

RoseWood

COMPLETE CORRIDOR

DRAFT RoseWood Complete Corridor Vision Plan

April 7, 2026



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1 INTRODUCTION

Rosemead/Lakewood Boulevard, designated as State Route (SR) 19 from SR 1 to Gallatin Road and SR 164 from Gallatin Road to Foothill Boulevard, is a major north-south corridor connecting the Gateway Cities and San Gabriel Valley sub regions of eastern and southeast Los Angeles County. The entire corridor extends approximately 28 miles from the Sierra Madre A (Gold) Line Metro Rail station in East Pasadena south to the Pacific Coast Highway (SR 1 of PCH) in the City of Long Beach.

From the traffic circle in Long Beach, the Rosemead/Lakewood (RoseWood) Corridor extends southeast to California State University of Long Beach (CSULB) and the Tibor Rubin Veterans' Affairs (VA) Medical Center, along SR 1 and 7th Street to provide connectivity to this major destination. The corridor is well-positioned to provide multimodal regional connections to existing and future destinations. In the near term, it provides a connection between proposed competition venue sites for the 2028 Los Angeles Olympic and Paralympic Games (2028 Games) and serves longer-term as a transportation spine that links two iconic Southern California natural landscapes: the San Gabriel Mountains and the sea. Major Los Angeles County Metropolitan Transportation Authority (Metro) rail projects intersect the corridor such as the Phase 2 of the Metro Eastside Transit Corridor (Metro E Line extension) with a proposed Rosemead Boulevard station in Pico Rivera and the Southeast Gateway Line crossing Lakewood Boulevard.

In response to growing travel demand, the RoseWood Complete Corridor Vision Plan seeks to transform the corridor to prioritize transit, active transportation, and safety for all users. Improvements along the corridor aim to improve access, reduce vehicle miles traveled, lower greenhouse gas emissions, and improve community and economic vitality. Improvements along the corridor will facilitate connections to the regional transit network, job centers, and key destinations, while integrating pedestrian and bicycle infrastructure and supporting transit-oriented development (TOD).

The RoseWood Complete Corridor Vision Plan will evaluate alternatives and identify phasing opportunities for the implementation of preferred concepts along Lakewood/Rosemead Boulevard between Pico Rivera and Long Beach. Although the implementation strategy outlined in the Vision Plan is focused on the Gateway Cities (City of Pico Rivera to City of Long Beach, including the cities of Downey, Bellflower, Paramount, and Lakewood), this report includes a broad analysis of the one-mile area around the entire RoseWood Corridor, from Pasadena to Long Beach, to establish a clear and comprehensive vision. North of Pico Rivera, the San Gabriel Valley Council of Governments (SGVCOG) is studying concepts for the northern section of Rosemead Boulevard with Metro as a project partner.

1.1 Project Background

The concept for a unified north–south multimodal corridor has emerged from multiple planning efforts undertaken independently by cities and regional agencies along Rosemead/Lakewood Boulevard. While these efforts vary in scope and geography, they share a common goal of transforming Rosemead/Lakewood Boulevard into a safe, efficient, and multimodal corridor. This includes:

- **The Complete Streets Master Plan** developed by Gateway Cities Council of Governments (GCCOG) which explores active transportation improvements from Pico Rivera to Long Beach. The Lakewood/Rosemead Boulevard Master Plan and Complete Street Evaluation can be found [here](#).
- **The Lakewood/Rosemead Corridor Enhanced Transit Assessment** developed by Metro evaluated transit improvement opportunities and the feasibility of enhancing transit service along the Lakewood/Rosemead Boulevard corridor between Pico Rivera and Long Beach. The results of the assessment indicate that Lakewood/Rosemead Boulevard has potential for ridership growth with enhanced service and connectivity to Long Beach and may be viable as a candidate for service enhancements, including eventual bus rapid transit (BRT) service. The report can be found [here](#).
- **The San Gabriel Valley Transit Feasibility Study** developed by SGVCOG, which identifies Rosemead Boulevard from the Sierra Madre A (Blue) Line in Pasadena to Gallatin Road in Pico Rivera as a potential corridor for enhanced bus service, and potential improvements are being studied separately by SGVCOG. The project status and reports for the San Gabriel Valley Transit Feasibility Study can be found [here](#).
 - **Phase 1** completed in 2022, screened 15 corridors and carried forward seven for further analysis, including a route via Rosemead/Lakewood Boulevard with stops from Sierra Madre Villa Avenue to Pacific Coast Highway.
 - **Phase 2** completed in 2024, focused on refining the concepts. Bus lane segments and Traffic Signal Priority along Rosemead Boulevard in Rosemead, El Monte, and South El Monte is proposed as a mid-term plan (2035). The long-term plan (2050) would add additional bus segments along Rosemead Boulevard in East Pasadena.
 - The current effort, known as **SGV Forward** builds on the completed feasibility study. This next phase will carry out early-action demonstration projects by 2028, potentially including new bus lanes, transit signal upgrades, and improvements to key stops and corridors.
- **The Long Beach-East LA Corridor Mobility Investment Plan (CMIP)**, developed by Metro, reimagines mobility for communities along the Interstate 710 corridor. It replaces the prior freeway widening proposal with a vision focused on health, mobility, and environmental justice. The Lakewood Boulevard Improvement Project is included in the CMIP's initial list of projects, and improvements are proposed along Lakewood Boulevard between Del Amo Boulevard and Ashworth Street. The project would install a Class I bike path and pedestrian sidewalk within the parkway, along with minor roadway capacity improvements on Lakewood Boulevard. In total, it would deliver 1.5 miles of

new bicycle and pedestrian facilities. Additional improvements include undergrounding utility, traffic signal upgrades, LED street lighting, ADA improvements, and green street features, including landscaped median islands, parkway trees, and stormwater retention. The Long Beach-East LA Corridor Mobility Investment Plan can be found [here](#).

Transit signal priority (TSP) on Rosemead Boulevard in the San Gabriel Valley is a near-term improvement and some segments are targeted by SGVCOG for implementation by 2028. The City of Downey has deployed Bus Signal Priority (BSP) for existing Downey LINK transit services at 17 intersections along Lakewood Boulevard to reduce delay at signalized intersections. Long Beach Transit is exploring integrating TSP on Long Beach Transit's (LBT) fleet. Metro's NextGen Bus Plan improved bus service frequency along the corridor, significantly increasing daily revenue hours and miles, particularly during the midday per Next Gen policy to maintain peak headways throughout the day for Line 266.

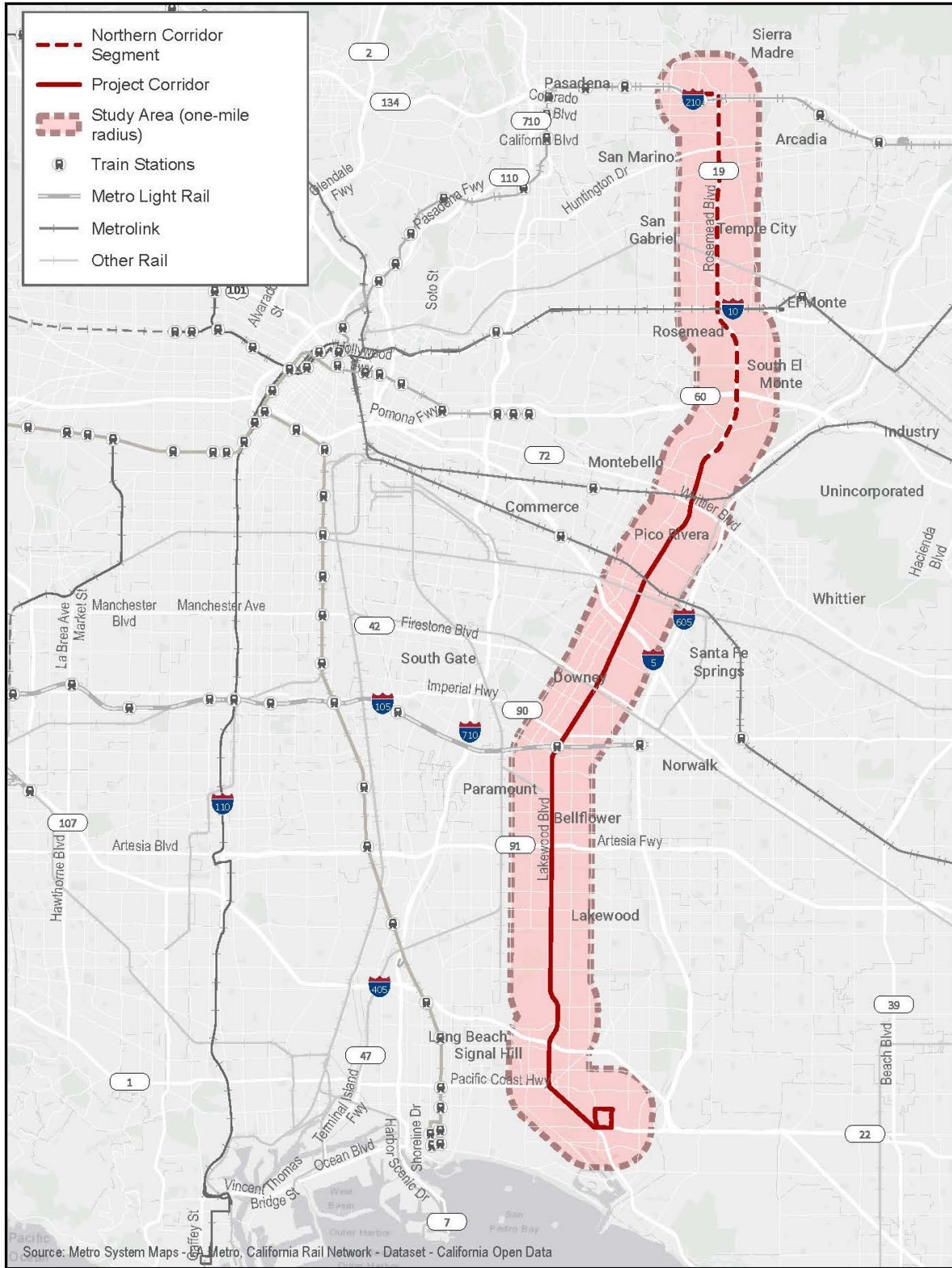
The **RoseWood Complete Corridor Vision Plan** builds on these initiatives. The Vision Plan is funded by a California Department of Transportation (Caltrans) Sustainable Communities planning grant program and focuses on the portion of the RoseWood Corridor between Gallatin Road in Pico Rivera and CSULB in the Gateway Cities (the Southern Segment). The Vision Plan puts forth a cohesive vision that integrates high-quality transit and active transportation to enhance connections to major destinations.

1.2 Study Area and Project Corridor

The Study Area encompasses a one-mile buffer around the entire RoseWood Corridor from East Pasadena south to Long Beach and includes the communities of Pasadena, Temple City, South El Monte, Signa Hill, Pico Rivera, Downey, Bellflower, Paramount, Lakewood, Long Beach, and unincorporated portions of Los Angeles County (East Pasadena, East San Gabriel, and Whittier Narrows Recreation Area). As shown in **Figure 1-1**, the Southern Segment of the RoseWood Corridor extends 16.5 miles from Gallatin Road in the City of Pico Rivera, through the Cities of Downey, Bellflower, Paramount, Lakewood, and Long Beach, continuing onto Pacific Coast Highway to the CSULB and Veterans' Affairs site in southeast Long Beach.

Although the Study Area included the Northern Segment of the corridor to understand regional origin and destination connections, the SGVCOG and Metro are separately studying concepts for the section of Rosemead Boulevard north of Pico Rivera. In summary, existing conditions have been analyzed for the entire Study Area, with key opportunities for corridor enhancements focused on the Southern Segment of the RoseWood Corridor.

Figure 1-1. Study Area and the Project Corridor



2 EXISTING CONDITIONS

To inform the Vision Plan, recent relevant plans and available data, such as demographics, ridership, and traffic conditions were reviewed to provide context for the study.

2.1 Policies and Plans

Adopted and in-progress plans and policies were reviewed for how well they align with and support a multimodal corridor on Rosemead/Lakewood Boulevard.

Shared objectives from the policies are:

- **Improve transit frequency and access**, while increasing mobility options
- **Enhance pedestrian and bicycle infrastructure** and improve active transportation connectivity along Rosemead/Lakewood Boulevard
- **Implement traffic calming measures** to create safer streets and improve the multimodal mobility and access
- **Advance TOD strategies for areas along the corridor** designated as for high-density residential and employment centers including land use planning and community development policies that maximize access to transit and encourage land use diversity
- **Foster livable and healthy communities** and support economic vitality and quality of life

The reviewed plans and policies identify common challenges along Rosemead/Lakewood Boulevard, including limited right-of-way, required setbacks, on-street parking demand, utilities, and peak-hour congestion, all of which may constrain pedestrian, bicycle, and transit improvements. The local and regional plans prioritize walking and biking; however, implementation largely falls to cities with limited funding, and some improvements require coordination with Caltrans, particularly near freeway interchanges and state highways. Near- and long-term transit initiatives include transit signal priority on Rosemead Boulevard by 2028, proposed BRT or express bus service by 2035, and Metro and Long Beach Transit (LBT) commitments to 100 percent zero-emission bus fleets by 2030. Safety goals are also prominent, with Los Angeles County targeting zero traffic fatalities in unincorporated areas by 2035 and Long Beach aiming for zero fatalities by 2026.

Planned and proposed development near the corridor, including the Pico Rivera Sport and Entertainment District, the Whittier Boulevard Vision Plan, Washington Boulevard TOD Specific Plan, and other mixed-use projects, supports transit-oriented growth. Pico Rivera and Lakewood are also exploring Enhanced Infrastructure Financing Districts to help fund transportation improvements. Major rail projects intersect the corridor, including Phase 2 of the Metro Eastside Transit Corridor with a proposed Rosemead Boulevard station by 2037, a proposed Metrolink and/or Amtrak station in Pico Rivera near Warvale Street and Industry Avenue, and the Southeast Gateway Line crossing Lakewood Boulevard, scheduled to open in 2033. These investments could strengthen bus and rail connectivity along the corridor.

Additional initiatives include the Whittier Narrows Dam Safety Modification project, Rio Hondo Bike Path and Recreation Zone, the Riverfront Sports and Entertainment District, the Micro EV Tech Hub and Nucleus, and capital projects near the southern terminus at CSULB, such as the mobility hub

with potential connections to LBT, Metro, and Orange County Transportation Authority. Finally, with the 2026 World Cup and 2028 Olympic and Paralympic Games approaching, Rosemead/Lakewood Boulevard is expected to serve as a key arterial linking event venues in Long Beach, Pasadena, and the San Gabriel Valley, as well as the planned Cultural Celebration Hub in the city of Pico Rivera.

2.2 Corridor Conditions

2.2.1 Governance

The RoseWood Corridor traverses numerous governance boundaries that include transit operators, councils of governments, municipalities, and county jurisdictions. Two major transit providers, Metro and Long Beach Transit, operate along the corridor, and additional providers such as Foothill Transit and Montebello Bus Lines operate connecting services. The corridor traverses 11 cities within Los Angeles County, including Pasadena, Temple City, Rosemead, El Monte, South El Monte, Pico Rivera, Downey, Bellflower, Paramount, Lakewood, and Long Beach. Two subregional councils of governments represent the corridor, the Gateway Cities Council of Governments and the San Gabriel Valley Council of Governments. This underscores the need for coordinated governance and dedicated support to effectively plan and deliver regional improvements.

2.2.2 Infrastructure

Through the Southern Segment, Rosemead/Lakewood Boulevard is an arterial highway oriented towards moving automobile traffic, with road configuration varying by city. The corridor generally includes 5 to 9 lanes in both directions and including medians, with varying geometries, median widths, sidewalk widths, and lane widths. Cross sections typically widen at major signalized intersections, reflecting needs from previous intersection-level capacity analyses. Medians are mostly continuous (raised or striped), while curbside parking is limited to select segments. Existing bus stops are typically located near striped crosswalks or signalized pedestrian crossings.

2.2.3 Travel Characteristics

Land Use | Land uses include residential neighborhoods, commercial corridors, industrial areas, and major community destinations such as schools, parks, hospitals, government facilities, the VA Center, and educational institutions. Throughout its alignment, the corridor intersects employment centers, retail clusters, and educational institutions, making it an ideal candidate for high-capacity, efficient transit. Economically, the area features a concentration of retail jobs, planning, and light manufacturing employment, and public-sector employers, such as school districts and municipal offices. The corridor also connects residential zones to the broader job markets of Los Angeles and the San Gabriel Valley, facilitating access to opportunity for communities with limited mobility options.

Trips By Mode | Using Replica data from a typical weekday in fall 2024, approximately 1.3 million total trips were identified. Private automobiles account for 70 percent of trips, carpools 24 percent, freight 3 percent, public transit 2.5 percent, and taxi/TNCs 0.5 percent. Freight activity is most concentrated in Pico Rivera (between Claymore Street and Beverly Boulevard) and Downey (between I-5 and Imperial Highway). Given their share, the traffic analysis focuses on private auto trips.

Trip Characteristics | Private auto trips generate about 1.2 million vehicle miles traveled, with an average trip length of 13 miles. The most common trip purpose is commuting home (33 percent), followed by shopping (19 percent) and work (16 percent). Key work-trip destinations include CSULB, Long Beach Airport, and South El Monte. Trips are distributed throughout the day, with peaks from 11:00 AM to 2:00 PM and from 3:00 PM to 6:00 PM, indicating strong potential for frequent, peak-period transit service. Nearly half of trips along the corridor are 10 to 20 minutes, and most trips range from 5 to 15 miles.

Traffic Analysis Summary | Existing conditions indicate strong potential for BRT. The corridor connects dense clusters of educational, medical, civic, and commercial destinations in Long Beach, Downey, and Pico Rivera, including CSULB, the VA Medical Center, Kaiser Permanente, and Long Beach City College. Trip data shows mostly consistent volume of travel throughout the day, with an increase in the afternoon. This indicates robust demand for reliable, frequent transit service, especially during morning and late afternoon periods. Trip data indicates that many users are traveling medium-range distances between 5 and 15 miles. This range is ideal for fast, frequent BRT service that can outcompete the automobile for short-to-mid-distance trips. Demographic diversity underscores the need for inclusive, multilingual outreach. These factors point to high latent demand for high-capacity transit along the RoseWood corridor.

2.2.4 Safety and Access

Existing Conditions | Active transportation conditions vary widely along the 28-mile corridor due to differing jurisdictional standards. Sidewalks are generally present but are missing or incomplete in several segments, sometimes on one side only. Bicycle facilities are intermittent and discontinuous, with limited Class II and Class IV segments. Several frontage roads provide local access and may offer opportunities for active transportation improvements.

Safety Performance | Crash data from 2018 to 2022 show 1,410 collisions involving a pedestrian or bicyclist, resulting in 65 fatalities and more than 1,300 injuries. Most crashes occurred during daylight hours, and 16 percent were hit-and-run incidents. Common contributing factors included pedestrian violations and right-of-way conflicts. There are high-crash location clusters along Rosemead/Lakewood Boulevard, particularly in Pasadena, Marshall Street in Rosemead, Garvey Street in El Monte, Whittier Boulevard in Pico Rivera, Firestone Boulevard in Downey, and the Pacific Coast Highway in Long Beach, with additional concentrations on nearby arterials (see **Figure 2-1**). Multiple jurisdictions along the corridor have adopted Vision Zero High-Injury Networks that overlap the study area.

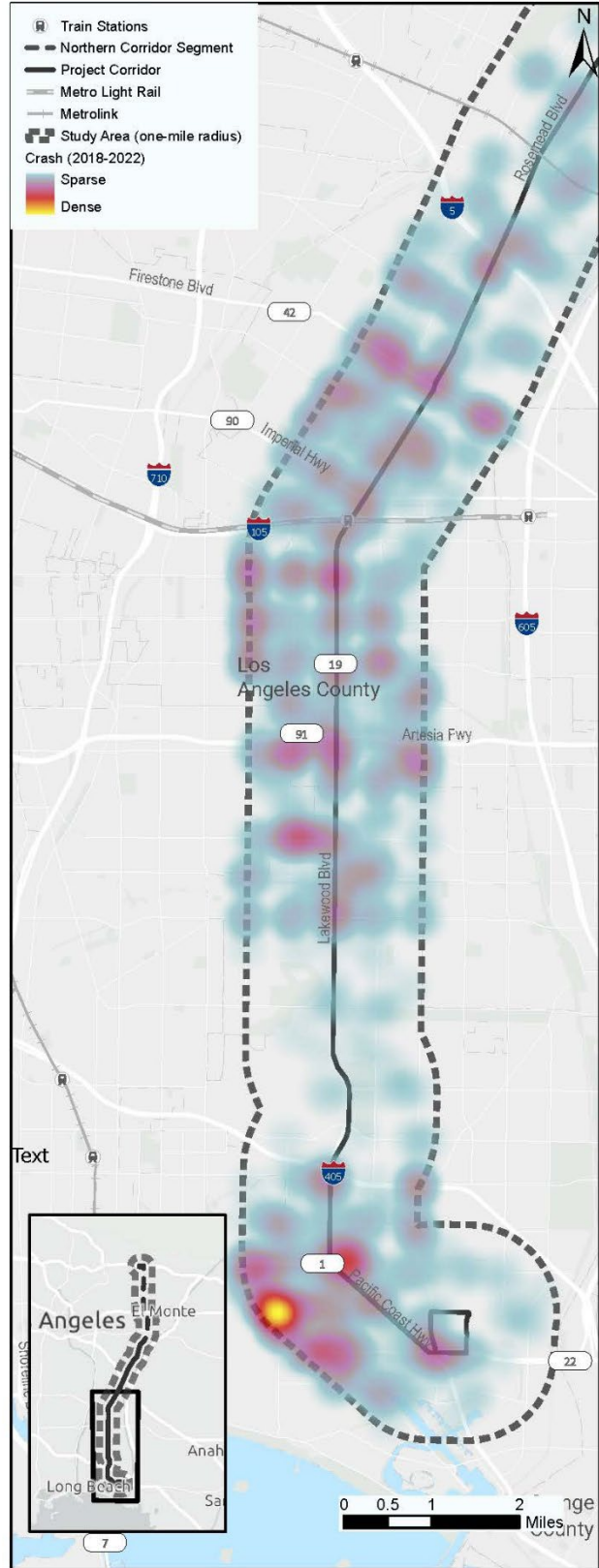
Planned Improvements | Local plans across the Southern Segment propose sidewalk upgrades, Americans with Disabilities Act (ADA) improvements, enhanced crossings, and new or improved bikeways. The GCCOG's Rosemead/Lakewood Boulevard Master Plan and Complete Street Evaluation (2019) provides a unifying vision for corridor-wide active transportation improvements.

Areas of Opportunity | Key opportunities include filling sidewalk gaps near rail underpasses in Pico Rivera, improving pedestrian safety at high-crash intersections in Downey, Bellflower, Lakewood, and Long Beach, and enhancing crossings and wayfinding near the Traffic Circle and PCH. Bicycle connectivity could be strengthened by linking planned local bikeways, regional trails, and proposed Class I facilities on Lakewood Boulevard, as well as improving bike access through the Traffic Circle area.

Environmental and Health Conditions | CalEnviroScreen and Healthy Places Index data show that many communities along the corridor, particularly in Pico Rivera, Paramount, and Bellflower, face high pollution burdens, greater population vulnerability, and poorer health outcomes. These areas also experience socioeconomic disparities and limited access to resources, underscoring the importance of equitable, health-focused transportation investments along the RoseWood Corridor.

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Figure 2-1. Pedestrian and Bicycle-Involved Crash Density, 2018-2022



2.3 Travel Demand, Propensity, and Service Analysis

2.3.1 Travel Demand and Propensity

Travel demand was analyzed using fall 2023 and spring 2024 data from Replica, which uses mobile location data to estimate daily origin-destination patterns. Census tracts were grouped into seven subareas: SGV-North, SGV-South, Pico Rivera, Downey, Lakewood, Long Beach, and CSULB.

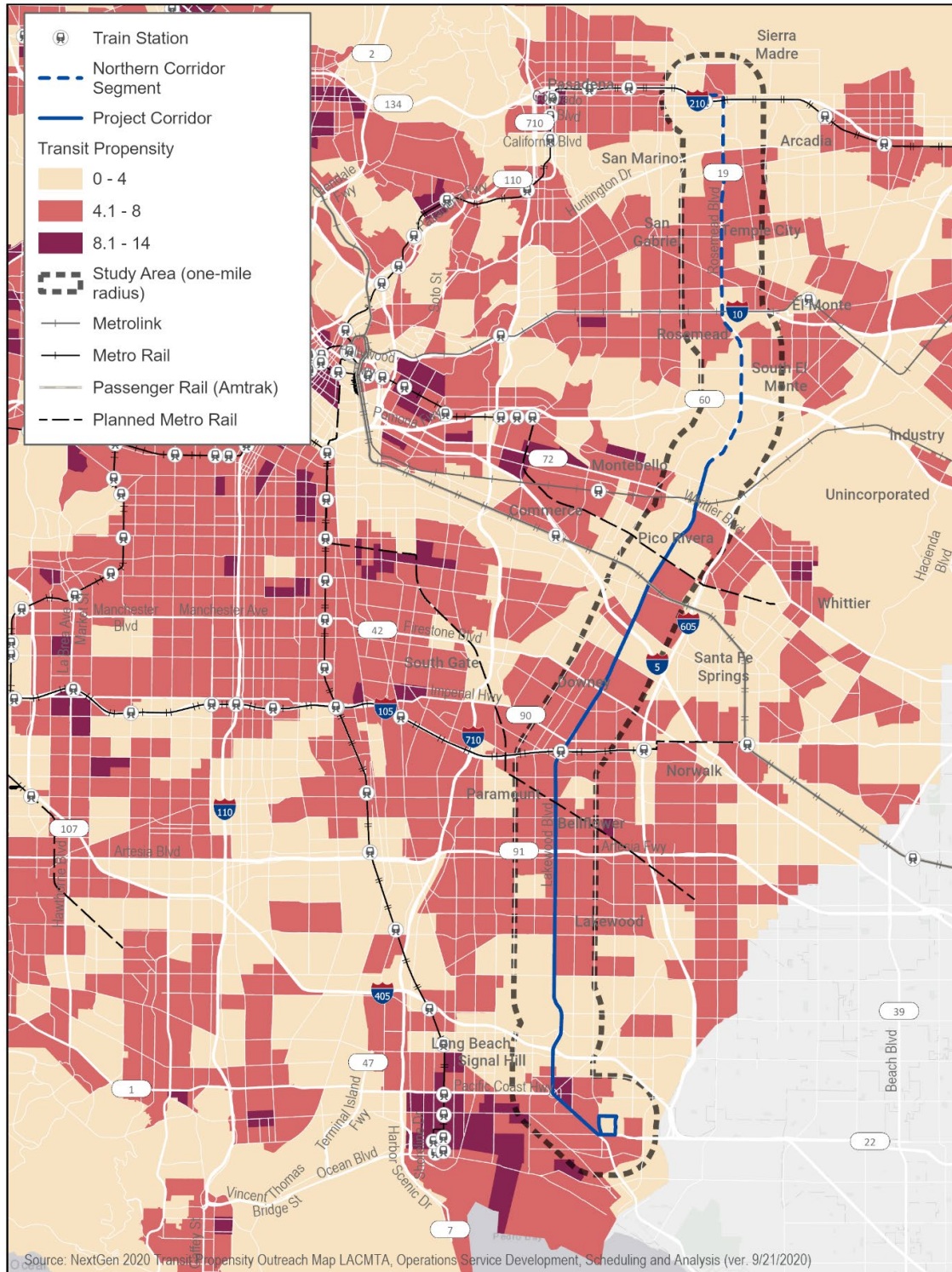
From 2019 to 2024, total travel in the Study Area increased by about 15 percent, but origin–destination patterns were largely consistent. More than 78 percent of trips both began and ended within the same subarea. As shown in **Table 2-1**, trips leaving a subarea were generally most likely to end in an adjacent subarea, with the number of trips decreasing with distance. Travel between the Southern Segment and the northern San Gabriel Valley was relatively limited, except for trips to and from Pico Rivera. **Table 2-1** green cells show higher trips, with yellow, orange, and red cells showing decreasing number of trips.

Table 2-1. Subregional Travel Demand Patterns (Spring 2024 Average Weekday)

Destination	Origin						
	SGV-North	SGV-South	Pico Rivera	Downey	Lakewood	Long Beach	CSULB
SGV-North	79,210	5,717	1,139	248	127	160	126
SGV-South	6,007	27,057	521	153	79	41	69
Pico Rivera	1,114	528	80,836	7,097	1,936	308	168
Downey	268	168	6,949	79,687	15,289	1,942	1,065
Lakewood	163	103	1,671	14,355	116,503	10,191	3,947
Long Beach	151	27	315	2,227	12,154	37,081	16,592
CSULB	127	62	214	1,042	3,766	15,038	56,270

Transit mode share across the Study Area remains low at approximately 0.7 percent, though it is higher in the southern portions of the corridor than in the San Gabriel Valley. The Transit Propensity Score (TPS) estimates the likelihood of transit use by evaluating physical, locational, and socioeconomic factors at the census-tract level. It is based on three components: demand (population, employment, school enrollment, and shopping trip density), market segments (zero-car households, poverty, age, family status, minority populations, and disability), and the built environment (walkability, housing density, and occupied development intensity). Metro’s TPS analysis indicates mostly medium transit potential across the corridor, with high potential east of the Long Beach Traffic Circle and lower potential near Whittier Narrows, parts of Pico Rivera, and Long Beach Airport. **Figure 2-2** shows TPS by census tract divided into three categories: low (TPS between 0 and less than 4), medium (between 4 and less than 8), and high (between 8 and 14).

Figure 2-2. Study Area Transit Propensity Score



2.3.2 Transit Service Analysis

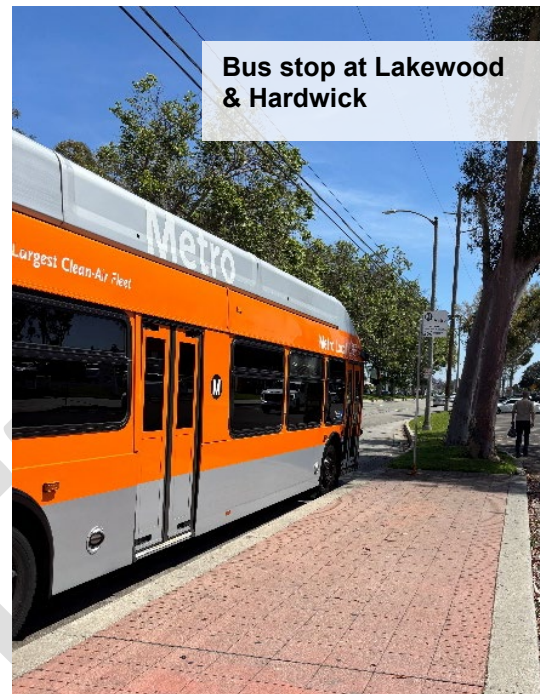
Figure 2-3 shows the transit services in the study area. Most of the corridor is served by Metro Line 266, which operates every 20 minutes on weekdays and every 30 minutes on weekends along its route from Pasadena to Lakewood Center. South of Lakewood Center, service is primarily provided by LBT, with Route 111 operating hourly between Lakewood Center and downtown Long Beach, and Routes 171/175 providing 20-minute service between the Long Beach Traffic Circle and CSULB. Additional LBT routes (41 and 121) serve portions of the Southern Segment.

Figure 2-4 shows the number of boardings and alightings at Line 266 and LBT stops along the corridor. Metro stop activity reflects only Line 266. In contrast, due to the absence of continuous service along the entirety of the Long Beach portion of the corridor, LBT stop activity shows combined ridership for all routes serving each stop. A stop activity analysis shows that the highest ridership occurs at major destinations and transfer points, particularly CSULB, the VA Medical Center, and the Long Beach Traffic Circle, as well as at Metro C and A Line stations. Metro Line 266 ridership is higher on weekdays, though weekend boardings are similar in order of magnitude, and the stop rankings are relatively consistent. The activity for Line 266 was similar across weekdays and weekends, however, activity on the Long Beach portion of the corridor shows a large drop in ridership at stops near CSULB on weekends. High-activity stops are typically located at major cross streets with strong commercial uses and bus transfer opportunities, underscoring the importance of connectivity.

Transfer analysis indicates that over 15 percent of Metro Line 266 boardings involve transfers within Metro's two-hour free transfer window. Transfers to LBT were not disaggregated by route, but it is likely that most transfers are to Route 111. Despite lower service frequency, LBT transfers represent 6.4 percent of all transfers and only three Metro routes have a higher number of transfers from Route 266, suggesting unmet demand for stronger north-south connectivity into Long Beach. The pattern of transfer activity largely corresponds to total boardings by stop, with transfer activity occurring largely at major arterial highways along the route. Combined with the fact that some riders have more than one transfer, this underscores the use of the bus system as a grid, with connections opening a larger range of destinations.

Service performance data show that Line 266 weekday and weekend boardings now exceed pre-COVID levels, though productivity remains slightly below pre-COVID due to service expansion. Compared to the Metro bus system overall, Line 266 has lower average productivity but higher operating speeds, performing near the system median. Since 2022, ridership growth on Line 266 has matched or exceeded systemwide growth, despite no increase in service levels on the route.

A field bus ride assessment conducted in May 2025 found that buses generally operated on schedule, with moderate traffic-related delays at some intersections. Stop capacity was adequate,



and ridership remained light to moderate, with seating available throughout the observed trips. Passenger experience was positive overall, with minimal delays from wheelchair boarding or bicycle loading. Bus stop amenities varied by jurisdiction, with more consistent shelter design in Long Beach than elsewhere along the corridor.

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Figure 2-3. Study Area Transit Network

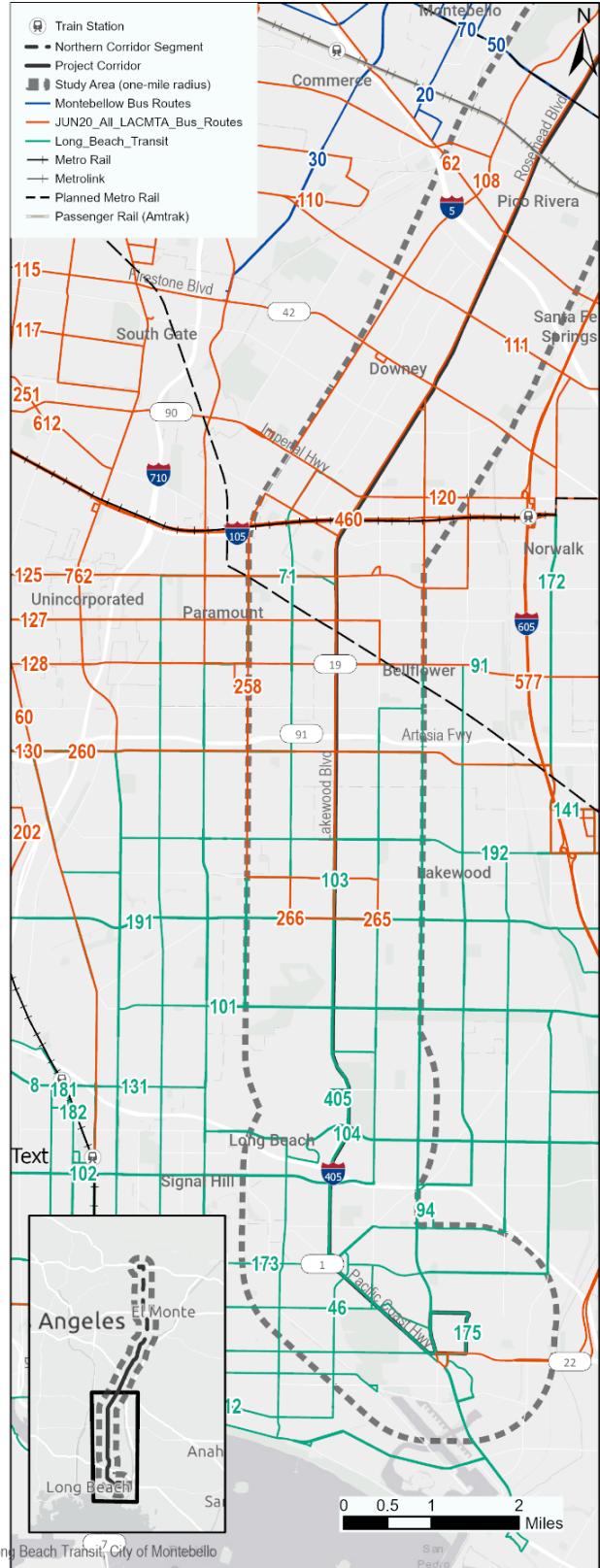
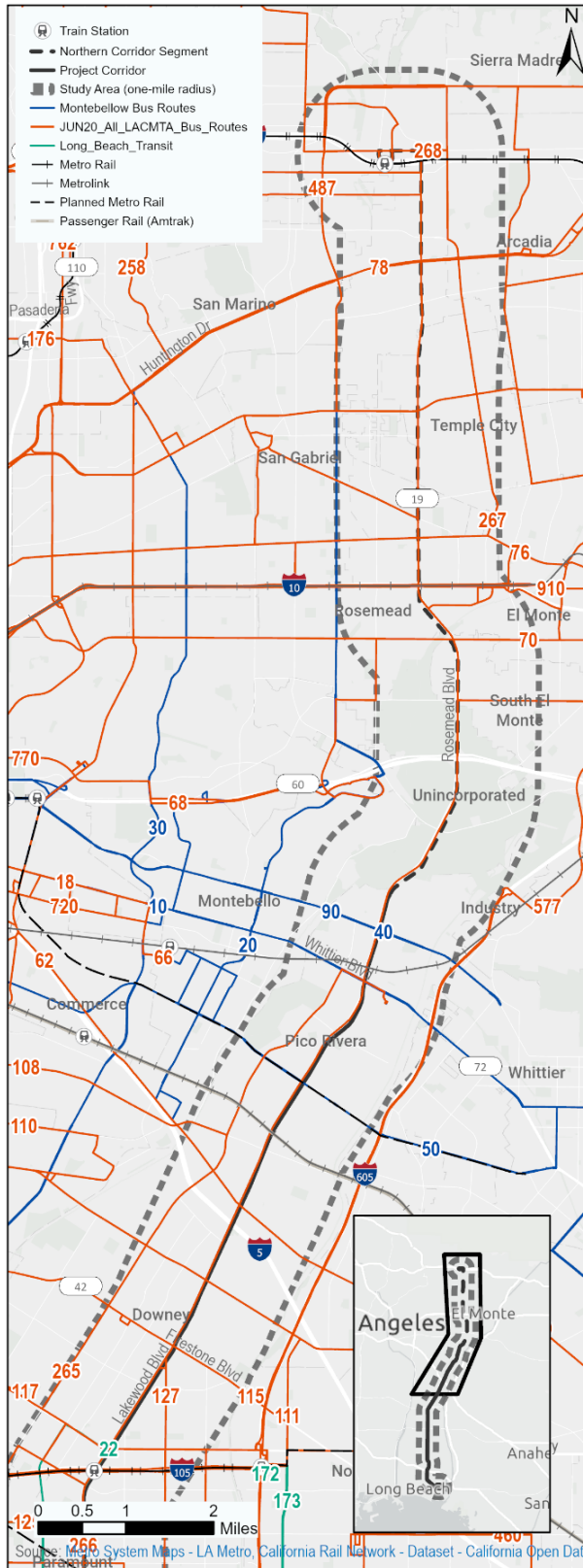
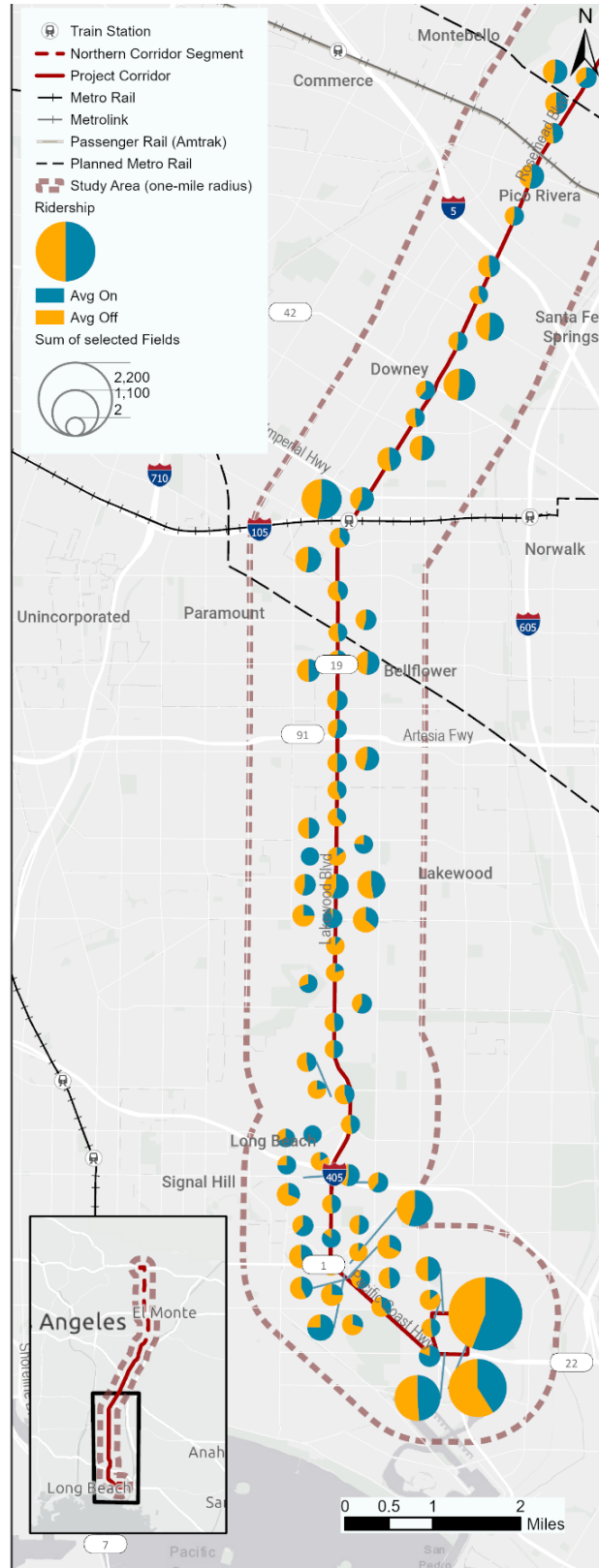
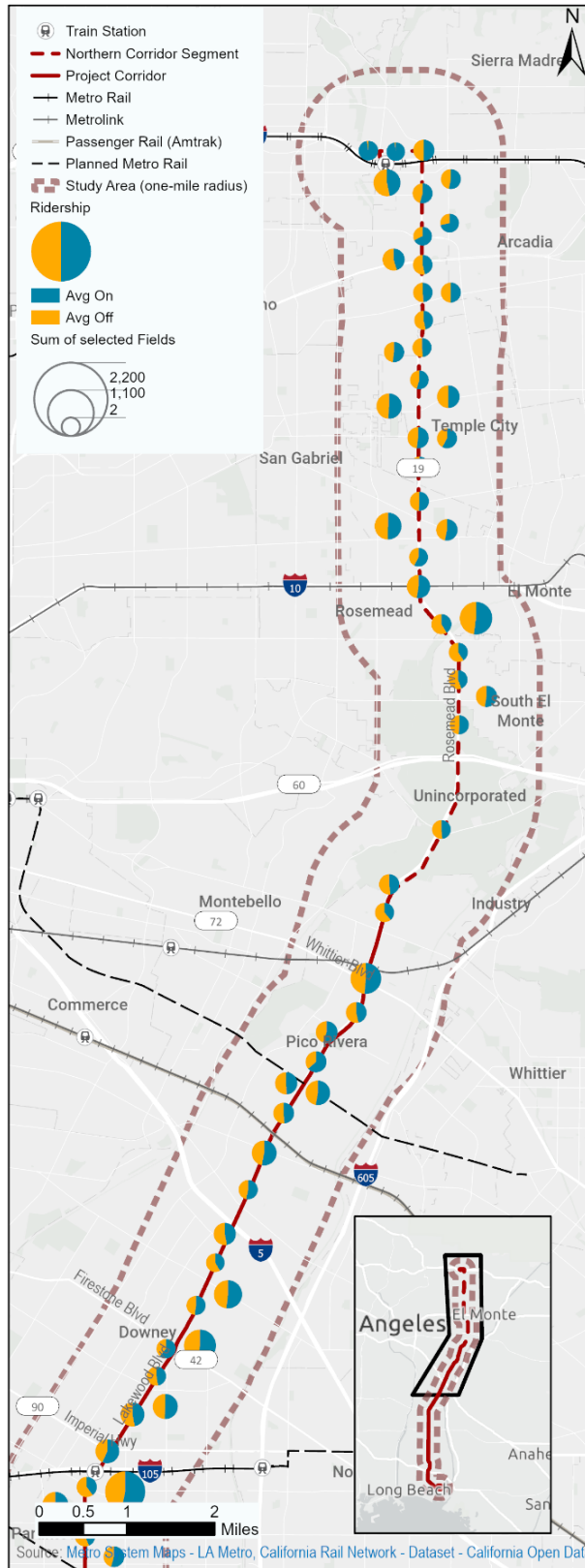


Figure 2-4. Study Area Ridership by Stop



3 MOBILITY PROBLEM DEFINITION STATEMENT

The Mobility Problem Definition Statement focuses on potential to improve the RoseWood Corridor Southern Segment. The Southern Segment shows great promise for multimodal, active transportation, and TOD investment, but there are some operational and infrastructure challenges to coordinate and consider.

Lack of connected transit services creates a patchwork of routes for Southern Segment riders.

- While travel demand analysis shows strong links between Long Beach and other Gateway Cities, transit riders are currently required to transfer at Lakewood Center between two transit agencies (Metro and Long Beach Transit), with significantly different service headways. Current activity indicates existing demand for connections to LBT, but transfer volumes are greater to connecting Metro routes with higher service frequency.
- Transit riders who pay with cash, Transit Access Pass (TAP) card, or a smartphone can use the same payment method for both Metro and LBT transit systems; however, a \$0.50 transfer fee applies when transferring between LBT and other systems. Further, there are no free transfers within the LBT system, so single-fare riders transferring between the CSULB campus and the Traffic Circle would have to pay a new single fare.

The corridor needs to accommodate long-term growth and short-term event surges.

- While projected population growth in the Study Area is dispersed, new transit and development projects, particularly within Pico Rivera, are expected to generate more travel to and along the Southern Segment. Improved transit would help to capture more of these trips, mitigating increases in congestion and vehicle miles traveled (VMT).
- The Southern Segment is expected to absorb short-term but significant surges in travel demand from upcoming mega events, especially the 2028 Olympic and Paralympic Games, which will include venues at the north and south ends of the Project Corridor, and a cultural celebration hub in the City of Pico Rivera. Additional increases in travel demand are expected from growing entertainment activities, including the Long Beach Grand Prix, the Vans Warped Tour, and the planned new amphitheater at the Queen Mary.

With the above challenges, future plans and enhancements of the Southern Segment should focus on upgrading transit service for frequency, connectivity, and consistency to support growth and development without residents, students, workers, and other travelers relying solely on cars. Fortunately, the Southern Segment is not especially physically constrained, allowing for design and reconfiguration alternatives to support a complete corridor that provides regional connectivity from the mountains to the sea.

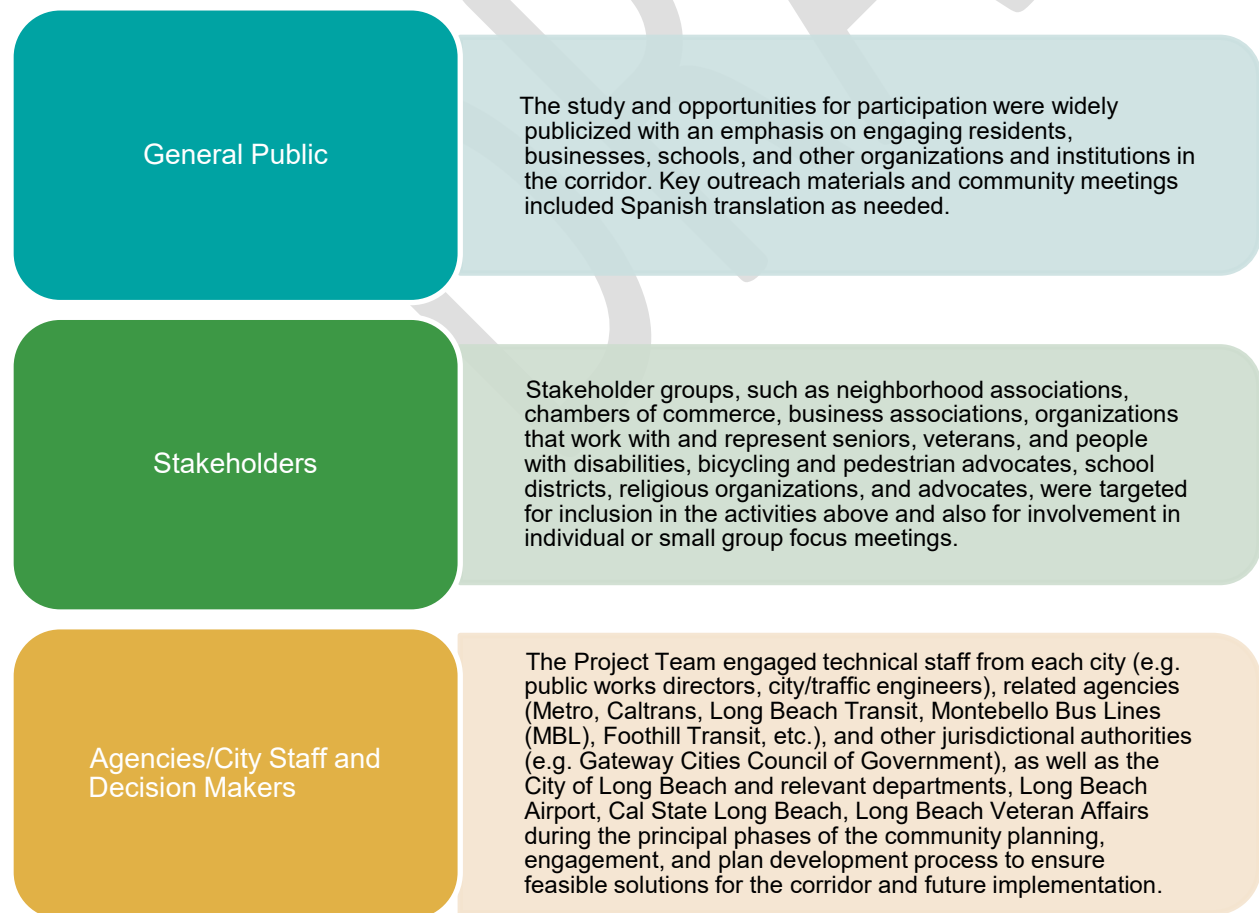
4 STAKEHOLDER ENGAGEMENT SUMMARY

The Vision Plan was informed and developed through robust community engagement. From March 2025 to April 2026, the Project Team engaged with community members, stakeholders, transportation agencies, city staff, and legislative decision-makers to identify perceptions, unique needs, constraints, and considerations that reflect the respective cities, economic sectors, user demographics, and adjacent land uses throughout the corridor.

4.1 Approach

The overall process involved continuous engagement with the community at each stage of the planning and design process, through a sequence of public interactive planning events and activities to develop community-based solutions for the study area. The project team hosted 25 events, including public meetings, mobility forums, pop-ups at farmers’ markets and local events, workshops, and online surveys. The Project Team also used various communication channels, including the project website, social media, and partners’ channels, to communicate with stakeholders about the latest developments in the Vision Plan and opportunities to get involved.

Engagement was targeted through three primary groups:



4.2 Engagement Phasing

The first phase of the engagement process focused on introducing tools and strategies related to Complete Streets, first- and last-mile transit connectivity, zero-emissions enhanced transit, TOD, key concepts associated with BRT, and the overall corridor planning process. Activities conducted during this phase included coordination and informational meetings with individual cities, committee groups, site visits, mobility forums, community surveys, and pop-up events to support stakeholders and public engagement. During this time, the Project Team presented results of the corridor conditions assessment through committee meetings and community pop-ups.



The second phase of the engagement process presented preliminary BRT concepts, potential strategies to improve connectivity along the corridor, and initial implementation considerations for community review and input. During this phase, feedback was collected through an online survey hosted on the project website and disseminated through social media, newsletters, and direct email outreach. Additional input was obtained through in-person outreach activities, including community bike rides, mobility forums and youth workshops.

The last phase of the engagement process will include a public review period of the Draft Plan in April 2026, at community pop-ups to gather public comments and feedback, and a robust online promotion.

4.3 Engagement Activities

The Project Team has held 25 engagement activities so far, ranging from online meetings and in-person community forums to ad hoc committee meetings and pop-ups at local events as needed. During the project stage, some activities were pivoted or delayed reflecting on-the-ground conditions, including immigration enforcement measures that delayed some in-person events. **Appendix A** lists when each engagement activity was conducted during the project.

4.3.1 Committee Meetings

The Project Team convened a series of committee groups, comprised of representatives from government and technical staff from each city (e.g. city managers, public works directors), related agencies (Metro, Caltrans, Long Beach Transit, MBL), GCCOG, Long Beach Airport, Long Beach Transit, CSULB, Long Beach VA, community stakeholders, advocacy groups, and policy-makers. These committees convened online multiple times throughout the duration of the project.

Technical Advisory Committee (TAC)

Focus on providing critical updates, reviewing content, sharing information, overcoming challenges, and informing the planning process and outreach program.

Transit Agency Subcommittees (TAS)	Focus on identifying strengths, weaknesses, threats, and opportunities to provide the most effective, efficient, and highest-quality bus service in the corridor.
Long Beach Subcommittee	Focus on identifying strengths, weaknesses, threats, and opportunities to provide safe, convenient, and attractive active transportation facilities and the most effective, efficient, and highest-quality bus service in the Long Beach segment of the corridor.
Individual Cities	Focus on discussing and accounting for unique needs, issues, and considerations pertaining to each segment of the corridor.
Stakeholder Advisory Group (SAG)	Focus on identifying key sensitivities and pertinent information about the community’s conditions, history, and needs of the community. They were consulted to help determine strategies to engage all segments.
Blue Ribbon Committee	Focus on informing and gathering support from the decision-makers.

4.3.2 Community Forms

The Project Team collaborated with partners to hold two rounds of forums in three locations, engaging the community members and stakeholders about bus rapid transit, complete streets, transit-oriented development, and learning about their mobility and transit needs and service models that best suit their communities. Activities included Mobility Forums and Youth Workshop.



4.3.3 Pop-Up Events

The Project Team participated in existing events and activities along the corridor to promote the project and gather public input. Activities included: Farmer’s Market, Summer Street Fest, Long Beach Transit Bus Fest, Car-Lite Happy Hour, Tree Lighting Ceremony, and community bike rides.

4.3.4 Online Engagement

Project Website

- The project website launched in January 2025, featuring relevant documents and information, upcoming events, and community surveys.
 - **Community Survey Findings**
The initial survey was collected in English and Spanish from July 17 to October 21, 2025. The survey was available digitally and in print at in-person events, receiving 118 responses.

The first survey asked residents about how they travel along the Rosemead-Lakewood corridor. About a third of participants travel more than once a day (32.5%),

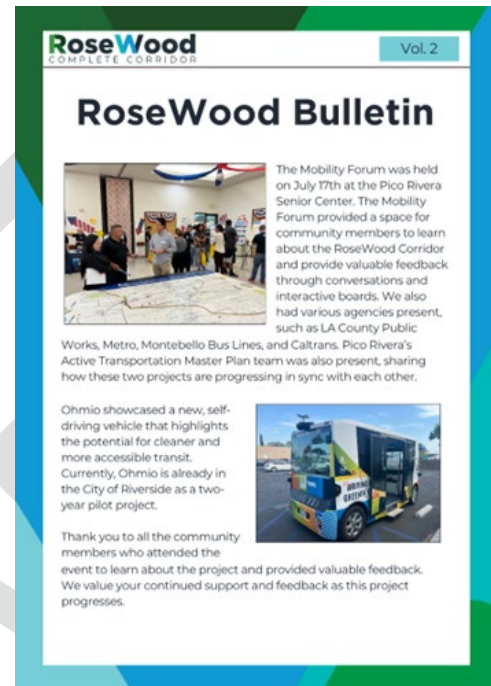
followed by “often (3-5 times a week)” with 29.9%. Primary reasons for not using transit include “Does not take me to where I need to go” (47.5%) and “Travel time takes too long (59.3%). The majority of participants selected better sidewalks, more bike lanes, safer biking conditions, and shade coverage as improvements that would encourage active transportation.

Social Media

- An Instagram account (@rosewoodcorridor) was created to inform the public, connect with users, share upcoming events, and promote surveys and engagement opportunities throughout the project. Instagram served as a helpful tool for reaching users who met the criteria and shared an interest in transportation, active transportation, walking, cycling, etc.
- The Project Team coordinated closely with city staff to ensure relevant project information was featured on the City of Pico Rivera’s Instagram and Facebook. In addition, the Project Team collaborated with the City’s Active Transportation Master Plan project team to cross-promote with each other’s audience and share the vision and connection between the two projects.

Project Newsletter

- RoseWood Bulletin, the project’s newsletter, was published a few times to update the stakeholders on project status and upcoming events.



5 CORRIDOR VISION

5.1 Vision Summary

The RoseWood Corridor Vision Plan establishes a strategy to deliver a unified 28-mile enhanced multimodal corridor connecting the San Gabriel Valley and the Gateway Cities to regional transit, job centers, and other key destinations. Developed through community engagement and review of previous local and regional plans, the Vision Plan aligns investments in mobility with local priorities and support the implementation of high-quality transit and multimodal improvements.

The RoseWood Corridor will serve as a north-south main street designed for safe and efficient travel for pedestrians, bicyclists, transit users, and drivers. The Plan will advance regional mobility, improve safety for all roadway users, and support long-term community and economic development. The Vision includes the following three pillars that may be delivered through a phased and incremental approach:

- **Enhanced Transit Service** | Faster and more frequent bus service that better connects between lines will make transit a more competitive travel mode and better serve new and future riders.
- **Multimodal Infrastructure Improvements** | Improvements include transit signal priority to speed up buses through intersections, enhanced bus stop amenities, safe bicycle lanes, and potentially dedicated bus lanes.
- **Transit Oriented Development** | To support the region's economy and address regional housing needs, it is anticipated that developers will take advantage of corridor improvements to redevelop underutilized parcels along the corridor with mixed-use housing and commercial developments, adding more residents and attractions to this vibrant corridor.

5.2 Service Vision

Preliminary alternatives were developed in order to estimate the ridership potential of various infrastructure improvements and service plans along the RoseWood Boulevard Corridor. Several key factors were considered in developing the alternatives, including:

- **Improved Connectivity with Long Beach** | Travel pattern analysis showed strong links between Long Beach and other Gateway Cities, but current transit services making this connection are infrequent and require transfers between LBT and Metro. Improved service to key destinations, such as the CSULB complex including the VA Hospital, present additional opportunities to generate ridership.
- **Frequent Service** | To improve customer convenience, the alternatives should operate frequently enough to allow customers to use the service "on-demand" without needing to consult a published schedule. For the purposes of this analysis, frequent service refers to 15-minute headways or better.
- **Bus Speed Improvements** | Increasing the speed of travel can significantly improve the rider experience. Various infrastructure and technology options are available to improve

bus speeds, such as bus stop placement at the far side of intersections, transit signal priority, bus bulbs or curb extensions, and dedicated bus lanes where feasible.

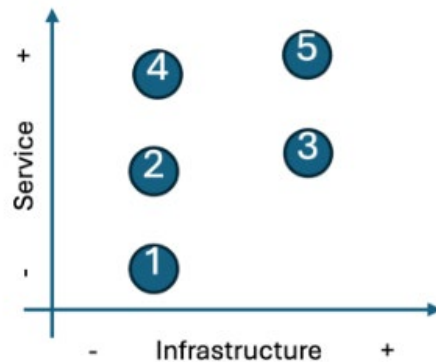
- **Stop Spacing Options** | Current local bus routes along the corridor include stops spaced approximately one quarter mile apart. This spacing maximizes access but adds time for customers making longer trips. Increasing the distance between stops can improve travel time, particularly in conjunction with other improvements such as dedicated bus lanes.

Considering these factors, five alternatives were modeled to evaluate their ridership potential: an enhanced local with two service providers, two alternatives reflecting a single enhanced local bus service with varying levels of dedicated bus lanes, one limited-stop rapid service with reduced local service, and one scenario with full BRT in addition to reduced local service. The enhanced local service alternatives represent a more modest improvement over existing operations, while the limited stops and BRT alternatives represent a higher level of service and infrastructure improvements, which would require greater levels of investment.

5.2.1 Service Alternatives

Five alternatives were developed that span a range of service levels, from local service to full BRT, and a range of infrastructure investments, from targeted improvements to corridor-wide improvements. The level of service improvement to infrastructure investment is shown in **Figure 5-1**. This section summarizes the five alternatives for enhancing transit service along the corridor. Each alternative is defined by assumptions regarding the alignment, stop spacing, service frequency, and transit priority treatments to improve speed and reliability.

Figure 5-1. Alternatives Matrix



The transit priority treatments are largely consistent across the five alternatives and include:

- Increasing the number of far side bus stops
- Providing signal priority at all intersections with far side stops
- Installing bus bulbs at eight stop locations

The primary distinction in transit priority treatment is the extent of dedicated bus lanes, which are evaluated at 25, 50, and 100 percent of the corridor length. It should be noted that this study does not specify where the 25, 50, and 100 percent dedicated lanes would be implemented, as these determinations would be subject to further analysis.

These alternatives can be considered both as discrete options for enhanced bus service, but also as potential phases for progressive implementation of corridor enhancements over time.

Frequent Service (Alternative 1)

For this alternative, two service providers (Metro and LBT) would operate, meeting at Lakewood Center Mall. North of Lakewood Center Mall, the alignment would follow Metro Route 266, and south of Lakewood Center Mall, the alignment would follow LBT Route 111. Stop spacing would be approximately 0.33 miles apart. The service map and stop locations are shown in **Figure 5-2**. The proposed service would operate with 15-minute headways during peak hours and 20-minute headways in the evening. In addition to the transit priority treatments that are consistent across all alternatives, this alternative evaluates dedicated bus lanes along 25 percent of the length of the corridor. As stated above, this study does not specify the specific locations for dedicated lane implementation, which would be subject to further study.

Figure 5-2. Alternative 1 Service Map



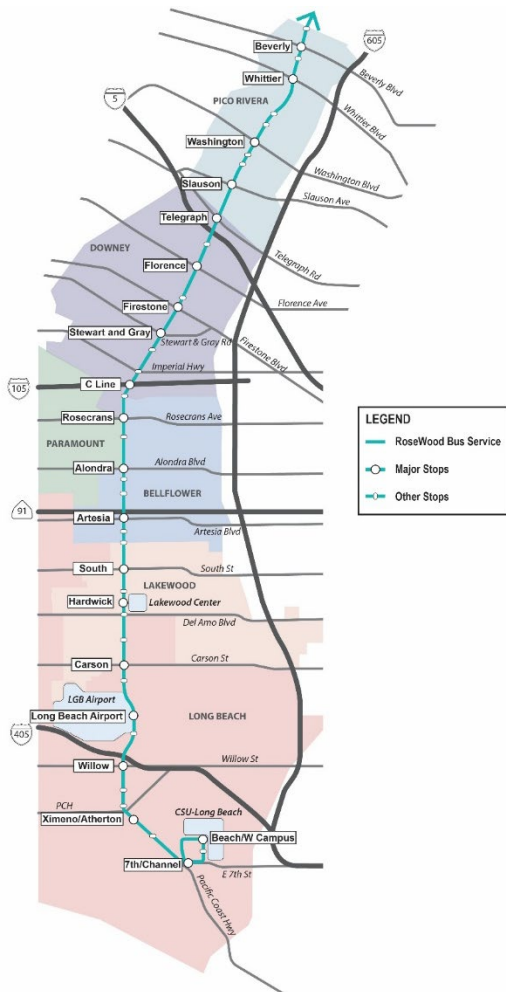
Frequent, Direct Service (Alternative 2)

This alternative assumes a single service provider operating along the corridor with local stop spacing of about 0.33 miles apart. The service map and stop locations are shown in **Figure 5-3**. Similar to the first alternative, the proposed service would operate with 15-minute headways during peak hours and 20-minute headways in the evening. This alternative includes the standard transit priority treatments and evaluates dedicated bus lanes along 25 percent of the corridor length. Service operations are more streamlined compared to the first alternative.

Frequent, Direct, Faster Service (Alternative 3)

Under this alternative, a single service provider operates with local stop spacing of about 0.33 miles (see **Figure 5-3**). Service frequencies remain consistent with the first and second alternatives, 15-minute headways during peak hours and 20-minute headways in the evening. In addition to investment in the transit priority treatments that are consistent across all alternatives, this alternative evaluates dedicated bus lanes along 50 percent of the length of the corridor.

Figure 5-3. Alternative 2 and Alternative 3 Service Map



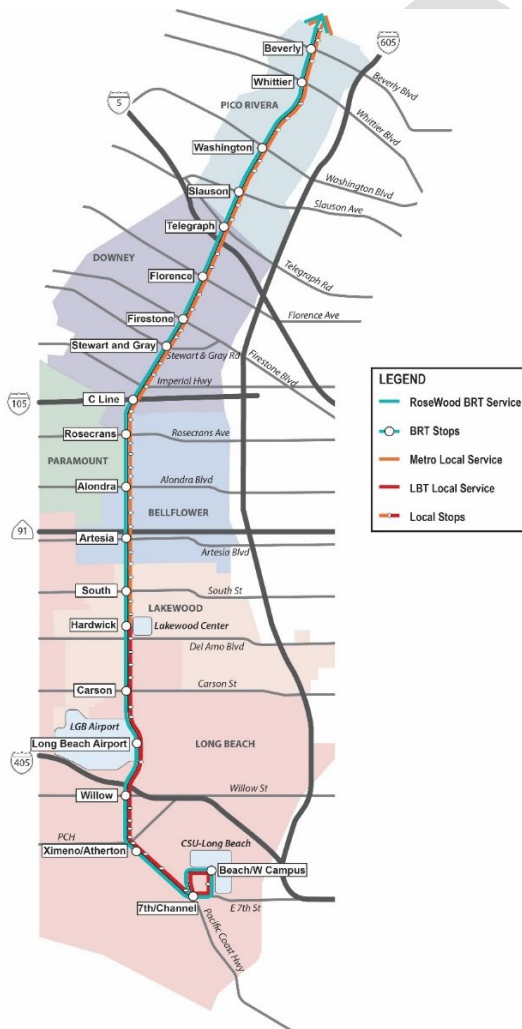
Limited-Stop Rapid Service (Alternative 4)

This alternative introduces a limited-stop, enhanced service operated by a single provider, with stops spaced approximately one mile apart. Underlying local service would continue to operate every 30 minutes, provided separately by Metro and LBT. The service map and stop locations are shown in **Figure 5-4**. This limited-stop rapid service would run every 15 minutes during peak hours and every 30 minutes in the evening, while local service operates every 30 minutes. Transit priority treatments include far side bus stops, transit signal priority, bus bulbs, and dedicated bus lanes at 50 percent of the corridor length.

Full BRT Service (Alternative 5)

The full BRT alternative assumes a single provider operating a limited-stop service every 15 minutes with stops spaced approximately one mile apart, supplemented by 30-minute local service provided separately by Metro and LBT (see **Figure 5-4**). In addition to investments in far side bus stops, transit signal priority, and bus bulbs, this alternative evaluates dedicated bus lanes throughout the entire length of the corridor.

Figure 5-. Alternative 4 and Alternative 5 Service Map



5.3 Ridership Forecast Modeling

5.3.1 Modeling Approach

While the Study Area for the Vision Plan spans from Long Beach to Pico Rivera (to account for the BRT study underway in the San Gabriel Valley), the intent was for the ridership model to account for the whole potential corridor extending to the Sierra Madre Villa station. Ridership modeling compared a no-build and build scenario in 2024 baseline conditions and a 2057 horizon.

Ridership was modeled using the Federal Transit Administration's Simplified Trips-on-Project Software (STOPS), which is a series of programs designed to quickly produce plausible forecasts of transit project ridership using readily available American Community Survey data, transit ridership, origin-destination surveys, transit schedule information, and metropolitan planning organization forecasts of demographic growth and traffic congestion. STOPS creates a zone-to-zone matrix of person trips stratified by trip purpose and socioeconomic class for traffic analysis zones (TAZs), then assigns each of the mode-specific tables to specific transportation facilities to determine transit travel volumes.

The STOPS model was built by updating transportation system elements available through the STOPS model prepared for the East San Fernando Valley Light Rail Project. The model was calibrated to the existing boardings by stop for October 2024 and operating assumptions were developed for multiple enhanced transit alternatives. The ridership modeling does account for the future Metro E Line extension, the Southeast Gateway Line, and the proposed Pico Rivera Metrolink Station.

Five scenarios were modeled, three reflect an enhanced local bus service, one is a limited-stop rapid service with a reduced local service, and one is a full BRT in addition to reduced local service. **Table 5-1** summarizes the existing conditions of Route 266 and Route 111 and the proposed conditions of each of the five scenarios.

In terms of travel time savings assumptions for the STOPS model, Alternatives 1 and 2 are each assumed to reduce travel time by 4.3 percent compared to existing conditions. Alternative 3 is

Key elements of the STOPS modeling approach for this project include:

- **Origin-to-Destination Travel** | Instead of elaborate trip generation and destination choice procedures included in trip-based models, origin and destination data were derived from the American Community Survey and the regional transit on-board survey.
- **Proposed Operating Patterns** | for each of the alternatives described above.
- **Travel Times** | Estimated travel times between stations were developed using existing Metro Route 266 and LBT Route 111 schedule information, along with assumptions on travel time savings from improvements such as dedicated bus lanes, signal priority, bus bulbs, and longer distances between stations.
- **Fixed Guideway Factor** | STOPS accounts for the presence of exclusive lanes by assigning a value between 0 and 1, 0 being fully mixed traffic and 1 being completely separated guideway such as a subway. For the BRT alternative, a factor of 0.4 was used.

assumed to reduce travel times by 5.8 percent, Alternative 4 by 16.7 percent, and Alternative 5 by 20.1 percent compared to the existing services.

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Table 5-1. Service Scenarios

	Existing		Enhanced Local			Limited Stops + Local (Alt 4)			BRT + Local (Alt 5)		
	Metro 266	LBT 111	Alt 1	Alt 2	Alt 3	Limited Stops	Local (Metro 266)	Local (LBT 111)	BRT	Local (Metro 266)	Local (LBT 111)
Number of Stops	79 NB, 80 SB	58 NB, 55 SB	106 NB, 106 SB	106 NB, 106 SB	106 NB, 106 SB	26 NB, 26 SB	79 NB, 80 SB	58 NB, 55 SB	26 NB, 26 SB	79 NB, 80 SB	58 NB, 59 SB
Avg. Stop Spacing (miles)	0.3	0.3	0.3	0.3	0.3	1	0.3	0.3	1	0.3	0.3
Peak/Midday Headway	20	60	15	15	15	15	30	30	15	30	30
Evening Headway	30	60	20	20	20	30	30	30	30	30	30
Percent Dedicated Lanes	0%		25%	25%	50%	50%			100%		
Travel Time Saving	N/A	N/A	4.3%	4.3%	5.8%	16.7%			20.1%		
Peak/Midday Roundtrip Run Times	3:42:00	2:04:00	4:35:55	4:35:55	4:31:07	4:02:22	3:42:00	2:04:00	3:40:18	3:42:00	2:04:00
Off-Peak Roundtrip Run Times	3:14:00	1:58:00	4:06:56	4:06:56	4:02:37	3:29:48	3:14:00	1:58:00	3:12:57	3:14:00	1:58:00
Service Span	5am - 10pm										

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5.3.2 Ridership Forecasting Results

Table 5-2 shows the estimated weekday boardings for each service scenario. The corridor has considerable ridership potential with increased speed and frequency. The new BRT route is expected to capture approximately 13,050 daily boardings in the 2024 baseline scenario and over 14,950 daily boardings in the future year scenario. Even without a full BRT service, the Enhanced Local scenarios show an increase of 12 to 24 percent over the existing service with improvements in frequency, speed, and the extension of the route to CSULB. Decrease in walking access due to limited stops, and limited dedicated bus lanes, may account for lower ridership on Alternative 4.

Figure 5-5 shows the projected station level boardings by transfers and other access modes, including walking, kiss-and-ride, and park-and-ride, for the 2024 baseline BRT scenario. Project trips are mostly concentrated in Pico Rivera, Downey, Lakewood, and Long Beach. Connectivity to other rail and bus lines is a key source of ridership. There is significant forecast transfer activity along the route, particularly at the proposed Metro E Line Extension on Washington Boulevard, the Lakewood Boulevard Station, and the San Gabriel Valley stops. The pattern of station level boardings is similar in the 2057 future scenario, with slight decreases in the number of transfers to other access modes.

The new stops in Long Beach to CSULB, not currently served by Route 266 or LBT 111, represent approximately 20 percent of total boardings. This indicates that the projected corridor-level ridership gains not only result from speed and frequency improvements, but from new connectivity to Long Beach.

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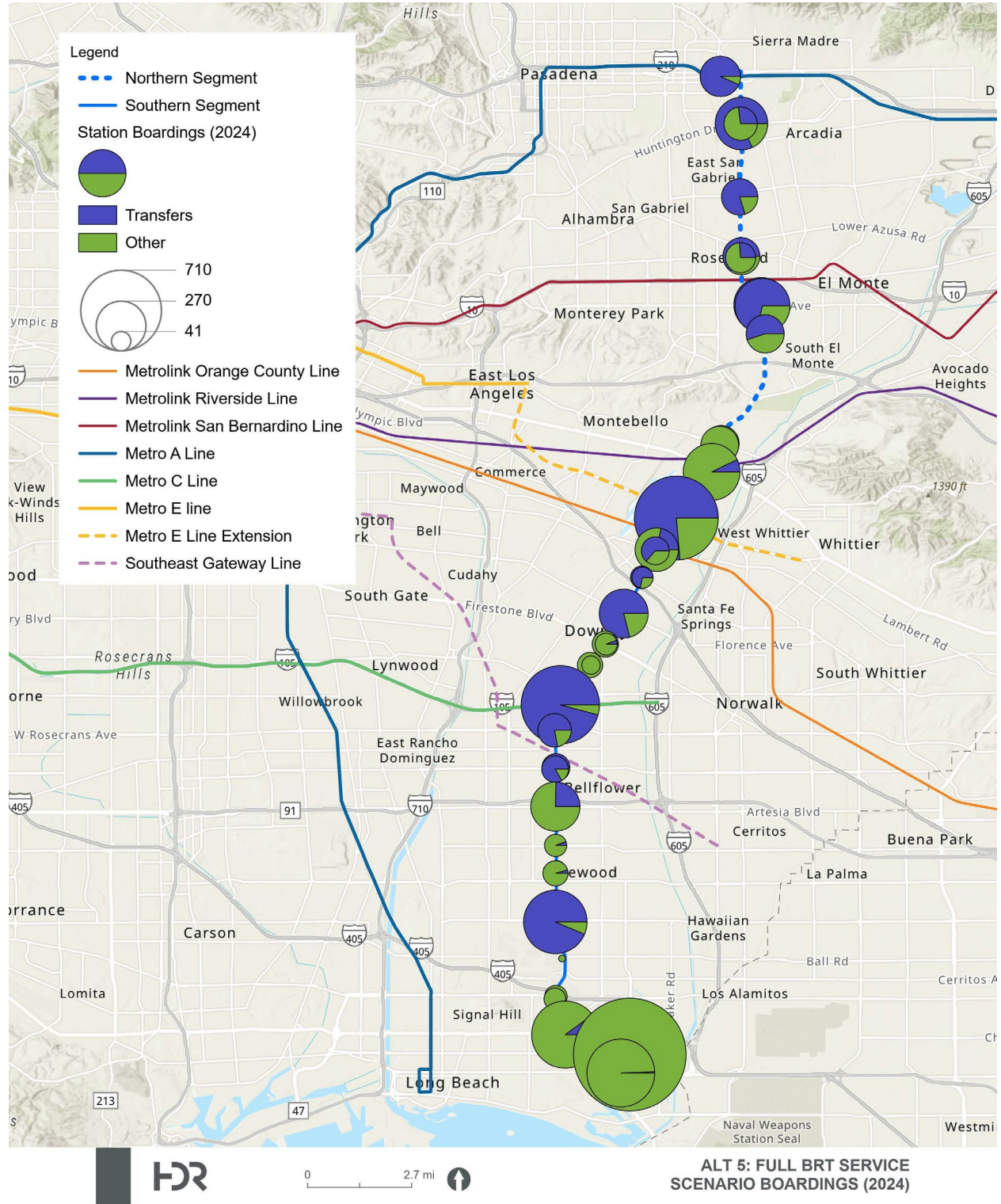
Table 5-2. Results Summary

	Existing	Enhanced Local			Limited Stops + Local (Alt 4)	BRT + Local (Alt 5)
		Alt 1	Alt 2	Alt 3		
2024						
New Linked Trips, Systemwide	-	300	400	400	200	2,500
New Unlinked Trips, Systemwide	-	300	100	-50	1,550	5,600
Systemwide Boardings	1,224,750	1,225,050	1,224,850	1,224,700	1,226,300	1,230,350
Corridor Boardings	6,750	7,600	7,900	7,950	8,300	13,050
Metro Route 266	5,950	-	-	-	2,400	2,100
LBT 111	850	1,950	650	650	850	750
Alternative Boardings	-	5,650	7,300	7,350	5,050	10,200
Vehicle Miles Reduced	-	1,100	2,800	3,000	5,650	20,950
2057						
New Linked Trips, Systemwide	-	350	400	450	250	2,800
New Unlinked Trips, Systemwide	-	200	0	-150	2,050	6,550
Systemwide Boardings	1,519,950	1,520,100	1,519,950	1,519,800	1,522,000	1,526,500
Corridor Boardings	7,750	8,650	8,900	9,000	9,600	14,950
Metro Route 266	6,750	-	-	-	2,750	2,400
LBT 111	1,000	2,350	750	750	1,000	900
Alternative Boardings	-	6,300	8,150	8,250	5,850	11,650
Vehicle Miles Reduced	-	1,000	2,950	3,150	6,850	23,900

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Figure 5-4. BRT Scenario Boardings (2024)



5.4 Infrastructure Improvements

While some of the larger infrastructure and service frequency improvements will require additional planning and funding to deliver, several elements of the vision can be implemented earlier. Advancing early action improvements provides an opportunity to improve mobility of all roadway users sooner, delivering service benefits while longer-term investments are developed.

5.4.1 Early Action Improvements

Transit Signal Prioritization

Buses and streetcars often face the same congestion and delays as private vehicles, reducing the reliability and attractiveness of transit service. Transit Signal Prioritization (TSP) has emerged as an effective traffic management strategy designed to improve transit performance by modifying traffic signal operations in favor of transit vehicles. By granting conditional priority at signalized intersections, TSP helps reduce delays, improve schedule adherence, and enhance the overall efficiency of urban transportation systems.

Definition and Purpose of Transit Signal Prioritization

Transit Signal Prioritization refers to a set of operational strategies that adjust traffic signal timing when a transit vehicle approaches an intersection. Unlike signal preemption—commonly used by emergency vehicles and railroad crossings—TSP only modifies the existing signal timing by adding green time while maintaining the remaining phases of the signal. The primary goal of TSP is to reduce intersection delay for transit vehicles while minimizing adverse impacts on general traffic, pedestrians, and cyclists.

The motivation for implementing TSP lies in its ability to improve transit service effectiveness without major capital investments. Since signalized intersections are a major source of delay for surface transit, even small timing adjustments—such as extending a green phase or shortening a red phase—can yield significant benefits in travel time and reliability.

Types of Transit Signal Priority

There are several forms of TSP, each varying in complexity and level of control. Common strategies include:

Green Extension, which lengthens the current green phase to allow the approaching bus to clear the intersection.

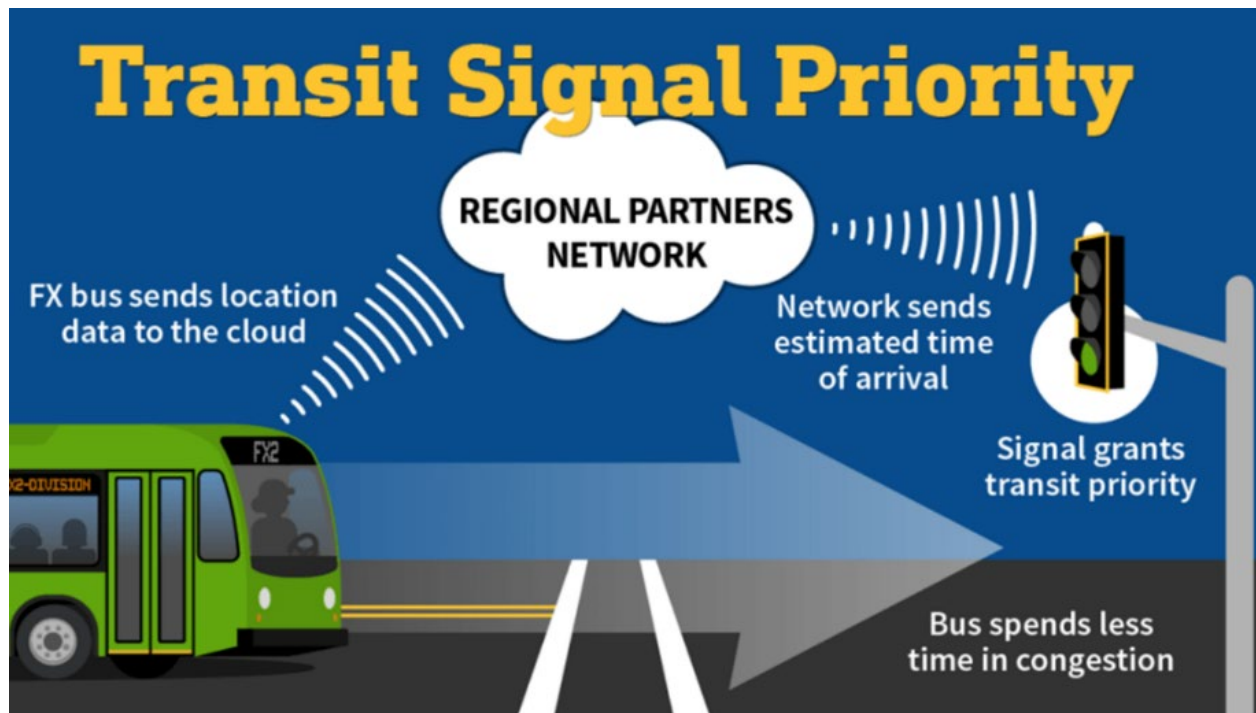
Early Green (Red Truncation), which shortens the opposing phase, so the bus receives a green signal sooner.

Phase Insertion, in which a special phase is added to serve transit movements.

Adaptive or Conditional Priority, which uses real-time data to determine when priority should be deployed.

Modern TSP systems often rely on Global Positioning System (GPS) data, automated vehicle location (AVL), and advanced signal controllers to dynamically respond to traffic and transit conditions. These systems allow agencies to tailor priority strategies based on time of day, congestion levels, or policy objectives. **Figure 5-6** below shows how the TSP would operate.

Figure 5-5. TSP Operations



Benefits of Transit Signal Prioritization

The benefits of TSP extend far beyond faster bus trips. Studies have consistently shown that TSP can reduce transit travel times by five to 15 percent and improve schedule reliability by decreasing variability in delays. Improved reliability reduces the need for excessive recovery time at route termini and allows agencies to deploy their fleets more efficiently.

From a passenger perspective, shorter and more predictable travel times enhance the perceived quality of transit service. For operating agencies, TSP can reduce operating costs by allowing the same level of service to be provided with fewer vehicles or drivers.

Impacts on General Traffic and Multimodal Considerations

While TSP prioritizes transit vehicles, it is designed to balance competing roadway demands. Because priority is typically conditional and temporary, impacts on cross street traffic are generally modest. Nevertheless, careful planning is required to ensure that priority strategies do not significantly degrade safety or delay for other users, particularly pedestrians and cyclists.

Integration of TSP with multimodal policies is increasingly important. In corridors with bicycle lanes, pedestrian priority corridors, or freight routes, signal timing must accommodate diverse needs. Advanced TSP systems can be coordinated with adaptive traffic signal control to optimize overall corridor performance rather than focusing solely on transit delay.

Implementation on the RoseWood Corridor

A planning level cost estimate for TSP implementation for the RoseWood Corridor has been developed and includes existing infrastructure, upgrades necessary to make the existing infrastructure TSP-enabled, and a planning level cost estimate for cloud-based TSP implementation.

The existing infrastructure inventory was informed by meetings with the City of Pico Rivera, City of Bellflower, City of Downey, City of Lakewood and City of Long Beach.

Signalized intersections along the route that are maintained by Caltrans on Pacific Coast Highway were not evaluated for TSP implementation and are not included in this cost estimate. The Caltrans signals are being reviewed for potential TSP implementation as a potential area wide project.

There are 54 signalized intersections along the RoseWood Corridor route that are considered in this cost estimate. The existing traffic signal controller hardware, firmware, communications media, and planned upgrades were collected from each city.

Infrastructure Needs

The following assumptions were made regarding the infrastructure needs:

1. The software solution is a cloud-based hosted TSP service deployment.
2. Cloud-based transit signal priority is compatible with:
 - a. 2070, 2070E, 2070E ATC, and 2070L ATC controller hardware.
 - b. Bitrans 2033, Bitrans 233, MaxTime, and Omni controller firmware.
 - c. Controllers with fiber, DSL, and twisted pair copper communications.
3. Existing 2070, 2070E, 2070E ATC, and 2070L ATC controllers along the route support Metro TSP protocols and networking.
4. Controllers with fiber, DSL, and twisted pair copper communications have high-speed IP communications.
5. Controllers with no existing communication will require a leased-line, cell modem
6. Cloud-based transit signal priority is not compatible with:
 - a. 170 controller hardware and will require an upgrade to 2070.
 - b. CATS controller firmware. Controllers with SCATS require an upgrade to the firmware of the corresponding City's preference.

To be TSP-enabled, a signalized intersection must have appropriate controller hardware, firmware, and communications. **Table 5-3** highlights upgrade needs by Agency. **Table 5-4** shows which signalized intersections need upgrades to be TSP-enabled.

Table 5-3. Intersection Infrastructure Upgrade Needs by Agency

Agency	No. of Signalized Intersections			
	Along Corridor	Require TSP-Enabled Communications	Require TSP-Enabled Controller Hardware	Require TSP-Enabled Controller Firmware
Bellflower	6	0	0	0
Downey	17	1	4	1
Lakewood	5	5	5	5
Long Beach	11	6	5	5
Pico Rivera	15	6	14	14
Total	54	18	28	25

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Table 5-4. Infrastructure Upgrade Needs by Intersection

City	Need	Intersection
Downey	New Traffic Signal Infrastructure with Compatible Communications and Controller Hardware & Firmware	Lakewood/Century
		Lakewood/Gallatin
	Controller Hardware Upgrade	Lakewood/Cherokee
		Lakewood/Firestone
Pico Rivera	Controller Hardware and Communications Upgrade	Lakewood/Telegraph
	Controller Firmware and Communications Upgrade	Rosemead/Whittier
	Controller Hardware, Firmware, and Communications Upgrade	Rosemead/Beverly Blvd
		Rosemead/Beverly Road
		Rosemead/Olympic
		Rosemead/Havenwood
	Controller Hardware and Firmware Upgrade	Rosemead/Gallatin
		Rosemead/Mines
		Rosemead/Coffman
		Rosemead/The Marketplace
		Rosemead/Washington
		Rosemead/Rex
		Rosemead/Slauson
Rosemead/Terradell		
Rosemead/Telegraph		
Long Beach	Controller Hardware, Firmware, and Communications Upgrade	Lakewood/Cover
	Communications Upgrade	Lakewood/Carson
		Lakewood/McGowen-Douglas Cr Dr
		Lakewood/Conant
		Lakewood/Wardlow
		Lakewood/Spring
	Controller Hardware and Firmware Upgrade	Lakewood/Arbor
		Lakewood/Harvey
		Lakewood/23rd
		Lakewood/Stearns

Funding and Timing

The implementation of TSP can be done as an early action project and constructed in individual segments/cities as funding becomes available. Operating agreements with Metro or Long Beach Transit will be required to have the buses equipped with the necessary tacking hardware/software. In addition, Memorandums of Understanding will need to be established between each agency having jurisdiction of the traffic signals to have TSP implemented to establish timing guidelines, and use of cloud-based software. The cost for potential implementation is shown below in 2026 dollars.

Table 5-5. TSP Implementation Costs (2026 dollars)

Description	Quantity	Unit	Unit Price	Extended Price
Non-Capital Cost				
Project Management	1	LS	\$80,000	\$80,000
Training and Documentation	1	LS	\$35,000	\$35,000
Furnish TSP System Software	1	LS	\$540,000	\$540,000
Installation and Integration with Metro Network	1	LS	\$275,000	\$275,000
Configure and Deploy TSP System	86	EA	\$2,700	\$232,200
System Testing & Acceptance	1	LS	\$65,000	\$65,000
Design	1	LS	\$190,000	\$190,000
Total Non-capital and Software Cost				\$ 1,417,200
5-Year Operations and Maintenance (O&M) Cost				
System Operation, Warranty, and Support	5	Year	\$30,000	\$150,000
Performance reporting KPI dashboard	1	LS	\$75,000	\$75,000
Performance reporting & optimization review meetings for 5 years)	5	EA	\$30,000	\$150,000
Traffic signal operations updates for five years	5	EA	\$20,000	\$100,000
Total O&M Cost				\$ 475,000
Capital Cost				
Remove and Salvage Existing Controller. Furnish and Install 2070 Controller.	29	EA	\$10,000	\$290,000
Furnish and Install 2070 Controller 1C module	29	EA	\$7,000	\$203,000
Firmware upgrades	20	EA	\$1,500	\$30,000
Contingency (20%)	1	EA	\$120,000	\$120,000
Total Upgrade Capital Cost				\$ 643,000

LS = Lump Sum

EA = Each

Bus Stop Amenities

Bus stop amenities, such as shelters, benches, and informational signage, play a critical role in shaping the rider experience and influencing transit use. Research consistently shows that investments in basic bus stop infrastructure improve comfort and accessibility while also producing measurable increases in ridership. As a result, bus stop amenities represent a cost-effective strategy for strengthening transit systems and encouraging mode shift.

Improved Comfort and Waiting Experience

Bus stop amenities directly improve the comfort of waiting passengers. Shelters provide protection from rain, wind, and extreme heat, while benches reduce physical strain for riders who may have difficulty standing for extended periods. These improvements are particularly important because waiting time is often perceived as more burdensome than in vehicle travel time. Studies have shown that comfortable waiting environments can reduce the perceived wait time and improve overall satisfaction with transit service.

Comfort improvements are not merely cosmetic; they affect travel behavior. Surveys conducted as part of the Transit Cooperative Research Program (TCRP) found that a significant share of riders reported they would increase transit use if amenities such as shelters and seating were provided, even when compared to fare reductions.

Measurable Increases in Ridership

Empirical research demonstrates that bus stop amenities are associated with statistically significant increases in ridership. A well-documented study of bus stop improvements by the Utah Transit Authority found that stops upgraded with shelters, seating, signage, and sidewalks experienced higher ridership growth than comparable unimproved stops, even after controlling for land use and demographic factors. The same study also found a reduction in demand for ADA paratransit services near improved stops, suggesting that better stop design enables more riders to use fixed route transit rather than more costly alternatives.

At a broader level, the TCRP's *Amenities for Transit Handbook* estimates that investments in passenger amenities can increase ridership by approximately 1.5 to 3 percent in typical U.S. transit systems, depending on the scale of improvements and local context. While these percentage gains may appear modest, they are significant given the relatively low cost of stop level improvements compared to major service expansions.

More recent research also shows that ridership impacts can be substantially higher at specific locations. A Virginia Transportation Research Council study documented stop level ridership increases ranging from 1.5 percent to over 100 percent following the installation of basic bus stop infrastructure, with the largest gains occurring at previously unimproved, high demand stops. These findings highlight that amenities are especially effective where waiting conditions were previously poor.

Accessibility, Equity, and Ridership Retention

Bus stop amenities also support equity and accessibility, which in turn influence ridership retention. Benches and shelters benefit older adults, people with disabilities, and riders with health or mobility limitations. Clear informational signs with route numbers, schedules, and maps reduce uncertainty

for first-time riders and people unfamiliar with the system. Research indicates that reducing physical and informational barriers encourages more frequent use among existing riders and lowers the likelihood that riders abandon transit altogether.

By improving accessibility at the stop level, agencies can also reduce reliance on paratransit services, which are significantly more expensive to operate than fixed route transit. The observed decrease in paratransit demand near improved stops underscores the long-term operational and financial benefits of amenity investments.

Safety, Perception, and Community Benefits

In addition to direct ridership impacts, bus stop amenities improve safety and the perceived quality of transit service. Well designed shelters and signage increase visibility, support lighting installation, and signal public investment in a location. These factors contribute to a greater sense of security, particularly during early morning or evening hours, which research has linked to increased willingness to use transit.

From a community perspective, attractive and well maintained bus stops enhance the streetscape and can support local economic activity by increasing foot traffic. Over time, increased ridership contributes to reduced congestion, lower emissions, and more efficient use of existing transportation infrastructure.

Corridor recommendations for early stop improvements

Improvements would consist of the installation of a BRT type shelter developed by Metro, and would include seating, trash receptacles, e-paper displays to provide bus/route information, and informational/ad kiosks. The shelters are installed in units of 12 or 16 feet in length, and several can be located at one stop depending on need and available space. The units are also internally illuminated to provide safety at night. Some locations may also include an overhead charging unit for electric buses running down the corridor. **Figure 5-7** and **Figure 5-8** are examples of a typical stop with full amenities. In addition to improving functionality, the shelters enhance design quality and Metro brand consistency throughout the corridor while allowing for the incorporation of artwork that reflects local culture and neighborhood character.

Figure 5-6. Example Bus Stop Amenities with a Bus Charging Unit



Figure 5-7. Metro BRT Station Shelter



While the goal would be to add or upgrade existing stop amenities such as shelters, benches, and informational kiosks at all stops along the corridor, based on high usage and connectivity the following stop locations are recommended for implementation as an initial phase.

Table 5-6. Top 14 Priority Bus Stops for Early Action Amenity Enhancement

Stop Location	Southbound Weekday Ridership	Northbound Weekday Ridership	Connections	Municipality
Rosemead / Whittier	245	253	Montebello Bus Line 10	Pico Rivera
Rosemead / Washington	53	200	Montebello Bus Line 50	Pico Rivera
Rosemead / Slauson	136	130	Metro 108	Pico Rivera
Lakewood / Telegraph	190	207		Downey
Lakewood / Florence	197	201	Metro 111	Downey
Lakewood / Firestone	282	265	Metro 115, 127	Downey
Lakewood Blvd C Line	428	447	Metro C, 117, 120; LBT 22	Downey
Lakewood / Rosecrans	151	154	Metro 125	Downey / Bellflower
Lakewood / Alondra	119	106	Metro 128	Bellflower
Lakewood / Artesia	108	124	LBT 141	Bellflower
Lakewood / Hardwick	181	244	Metro 265; LBT 103, 112, 191	Lakewood
Ximeno / Atherton	341	389	LBT 121, 172, 173	Long Beach
7th / Channel	661		LBT 41, 46, 91, 92, 93, 94, 121, 171, 175; OC Bus 1, 50, 60	Long Beach
Beach / W Campus	1426	1426	LBT 41, 46, 91, 92, 93, 94, 121, 171, 175	Long Beach

Estimated cost for the initial 14 locations is shown below. Cost is 2026 dollars and does not include bus charging equipment, new or upgraded handicap ramps, or bus bulb-outs for side running locations.

Table 5-7. Bus Stop Amenities Costs (2026 dollars)

Description	Quantity	Unit	Unit Price	Extended Price
Non-Capital Cost				
Project Management/Transit Agency Coordination	1	LS	\$50,000	\$50,000
Design	1	LS	\$300,000	\$300,000
Total Non-Capital Cost				\$ 350,000
Capital Cost				
Furnish and Install 16 shelter	14	EA	\$150,000	\$2,100,000
Construct shelter foundation	14	EA	\$ 5,000	\$70,000
Furnish and install Kiosk	14	EA	\$ 25,000	\$350,000
Furnish and install benches	28	EA	\$3,000	\$84,000
Furnish and install trash receptacles	14	EA	\$1,000	\$14,000
Install meter cabinet and related conduit/pull boxes	14	EA	\$5,000	\$70,000
Contingency (20%)	1	EA	\$537,000	\$537,000
Total Capital Cost				\$ 3,225,000

LS = Lump Sum
EA = Each

For each location, maintenance agreements will need to coordinate with the operating transit agency. This would include maintenance of the shelter, operation of the e-paper displays, operation/maintenance of the kiosk and use of the revenue from ad sales. In addition, local agencies can utilize back panels for local artwork.

5.4.2 Long-Term Buildout

Dedicated bus lanes are a key strategy for cities aiming to improve mobility, reduce congestion, and promote sustainable transportation. By reserving road space for buses, cities increase travel time reliability and allow transit agencies to operate more efficiently. By allocating specific roadway space exclusively for buses, municipalities can dramatically enhance the reliability, speed, and appeal of public transit.

One of the most significant advantages of dedicated bus lanes is improved travel time reliability. Unlike buses operating in mixed traffic—where they face delays from congestion, collisions, or unpredictable driver behavior—buses in dedicated lanes can maintain consistent speeds and predictable schedules. This reliability enhances passenger satisfaction and improves operational efficiency, allowing the same number of buses to complete more trips within a given period.

Dedicated bus lanes also promote higher public transit ridership. When buses are faster and more dependable, they become a viable alternative to driving. Increased ridership reduces the number of single-occupancy vehicles on the road, easing congestion. This modal shift also supports

environmental goals; particularly electric buses, significantly lower per-capita emissions when compared with private cars. Cities striving to meet climate action targets view dedicated bus lanes as a relatively low cost means of reducing greenhouse gas emissions and improving air quality.

Dedicated bus lanes can make efficient use of limited right-of-way. Expanding general-purpose lanes often leads to induced demand and more traffic, whereas transit-priority lanes move more people in less space. A single articulated bus can carry as many passengers as dozens of cars while occupying far less roadway. Dedicated bus lanes also integrate well with complementary strategies such as transit signal priority, bus rapid transit corridors, and safe pedestrian infrastructure around stations.

Implementation, however, presents challenges. Some communities express concerns about congestion if road space is reallocated from general traffic to transit, while businesses have concerns about impacts to curbside access or parking. Addressing these issues requires thoughtful planning, public engagement, and data-driven decision-making. A regional transportation agency or a dedicated joint powers authority serving as the planning lead could help streamline coordination, build consensus, and secure approvals. Successful projects typically pair bus lanes with signal optimization, managed loading zones, and improved pedestrian crossings. In practice, corridors often perform better overall when more travelers shift to high-capacity transit.

Financial factors must also be considered. Although far less expensive than major highway or rail projects, bus lanes still require funding for design, construction, signage, enforcement, and maintenance. Effective enforcement is essential, as unauthorized vehicles can undermine performance. Technologies such as automated enforcement cameras help preserve lane integrity while reducing staffing demands.

Overall, dedicated bus lanes represent a practical, scalable, and sustainable approach to improving urban mobility. By increasing reliability, reducing emissions, and maximizing roadway space, they deliver long-term benefits that often outweigh the initial challenges.

Types of Dedicated Bus Lanes

Dedicated bus lanes vary in their level of separation, operational design, and intended performance. The following are the primary types used in urban transit systems:

Type	Characteristics	Advantages	Challenges
Curbside Bus Lanes	<ul style="list-style-type: none"> • These lanes run along the curb and are the most common form of dedicated bus lane. • Located directly adjacent to the sidewalk. • Shared points of conflict with right turning vehicles, driveways, loading zones, and cyclists. 	<ul style="list-style-type: none"> • Easiest and fastest to implement. • Minimal roadway redesign. 	<ul style="list-style-type: none"> • Susceptible to blockage by illegal parking or delivery vehicles. • Lower reliability compared with more separated options.

Type	Characteristics	Advantages	Challenges
Median (Center Running) Bus Lanes	<ul style="list-style-type: none"> • These lanes operate along the center of the roadway. • Buses run in the median area or in the lane adjacent to the median (essentially the conversion of a general purpose lane to a dedicated bus lane), often with platform stations in the center. • Usually paired with restricted or protected left turns. 	<ul style="list-style-type: none"> • Avoids right turn conflicts and curbside blockages. • Provides higher speed and reliability similar to BRT. 	<ul style="list-style-type: none"> • Requires more infrastructure changes (stations, pedestrian access). • More expensive and complex to build.
Side Running Bus Lanes (Offset Bus Lanes)	<ul style="list-style-type: none"> • These are placed one lane away from the curb—between the parking lane (or bicycle lane) and general purpose traffic. • Reduces interference from curbside activities like parking or delivery. • Maintains bus accessibility to curbside stops via short pull-ins or platform extensions. 	<ul style="list-style-type: none"> • More reliable than curbside lanes. • Less disruptive than fully center running lanes. 	<ul style="list-style-type: none"> • Requires careful design to manage conflicts with turning vehicles.

Analysis of the RoseWood Corridor

A review of existing street configurations and available right-of-way was conducted to determine the most feasible type of dedicated bus lanes for the RoseWood Corridor. This evaluation incorporated the adopted active transportation plans of each city along the corridor to ensure that proposed bicycle facilities could be accommodated alongside any dedicated bus lanes. Given the limited median space along much of the corridor, and to minimize frequent transitions between curbside and center-running configurations, curb- and side-running dedicated bus lanes were identified as the most appropriate option. The roadway cross sections illustrated in **Figure 5-9**, **Figure 5-10**, and **Figure 5-11** are examples of mixed flow, side-running, and curb-running bus lanes. **Figure 5-12** presents the proposed alignment configuration identifying where each bus lane treatment would be implemented.

These lanes could be implemented relatively quickly. Improvements would include signage, pavement markings, and curb extensions where side-running bus lanes are introduced. Traffic signal modifications would also be required. Estimated costs range from \$3 million to \$8 million per mile.

An additional benefit of curb/side-running dedicated bus lanes is their flexibility. The lanes can be implemented in phases or independently by individual jurisdictions, allowing buses to transition between dedicated lanes and general-purpose lanes as segments are completed. As discussed in **Section 5.3.1** of this report, the incremental addition of dedicated bus lanes is expected to progressively reduce bus travel times and increase ridership over time.

Figure 5-8. Mixed Flow with Class II Bike Lane

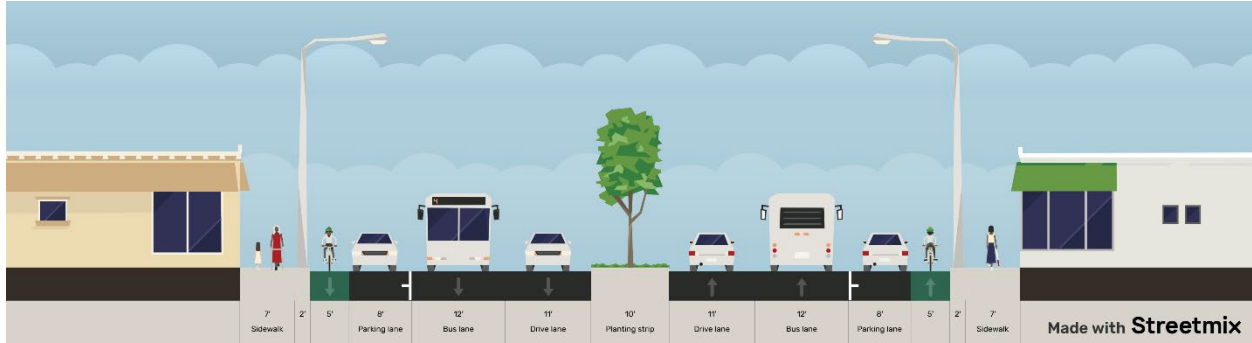


Figure 5-9. Side-Running Bus Lane with Class II Bike Lane

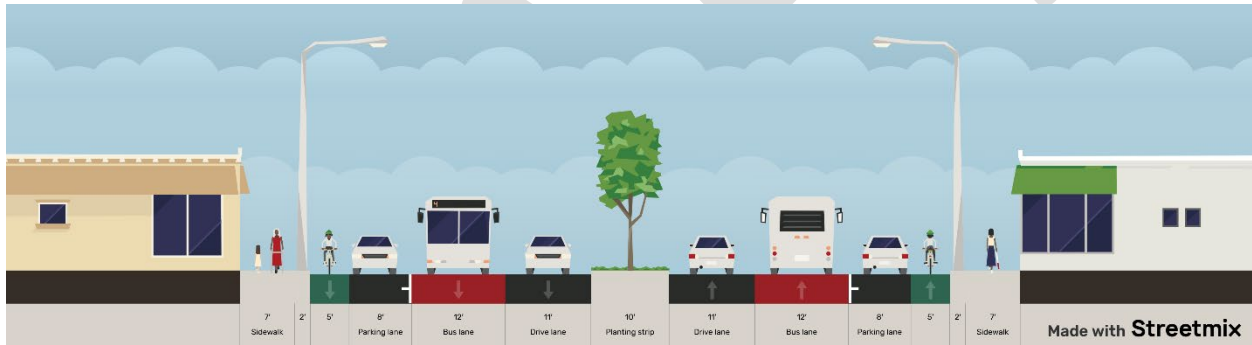
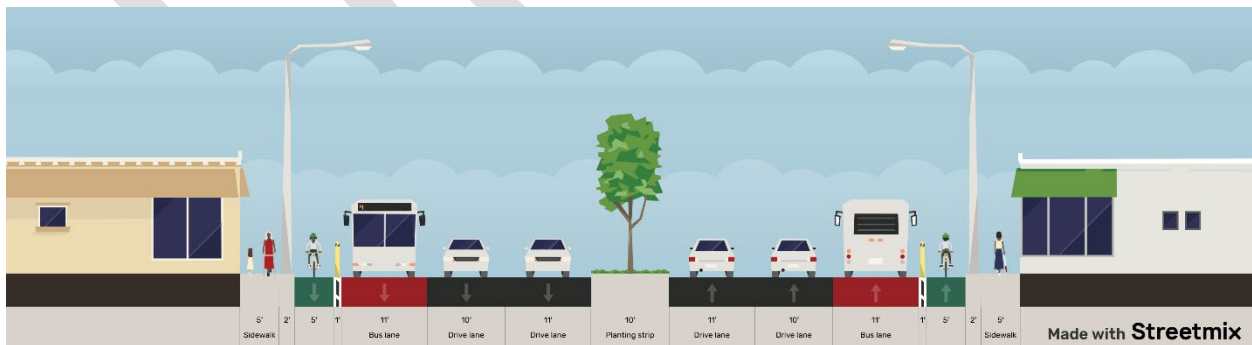


Figure 5-10. Curb-Running Bus Lane with Class II Bike Lane



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Figure 5-11. BRT Alignment Configuration



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5.4.3 Cost Estimate Summary

The costs associated with both the early action improvements and the long-term buildout are summarized in **Table 5-8**. The total cost shown for TSP and bus stop amenities reflects implementation across the full corridor and includes capital, non-capital, and operations and maintenance expenses.

Table 5-8. Cost Estimate Summary

Element	Cost Estimate
TSP	\$2,535,000
Bus Stop Amenities	\$3,575,000
Dedicated Bus Lane	\$3 million to \$8 million per mile
25% Dedicated Bus Lane	\$19,500,000 to \$52,000,000
50% Dedicated Bus Lane	\$39,000,000 to \$104,000,000
100% Dedicated Bus Lane	\$78,000,000 to \$208,000,000

5.5 TOD Opportunities

Planning TOD alongside the BRT improvements can promote a sustainable approach to urban revitalization. The TOD site selection process addresses challenges of underutilized spaces while fostering vibrant, connected, and livable communities. The proposed TOD concepts will include strategic redevelopment plans for key locations, each uniquely positioned to benefit from enhanced connectivity, residential density, and mixed-use functionality. These developments are designed not only to improve current land use and address safety concerns but also to align with broader municipal visions and regional growth strategies. By capitalizing on existing infrastructure and emphasizing multimodal transportation, these TOD projects promise to reinvigorate the local economy, provide essential housing, and create engaging community spaces. Opportunities at two potential TOD sites are described below, and additional information on the potential of each site is provided in **Appendix B**.

Long Beach Circle

The Long Beach Circle, located at the terminus of the RoseWood Corridor at the intersection of 7th Street and Manila Avenue, presents an availability of an underutilized parking lot, makes it a suitable location for future TOD development. The developable area that has been identified totals to about 2.75 acres, zoned within the SP-2 – Southeast Area/ PD-1 Southeast Area Development and Improvement Plan (SEADIP), with a current land use of Commercial. The proposed new development would yield approximately 100 to 150 housing units, and approximately 195 parking spaces. The assumptions used for this site were based on the combination of development standards from R-4-N and CCN of the City of Long Beach’s Municipal Code, as the existing guidelines defer to the development standards closest to the overall intent of the Planned

Development area. Given that the area does not include mixed development standards, a combination of R-4-N and CCN reflects closely the TOD development envisioned for this site.

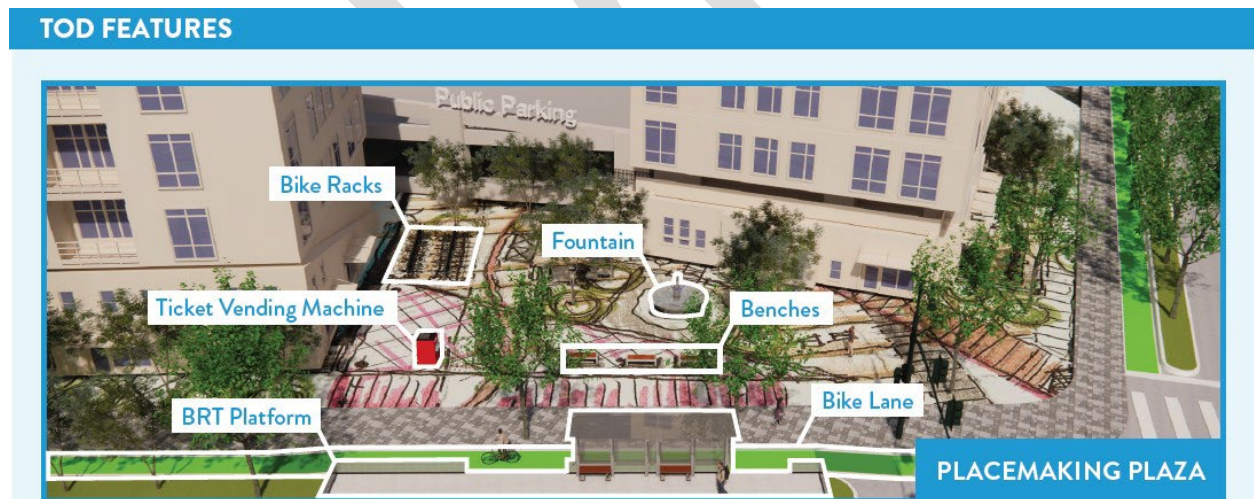
The analysis for this area also considers the California State University Long Beach Master Plan¹ to identify the future growth and plan for the area. The Master Plan has set forth a goal to increase the number of beds on campus to approximately 3,626 student beds within the 15-year time horizon, and a total new parking of 65 spaces given the underutilized spaces from existing facilities.

Historic Whittier Boulevard

The Historic Whittier Boulevard (HWB) area presents as an appropriate location for a potential TOD development site due to the large, underutilized surface lots facing Whittier Boulevard within its commercial corridor at the Whittier/Rosemead intersection. Zone 4 of the HWB Vision Plan calls for Town Mixed-Use with 19.3 acres of developable area proposed for new development. The TOD will feature various placemaking elements such as benches, bike lanes, and bus platforms, as shown in **Figure 5-13**. The approximate unit yield would total 450 to 500 housing units, and approximately 800 to 900 parking spaces (see **Figure 5-14**). The area is also located within the regional dedicated transit lanes and Southern California Association of Governments (SCAG) bike routes, therefore further providing riders with connectivity and access to multimodal transportation options.

In alignment with the HWB Vision Plan², the TOD development will follow the infill land use recommendation planned for the next 30 years outlined in the plan. The HWB Vision Plan, as demonstrated in **Figure 5-15**, would include additional new open spaces, redesigning circulation for pedestrian-oriented streets, complete streets reconfiguration, preservation of existing retail and additional ground floor retail, strategic district parking, pedestrian paseo network, and multi-purpose public plazas.

Figure 5-12. TOD Features



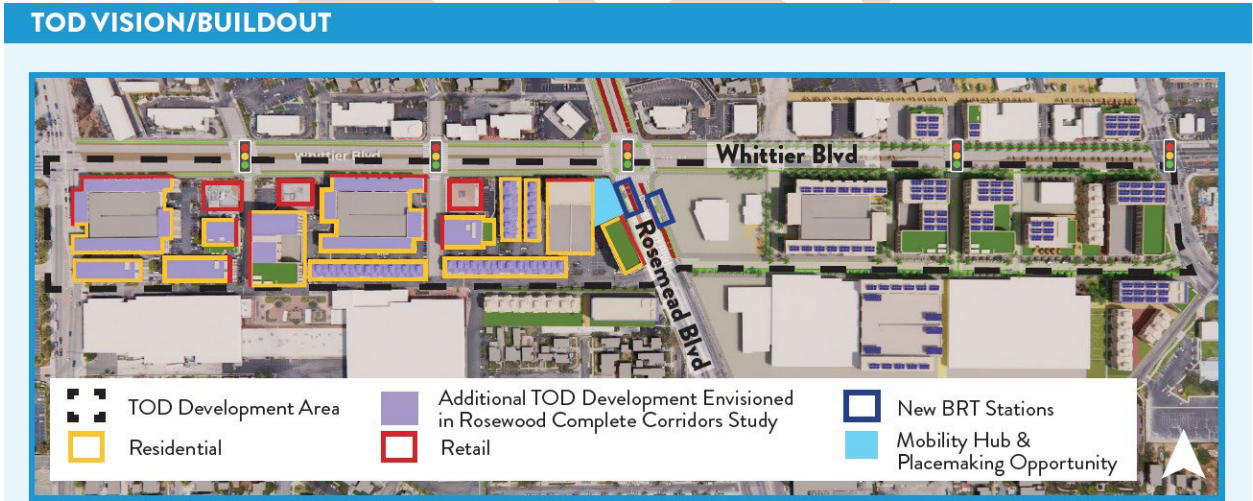
¹ [Master Plan Update 2035.pdf](#)

² [HWB Vision 20Plan ExecSummary Final 20December 202024 20\(1\).pdf - Adobe cloud storage](#)

Figure 5-13. Infill Development Strategy



Figure 5-14. Historic Whittier Boulevard TOD Buildout



6 IMPLEMENTATION PLAN

6.1 Phasing and Implementation Strategy

The proposed infrastructure improvements can be implemented in phases, with short-term improvements in customer experience leading eventually to higher-level infrastructure and service investment. Potential early action items include upgraded bus stops in areas with high ridership and transit signal priority. Bus lane additions could be implemented in locations with the highest need first, allowing time for funding to be obtained as the project progresses into its final form. This allows for performance to be studied over time to measure activity for corridor residents and users, which can strengthen a funding application. An example of this is the Metro G Line BRT, completed in 2005.³ The original 14-mile segment opened in 2005, with an extension to Chatsworth completed in 2012, allowing Metro to expand service incrementally as funding became available. Ongoing performance monitoring showed significant benefits, including a 22 percent reduction in end-to-end travel time and highly reliable operations, which justified later reinvestment and upgrades.⁴

Stakeholders involved with this project each play a role in its implementation. From components such as providing transit service, maintenance of right-of-way's (ROW), and community engagement and input, each part stakeholders play during implementation helps get the project one step closer to completion. With this project traversing through multiple jurisdictions while being in the same county, Metro could act as the sole transit service provider as it currently does for its two other countywide BRT lines, the G and J Lines. Metro would be responsible for all infrastructure, operations, maintenance, and outreach.

Another option would be to advance the corridor collaboratively between the cities and the transit operators, Metro and /or Long Beach Transit. In this case, corridor cities would each be responsible for ROW maintenance, utility coordination, and signal prioritization as each city owns and manages their own roadways. The cities could progress with context sensitive infrastructure improvements as funding and local political will allow. Service planning would remain the responsibility of the transit providers. If a single operator were to provide a continuous service along the corridor to improve connectivity, it is likely that Metro would be that operator. As regional governments representing the cities along the corridor, SCAG and GCCOG, could allocate potential regional funding appropriately to adhere to each city's needs and the goals of each of its regional plans and organizational initiatives.

Outreach and engagement efforts for a transit project allow residents to provide input and feedback on the project during the early phases of the project's inception. If Metro becomes the service provider, Metro would be in charge of coordinating outreach within the project corridor city jurisdictions. If the provider is Long Beach Transit with support from the project corridor cities, then these cities would individually be in charge of coordinating outreach efforts with local community-based organizations (CBOs) and businesses.

³ [Metro Orange Line B R T Project Evaluation, F T A 0004 Research Report Summary](#)

⁴ [LA Metro Orange Line Improvements, 2018](#)

6.2 Funding Strategy

For a project of this magnitude, leveraging various funding mechanisms at the federal, state, and local levels will help ensure comprehensive financial support to implement the corridor-wide vision, as shown in **Table 6-1**. The project should focus on securing federal funding first as the amount of the grant funding awards are usually larger and could provide a significant amount of funding needed to complete the project. At the federal level, the project would qualify for the Better Utilizing Investments to Leverage Development (BUILD) grants, which provided \$1.5 billion in FY 2026, to cover the costs related to construction, planning, and design phases. BUILD has a maximum award of \$25 million per entity, which can limit the size of projects that can be funded. Additionally, pursuit of the Federal Transit Administration (FTA) Capital Investment Grants (CIG) for either Small Starts or New Starts programs (pending project cost), could provide annual funding continuity with \$3 billion allocated per year and \$1.6 billion in advance appropriations. New Starts project must have a project cost of \$400 million or more, and Small Starts projects must be less than \$400 million. The final cost of this project will determine which grant program the project will be eligible for. It should be noted that CIG eligibility depends on the implementation approach, as the project would need to have substantial corridor investment, not incremental improvements in order to be eligible.

Grants for Buses and Bus Facilities, offering \$397 million in FY 2025, could support the acquisition of BRT buses and necessary infrastructure. The Congestion Mitigation and Air Quality (CMAQ) program, with \$2.74 billion available in FY 2026, could help reduce congestion and improve air quality by funding bus lane improvements and transit strategies. This project would qualify for this grant as a BRT route involves designating or upgrading streets to bus-only or shared bus and vehicle lanes.

At the state level, the Transit and Intercity Rail Capital Program (TIRCP), offered \$1.33 billion in FY 2024 to achieve positive environmental impact and ridership increase. This program has been widely used in the state for BRT projects including the enhancement of the San Bernardino sbX Green Line BRT and the Metro G Line BRT Improvements for transit signal priority and bus-only lane enhancements. The Solutions for Congested Corridors Program (SCCP), with \$250 million annually, funds the construction of bus-only lanes and enhancement of existing transit infrastructure. Projects must be included in a qualifying Comprehensive Multimodal Corridor Plan to be eligible for SCCP funding. The State Transportation Improvement Program (STIP), is providing \$32 billion for FY 2026-2027, and can support comprehensive capital improvements, including state highways and mass transit guideways; a category that this project falls in.

Local funds can be best used for matching requirements after federal and state funding is obtained. In Southern California, leveraging Measure M funds can provide funding for priority signaling and dedicated bus lanes. Measure R's \$13 million over a 30-year period will improve bus stops and station amenities. Proposition A and Proposition C, each offering \$1.2 billion in FY 2024, can expand transit services and support capital improvements for the corridor-wide vision.

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Table 6-1. Federal, State, and Local BRT Funding Sources

Source	Description	Total Funding Available	BRT Applicability	Website
Federal Funding				
Better Utilizing Investments to Leverage Development (BUILD)	The U.S. Department of Transportation's (USDOT) BUILD grant program provides grants for surface transportation infrastructure projects with significant local or regional impact. The eligibility requirements of BUILD allow project sponsors, including state and local governments, counties, Tribal governments, transit agencies, and port authorities, to pursue multi-modal and multi-jurisdictional projects that are more difficult to fund through other grant programs.	\$1.5 Billion (FY 2026)	BRT Applicability for this funding source include: > Capital Projects: Public transportation projects eligible under chapter 53 of title 49, United States Code > Planning Projects: Planning, preparation, design, or engineering of eligible surface transportation capital projects	Better Utilizing Investments to Leverage Development (BUILD) Grant Program US Department of Transportation
Federal Transit Authority Urbanized Area Formula Funding Program	The Urbanized Area Formula Funding program makes federal resources available to governors and other recipients for transit capital and operating assistance and transportation-related planning in urbanized areas. An urbanized area is an area that has been defined and designated by the U.S. Department of Commerce, Bureau of the Census as an 'Urban Area' with a population of 50,000 or more.	\$7.2 Billion (FY 2024)	BRT Applicability for this funding source include: > Capital Projects: Capital investments in bus and bus-related activities > Planning Projects: Planning, engineering, design and evaluation of transit projects and other technical transportation-related studies	Urbanized Area Formula Grants - 5307 FTA

<p>Carbon Reduction Program</p>	<p>The Infrastructure Investment and Jobs Act (IIJA) establishes the Carbon Reduction Program (CRP), which provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from on-road highway sources</p>	<p>\$1.3 Billion (FY 2026)</p>	<p>BRT Applicability for this funding source include: > Capital Projects: A public transportation project eligible under 23 U.S.C. 142 that supports the reduction of transportation emissions</p>	<p>Infrastructure Investment and Jobs Act - Carbon Reduction Program (CRP) Fact Sheet Federal Highway Administration</p>
<p>Grants for Buses and Bus Facilities</p>	<p>The Grants for Buses and Bus Facilities Competitive Program (49 U.S.C. 5339(b)) makes federal resources available to states and direct recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. Funding is provided through formula allocations and competitive grants.</p>	<p>\$397 Million (FY 2025)</p>	<p>BRT Applicability for this funding source include: > Capital Project: Capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. Additionally, 0.5% of a request may be for workforce development training, and an additional 0.5% may be for training at the National Transit Institutes.</p>	<p>Grants for Buses and Facilities</p>
<p>Low or No Emission Program (LoNo)</p>	<p>The Low or No Emission competitive program provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities.</p>	<p>\$1.6 Billion (FY 2025)</p>	<p>BRT Applicability for this funding source include: > purchasing or leasing low- or no-emission buses > acquiring low- or no-emission buses with a leased power source</p>	<p>Low or No Emission Grant Program FTA</p>

			<ul style="list-style-type: none"> > constructing or leasing facilities and related equipment for low- or no-emission buses > constructing new public transportation facilities to accommodate low- or no-emission buses > rehabilitating or improving existing public transportation facilities to accommodate low- or no-emission buses > Additionally 0.5% of a request may be for workforce development training and an additional 0.5% may be for training at the National Transit Institute (NTI) 	
<p>Capital Investment Grants (CIG)</p>	<p>The Capital Investments Grants provide funding through a multi-year competitive process for transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. Federal transit law requires transit agencies seeking CIG funding to complete a series of steps over several years to be eligible for funding.</p>	<p>\$3 billion per year in annual appropriations and \$1.6 billion per year in advance appropriations</p>	<p>BRT Applicability for this funding source include:</p> <ul style="list-style-type: none"> > New Starts Projects must be new fixed guideway projects or extensions to existing fixed guideway systems (including fixed-guideway BRT) that have a total estimated capital cost of \$400 million or more or that are seeking \$150 million or more in CIG program funds. > Small Starts projects must be new fixed guideway projects, extensions to existing 	<p>Capital Investment Grants Program FTA</p>

			<p>fixed guideway systems, or corridor-based bus rapid transit</p> <p>projects that have a total estimated capital cost of less than \$400 million and must be seeking less than \$150 million in CIG program funds.</p>	
<p>Surface Transportation Block Grant (STBG)</p>	<p>The STBG program provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.</p>	<p>\$14.97 Billion (FY 2026)</p>	<p>BRT Applicability for this funding source include:</p> <p>> Capital Projects: capital projects for the construction of a bus rapid transit corridor or dedicated bus lane</p>	<p>Infrastructure Investment and Jobs Act - Surface Transportation Block Grant (STBG) Fact Sheet Federal Highway Administration</p>
<p>Congestion Mitigation and Air Quality (CMAQ)</p>	<p>The IJA continues CMAQ to provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).</p>	<p>\$2.74 Billion (FY 2026)</p>	<p>BRT Applicability for this funding source include:</p> <p>> Transit Facilities are eligible if they are associated with new or enhanced public transit, passenger rail, or other similar services.</p> <p>> Bus service and fleet expansions that increase ridership by providing new or expanding bus services are eligible.</p> <p>> High-Occupancy Vehicle and Managed lanes including bus lanes are eligible.</p>	<p>Infrastructure Investment and Jobs Act - Congestion Mitigation and Air Quality (CMAQ) Improvement Program Fact Sheet Federal Highway Administration</p>

State Funding

<p>Transit and Intercity Rail Capital Program (TIRCP)</p>	<p>The Transit and Intercity Rail Capital Program (TIRCP) provides grants from the Greenhouse Gas Reduction Fund (GGRF) to fund transformative capital improvements that will modernize California’s intercity, commuter, and urban rail systems, and bus and ferry transit systems, to significantly reduce emissions of greenhouse gases, vehicle miles traveled, and congestion</p>	<p>\$1.33 billion (Cycle 7 - FY 2024)</p>	<p>BRT Applicability for this funding source include: > Bus rapid transit that will increase ridership and reduce greenhouse gas emissions</p>	<p>Transit and Intercity Rail Capital Program CalSTA</p>
<p>Local Partnership Program (LPP)</p>	<p>The Road Repair and Accountability Act of 2017 (Senate Bill 1) created the Local Partnership Program and continuously appropriates \$200 million annually from the Road Maintenance and Rehabilitation Account to local and regional transportation agencies that have sought and received voter approval of taxes or that have imposed fees, which taxes or fees are dedicated solely for transportation improvements.</p>	<p>\$200 Million Annually</p>	<p>BRT Applicability for this funding source include: > Improvements to transit facilities, including guideways, that expand transit services, increase transit ridership, improve transit safety, enhance access or convenience of the traveling public, or otherwise provide or facilitate a viable alternative to driving. > Acquisition of zero-emission buses > Other transportation improvement projects</p>	<p>Local Partnership Program CTC</p>
<p>Solutions for Congested Corridors Program (SCCP)</p>	<p>The Solutions for Congested Corridors Program is a statewide, competitive program that funds projects to reduce congestion in heavily traveled corridors. Projects must deliver measurable performance improvements that balance mobility, community, and environmental impacts. All projects nominated for the Solutions for Congested Corridors</p>	<p>\$250 Million Annually</p>	<p>BRT Applicability for this funding source include: > Capital Projects: New or existing transit infrastructure improvements for new or improved service including adding roadway capacity for new or improved transit</p>	<p>Solutions for Congested Corridors Program (SCCP) CTC</p>

	Program must be included in a comprehensive multimodal corridor plan (CMCP).		service, such as bus-only lanes or dedicated bus-on-shoulder facilities	
State Transportation Improvement Program (STIP)	The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. The purpose of this program is to provide state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements. The STIP consists of two broad sub-programs: the Regional Improvement Program (RIP) and the Interregional Improvement Program (IIP).	\$32 Billion (FY 2026-2027)	BRT Applicability for this funding source include: > The projects may include State highway, intercity passenger rail, mass transit guideway, or grade separation projects.	State Transportation Improvement Program (STIP) Caltrans
Local Funding				
LA County Measure M	Passed in 2016 by LA County, this no sunset half-cent sales tax funds projects to ease vehicular congestion, repair local streets and sidewalks, expand public transportation, seismically retrofit bridges, and subsidize transit fares for students, older adults, and persons with mobility limitations.	\$1 Billion (FY 2022)	BRT Applicability for this funding source include: > Bus rapid transit Capital Improvements	Measure M Guidelines
LA County Measure R	Approved by LA County in 2008, Measure R is a half-cent sales tax that finances new transportation projects and programs and accelerates funding for projects in the pipeline. 15% is allocated to local jurisdictions through a Local Return, which may fund bus stop improvements.	\$13 Million (Over 30-year period from 2010-2039)	BRT Applicability for this funding source include: > Exclusive Bus Lanes > Traffic signal priority for buses > Preferential turning lanes for buses > Bus Stops > Bus/Station Amenities	Measure R Guidelines

<p>Proposition A</p>	<p>Proposition A is a half-cent sales tax: 25% is designated to a Local Return program, 35% is designated to rail development and 40% is designated for discretionary funding.</p>	<p>\$1.2 Billion (FY 2024)</p>	<p>BRT Applicability for this funding source include: > New or expanded transit services > Transportation system management for reserved bus lanes > Bus-only transit malls or station</p>	<p>Proposition A and C Guidelines</p>
<p>Proposition C</p>	<p>Proposition C is a half-cent sales tax: 20% is designated for a Local Return; 5% is designated for rail and bus security; 10% is designated for commuter rail, transit centers, and park-and-ride facilities; 25% is designated for transit-related highway improvements; and 40% is designated as discretionary funding.</p>	<p>\$1.2 Billion (FY 2024)</p>	<p>BRT Applicability for this funding source include: > Bus rapid transit Capital Improvements</p>	<p>Proposition A and C Guidelines</p>

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7 NEXT STEPS

The Plan identifies a long-term vision for the corridor and multiple potential pathways to achieve it. While the corridor stakeholders continue to collaborate on long-term planning for potential BRT implementation, corridor cities can achieve immediate benefits through early action improvements such as TSP and enhancing bus stop amenities. These improvements will enhance the rider experience and can help build the corridor identity for future funding pursuits. For the long-term, corridor stakeholders could continue to collaboratively advance incremental infrastructure and service improvements in phased approach or develop a substantial corridor-level investment plan to seek funding for a more substantial corridor-wide investment through the FTA CIG program.

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