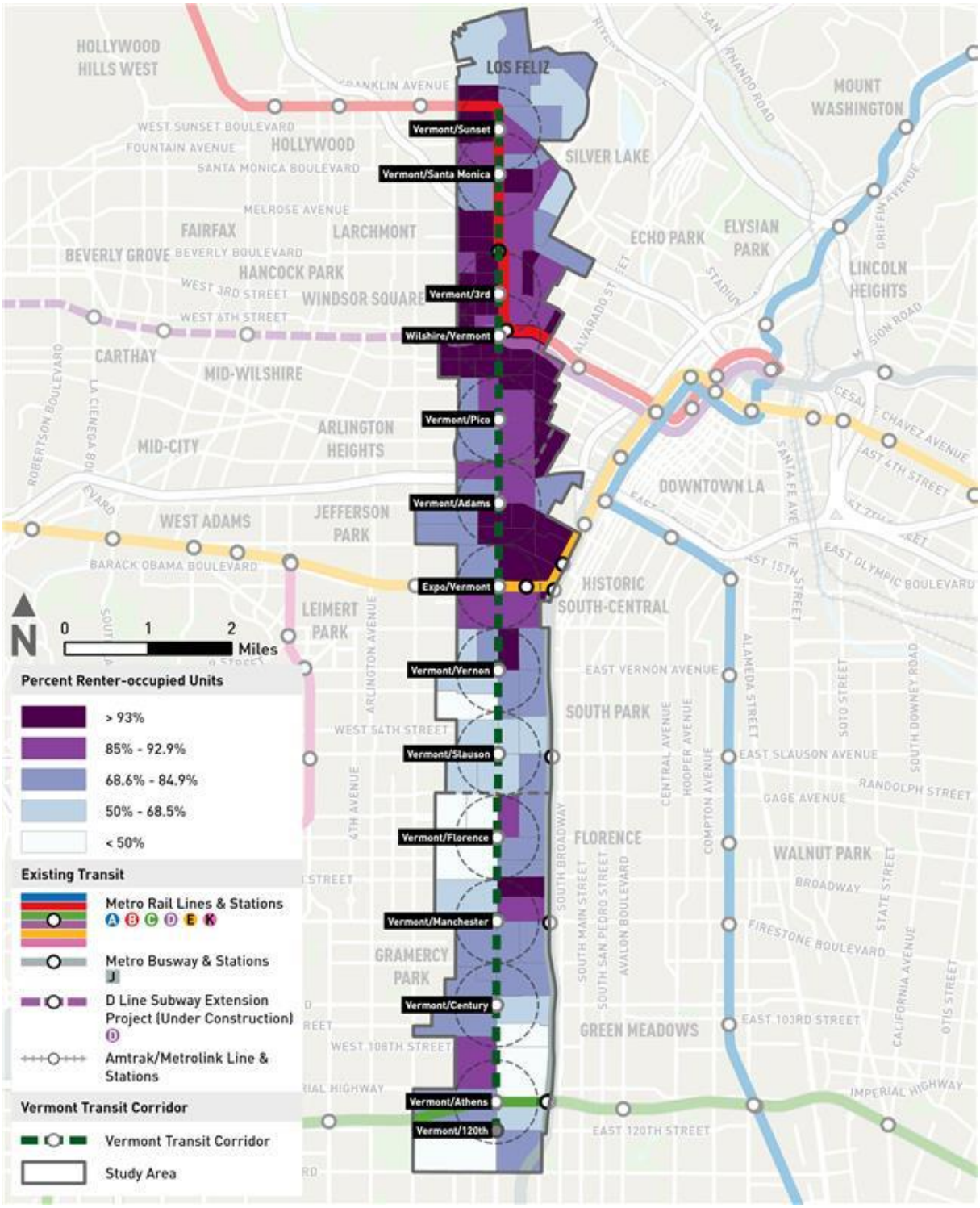
Source: U.S. Census Bureau, 2023b.

[a] Los Angeles County census data are collected at the county level and are provided for county-level context. City of Los Angeles census data are collected at the city level and is provided for city-level context.

[b] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is 0.5 miles from each station area.

[c] Renter-occupied units denote households which are occupied by persons renting their dwelling unit, rather than owning it.

Figure 6-3 Renter-Occupied Households in the Project Study Area



Source: Vermont Corridor Partners, 2024.

Note: Dotted lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

6.4 Summary of Socioeconomic Characteristics

Table 6-4 summarizes the BIPOC population, low-income households and renter-occupied households in the Project Study Area. Based on the socioeconomic factors, the Project Study Area includes vulnerable communities that would be more directly and indirectly affected by residential displacement compared to the general population.

Table 6-4 Summary of the Socioeconomic Characteristics in Project Study Area

Geographic Area [a,b]	BIPOC Population (%) [c]	Low-Income (%) [d]	Renter-Occupied Households (%) [e]
Los Angeles County	74.8	37.3	64.2
City of Los Angeles	71.9	41.2	82.3
Project Study Area	**88.8**	**55.6**	**82.3**
North Subarea	80.8	53.4	**92.0***
Central Subarea	91.8	**59.1***	76.5
South Subarea	**98.7***	57.4	70.8

Source: U.S. Census Bureau, 2023a, 2023b, 2023c; Metro, 2023.

[a] Los Angeles County census data are collected at the county level and are provided for county-level context. City of Los Angeles census data are collected at the city level and is provided for city-level context.

[b] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor.

[c] BIPOC is defined as an individual who identifies as Hispanic or Latino origin regardless of race, and Non-Hispanic or Latino, Black or African American Alone; Non-Hispanic or Latino, American Indian or Alaska Native Alone; Non-Hispanic or Latino, Asian Alone; Non-Hispanic or Latino, Native Hawaiian or Other Pacific Islander Alone, Non-Hispanic or Latino, Some Other Race and Non-Hispanic or Latino, Two or More Races.

[d] Low-income is defined as households with income less than $60,000, or approximately 72% of the 2022 median household income for Los Angeles County ($83,411).

[e] Renter-occupied units denote households which are occupied by persons renting their dwelling unit, rather than owning it.

* Indicates the highest percentage for that category

The North subarea has the lowest BIPOC population (80.8%), the lowest percentage of low-income households (53.4%) and the highest percentage of renter-occupied households (92.0%). There is a presence of high-density residential and commercial uses, as well as access to the Metro B and D lines, which indicates that this portion of the corridor is highly connected and well suited for pedestrian activity. The North subarea has also experienced the most investment and growth compared to the Central and South subareas and includes more affluent neighborhoods and growing communities than the other subareas. The presence of the existing rail lines and high-density residential uses can be linked to the high percentage of renter-occupied households in the North subarea.

The Central subarea has the second highest BIPOC population (91.8%), the highest percentage of low-income households (59.1%), and the second highest percentage of renter-occupied households (76.5%). Residential land uses in the Central subarea are characterized with low- to medium-density. Commercial land uses are concentrated along the Vermont Corridor north of I-10, and the commercial and residential land uses are denser in the north near Venice Boulevard and Koreatown. Major institutional and public facilities in the subarea include Exposition Park and the USC Campus. Based on existing access to the Metro E Line and the presence of major institutional and public facilities, this subarea is moderately well connected and suitable for pedestrian activity.

The South subarea has the highest percentage of BIPOC population (98.7%), the second highest percentage of low-income households (57.4%) and the lowest percentage of renter-occupied households (70.8%). Based on predominance of lower-density residential uses, wide ROW and access to the Metro C Line, this segment is poorly suited to pedestrian activity but moderately well-connected.

Table 6-5 summarizes the BIPOC population, low-income households and renter-occupied households in the station areas. The Vermont/3rd Station area in the North Subarea has the highest percentage of renter-occupied households (96.1%); The Expo/Vermont Station area in the Central subarea has the highest low-income population (67.1%), and the Vermont/Manchester and Vermont/Century station areas in the South subarea have the highest BIPOC population of the Project Study Area (98.9%).

Table 6-5 Summary of the Socioeconomic Characteristics in Station Areas

Station Area [a]	BIPOC Population (%) [b]	Low-Income (%) [c]	Renter-Occupied Households (%) [d]
North Subarea			
Vermont/Sunset	56.7	45.2	89.9
Vermont/Santa Monica	71.2	54.3	94.0
Vermont/3rd	90.0	55.3	**96.1***
Wilshire/Vermont	92.9	59.6	89.9
Vermont/Pico	95.8	61.8	85.3
Central Subarea			
Vermont/Adams	82.9	63.0	90.3
Expo/Vermont	83.0	**67.1***	74.0
Vermont/Vernon	98.3	55.9	61.1
Vermont/Slauson	98.7	50.8	67.6
South Subarea			
Vermont/Florence	98.7	58.9	78.1
Vermont/Manchester	**98.9***	61.8	73.3
Vermont/Century	**98.9***	58.8	63.1
Vermont/Athens	98.8	54.2	64.2

Source: U.S. Census Bureau, 2023a, 2023b, 2023c; Metro, 2023.

[a] Station Area is 0.5 miles from each station.

[b] BIPOC is defined as an individual who identifies as Hispanic or Latino origin regardless of race, and Non-Hispanic or Latino, Black or African American Alone; Non-Hispanic or Latino, American Indian or Alaska Native Alone; Non-Hispanic or Latino, Asian Alone; Non-Hispanic or Latino, Native Hawaiian or Other Pacific Islander Alone, Non-Hispanic or Latino, Some Other Race and Non-Hispanic or Latino, Two or More Races.

[c] Low-income is defined as households with income less than $60,000, or approximately 72% of the 2022 median household income for Los Angeles County ($83,411).

[d] Renter-occupied units denote households which are occupied by persons renting their dwelling unit, rather than owning it.

* Indicates the highest percentage for that category

7 FACTORS OF RESIDENTIAL DISPLACEMENT

The following analysis evaluates how the Project may directly or indirectly contribute to residential displacement in the Project Study Area.

7.1 Physical Effects to Residential Displacement

Physical residential displacement is a direct displacement as result of eviction, acquisition, rehabilitation or demolition of property, or the expiration of covenants on rent- or income-restricted housing. The Project is a BRT project located entirely within the Vermont Avenue public ROW and would not directly contribute to residential displacement during the construction or operation phases. No physical impacts on properties adjacent to the Vermont Avenue ROW would occur. The Project would not result in the physical deterioration of any residential buildings, nor result in the demolition or replacement of any housing stock in the Project Study Area. Construction staging areas would occur entirely within the Vermont Avenue ROW, and construction of the Project would not require any property acquisitions. Therefore, no populations within the Project Study Area would be at risk of direct Project-related residential displacement.

7.2 Residential Market Factors and Land Use Factors

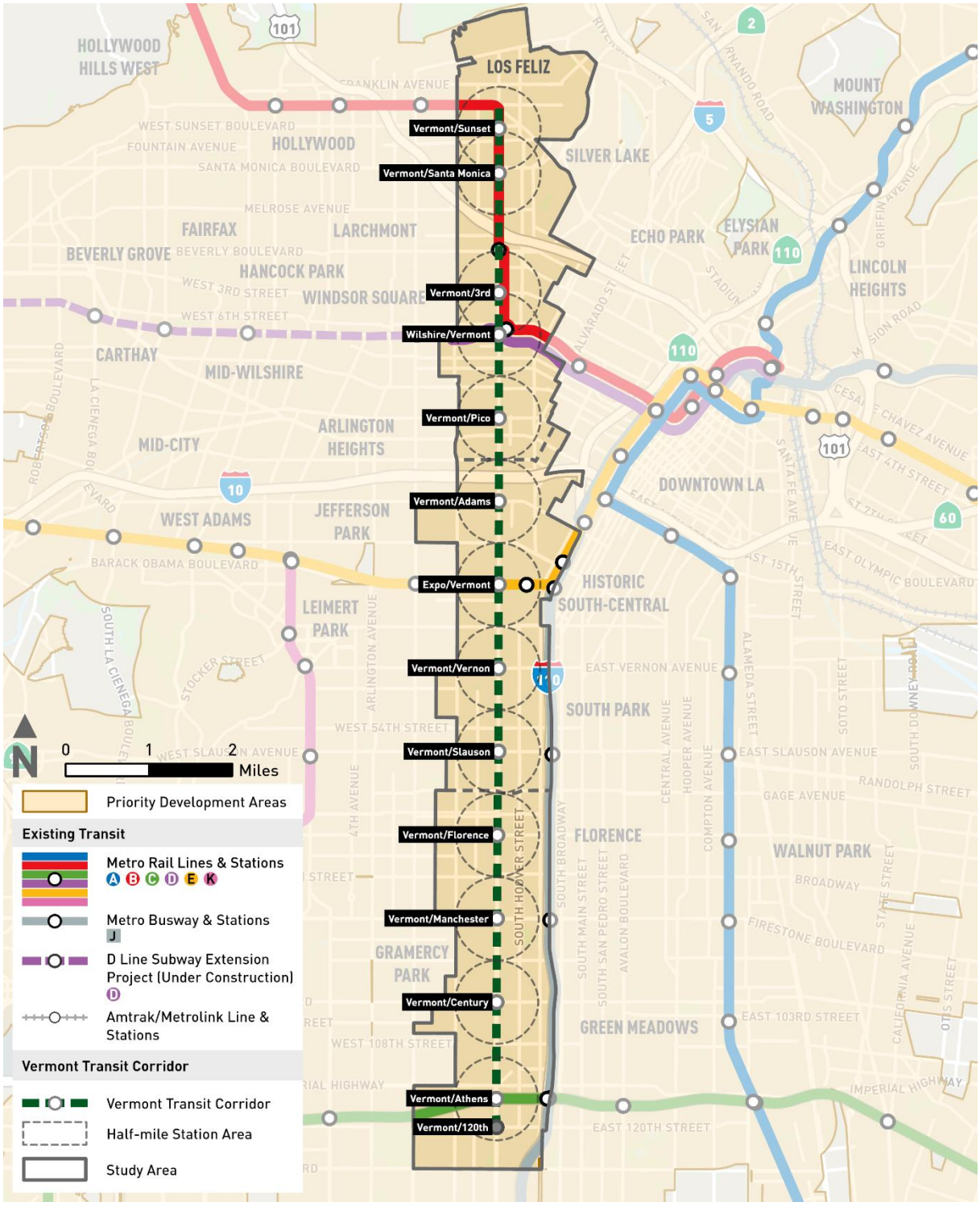
Economic displacement is an indirect displacement that may occur when residents and businesses can no longer afford escalating rents or property taxes due to changes in the market. As discussed above, the Project would not directly contribute to residential displacement. However, as a bus transit project that would provide better transit connectivity in the Vermont Corridor, the Project may indirectly contribute to changes in the residential and development market in the Project Study Area that may result in increased development interest and activity in the corridor.

Metro does not have jurisdiction over land use or other community development efforts that affect residential market changes or population and housing growth. The following analysis identifies how development activities and land use factors may contribute to changes in the residential market. Development activities include public and private sector views of development opportunities in the proposed station areas as reflected in affordable housing and related development projects, as well as assessment of potential community housing impacts resulting from development activity and market trends. Land use factors include land use plans and presence of vacant, underutilized and publicly owned parcels that may become development sites.

7.2.1 Southern California Association of Governments Projected Housing Growth

The Southern California Association of Governments (SCAG) *Connect SoCal 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (Connect SoCal) (SCAG, 2024) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal includes strategies to direct new housing growth toward Priority Development Areas (PDA). PDAs are places within the SCAG region where future growth can be located in order to help the region reach mobility or environmental goals. Generally, this means that people in these areas have access to multiple modes of transportation or that trip origins and destinations are closer together, allowing for shorter trips. PDAs in Connect SoCal 2024 include Neighborhood Mobility Areas, Transit Priority Areas, Livable Corridors and Spheres of Influence (in unincorporated areas only) (SCAG, 2024). The Project is included in the Connect SoCal Project List Technical Report (ID# 11621029) (SCAG, 2024). **Figure 7-1** shows the PDA in the Project Study Area, which plans for higher-density housing. The Project does not directly create growth; instead, the Project could generate future private development interest in transit-oriented communities (TOCs) in the station areas.

Figure 7-1 Southern California Association of Governments Priority Development Areas



Source: Vermont Corridor Partners, 2024.

Note: Dotted lines in the Project Study Area delineate the three subareas (North, Central and South) of the Project Study Area.

7.2.2 Affordable Housing and Rent Stability in the Project Study Area

The City of Los Angeles housing crisis has reached epic proportions and continues to deteriorate. The City of Los Angeles, according to a study by the federal housing agency Freddie Mac, is short 400,000 homes with an estimate of over 75,000 homeless in Los Angeles County and over 46,000 in the City of Los Angeles, a rise of 10% since last year (People's World, 2024). Although, point-in-time data estimates a slight decrease in homeless population in both Los Angeles County and the City of Los Angeles. Rents for new listings throughout Los Angeles County continue to skyrocket with more than half of renters (at all income levels) spending 30% or more of their income on rent. However, academic research has shown that new homebuilding decreases rents or slows rent increases in a region as a whole (Los Angeles Times, 2024).

7.2.2.1 Affordable Housing

Affordable housing is an essential component of Metro's TOC policy, as it provides housing options for low-income communities near transit, while improving access to economic opportunities. Naturally occurring affordable housing properties include residential properties that can maintain low, affordable rents without government subsidies to ensure affordability (The Preservation Compact, 2024). Subsidized affordable housing refers to units which are subsidized by local, state or federal programs and strategies. Households who meet eligibility requirements, including income-limit requirements, may be eligible to qualify for subsidized affordable housing (Los Angeles Housing Department, 2024a). Lower-income households earning 80% of the area median income and below generally qualify for affordable housing (HUD, 2024).

Table 7-1 summarizes existing subsidized affordable housing units located in the Project Study Area and station areas. **Table 7-1** does not include naturally occurring affordable housing properties. There are 331 subsidized affordable housing units in the Project Study Area, of which 259 subsidized affordable housing units are located in a station area. The North subarea has the greatest number of subsidized affordable housing units (115 units), while the South subarea has the fewest subsidized affordable housing units (36 units). At the station area level, the Vermont/Adams Station area in the Central subarea has the greatest number of subsidized affordable housing units (48 units), while the Vermont/Athens Station area in the South subarea has the fewest subsidized affordable housing units (one unit). More affordable housing units are in the North and Central subarea compared to the South subarea.

Table 7-1 Affordable Housing Units in the Project Study Area

Geographic Area and Station Area [a]	Affordable Housing [b]
Project Study Area	331
North Subarea	**115**
Vermont/Sunset	15
Vermont/Santa Monica	17
Vermont/3rd	23
Wilshire/Vermont	35
Vermont/Pico	25
Central Subarea	**108**
Vermont/Adams	48
Expo/Vermont	27
Vermont/Vernon	23
Vermont/Slauson	10
South Subarea	**36**
Vermont/Florence	17
Vermont/Manchester	14
Vermont/Century	4
Vermont/Athens	1

Source: Los Angeles GeoHub, 2020; HUD, 2024.

[a] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is 0.5 miles from each station area.

[b] There are 331 affordable housing units within the Project Study Area; 259 of those units are within 0.5 miles of the station areas.

7.2.2.2 Rent Stability

Rent-stabilization is a form of control over rental housing prices that aims to protect tenants from unreasonable rent hikes. A high share of rent-stabilized residential units in an area indicates residential stability, as rent-stabilized units have greater ability to resist rent increases, which can lead to displacement. The County and City of Los Angeles have rent-stabilization ordinances to limit annual rent increases and regulate evictions on qualifying properties based on the age of the structures. The Los Angeles County Rent Stabilization and Tenant Protections Ordinance fully covers rental units with a Certificate of Occupancy (or equivalent) issued on or before February 1, 1995 (C&BA, 2024). The City of Los Angeles Rent Stabilization Ordinance (RSO) provides rent stabilization to rental units built on or before October 1, 1978 (Los Angeles Housing Department, 2024b).

Table 7-2 summarizes the rent-stabilized parcels within the Project Study Area and station areas. The Central subarea has the highest percentage of rent-stabilized parcels (50.8%), while the South subarea has the lowest percentage of rent-stabilized parcels (34.7%). At the station area level, the Vermont/Sunset Station area in the North subarea has the highest percentage of rent-stabilized parcels in the Project Study Area (64.7%), while the Vermont/Athens Station area has the lowest percentage of rent-stabilized parcels (25.9%). Approximately 44% of all residential parcels in the Project Study Area is rent-stabilized. Rent-stabilized housing tends to be more concentrated in the Central subarea compared to the North and South subareas.

Table 7-2 Rent-Stabilized Parcels in Project Study Area

Geographic Area and Station Area [a]	Rent-Stabilized Residential Parcels (%)[b]
Project Study Area	44.0
North Subarea	**49.9**
Vermont/Sunset	64.7
Vermont/Santa Monica	59.9
Vermont/3rd	40.8
Wilshire/Vermont	30.6
Vermont/Pico	58.8
Central Subarea	**50.8**
Vermont/Adams	57.4
Expo/Vermont	53.7
Vermont/Vernon	50.5
Vermont/Slauson	45.4
South Subarea	**34.7**
Vermont/Florence	31.3
Vermont/Manchester	44.4
Vermont/Century	35.5
Vermont/Athens	25.9

Source: Los Angeles GeoHub, 2024.

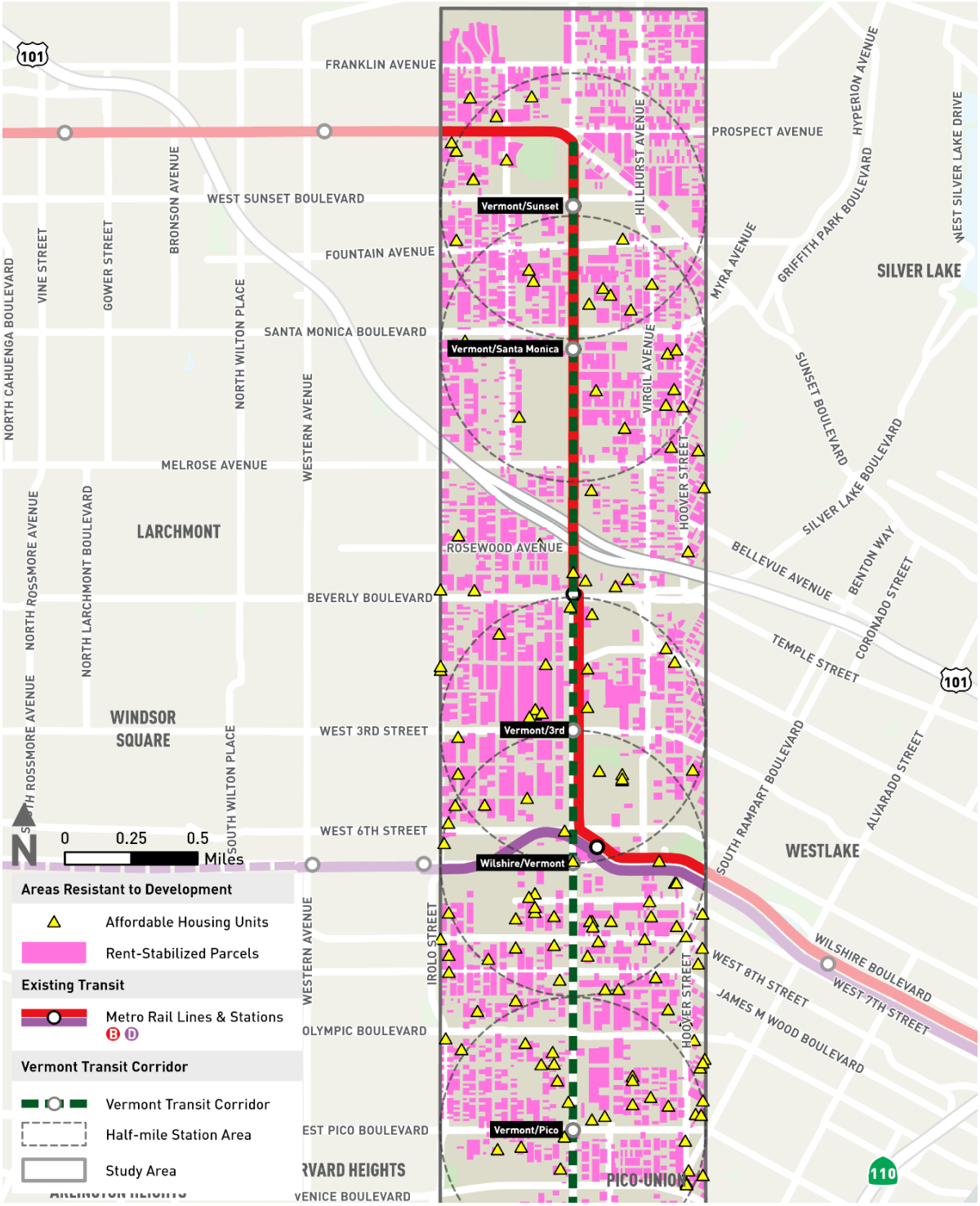
[a] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is 0.5 miles from each station area.

[b] Rent-stabilized parcels are defined as existing multi-family residential land uses built on or before October 1, 1978. Units constructed after July 15, 2007 that replace demolished rent stabilization ordinance (RSO) rental units may also be covered under the RSO.

Figure 7-2 through **Figure 7-4** show the rent-stabilized parcels and existing affordable housing in the Project Study Area and station areas.

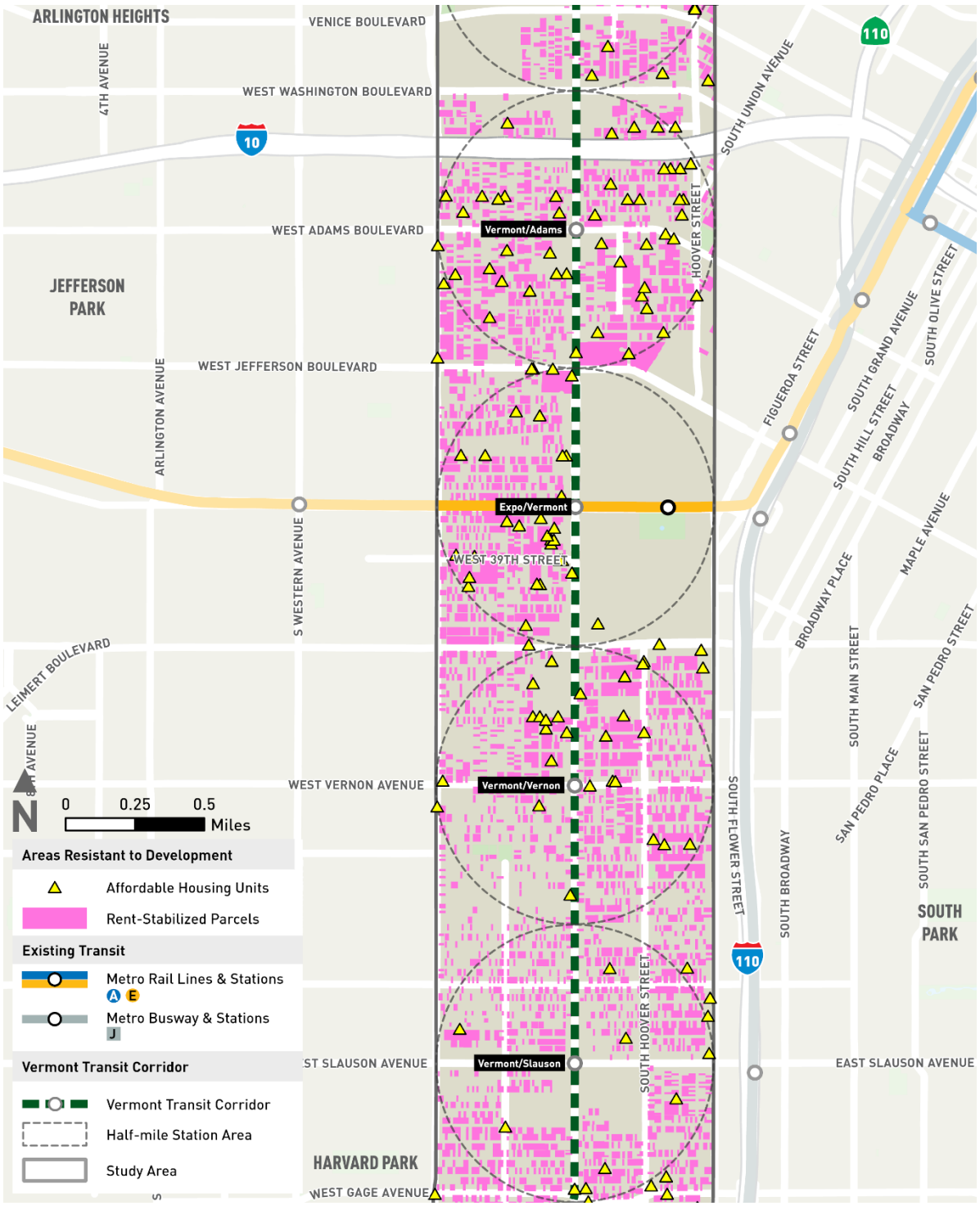
Based on the above tables and shown on the figures, there is residential stability for renters living in each of the subareas and existing affordable housing in the Project Study Area that contributes to reduced pressure on economic development. However, the housing crisis continues to affect this area. As demonstrated in Section 7.2.6, most proposed and under construction housing developments in the Project Study Area are market-rate. The Project would serve the growing community with better transit connections through the Vermont Corridor but would not directly create growth or new residents or cause people to move into the area. The Project may indirectly spur new opportunities and interest for housing development near transit stations that may benefit the community and increase the overall housing supply in the area. The rent-stabilized parcels identified may also minimize potential rent increases that could affect the vulnerable communities in the Project Study Area. The Project may indirectly contribute to the changing residential market in residential displacements that may affect vulnerable communities.

Figure 7-2 Affordable Housing and Rent-Stabilized Parcels in Project Study Area, North Subarea



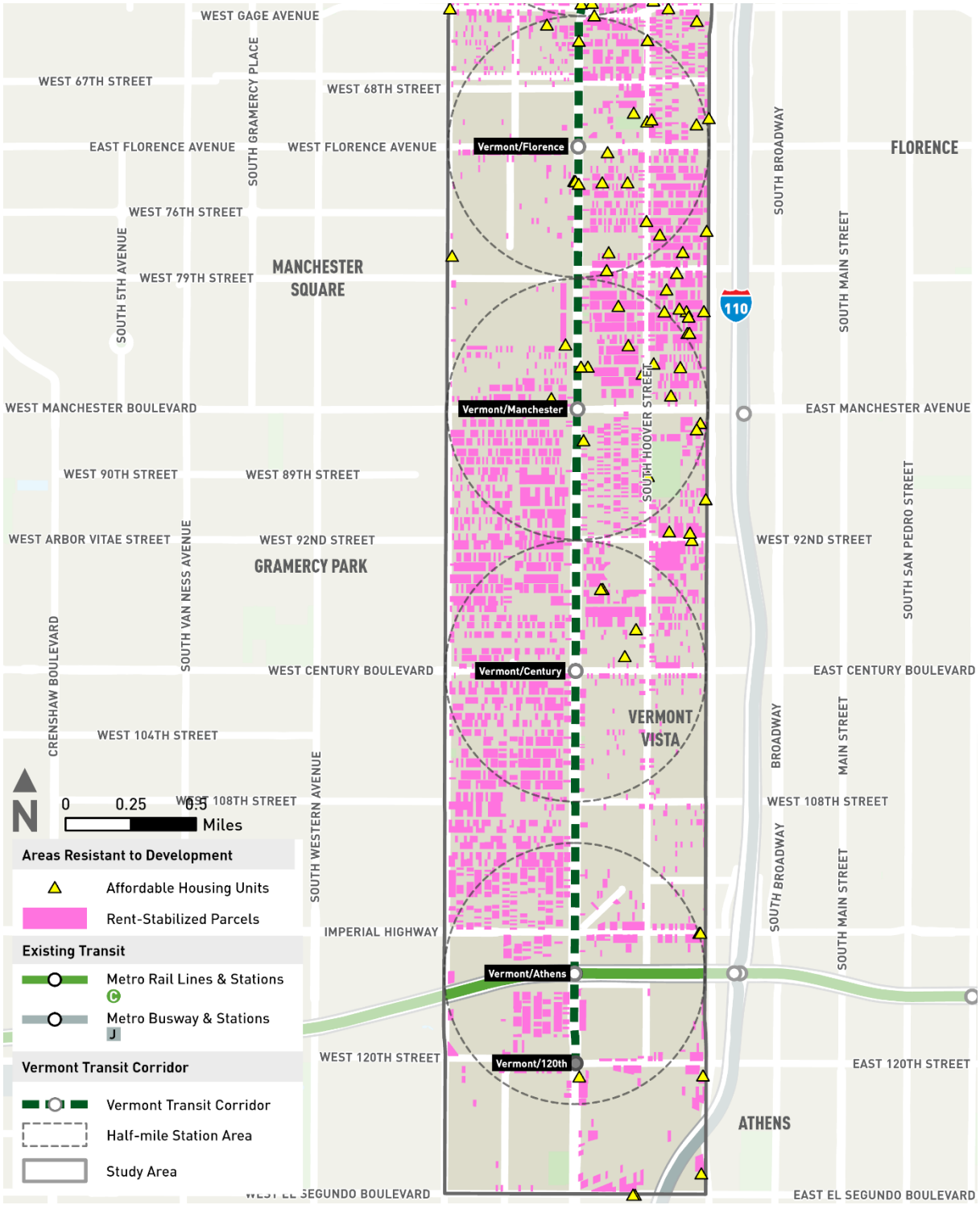
Source: Vermont Corridor Partners, 2024.

Figure 7-3 Affordable Housing and Rent-Stabilized Parcels in the Project Study Area, Central Subarea



Source: Vermont Corridor Partners, 2024.

Figure 7-4 Rent-Stabilized Parcels and Affordable Housing in the Project Study Area, South Subarea



Source: Vermont Corridor Partners, 2024.

7.2.3 Housing Development Opportunities

Many of the existing land uses in the Project Study Area's current residential neighborhoods do not match the scale and density allowed under adopted land use and zoning plans, which result in residential areas being identified as underutilized and as possible sites for higher-density development. These include existing single-family residential land uses located on parcels zoned for higher-density residential, and any existing residential land use parcel located in commercial zoning. Existing residential uses that are developed at densities lower than zoning requirements represent potential housing market-related opportunities to increase the housing supply in the station areas.

Table 7-3 summarizes the percentage of existing residences that are developed at densities lower than zoning requirements in the Project Study Area.

Table 7-3 Residences Under Allowable Density at Station Areas in the Project Study Area

Geographic Area and Station Area [a]	Existing Residences Developed at Densities Lower than Zoning Requirements (%)[b]
Project Study Area	15.6
North Subarea	**34.3**
Vermont/Sunset	10.8
Vermont/Santa Monica	10.3
Vermont/3rd	51.7
Wilshire/Vermont	62.4
Vermont/Pico	27.3
Central Subarea	**8.8**
Vermont/Adams	5.9
Expo/Vermont	9.2
Vermont/Vernon	12.4
Vermont/Slauson	7.3
South Subarea	**10.2**
Vermont/Florence	11.8
Vermont/Manchester	14.2
Vermont/Century	10.0
Vermont/Athens	2.9

Source: Los Angeles GeoHub, 2024.

[a] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is 0.5 miles from each station area.

[b] Residences Under Allowable Density are defined as existing single-family residential land uses located in high-density residential zoning (R3, R4, R4P, R5, R5P, RAS4 and RD3), or any existing residential land use located in commercial zoning. Also known as residences at-risk of displacement, these indicate potential for displacement.

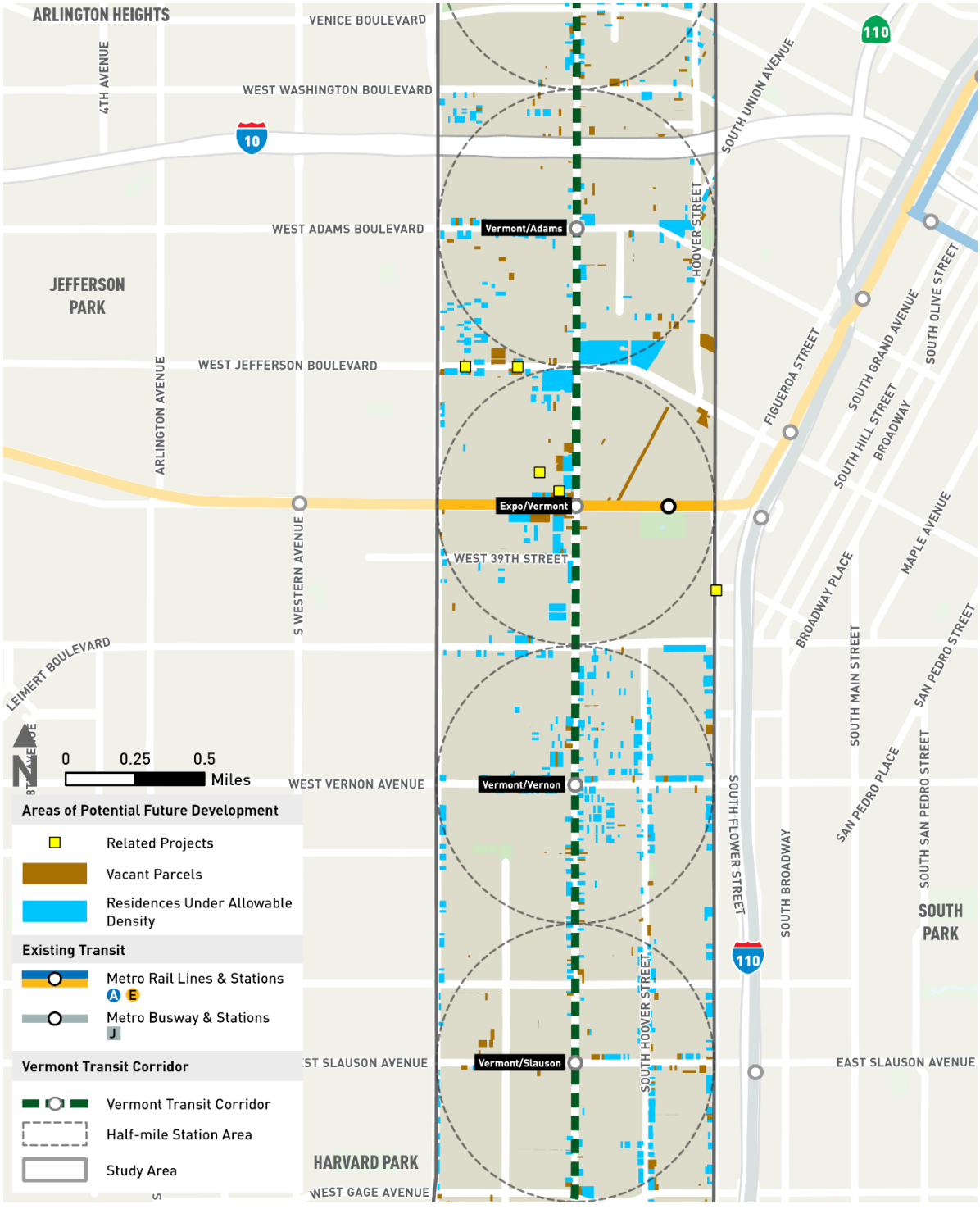
Approximately 15.6% of all residences in the Project Study Area can be developed at higher densities than what is allowed under the existing zoning. The North subarea has the highest percentage of residential parcels that can be developed at higher densities (34.3%), while the Central subarea has the lowest percentage (8.8%). At the station area level, the Wilshire/Vermont Station area in the North subarea has the highest percentage of residential parcels that can be developed at higher densities (62.4%), while the Vermont/Athens Station area in the South subarea has the lowest percentage (2.9%). This shows that there is opportunity to increase housing densities in the North subarea, while the existing residential parcels are built at the allowable density in the Central subarea. However, it should be noted that residential parcels with single family residences may be owned by middle-income or working-class households and could directly benefit from the Project. Nonetheless, the Project may indirectly spur new opportunities and interest for housing development near transit stations. As such, the Project may indirectly contribute to the changing residential market in residential displacements that may affect vulnerable communities.

Figure 7-5 through **Figure 7-7** show the land uses and development activities that may indirectly cause residential displacement in the North, Central and South subareas. Residences under allowable density in the Project Study Area and station areas are identified.

Figure 7-5 Land Uses and Development Activities that May Indirectly Cause Residential Displacement, North Subarea

Source: Vermont Corridor Partners, 2024.

Figure 7-6 Land Uses and Development Activities that May Indirectly Cause Residential Displacement, Central Subarea



Source: Vermont Corridor Partners, 2024.

Figure 7-7 Land Uses and Development Activities that May Indirectly Cause Residential Displacement, South Subarea

Source: Vermont Corridor Partners, 2024.

7.2.4 Vacant and Underutilized Parcels

7.2.4.1 Vacant Parcels

Vacant parcels refer to parcels not in use or unoccupied. Vacant and underutilized parcels are identified to highlight possible future development opportunities in the Project Study Area. Vacant parcels developed with market-rate or luxury housing could lead to gentrification and economic displacement. However, if affordable housing is constructed on vacant parcels, vulnerable communities may benefit from the development.

Table 7-4 summarizes the number of vacant parcels and the minimum and maximum square footage of the parcels within the Project Study Area and station areas.

Figure 7-5 through **Figure 7-7** show the land uses and development activities that may indirectly cause residential displacement in the North, Central and South subareas. The vacant parcels in the Project Study Area and station areas are identified.

Table 7-4 Vacant Parcels at Station Areas in Project Study Area

Geographic Area and Station Area [a]	Number of Vacant Parcels [b]	Size Range of Vacant Parcels (square feet) [c]
Project Study Area	788	10 to 131,000
North Subarea		
Vermont/Sunset	42	1,170 to 54,000
Vermont/Santa Monica	49	30 to 54,000
Vermont/3rd	31	30 to 95,000
Wilshire/Vermont	30	80 to 95,000
Vermont/Pico	79	170 to 49,000
Central Subarea		
Vermont/Adams	61	10 to 14,000
Expo/Vermont	25	390 to 131,000
Vermont/Vernon	39	60 to 15,000
Vermont/Slauson	77	40 to 27,000
South Subarea		
Vermont/Florence	44	380 to 22,000
Vermont/Manchester	56	210 to 63,000
Vermont/Century	24	300 to 12,000
Vermont/Athens	36	730 to 63,000

Source: Los Angeles County Assessor, 2023.

[a] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is 0.5 miles from each station area.

[b] Vacant parcels refer to parcels not in use or unoccupied.

[c] Square footage is rounded to the nearest whole number.

Of the vacant parcels identified in the Project Study Area, the Central subarea has the highest percentage of vacant parcels (2.5%), while the South subarea has the lowest percentage (1.7%). At the station area level, the Vermont/Pico Station area has the highest percentage of vacant parcels (4.1%), while the Vermont/Century Station area has the lowest percentage of vacant parcels (1.0%) within the Project Study Area.

The 788 vacant parcels identified in the Project Study Area range in size, with the smallest parcel measuring 10 square feet to the largest vacant parcel measuring 131,000 square feet. Many of the vacant parcels are small in size and are scattered throughout the proposed station areas, making future land assembly challenging. However, larger parcels may be available for future residential planning and development. Each station area could have the potential for future residential planning and development, but the level of residential development would vary based on the contiguous parcels and size.

7.2.4.2 Underutilized Parcels

Several of the parcels in the station areas are also identified as underutilized, as existing land uses do not match land use and zoning plan potential and/or the land value exceeds the building value due to increasing land values. The underutilized parcels represent a mismatch between existing land uses and zoning plans, primarily in residential neighborhoods. Each of the station areas in the North subarea and the Vermont/Adams and Expo/Vermont station areas in the Central subarea have a moderate number of underutilized parcels. Existing development in the Vermont/Vernon Station area most closely matches the land use and zoning plans, and the existing building investment closely matches the land value; thus, this station area has a low number of underutilized parcels. Existing development in the Vermont/Slauson station area in the North subarea and the station areas in the Central subarea have a high number of underutilized parcels, indicating that the existing development does not match the land use and zoning plans, and the existing land value exceeds the building value.

Based on the number of vacant parcels and the scattered location of vacant parcels, there may be limited housing development opportunities. However, there may be housing opportunities in station areas that have moderate to high levels of underutilized parcels or on the larger parcels. The Project may indirectly spur new opportunities and interest for housing development on vacant and underutilized parcels in station areas. As such, the Project may indirectly contribute to the changing residential market in residential displacements that may affect vulnerable communities.

7.2.5 Publicly-Owned Parcels

Publicly owned parcels are considered in order to assess possible partnering opportunities that could increase housing developments in the Project Study Area.

Table 7-5 summarizes the number of publicly owned parcels and the public agency parcel ownership in the Project Study Area and station areas. The publicly owned parcels in the Project Study Area include parcels owned by Los Angeles Unified School District (LAUSD), City of Los Angeles, Los Angeles County, Metro, State of California, United States Postal Service (USPS) and Los Angeles Community College District (LACCD).

Table 7-5 Publicly-Owned Parcels at Station Areas in the Project Study Area

Geographic Area and Station Area [a]	Number of Publicly Owned Parcels	Public Agency Ownership	
Project Study Area	610	—	
North Subarea	**224**	—	
Vermont/Sunset	30	LAUSD: 10 Metro: 5	City of Los Angeles: 14 USPS: 1
Vermont/Santa Monica	46	LAUSD: 24 Metro: 4	City of Los Angeles: 15 LACCD: 3
Vermont/3rd	40	LAUSD: 30 Metro: 4	City of Los Angeles: 5 USPS: 1
Wilshire/Vermont	38	LAUSD: 21 Los Angeles County: 7 USPS: 1	City of Los Angeles: 6 Metro: 3
Vermont/Pico	70	LAUSD: 63	City of Los Angeles: 7
Central Subarea	**253**	—	
Vermont/Adams	72	LAUSD: 63	City of Los Angeles: 9
Expo/Vermont	47	LAUSD: 9 Los Angeles County: 1 State of California: 18	City of Los Angeles: 7 Metro: 12
Vermont/Vernon	15	LAUSD: 8	City of Los Angeles: 7
Vermont/Slauson	119	LAUSD: 115	City of Los Angeles: 4
South Subarea	**133**	—	
Vermont/Florence	36	LAUSD: 29	City of Los Angeles: 7
Vermont/Manchester	41	LAUSD: 9 Los Angeles County: 7	City of Los Angeles: 24 USPS: 1
Vermont/Century	28	LAUSD: 2 Los Angeles County: 7	City of Los Angeles: 19
Vermont/Athens	28	LAUSD: 9 Metro: 1	Los Angeles County: 14 State of California: 4

Source: Los Angeles County Assessor, 2024.

Notes:

[a] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is 0.5 miles from each station area.

"—" = Not Applicable

There are 610 publicly owned parcels distributed fairly evenly throughout the Project Study Area, demonstrating the high number of public facilities in the area. The following breaks down the land ownership in the Project corridor by the public agencies:

- LAUSD: 392 parcels housing school facilities located in all three subareas for the Project.
- City of Los Angeles: 124 parcels located at every proposed station area, except the Vermont/Athens Station area in the South subarea where LAUSD owns property. City of Los Angeles-owned parcels include property owned by the City of Los Angeles Housing Authority, Redevelopment Agency, Public Library, Recreation and Parks, Fire Department and Department of Water and Power.
- Los Angeles County: Properties located at five proposed station areas, including the County Department of Mental Health Administration offices in the Wilshire/Vermont Station area in the North subarea; several museums and sports facilities in the Expo/Vermont Station area in the Central subarea; Seeking Educational Equity and Diversity Charter School in the Vermont/Manchester Station area and property owned by County Housing Authority at the Vermont/Century and Vermont/Athens station areas in the South subarea.
- Metro: 29 parcels located at the station areas serving the Metro B, C, D and E lines. The Metro park-and-ride lot in the Vermont/Athens Metro C Line station area is Caltrans-owned property.

The Vermont/Slauson Station area in the Central subarea has the highest number of publicly owned parcels (119 parcels) and the Vermont/Vernon Station area in the Central subarea has the lowest number of publicly owned parcels (15 parcels). Of the 119 parcels in the Vermon/Slauson Station area, 115 parcels are owned by LAUSD, and four parcels are owned by Metro. The LAUSD parcels include the Budlong Avenue Elementary School, John Muir Middle School and Augustus F. Hawkins High School. In contrast, of the 15 parcels in the Vermont/Vernon Station area, eight parcels are owned by LAUSD, and seven parcels are owned by the City of Los Angeles. The LAUSD parcels include Manual Arts High School, and the area is primarily developed with single-family residences. The identified publicly owned parcels in the Project Study Area are fully occupied and utilized by their public agency owners at the time of this Residential Displacement Analysis Report preparation.

7.2.6 Proposed and Under-Construction Residential Projects

Several proposed or under-construction residential projects are identified in the Project Study Area. **Table 7-6** summarizes the proposed or under-construction housing projects in the Project Study Area and station areas. **Figure 7-5** through **Figure 7-7** show the land uses and development activities that may indirectly cause residential displacement in the North, Central and South subareas. The proposed and under-construction residential projects in the Project Study Area and station areas are identified.

Table 7-6 Proposed and Under-Construction Housing Projects in Project Study Area

Geographic Area and Station Area [a]	Number of Housing Projects [b]	Number of Market Rate Units [c]	Number of Affordable Units [d]
Project Study Area	32	1,760	552
North Subarea	**22**	**1,174**	**218**
Vermont/Sunset	1	92	11
Vermont/Santa Monica	2	43	6
Vermont/3rd	0	0	0
Wilshire/Vermont	10	425	35
Vermont/Pico	7	352	140
Central Subarea	**6**	**323**	**108**
Vermont/Adams	0	0	0
Expo/Vermont	3	323	108
Vermont/Vernon	0	0	0
Vermont/Slauson	0	0	0
South Subarea	**4**	**263**	**226**
Vermont/Florence	1	85	8
Vermont/Manchester	2	114	198
Vermont/Century	0	0	0
Vermont/Athens	1	64	20

Source: Los Angeles County Assessor, 2023.

[a] Project Study Area data are aggregated from census tracts whose geographic center (centroid) are within 0.5 miles of the Vermont Corridor. Station Area is 0.5 miles from each station area.

[b] There are 32 housing projects within the Project Study Area. Of the 32 projects identified, 18 projects are within 0.5 miles of the station areas.

[c] Within the 32 projects identified are a total of 1,760 market-rate housing units.

[d] Within the 32 projects identified are a total of 552 affordable housing units.

Of the 32 proposed residential projects identified, 18 projects are in station areas and represent housing supply growth in the Vermont Corridor and in the station areas. Of the 32 proposed residential projects identified in the Project Study Area, 24 of the residential projects include affordable housing units. The North subarea has the most proposed or under-construction residential projects (16 projects), while the Central subarea has the fewest projects (three projects). At the station area level, the Wilshire/Vermont Station area in the North subarea has the most residential projects proposed or under-construction (seven projects). The Vermont/3rd Station area in the North subarea; Vermont/Adams, Vermont/Vernon, and Vermont/Slauson station areas in the Central subarea; and the Vermont/Florence and Vermont/Century station areas in the South subarea have no residential projects.

The new residential projects show that there is investment into the housing supply in the Vermont Corridor. Housing development is being undertaken primarily by the public sector, with increasing but still limited private sector interest throughout the Project corridor. Private-sector housing projects built to date include a combination of market rate only units and market rate with affordable housing units. The number of public sector housing projects demonstrates the priority of the City of Los Angeles and Los Angeles County in providing affordable housing which is matched with the availability of funding.

Although the residential projects are not invested evenly across the Vermont Corridor, this would nonetheless increase the housing and affordable housing supply in the Project Study Area. In addition to the proposed and under-construction residential projects in the Project Study Area, the Project may indirectly spur new opportunities and interest for housing development in the station areas. As such, the Project may indirectly contribute to the changing residential market in residential displacements that may affect vulnerable communities.

8 STRATEGIES TO REDUCE THE POTENTIAL OF INDIRECT RESIDENTIAL DISPLACEMENT

The Project is a BRT project located entirely within the Vermont Avenue public ROW and would not directly contribute to residential displacement during the construction or operation phases. However, the Project may indirectly spur new opportunities and interest for housing development near transit stations. New housing development may benefit the community and increase the overall housing supply in the area the Project. Nonetheless, the indirect contribution to the changing residential market in residential displacements through Project implementation may also affect vulnerable communities. This section discusses strategies to address the Project's changes to residential market in the Project Study Area and reduce the potential for indirect residential displacement in the Project Study Area.

Metro has the role of planning, designing, building and operating the regional transportation system, which brings positive benefits from the resulting ability to move people on a fast, clean public transportation system. There is a growing desire to identify ways to better leverage the positive benefits that come with the public transportation system, while guarding against potential unintended consequences, especially in vulnerable communities as identified in Section 5 above. Metro has sought to look beyond individual transit and transit-oriented development projects, and to identify how the agency can influence, implement and leverage its investments to have broader positive community impacts that increase ridership, while improving the quality of life of the people it serves.

Metro is responsible for planning, constructing and operating the BRT Project. Metro acknowledges that for public transit to be successful, the planning and delivery process must leverage partnerships with the public agencies who are responsible for land use planning, along with community members and CBOs who work with agencies on land use decision-making. Metro is a transit agency and does not have jurisdiction over land use or other community development efforts that address residential market changes, population and housing growth, or strategies to address residential displacement. The implementation of development in the corridor would fall outside of the jurisdiction of Metro. Development and other improvement projects would be implemented by the City of Los Angeles, Los Angeles County and private developers.

Metro has identified ways to leverage its power as planner and builder of the regional transit system and as a major funding entity to enable and incentivize municipalities to embrace and implement supportive goals, policies and plans that focus on equity and minimizing adverse impacts on vulnerable communities. Strategies to address and reduce the potential for indirect residential displacement identified in this Residential Displacement Analysis Report are focused on Metro coordination and partnerships with the Los Angeles County and City of Los Angeles, public agencies, private developers, CBOs and other community organizations.

8.1 Coordination Efforts with Local Jurisdictions

Metro coordination with Los Angeles County and the City of Los Angeles could provide land use planning opportunities for affordable housing and transportation improvements in vulnerable communities. Coordination efforts with Metro, Los Angeles County and the City of Los Angeles may include the following land use strategies to reduce the potential for indirect residential displacement:

- **Update or amend general, community and specific plans and zoning codes** to include the implementation of TOC policies in the station areas, with stronger requirements and incentives. Upcoming zones along Vermont Avenue and major east-west streets in and between the station areas may attract higher-density development and shift mixed-use development away from being built in adjacent station area residential areas.
- **Encourage use of a wider range of plan types and districts** that may include Transit Neighborhood Plans (TNPs), Community Plan Implementation Overlay (CPIO) districts, specific plans at station areas, pedestrian- and community focused districts, streetscape plans and housing stabilization plans. TNPs could target TOC policies for the station areas, including policies and incentives to address provision of mixed-use development, affordable housing production and multimodal station access improvements. CPIO districts could support development and incentivization of TOC efforts, including provision of affordable housing, community services and amenities and active transportation improvements. Specific plans may include policies for higher-density and mixed-use zoning requirements and incentives aligned with the Project and Metro's TOC policy.
- **Develop Project corridor-specific affordable housing plans, strategies and design guidelines** to address affordable housing needs. This would take into consideration that the housing authorities of the City of Los Angeles and Los Angeles County own property in the corridor; there is public funding available, and there is developer interest in Project corridor-specific affordable housing plans and strategies. Guidelines and policies could include rent-control stabilization ordinances, replacement of rent-controlled units, rent subsidies, housing ownership programs, public/community land trusts and tenant protections. Strategies to reduce the potential for indirect displacement and gentrification could include provision for affordable housing projects specific to each station area's needs.
- **Develop TOC policies, plans and programs, and TOC strategies** to address the production and protection of affordable units. Identifying and implementing station area TOC community and multimodal improvements as part of the future first/last mile planning efforts would be important. The provision of multimodal improvements contributing to the creation of a compact walkable, bikeable and transit-oriented neighborhood would increase transit ridership and community quality of life.
- **Engage stakeholders, CBOs and local communities** in developing a vision for the Vermont Corridor and the proposed station areas and strategies to promote equitable TOCs with a mix of land uses, housing affordability and access to transit stations. Hold Project corridor-wide planning workshops with city and county staff, CBOs and community members.
- **Secure regional, state and federal funding** for TOC planning and community improvement efforts. Metro also has funding programs available to local jurisdictions to perform TOC-supportive studies near transit.

8.2 Partnerships with Public Land Ownership

For a majority of the publicly owned sites in the Project Study Area, the land was assembled for specific public purposes which have not changed and are not easily relocated (i.e., libraries, recreation and parks, fire stations and Department of Water and Power facilities). While the publicly owned sites in the Project Study Area are currently utilized, there may be future partnership

opportunities in which the sites can serve both the agency's specific public purpose and another public use, such as provision of housing.

For example, LAUSD assembled land and built schools along the Project corridor to serve a growing student population. Agencies may consider shared use in the future to address changing public needs and generate operational revenue. Los Angeles County purchased land for public uses that have not changed and are part of making a livable community and city: museums and sports facilities in the proposed Vermont/Expo Station area and county service offices in the proposed Vermont/Wilshire Station area.

The California Department of Transportation owns and operates freeway-related land by the existing Athens/C Line Station, which could offer limited future development opportunities, as housing is limited in such close proximity to the freeways. USPS has also sought revenue-producing opportunities on their properties in other locations, though typically, on larger sites such as their Terminal Annex facility at Los Angeles Union Station.

8.3 Joint Development Opportunities

Metro's Joint Development Program is a real estate development program for properties owned by Metro. Joint Development sites are typically built on vacant parcels adjacent to transit projects. No property acquisition is planned for the Project. As stated in the *Metro BRT Vision and Principles Study* (Metro, 2020), "BRT projects typically do not require acquisition of significant amounts of property, and therefore Metro is unlikely to undertake joint development at a large scale." However, Metro owns 29 parcels in the Project Study Area, located in the rail station areas serving the Metro B, C, D and E lines, and a Metro parking lot in the Athens/C Line Station. These parcels could serve the users of the BRT.

9 CONCLUSION

Vulnerable communities that would experience the most effects from residential and development market changes would be BIPOC populations, low-income households and renter-occupied households compared to the general population in the Project Study Area. The Project Study Area and each of the subareas have a high percentage of BIPOC populations, low-income households and renter-occupied households and include vulnerable communities that may be affected by residential displacement. As discussed above, the Project would not directly contribute to residential displacement. However, as a bus rapid transit project that would provide better transit connectivity in the Vermont Corridor, the Project may indirectly contribute to changes in the residential and development market within the Project Study Area that may result in increased development interest and activity in the corridor.

Metro is a transit agency does not have jurisdiction over land use or other community development efforts that address residential market changes, population and housing growth and strategies to address residential displacement. The implementation of development in the corridor would fall outside of the jurisdiction of Metro. Development and other improvement projects would be implemented by the City of Los Angeles, Los Angeles County and private developers. Thus, strategies to address and reduce the potential of indirect residential displacement is focused on Metro coordination and partnerships with Los Angeles County, the City of Los Angeles, public agencies, private developers, CBOs and other community organizations.

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Los Angeles County
Metropolitan Transportation Authority

Business Case Analysis

Metro®

VERMONT TRANSIT CORRIDOR PROJECT

Contract No. AE97976000

Business Case Analysis

Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

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ABBREVIATIONS/ACRONYMS

ADA	Americans with Disabilities Act
BCA	benefit-cost analysis
BCR	benefit-cost ratio
BEA	Bureau of Economic Analysis
BRT	bus rapid transit
CalSTA	California State Transportation Agency
CBO	Community-based organization
CEQA	California Environmental Quality Act
CMF	crash modification factor
EFC	Equity Focus Community
I-10	Interstate 10; Santa Monica Freeway
I-105	Interstate 105; Glen Anderson Freeway
I-110	Interstate 110; Harbor Freeway
LACC	Los Angeles City College
LRTP	Long Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21st Century Act
Metro	Los Angeles County Metropolitan Transportation Authority
Metro Board	Metro Board of Directors
O&M	operating and maintenance
OPR	California Governor's Office of Planning and Research
PRC	California Public Resources Code
Project	Vermont Transit Corridor Project
ROM	rough-order-of-magnitude
ROW	right-of-way
SB	Senate Bill
SCAG	Southern California Association of Governments
TIMS	Transportation Injury Mapping System
U.S.	United States
US-101	United States Highway 101
USC	University of Southern California
USDOT	United States Department of Transportation
VMT	vehicle miles traveled
VTC	Vermont Transit Corridor Project
YOE	year of expenditure
%	Percent
$	United States dollars

EXECUTIVE SUMMARY

The Vermont Transit Corridor Project (VTC; the "Project") proposes a 12.4-mile-long, high-quality transit alternative along Vermont Avenue from 120th Street on the south to Sunset Boulevard on the north with 26 bus rapid transit (BRT) stations at 13 station locations.

The Los Angeles County Metropolitan Transportation Authority (Metro) is seeking a statutory exemption under the California Environmental Quality Act (CEQA) through Senate Bill 922 codified as California Public Resources Code (PRC) Sections 21080.20 and 21080.25. Under PRC Section 21080.25, this Business Case Analysis will substantiate the case for the applicability of the statutory exemption to the Project. This executive summary provides the conclusions of the analysis of this report. This Business Case Analysis makes a strategic, economic, financial, and delivery and operations case for the Project, which would return a strong value for money.

Case for Change: Vermont Avenue is the busiest north-south travel corridor in the Metro bus system. The existing service faces performance deficiencies related to vehicle speeds, reliability, and overall user experience due to the severe traffic congestion and adverse operating conditions. The selected Project would improve efficiency along the congested corridor and facilitate safe and accessible transport to major employment and attraction hubs. The Project supports the ambitions and goals from federal, state, and local governments.

Strategic Case: The Project would improve transit performance and transit-rider experience by increasing carrying capacity and enhancing service reliability. The Project's connectivity would support the equitable development of transit neighborhoods. Electric buses would help to meet environmental goals and improve air quality for residents. Enhanced station facilities would improve multimodal access to destinations, improve safety, and make transfers more efficient.

Economic Case: The Project is expected to produce favorable economic returns and have a "Very High Value for money". Capital expenditures from the Project construction could generate up to 800 additional jobs annually and $436 million across the 35-month construction period. Operating and maintenance (O&M) expenditures from the Project could yield up to 260 additional jobs annually and almost $17.5 million annually across the Project lifetime.

Financial Case: The Project is projected to save $18.99 million by eliminating Metro Rapid Route 754 and reducing Metro Line 204 travel times, resulting in a net O&M cost increase of $8.54 million. Current ridership is expected to increase by 130%, driving higher fare revenues for the Project. The Project will also generate tax revenues, including $341,000 during construction and $18,000 annually from O&M activities. Funding will be sourced from local, state, and federal entities, including Measure M and federal grants, with fare revenues and O&M savings supporting ongoing operations.

Delivery and Operations Case: This Project consists largely of implementing improvements to an existing transit system, making the improvements and implementation viable for Metro. Only approximately one third of the Project O&M costs are expected to be additive relative to No Project scenario. Alternative as the Project allows for the elimination of other service costs. Secure and reliable funding sources have been identified for the Project and include a variety of local, state and federal sources, including Measure M. O&M costs are anticipated to be funded, in part, by increased fare revenues from increased ridership.

1 INTRODUCTION

Metro is conducting the planning and environmental study for the Project. The Project is intended to provide a high-quality transit alternative along Vermont Avenue from 120th Street on the south to Sunset Boulevard on the north (approximately 12.4 miles). It is the busiest north-south travel corridor in the entire Metro bus system with approximately 36,000 daily boardings, connecting the Metro B/D Lines (Red/Purple), E Line (Expo) and C Line (Green), as well as various east-west bus lines, to many key activity centers, including educational, cultural, medical, governmental and faith-based institutions (**Figure 1-1**). The Study Area includes several densely populated and Metro-defined Equity Focus Communities (EFCs).[1] The Project would also offer a vital north-south transit alternative to residents and businesses west of the Interstate 110 (I-110; Harbor Freeway) and an opportunity to reinvest in communities along the Vermont Corridor.

1.1 Project Background

Two previous studies were completed evaluating the feasibility of implementing BRT and rail alternatives along Vermont Avenue, including the 2017 *Vermont Bus Rapid Transit Technical Study* (2017 BRT Technical Study) (Metro, 2017) and the 2019 *Vermont Transit Corridor – Rail Conversion/Feasibility Study* (2019 Rail Feasibility Study) (Metro, 2019). The 2017 BRT Technical Study identified strategies for improving bus service along Vermont Avenue, focusing on the feasibility of implementing BRT, which could include several elements such as dedicated bus lanes, enhanced station stops, all-door boarding, and transit signal priority. The purpose of the 2019 Rail Feasibility Study was to further evaluate the most promising BRT concepts developed earlier as part of the 2017 BRT Technical Study to ensure that their implementation would not preclude a potential conversion to rail in the future. The study was to also look at and assess the feasibility of potential future rail alternatives for the Vermont Corridor.

Additionally, in Winter/Spring 2022, Metro partnered with several community-based organizations (CBO) to conduct a pre-environmental community-based planning effort to engage with community partners and stakeholders early to build a common vision for the corridor, listen to their transit needs and concerns, and incorporate their feedback into the development of an equitable transit solution for the corridor.

Based on what was heard during that effort, the Metro Board directed staff to advance the Vermont Transit Corridor using a three-pronged approach, including:

- Near-term improvements to the existing bus service that could be implemented in a relatively short time frame
- Mid-term BRT to be implemented after the near-term improvements
- Long-term rail subject to funding availability

[1] Metro's Equity Platform defines EFCs as "areas in which at least 40% of residents are low-income, and 80% of residents are people of color [Black, Indigenous, and other People of Color (BIPOC)], or 10% of the households do not have a car" (Metro, 2024).

Figure 1-1: Vermont Transit Corridor Study Area

Source: Vermont Corridor Partners, 2024

1.2 Project Study Area

Figure 1-1 shows the Project's Study Area, which is bordered by El Segundo Boulevard to the south, Los Feliz Boulevard to the north, I-110 to the east, and transitions between Western Avenue and Normandie Avenue to the west. The proposed Project alignment would extend approximately 12.4 miles from 120th Street, south of the Vermont/Athens Metro C Line Station, to Sunset Boulevard, at the Vermont/Sunset Metro B Line Station in Hollywood. The majority of the Study Area is located within the City of Los Angeles with approximately 2.5 miles at the southern end (western side of Vermont Avenue only) in unincorporated Los Angeles County.

The Study Area includes several City of Los Angeles communities, including East Hollywood/Los Feliz, University Park/Exposition Park, Koreatown and South Los Angeles. The Study Area also includes the West Athens and Westmont communities in unincorporated Los Angeles County. These communities have some of the highest population densities in the region and have a disproportionately high proportion of transit-dependent residents.

The Study Area contains several cultural and institutional amenities as well as many major activity centers, including, but not limited to, University of Southern California (USC), BMO Stadium, Exposition Park Museums, Kaiser Permanente Los Angeles Medical Center, Children's Hospital and Los Angeles City College (LACC).

1.3 Purpose of Report and Structure

Metro is seeking a statutory exemption under the California Environmental Quality Act (CEQA) through Senate Bill (SB) 922 codified as California PRC Sections 21080.20 and 21080.25. As required under PRC Section 21080.25, this Business Case Analysis will substantiate the case for the applicability of the statutory exemption to the Project. This report will:

- Set forth the rationale for why the Project should be implemented to solve an issue or address an opportunity
- Outline strategic goals and objectives of the Project
- Evaluate other options to achieve the Project's objectives
- Describe the economic costs and benefits of the Project
- Describe the financial implications of the Project
- Establish the requirements to deliver and operate the Project

The purpose of this Business Case Analysis is to confirm the need for change and the policy fit of a project at this location. This analysis demonstrates that a range of options have been considered, and that a preferred option (the Project) has been identified that meets the Project objectives. The report also verifies that the Project offers value for money and has been costed based on all the information available. The remainder of This analysis details how the Project would be implemented and delivered.

The remainder of this report is organized into following sections:

- Introduction
- Project Description
- Methodology
- Existing Setting
- Case for Change
- Strategic Case
- Economic Case
- Financial Case
- Delivery and Operations Case

2 PROJECT DESCRIPTION

2.1 Project Goals and Objectives

The Project would address the mobility needs of the Vermont Corridor's historically underserved and underinvested communities, including alleviating existing transit and multimodal network challenges, through fulfillment of the Goals and Objectives identified in **Table 2-1**. The Project's Goals include improving transit performance, enhancing the customer experience, investing in the community, and developing a cost-effective project within a desired timeline. The screening and evaluation approach is designed to evaluate each Project concept's ability to meet the Project's Goals and Objectives.

Table 2-1: Project Goals and Objectives

Goal	Objective
Improve Transit Performance	Improve and maintain service reliability Reduce passenger travel times
Enhance Customer Experience	Enhance stations and passenger amenities Improve pedestrian/bicycle access Improve safety and security
Invest in Community	Improve mobility options to provide access to destinations Address disparities identified in the Equity Analysis Acknowledge and integrate community assets in planning/design
Develop a Cost-Effective Project within Desired Timeline	Maximize benefits within funding constraints Implement a project by the 2028 Olympics Maximize sustainability by reducing throwaway work, aligning with Metro's NextGen Bus Plan (Metro, 2020a) and future rail conversion

Source: Vermont Corridor Partners, 2024

2.2 Study Area Description

Vermont Avenue is the most heavily traveled bus corridor in Los Angeles County. Carrying over 36,000 daily riders, the north-south oriented corridor experiences significant performance deficiencies in terms of vehicle speeds, schedule reliability and passenger comfort due to severe traffic congestion and challenging operating conditions.

This planning effort for the Project divides the 12.4-mile Study Area into three subareas and six segments for the purpose of analysis. The three subareas are referred to as the South, Central and North subareas. These subareas are used to organize and analyze high-level data for areas with distinct land use and development characteristics. These three subareas are further divided into six segments. These six segments are used to differentiate lengths of the corridor with unique roadway configurations and other characteristics that present design constraints or opportunities when developing a project alignment.

2.2.1 Study Area Subareas

The physical, cultural and community attributes of Vermont Avenue vary significantly along the corridor as it connects a cross-section of the Los Angeles metropolitan area. To effectively characterize the range of conditions experienced within the Study Area, this study identified three subareas defined geographically by South, Central and North, as shown in **Figure 2-1**.

Figure 2-1: Study Area Subarea Boundaries

Source: Vermont Corridor Partners, 2024.

2.2.1.1 South Subarea: 120th Street to Gage Avenue

The South subarea is approximately 4.1 miles long, extending from 120th Street north to Gage Avenue. This subarea transverses through several historically African American and Hispanic or Latino communities of South Los Angeles. The land use is characterized by commercial and public facilities along Vermont Avenue, with low- to medium-density residential in the surrounding Study Area.

2.2.1.2 Central Subarea: Gage Avenue to Venice Boulevard

The Central subarea is approximately 4.4 miles long, extending from Gage Avenue north to Venice Boulevard. The corridor has many public, institutional (educational and faith based) and regional attractions at Exposition Park and the USC campus area and commercial uses north of Interstate 10 (I-10). The subarea is offset on both sides with low- to medium-density residential land uses. The commercial and residential land uses densify north near Venice Boulevard and Koreatown.

2.2.1.3 North Subarea: Venice Boulevard to Sunset Boulevard

The North subarea is approximately 3.9 miles long, extending from Venice Boulevard north to Hollywood Boulevard. The North subarea has high densities of commercial land use, such as shopping centers, medical centers, and higher densities along this portion of the corridor are suited for pedestrian activity. This subarea includes the neighborhoods of Pico-Union, Koreatown and Westlake. The variety of restaurants and retail stores in this subarea reflects the Vermont Corridor's cultural diversity and service to Los Angeles' immigrant communities, including Salvadorian, Korean, Oaxacan, and Thai.

2.2.2 Study Area Segments

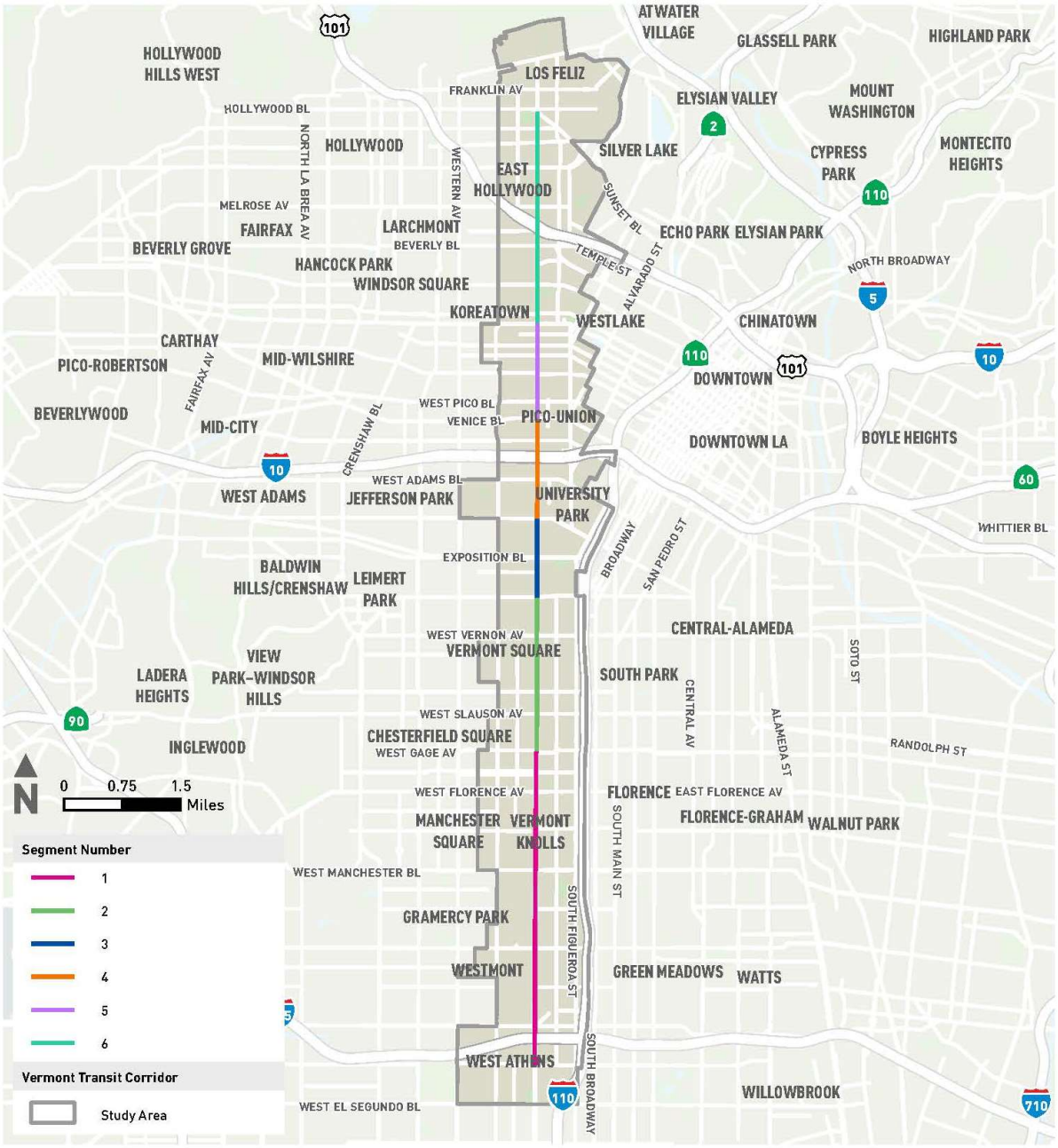
In addition to the three subareas, this study divides the Vermont Corridor into six segments. The six segments are used to differentiate lengths of the corridor with unique roadway configurations and having unique infrastructure characteristics, such as right-of-way (ROW) width and roadway lane configurations, that influence the design of a consistent set of transit priority investments and multimodal treatments in each segment. **Table 2-2** and **Figure 2-2** present the corridor segment boundaries.

Table 2-2: Vermont Corridor Segment Boundaries

Segment	Length (miles)	From	To
1	4.1	120th Street	Gage Avenue
2	2.0	Gage Avenue	Martin Luther King Jr. Boulevard
3	1.0	Martin Luther King Jr. Boulevard	Jefferson Boulevard
4	1.3	Jefferson Boulevard	Venice Boulevard
5	1.3	Venice Boulevard	Wilshire Boulevard
6	2.7	Wilshire Boulevard	Sunset Boulevard

Source: Vermont Corridor Partners, 2024.

Figure 2-2: Vermont Corridor by Segment



Source: Vermont Corridor Partners, 2024

Across these six segments, the proposed Project connects several distinct communities, both within the City of Los Angeles and in unincorporated Los Angeles County. Beginning at the southern terminus, the Project proceeds northward from 120th Street. Along this segment from 120th Street to Imperial Highway, the Project straddles the jurisdictional boundary between the City of Los Angeles (West Athens neighborhood) on the eastern side of Vermont Avenue and the unincorporated Los Angeles County community of West Athens on the western side of Vermont Avenue. At Imperial Highway, the Project continues northward along the City-County line, with the City of Los Angeles (Vermont Vista neighborhood) on the eastern side of Vermont Avenue and the unincorporated Los Angeles County community of Westmont on the western side of Vermont Avenue. At Manchester Avenue, the Project proceeds northward on Vermont Avenue, staying within the bounds of the City of Los Angeles for the remainder of its alignment. The Project continues northward for approximately 10 more miles through numerous neighborhoods, including Manchester Square, Vermont Knolls, Vermont-Slauson, Vermont Square, Exposition Park, University Park, Adams-Normandie, Pico-Union, Westlake, Koreatown and East Hollywood before terminating at Sunset Boulevard in Los Feliz.

2.2.2.1 Segment 1: 120th Street to Gage Avenue

Segment 1 starts at 120th Street and proceeds north towards Interstate 105 (I-105; Glen Anderson Freeway) overpass where the existing Vermont/Athens Metro C Line Station entrances are located. Segment 1 transverses through south Los Angeles and includes the neighborhoods of Vermont Vista and Vermont-Knolls. Vermont Avenue features six lanes of traffic with a total width ranging from approximately 140 to 160 feet curb to curb. Median islands with mature trees span between 120th Street and 89th Street. As the corridor approaches north, frontage roads with median islands exist between 89th Street and Gage Avenue. Segment 1 features striped northbound and southbound bicycle lanes and sidewalks on both sides of Vermont Avenue. This segment also features on-street parking on both sides of Vermont Avenue between 120th Street and 89th Street, while parking is located on the frontage roads between 89th Street and Gage Avenue in the northern portion of Segment 1.

2.2.2.2 Segment 2: Gage Avenue to Martin Luther King Jr. Boulevard

Segment 2 extends from Gage Avenue to Martin Luther King Jr. Boulevard. As Vermont Avenue approaches north towards Gage Avenue, the roadway significantly narrows and no longer features a center-running median or frontage roads. The roadway has four traffic lanes with street parking in both directions, and the roadway width is reduced to approximately 60 to 70 feet from curb to curb. The corridor is characterized by commercial and public facilities such as churches, restaurants, schools, government agency buildings, markets, and retail stores, along with some industrial uses from Slauson Avenue to Martin Luther King Jr. Boulevard. Segment 2 features sidewalks along both sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.3 Segment 3: Martin Luther King Jr. Boulevard to Jefferson Boulevard

Segment 3 extends from Martin Luther King Jr. Boulevard to Jefferson Boulevard. The roadway has an approximate width of 60 feet from curb to curb between Martin Luther King Jr. Boulevard and Exposition Boulevard and does not accommodate street parking. The road widens to approximately 80 feet from curb to curb with street parking from Exposition Boulevard to Jefferson Boulevard. A surface connection to the Metro E Line via the Expo/Vermont Station, as well as entrances to USC and Exposition Park, are located at Exposition Boulevard. A center-running landscaped median island

runs throughout Segment 3. Segment 3 features sidewalks on both sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.4 Segment 4: Jefferson Boulevard to Venice Boulevard

Segment 4 extends from Jefferson Boulevard to Venice Boulevard. The corridor has a similar neighborhood character and roadway features as Segment 3, with a 60-foot roadway curb-to-curb width with street parking. However, as it approaches the I-10, I-10 serves as a physical boundary, and Vermont Avenue shifts to a more vehicle-oriented environment to accommodate the high volumes of traffic flow at the I-10 on- and off-ramps. Segment 4 features on-street parking and sidewalks on both the northbound and southbound sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.5 Segment 5: Venice Boulevard to Wilshire Boulevard

Segment 5 extends from Venice Boulevard to Wilshire Boulevard. Vermont Avenue is approximately 60 feet wide from curb to curb, generally consisting of four through lanes until it approaches intersections to accommodate turn pockets. On-street parking exists throughout this segment. A transit plaza at the northeastern corner of Wilshire Boulevard and Vermont Avenue provides access to Metro's B Line and D Line Wilshire/Vermont Station. Segment 5 features sidewalks on both the northbound and southbound sides of Vermont Avenue and does not contain bicycle lanes.

2.2.2.6 Segment 6: Wilshire Boulevard to Sunset Boulevard

Segment 6 extends from Wilshire Boulevard to Sunset Boulevard. Vermont Avenue serves as the border between Koreatown and Rampart Village until it crosses United States Highway 101 and transitions into the neighborhood of East Hollywood. The roadway varies in width throughout this segment, ranging from approximately 70 to 90 feet from curb to curb, maintaining four traffic lanes with sidewalks on both sides. This segment has a strong presence of existing transit infrastructure. When traveling north throughout the segment, there are existing Metro B Line transit stations including Wilshire/Vermont Station, Vermont/Beverly Station, Vermont/Santa Monica Station and Vermont/Sunset Station. Segment 6 features on-street parking on both the northbound and southbound sides of Vermont Avenue, though parking in this segment features peak-hour restrictions to allow the curb-adjacent lane to function as a general travel lane during these times. Segment 6 does not contain bicycle lanes.

2.3 Project Overview and Design Elements

The Project proposes side-running dedicated BRT lanes for the extent of the Vermont Avenue corridor from 120th Street to Sunset Boulevard. There are no improvements planned between Sunset Boulevard and Hollywood Boulevard.

2.3.1 Project Overview

The Project extends approximately 12.4 miles from 120th Street at its southern terminus to Sunset Boulevard at its northern terminus. The Project is divided into six segments which are used to differentiate lengths of the corridor with unique roadway configurations and having unique infrastructure characteristics, such as right-of-way width and roadway lane configurations, that influence the design of a consistent set of transit priority investments and multimodal treatments in each segment. The six segments, along with the stations present within each segment, are detailed in **Table 2-3**.

Table 2-3: Study Area Segment Boundaries and Stations

Segment	From	To	BRT Stations
1	120th Street	Gage Avenue	Athens Century Manchester Florence
2	Gage Avenue	Martin Luther King Jr. Boulevard	Slauson Vernon
3	Martin Luther King Jr. Boulevard	Jefferson Boulevard	Expo
4	Jefferson Boulevard	Venice Boulevard	Adams
5	Venice Boulevard	Wilshire Boulevard	Pico Wilshire
6	Wilshire Boulevard	Sunset Boulevard	3rd Street Santa Monica Sunset

Source: Vermont Corridor Partners, 2024

In addition to the 13 proposed BRT station locations, two existing bus layover facilities are proposed to continue to be used as a part of the Project at both the northern and southern terminus of the Project. These layovers exist on the northbound side of Vermont Avenue at Hollywood Boulevard at the northern end of the Project and on the northbound side of Vermont Avenue at 120th Street at the southern end of the Project. These locations would facilitate passenger boarding and alighting but are not considered full BRT stations for the purposes of the Project and would not be upgraded to include station canopies and other passenger amenities like the 13 proposed BRT stations.

2.3.2 Project Design Elements

To ensure the Project remains feasible within its cost and schedule constraints, the Project's design emphasizes the importance of investing in accessible, functional BRT station elements while limiting major changes between stations to only those elements that are required to support efficient, reliable BRT service. The Project is comprised of eight categories of design elements:

- **Roadway Elements:** Roadway elements are defined as those components of the project that exist within the existing roadway curb to curb, including the curbs and adjacent sidewalks and ramps. These elements include BRT lane striping and pavement repairs; striping and pavement markings for general travel lanes, turn lanes, shared bus and turn lanes, bicycle lanes, parking and crosswalks; and modifications to frontage road medians. Roadway elements also include improvements to station-adjacent sidewalks, ramps and curbs to facilitate station access for riders.
- **Station Elements:** Station elements are those elements of the project that exist within immediate BRT station areas and facilitate patron access, use and comfort. These elements may include BRT platforms, canopies, lighting, signage, security systems, integrated artwork, fare collection systems and landscaping.

- **Systems:** Project systems are defined as corridor-wide electrical components that support the functioning of the Project. These elements include traffic signals and BRT vehicle charging infrastructure.
- **Utilities:** Utilities are aboveground systems and underground systems that connect the Project to the local utility grid. Utilities include water/sewer, electrical and communications systems.
- **Support Facilities:** Support facilities are those facilities that maintain the Project's operations, such as operator comfort facilities and BRT vehicle maintenance and storage facilities. The Project does not propose the addition of any new support facilities, as existing facilities are anticipated to be sufficient to support the BRT service on Vermont Avenue.
- **ROW:** ROW can be both public and private. Public ROW is the physical space between building faces and lot lines along Vermont Avenue, including sidewalks, curbs, roadways, medians, and bus stops and stations. Private ROW is the physical space owned by private entities along the corridor, including most space behind lot lines and building faces. Activity would take place entirely within the public ROW during both the construction and operational phases of the Project.
- **Vehicles:** Vehicles are defined as the buses that would provide BRT service to patrons of the Project. The Project will include the use of 40-foot buses in opening year 2028 but could potentially go to 60-foot articulated buses in the future if passenger demand warrants it.
- **Traffic Handling and Construction Staging:** Traffic handling and construction staging elements are those components of the Project that facilitate the construction phase of the Project's lifecycle. Temporary traffic control measures and construction staging areas are proposed as a part of the project. These measures would exist entirely within the existing public ROW.

Generally, civil improvements such as changes to sidewalk widths or realignments of existing curbs are not proposed between Project stations. Civil improvements are generally limited to station areas, such as the construction of station platforms, and are complemented by investments in transit-supportive infrastructure at stations like station amenities.

Between BRT stations, Project improvements are generally limited to dedicated lane striping where feasible. This striping would feature the use of shared bus and turn lanes at several right-turn locations throughout the corridor, both between stations and at specific station locations.

The Project is proposed to be constructed solely within the existing public ROW, meaning that no permanent ROW takings are anticipated to support project implementation. Construction staging is also proposed to occur solely within the public ROW, eliminating the need for temporary ROW takings or easements to facilitate construction activities.

The construction depth of the Project is anticipated to be shallow, both to limit impacts to utilities and to contain the cost of the Project to the prescribed budget. Proposed paving improvements are intended to only be to the extent required to incorporate the proposed BRT station and lane configuration. The proposed Project profile will mimic the existing pavement profile throughout the corridor.

2.4 Project Elements

The Project spans 12.4 miles along Vermont Avenue and includes roadway modifications and construction of 26 BRT stations at 13 station locations (1 northbound and 1 southbound station at each station location).

2.4.1 Roadway Elements

The roadway would be modified to accommodate a dedicated BRT lane along the entire project length. Additionally, intersections at the 13 proposed stations would be reconstructed to accommodate platforms and canopy structures constructed on curb bulb-outs, on the sidewalk or on frontage road median islands. The following describes the design features of the roadway elements:

- **BRT Lanes:** Two 12-foot-wide dedicated BRT lanes (northbound and southbound) would be implemented along the length of the Project using a mix of solid white-line striping and dashed white-line striping. The dedicated BRT lanes reduce to 11 feet wide in Segment 2 to accommodate maintaining existing parking and increase to 16 feet at station locations where additional ROW is present. Shared bus and turn lanes are proposed throughout the corridor to accommodate right-turning movements where right-turn pockets do not fit. The existing asphalt concrete pavement within the dedicated BRT lane would be sandblasted, patched, repaired and sealed before striping. Full-width BRT lane painting is not proposed as a component of the Project. However, hatched striping would be provided at the beginning and end of each block as well as in bus/vehicle conflict zones to delineate where vehicles can merge into or cross the bus lane. Vehicles would be permitted to cross the BRT lane at any point to access on-street parking. Concrete bus pads would be constructed within the BRT lanes in front of 24 of the 26 BRT station locations and at the 120th Street Layover in compliance with local design standards. No bus pads would be provided at the proposed Athens Station to avoid impacting the existing bridge structure.
- **General Travel Lanes, Bicycle Lanes, and Parking:** Asphalt concrete pavement reconstruction is proposed adjacent to BRT station locations to accommodate bulb-outs and/or lane reconfigurations adjacent to the intersections. The asphalt concrete repair for the remainder of the corridor would be limited to the dedicated BRT lane and is not included for the other general-purpose travel lanes. General purpose lanes, bicycle lanes and parking boxes would be restriped to match existing striping. Crosswalks would be re-striped at the 13 station intersections and at the 120th Street Layover to enhance visibility at the pedestrian crossings to and from the proposed stations. Pavement markings and directional arrows for all lanes would be marked throughout the corridor to facilitate overall modal interaction and safety.
- **Medians:** Frontage road medians along Segment 1 south of Gage Avenue would be modified to accommodate station platforms and canopy structures. Reconstruction of the frontage road medians is limited to the stations at southbound Manchester Avenue and northbound and southbound Florence Avenue. At Century Boulevard, where frontage road medians do not exist, it is proposed that the northbound and southbound stations have median islands on which station platforms would be constructed. Frontage road medians and center medians would be protected in place along the remainder of Segment 1 where they currently exist.
- **Sidewalk and Curb Modifications:** Sidewalk and curb modifications include the following components:

- **Sidewalks and Sidewalk Bulb-Out Extension:** Station platforms would generally be constructed on bulb-outs to accommodate station platforms and canopy structures that allow for Americans with Disabilities Act (ADA)-compliant pedestrian circulation and boarding/alighting access. In locations where the existing public ROW does not accommodate a bulb-out platform, the station platform and canopy would be constructed on the existing sidewalk. The existing sidewalk immediately adjacent to the bulb-out or station platform would be repaired to accommodate ADA circulation. Sidewalk reconstruction and bulb-out extensions would be designed to include curb and gutter reconstruction to ensure positive drainage flow.
- **Americans with Disabilities Act (ADA) Compliant Curb Ramps:** Existing curb ramps would be upgraded at the 13 station intersections and at the 120th Street Layover. The design and location of curb ramps would be in accordance with the applicable provisions of the City of Los Angeles Department of Public Works, Los Angeles County Department of Public Works, United States Access Board Public ROW Accessibility Guidelines and any other applicable design codes and standards. Tactile warning strips would be installed at all pedestrian curb ramps. Dual/directional curb ramps would be provided where it is possible to do so without impacting private ROW.

2.4.2 Station Elements

The proposed Project includes 13 station locations. Each station location would have two bus stops, one northbound and one southbound, for a total of 26 BRT stops. All 26 BRT stop locations include platforms, canopies and patron amenities. Station design elements include the following:

- **Platforms:** Station platforms would be provided at each bus stop, except in a few locations where station platforms are not feasible. The platforms range in length depending on the specific location and include platforms that are 65, 75, 90 or 100 feet long. Platforms are generally 10 feet wide and are built as bulb-outs, extending the existing sidewalk at the stop locations. In constrained locations where the roadway ROW cannot accommodate a bulb-out, the station canopy would be located within the sidewalk area. Curbside platforms are proposed to be 6 inches high, with accessible boarding achieved through the utilization of bus ramps and vehicle kneeling. Station platforms would also include all associated infrastructure, including ramps, railings and other related accessories.
- **Canopies:** Overhead canopies are proposed at station areas to provide protection to passengers from severe weather conditions. Canopies are generally proposed to cover approximately 37 percent of the platform footprint depending on platform size, with canopies set back at least 2 feet from the platform edge to avoid interference with buses stopping to pick up or drop off passengers. The canopies are generally 49 feet and six inches in length and consist of tempered glazing with integrated shading, lighting and side panels.
- **Lighting:** Station lighting would be integrated into the underside of the canopy roof and project down onto the platform surface. Additional street light poles may be provided where the station platform extends substantially beyond the canopy structure.
- **Signage:** Wayfinding and station identification signs would be located in station areas at visible locations. Station signage may include station marker signs with system logo and other branding elements, route maps and schedules, station identification and neighborhood wayfinding. Wayfinding and station identification signs may be internally illuminated as

appropriate but may also be illuminated by general area/station lighting. Variable message signs may be provided using light-emitting-diode (LED) or liquid-crystal-display (LCD) screens to provide information to patrons, such as real-time travel information. Messaging signage would be integrated into the design of the canopy by suspending the message boards from the canopy outriggers.

- **Security Systems:** Security equipment may be included at some stations with high levels of ridership and pedestrian activity. The security equipment could consist of closed-circuit television cameras and/or emergency call buttons. The equipment would be integrated into the systems cabinet adjacent to the waiting area.
- **Public Art:** Integrated public art will be included in accordance with the Metro Art Program Policy and in coordination with Metro Art. Artwork locations, materials, lighting, and electrical and mechanical requirements would be incorporated into the Project drawings and technical specifications.
- **Fare Collection Systems:** Some stations may have ticket vending machine kiosks in the station canopy area. Ticket vending machines are not required at all stations, as patrons can purchase fares at the four connecting rail stations, the multiple Metro designated vendor locations or directly on the vehicles.
- **Landscaping:** Landscaping elements would be provided at station locations where existing street trees and plantings are affected by the construction of new stations. Additional plantings may be provided along the sidewalk immediately adjacent to station locations.

2.4.3 Systems

The proposed Project includes multiple systems that span the length of the Vermont Corridor, including the following elements:

- **Traffic Signals:** Transit signal prioritization is expected to be implemented by the City of Los Angeles prior to implementation of this Project, in coordination with Metro Operations. Traffic signal modifications for this Project would be limited to pole adjustment and reprogramming. Traffic signal pole adjustments would be required at station intersections where the existing hardscape is modified. No traffic signal pole adjustments are expected beyond the station intersections. Traffic signal digital reprogramming may occur at signalized intersections along the Project alignment, as needed. Traffic signal replacements or upgrades are not expected.
- **BRT Vehicle Charging Infrastructure:** The Project would be designed to accommodate on-route charging for BRT vehicles. Charging infrastructure may be provided as part of a separate project or may be provided as a part of the Project and is anticipated to be located at the Hollywood Boulevard layover, if implemented. These facilities are anticipated to be an overhead charger/pantograph system with supporting utility cabinets at one end of the Project alignment.

2.4.4 Utilities

The Project would require minor utility work to accommodate changes to the roadway and new BRT station infrastructure at station locations where the roadway is proposed to be reconstructed. The proposed project design is expected to minimize impacts to existing utilities along the Vermont

Corridor. Utility modification is limited to manhole and vault lid adjustments. Widespread utility relocation, replacement, adjustment, protection, and/or abandonment of existing utility facilities is not anticipated. However, spot utility adjustments may be required in some station locations where curb modifications are proposed. Utility elements include the following:

- **Storm Drainage:** Surface drainage would be impacted in locations where curb bulb-outs are constructed for stations. The modifications are expected to be minor and not require regrading of the entire roadway ROW. Additionally, there are no major modifications or impacts expected to existing storm drainage culverts or lines. Some minor modifications of manholes and vaults may be required. For example, stormwater drains may be impacted by curb reconstruction at station locations.
- **Domestic Water and Sanitary Sewer:** New water and sewer infrastructure is not proposed as a part of the Project. Where existing water and sewer infrastructure are impacted as a part of Project implementation, these elements would be retained in their current configurations. Some minor modifications of manholes and vaults may be required. For example, manhole covers located within the proposed BRT lanes may be impacted by asphalt patching and sealing.
- **Electrical:** New electrical power infrastructure would be required to support the proposed BRT stations, including to accommodate station lighting, security systems, and message boards. Connections for electrical elements would be routed to the nearest power sources to the shelter locations. Utility conduit would be routed from the source within public ROW, including associated saw cutting, patching, and repairing of existing hardscape. Additionally, there may be minor modifications of electrical vault lids required where the BRT lane is repaired or the curb is adjusted to accommodate bulb-outs.
- **Communications:** New communications infrastructure would be required to support the proposed BRT stations, including to accommodate security systems and real-time bus information signage. Connections for fiber optic elements would be routed to the nearest communication sources to the shelter locations. Utility conduit would be routed from the source within public ROW, including associated saw cutting, patching, and repairing of existing hardscape. Additionally, there may be minor modifications of communication vault lids required where the BRT lane is repaired or the curb is adjusted to accommodate bulb-outs.

2.4.5 Support Facilities

The Project does not propose the addition of any new support facilities, as existing facilities are anticipated to be sufficient to support BRT service on Vermont Avenue. Existing Metro operator comfort facilities would be retained as-is through the implementation of the Project. Existing bus maintenance facility yards are expected to have capacity for storage, charging and maintenance of the Project's fleet vehicles.

2.4.6 ROW

The Project would take place entirely within the existing public ROW for both the construction and operating phases. Neither permanent private property acquisitions nor temporary construction easements are anticipated for this Project.

2.4.7 Vehicles

The Project will open with the use of 40-foot buses to provide BRT service along the Vermont Corridor. BRT vehicles are proposed to be electric and would have the capacity to utilize on-route charging infrastructure. Vehicles are proposed to accommodate all-door boarding to facilitate efficient passenger loading and unloading, enhancing overall service efficiency.

2.4.8 Traffic Handling and Construction Staging

The Project proposes the use of temporary traffic control measures to accommodate Project construction. These measures would take into consideration all modes of transportation including buses, passenger vehicles, trucks, bicycles, and pedestrian traffic. The design of these measures would also consider construction staging in coordination with the construction team. Both the temporary traffic control measures and construction staging are anticipated to be carried out entirely within the existing public ROW, obviating the need for temporary easements to facilitate Project implementation.

2.5 Project Segment and Station Descriptions

The following sections describes the Project alignment for each Study Area segment. The Project proposes 26 BRT stations at 13 station locations.

2.5.1 Segment 1: 120th Street to Gage Avenue

Segment 1 spans 4.1 miles from the south terminus at 120th Street to Gage Avenue. This segment has the widest ROW of the Project at 140 feet to 160 feet from curb to curb, including three lanes of through-traffic in each direction, on-street parking on both sides, dedicated bike lanes and a median up to 40-feet wide curb to curb. This segment also features frontage roads, frontage road medians and parking on one or both sides of the median roads. This segment includes a connection to the Metro C Line at the Vermont/Athens Station. Segment 1 includes the following components:

- **Segment 1 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot to 14-foot-wide dedicated BRT lanes, resulting in two through lanes and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for at station platform locations. Existing bicycle lanes would be maintained and enhanced, with the BRT lane acting as a buffer between the bicycle lane and general traffic lanes. Existing left- and right-turn pockets would be maintained. Existing frontage road medians would be maintained in place. Existing landscaped medians would be maintained, and all median trees would be retained.
- **South Terminus – 120th Street Layover:** 120th Street serves as the existing southern terminus for the Metro Line 204 and Metro Rapid Line 754 service and bus layover facility. This layover would continue to serve as the local bus layover area for the existing bus service as well as the new proposed service. 120th Street is not considered one of the 13 BRT stations proposed for implementation as a part of the Project, though passengers would be allowed to board and alight BRT buses at this location. The layover area would feature an extended platform from the intersection of 120th Street and Vermont Avenue northward about 580 feet to a point just beyond the intersection of Vermont Avenue and 119th Street. This extended platform length would allow for the continued queuing of more than 10 buses at a time, including both local bus and BRT services. The platform would utilize the existing

bus layover space to widen the existing 5- to 6-foot sidewalks to 11 to 16 feet wide, allowing for safer and easier access to transit services for the projected increase in passengers along the corridor. The extended platform would fix the existing sidewalk issues, remove obstructions and provide space for pedestrian flow and access for patrons boarding and alighting at this location. The 12-foot-wide dedicated BRT lane would be implemented within the existing right-most travel lane and would serve as the future bus layover lane.

- **Athens Station:** The Athens Station would require a custom, non-standard kit-of-parts station due to design limitations on the existing overpass. This station would have modular rubber boarding platforms placed on the surface of the bridge structure, with an integrated bicycle lane for the length of the platform. The northbound platform would be 11 feet wide, and the southbound platform would be 9 feet wide. The existing bicycle lane would be maintained and situated between the proposed BRT platforms and the existing sidewalk on a raised platform. Curb space north and south of the proposed platforms would be reserved as a layover for local Metro bus services. Both station canopies would be constructed to minimize impacts to the existing Metro C Line rail station entrances. New station elements will be coordinated with Metro Art to minimize impact to existing artwork at the Metro C Line Station entrances. The canopy would be built on a cantilever so as not to add structural load onto the existing Caltrans bridge.
- **Century Station:** Beginning at the Century Station and heading north, all station stops would feature concrete platforms on both the northbound and southbound sides of Vermont Avenue. The Century Station would feature station platforms on bulb-outs measuring 100 feet long and 10 feet wide on both the northbound and southbound sides of Vermont Avenue. The southbound platform is proposed 20 feet south of 101st Street due to a lack of curb space available closer to Century Boulevard, while the northbound platform is proposed 56 feet north of Century Boulevard. Both the northbound and southbound sides of Vermont Avenue would feature unprotected bicycle lanes running between the station platforms and existing sidewalks. The existing bicycle lane would be kept in place with a width of 5 feet, except for immediately adjacent to the northbound BRT platform, where the bicycle lane would be 6 feet wide.
- **Manchester Station:** The Manchester Station features station platforms measuring 100 feet long and 10 feet wide on both the northbound and southbound sides of Vermont Avenue. The southbound platform is proposed to be approximately 63 feet south of Manchester Avenue, while the northbound platform is proposed to be located approximately 60 feet north of Manchester Avenue. On the southbound side, the BRT platform would be located on the frontage road median, between the southbound lanes on Vermont Avenue and the adjacent southbound frontage road south of Manchester Avenue. Pedestrian access to this platform would be enhanced with a raised crosswalk between the existing sidewalk and the frontage road. The northbound platform would be located on the far side of the intersection on the northeast corner adjacent to a new development. The ROW in this location cannot accommodate a bulb-out platform. Therefore, the station platform and canopy would be constructed fully on the sidewalk. A custom canopy may be constructed at this location to maximize pedestrian flow along the sidewalk.
- **Florence Station:** The Florence Station features station platforms measuring 100 feet long and 10 feet wide on the far side of the intersection within the existing frontage road

medians. The northbound station platform is proposed approximately 79 feet north of Florence Avenue and the southbound station platform is proposed approximately 83 feet south of Florence Avenue. Pedestrian access to these platforms would be enhanced with a raised crosswalk between the existing sidewalk and the frontage road. The existing bicycle lane would be realigned between the BRT lane and the frontage road medians. A portion of the frontage road at the southeast corner of Vermont Avenue and Florence Avenue is proposed to be replaced by a larger curb bump-out to maintain retail access for vehicles, while avoiding a complex traffic mixing zone for vehicles entering the BRT lane. In front of the southbound station, the BRT lane widens to between 13 feet and 15 feet and 5 inches wide for the portion of the alignment between Florence Avenue and 73rd Street due to available ROW at this location.

2.5.2 Segment 2: Gage Avenue to Martin Luther King Jr. Boulevard

Segment 2 spans 2.0 miles from Gage Avenue to Martin Luther King Jr. Boulevard. The roadway width narrows north of Gage Avenue to about 60 feet to 70 feet curb to curb with two northbound lanes, two southbound lanes, one turning lane and street parking along both sides of the roadway. Segment 2 includes the following elements:

- **Segment 2 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. In the most constrained locations, the BRT lane configuration in Segment 2 narrows to 11 feet and the parking lane width is reduced to 7 feet to accommodate maintaining parking on both sides of the street. Segment 2 has the only locations where the BRT lane and parking dimensions vary from the standard configuration. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Slauson Station:** The Slauson Station features two station platforms, both south of Slauson Avenue, due to limited ROW and the layout of existing driveways north of Slauson Avenue. The northbound station would be on the near side of the intersection at the southeastern corner. The northbound platform is 100 feet long, 10 feet wide and located approximately 104 feet south of Slauson Avenue. The southbound platform is 90 feet long, 10 feet wide and located approximately 35 feet south of Slauson Avenue. The southbound station is close to the intersection due to the constrained length between Slauson Avenue and 58th Place. At the southbound station platform, the BRT lane widens to 16 feet due to available ROW in this segment. On-street parking does not currently exist at this intersection south of Slauson Avenue, and limited new on-street parking is proposed on the northbound side of Vermont Avenue south of 58th Place.
- **Vernon Station:** The Vernon Station features BRT station platforms measuring 90 feet in length and 10 feet wide on the far side of the intersection on both the northbound and southbound side of Vermont Avenue. The southbound station platform is proposed to be located 24 feet south of Vernon Avenue and the northbound station platform is proposed to be located approximately 51 feet north of Vernon Avenue. The existing Metro Local Line 204 stop at the northwestern corner of Vermont Avenue and Vernon Avenue would be relocated

to the southern side of the intersection about 180 feet south of Vernon Avenue. Similarly, the existing DASH stop at the northeastern corner of Vernon Avenue and Vermont Avenue is proposed to be relocated about 150 feet to the north to the opposite side of the proposed northbound BRT station platform. The ROW in this location cannot accommodate full bulb-out platforms. Therefore, the station platform and canopy would be constructed fully on the sidewalk for the southbound station and partially on the sidewalk for the northbound station, which can accommodate a partial 4-foot-wide bulb-out to host a portion of the station canopy. Custom canopies may be constructed at these locations to maximize pedestrian flow along the sidewalk.

2.5.3 Segment 3: Martin Luther King Jr. Boulevard to Jefferson Boulevard

Segment 3 spans 1 mile from Martin Luther King Jr. Boulevard to Jefferson Boulevard. The roadway has a width of about 60 feet curb to curb between Martin Luther King Jr. Boulevard and Exposition Boulevard, with two northbound lanes, two southbound lanes, one turning lane, an 8-foot-wide median and no on-street parking. The roadway widens to about 80 feet curb to curb between Exposition Boulevard and Jefferson Boulevard, with two northbound lanes, two southbound lanes, one turning lane and street parking along both sides. The turning lane becomes a landscaped median mid-block through this segment. This segment includes a connection to the Metro E Line at the Exposition Station. Segment 3 includes the following elements:

- **Segment 3 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets and the landscaped median would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Exposition Station:** The Exposition Station features two platforms, both on the northern side of Exposition Boulevard. The northbound platform is proposed to be 100 feet long by 10 feet wide and located 64 feet north of Exposition Boulevard and the southbound platform is proposed to be 90 feet long by 10 feet wide and located 31 feet north of Exposition Boulevard. The existing Metro Local (Lines 204 and 550) and Dash (Line F) services would be relocated north of their current locations.

2.5.4 Segment 4: Jefferson Boulevard to Venice Boulevard

Segment 4 spans 1.3 miles from Jefferson Boulevard to Venice Boulevard. This portion of the corridor has similar roadway features to Segment 3, with a 60-foot roadway width curb to curb with two northbound lanes, two southbound lanes, one turning lane, and street parking along both sides of the roadway. The corridor becomes more vehicle-oriented in this segment, with narrower sidewalks to accommodate the high volume of traffic at the I-10 on- and off-ramps. Segment 4 includes the following elements:

- **Segment 4 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be

maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.

- **Adams Station:** The Adams Station features two platforms on the far side of the intersection. The northbound platform is 100 feet long and 10 feet wide and about 130 feet north of the intersection. The southbound platform is 90 feet long and 10 feet wide and about 26 feet south of Adams Boulevard. The southbound platform is close to the intersection due to the constraint of an existing driveway. The existing Metro Local Line 204 stop on the southwestern corner of the intersection would be relocated about 100 feet to the south to accommodate the BRT station platform and avoid conflicts with the driveway.

2.5.5 Segment 5: Venice Boulevard to Wilshire Boulevard

Segment 5 spans 1.3 miles from Venice Boulevard to Wilshire Boulevard. Vermont Avenue is about 60 feet wide curb to curb in this segment, with two northbound lanes, two southbound lanes, one turning lane and on-street parking along both sides of the roadway. This segment includes connections to the Metro B and D Lines at the Wilshire/Vermont Station. Segment 5 includes the following elements:

- **Segment 5 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 12-foot-wide dedicated BRT lanes, resulting in one through lane and one BRT lane in each direction. Existing parking would generally be maintained on both sides of the street except for station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations, where right-turning vehicles and existing buses operate in the right-most lane.
- **Pico Station:** The Pico Station features two platforms on the far side of the intersection. The northbound platform would be 90 feet long and 10 feet wide, about 131 feet north of Pico Boulevard, situated between existing driveways. The southbound BRT platform would be 100 feet long and 10 feet wide, located approximately 25 feet south of Pico Boulevard to avoid a conflict with an existing driveway. The ROW in this location cannot accommodate full bulb-out platforms. Therefore, the station platforms and canopies would be constructed mostly on the sidewalk, with partial 4-foot-wide bulb-outs constructed to host a portion of the station canopies. Custom canopies may be constructed at these locations to maximize pedestrian flow along the sidewalk.
- **Wilshire Station:** The Wilshire Station features station platforms on the north side of Wilshire Boulevard due to limited ROW south of Wilshire Boulevard. The curb-to-curb ROW is 80 feet north of Wilshire Boulevard and 60 feet south of Wilshire Boulevard. Both platforms are proposed to be 100 feet long by 10 feet wide, with the northbound station proposed to be about 59 feet north of Wilshire Boulevard and the southbound station proposed to be about 34 feet north of Wilshire Boulevard. Given the proximity of the southbound platform to Wilshire Boulevard, curb bump-outs are proposed at the northwestern and northeastern corners of the intersection to better protect pedestrians and passengers who are boarding

and alighting BRT vehicles. To accommodate the southbound platform, an existing driveway located approximately 90 feet north of Wilshire Boulevard that serves a vacant lot is proposed to be closed as a part of any future development at this location. To support the northbound platform, the existing Metro Local Line 204 bus stop on the northeastern corner of Vermont Avenue and Wilshire Boulevard would be moved about 100 feet north. The BRT service connects with the existing Metro B Line and D Line heavy rail service at the Wilshire/Vermont Station, allowing for transfers at the northeastern corner of the intersection.

2.5.6 Segment 6: Wilshire Boulevard to Sunset Boulevard

Segment 6 spans 2.7 miles from Wilshire Boulevard to the north terminus at Sunset Boulevard. There are no improvements planned between Sunset Boulevard and Hollywood Boulevard. Vermont Avenue varies from 70 feet to 90 feet curb to curb in this segment. This segment has two northbound lanes, two southbound through lanes, a turning lane, and on-street parking along both sides of the roadway. This segment includes connections to the Metro B Line at Santa Monica and Sunset Stations.

Metro's related Near-Term Improvements project is anticipated to be implemented prior to this Project. The near-term improvements consist of taking the existing curb lanes between Wilshire Boulevard and Sunset Boulevard (currently used as a third travel lane during peak hours) and converting them to peak-period bi-directional bus lanes. During non-peak hours, buses would operate in the right-most through lane.

Segment 6 includes the following elements:

- **Segment 6 BRT Alignment and Roadway Work:** The Project would replace one northbound lane and one southbound lane with two 11- to 12-foot-wide dedicated BRT lanes, resulting in one through-lane and one BRT lane in each direction between Wilshire Boulevard and Sunset Boulevard. The existing peak-hour dedicated bus lanes would be removed and replaced by permanent full-time parking except for at station platform locations. Existing left- and right-turn pockets would be maintained. Where right-turn pockets do not exist, right-turning movements would be accommodated with a shared BRT and right-turn lane, maintaining existing operations. At the US-101 freeway overpass between 3rd Street Station and Santa Monica Station, the proposed alignment differs from the typical alignment in Segment 6 to accommodate the increased traffic flow entering and exiting the freeway. The southbound direction of Vermont Avenue would feature three general-purpose through lanes including one mixed-flow traffic lane between the US-101 northbound on-ramp and Council Street. At Council Street, the southbound roadway would return to one dedicated BRT lane and one general-purpose through lane. The northbound direction of Vermont Avenue would maintain a dedicated BRT lane through the US-101 overpass with a mixing zone to accommodate an extended general-purpose turning lane.
- **3rd Street Station:** The 3rd Street Station features two shortened platforms due to constraints of existing driveways. The northbound station would be 75 feet long and 10 feet wide, located about 80 feet north of 3rd Street. The southbound station would be 67 feet long and 10 feet wide, located about 102 feet south of 3rd Street. The existing Dash stop at the southwestern corner of Vermont Avenue and 3rd Street would be co-located with the proposed BRT station platform.

- **Santa Monica Station:** The Santa Monica Station features two station platforms on the far side of the intersection. The northbound platform would be 100 feet long and 10 feet wide, and 48 feet north of Santa Monica Boulevard to avoid a conflict with a driveway to the north. The southbound platform would be 100 feet long and 10 feet wide, and about 81 feet south of Santa Monica Boulevard. The southbound platform would be adjacent to the access point for the existing Metro B Line heavy rail station.
- **Sunset Station:** The Sunset Station features two BRT station platforms on the far side of the intersection. The northbound station platform is about 90 feet long and 10 feet wide, and about 85 feet north of Sunset Boulevard. The southbound station platform would be 100 feet long and 10 feet wide, and about 88 feet south of Sunset Boulevard. Existing Metro Local bus stops (Lines 175, 204, 206 and 217) and the existing Dash stop would be co-located with the proposed BRT station platforms. This station connects to the existing Vermont/Sunset Metro B Line heavy rail station at the northeastern corner of Vermont Avenue and Sunset Boulevard.
- **North Terminus** – **Hollywood Boulevard Layover:** Hollywood Boulevard is the north terminus of the Project. Hollywood Boulevard is not considered one of the 13 BRT stations proposed for implementation as a part of the Project, though passengers would be allowed to board and alight BRT buses at this location. Hollywood Boulevard is the existing bus layover location for the Metro Line 204 and Metro Rapid Line 754 service. This location would continue to serve as the layover for both local and BRT service. No civil improvements are proposed at this location.

2.6 Project Implementation Schedule

Project implementation is anticipated to take approximately 42 months from the start of Preliminary Engineering in fall 2024 to Project opening in spring 2028. This schedule includes approximately 12 months for preliminary engineering, 12 months for final engineering and 18 months for construction.

3 METHODOLOGY

This Business Case Analysis evaluates the Project through five cases, or specific justifications, to understand the Project benefits and feasibility, as well as costs and impacts of the investment. Specifically, Section 5, Case for Change, identifies the issue/opportunity and proposes a solution to address it; Section 6, Strategic Case, and Section 7, Economic Case, lay out the rationale for pursuing the Project; and Section 8, Financial Case, and Section 9, Delivery and Operations Case, address how the Project would be implemented. The Metrolinx guidance documents (2017, 2021) were used to structure and inform this Business Case Analysis as recommended by California Governor's Office of Planning and Research (OPR, 2021).

4 EXISTING SETTING

The Project would be in an area that includes the City of Los Angeles and the communities of Westmont and West Athens in unincorporated Los Angeles County. This section presents information on existing conditions and forecasted growth near and/or within the Project Study Area, as defined in Section 1.2 above. The area under consideration for this Business Case Analysis is primarily the Project Study Area, with some discussion of existing conditions and anticipated growth in the region.

4.1.1 Regional Setting

The Southern California Association of Governments (SCAG) represents six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and nearly 19 million residents. This region hosts a diversity of landscapes and communities that span 38,000 square miles. As a result of the vast geographic distance, employers in one subarea of the region cannot easily access workers living in another. The region is a major hub of global economic activity, representing the 16th largest economy in the world, and is considered the nation's gateway for international trade, with two of the largest ports in the nation. A more efficient transportation system with increased mass transit systems would create a more efficient and competitive labor market and add economic activity and jobs to the economy (SCAG, 2024a).

4.1.1.1 Los Angeles County

Los Angeles County, California has approximately 4,060 square miles of land area and approximately 10 million people [United States(U.S.) Census Bureau, 2024]. Although Los Angeles County covers only about one-tenth of the SCAG region's land area, it is home to more than half of the region's population.

The City of Los Angeles and communities of Westmont and West Athens lie within Los Angeles County. The Project Study Area includes a variety of urban land uses including commercial, institutional/public facility, industrial, open space/recreational, residential and vacant uses. **Table 4-1** provides the land use distribution within 0.5 miles of the Project. Residential use is the most prominent land use in the Project Study Area.

Table 4-1: Land Use Distribution in Project Corridor

Land Use	Acres	Percent (%)
Vacant	134	1.8
Commercial	753	9.9
Open Space/Recreational	30	0.4
Industrial	64	0.8
Institutional/Public Facility	1,091	14.4
Residential	5,515	72.7
Total	**7,587**	**100.0**

Source: Vermont Corridor Partners, 2024.

4.1.1.2 Growth Trends

SCAG's planning efforts focus on strategies to minimize traffic congestion, protect environmental quality and provide adequate housing throughout the region. Adopted in April 2024, the SCAG's *Connect SoCal – The 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (Connect SoCal) is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern (SCAG, 2024a).

Connect SoCal forecasts growth in employment, population and households. These projections consider economic and demographic trends as well as feedback reflecting on-the-ground conditions from the SCAG's jurisdictions. The regional growth forecast is a balanced, long-term vision for future population, household and employment growth.

In **Table 4-2**, historical growth of population, households and employment appears similar, ranging from 10 to nearly 14%, across the two decades between 1990 and 2019. Economic and population growth drivers in Los Angeles County include proximity to the Ports of Los Angeles and Long Beach, the presence of Los Angeles International Airport and nearby attractions, and comparative job opportunity relative to other parts of California and the U.S.

Whereas population growth was once driven by fertility rates, it is now driven by net migration. Los Angeles County's job opportunities and amenities attract new households, but the high cost of living and shortage of affordable housing offset growth for some areas and demographics. This trend is evident by the projected slight 0.1% decrease in population from 2019 to 2025.

Table 4-2: Los Angeles County Forecast of Population, Households, and Employment

	1990	Historic % Change 1990-2019	2019	Projected % Change 2019-2025	2025	Projected % Change 2025-2050	2050
Population	8,863,000	13.3	10,046,000	-0.1	10,040,000	7.5	10,793,000
Households	2,990,000	13.5	3,393,000	5.9	3,594,000	15.6	4,155,000
Employment	4,562,000	10.3	5,031,000	2.0	5,131,000	6.4	5,461,000

Source: SCAG, 2024b

Positive growth in population, households and employment is projected from 2025 to 2050, as is also demonstrated in **Table 4-2**. Household formation is projected to see nearly 16% growth, more than double the 6% to 7% growth anticipated for population and employment. Los Angeles County will be home to nearly 10.8 million residents in 2050 according to these projections.

5 CASE FOR CHANGE

5.1 Issue/Opportunity

As the busiest north-south travel corridor in the Metro bus system, Vermont Avenue faces significant performance deficiencies related to vehicle speeds, reliability and overall user experience due to severe traffic congestion and adverse operating conditions. Additionally, the Project Study Area is home to densely populated and Metro-defined EFCs, which consider the presence of Black Indigenous, and other People of Color (BIPOC) residents, low-income households and zero-car households. Approximately 91.2% of the census tracts in the Project Study Area are considered EFCs based on these factors. BIPOC communities that exist in the Vermont Corridor includes several historically African American and Latinx communities, as well as Salvadoran, Korean, Honduran, Oaxacan, Armenian, Bengali, and Thai immigrant communities. The transit system is vital to these groups, as well as the larger community located in the Project Study Area for access to the entertainment, education and job sectors in the Vermont Corridor. For example, this includes the Shrine Auditorium, Exposition Park, USC and many more. The average transit trip lengths on Metro Line 204 and Metro Rapid Line 754 are only approximately 2.3 miles, which indicates many riders stay within their local communities to conduct their daily business or use transit to transfer outside of the corridor to connect to adjacent or nearby activity or employment centers.

Metro has partnered with multiple CBOs to inform the planning effort with stakeholders' transit needs and concerns in mind to develop an equitable transit solution. Safety is another critical issue in the corridor, with regular accidents including multiple fatalities occurring in 2023 alone (TIMS, 2024). By providing a dedicated transit lane and platform stops, the Project is anticipated to foster a reduction in the number of annual accidents that occur along the corridor.

It is critical to address the existing issues along Vermont Avenue not only because it is the busiest north-south travel corridor in the Metro bus system and affects thousands of people daily, but also to facilitate safe and accessible transport that would uplift the local economy and communities.

5.1.1 Internal Drivers for Change

The existing transit system faces deficiencies related to reliability and travel times. Without the Project, this is expected to worsen as the system becomes overwhelmed with the projected growth through 2050 (SCAG, 2024a). This in turn contributes to less-than-ideal ridership rates that are still below pre-pandemic levels. Additionally, the station and passenger amenities are not consistent throughout the corridor. The existing E Line's Expo/Vermont station has covers and updated signage; however, several stops in the South and Central subareas are lacking amenities, with some stops having only a sign. These stops specifically are in need of improvement to enhance user comfort and experience. Pedestrian and bicycle access is inadequate and should be improved in order to maintain existing traffic and attract new cyclists and pedestrians. Safety and security measures along the corridor and at the individual stations are of concern, as the Project Study Area has a high accident rate with multiple fatalities annually according to University of California, Berkeley's Transportation Injury Mapping System (TIMS) (University of California, Berkeley, 2024). In 2022 and 2023, there was an annual average of approximately six crashes resulting in fatalities and 131 crashes resulting in injuries in the Project Study Area, specifically along Vermont Avenue through the corridor.

The communities' reliance on the transit system in this corridor highlights the need for change and improvement. The corridor is regularly used by the community residents to access employment and

functions as a vital connection to the local economic hub. Los Angeles County's population is largely composed of individuals between the ages of 15 and 44 years old, totaling 42.7%, an age group that tends to be especially transit-dependent. According to Metro's 2022 customer experience survey results, which included over 10,000 responses from all transit users in Los Angeles County, 89% of bus riders has an annual household income of less than $50,000 (U.S. dollars), with 43% of bus users making less than $15,000 annually (Metro, 2022a). Additionally, 78% of bus riders do not have access to a vehicle, and 83% of users ride the bus at least 3 days per week. Metro's overall satisfaction, specific to the bus service, is at 61%, which is slightly down from its level in 2020. Improving mobility options to enhance access to destinations and addressing disparities are critical for investing in the community. These Metro priorities have been integrated into the planning and design of the Project.

5.1.2 External Drivers for Change

The Project aims to address issues and align with outcomes raised by stakeholders, including federal, state and local governments, thereby contributing to a greater collective change. Metro has regularly organized collaborations to ensure stakeholder input informs the design and implementation of the Project. Metro's CBO partnership program provides community stakeholders with opportunities to engage with Metro throughout the planning process to ensure there is a common vision for the corridor, as well as listen to their transit needs and concerns and incorporate feedback into the development of an equitable transit solution for the corridor. The Project will continue to include the communities through the CBO engagement efforts, such as public hearings, update meetings, social media and e-mail. Further, overarching government policies and goals have been incorporated into the Project design and implementation. This includes SCAG Connect SoCal plan goals (SCAG, 2024a) and California State Transportation Agency (CalSTA) 2024-2026 Strategic Plan. Together, these plans call for improvements to safety, climate action, equity, innovation, mobility and economic prosperity.

5.2 Proposed Solution

The issues outlined in this section would be addressed by the Project by meeting the mobility needs of the Vermont Corridor's historically underserved and underinvested communities. This includes alleviating existing service deficiencies and network challenges to provide safe, accessible and reliable transit service. The Project offers a vital north-south transit alternative to residents and businesses west of I-110 and an opportunity to reinvest in communities along the Vermont Corridor. The Project's goals reflect this and include improving transit performance, enhancing the customer experience, investing in the community and developing a cost-effective Project within a desired timeline.

6 STRATEGIC CASE

This section covers the Strategic Case for the Project, which demonstrates why improvements are needed along the corridor and considers how the Project performs against existing goals and alternatives to indicate if the investment addresses the issues outlined in Case for Change section above.

6.1 Local Transportation Strategy

The regional (SCAG, 2024a) and local (Metro, 2020b) strategy for facilitating further economic growth requires continued investment in transportation infrastructure to enable businesses to invest in job creation and the provision of new residential developments. This section details how the Project would contribute to achieving these strategic aims.

SCAG's Connect SoCal plan goals include:

- Mobility: Build and maintain an integrated multimodal transportation network.
- Communities: Develop, connect and sustain communities that are livable and thriving.
- Environment: Create a healthy region for the people of today and tomorrow.
- Economy: Support a sustainable, efficient and productive regional economic environment that provides opportunities for all residents.

Metro's 2020 *Long Range Transportation Plan* (LRTP) includes the following applicable strategies under its Better Transit priority area:

- Strategy 1.2: Improve the frequency, speed and reliability of the bus and rail transit networks.
- Strategy 1.4: Enhance station areas.
- Strategy 1.6: Enhance customer service.
- Strategy 1.8: Optimize sustainable and resilient operations and maintenance of fleet, infrastructure and facilities.

The Project has the potential to reduce congestion and improve both connectivity and journey time reliability. The Project would employ electric buses and install new, modern bus stops. The delivery of these benefits would support economic growth. As such, the delivery of the Project would provide benefits aligned to delivering the SCAG Connect SoCal goals and the strategies of Metro's Better Transit priority. The VTC is identified as an upcoming major transit project in the LRTP.

6.2 Fit with Wider Policy Context

Achieving economic growth, increasing living standards and the provision of new housing are goals not only for Los Angeles County and southern California; they are also goals at state and federal levels.

The federal transportation performance management program, introduced by the Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2012, requires states and metropolitan planning organizations to establish performance targets focused on outcomes that align with seven key national transportation goals. These national performance goals are related to transportation investment efficiency (SCAG, 2024a):

1. Transportation system safety
2. Transportation infrastructure condition
3. Congestion reduction
4. System reliability

5. Freight movement and economic vitality
6. Environmental sustainability
7. Reduced project delivery delay

The CalSTA *2024-2026 Strategic Plan* established the following goals related to the state's transportation system:

- Safety: Reduce fatalities and serious injuries for everyone on the transportation system.
- Climate Action: Lead and advance climate action for a cleaner California.
- Equity: Embed equity in all our programs, policies and practices.
- Innovation: Foster innovation in our processes, systems and technology to enhance service for all Californians.
- Mobility: Create a seamless and connected multimodal transportation system with easy access to jobs and housing for all.
- Economic Prosperity: Promote sustainable and inclusive economic growth.

The Project would improve efficiency along the congested corridor and facilitate safe and accessible transportation to major employment and attraction hubs. The Project supports the economic growth ambitions from federal and state governments. Metro has successfully delivered projects of this scale and larger and has the necessary expertise to limit project delivery delay. The Project is being designed with the climate and the community in mind, seeking to provide better, cleaner and more equitable transit to Los Angeles County. The Project aligns with the given federal and state ambitions.

6.3 Project Objectives

A transportation project can have both primary objectives and secondary objectives (goals). The primary objectives are the fundamental outputs of why the Project is needed and, therefore, must be achieved, whereas secondary objectives are other outputs that are achieved along the way but are not necessary to the success of the Project. The goals tend to be delivered as a consequence of delivering the primary objectives, as a causal chain effect.

Therefore, the primary objectives represent the outcomes required by the Project. As discussed in Section 2.1 above, Metro has identified the following primary objectives for the Project:

- Improve and maintain service reliability
- Reduce passenger travel times
- Increase ridership
- Enhance stations and passenger amenities
- Improve pedestrian/bicycle access
- Improve safety and security
- Improve mobility options to provide access to destinations
- Address disparities identified in the Equity Analysis
- Acknowledge and integrate cultural assets in planning/design
- Maximize benefits within funding constraints
- Implement a project by the 2028 Olympics
- Maximize sustainability by reducing throwaway work, aligning with the Metro's NextGen Bus Plan and future rail conversion

Secondary objectives, or goals, include:

- Improve Transit Performance
- Enhance Customer Experience
- Invest in Community
- Develop a Cost-Effective Project within Desired Timeline

Project design would need to satisfy all of the primary objectives and as many of the secondary objectives as possible. These objectives and goals inspired the evaluation criteria in selecting the Project, as described further in Section 6.7 below. The selected Project was considered the best alternative to satisfy the Project objectives.

6.4 Measures of Success

Table 6-1 sets out the measures for success against which any potential Project objectives should be monitored.

Table 6-1: Project Objectives and Measures of Success

Objective	Method of Assessment
Primary Objectives	
Improve and maintain service reliability	Compare percentage of existing and future on-time arrival trips
Reduce passenger travel times	Compare existing and future journey times for routes within the Project Study Area
Increase ridership	Review existing ridership counts, then compare against future ridership post-construction
Enhance stations and passenger amenities	Consider amenities pre- and post-construction; review existing ridership counts, then compare against future ridership post-construction
Improve pedestrian/bicycle access	Review existing pedestrian/cyclist counts along the corridor, then compare against future counts post-construction
Improve safety and security	Consider number of stations with upgraded safety features pre- and post-construction
Improve mobility options to provide access to destinations	Consider ridership representing disabled, low-income, and/or elderly users, pre- and post-construction
Address disparities identified in the Equity Analysis	Consider transit accessibility for low-income or BIPOC communities pre- and post-construction, as well as access to jobs
Acknowledge and integrate cultural assets in planning/design	Consider impact on origin destination stops to and from nearby attractions
Maximize benefits within funding constraints	Consider benefit-cost ratio; budget for maintaining operations
Implement a project by the 2028 Olympics	Project Open scheduled before the 2028 Olympics
Maximize sustainability by reducing throwaway work, aligning with the Metro's NextGen Bus Plan and future rail conversion	Assess extent to which Project supports continued utilization of the proposed near-term bus lane improvements on the corridor and extent to which Project precludes or supports future rail implementation on the corridor.

Source: Vermont Corridor Partners, 2024.

6.5 Uncertainties and Risks

The following constraints have been identified for the Project:

- Funding: The cost of the Project would need to compete with other transportation infrastructure funding priorities which in total may exceed Los Angeles County's core transportation investment budget allocation.
- Budget: Improvements would need to be achievable within the budgets available but should not be constrained by current funding, as other funding sources may be found to complement Metro budgets.
- Structural/Highway Boundary: Improvements would need to be achievable within the land available, which consists of the road and public ROW along the corridor.
- Non-acceptance from the public or stakeholders: The Project should not be considered controversial and should be capable of gaining support during stakeholder and public consultation.
- Further Project development and design work would be mindful of these constraints by managing funding and budget limitations, operating within the designated Project area, and continuing to engage with and gain the support of the public and stakeholders.

6.6 Interdependencies

The VTC has independent utility. Beyond the constraints listed above in Section 6.5, there are no other internal or external factors upon which the successful delivery of the Project is dependent. The Project is self-contained and does not require the completion of any other Metro or California Department of Transportation works to progress, and there is sufficient land available.

6.7 Alternatives Assessment

The Project was identified after careful consideration of alternatives with the stakeholder and Metro objectives and goals in mind. Four concepts were previously considered in the 2017 BRT Technical Study, with two concepts identified as being the most promising BRT concepts. Those two concepts, Concept 1 (the Project; side-running BRT) and Concept 2 (center-running BRT), were identified as being the most promising BRT concepts. These concepts are illustrated in **Figure 6-1** below.

The primary differentiating characteristic between Concepts 1 and 2 is side- or center-running bus lanes south of Gage Avenue. The remainder of the alignments for Concepts 1 and 2 (from Gage Avenue to Hollywood Boulevard) are identical side-running configurations. Both concepts have proposed BRT stations at the same intersections, with side-running station platforms placed along the existing sidewalk and center-running station platforms placed in the Vermont Avenue median.

Concepts 1 and 2 were evaluated by Metro using 12 evaluation criteria to examine the Project's support for the overarching Project goals which feed into Project objectives. The analyses conducted using the 12 evaluation criteria represent an assessment of the advantages and disadvantages of pursuing a side-running or center-running concept for the implementation of BRT service on Vermont Avenue.

Figure 6-1: Vermont Corridor Configurations Remaining Under Consideration

Source: Vermont Corridor Partners, 2024.

Each criterion is rated on a five-point scale, as illustrated in **Table 6-2**. The values or conditions identified as scoring thresholds and breakpoints differ with respect to each criterion based on a reasonable range of performance outcomes, including:

- Existing and planned corridor conditions
- Industry best practices and supporting documentation
- Peer agency experience

Qualitative ratings from Low to High were assigned to communicate the relative performance of each concept. Each qualitative rating also equates to a numerical score to support the cumulative and overall comparison of concepts.

Table 6-2: Vermont Transit Corridor Rating Key

Points	Rating	Symbol
5	High	●
4	Medium-High	◕
3	Medium	◑
2	Medium-Low	◔
1	Low	○

Source: Vermont Corridor Partners, 2024.

Table 6-3 shows the overall scoring results for each concept, with a total possible score of 60 points.

The screening analyses determined that the highest-scoring configuration is Concept 1, which features side-running dedicated BRT lanes for the full extent of the Vermont Corridor from 120th Street to Hollywood Boulevard. As a result, Concept 1 was carried forward as the Project. Additional refinements have been made to the configuration's alignment and design to ensure the Project meets the community's needs and the Project objectives to the greatest extent possible.

Table 6-3: Vermont Transit Corridor Evaluation Criteria

Goal	Evaluation Criteria	Project: Side-Running Rating	Project: Side-Running Score	Concept 2: Center-Running Rating	Concept 2: Center-Running Score
Improve Transit Performance	Daily Ridership		4		4
	Travel Time		3		4
	Traffic Impacts		2		3
	On-Street Parking Impacts		4		4
Enhance Customer Experience	Pedestrian Safety and Compatibility		4		3
	Bike Lane Safety and Compatibility		3		3
Invest in Community	Community Support		4		3
	Compatibility with Neighborhood/ Urban Design		3		4
	Lessening of Disparate Outcomes		3		2
Develop a Cost-Effective Project within Desired Timeline	Compatibility with other Near-Term BRT/Long-Term Rail and Local Plans		4		2
	Capital Cost		4		3
	Construction Schedule		4		2
Total Score			42		37

Source: Vermont Corridor Partners, 2024.

6.8 Strategic Case Summary

Alternatives were thoroughly screened and considered in selecting the Project. The Project best addresses the issues, as described in the Case for Change, and it best meets the Project goals and objectives. Due to the size and scale of ridership, improvements to this transit corridor would have a notable impact on the area. Transit performance would be improved by increasing carrying capacity, reducing the run and dwell times and enhancing service reliability. Passenger-friendly buses and stations that are safe, convenient and informative would also improve transit-riders' experiences. Electric buses would help to meet environmental goals and improve air quality for local residents. Safer first/last mile options to rider destinations and easier transfers would improve the multimodal access to transit. The Project's connectivity would support the equitable development of transit neighborhoods in the immediate area and foster livable communities where activity centers and destinations are within walking distance. Benefits would also be maximized through resolving planning and design tradeoffs so that desired community features are implemented and potential impacts are minimized.

Measurements for success were defined, against which the Project can be assessed following Project Open. Uncertainties and risks were identified, and no interdependent works were deemed necessary for the successful delivery of the Project. Importantly, the design and implementation of the Project would address the issues and align with the standards set out by federal, state and local governments and other key stakeholders.

7 ECONOMIC CASE

The Economic Case demonstrates that the Project offers a strong value for money and includes a sensitivity test, exploring the impact of Metro's contribution for the Project cost and the resultant value for money. In the Economic Case, impacts such as reductions in user travel times, air pollution or car accidents are monetized as benefits. Additionally, economic impacts from capital and O&M expenditures are considered.

This section outlines the approach taken to assess the economic case of the Project and demonstrates how and why the Project would offer a Very High Value for Money. The analysis was conducted in accordance with U.S. Department of Transportation's (USDOT's) 2024 update for benefit-cost analysis (BCA) guidance for discretionary grant programs (USDOT, 2024). The BCA compares expected benefits and costs of the Project to the No Project (baseline) Alternative to estimate the Project's net benefits and benefit-cost ratio (BCR). The analysis follows a conservative estimation of the quantifiable benefits of the Project in the BCA; the actual total benefits of the Project may be greater than depicted in the results.

7.1 Economic Assessment

The Economic Case for this Project is focused on the following aspects:

- Assessing and quantifying the associated monetized benefits of the Project
- Preparing a qualitative description of the social costs such as collisions resulting in property loss, injury or death, emissions resulting in health impacts, construction noise and climate change
- Conducting a BCA to compare the Project's benefits against costs and produce a BCR value

Generally, for the benefits calculations, standard factors and values accepted by federal agencies were used, except in cases where Project-specific values or prices were available. In such cases, modifications are noted, and references are provided for data sources.

Travel demand modeling was conducted to estimate the impacts of the BRT service proposed in the Project and includes expected new riders, time savings (hours) and vehicle miles traveled (VMT) savings. Details of the methodology for the travel demand model can be found in the *Travel Demand Forecast Results Technical Memorandum* (VCP, 2024a). These figures were used in the BCA to calculate the associated benefits of the Project. The modeling is forecasted to the year 2045 with the full BRT service in use throughout the corridor. The results of the model are consistent with the Project inducing ridership, reducing VMT and leading to time savings.

7.1.1 Present Value Costs

This section presents estimated capital cost prepared for the Project based on the Draft Advanced Conceptual Engineering Design. The capital cost estimate prepared at the ACE phase is a parametrical Rough Order of Magnitude estimate. The estimate was prepared to a level of detail appropriate for the conceptual (5-percent [%] to 15%) level of design. Capital costs include construction of BRT infrastructure, guideway improvements, stations, sitework and systems. The costs are also inclusive of professional services required to deliver the Project to revenue service, transit vehicles, and contingencies. The cost estimate does not include any ROW acquisition costs as the Project does not impact any existing ROW.

The capital cost estimate has been prepared in accordance with the Association for the Advancement of Cost Engineering, International (AACE) Class 4 estimating standards for a planning level of design. Similar industry terms for this classification of estimate are rough order of magnitude, budget, scope development and concept study. A Class 4 estimate is typically based on limited and/or preliminary design information, project narratives and recommendations from the design team. The Class 4 estimate inherits an expected range of accuracy from low (L) at -15% to -30% to high (H) at +20 to +50%, based on 1% to 15% project definition, and is prepared using historical cost data and parametric modeling. The capital cost is prone to fluctuations as the Project design is modified and refined as the design advances.

Construction for the Project is scheduled to last 18 months. For the purpose of the BCR calculation, the costs were deflated from the 2024 base-year-dollar (BYD) value to a 2022 current year dollar value. 2022 is used as the most recent year with full data to relate all dollar values to a common unit, in accordance with the USDOT BCA guidance. The total costs pertinent to the BCA were spread evenly over the 3-year period and discounted using a 3.1% discount rate. It should be noted the costs analyzed for the purpose of the BCA differ from the ones related to the IMPLAN analysis in sections below, as those costs are focused on the percentage spent in Los Angeles County.

The estimated capital cost for the Project is presented in **Table 7-1** with all values rounded to the nearest thousand. The table presents the costs in the year of expenditure (YOE) 2028-dollar value, base year 2024-dollar value, and the current year 2022-dollar value. The base year 2024-dollar value does not include escalation to the YOE. The total capital cost that would be incurred includes the 2024-dollar value plus cost escalation to the YOE at roughly 3.5% per year to the opening year of 2028.

Table 7-1: Capital Costs

Year	Total Capital Costs (2028 YOE Dollar Value)	Total Capital Costs (2024 BYD Dollar Value)	Total Capital Costs (2022 Current Dollar Value)	Discounted Capital Costs (3.1%)
2025	$149,416,000	$135,692,000	$126,381,000	$115,320,000
2026	$149,416,000	$135,692,000	$126,381,000	$111,852,000
2027	$149,416,000	$135,692,000	$126,381,000	$108,489,000
Total	**$448,248,000**	**$407,076,000**	**$379,143,000**	**$335,661,000**

Source: Vermont Corridor Partners, 2024

Notes: YOE = year of expenditure

7.1.2 Present Value Benefits

Benefit values calculated for the Project include road safety benefits, facility amenities, emission savings, vehicle operating cost savings, time savings and residual value. All monetary values for the different benefit components were sourced from the USDOT BCA guidance. Benefits were modeled to begin in the year 2028, with the opening of the Project, and analyzed through the year 2047.

Road safety benefits were calculated based on crash data from 2022 to 2023 in the Project area sourced from the TIMS. The Project is expected to reduce crashes in the impacted area due to the implementation of a dedicated transit lane and installation of platform stops. Crash modification factors (CMFs) were sourced from Crash Modification Factors Clearinghouse (2024), sponsored by

the Federal Highway Administration, to estimate the reduction in accidents as a result of the Project. CMFs are based on published research analyzing crash data, types and outcomes in relation to different safety and road improvements. Values related to crashes with injuries and fatalities were sourced from the USDOT BCA guidance.

Facility amenity benefits were based on the modelled results of the projected daily ridership and used the USDOT BCA guidance values for the variety of amenities provided by the Project. This included electronic real time information, information/emergency button, platform/stop weather protection, step-free access to station stops, step-free access to vehicle, surveillance cameras, ticket machines and timetables.

Emission savings measured the avoided vehicle emissions, including nitrous oxide, carbon dioxide, particulate matter and sulfur oxide. Values were sourced from the USDOT BCA guidance and are based on a dollar-per-metric-ton value. Vehicle operating costs savings used the value of $0.52 per operating mile in accordance with the USDOT BCA guidance to capture the benefits of the avoided VMT from the Project. Similarly, time-saving benefits used the standard value of time of $19.60 per hour to measure the time-saving benefit of the Project. Lastly, residual value used 80% of the capital costs and the estimated service life of 38 years for local transit according to the Bureau of Economic Analysis (BEA) Depreciation Estimates (BEA, n.d.).

7.1.3 Benefit Cost Ratio

Results of the BCA are presented in **Table 7-2** in 2022 dollar values in millions ($2022 M). The BCR of 5.4 is the ratio of the present value benefits and present value costs. The Project is expected to have approximately $1.5 billion in net benefits, discounted at 3.1% over the 20-year period of analysis.

Table 7-2: Summary of the Benefit Cost Analysis Results

	Discounted to 2022 Dollar Values at 3.1%
	20-Year Analysis, Millions of Dollars
Costs ($2022 M)	
Capital Cost	$335.7
Total Costs	**$335.7**
Benefits ($2022 M)	
Road Safety Benefits	$421.2
Facility Amenities	$114.9
Emission Savings	$28.4
Vehicle Operating Cost Savings	$173.9
Travel Time Savings	$1,127.4
Residual Value	$67.0
O&M Costs Increase (disbenefit)	-$113.1
Total Benefits	**$1,819.9**
Net Benefits ($2022 M)	**$1,819.9**
Benefit-Cost Ratio	**5.4**

Source: Vermont Corridor Partners, 2024

7.2 Key Risks, Sensitivities and Uncertainties

The Project is anticipated to be low risk, especially related to construction, because the ROW is under jurisdiction of both the City of Los Angeles and Los Angeles County, and there is existing transit service in portions of the Project area. The results of the forecasted modeling that are used as the basis of the BCA are subject to greatest risks, sensitivities and uncertainties, which are expected when estimating future conditions. Risks, sensitivities, and uncertainties are especially true when estimating transit figures following the COVID-19 pandemic. As newer data become available, the BCA can be easily updated.

7.3 Value for Money Statement

The value of money was determined by the strength of the BCR. The threshold for determining the value of money based on the BCR was as follows:

- Low Value for money if BCR equals 1.0 to 1.5
- Medium Value for money if BCR equals 1.5 to 2.0
- High Value for money if BCR equals 2.0 to 4.0
- Very High Value for money if BCR is greater than 4.0.

If the BCR value is below 1.0, the Project is not economically favorable, as the costs are greater than the benefits. If the BCR value is on the cusp of a threshold, it is important to consider inequalities, both weak and strict, in the decision-making of the value of money.

Based on these defining terms, the BCR of 5.4 shows that the Project would have a Very High Value for money.

7.4 Economic Impacts

The Project supports the economic growth objectives from local, state and federal governments, as discussed in Section 6 above, for the Strategic Case. Project achievements of economic growth objectives are demonstrated by the Very High Value for money statement detailed above. Additionally, **Table 7-3** summarizes the economic impact of capital expenditures on employment and economic output and the annual impact of additional O&M expenditures.

Expenditures in the region required for the No Project Alternative are typically separated from those expenditures that would be new to the economy under the Project. For example, expenditures already allocated for other rail transportation construction projects in the region under the No Project Alternative would not be considered new economic stimulus and, therefore, would not be strictly attributable to the Project. However, at this stage of Project development, the apportionment of expenditure sources is undetermined. For this analysis, 100% of Project costs spent inside of Los Angeles County will be treated as new spending in the region. This assumption will yield an upper limit estimate of the economic impact due to Project construction. The actual economic effects from construction and operation of the Project would likely be lower after expenditures planned under the No Project Alternative, such as the Measure M funds, are removed.

Table 7-3: Inputs: Project Capital Expenditures in Los Angeles County

Cost Category	2024 Dollar Values	Percent of Costs Spent Outside of Los Angeles County	2024 Dollar Value Costs Spent Inside of Los Angeles County (Inputs)
Guideway and Track Elements	$0	12%	$0
Stations, Stops, Terminals and Intermodal	$22,391,000	40%	$13,435,000
Support Facilities: Yards, Shops and Administration Buildings	$0	20%	$0
Sitework and Special Conditions	$134,782,000	0%	$134,782,000
Systems	$41,237,000	17.5%	$34,020,000
ROW, Land and Existing Improvements	$0	0%	$0
Vehicles	$90,816,000	100%	$0
Professional Services	$80,842,000	6.5%	$75,587,000
Unallocated Contingency	$37,007,000	3.5%	$35,712,000
Total Project Cost	**$407,075,000**	**27.9%**	**$293,536,000**

Source: Vermont Corridor Partners, IMPLAN, 2024

Dollar values are rounded to the nearest thousand

When estimating the economic impact of any activity on a particular study area (in this case, Los Angeles County), it is also important to consider how much of the total goods and services that are purchased would be produced within that area. Goods and services that are not produced within the study area are called “leakages” and represent dollars that flow to businesses and individuals outside of the study area. Thus, goods and services for which it is known that they would not be produced within Los Angeles County have been excluded from the cost estimates that were used to conduct this analysis. These dollars would still have an economic impact upon the broader region, state and country but would not have a direct local effect in Los Angeles County.

For example, Professional Services are largely purchased in Los Angeles County and, thus, would have an impact in the local economy. Bus (vehicle) purchases, by contrast, would not be purchased from the local economy, as Los Angeles County does not produce transit vehicles; this limits the potential impact this purchase can have. Thus, as no local labor would be used to produce such vehicles, no local impact generated by their purchase could be realized.

Total capital expenditures are divided into nine major categories, as seen in **Table 7-3**. After analyzing individual line items included in each category, those items that were determined to be likely built using non-local materials were excluded. The Project limits exist entirely within the existing public ROW; thus, ROW is excluded from this portion of the analysis. The entirety of annual, additional O&M expenditures ($9.6 million in net increase relative to No Project Alternative) are assumed to be new spending in Los Angeles County.

A total of $293.5 million in capital expenditures is assumed to be new spending in Los Angeles County across the 35-month construction period, as shown in **Table 7-3**.

The initial construction, engineering and associated hiring affiliated with construction represent the direct effect of investment in the Project. A further increase in new spending and employment across a variety of industrial sectors and occupational categories via supply-chain linkages is also expected, such as when a construction company rents an excavator from a local heavy equipment dealer. These inter-industry transactions represent the Project's indirect effect, which would not have occurred if it were not for the direct effect.

Finally, the earnings of newly hired workers as part of these direct and indirect effects would translate into a proportional increase in consumer demand as these workers purchase goods and services in the region; this would be considered the induced effect of the Project. In this way, funds spent on construction in Los Angeles County would ripple through the economy, producing jobs and income across a variety of different economic sectors.

The results of the input-output analysis are categorized by labor income, value added, output and employment. Labor income includes all forms of labor income, including wages, benefits and proprietor income. It reflects the combined cost of total payroll paid to employees (e.g., wages and salaries, benefits and payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners across the defined economy. The term value added means the difference between an industry's total output and the cost of its intermediate inputs[2] (in other words, value added represents industry's contribution to the Gross Domestic Product). Output is the value of industry output, measured in purchaser prices. Employment numbers are considered an annual average of employment and includes full-time, part-time and seasonal employment (in other words, employment data should not be considered full-time equivalent). IMPLAN calculates the labor income, value added, output and employment for the direct, indirect and induced effects of the Project.

Table 7-4 demonstrates that the Project could yield up to 1,000 additional jobs annually during the construction period, predominantly in construction and architectural, engineering and related services. Labor income could increase by more than $229 million across the 35-month construction period. Value added could be almost $301 million, and total output increase could be up to $534 million.

Table 7-4: Employment and Economic Output of the Project's Capital Expenditures ($2024) across the 35-Month Construction Period

Effect	Employment (annual)	Labor Income	Value Added	Total Output
Direct	610	$147,257,000	$155,557,000	$293,536,000
Indirect	150	$36,925,000	$62,102,000	$108,435,000
Induced	230	$44,926,000	$83,047,000	$132,182,000
Total	**1,000**	**$229,107,000**	**$300,706,000**	**$534,152,000**

Employment is rounded to the nearest hundred, and dollar values are rounded to the nearest thousand.

Source: Vermont Corridor Partners, IMPLAN, 2024

[2] Intermediate inputs are purchases of non-durable goods such as energy, materials and purchases of services that are used in the production of other goods and services, rather than for final consumption.

Table 7-5 demonstrates that the Project could yield up to 260 additional jobs annually, predominantly in transit and ground passenger transportation. Labor income could increase by almost $6.6 million annually across the entire Project lifetime. Value added could be almost $10.7 million, and total output increase could be almost $17.5 million.

Table 7-5: Employment and Economic Output of the Project's O&M Expenditures Annually ($2024)

Effect	Employment (annual)	Labor Income	Value Added	Total Output
Direct	230	$4,061,000	$6,030,000	$9,599,000
Indirect	10	$1,227,000	$2,246,000	$4,075,000
Induced	20	$1,297,000	$2,393,000	$3,809,000
Total	**260**	**$6,585,000**	**$10,669,000**	**$17,483,000**

Employment is rounded to the nearest ten, and dollar values are rounded to the nearest thousand.

Source: Vermont Corridor Partners, IMPLAN, 2024

7.5 Economic Case Summary

The Project is expected to produce favorable economic returns and have a Very High Value for money. The benefit categories of road safety benefits, facility amenities, emission savings, vehicle operating cost savings, travel time savings and residual value were all quantified as part of the BCA and compared against the Project's costs over the 20-year analysis period. Capital expenditures from the Project construction could generate up to 1,000 additional jobs annually, $229 million in total labor income, $301 million in total value added and a total output increase of $534 million across the 35-month construction period. O&M expenditures from the Project could yield up to 260 additional jobs annually; labor income could increase by almost $6.6 million, value added by almost $10.7 million, and total output increase could be almost $17.5 million annually across the Project lifetime.

8 FINANCIAL CASE

This section presents the Financial Case for the Project, which assesses the overall financial impact of proposed investment options. This includes a review of expenditures (capital and O&M) and total revenue (fares) gained. The Financial Case concentrates on the affordability of the proposals and the funding arrangements.

8.1 Costs

This section presents the Project costs for the purpose of the Financial Case Analysis. The Project costs include capital and O&M costs that would be expended to deliver and operate the Project. This section also provides a comparison of Project Alternatives that led to the recommendation of the preferred alternative.

8.1.1 Capital Cost of Recommended Alternative

This section presents estimated capital cost prepared for the Project based on the Draft Advanced Conceptual Engineering Design. The capital cost estimate prepared at the ACE phase is a parametrical Rough Order of Magnitude estimate. The estimate was prepared to a level of detail appropriate for the conceptual (5-percent [%] to 15%) level of design.

The Class 4 estimate inherits an expected range of accuracy from low (L) at -15% to -30% to high (H) at +20 to +50%, based on 1% to 15% project definition, and is prepared using historical cost data and parametric modeling. The capital cost is prone to fluctuations as the Project design is modified and refined as the design advances.

The expected capital costs for the Project are summarized in **Table 8-1**. The table presents the costs in the base year 2024-dollar value. The base year 2024-dollar value does not include escalation to the YOE. The total capital cost that would be incurred includes the 2024-dollar value plus cost escalation to the YOE at roughly 3.5% per year to the opening year of 2028.

Table 8-1: Capital Cost Estimate for the Project

Cost Category	2024 Dollar Value	2024 Dollar Value as a Percentage of Total Project Costs	YOE
Guideway and Track Elements	$0	0%	$0
Stations, Stops, Terminals and Intermodal	$22,391,000	6%	$24,836,000
Support Facilities: Yards, Shops and Administration Buildings	$0	0%	$0
Sitework and Special Conditions	$134,782,000	33%	$149,494,000
Systems	$41,237,000	10%	$45,738,000
ROW, Land and Existing Improvements	$0	0%	$0
Vehicles	$90,816,000	22%	$100,729,000
Professional Services	$80,842,000	20%	$86,702,000
Unallocated Contingency	$37,007,000	9%	$40,750,000
Total Project Cost	**$407,075,000**	**100%**	**$448,249,000**

Source: Vermont Corridor Partners, 2024

8.1.2 Operations and Maintenance Costs of Recommended Alternative

This section presents estimated O&M cost prepared for the Project based on the Draft Advanced Conceptual Engineering Design and Draft Operating Plan. The estimate was prepared to a level of detail appropriate for the conceptual (5% to 15%) level of design. The O&M estimate inherits an expected range of accuracy from low (L) at -15% to -30% to high (H) at +20 to +50%, based on 1% to 15% project definition, and is prepared using historical cost data and parametric modeling. The O&M cost is prone to fluctuations as the Project design and operating plan is modified and refined as the design advances.

The Operating & Maintenance Cost Estimates Report calculated O&M costs for three operating scenarios, including existing conditions, the No Project Alternative and the Project. The following defines these operating scenarios:

- **Existing Conditions:** The Existing Conditions scenario reflects existing transit operating conditions throughout the Vermont Corridor and the broader Metro and municipality networks in the year 2024. This scenario does not include any improvements being planned under a separate Near-term Improvements project for the Vermont Corridor. Instead, it accounts for the existing Metro Line 204 and Metro Rapid Line 754 operating as they do today without any planned improvements.
- **No Project Alternative:** The No Project Alternative scenario reflects the future transit operating conditions for the horizon year 2045, incorporating the separate Near-term Improvements project planned for the Vermont Corridor. In this scenario, Metro Line 204 and Metro Rapid Line 754 would operate within side-/curb-running dedicated bus lanes in Segment 1 and curb-running peak-hour dedicated bus lanes in Segment 6. The Near-Term Improvements project would provide incremental operational benefits for the existing Metro lines. The No Project Alternative scenario represents the future baseline conditions for the Project.
- **Project:** The Project scenario reflects the future transit operating conditions for the horizon year 2045, incorporating the proposed BRT Project. In this scenario, the proposed BRT service and the existing Metro Line 204 would operate in side-running dedicated bus lanes for all segments.

Table 8-2 below summarizes the service statistics and O&M costs for each scenario. The table presents the costs in the base year 2024-dollar value. The base year 2024-dollar value does not include escalation to the YOE. The total O&M cost that would be incurred includes the 2024-dollar value plus cost escalation to the YOE.

O&M cost estimates for the Project are approximately $27.53 million. However, with elimination of Metro Rapid Route 754 and faster travel times on Metro Line 204 discussed in Section 2, Project Description, background corridor bus service is estimated to save approximately $18.99 million, resulting in a net additional O&M cost of $8.54 million over existing as shown in **Table 8-2**. When compared to the No Project Alternative, additional O&M costs are estimated at $9.60 million over the No Project Alternative.

Table 8-2: Summary of Statistics and O&M Cost Estimates

Alternative	Statistic	204	754	BRT	Total	Change from Exist.	Change from N. Bld.
Existing	Peak Veh.*	23	18	n/a	41	*n/a*	*n/a*
	Ann. Rev. Hr.	140,195	82,028	n/a	222,223	*n/a*	*n/a*
	Ann Rev. Mi.	879,864	657,314	n/a	1,537,179	*n/a*	*n/a*
No-Build (Near-Term)	Peak Veh.*	22	18	n/a	40	-1	*n/a*
	Ann. Rev. Hr.	132,933	82,028	n/a	214,960	-7,263	*n/a*
	Ann Rev. Mi.	879,864	657,314	n/a	1,537,178	0	*n/a*
	Add'l O&M $ **					***-$1,063,000***	*n/a*
Build	Peak Veh.*	20	n/a	26	46	5	6
	Ann. Rev. Hr.	123,268	n/a	128,205	251,473	29,250	36,513
	Ann Rev. Mi.	879,864	n/a	1,405,018	2,284,882	747,704	747,704
	Add'l O&M $ **					***$8,536,000***	***$9,599,000***

* Peak vehicles refers to the maximum number of buses directly operated, not inclusive of maintenance and spares
** Additional O&M costs shown for the Project are inclusive of $422,000 for additional BRT station/stop maintenance costs.

Source: Vermont Corridor Partners, 2024

8.1.3 Costs of Alternatives and Options

Capital costs are a critical consideration for the implementation of BRT service on Vermont Avenue, as any further design must be feasible within the Project's proposed budget. To analyze capital costs for each configuration, rough-order-of-magnitude (ROM) cost estimates were developed during the screening analysis, detailed further in the *Final Project Configuration Screening Memorandum* (VCP, 2024b), for a typical station location for both the Project and Concept 2. These estimates considered general unit costs for the basic components of both side-running and center-running stations, including the costs of demolition, station infrastructure, hardscape, signage/striping, site work, utilities, signaling systems and indirect costs (i.e., professional services and contingencies). This ROM approach was taken because exact station and alignment design was ongoing, making a high-level assessment of the capital cost tradeoffs between center-running and side-running alignments the most feasible way to meaningfully measure differences between each concept at that stage of Project design.

Table 8-3 outlines the ROM cost estimates for the Project and center-running BRT (Concept 2). Given the Project's early stage of design, low-end and high-end estimates were developed for each concept to estimate a rough cost range for each station type. ROM cost estimates for this criterion only include station construction and do not include the cost of any potential improvements along the corridor between stations. Low-end estimated capital costs for station implementation are approximately $23 million per station for side-running BRT and $26 million per station for center-running BRT, a difference of 12%. Similarly, high-end estimated capital costs for station implementation are approximately $27 million per station for side-running BRT and $31 million per station for center-running BRT, a difference of 16%. These cost differences are driven by a handful of key factors. Demolition costs are higher for Concept 2 than for the Project because Concept 2 requires demolition of portions of the Vermont Avenue median and additional regrading. Hardscape costs are also higher for Concept 2 than the Project, as Concept 2 requires reconstruction of the median hardscape. These capital costs – and their resulting impact on design and contingency costs – result in higher overall station cost estimates for Concept 2 than the Project.

Table 8-3: ROM Cost Estimates for Side-Running and Center-Running BRT Stations (Cost per Station)

Concept	Station Cost Estimate (Low)	Station Cost Estimate (High)
Project: Side-Running BRT	$23 million	$27 million
Concept 2: Center-Running BRT	$26 million	$31 million

Source: Vermont Corridor Partners, 2024.

These estimates represent an allowance for one block of civil improvements that could be associated with a BRT project of this size and scope. These estimates represent only a portion of the required costs for the purposes of comparing a side-running and center-running station only and are not representative of the full costs associated with the Project. A full ROM cost estimate was prepared for the selected concept (the Project) to include all associated costs; this cost estimate is given above in Section 8.1.

Table 8-4 further highlights the advantages and disadvantages related to capital costs for side-running and center-running BRT.

Table 8-4: Comparison of Capital Cost Advantages and Disadvantages of Side- and Center-Running Concepts

The Project – Side-Running BRT	Concept 2 – Center-Running BRT
Advantage: Station-level capital costs are approximately 15% lower for the Project than Concept 2 based on ROM cost estimates for typical side-running and center-running stations.	**Disadvantage:** Station-level capital costs are approximately 15% higher for Concept 2 than the Project based on ROM cost estimates for typical side-running and center-running stations.
Advantage: Side-running BRT lanes do not require any demolition of the Vermont Avenue median, reducing overall demolition and regrading costs for the construction of each station relative to center-running BRT.	**Disadvantage**: Center-running BRT lanes require partial demolition of the Vermont Avenue median, increasing overall demolition and regrading costs for the construction of each station relative to side-running BRT.
Advantage: Side-running BRT lanes do not require reconstruction of the existing Vermont Avenue median and can leverage existing sidewalks along the corridor for station access and platforms, reducing hardscape costs relative to center-running BRT lanes.	**Disadvantage**: Center-running BRT lanes require reconstruction of the existing Vermont Avenue median and cannot leverage existing sidewalks along the corridor for station access and platforms, increasing hardscape costs relative to side-running BRT lanes.

Source: Vermont Corridor Partners, 2024

The scoring results for the Capital Cost criterion are summarized below and in **Table 8-5**:

- The Project receives a score of Medium-High because it would require less demolition and hardscape construction than Concept 2, which results in a lower construction cost for the side-running configuration than the center-running configuration.
- Concept 2 receives a score of Medium because it would require more demolition and hardscape construction than the Project, which results in a higher construction cost for the center-running configuration than the side-running configuration.

Table 8-5: Capital Cost Evaluation Summary

Concept	Rating	
Project: Side-Running BRT	Medium-High	
Concept 2: Center-Running BRT	Medium	

Source: Vermont Corridor Partners, 2024.

8.2 Revenue Impacts

The Project would provide safer first/last mile options to rider destinations, and easier transfers would improve the multimodal access to transit. By making the corridor safer, increasing carrying capacity, reducing the run and dwell times and enhancing service reliability, the VTC network improvements are anticipated to increase ridership.

As discussed in the *Travel Demand Forecast Results Technical Memorandum* (2024), daily boardings in the corridor are predicted to decrease from 36,000 to approximately 33,000 in 2045 if no near-term improvements are implemented. With the Project, 2045 ridership is predicted at approximately 75,000 boardings, which is about 130% more boardings than the predicted No Project Alternative. As such, fare revenue is anticipated to increase as a result of the Project improvements.

The consumption from new earnings resulting from capital expenditures and O&M spending of the Project (as discussed in Section 7 above) would also boost sale tax revenues in Los Angeles County. A portion of these sales tax revenues feed into the sales tax measures which fund Metro.

Table 8-1 summarizes the total impact of capital expenditures in Los Angeles County (as given in **Table 7-3**) on tax revenues and the annual impact of additional O&M expenditures ($9.6 million) resulting from the Project. Expenditures in the region required for the No Project Alternative are typically separated from those expenditures that would be new to the economy under the Project. For example, expenditures already allocated for other rail transportation construction projects in the region under the No Project Alternative would not be considered new economic stimulus and would, therefore, not be strictly attributable to the Project.

However, at this stage of Project development, the apportionment of funding sources is subject to change. For this analysis, 100% of the Project costs spent in Los Angeles County will be treated as new funding to the region. This assumption will yield an upper limit estimate of tax revenue increase due to Project construction. The actual fiscal effects from construction and operation of the Project would likely be lower after expenditures planned under the No Project Alternative, such as the Measure M funds, are removed. Both construction and future operations are anticipated to occur in the public ROW, and no temporary or permanent takings are expected. Therefore, no property tax loss is anticipated.

IMPLAN Tax Impact results are based on the collected and reported taxes within the region for the given data year (2022). Taxes are levied at different levels of government. In IMPLAN, results are given at the following levels: State and Local, Federal, County, Sub-County General, Sub-County Special Districts, and State. Sub-County General includes city and township governments. Sub-County Special includes fire and public-school districts. This analysis presents the County, State, Federal, and Total tax revenue generated. As shown in **Table 8-6**, the Project could increase tax revenues to the County by as much as $416,000 across the construction period, and then an additional $18,000 annually in revenue from O&M expenditures.

Table 8-6: Tax Revenue Increase from the Project ($2024)

Project Costs	County	State	Federal	Total
Capital Costs	$416,000	$20,086,000	$52,831,000	$81,115,000
O&M	$18,000	$758,000	$1,544,000	$2,654,000

Totals are higher than total of County, State, and Federal taxes, as Subcounty General and Subcounty Special District Taxes are also included.

Source: Vermont Corridor Partners, IMPLAN, 2024

8.3 Funding Sources

The Project is expected to be funded by a variety of local, state and federal sources, including Measure M, which is a Los Angeles County, voter-approved, no-sunset, half-cent sales tax which funds projects to ease traffic congestion and expand public transportation. Measure M partially funds many Metro projects, including funds for transit O&M and capital costs. (Metro, 2016). Measure M Ordinance indicated that $25 million in funding is derived from the Measure M sales tax, and the rest ($400 million) comes from state, local and federal sources.

Additionally, new fare revenues from increased ridership and O&M savings from the elimination of Metro Rapid Route 754 and faster travel times on Metro Line 204 service (about $18.99 million in annual savings) can be reallocated towards the O&M of the Project.

8.4 Financial Case Summary

The Project is estimated to cost approximately $407 million in capital expenditures and $27.5 million in O&M. The Project would require less demolition and hardscape construction than the alternative, Concept 2, which results in a lower overall construction cost. The elimination of Metro Rapid Route 754 and faster travel times on Metro Line 204 is estimated to save about $18.99 million, resulting in a net additional O&M cost of $8.54 million over Existing Conditions. When compared to the No Project Alternative, additional O&M costs are estimated at $9.60 million over the No Project Alternative.

Fare revenue is anticipated to increase as a result of the Project's increased ridership. Consumption from new earnings resulting from capital expenditures and O&M spending of the Project would also boost sale tax revenues in Los Angeles County. A portion of these sales tax revenues feed into the sales tax measures which fund Metro. The Project could increase tax revenues to Los Angeles County by as much as $416,000 across the construction period, and then an additional $18,000 annually in revenue from O&M expenditures. The Project is expected to be funded by a variety of local, state and federal sources. Funds for O&M may also be derived from fare revenues and O&M savings relative to the No Project Alternative.

9 DELIVERY AND OPERATIONS CASE

This section covers the Delivery and Operations Case, which consists of an analysis of investment delivery, O&M and service plans for VTC network improvements. This includes delivering the Project from original concept through to planning, design, environmental assessment, stakeholder engagement, procurement, construction and operations. Any issues that should be considered during the continued development of the Project are also discussed.

9.1 Project Delivery

The Project improvements, featuring a side-running dedicated BRT lanes for the extent of the Vermont Corridor from 120th Street to Sunset Boulevard, would be completed between 2028 and 2030 with the goal of completion by 2028. The Project's design emphasizes the importance of supporting accessible, functional BRT station elements while also minimizing disruptions to changes to existing bus stations in between stations except those that are essential for supporting efficient and reliable BRT service. In total, the Project covers 12.4 miles of transit service.

Before construction, all required regulatory permits and approvals would be acquired which would minimize any potential legal and organizational risks for Metro. The Project would improve the safety, accessibility and reliability of the public transit which supports 36,000 daily riders and is expected to increase public support for Metro in the region. Safety features include installing platform stops and a 12-foot-wide dedicated transit lane, both of which are expected to reduce accidents throughout the corridor. The BRT would be a fully electric fleet, leading to reduced emissions as passenger vehicles switch to transit. Time and VMT savings would also be realized through the Project by enhancing mobility and increasing service speed.

9.2 Requirements for Delivering and Operating the Investment

9.2.1 Procurement

Metro anticipates working with qualified and experienced engineers, construction consultants and contractors to successfully implement the proposed improvements. Metro receives proposals for Invitations for Bids and Request for Proposals electronically through submittals made to bids@metro.net. Open solicitations for engineering and consulting services are published on Metro's Vendor Portal website. Formal solicitations are considered to be any procurement over $150,000 in value, and anything under $150,000 in value is considered to be an informal solicitation. Firms are required to be pre-qualified to do business with Metro under the California Public Utility Code Section 130051.23 and Ordinance Number 4-05 of Metro's Administrative Code.

9.2.2 Delivery and Operation

While partnering with vetted engineering and construction contractors that are experienced with relevant Project execution phases, Metro will hold responsibility for the delivery of the proposed improvements. Metro is specifically responsible for development of the Project, community engagement, Project approval and permitting as well as O&M, all of which have been on track in development. Engineering and construction responsibilities are allocated to the consultants selected by Metro.

9.3 Evidence of Viability

The Project would require extensive planning and collaboration between public and private stakeholders to be implemented successfully. Metro has decades of experience developing, implementing, and collaborating on public transportation projects in Los Angeles County. Metro also has regularly partnered with private firms to execute projects and maintained O&M of public transportation projects. This Project consists largely of implementing improvements to an existing transit system and, therefore, does not propose an over-haul of the infrastructure and transit system, making the improvements and implementation viable for Metro. For example, only approximately one third of the Project O&M costs are expected to be additive relative to the Existing Conditions or No Project Alternative as the Project allows for the elimination of other service costs. Secure and reliable funding sources have been identified for the Project and include a variety of local, state and federal sources, including Measure M which funds projects that ease traffic and expand public transportation. O&M funds are anticipated to be reallocated from the new fare revenues with increased ridership.

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