

I-105 ExpressLanes Equity Assessment Final Report



Metro®

Acknowledgments

Community-Based Organizations (CBOs)

Ascension Catholic Church
Charles R. Drew University of Medicine and Science
Asian Business Association
East Side Riders Bike Club
Inglewood Airport Area Chamber of Commerce
LAX Coastal Chamber of Commerce
LA South Chamber
Los Angeles Walks
Loyola Marymount University
New Mount Pleasant Missionary Baptist Church
Sisters of Watts
South Bay Bicycle Coalition
Street Racing Kills
Streets Are for Everyone
Verbum Dei Jesuit High School
Willowbrook Inclusion Network (WIN)

Metro Departments

Countywide Planning (First/Last Mile, Mobility Corridors)
Customer Experience
Office of Strategic Innovation
Operations (Stations Experience, Service Planning, Shared Mobility)
Program Management

Consultant Team

Jacobs
Arellano Associates
MA Engineering



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Glossary

Active Transportation	Human powered transportation and low speed electronic assist devices: Examples include but are not limited to pedestrians, bicycles, tricycles, wheelchairs, electric wheelchairs, scooters, skates, and skateboards.
Americans with Disabilities Act (ADA)	The Americans with Disabilities Act (ADA) of 1990 guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications. It prescribes federal transportation requirements for transportation providers.
Amenities	Roadway features that help to provide comfort, convenience, and safety.
Arterial Roadway	A high-capacity road that carries longer-distance flows between important centers of activity.
At-grade crossing	A crossing or intersection of highways, railroad tracks, other guideways, or pedestrian walks, or combinations of these at the same level or grade.
Bicycle Routes/ Facilities	A portion of a right-of-way for the exclusive use of bicyclists which has been designated by pavement markings, curb, cross-hatched paint, planting strip or parked cars. Bike facilities come in many forms and are categorized into classes, typically from Class I to Class IV, with the latter including a buffer/barrier and is considered as the most protective for cyclists/ pedestrians.
Bike Facilities/Paths – Class I (1)	Paved rights-of-way completely separated from streets. Bike paths are often located along waterfronts, creeks, railroad rights-of-way or freeways with a limited number of cross streets and driveways. These paths are typically shared with pedestrians and often called mixed-use paths.
Bike Facilities/Paths – Class II (2)	On-street facilities designated for bicyclists using stripes and stencils. Bike lanes are the preferred treatment for all arterial and collector streets on the bikeway network, and not typically installed on lowvolume, low-speed residential streets.
Bike Facilities/Paths – Class III (3)	Streets designated for bicycle travel and shared with motor vehicles. Streets are designated as bike routes because they are suitable for sharing with motor vehicles and/or provide better (or needed) connectivity than other streets. Routes are marked with signs and/or shared lane bicycle (aka “sharrow”) pavement markings intended to encourage bicyclists to ride clear of the “door zone” and to alert motorists to expect bicyclists to occupy the full lane.
Bike Facilities/Paths – Class IV (4)	Separated bikeway for the exclusive use of bicycles, physically separated from the roadway by a buffer or vertical feature.
Bike Share	A service that provides bicycles for a daily, monthly, annual, or trip-based fee. Bike share is recognized as an option for first and last mile transit connections. Learn about Metro’s Bike Share program at https://bikeshare.metro.net/
Bus Priority Lane Corridor	Typically involves the conversion of the rightmost traffic lane into a travel lane primarily dedicated to buses (allows for right turns and bike lane uses) during specific times and days of the week. These are typically installed to increase service frequency and reliability, as well as enhancing mobility by moving more people without adding more infrastructure.
Bus Rapid Transit (BRT)	Bus Rapid Transit is a mobility or bus option with many of the same benefits as light rail service, but at significantly less cost and with a faster build time. BRT offers reliable, frequent transit service in LA County with bus speed improvements over local bus service, operational enhancements and minimal infrastructure needs. Local examples of BRT service include the G Line (Orange), serving the San Fernando Valley, and the J Line (Silver), which serves El Monte, downtown Los Angeles and San Pedro.
Community Based Organizations (CBOs)	Public or private nonprofit organization that are representative of a community and provide educational or related services to individuals in the community.

Complete Streets	Streets that are designed and operated to enable safe access for all roadway users of all ages and abilities, including pedestrians, bicyclists, motorists and transit riders. Complete Streets strategies can include traffic calming, bicycle priority streets (bicycle boulevards) and pedestrian connectivity to increase physical activity, improve connectivity to the regional bikeway/ greenway networks, local businesses and parks.
Equity	1) Both an outcome and a process to address disparities to ensure fair and just access to opportunities. 2) An end state in which all groups have access to the resources, benefits, and opportunities necessary to improve the quality of their lives, which can include a more just decision-making process.
Equity-Focus Community (EFC)	Metro created a community designation called Equity Focus Communities (EFCs) to help identify where transportation needs are greatest. EFCs consider where there are higher concentrations of resident and household demographics associated with mobility barriers including low-income households, BIPOC/non-white households, and households without a vehicle. EFCs reflect percentile ranges of combined metrics and refer to tracts above the 60th (high need) and 80th (very high need) percentiles.
Evaluation Criteria	A benchmark, standard, or factor against which performance and suitability of an activity, product, or plan is measured.
First/Last Mile	The first and last part of the journey that riders walk, bike or roll to and from their nearest station or bus stop is called the “first/last mile connection.”
Grade Separation	A crossing of two highways, highway and local road, or a highway and a railroad at different levels. For example, a multimodal bridge over or under the railroad tracks.
Intelligent Transportation Systems (ITS)	Improves transportation by integrating advanced information and communications-based technologies (ICT) into transportation infrastructure and vehicles. ITS refers to a system of technologies and operational advancements that, when combined and managed, improve the capabilities of the overall transportation system.
Light Rail Transit (LRT)	Light Rail Transit (LRT) Is a public transit system with vehicles that are electrically self-propelled by overhead catenary wires and usually operate in one or two-car trains (at peak times, Metro trains can have up to three cars). LRT train cars have passenger capacity of 135 per car and can carry up to 405 passengers per train, operating every five to six minutes. An LRT system has an average speed of 24-35 mph the top speed of 55-65 miles per hour (MPH) and operates above, below or at street level with a typical station spacing being one mile. Metro currently operates LRT on the Metro A Line (Blue), C Line (Green), L Line (Gold), E Line (Expo), and the recently opened K Line (Crenshaw/LAX).
Multimodal options	1) A mixture of several modes of transportation, such as public transportation (i.e., bus, light rail, commuter rail, etc.), autos, trucks, freight rail, and non-motorized systems of transportation. 2) Includes walking, taking public transportation, driving, rolling (riding a bike, scooter, wheelchair, skates).
Soundwalls	A wall installed parallel to highways with the intent of minimizing the traffic noise for nearby residential areas.
Zero Emission Infrastructure	Fueling or electric charging stations for vehicles that produce no emissions
Zero-Emission Vehicle (ZEV)	Trucks or vehicles that produce no tailpipe emissions of criteria pollutants. Generally, ZEVs feature electric powertrains. Technically, ZEVs are still responsible for some greenhouse gas emissions, as the GHG content from the electricity generation must be accounted for. ZEVs include battery electric vehicles (BEV), plug-in electric hybrids (PHEV) when powered by an electric engine, and hydrogen fuel cell vehicles (FCV).

Executive Summary

Introduction

Metro is planning to ease traffic on Interstate (I)-105 by adding two ExpressLanes in each direction. The goal of the I-105 ExpressLanes Project is to improve traffic flow, trip reliability, and travel times on I-105. The project will be implemented in three segments. Once Segment 1 is operational, the I-105 ExpressLanes will generate toll revenue, which will include net revenue. Metro reinvests a portion of the net toll revenue in projects in communities within a 3-mile radius of the ExpressLanes with benefit to the ExpressLanes. To plan how to equitably invest the future net toll revenue, Metro is embarking on a unique and first-of-its kind Equity Assessment to identify transportation projects that will further enhance mobility, accessibility, connectivity, and equity for nearby communities as well as all users of the I-105 corridor.

This I-105 ExpressLanes Segment 1 Equity Assessment (Assessment) identifies and prioritizes equity and mobility improvements in the Segment 1 area (the Assessment Area), shown on Figure 1. As part of the process to identify potential mobility improvement projects, Metro facilitated a community participation process for obtaining feedback, incorporated stakeholder and CBO input, and evaluated equity, demographics, transportation data, existing conditions, and previous studies/plans.



Equity

To improve access and opportunity for all, infrastructure, programs, and service investments must be targeted toward those with the greatest mobility needs. This I-105 ExpressLanes Segment 1 Equity Assessment provides valuable information that can guide the use of net toll revenue from the future ExpressLanes as a catalyst to positively affect the I-105 corridor communities with particular focus on EFCs.

Metro has been at the forefront of leading equitable transportation planning with the development of and/or Board adoption of the following:

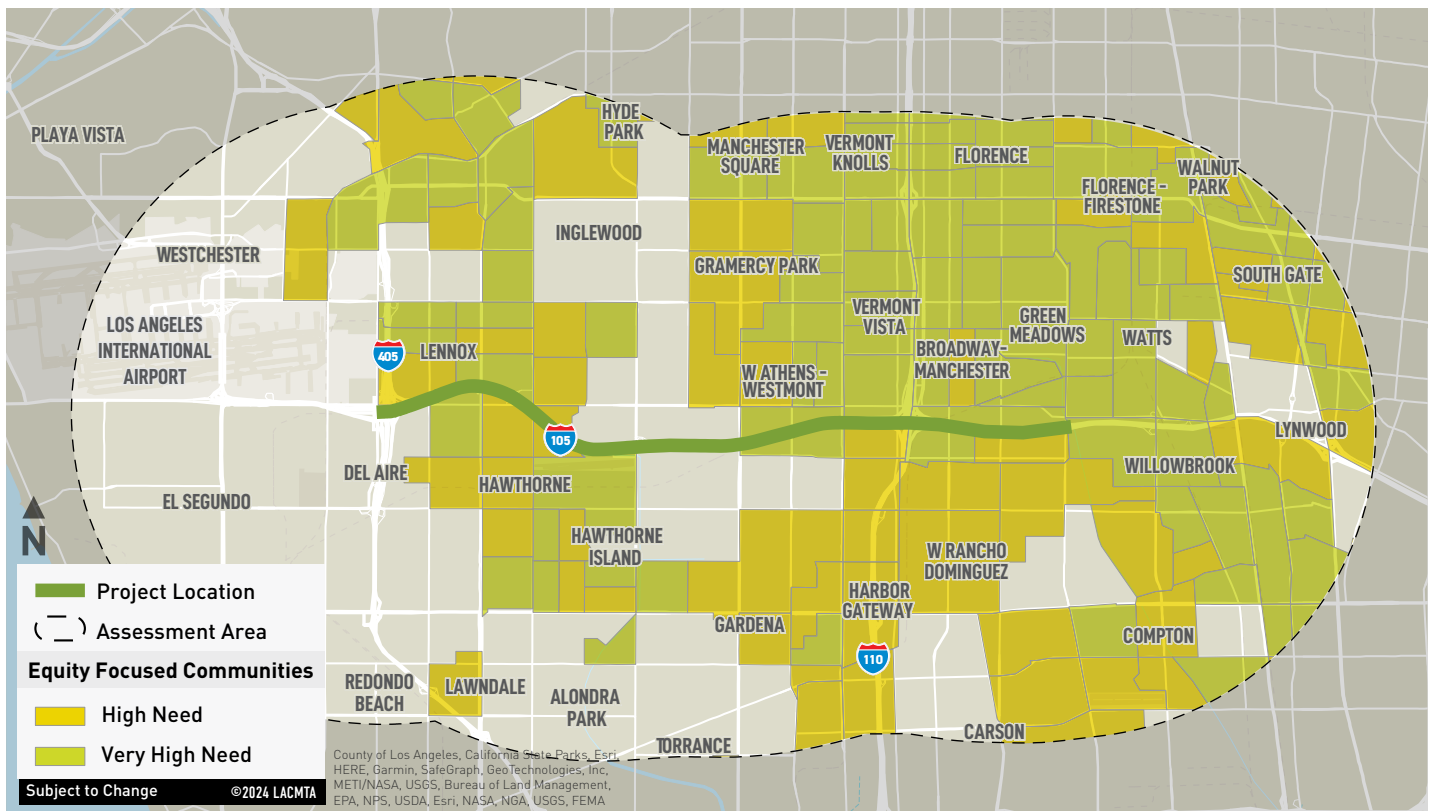
- > **Equity Platform Framework:** Policy framework for how Metro can use its influence as a transportation authority to evaluate and address disparities in mobility access while providing people opportunities for upward social and economic mobility.

- > **Equity Focus Communities (EFCs):** An analysis that maps where transportation needs are greatest by assessing low-income households, populations of people of color, and households with no access to a car. Figure 2 shows the EFCs within the Assessment Area.

Several of Metro’s equity tools have been incorporated into the equity assessment though the goals and evaluation criteria for projects that could be funded with future net toll revenue. These projects are a part of Metro’s efforts to achieve a multidimensional, multimodal strategy for improving mobility and equity while fostering social equity, economic vitality, environmental sustainability, improved public health, and access to opportunities.

Figure ES-2

Equity Focused Communities



Existing Conditions

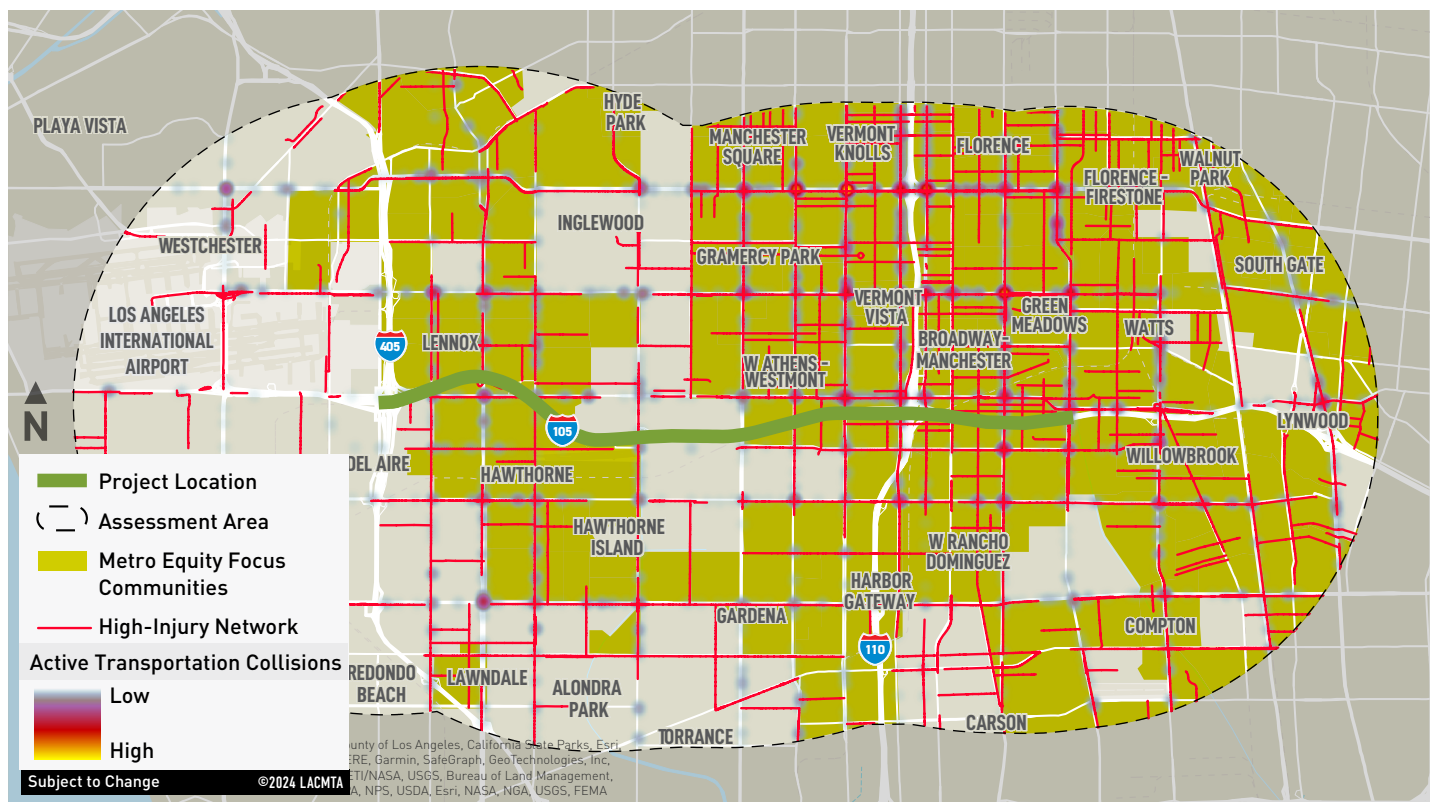
To gain an understanding of the Assessment Area and population, an existing conditions assessment was conducted that focused on demographics, socioeconomic, as well as environmental and transportation data. The existing conditions assessment focused on identifying transportation patterns and disparities in EFCs within the Assessment Area.

The findings reveal communities that are primarily economically disadvantaged, composed of people of color, and with unemployment rates higher than the county average. Households within the area have high living costs,

with about half being housing burdened, spending 30% or more of their household income on housing. With almost 10% of the population lacking a household vehicle, safe first/last mile connections are crucial, especially considering the disproportionate concentration of high-injury network corridors in the area. High-injury network corridors consist of roadway segments that account for a disproportionate share of fatal and serious injuries in the region (shown on Figure 3). The findings were critical to the development of the vision statement, project list, evaluation criteria, and recommendations.

Figure ES-3

High Injury Network and Collisions Heat Map



Source: Southern California Association of Governments and University of California, Berkeley

Community Engagement

Community-driven conversations are essential, but engagement efforts must ensure that community members are left feeling heard and respected. A successful outcome for this Study required a commitment to authentic listening and learning, and meaningful community outreach and engagement. Involving the public in decision-making processes ensures more informed and inclusive outcomes. Throughout the processes, the public has been integral, receiving project information and providing feedback through various avenues such as attending public meetings, providing comments, contributing to surveys, and engaging in community meetings and events and via partnerships with various local community-based, faith-based, and community development-based organizations.

Metro engaged 16 community-based organizations (CBOs) that represent the communities in the project area to be part of a monthly CBO roundtable meeting. These CBO roundtable meetings allowed the CBOs to provide input on the Assessment's goals, evaluation criteria, and projects. The CBOs also shared project information with community stakeholders through their resources. The CBO roundtable

partners also participated in walk audits. Concurrently, Metro participated in multiple pop-up events that engaged nearly 500 people and conducted a travel survey that engaged over 900 people within the Assessment Area.

COMMUNITY ENGAGEMENT BY THE NUMBERS

16	CBO PARTNERS
10	CBO MEETINGS
2	WALK AUDITS
478	PEOPLE ENGAGED AT POP-UP EVENTS
922	RESPONSES TO THE TRAVEL SURVEY
2	COMMUNITY MEETINGS



Methodology for Identifying and Evaluating Projects

Using an equity lens and input from CBOs, Metro undertook a comprehensive and robust process to identify and evaluate these potential projects. This Equity Assessment consisted of a multistep technical process that identified the list of projects, established goals, project identification criteria, and scoring to recommend the most valuable and equitable projects for future net toll revenue funding.

Projects were identified by reviewing existing studies, field visits, and input from Metro departments and local jurisdictions. The projects were then scored using 5 goals and 14 evaluation criteria metrics, presented in Table 1.

For each of the evaluation criteria listed in Table 1, a project received a score between 1 and 5, with 5 being the best outcome or highest benefits. In cases where quantitative data was not available for a particular evaluation criteria, the scores are a qualitative assessment based on professional judgement of the project team.

In addition, each of the five goals were weighted based on Metro and CBO input. This process resulted in the following weights – Connect People and Places, 25%; Prioritize Equity, 21%; Create Community Value, 20%; Conserve Resources, 17%; and Cost-Effective, 17%.

The project list also incorporates feedback from the broader community. This was done through a survey that allowed the public to suggest changes in prioritization as well as suggest new projects not included in the list. In total, 140 survey responses were received. Projects were scored as high, medium, and low and grouped into three categories consistent with the existing I-10/I-110 ExpressLanes net toll grants – active transportation, transit, and roadway improvements.

Table ES-1. Goals and Evaluation Criteria

GOAL	EVALUATION CRITERIA
1. Connect People and Places	1.1 Improve and encourage transit, walking, and biking/rolling 1.2 Improve transportation access and connectivity 1.3 Reduce congestion by increasing people throughput 1.4 Make all modes of travel safer
2. Create Community Value	2.1 Provide access for economic opportunities 2.2 Align with community input, including local plans and policies 2.3 Enhance the quality of life (e.g., Crime Prevention Through Environmental Design principles, no displacement) 2.4 Adopt innovative technology, practice, or strategy
3. Conserve Resources	3.1 Foster local and regional environmental quality 3.2 Reduce GHG emissions 3.3 Leverage matching funds
4. Prioritize Equity Focus Communities	4.1 Minimize disruption during construction 4.2 Provide long-term benefits to EFCs
5. Cost-Effectiveness	5.1 Effectiveness in relationship to the total project cost and consideration of life-cycle costs

Prioritized Project List and Recommended Actions

The evaluation and prioritization process resulted in prioritized project lists recommended for potential consideration when the net toll revenue funding becomes available from the I-105 ExpressLanes. Of the 143 projects identified, approximately 50% of the projects are prioritized as high, 46% are medium, and 4% are low. The characteristics of high-scoring projects include Assessment Area-wide or corridor projects, projects within high EFC populations, projects near Metro rail/bus rapid transit stations to promote intermodality, and projects focused on sustainable mobility options. Figure 4 provides a breakdown of the numbers and percentages of each tier by mode. Since many of the projects on the list are in city or county right of way and net toll grants are awarded on a competitive basis, Metro can only grant funding if the local jurisdictions apply to Metro for funding. The detailed project list can be found in Appendix B.

The priority lists of potential active transportation, roadway, and transit projects serve as a living plan and represent current priorities. Priorities and projects may evolve once the

I-105 ExpressLanes are operational and generating Net Toll Revenue. Projects submitted for the future Net Toll Revenue grants will ultimately be up to local agencies.

In addition to the project list, it is recommended Metro undertake the following actions to support this Equity Assessment as the I-105 ExpressLanes project is implemented:

- > Incorporate lighting improvements at undercrossings that will be widened as part of segment 1;
- > Modify Metro’s existing I-10/I-110 Net Toll Revenue Guidelines’ evaluation criteria and process to prioritize equity above other criteria
- > Advance the project development of prioritized projects
- > Monitor and report on key equity metrics of projects funded through the Net Toll Revenue program
- > Continue to engage the community and CBOs along I-105

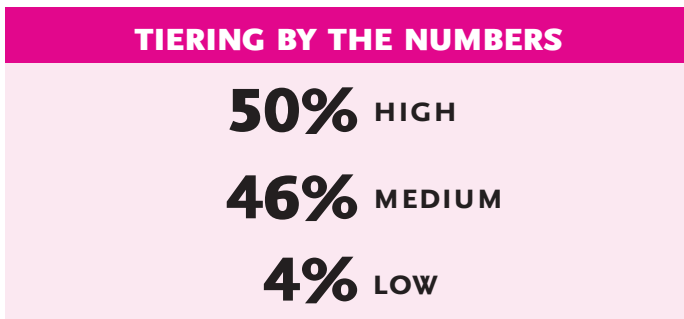
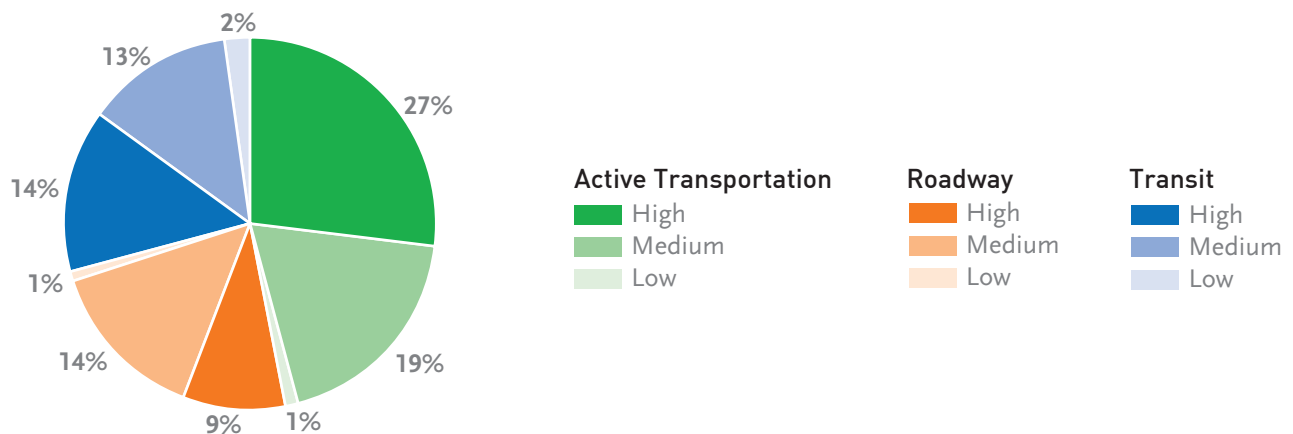
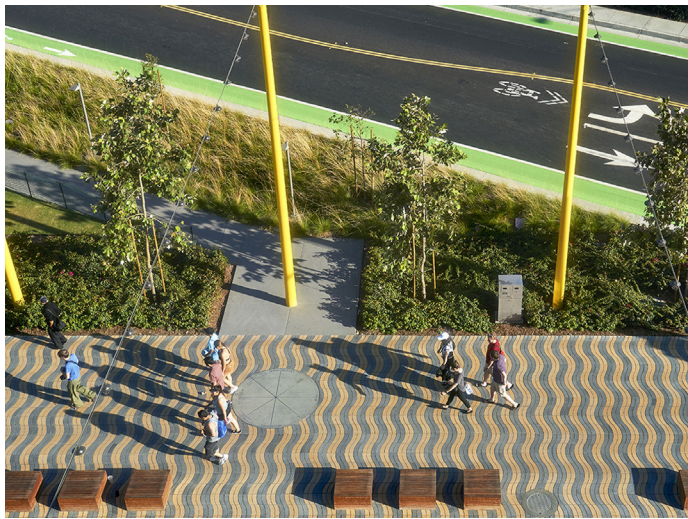


Figure ES-4

Breakdown of Projects by Mode and Tier





Introduction

Metro is planning to address traffic delays on Interstate (I)-105 by adding two ExpressLanes in each direction. The goal of the I-105 ExpressLanes Project is to improve traffic flow, trip reliability, and travel times on I-105. In parallel with the ExpressLanes project, Metro is embarking on a unique and first-of-its kind Equity Assessment to identify transportation projects that will further enhance mobility, accessibility, and connectivity for all users of the I-105 corridor. The net toll revenue generated from the ExpressLanes could be used to fund these transportation projects within 3-miles of Segment 1 of the I-105 ExpressLanes.



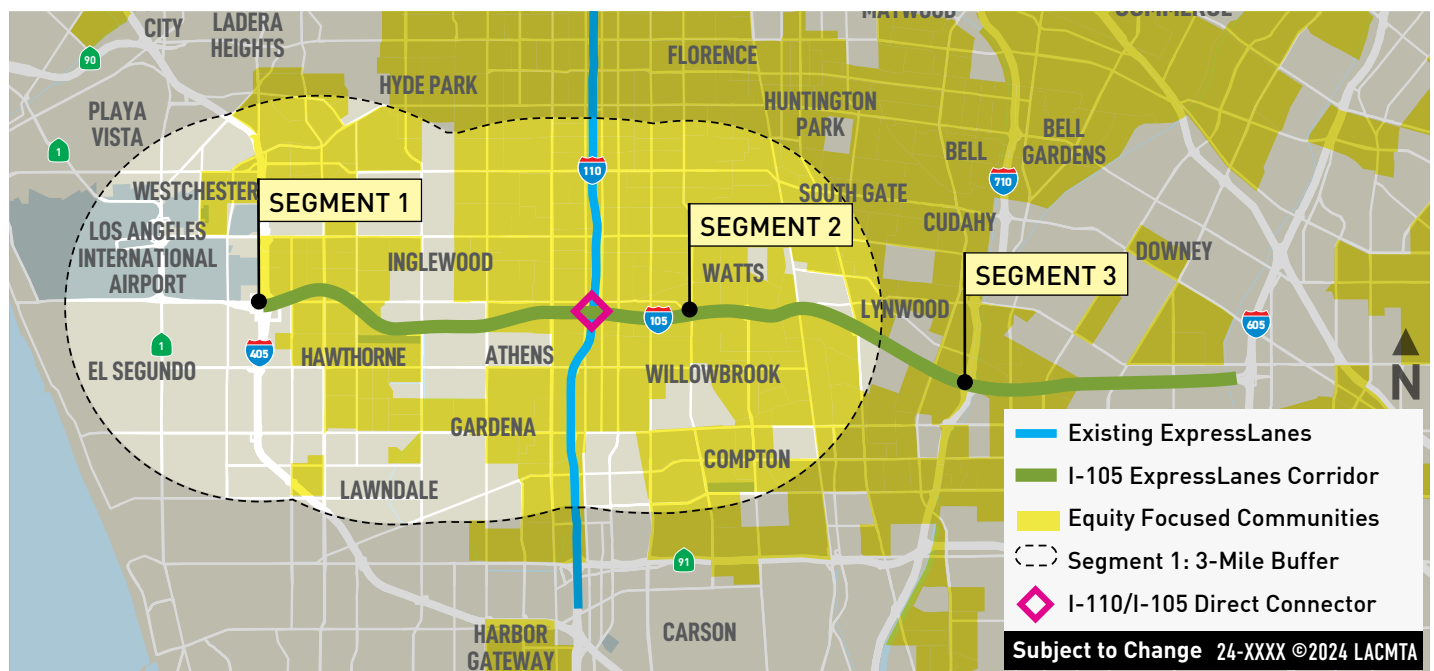
The I-105 ExpressLanes will be constructed in three segments. Construction on Segment 1 between I-405 and Central Avenue is expected to begin in 2025, while construction on Segments 2 and 3 between Central Avenue and Studebaker Road will begin in 2026. Once the I-105 ExpressLanes are completed, Metro will be able to collect toll revenue from solo-occupant drivers using the ExpressLanes. Net toll revenue generated from the ExpressLanes program will be reinvested in the corridor where they are generated, consistent with Metro's current Net Toll Revenue Grant Program for the I-110 and I-10 ExpressLanes corridors, which funds active transportation, transit, and roadway projects within a 3-mile radius of the ExpressLanes corridors.

This I-105 ExpressLanes Segment 1 Equity Assessment (Assessment) identifies and prioritizes equitable mobility improvements in the Segment 1 area (the Assessment Area), shown in Figure 1. As part of the process to identify future additional mobility projects, Metro facilitated a community participation process for feedback, incorporated stakeholder input, and evaluated equity, demographics, transportation data, existing conditions, and previous studies/plans.



Figure 1

I-105 ExpressLanes



I-105 ExpressLanes Project

The I-105 ExpressLanes Segment 1 project will convert the existing High-Occupancy Vehicle (HOV) lane in each direction into an ExpressLane and redesign the existing cross-section to accommodate a second ExpressLane between I-405 and Studebaker Road in the City of Norwalk. Figure 2 shows the current configuration of the I-105 freeway. Figure 3 shows the future configuration with the new ExpressLanes.

The I-105 ExpressLanes Project is being designed and constructed in three phases. Segment 1 is between I-405 and Central Avenue, Segment 2 is between Central Avenue and I-710, and the third segment is between I-710 and Studebaker Road. Segment 1 is expected to begin construction in 2025 and reach completion by 2028. Segments 2 and 3 are expected to begin construction in 2026 and be completed by 2029. The I-105 ExpressLanes Project is part of Metro's plans to expand the ExpressLanes network in Los Angeles County.



Figure 2

Existing Cross Section

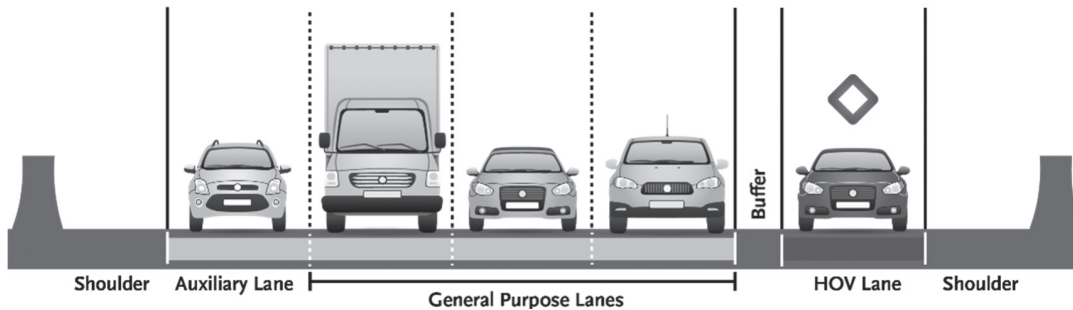
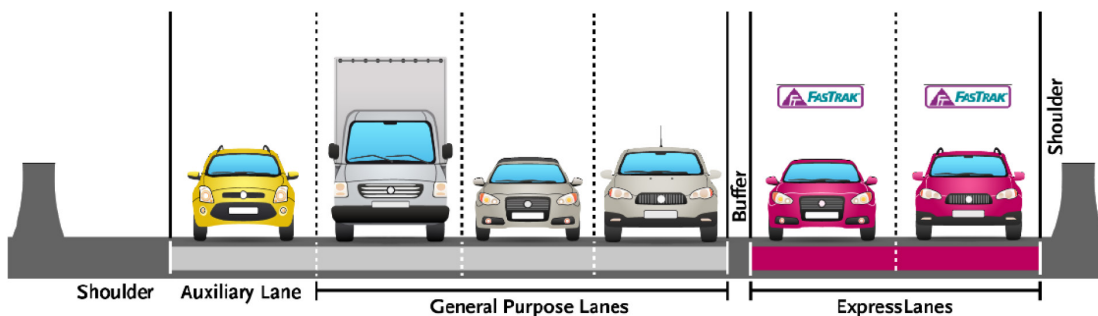


Figure 3

Proposed Cross Section



Background

Metro ExpressLanes

Los Angeles freeways have consistently ranked among the worst in the nation for congestion, which has resulted in travel delay, productivity loss, wasted fuel, and air pollution.

The Metro ExpressLanes Program was initiated to implement High-Occupancy Toll (HOT) lanes, also known as express lanes, that help improve traffic flow, provide drivers and transit with more reliable travel times. Express lanes allow carpools, vanpools, motorcyclists, and buses to travel for free, while also giving solo drivers the option of paying a toll to use the lane. By using dynamic pricing based on the current usage level, traffic flow in the ExpressLanes is continuously managed to maintain speed and flow, providing a more reliable travel option.

In 2012 and 2013, in collaboration with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), Metro converted existing

carpool lanes on the I-110 and I-10 to ExpressLanes. The I-110 and I-10 ExpressLanes have reduced travel times and improved equity and accessibility through transit subsidies and net toll grants. From the outset, the ExpressLanes program focused on equity by including the Low-Income Assistance Plan for qualifying Los Angeles County households with a reduced initial account opening and the waiver of the monthly maintenance fee, providing ongoing transit subsidies to increase bus service on the ExpressLanes corridors and developing the Net Toll Revenue Grant Program. Metro ExpressLanes provide approximately \$8 million annually to enhance transit service provision and operations on the I-10/I-110 ExpressLanes. Additionally, through the Net Toll Revenue Grant program, Metro has provided over \$100 million since 2014 to jurisdictions for active transportation, transit, and roadway projects within 3 miles of the I-10/I-110 with the objective of enhancing corridor mobility and quality of life.



Countywide ExpressLanes Strategic Plan

Building on the success of the I-10 and I-110 ExpressLanes, the 2017 Countywide ExpressLanes Strategic Plan established a vision for a network of ExpressLanes to increase mobility throughout Los Angeles County, as illustrated in Figure 4. Targeted corridors have been identified by tiers, with near-term potential (Tier 1) within 5 to 10 years, mid-term potential (Tier 2) within 15 years, and longer-term potential (Tier 3) within 25 years.

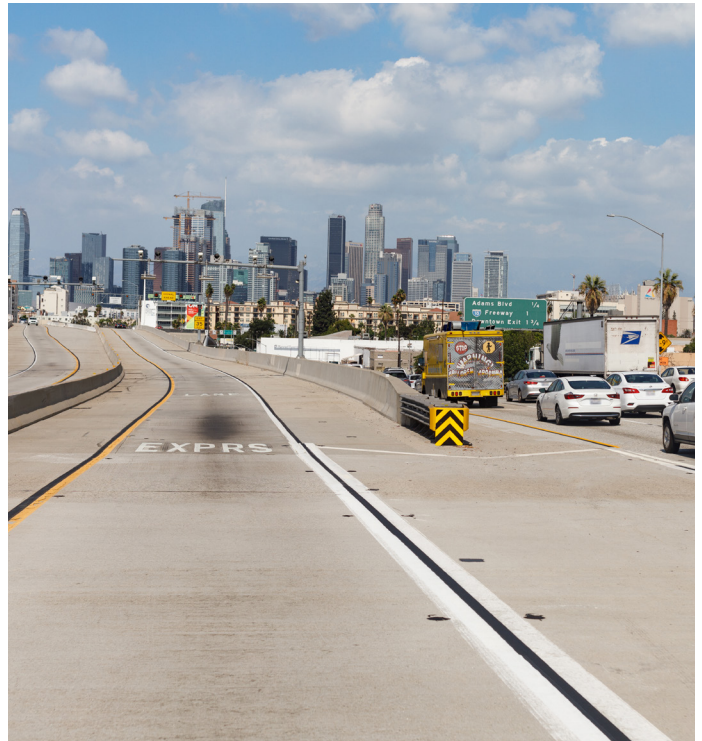


Figure 4

ExpressLanes Corridors



Net Toll Revenue

Metro uses toll revenues first to pay for the cost of operating the ExpressLanes, including roadway and equipment maintenance, administration, toll collection, customer service, California Highway Patrol enforcement, and Freeway Service Patrol tow trucks. In addition, transit subsidies are granted to the Metro Silver Line, Foothill Transit, Gardena Transit, and Torrance Transit for increased transit service operating on the I-10 and I-110 ExpressLanes. Toll revenues are also invested in discount and rewards programs for Metro ExpressLanes customers including the Low-Income Assistance Plan. More information can be found at metroexpresslanes.net.

After all expenses are paid, remaining net toll revenues generated from the corridor are available for jurisdictions within a 3-mile radius with funding through the competitive

Net Toll Revenue Reinvestment Grant Program. This program’s primary objective is to increase mobility and person throughput through the implementation of transit, active transportation, and roadway improvement projects.

An equity assessment is an opportunity to develop a framework for future net toll reinvestment. This framework is a vision of multimodal investment in transportation projects that local jurisdictions, Metro, and the community can collectively support and work towards implementing when net toll revenue from the I-105 ExpressLanes becomes available. In this way, the equity principles described in this document can be realized.

Figure 5 is a map of the previously funded projects from the net toll revenue generated by the I-10 and I-110 ExpressLanes. Figure 6 provides a breakdown of the net toll revenue awards and funding by mode.

Figure 5
Net Toll Revenue Project Map

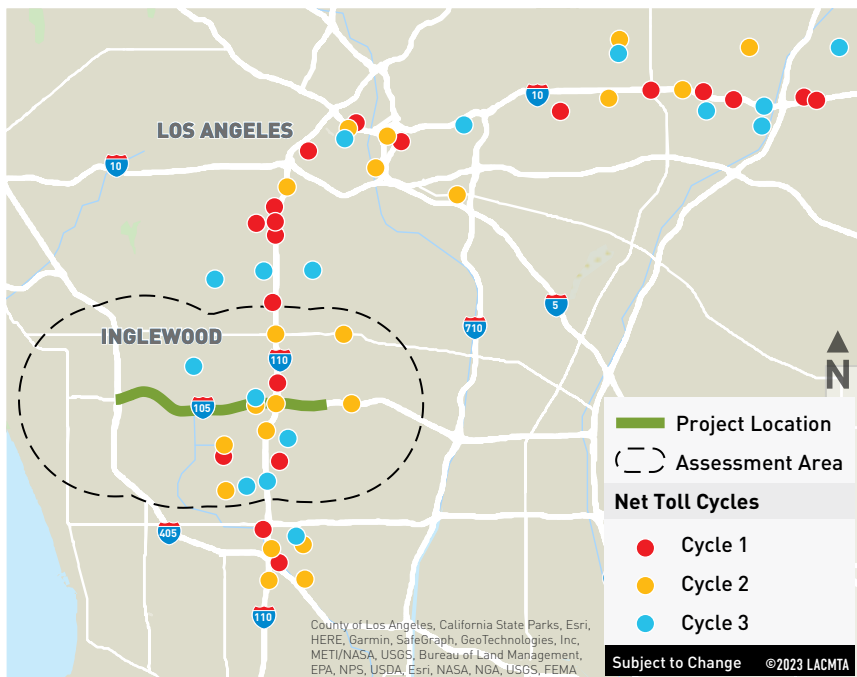
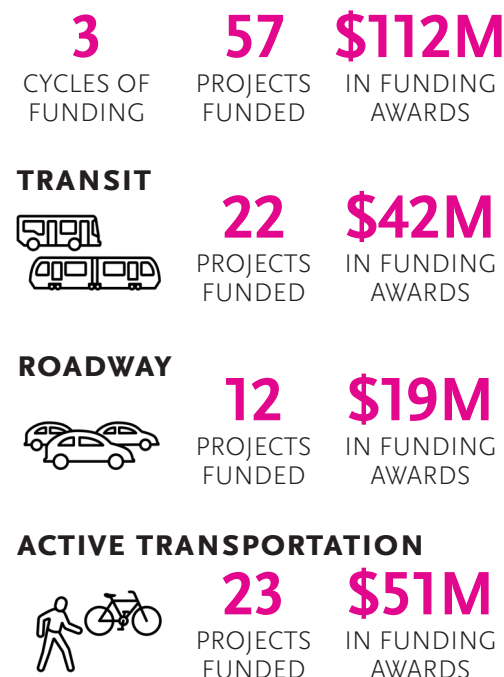


Figure 6
Net Toll Revenue by the Numbers



Equity Assessment

The goal of Metro ExpressLanes since its inception has been to move more people, not cars (refer to Figure 4 for a map of Metro ExpressLanes). In anticipation of the future I-105 ExpressLanes, Metro is preparing an I-105 ExpressLanes Segment 1 Equity Assessment (Assessment) to identify transportation projects that will improve mobility, accessibility, and connectivity for all users of the I-105 Assessment Area. Because Segment 1 is scheduled to begin construction in advance of Segments 2 and 3, this Assessment is focused on Segment 1 only. The following sections discuss the Assessment Area, the vision statement for the Assessment, and structure of the report.

Assessment Area

The Assessment Area covers the three-mile radius around Segment 1 of the I-105 ExpressLanes Project, which is an approximately 78-square-mile area between the Pacific Ocean and Bullis Road. The Assessment Area consists of 9 unincorporated Los Angeles County neighborhoods and 13 cities. Three Metro Rail lines (A, C, and K) provide

light rail connectivity to Angelenos within the project area. The Assessment Area for the I-105 ExpressLanes Equity Assessment is shown on Figure 7.

VISION STATEMENT

The I-105 ExpressLanes will serve as a catalyst for improving mobility and quality of life along the corridor. By leveraging the future toll revenue from the ExpressLanes, the I-105 ExpressLanes Equity Assessment will engage the community and strategically identify potential projects to be funded that achieve the following goals:



CONNECT PEOPLE AND PLACES



CREATE COMMUNITY VALUE



CONSERVE RESOURCES

Figure 7

Assessment Area



Assessment

The development of the Assessment reflects Metro's ongoing efforts to continue to create more equitable, multimodal solutions to address disparities. The prioritized project list and recommendations from this Assessment represents the consensus support of representative stakeholders who live and work along I-105. Its purpose is to achieve a multidimensional, multimodal strategy to improve mobility and equity while fostering economic vitality, environmental sustainability, and access to opportunity.

The Assessment's methodology, data analysis, engagement, and findings are documented in this report. The report is organized in the following sections and address the following:

- > **Equity** – What does equity mean and what are the equity concerns in the assessment area?
- > **Existing Conditions** – What are the mobility and quality of life challenges and opportunities?
- > **Engagement** – What type of engagement was conducted and what was the reach?
- > **Evaluation** – What was the process for identifying, evaluating, and prioritizing projects?
- > **Recommendations** – What are the next steps and what are the recommended projects?

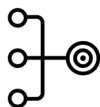
The report uses the icons below to identify how the Assessment aligned with the four pillars of Metro's Equity Platform. Additional information on the four pillars of Metro's Equity Platform Framework can be found in Chapter 2 – Equity.



**DEFINE
AND
MEASURE**



**LISTEN
AND
LEARN**



**FOCUS
AND
DELIVER**



**TRAIN
AND
GROW**



CHAPTER 2

Equity

Transportation is an essential lever for increasing and improving access to opportunities we often take for granted. We know that because there are vast disparities among neighborhoods and individuals in Los Angeles County, it is more difficult for many members of our community to have access to jobs, housing, education, health care, safe environments, or other essential tenets of thriving, vibrant communities. Transportation infrastructure, programs, and service investments must be aimed at improving mobility and access to opportunity for all. This I-105 ExpressLanes Segment 1 Equity Assessment represents an opportunity to use the net toll revenue from the future ExpressLanes as a catalyst to positively affect the I-105 corridor communities.



Metro and Equity

Equity is both an outcome and a process to address racial, socioeconomic, and gender disparities, to ensure fair and just access to opportunities, including jobs, housing, education, mobility options, and healthier communities. Equity is achieved when a person's life outcomes are not predetermined in a statistical or experiential sense, on their racial, economic, or social identities. Equity requires informed and needs-based provision, implementation, and community services, programs and policies that reduce and ultimately prevent disparities.

Metro is committed to providing equitable service and project delivery, policymaking, and resource distribution. This means accounting for the different histories, challenges, and needs of communities across Los Angeles County. The following sections discuss how Metro is leading and partnering with others to create a more just Los Angeles County.



Equity Platform Framework

Metro's Equity Platform is a policy framework adopted in February 2018. The policy defines how Metro can use its influence as a transportation authority to evaluate and address disparities in mobility access while providing opportunities for upward social and economic mobility.

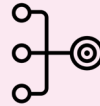
THERE ARE FOUR PILLARS OF THE EQUITY PLATFORM:



DEFINE AND MEASURE



LISTEN AND LEARN



FOCUS AND DELIVER



TRAIN AND GROW

The Equity Platform is designed to inform and guide every facet of Metro, on a continuing basis, shaping projects, investments, and new initiatives. The platform is not a singular task or process that will be completed, but rather a commitment to incorporate equity into all facets of Metro's work, and continuously pursue equitable outcomes in everything we do.

Equity Focused Communities

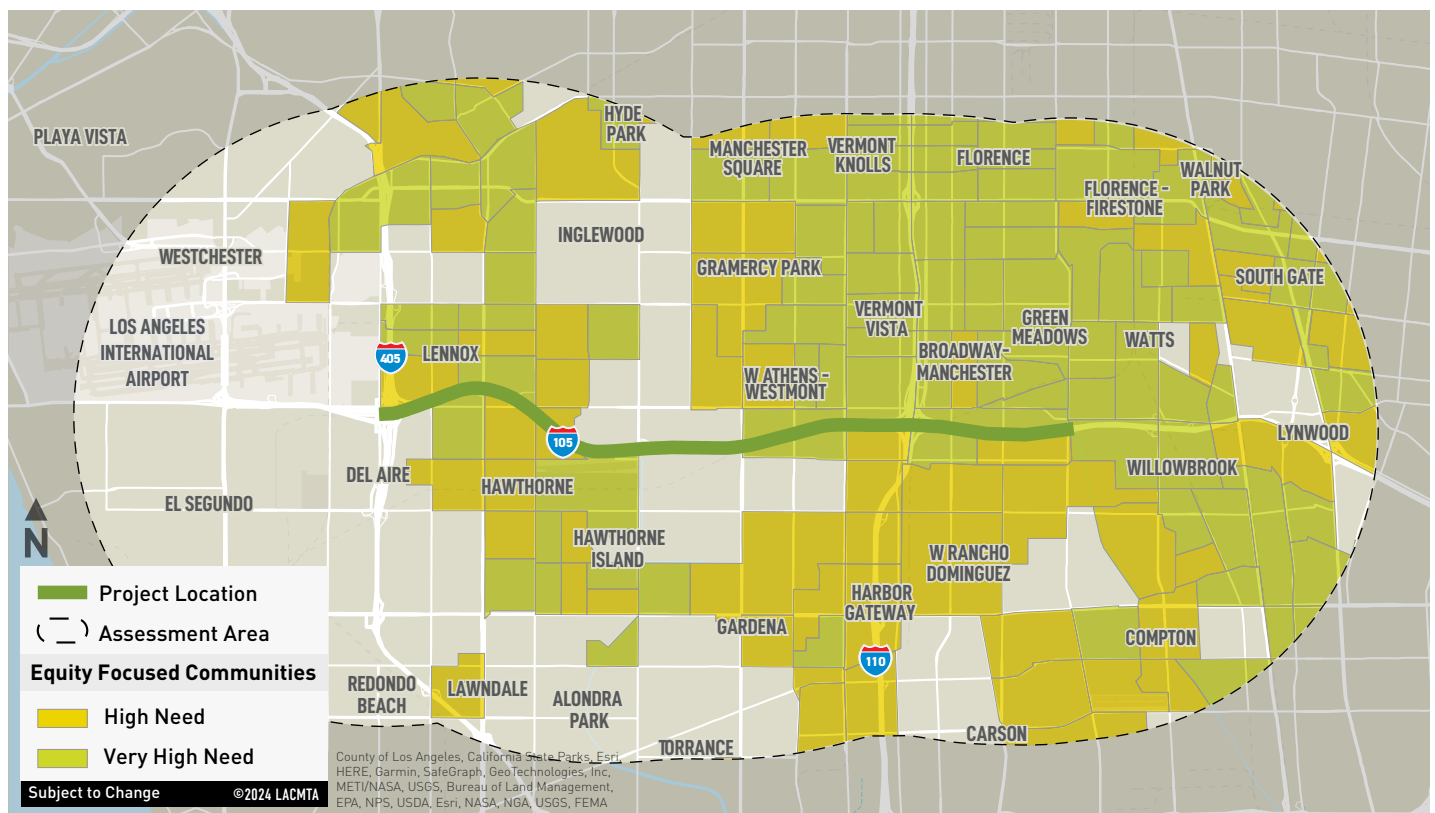
In proactively integrating equity into all programs and projects, Metro has identified Equity Focus Communities (EFCs) in Los Angeles County. EFCs are census tracts based on the following three criteria:

- > Household income of less than \$60,000
- > Percent of Black, Indigenous, and other People of Color (BIPOC) populations
- > Households that have zero vehicles

The majority of the 78-square mile Assessment Area and 75% of the population live in an EFC (Figure 8).

Figure 8

Equity Focused Communities





History of I-105

The planning, design, and construction of I-105 was a product of significant civic conflict, which set a precedent, ultimately impacting all future freeway construction projects within the County. At the time of construction, I-105 was and considered to be the world's costliest freeway. As a result, I-105 became much more than a freeway itself—it included a community development enterprise and environmental improvement

program, that also incorporated a fixed guideway transit line in the median and a significant housing construction component.

Table 1 provides a comparison summary of milestone dates, project design features of the various alternatives as the project evolved over time and the actual project that was built.

Table 1. Comparison of Milestone Dates and Project Features of the Various Alternatives and Actual Project

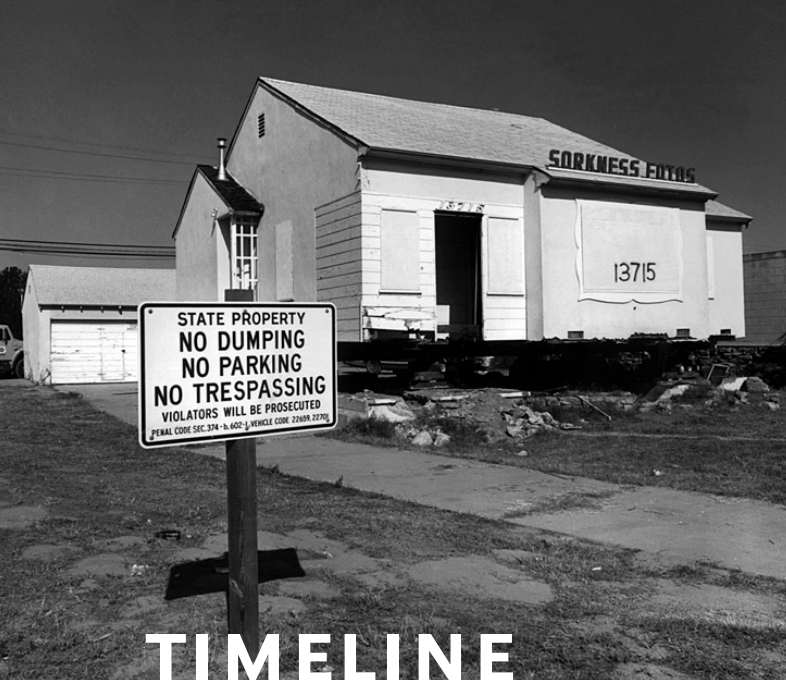
KEY FACTS	1974 EIR	1977 EIR	1979 ALTERNATIVE	ACTUAL
Groundbreaking Year	1975	1978	1979	1982
Opening Year	1980	1985	1987	1993
Transit	Busway	Busway	Busway	Light Rail
Median Width	64 feet	40 feet	84 feet	64 feet
Number of Mixed Flow Lanes (total of both directions)	10	8	8	6
Number of HOV Lanes (total of both directions)	0	2	2	2
Number of Interchanges	20+	N/A	15	10
Hawthorne Bell Shape Design	No	Yes	Yes	Yes
Cost	\$579 million	\$611 million	N/A	\$2,200 million

EIR = environmental impact report

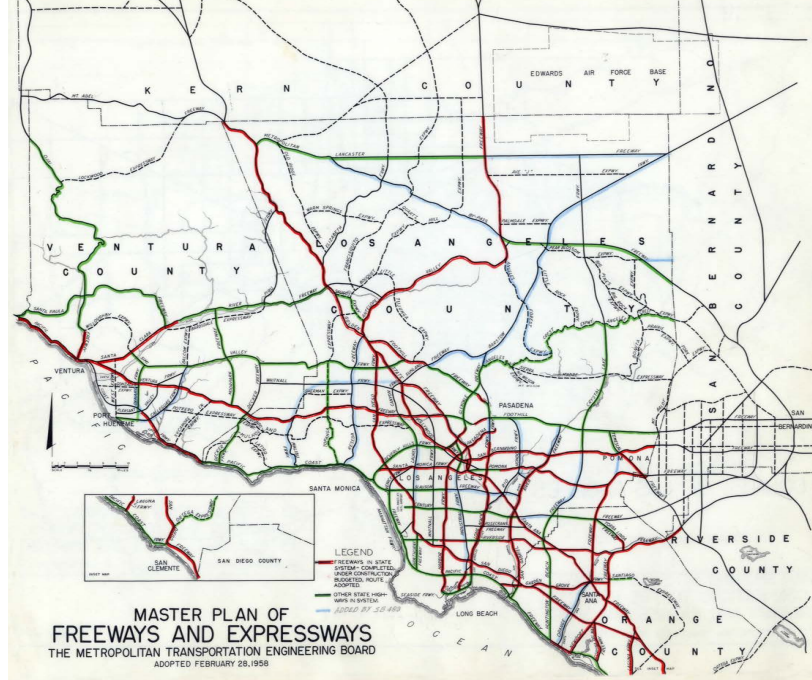
N/A = not applicable



Photo by Jeff Gates, "In Our Path"



TIMELINE



1950S

FREEWAY CONSTRUCTION

- > Federal-Aid Highway Act of 1956 promotes interstate freeway construction.
- > The 1958 Master Plan of Freeways and Expressways for Los Angeles was designed to create a grid-like automobile network across the region to assure that no Angeleno would live more than 3 miles from a freeway.
- > One of the planned freeways included in the Master Plan was the Century Freeway (I-105), roughly paralleling Century Boulevard through Los Angeles County and running east-west between San Bernardino and LAX. However, the eastern 34 miles were deleted from the Century Freeway route. Exact route location studies commenced in 1959.



Photos by Jeff Gates, "In Our Path"



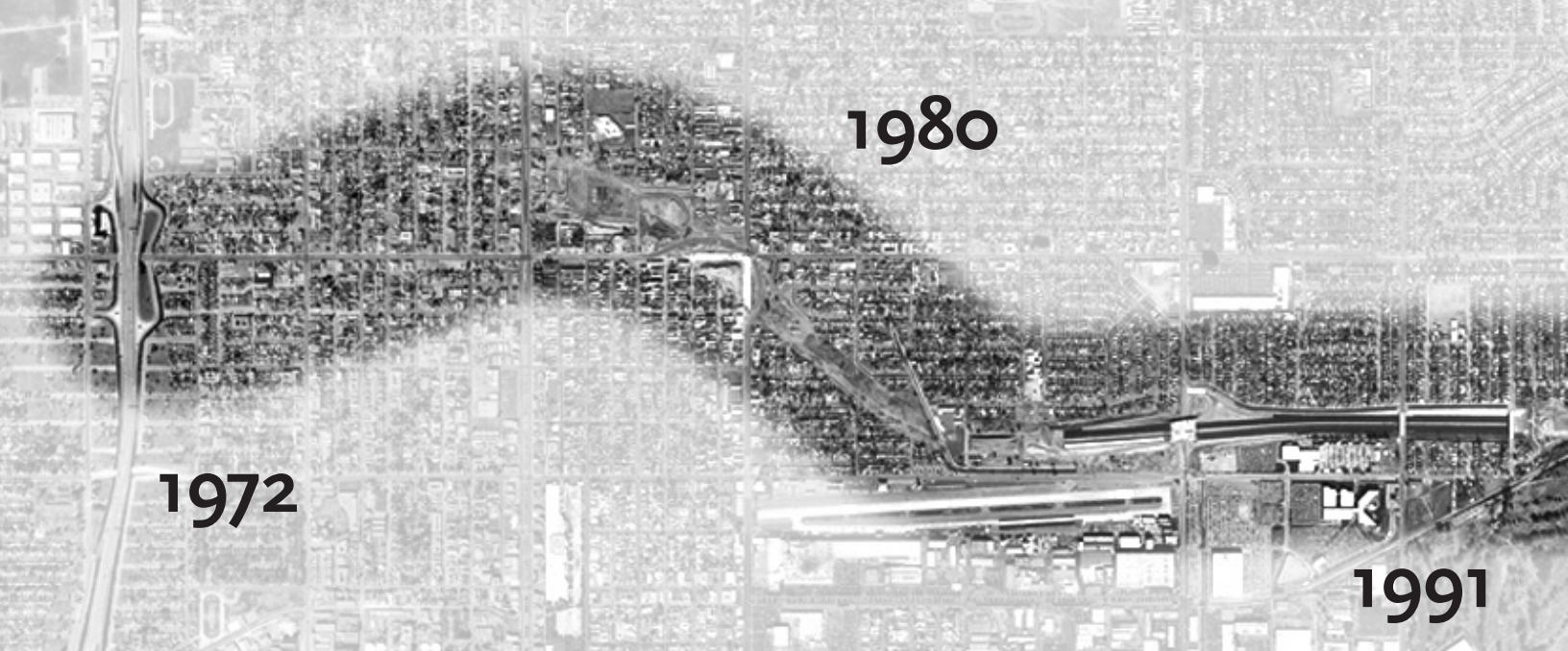


1960s

EARLY OPPOSITION

- > The City of Norwalk opposed the initial route alignment and successfully eliminated 1.5 miles of freeway in its city that changed the terminus from the Santa Ana Freeway (I-5) to the San Gabriel Freeway (I-605).
- > The City of Inglewood succeeded in having the western portion of the freeway routed to its south, much to the displeasure of the City of Hawthorne, because the freeway would bisect the central business district of Hawthorne. The City of Hawthorne refused to sign a freeway agreement for this route, which forced a realignment along the border of Inglewood and Hawthorne.
- > An activist group in Hawthorne known as “Freeway Fighters” led protests and a successful referendum opposing the construction of the freeway. However, it ultimately did not stop the cities from executing freeway agreements for the realigned route.





1970s

ENVIRONMENTAL LAW

- > The state begins acquiring property within the proposed right-of-way of the Century Freeway. At the same time, National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) become law. Eventually, about 6,000 homes were acquired to construct the I-105.
- > Esther Keith, a resident of the corridor, locked her front door and refused to let the state right-of-way agent enter her home.
- > One month before the groundbreaking, a federal lawsuit was filed, known as *Keith v. Volpe*, which sought an injunction to prevent the state from acquiring property until environmental studies were approved and also alleged inadequate relocation assistance, denial of equal protection to minorities and low-income residents, inadequate public hearing, and violation of due process.
- > U.S. District Court Judge Harry Pregerson ordered the government to refrain from evicting anyone living along the route of the proposed freeway and from instituting any new acquisition proceedings other than those involving volunteer relocation or those necessary to protect public health and safety. By then 55% of the needed parcels had been acquired and 35% had been cleared. This ruling halted freeway construction for the next 7 years, inducing deterioration in abandoned neighborhoods.
- > The state prepared and then circulated the environmental impact statement between 1972 and 1977. Meanwhile the abandoned neighborhoods in the corridor further deteriorated. Pressure from corridor cities on Governor Jerry Brown to promptly complete the freeway increased.

1980s

CONSENT DECREE

- > The plaintiffs and Caltrans reached an initial agreement recorded in a consent decree. The consent decree defined the project to have six lanes for general traffic; two HOV lanes; a transit system in the median not wider than 64 feet to be convertible to light rail; metered ramps; and new construction of 3,700 housing units. For the first time, federal highway funds would be used to mitigate a highway's impacts on a local housing stock and residents. The decree mandated several unprecedented elements for an interstate highway project, such as:
 - Established an Office of the Advocate for Corridor Residents responsible for representing persons displaced by the freeway.
 - Established a housing program led by the State Department of Housing and Community Development that required at least 30% of the housing units be made available for occupancy by the time 50% of the freeway construction contracts were awarded.
 - Formed a 60-member Housing Advisory Committee.
 - Began the Century Freeway Affirmative Action Committee, a group comprising community activists and the parties, which monitored and enforced affirmative action requirements.
- > Groundbreaking occurs in Lynwood on May 1, 1982.
- > Los Angeles County Transportation Commission (LACTC) authorizes the construction of light rail along the median.

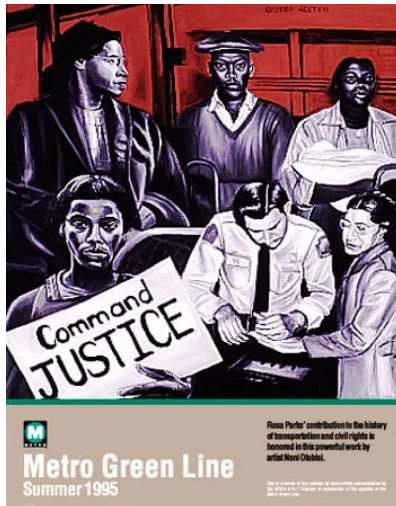
1993

2020

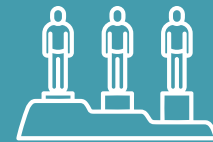
1990S–2020S

COMPLETION AND FUTURE EXPRESSLANES

- > In 1993, the new I-105 freeway was opened to traffic. Two years later the Metro Green Line (now known as the Metro C Line) opened to passengers.
- > In 2014, due to the success of the I-10 and I-110 ExpressLanes, the Metro Board of Directors approve staff to begin the development of project report and environmental document.
- > In 2017, Metro publishes the Countywide ExpressLanes Strategic Plan.
- > In 2021, Metro adopts Alternative 3 in the Final Environmental Impact Report and Environmental Assessment for the I-105 ExpressLanes Project that will convert the existing HOV lane into ExpressLanes and adds a second ExpressLane in each direction.
- > In 2023, Metro begins I-105 ExpressLanes Segment 1 Equity Assessment.
- > In 2024, Metro approves the construction contract for Segment 1 of the I-105 ExpressLanes Project.



Noni Olabisi Metro Green Line Commemorative Poster, 1995



PROGRESS BUT IMPERFECT

The Century Freeway emerged from conflict-ridden beginnings to become one of the first freeways governed by a consent decree. It did come with several compromises, such as:

+25,000

RESIDENTS AND BUSINESSES DISPLACED

8,000

PROPERTIES DWELLING UNITS WERE BOARDED UP



TRANSIT DISPARITIES

NORWALK

OPPOSED FREEWAY EXTENSION THAT WOULD ALLOW FOR A METROLINK AND AMTRAK CONNECTION

20-MILES

ARE IN THE I-105 MEDIAN, REQUIRING RIDERS TO DESCEND FROM BRIDGES OVER THE FREEWAY

10 STATIONS

ALONG THE FREEWAY MEDIAN EXPOSING PASSENGERS TO POLLUTION AND NOISE

LAX

DOES NOT DIRECTLY CONNECT TO THE AIRPORT



Equity Issues within the Corridor

The communities along the I-105 ExpressLanes Segment 1 corridor (Assessment Area) are unique and multi-faceted. Each community has been shaped by its rich history and the diverse demography of the people who live and work there. However, many of these communities face significant disparities, such as income, health, housing, services, education, and access to safe, affordable, and reliable mobility that are lower than the average for Los Angeles County per the U.S. Census data. For example, the mean household income is \$76,600 in the Assessment Area, while the mean household income in Los Angeles County is \$103,220. In addition, the transit work modal split within

the Assessment Area is higher (5%) compared to the rest of Los Angeles County (4%). Many of these disparities are documented in Appendix A – Community Spotlight Profiles, which enabled Metro to develop a preliminary understanding and snapshot into each community through historical and quantitative snippets of Compton, El Segundo, Gardena, Hawthorne, Lawndale, Lynwood, South Gate, Los Angeles, and unincorporated Los Angeles County communities.

One way to address these issues is to improve mobility and accessibility to economic opportunities such as those located in downtown Los Angeles and in the El Segundo/Hawthorne/

Figure 9

Equity Issues Matrix

EXAMPLE NET TOLL REVENUE PROJECTS	Active Transportation			Roadway			
	First/Last Mile	Bikeway	Pedestrian Improvements	Traffic Signals	Complete Streets /Safety	Ramp/ Interchange Enhancements	Urban Greening
EQUITY ISSUES							
Lack of reliable and efficient mobility options	●	●	●	●	●	●	
Unsafe/hostile streets for pedestrians and bicyclists	●	●	●	●	●		●
Disparities in health outcomes	●	●	●	●	●		●
Quality of life	●	●	●	●	●	●	●
Air and noise pollution	●	●	●		●		●
Lack of green space and shade	●	●	●		●		●
Physically disconnected communities	●	●	●	●	●	●	

Los Angeles International Airport area. This is accomplished through the ExpressLanes project itself that will enhance mobility and shift vehicles from arterials back onto the I-105 and away from local communities. This is supported by the responses to the travel survey, presented in Chapter 4, with two-thirds of respondents use the I-105 to commute to work. The project will also provide net toll revenue to enhance existing transit service and create new transit which will reduce travel times and increase convenience and travel options or those who do not drive. In addition, quality of life and safety can be improved through net toll revenue investments in active transportation, zero-emissions transit,

safe routes to schools/safe routes for seniors, and greenway projects. Collectively, the identified projects and programs are expected to improve travel times, convenience, and affordability across all modes to advance local and regional equity goals.

Using the framework from the Net Toll Revenue Grant Program (mode and project types) and the work done for this effort (data analysis, community engagement, technical assessment), Figure 9 presents a high-level equity issues matrix that shows how the potential projects could address equity in the I-105 Assessment Area.

EXAMPLE NET TOLL REVENUE PROJECTS	Transit					
	BRT	Station Improvements	Mobility Hubs	Bus Infrastructure	Bus Service	Zero-Emissions
EQUITY ISSUES						
Lack of reliable and efficient mobility options	●	●	●	●		●
Unsafe/hostile streets for pedestrians and bicyclists						
Disparities in health outcomes	●				●	
Quality of life	●	●	●	●	●	●
Air and noise pollution	●	●		●	●	●
Lack of green space and shade		●	●			
Physically disconnected communities	●		●		●	

CHAPTER 3

Existing Conditions

This chapter presents existing characteristics, conditions, issues, and disparities in the I-105 ExpressLanes Segment 1 Assessment Area. First, this chapter provides an overview of who lives within the corridor through socioeconomic and demographic information. Next, the chapter highlights key community impacts related to the environment, health, safety, and access for those living in the Assessment Area. Lastly, the chapter provides a more detailed set of existing conditions data relating to the Assessment Area's land uses and multimodal transportation system, including infrastructure conditions and travel characteristics.





Socioeconomic and Demographic

Population

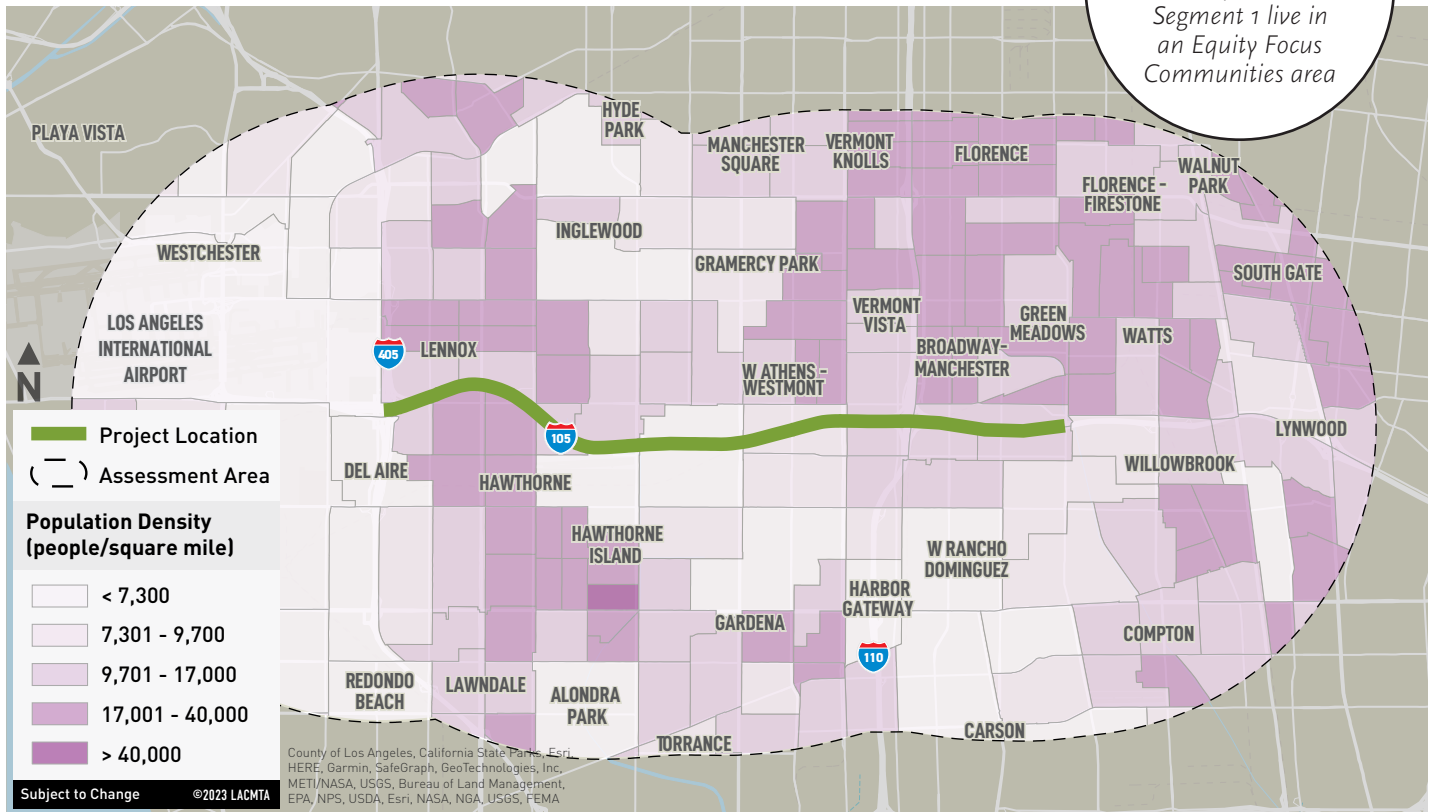
Within Segment 1 of the I-105 corridor, significant diversity exists among residents, spread among 13 cities and 5 unincorporated Los Angeles County neighborhoods. Each community has a vibrant and rich composition. Approximately 940,000 residents live within the corridor (10% of Los Angeles County's population). The average population density is 15,600 people/square mile (See Figure 11), making it more than 6 times denser than the average for LA County. As with much of Los Angeles County, single-family residential living initially dominated the landscape but with growing population figures, communities have begun to densify with the appearance of multifamily housing.

Approximately 711,700 residents live in an EFC area within the corridor, representing roughly 75% of the I-105 ExpressLanes Segment 1 population.

EQUITY FOCUS COMMUNITIES POPULATION	
40%	LA COUNTY
75%	ASSESSMENT AREA
DISPARITY RATIO	
1.9	ASSESSMENT AREA / LA COUNTY

Figure 11

Population Density



Source: 2020 US Census Decennial Data - P2 Table

Race and Ethnicity

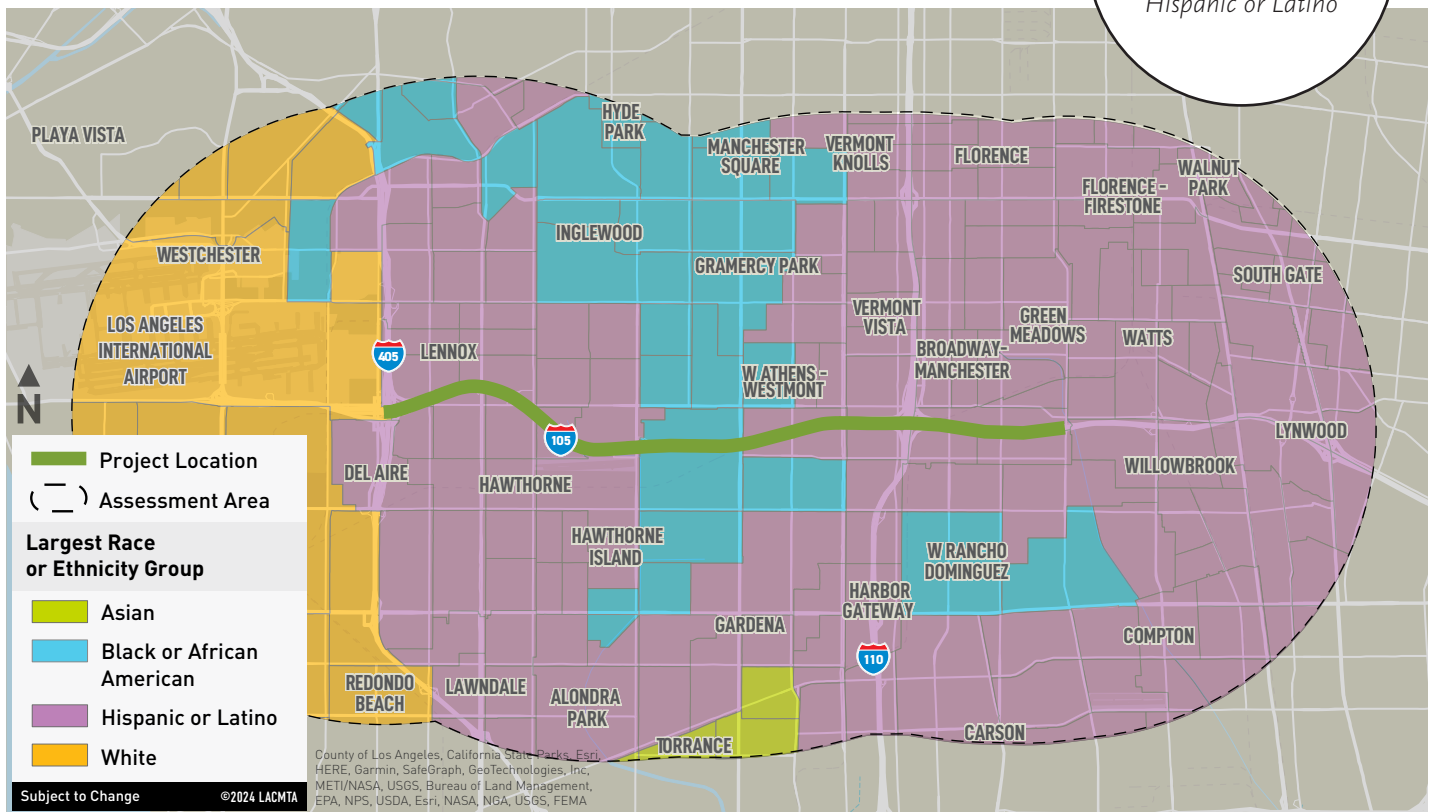
Figure 12 shows the breakdown of the population by race and ethnicity in the project area. These maps use data and categories from the United States (U.S.) Census Bureau. It is important to acknowledge that these categories do not capture the full range of identities represented in the corridor, or the preferred terminology with which some communities and individuals identify.

Per the US Census data, residents who identify as Hispanic or Latino are the most prevalent population within the project area (62% of the corridor population). This demographic group is the fastest growing minority group in the nation and is projected to become the dominant minority group in the nation by 2045.

62.2%
of the corridor
population identify as
Hispanic or Latino

Figure 12

Largest Race or Ethnicity Group



Source: 2020 US Census Decennial Data - P2 Table

Occupation

THE FOUR MOST PREVALENT JOB SECTORS FOR RESIDENTS WITHIN THE ASSESSMENT AREA ARE:

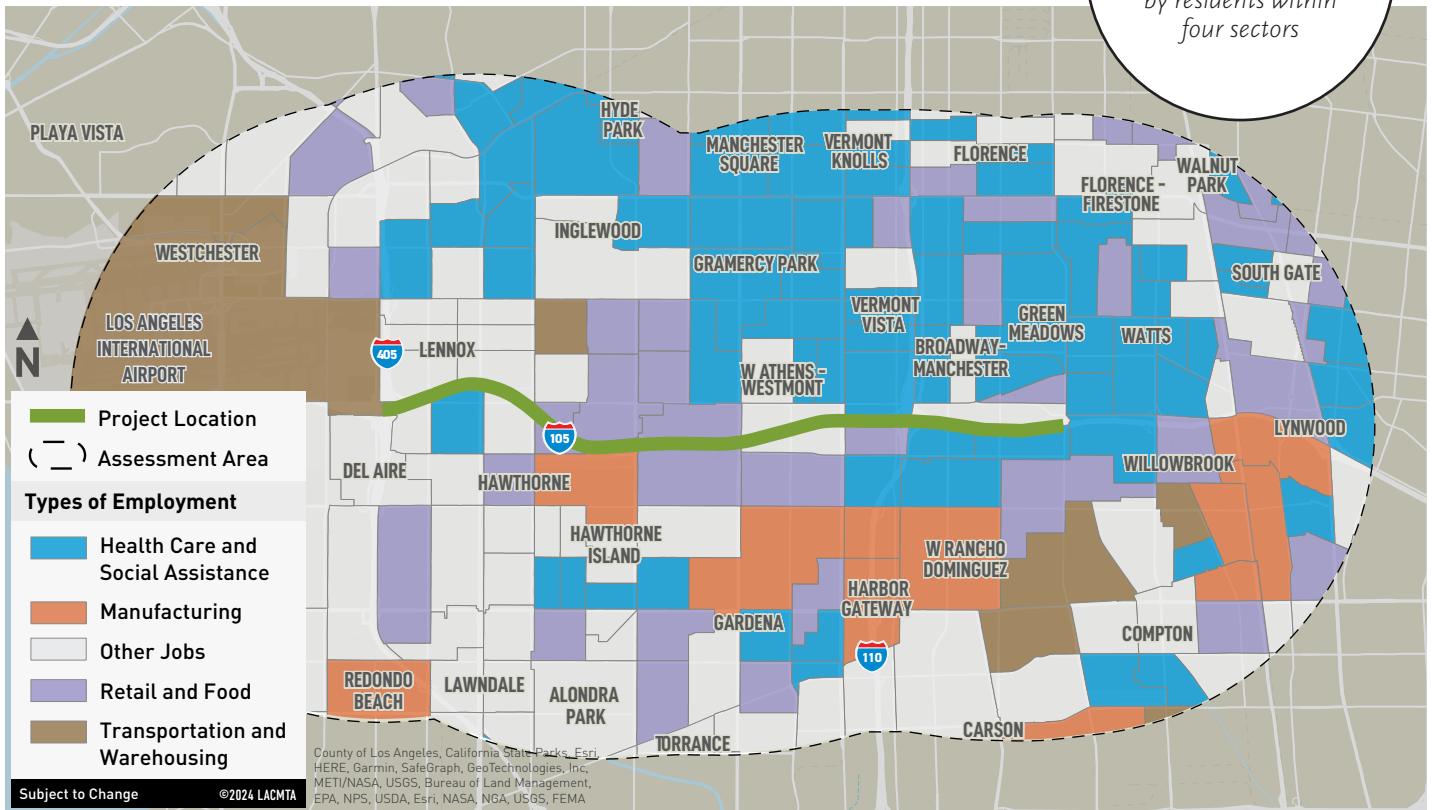
- 61,126** TRANSPORTATION AND WAREHOUSING JOBS
- 57,434** RETAIL AND FOOD JOBS
- 56,083** MANUFACTURING JOBS
- 44,851** HEALTH CARE AND SOCIAL ASSISTANCE JOBS

Occupation data can reveal several insights into existing conditions and disparities. It can be indicative of salary based on occupation and industry, education, and level of demand for different skills in the labor market. The top four occupations reside in transportation and warehousing, retail and food, manufacturing, and health care and social assistance. These four sectors account for 63% of all jobs held by residents. Other notable job sectors within the Assessment Area (see Figure 13) include:

- > Educational Services: 22,876 jobs
- > Professional, Scientific, and Technical Services: 19,224 jobs
- > Administrative Support and Waste Management and Remediation Services: 15,765 jobs
- > Wholesale Trade: 12,027 jobs
- > Construction: 10,825 jobs
- > Information: 10,059 jobs

63%
of all jobs are held by residents within four sectors

Figure 13
Types of Employment



Source: 2020 US Census Longitudinal Employer-Household Dynamics Data

Employment Density

In the Los Angeles metro area, job density grew between 10 to 30% in the last two decades. Density is a known economic driver, creating more job opportunities as well as upward mobility for low-income individuals. As housing pressures continue to build, the state of California and Los Angeles County are building more housing and densifying in metropolitan areas.

The average employment density is 4,248 jobs per square mile in the Assessment Area (see Figure 14), with the greatest concentration of jobs at LAX, totaling approximately 43,734 jobs. LAX directly employs nearly 3,700 people but generates over half a million jobs, with an annual economic output (business revenues) of more than \$126.6 billion (LAX). Job densities are higher in EFC communities, at an average density of 1,619 jobs per square mile.

**EMPLOYMENT DENSITY
WITHIN THE ASSESSMENT AREA**

4,828

JOBS PER SQUARE MILE

43,734

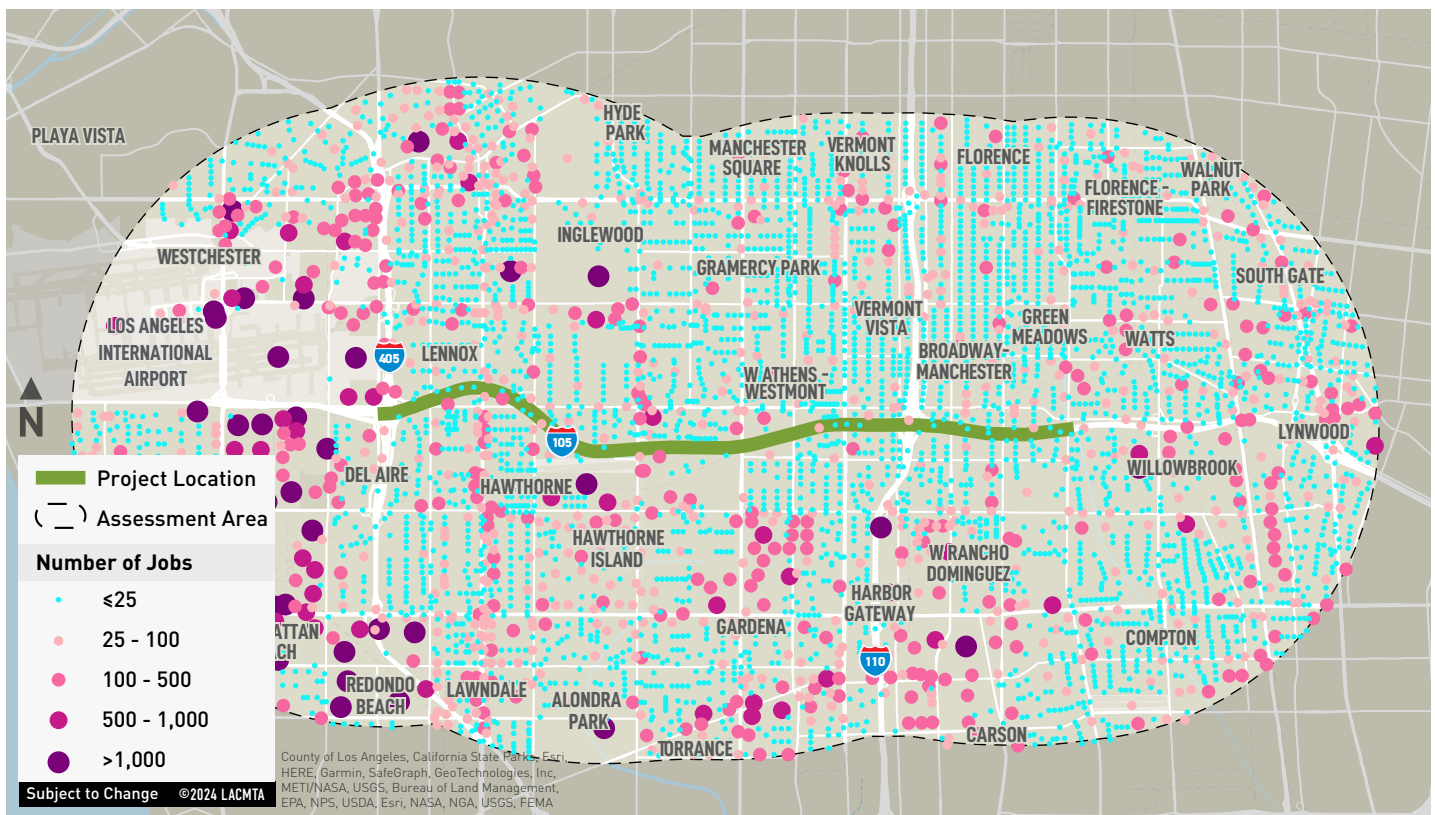
THE GREATEST
CONCENTRATION OF
JOBS ARE AT LAX

5,881

JOBS PER SQUARE MILE
IN EQUITY FOCUS
COMMUNITIES

Figure 14

Employment Density



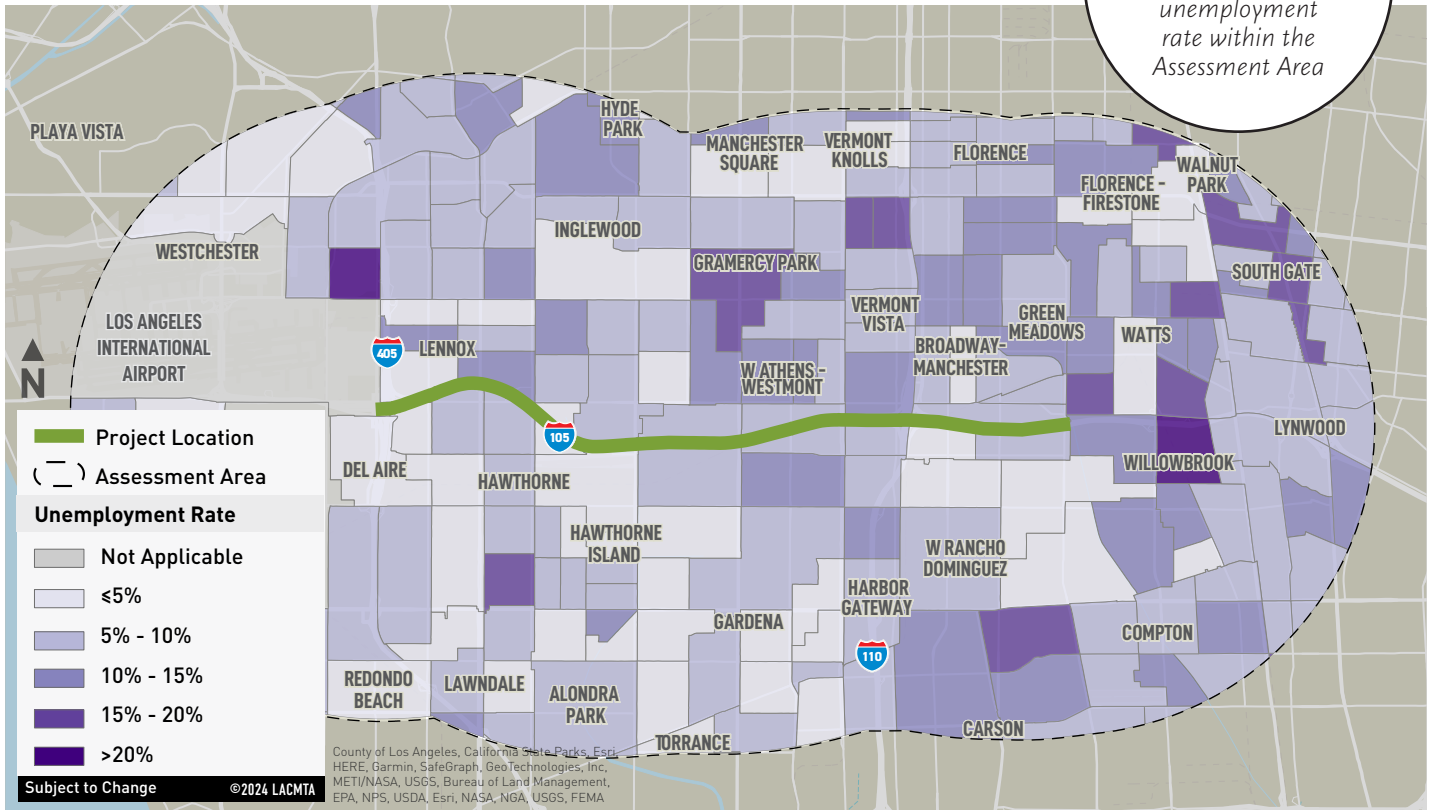
Source: 2020 US Census Longitudinal Employer-Household Dynamics Data

Unemployment

In the U.S., about half of the nation’s population is employed. Employment opportunities vary broadly across geographies and access to opportunities is dependent on many factors, including transportation. Within the I-105 Assessment Area, there are 348,900 people employed, out of a population of about 940,000 people. Approximately 598,000 people are of working age, between the ages of 18 and 65. The unemployment rate as of March 2024 is slightly higher within Los Angeles County at 5.2%, versus the national average of 3.8% (refer to Figure 15). Studies have found that some socio-demographic groups have a higher likelihood of unemployment. These groups may lack access to good-paying jobs, contributing to household income inequalities. Transportation access and connectivity to jobs and community services is crucial for access to advancement opportunities.

UNEMPLOYMENT	
3.8% U.S.	7.9% ASSESSMENT AREA
5.2% LA COUNTY	8.0% I-105 EFCs
EFC DISPARITY RATIOS	
2.1 I-105 EFC/ U.S.	1.5 I-105 EFC/ LA COUNTY

Figure 15
Unemployment Rate



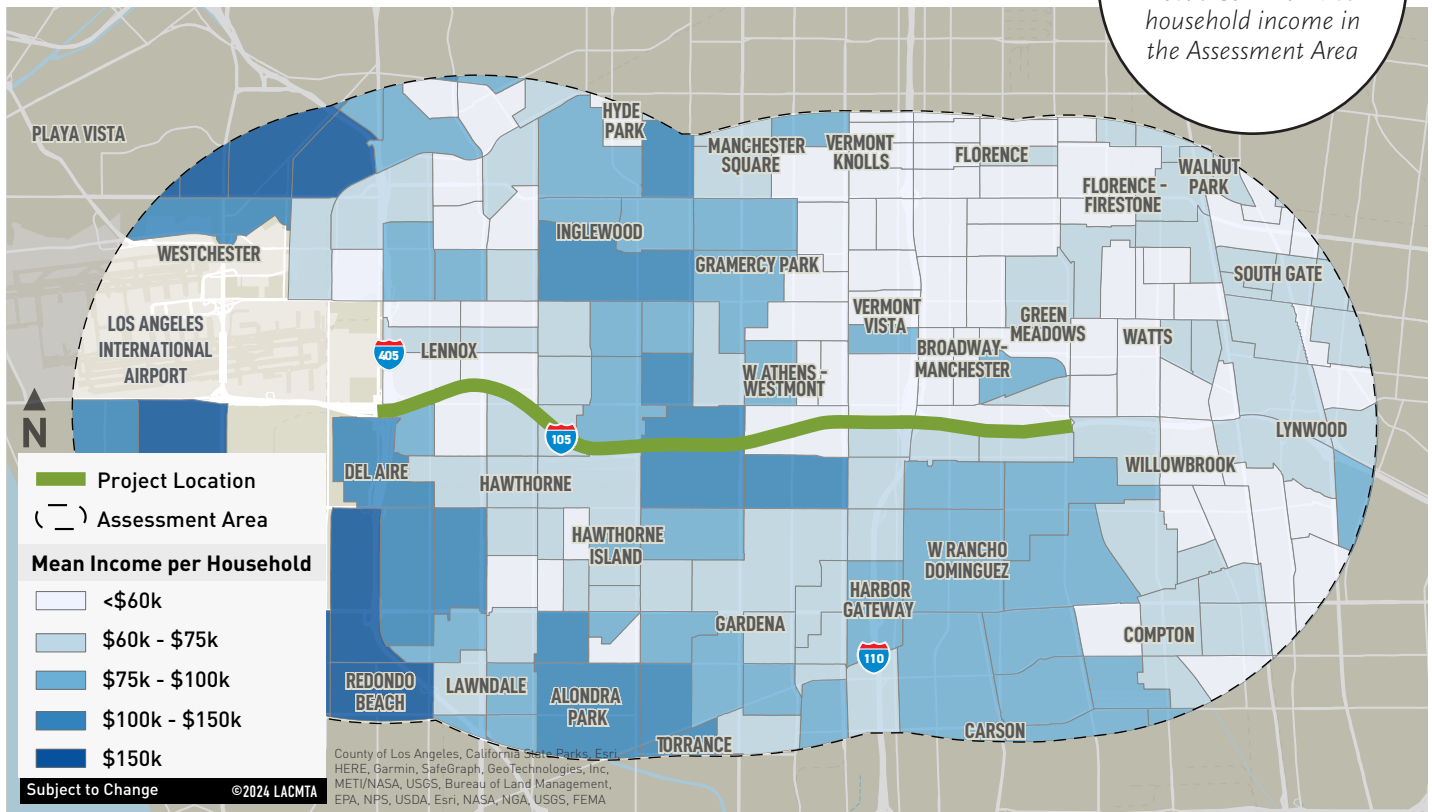
Source: 2020 US Census Decennial Data - DP03 Table

Household Income

Employment is the main source of household income in most households. The mean household income is \$76,600 in the Assessment Area, while the mean household income in Los Angeles County is \$103,220. The mean EFC household income is \$68,736 in the Assessment Area (refer to Figure 16). According to the California Department of Housing and Community Development, \$80,750 is the low-income cutoff for a two-person household and \$100,900 is the low-income cutoff for a four-person household for designated State programs. Given that the mean household size within the corridor is 3, the average household within the corridor is considered low income according to State-designated guidelines that consider local conditions such as housing costs when determining cutoffs.

Figure 16

Income per Household



Source: 2020 US Census American Community Survey 5-Year Data - S1901 Table

Housing Burden

Los Angeles County has one of the highest housing costs in the nation. As a result, 46% of Los Angeles County residents are housing burdened, while 50% of residents within the Assessment Area are housing burdened (see Figure 17), spending 30% or more of their income on housing. Housing burden households are even more concentrated in EFC communities within the Assessment Area, at an average of 52%. Increased housing costs decrease spendable income, making it difficult for households to afford medical care, necessities, and healthy food. The Los Angeles County Department of Public Health has found racial and ethnic health disparities exist because of the high housing burden experienced by residents (Los Angeles County Department of Public Health 2015).

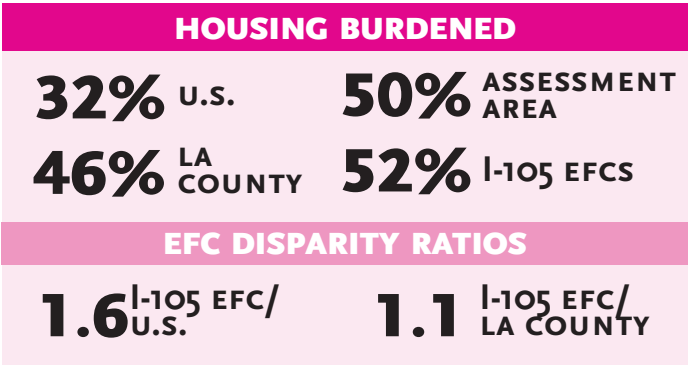
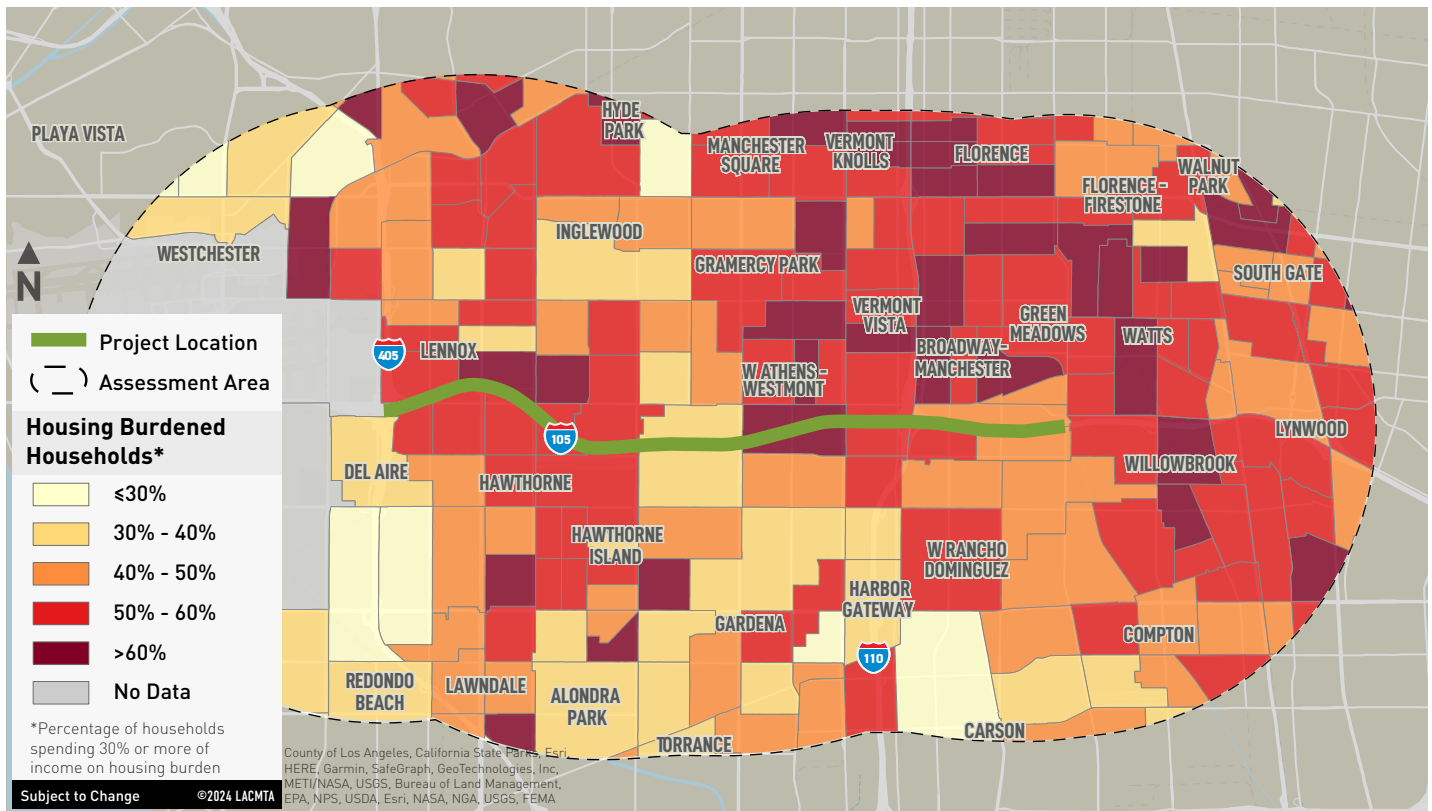


Figure 17

Housing Burdened Households



Source: 2020 US Census American Community Survey 5-Year Data - S2503 Table

Poverty Level

The federal poverty level is \$15,060 because the federal minimum wage is \$7.25 per hour, the equivalent of \$15,080 for a full-time employee. In Los Angeles County, the minimum wage is \$17.28 per hour due to the significantly higher living costs faced by residents. This is equivalent to \$35,942 for a full-time employee. Within the Assessment Area, the greatest concentration of poverty is in the northeast, particularly in the Vermont Knolls, Florence, Broadway-Manchester, and Watts communities. Figure 18 shows the number of individuals living in poverty per census tract.

It should also be noted that one of the criteria used by Metro to define an EFC is a household income of \$60,000 or less, which suggests that households with incomes between \$15,080 and \$60,000 living in the County are very high need even though they are not included in the Federal poverty estimate.

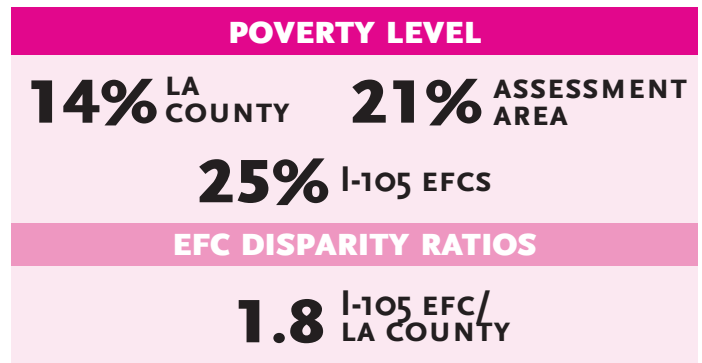
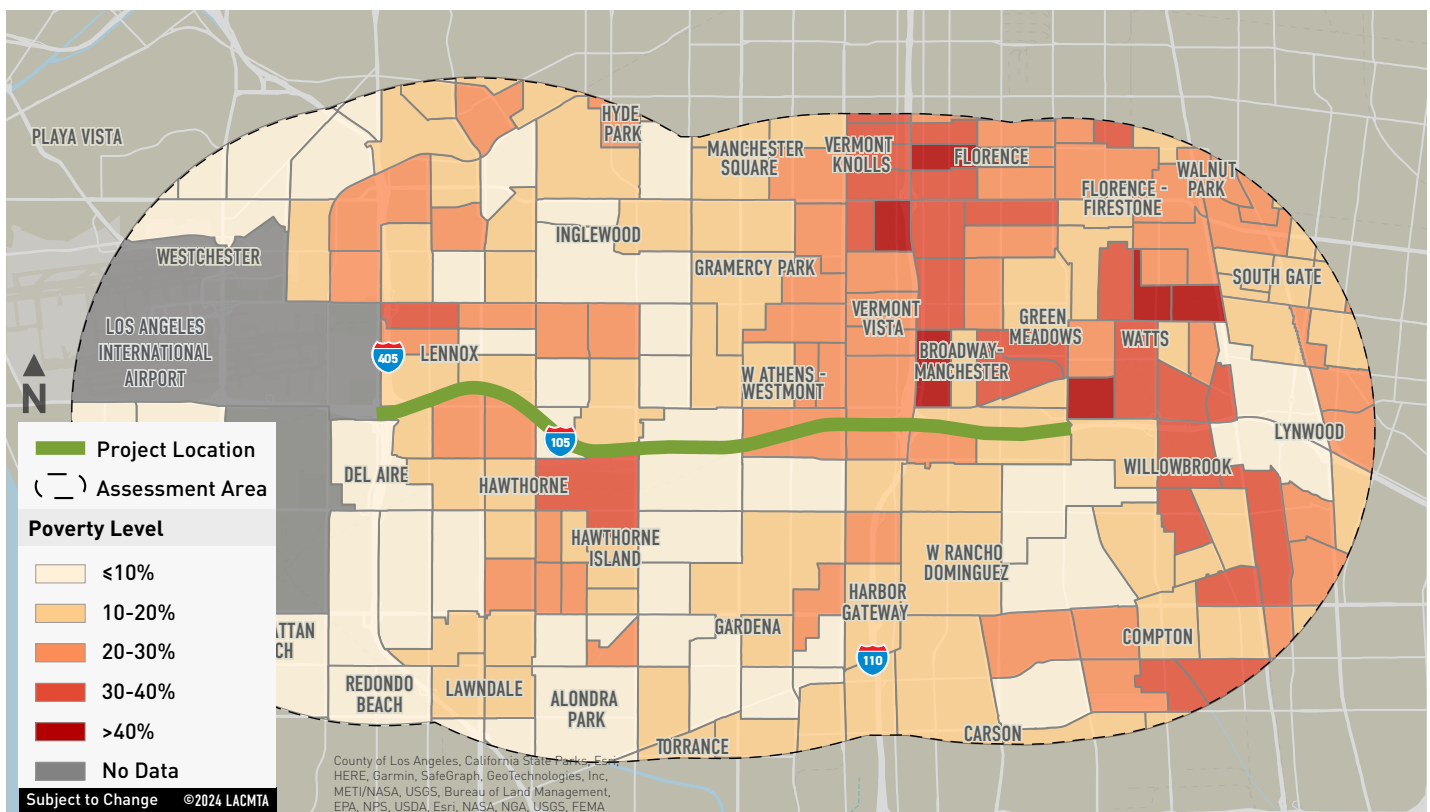


Figure 18

Poverty Level



Source: 2020 US Census American Community Survey 5-Year Data - S1701 Table

Percentage of Individuals with Disability

Disabilities affect quality of life and vary significantly. People with a disability are likely to have reduced opportunities for employment and often have increased medical expenses. These individuals may also require care assistance from family members who may reduce their working hours to provide sufficient care, and therefore household income.

Within the Assessment Area, 10.5% of individuals have a disability and 10.6% of individuals within EFC communities have a disability. While this rate is lower than the nationwide average of 12.7%, investments are still needed to ensure sufficient resources and infrastructure exists within the Assessment Area to ensure all individuals are afforded opportunities regarding mobility. Figure 19 shows the percentage of individuals with disabilities within the Assessment Area.

Youth and Seniors

Compared to national demographics, the I-105 communities have a higher “under 18” population (26.7% within the Assessment Area versus 22.4% nationally) and a lower “65 and older” population (10.8% within the Assessment Area versus 16.8% nationally). A high concentration of youth indicates a need for Safe Routes for Schools. While there is a lower “65 and older” population overall, there is a high concentration of individual 65 and older within the center of the corridor (Inglewood, Torrance, Alondra Park, and West Athens-Westmont). These areas would benefit from investments in programs, such as Safe Routes for Seniors.

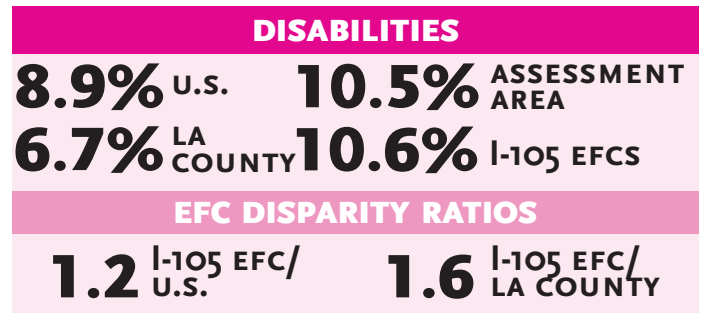
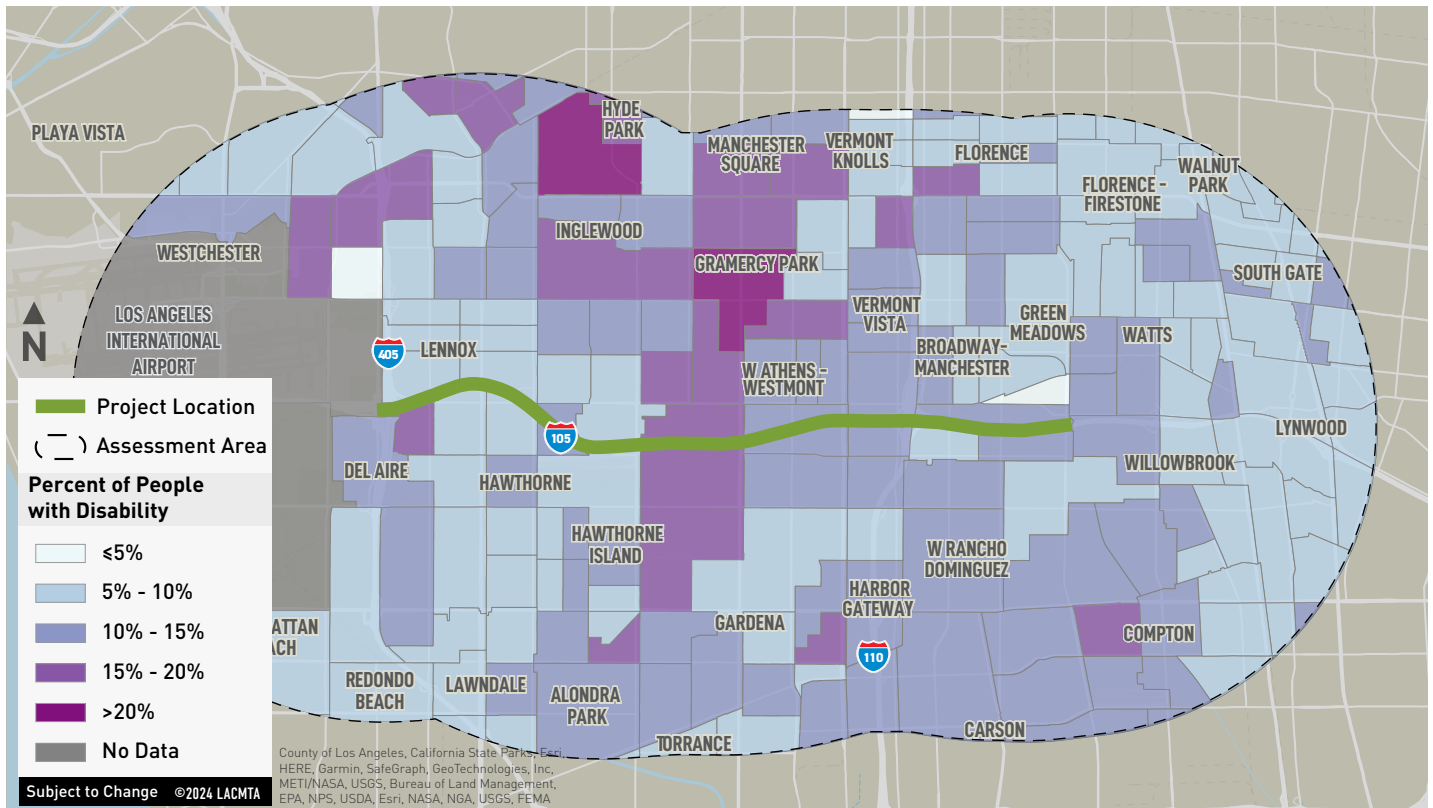


Figure 19

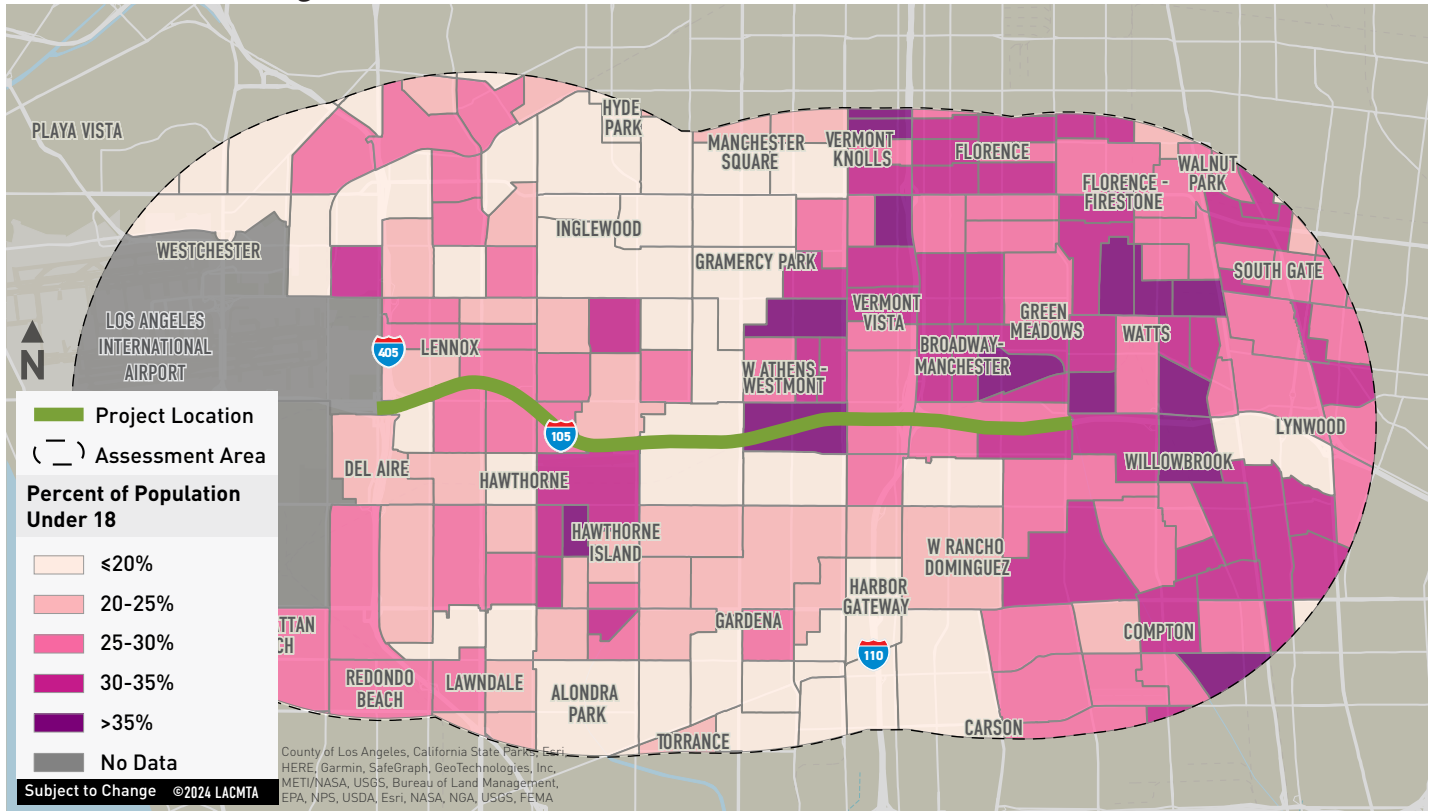
Percent of People with Disability



Source: 2020 US Census American Community Survey 5-Year Data - S1810 Table

Figure 20

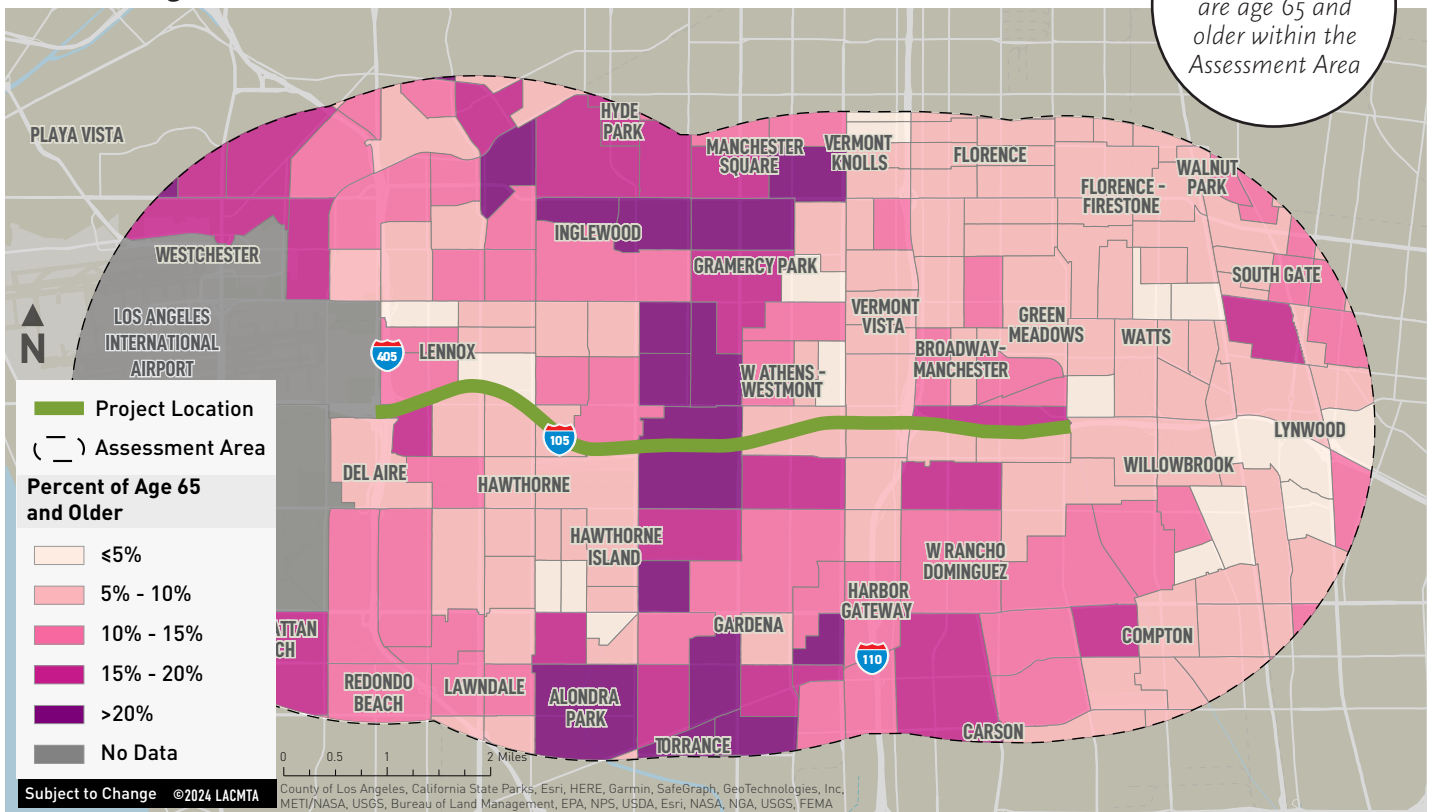
Percent of Under 18 Age



Source: 2020 US Census American Community Survey 5-Year Data - S0101 Table

Figure 21

Percent of Age 65 and Older



Source: 2020 US Census American Community Survey 5-Year Data - S0101 Table

PM 2.5 Levels

Particulate matter (PM) is a complex mixture of aerosolized solid and liquid particles and the solid particles in PM are known as diesel particulate matter (DPM). The average level of fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller (PM_{2.5}) in the corridor is at the 81st percentile, surpassing 81% of communities within California. According to the California Air Resources Board, “short-term exposures...have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days.”

Levels of PM_{2.5} are elevated in the communities of Willowbrook-West Rancho Dominguez, Harbor Gateway, Florence-Firestone, and the City of Compton as shown in Figure 23, indicating that they exceed those in 88% of communities in the State.

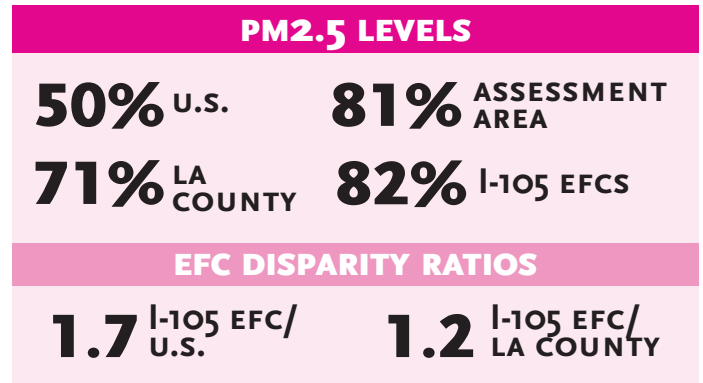
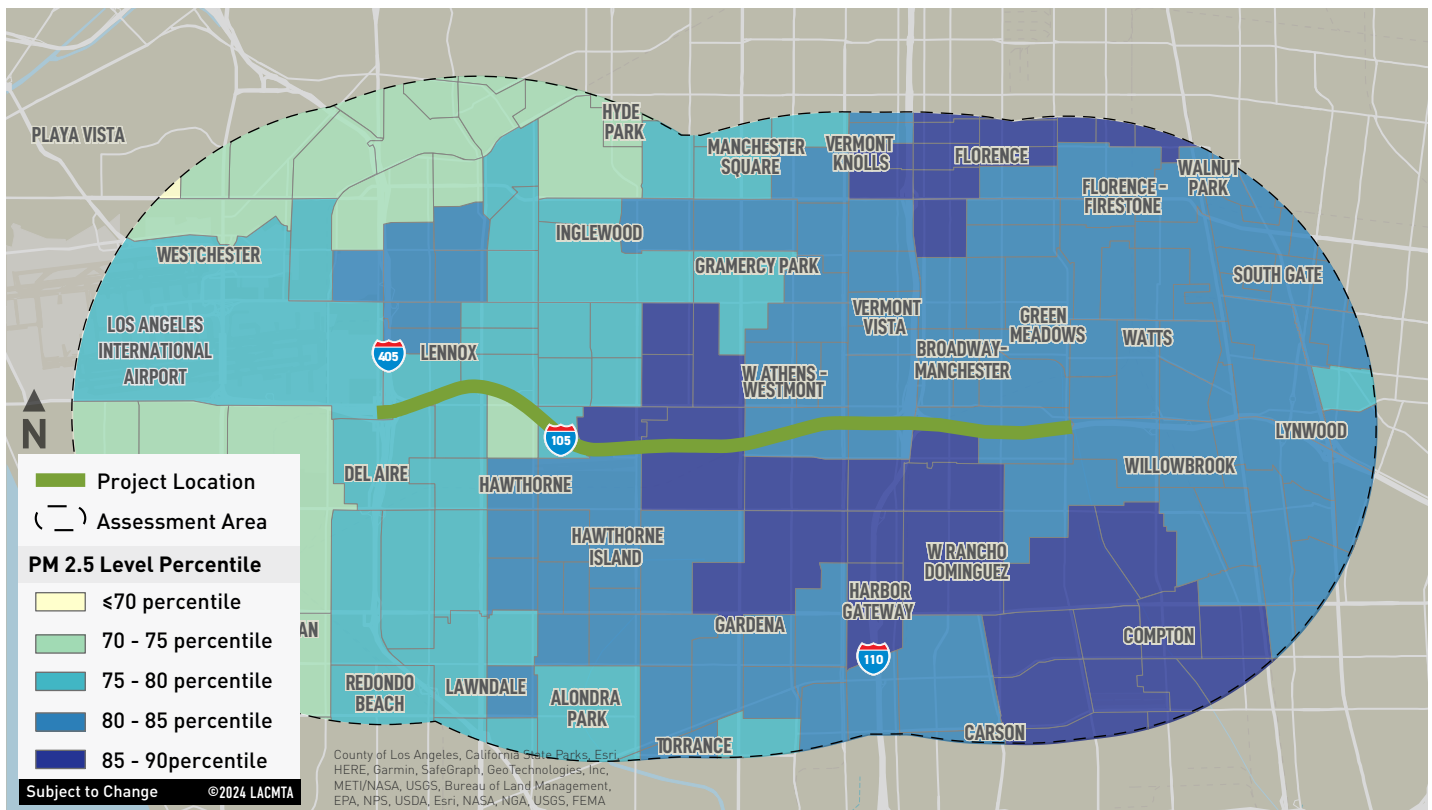


Figure 23

PM 2.5 Level Percentile



Source: Office of Environmental Health Hazard Assessment

Tree Canopy

Tree canopy is defined as the layer of foliage, branches, and stems that sits somewhere between the ground and sky. Tree canopy plays a vital role in contributing to the well-being of communities and people. Beyond its aesthetic contribution to streetscapes, a thriving tree canopy enhances the overall environment of urban areas by filtering air and water, contribute to traffic calming, and add to community identity. Trees provide natural shade and reduce the heat absorbed by pavement. This cooling effect is particularly significant for pedestrians and cyclists during the summer months.

Notable coverage patches exist south of the I-105 within the communities of Willowbrook and along the Alameda corridor. Portions of the Cities of Hawthorne, Gardena, Inglewood, Compton, and unincorporated areas of Florence-Firestone, and West Rancho Dominguez have some of the lowest tree canopy coverage (3% to 7%) in Los Angeles County.

Using data from Loyola Marymount University, the tree canopy coverage within the project area was assessed (Figure 24). The data use high-resolution imagery to analyze existing conditions and different types of land coverage. Approximately 98% of the project area has a tree canopy coverage less than the Los Angeles County average.

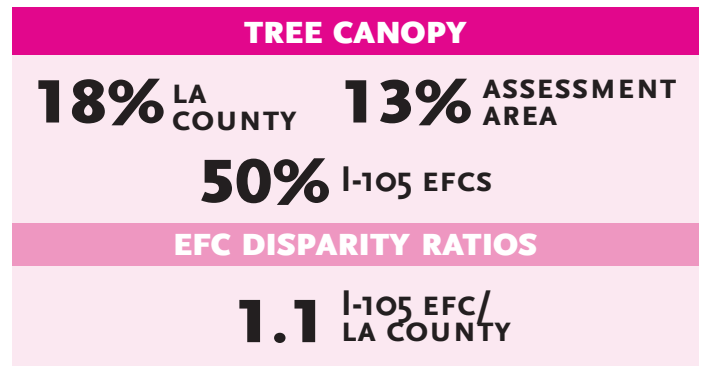
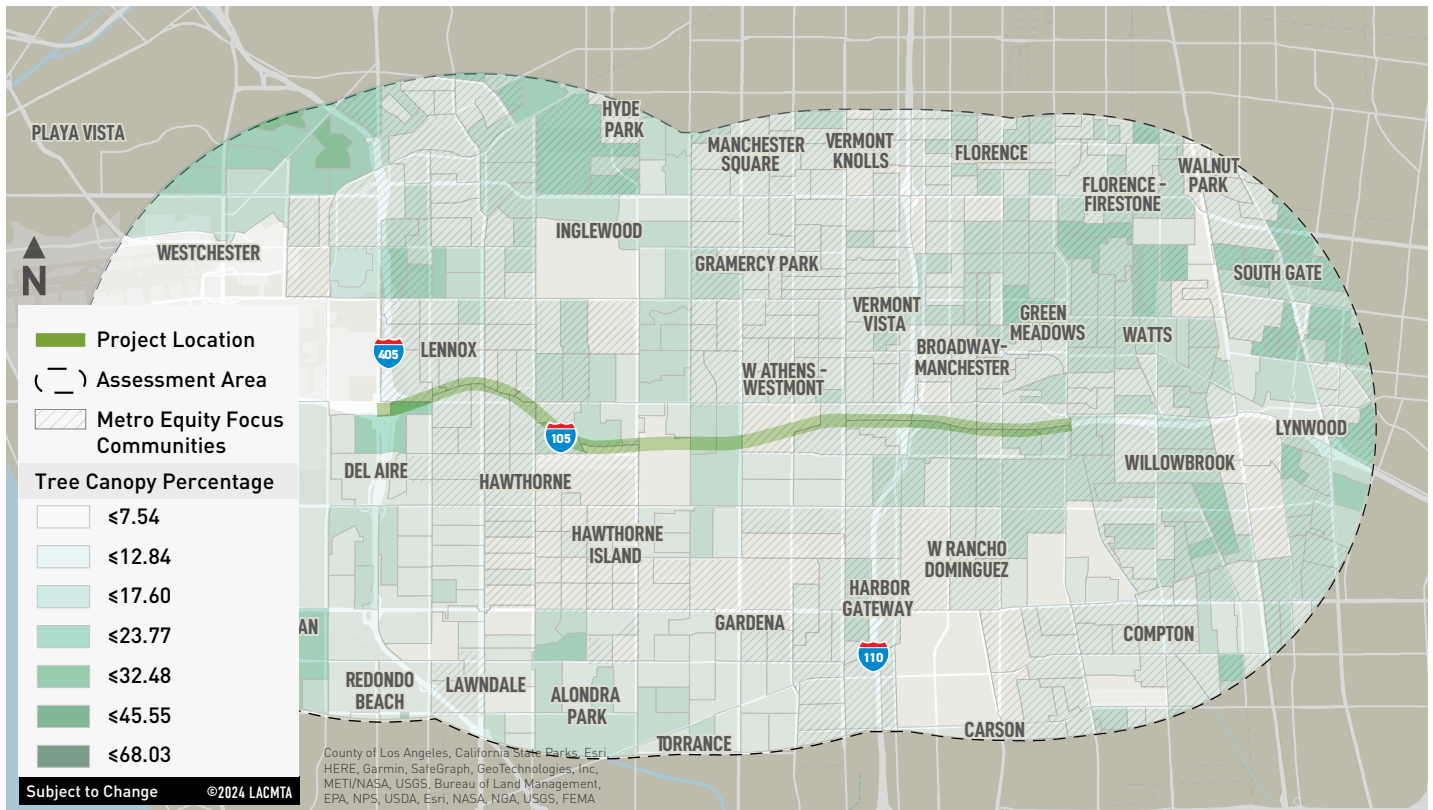


Figure 24

Tree Canopy



Source: Loyola Marymount University and TreePeople

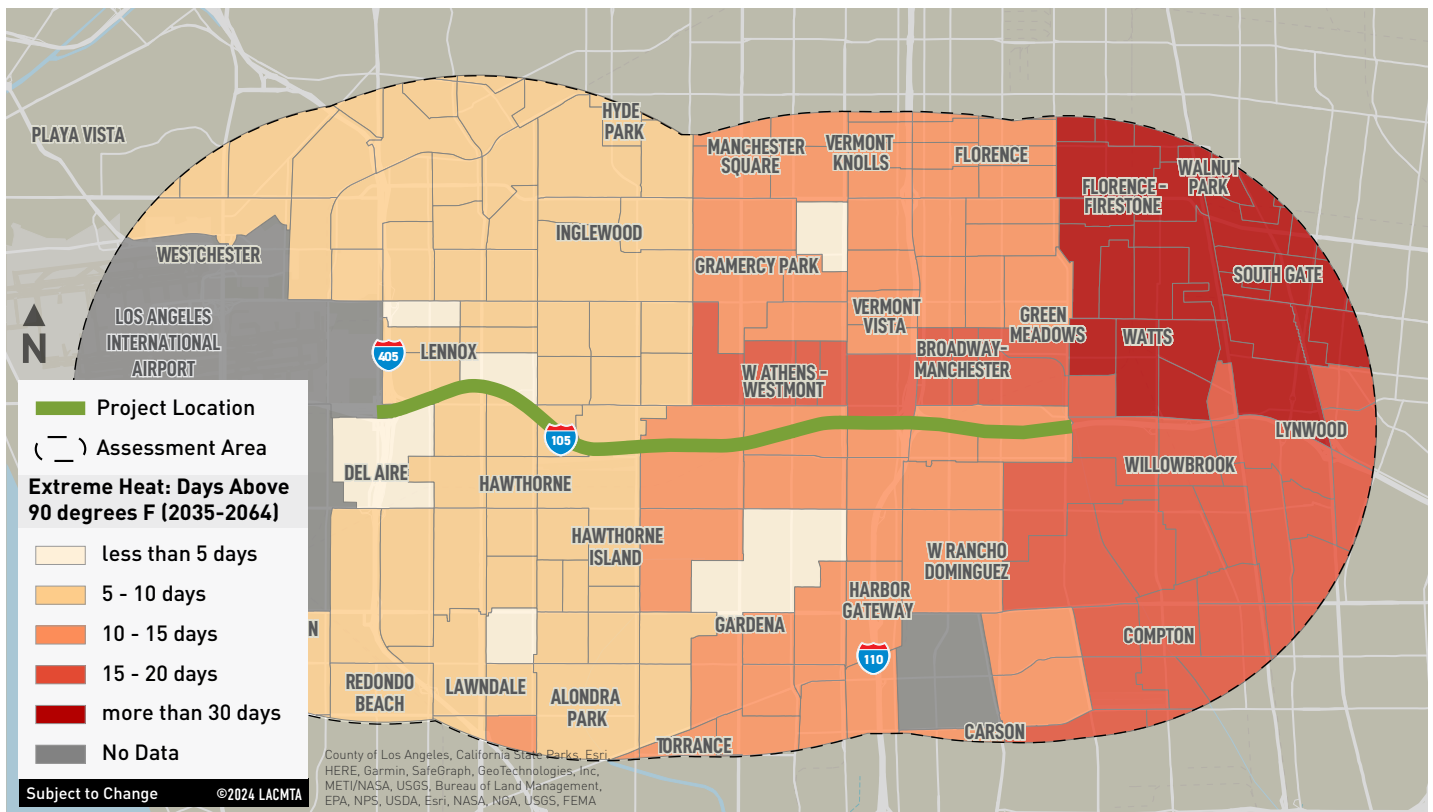
Urban Heat Island Effect

Urban areas as a result become “islands” of higher temperatures, up to 7 degrees Fahrenheit (°F) higher than temperatures in non-urban areas. Due to the close proximity of the Pacific Ocean, the western portions of the project area tend to experience the urban heat island effect to a smaller extent than inland areas (Guo et al. 2023). Based on data from the [California Healthy Places Index](#), the eastern portions of the Assessment Area (Figure 25) are projected to experience up to 44 days above 90°F by 2064. In contrast to the western portions, which are expected to experience up to 8 days above 90°F.

Rising temperatures discourage transit ridership as well as active mobility, especially in areas with low tree canopy cover. Bus stops that lack bus shelters are unable to provide shade for transit riders on hot days. Investments into tree canopy and shade structures reduce the impacts of extreme heat making it more comfortable and encourage non-vehicular mobility.

Figure 25

Extreme Heat Days



Source: Public Health Alliance of Southern California

Asthma Rate

Asthma is a chronic condition that affects the lungs, leading to inflamed and narrowed airways. High traffic volumes and associated tailpipe emissions, as well as harmful pollutants emitted from industrial facilities, cause poor air quality conditions along the I-105 corridor. Air pollution aggravates asthma, contributing to emergency department visits. Within the Assessment Area (Figure 26), there are 260,900 people living in areas where there are more than 100 asthma emergency room visits annually. Asthma contributes to elevated medical costs and decreases quality of life, contributing to health and socioeconomic disparities in equity focus communities.

According to the Centers for Disease Control, one in ten children have asthma (CDC 2011) and one in five individuals experiencing asthma cannot afford medication (CDC 2010).

Improving air quality through mode shift to walking, biking, and transit will reduce greenhouse gas emissions. This would help reduce asthma rates, decreasing medical costs while improving the health of the population within the Assessment Area.

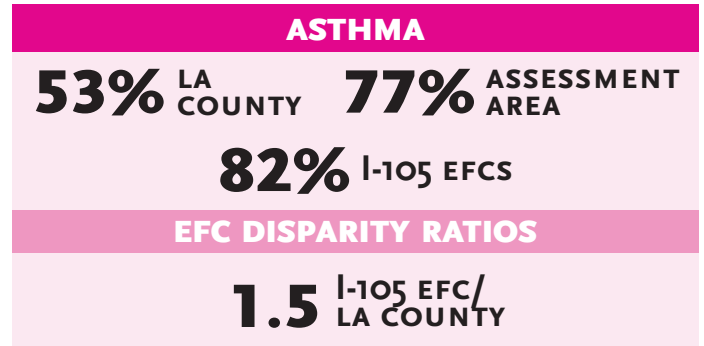
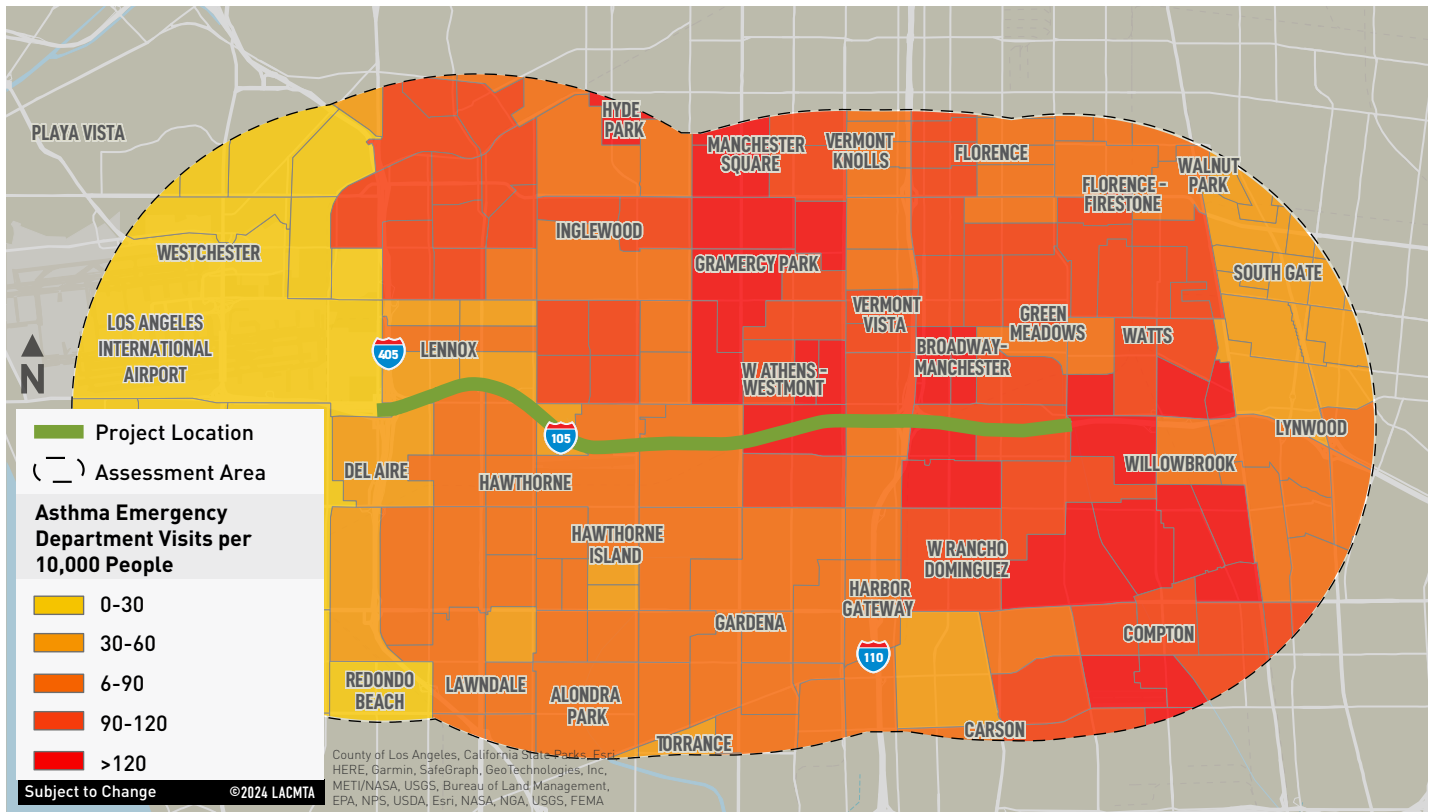


Figure 26
Asthma Emergency Department Visits per 10,000 People



Source: California Office of Environmental Health Hazard Assessment

Park Acres

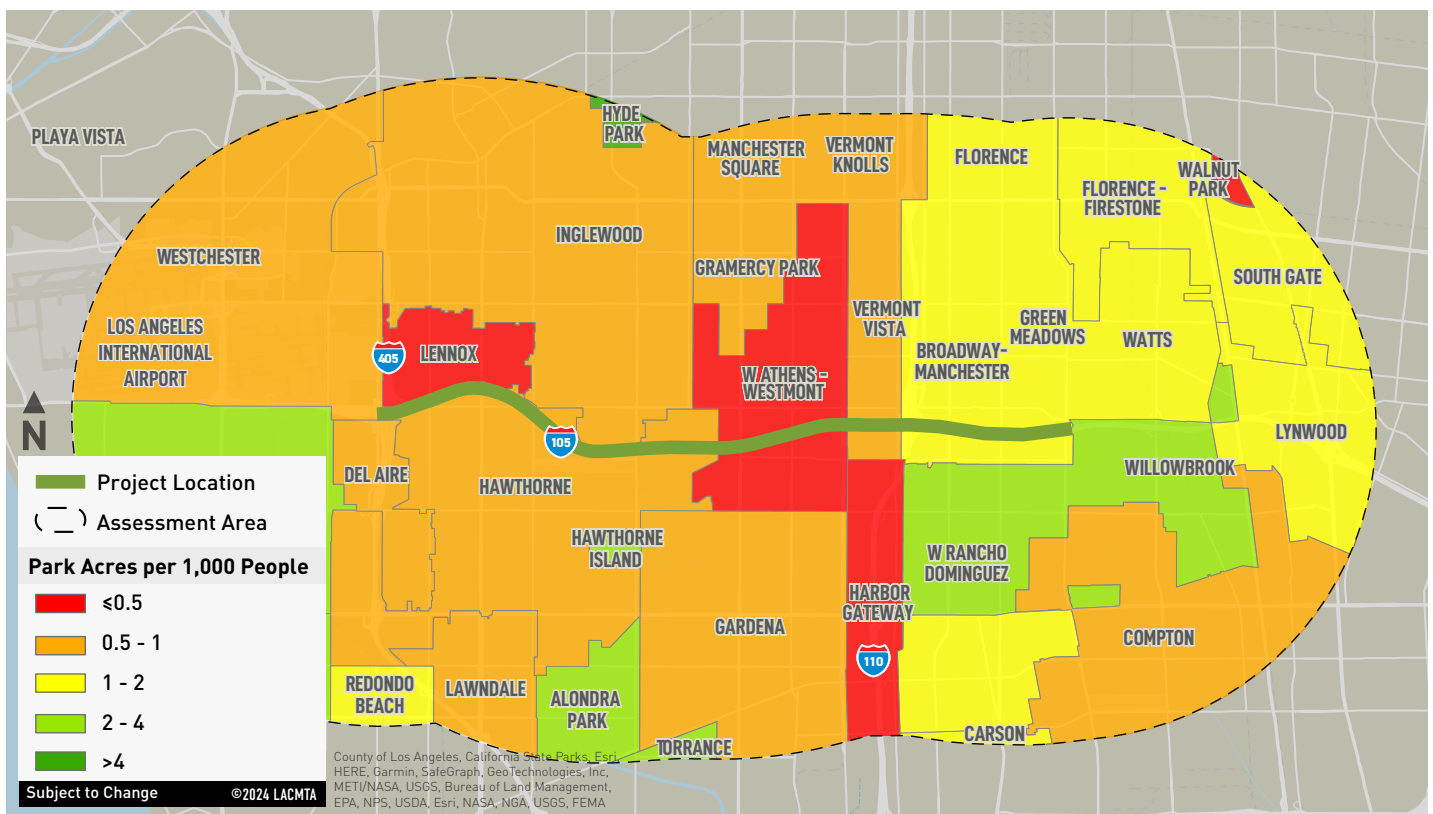
The Los Angeles County Department of Parks and Recreation (DPR) prepared the Los Angeles Countywide Parks and Recreation Needs Assessment (PNA), a comprehensive study of the diverse parks and recreation facilities throughout Los Angeles County’s cities and unincorporated communities. The PNA gathered data to determine the scope, scale, and location of park needs in Los Angeles County.

As seen in Figure 27 that depicts the results of the PNA, significant disparities exist across the corridor regarding accessibility to park spaces. Several communities—Harbor Gateway, Lennox, Walnut Park, and Westmont-West Athens—are park deserts where there is under 1 acre of park space per 1,000 residents. Access to parks and open spaces is crucial for offering residents opportunities for recreation and exercise, which provide physical and mental health benefits. Furthermore, substantial research has found that green spaces offer both mental and physical health benefits.



Figure 27

Park Acres per 1,000 People



Source: Los Angeles County Department of Parks and Recreation



Transportation

Active Transportation

Active transportation consists of walking, biking, and rolling modes of transportation. It enhances the quality of life for those who live, work, and play in Los Angeles County. With active transportation options (Figure 28), transportation costs are reduced, GHG emissions and traffic congestion are decreased, and public health is promoted through more opportunities for physical activity.

The Southern California Association of Governments (SCAG) conducted a collision analysis and found that 65% of all fatal and serious injuries occurred on 5.5% of the regional transportation network. Within the Assessment Area, approximately 268 miles of roadways are considered part of SCAG's high-injury network. Reductions in collisions along the high-injury network are crucial to improving the attractiveness of active transportation within the Assessment Area. The SCAG high injury network and collision heat map are mapped and overlaid on Figure 29.

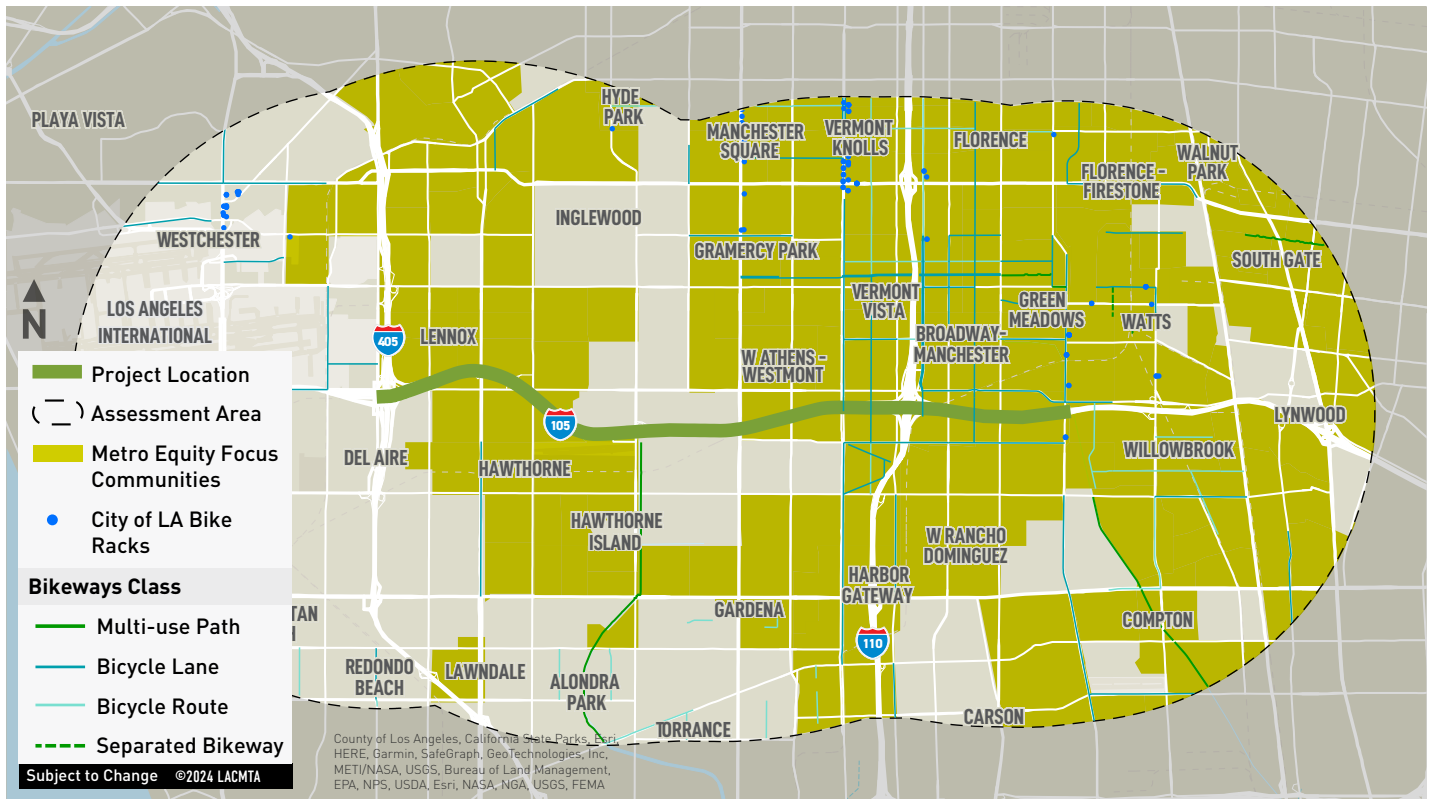
Within the I-105 corridor, fatal and severe collisions involving pedestrians and bicyclists are concentrated in the northeast portion of the corridor. Despite the existence of active transportation infrastructure within the Assessment Area, the concentration of collisions here underscores the need for investments to improve the existing infrastructure. Additional investments are likewise needed throughout the Assessment Area to ensure a contiguous and safe active transportation network.

ACTIVE TRANSPORTATION COLLISION DATA IN THE LAST 5 YEARS BY THE NUMBERS

3,061	BICYCLIST AND PEDESTRIAN COLLISIONS WITHIN THE PROJECT AREA
82%	OF BICYCLIST AND PEDESTRIAN COLLISIONS WITHIN EFCS IN THE PROJECT AREA
158	PEDESTRIAN FATALITIES
28	BICYCLE FATALITIES

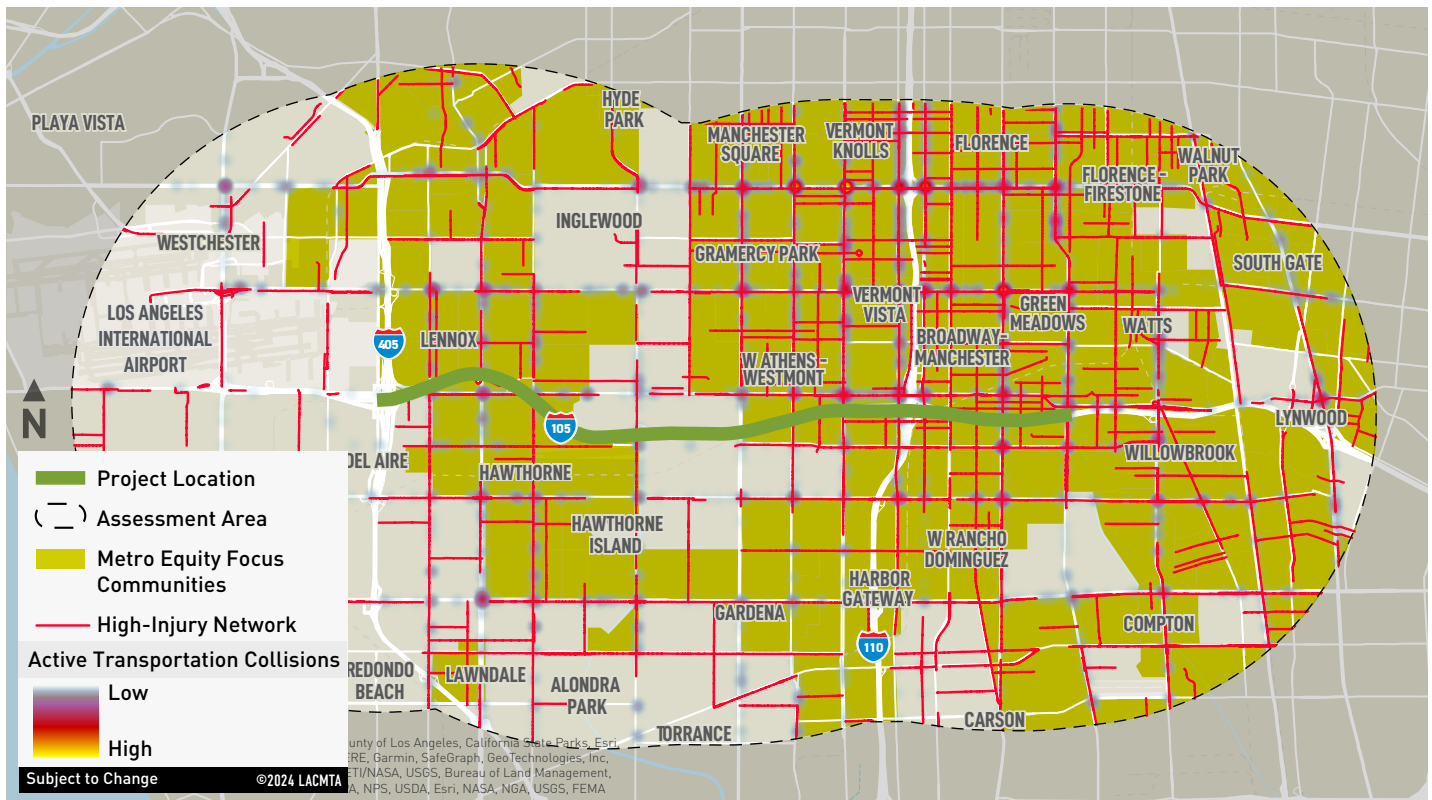


Figure 28
Bikeway Network



Source: Metro and City of Los Angeles
 Note: The data represented in the map may be outdated and not reflect actual conditions.

Figure 29
High Injury Network and Collisions Heat Map



Source: Southern California Association of Governments and University of California, Berkeley

Transit

Transit service in the Assessment Area consists of rail and bus service. Bus service includes local and circulator buses, the Metro Rapid Line, freeway express bus lines, and the Metro J Line bus rapid transit with stations along I-110, which is partially funded through the I-110 ExpressLanes program. All rail services and most bus services are provided by Metro.

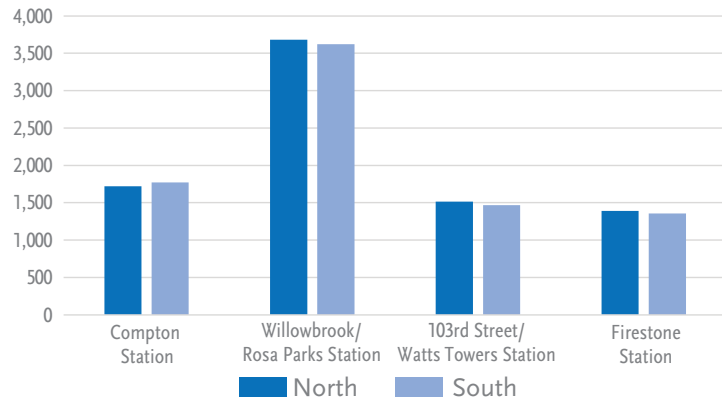
Rail

The A Line has experienced a resurgence because of the completed Regional Connector project which consolidated three of Metro’s legacy rail lines, the A (Blue), E (Expo), and L (Gold) Lines, into two: the A Line, serving customers between Azusa and Long Beach; and the E Line, serving customers between East Los Angeles and Santa Monica. With the full opening of the K Line segment that connects with the C Line, it is anticipated that the C Line will see an uptick in ridership as the Metro Rail system becomes even more connected and seamless.



Figure 30

Metro A Line Average Weekday Boardings by Stop and Direction within Assessment Area



TOP 3 HIGHEST RIDERSHIP A LINE STATIONS

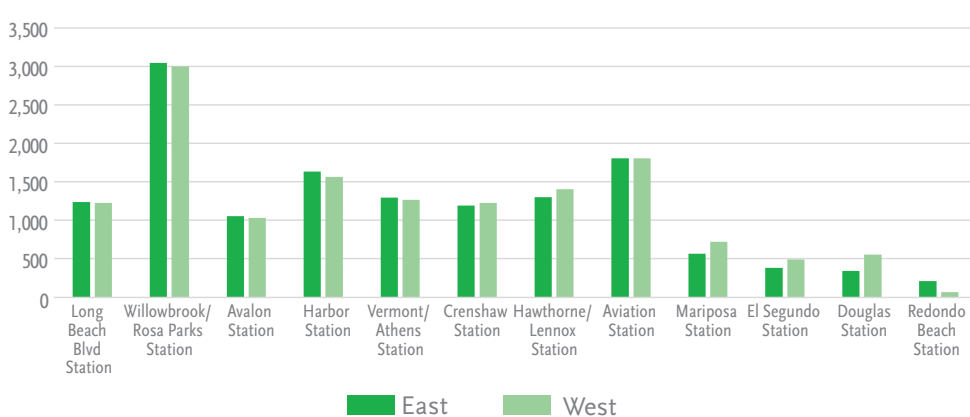
1. Willowbrook/Rosa Parks Station*
2. Anaheim Street Station
3. Florence Station

* within assessment area

Source: Metro, 2023

Figure 31

Metro C Line Average Weekday Boardings by Stop and Direction within Assessment Area



TOP 3 HIGHEST RIDERSHIP C LINE STATIONS

1. Willowbrook/Rosa Parks Station*
2. Aviation Station*
3. Harbor Freeway Station*

* within assessment area

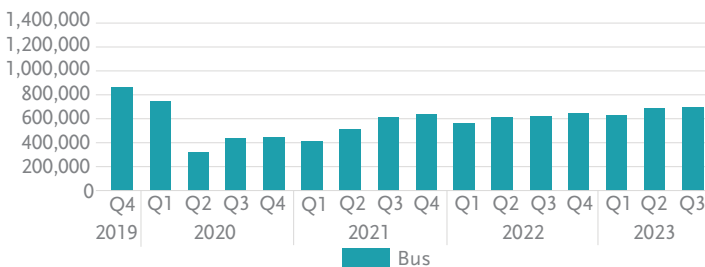
Source: Metro, 2023

Bus

Since the pandemic, bus ridership is recovering and trending upward. As of September 2023, bus ridership is at 81% of its levels in September 2019, before the pandemic. Figure 32 shows the average daily Metro bus ridership by bus station or stop within the project area. The Metro bus lines running within and through the project area account for approximately 9% of Metro’s total bus ridership. The J Line is one of two Metro bus rapid transit (BRT) lines that run primarily along the I-110 Harbor Transitway. All three J Line stations within the Assessment Area are within the top 10 highest ridership stations for the J Line.

Figure 32

Average Bus Weekday Ridership By Quarter



The available Metro data estimate that only 24% of bus stops served by Metro buses and other municipal transit operators have shelters, and only 46% have seating, exacerbating conditions for people with limited mobility and older adults. Figure 33 shows a lack of bus shelters and benches south of I-105, especially compared to the areas north of I-105. Century Boulevard has the highest concentration of bus shelters, and Manchester Avenue has the highest concentration of bus benches within the assessment area.

BUS SHELTERS WITHIN THE ASSESSMENT AREA

80% OF BUS SHELTERS ARE WITHIN EQUITY FOCUS COMMUNITIES

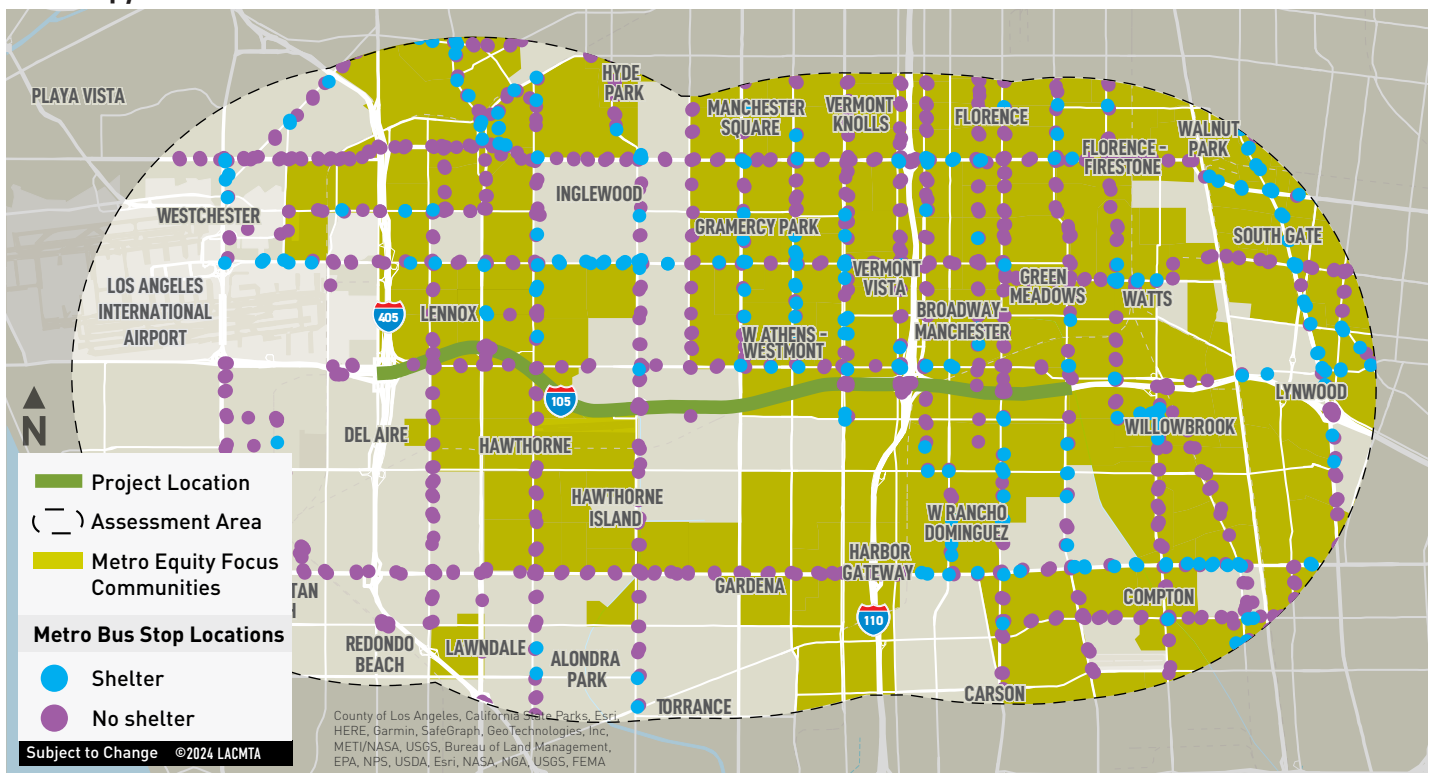
77 OF BUS BENCHES ARE WITHIN EQUITY FOCUS COMMUNITIES

TOP 3 CITIES HIGHEST PERCENTAGE OF BUS SHELTERS

LOS ANGELES, INGLEWOOD, COMPTON

Figure 33

Bus Stop/Stations and Amenities



Source: Metro, January 2023

Roadway

Within the Assessment Area, nearly all the major arterials are part of Metro’s Countywide Significant Arterial Network and Countywide Strategic Truck Arterial Network. Eight of the major arterials have on-/off-ramp access to the I-105 freeway. The arterials with the most average annual daily traffic (AADT) are Sepulveda Blvd and Century Blvd, exceeding 40,000 AADT, with the highest concentration near LAX. Other major arterials with a segment of roadway that ranges between 20,000 and 40,000 AADT include Manchester Blvd/Firestone Blvd, Imperial Hwy, El Segundo Blvd, Rosecrans Ave, Redondo Beach Blvd/ Compton Ave, Avalon Blvd, Hawthorne Blvd, Prairie Ave, Crenshaw Blvd, Western Ave, Figueroa St, Central Ave, Alameda St, and Long Beach Blvd. Refer to Figure 34 for a map showing AADT within the Assessment Area.

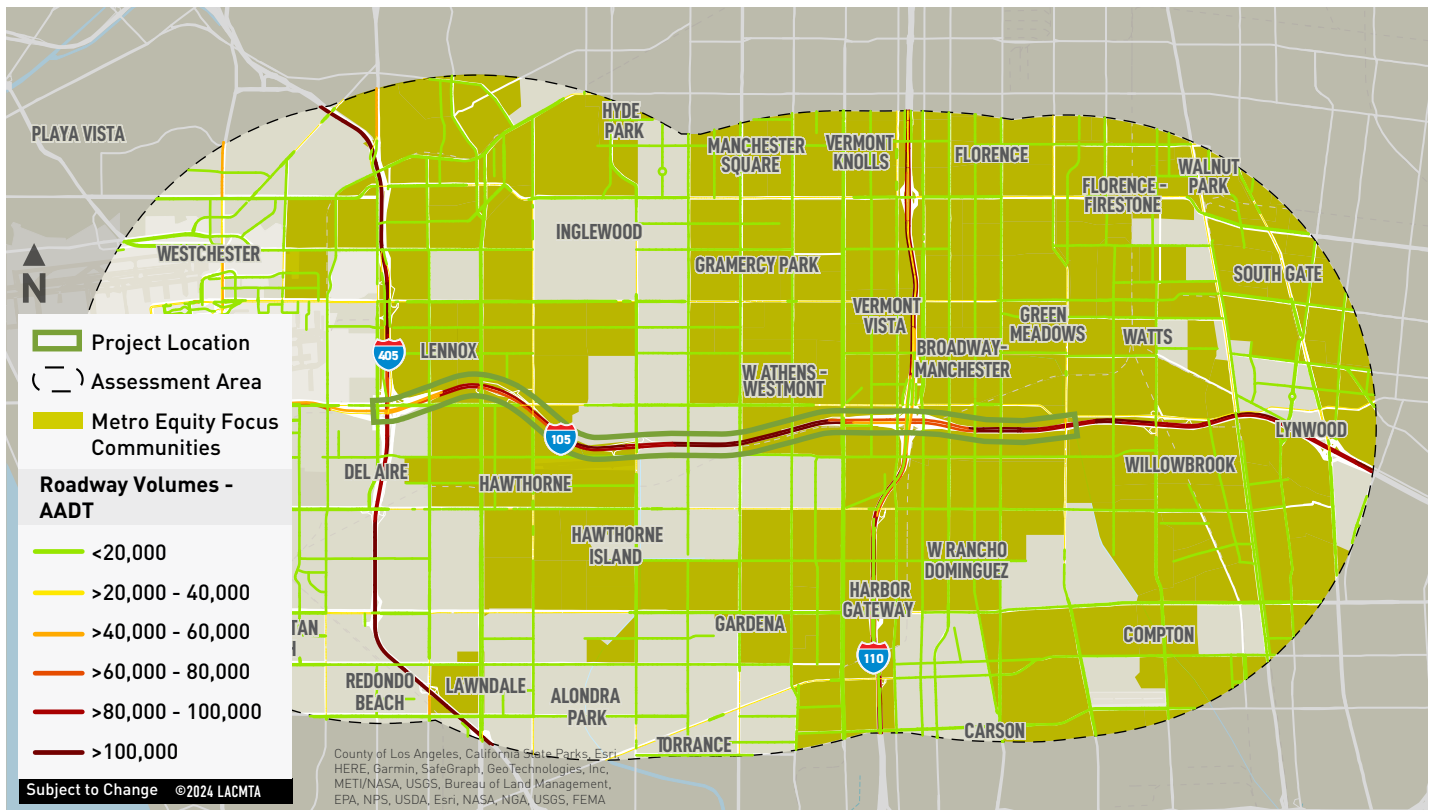
Truck traffic along I-105 between I-405 and I-110 ranges from 15,000 to 20,000 trucks per day, and west of the I-405 freeway truck traffic is less than 10,000 trucks per day (Los Angeles

County Goods Movement Strategic Plan, 2021). Truck volume along I-105 Segment 1 is typical of urban freeway in the region, while Segments 2 and 3 carry a significantly higher number of trucks due to the I-710 freeway and geographic proximity to the Ports of Los Angeles and Long Beach.



Figure 34

Roadway Volumes – Average Annual Daily Traffic



Source: StreetLight Data, 2023

ROADWAYS BY THE NUMBERS



FASTEST CORRIDOR(S)

NORMANDIE AVENUE AND WESTERN AVENUE ARE THE FASTEST CORRIDORS IN THE PROJECT AREA WITH AN AVERAGE SPEED OF 30 MILES PER HOUR (MPH).



WIDEST CORRIDOR(S)

CRENSHAW BOULEVARD AND VERMONT AVENUE ARE THE WIDEST CORRIDORS, REACHING UP TO 160 FEET WIDE.



HIGHEST CAPACITY CORRIDOR(S)

SEPULVEDA BOULEVARD, HAWTHORNE BOULEVARD, CENTURY BOULEVARD, AND EL SEGUNDO BOULEVARD HAVE SEGMENTS WITH UP TO EIGHT TRAVEL LANES.



SIGNALIZED CORRIDOR(S)

MANCHESTER AVENUE AND HAWTHORNE BOULEVARD/LA BREA AVENUE HAVE THE MOST SIGNALIZED INTERSECTIONS PER MILE WITH SIX SIGNALIZED INTERSECTIONS PER MILE.



DANGEROUS CORRIDOR(S)

MANCHESTER AVENUE AND CENTRAL AVENUE EXPERIENCE THE MOST ACCIDENTS PER MILE.



I-105 HOV Data

I-105 HOV occupancy data are based on available data from Caltrans District 7's 2019 Managed Lanes Annual Report. The report is summarized in Table 2 and includes data for two locations along the I-105 freeway: Long Beach Boulevard and Lakewood Boulevard. Although Lakewood Boulevard is not within the Assessment Area, it is used for comparison purposes to indicate that HOV demand is consistent in both locations. The peak carpool volume along I-105 is nearly 1,400 vehicles per hour, which is equivalent to approximately 3,000 people per hour. Transit use of the HOV lane is limited during peak hours primarily due to the Metro C Line running along the median of I-105.

Table 2. Existing I-105 HOV Lanes Occupancy Data

DESCRIPTION	METRIC	WB I-105 AT LONG BEACH BLVD	EB I-105 AT LONG BEACH BLVD
Peak Hour Number and Percentage of Vehicles using HOV Lane	Carpools (vehicles with two to five occupants only)	71%	70%
	Vanpools/buses	1%	5%
	Motorcycles	5%	5%
	Exempt vehicles (decal vehicles)	9%	8%
	Violators (single-occupant vehicles)	14%	12%
Average Occupancy During Peak Hour	HOV lane average occupancy (people per vehicle)	1.9	2.1
	General purpose lane average occupancy (people per vehicle)	1.1	1.1

Source: 2019 Caltrans District 7 Managed Lanes Annual Report

Travel to Work Modal Split

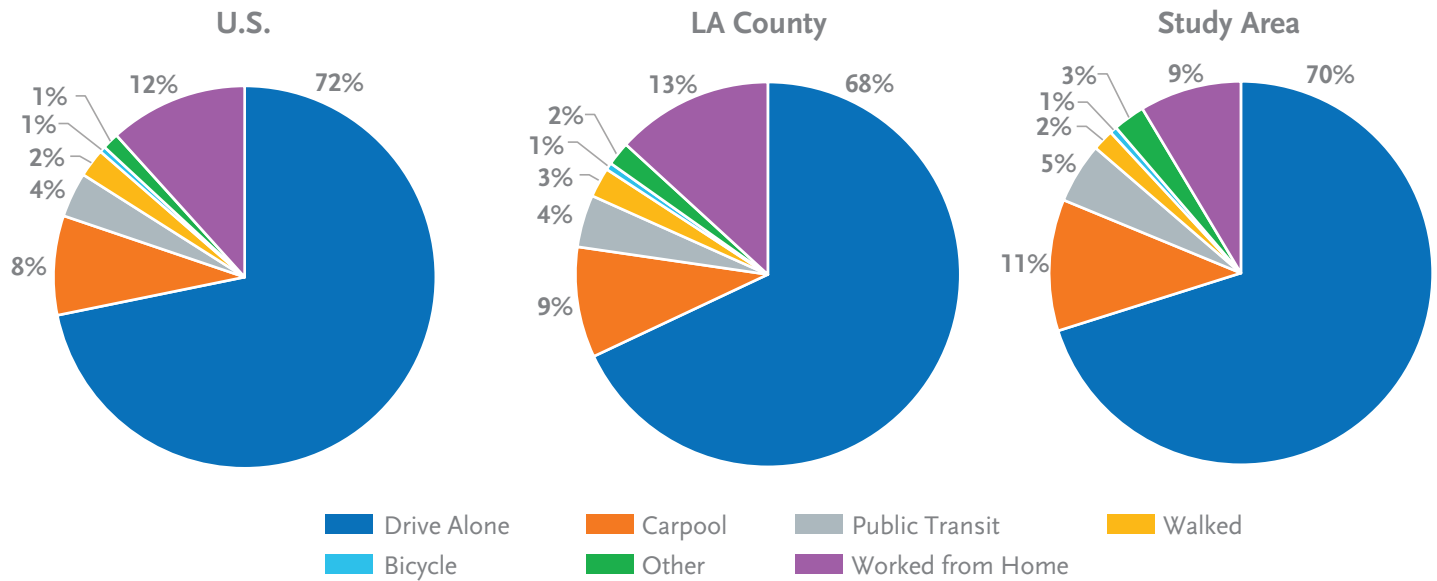
The 2020 US Census American Community Survey 5-Year Data provides insight into the modal split for how people travel to work, reflecting the availability and quality of multimodal infrastructure and user preferences. As a result of the pandemic, the percentage of work from home at the national and county levels has significantly increased. Within Los Angeles County, the data shows that driving alone and carpooling continue to be the predominant modes of transportation for people to get to work, indicating a strong dependency on private automobiles in the region.

Specifically, within the Assessment Area, 70% of people drive alone to work, 11% carpool to work, 5% take public transit to work, 2% walk to work, 1% bike to work, and 9% work from home. The existing mode split means the I-105 and arterial network carries high volumes of vehicles and suffers from the resulting congested conditions and traffic-related impacts. These conditions affect the quality of life of those traveling through and living in the Assessment Area. Reduced travel time on I-105 resulting from the ExpressLanes project is expected to shift traffic volume from arterials to I-105 which will benefit communities in the corridor.

Figure 35 and 36 display the transit to work mode share in the Assessment Area. The transit mode split within the Assessment Area is higher than in Los Angeles County, likely due to a high EFC population and the three major Metro lines across the Assessment Area. Another notable difference is that the assessment area has a lower percentage of work from home than Los Angeles County. Correlating to the employment data previously presented, the four most prevalent job sectors for residents within the Assessment Area are generally blue-collar jobs that do not permit work from home. This likely contributes to a slightly higher percentage of people driving alone and carpooling to work than the rest of Los Angeles County.

Figure 35

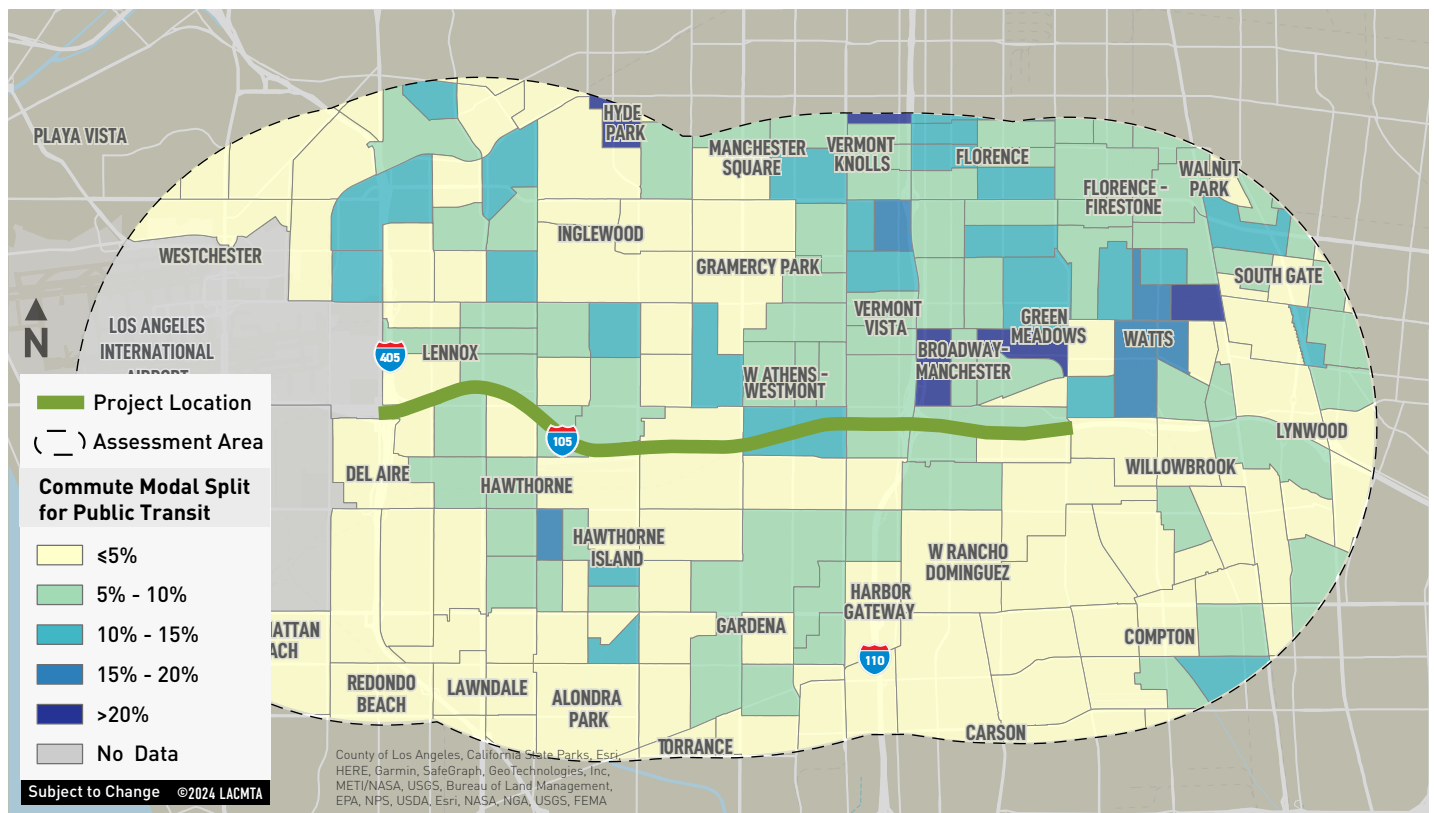
Travel to Work Modal Split Comparison



Source: 2022 US Census American Community Survey 5-Year Data - So801 Table

Figure 36

Transit to Work Mode Split



Source: 2022 US Census American Community Survey 5-Year Data - So801 Table

CHAPTER 4

Community Engagement

Community-driven conversations are essential, but engagement efforts must ensure that community members are left feeling heard and respected. A successful outcome for this Study required a commitment to authentic listening and learning, and meaningful community outreach and engagement. Involving the public in decision-making processes ensures more informed and inclusive outcomes. Throughout the processes, the public has been integral, receiving project information and providing feedback through various avenues such as attending public meetings, providing comments, contributing to surveys, and engaging in community meetings and events, and also via partnerships with various local community-based, faith-based, and community-development based organizations.





Community-based Organization Partnerships

Community-based organizations (CBOs) are vital to the economy, social service networks, and communities Metro serves. Furthermore, they are key players in civic life, public policy, and public program provision. Following the best practices outlined in Metro's CBO Partnering Strategy, the agency partnered with CBOs in a variety of ways and for diverse purposes. The following describes the process and the CBOs that were engaged for the I-105 ExpressLanes Segment 1 Equity Assessment.

Establishing a comprehensive and representative list of up to 20 CBO partners was the priority from the onset of the assessment. Metro reviewed past CBO engagement during the I-105 ExpressLanes Project Approval and Environmental Documentation (PA/ED) phase of the project. Then Metro augmented the list by examining the newly created CBO Database, which aims to centralize CBO contact information across multiple Metro departments, promote consistent communication, and provide a platform to track CBO relationships and partnership opportunities. More than 80 organizations were identified as potential candidates for this effort who currently serve the cities of Compton, El Segundo, Gardena, Hawthorne, Inglewood, Lawndale, Los Angeles, Lynwood, and South Gate, as well as unincorporated areas of LA County within the I-105 ExpressLanes Segment 1 corridor.

Metro initiated contact with these CBOs through an interest form that consisted of various questions to gauge their interest and evaluate their potential participation as a CBO partner for the Assessment. The interest form provided an initial screening of CBOs that were impartial, had the resources to support the project, and present a diverse set of constituents. The interest form consisted of 20 questions, such as:

- > Who is your organization's intended audience and which areas of interest does your organization focus on?
- > In which city(ies) or unincorporated community(ies) does your organization serve?
- > Would your organization be willing to remain neutral and impartial when sharing project information with the public as well as your organization's general stance on the I-105 ExpressLanes project?
- > Describe what perspective your organization may be able to offer at the monthly roundtable meetings
- > Are there any barriers or limitations to your organization participating in the monthly roundtable meetings?

COMMUNITY AND PUBLIC PARTICIPATION BY THE NUMBERS

4 POP-UPS/EVENTS WITHIN THE PROJECT AREA

20 COMMUNITY MEMBERS PARTICIPATED IN THE WALK AUDIT

10 CBO ROUNDTABLES MEETINGS

850+ RESPONSES TO THE TRAVEL SURVEY

16 CBO PARTNERS

920+ PEOPLE ENGAGED AT TRANSIT INTERCEPT SURVEYS

Based on the responses received, Metro invited all 16 interested CBOs to be a CBO partner. These CBO partners, representing a variety of communities along the Segment 1 corridor are as follows:

1. **Ascension Catholic Church** – Their mission is to create a multicultural community that welcomes everyone to love and worship while serving the community.
2. **Charles R. Drew University of Medicine and Science** – A private, nonprofit, student-centered university committed to cultivating diverse health professional leaders with a focus on social justice and health equity for underserved populations.
3. **Asian Business Association** – Represents Asian American business owners and creates business opportunities for its members and their diverse communities.
4. **East Side Riders Bike Club** – A volunteer organization in Watts that aims to strengthen “at-promise” communities by providing cycling and transportation education, advocacy, and community-building activities.
5. **Inglewood Airport Area Chamber of Commerce** – The chamber’s mission is to provide leadership and value to members by promoting an environment where businesses, organizations, and communities can position themselves for success and enhance the quality of life in Inglewood and neighboring communities.
6. **LAX Coastal Chamber of Commerce** – This chamber promotes business and enhances community vitality for Westchester/LAX, Marina Del Rey, Playa Vista, Playa Del Rey, and surrounding beach cities.
7. **LA South Chamber** – The LA South Chamber focuses on creating economic growth in South Los Angeles communities. They offer business development, networking, community engagement, and advocacy services.
8. **Los Angeles Walks** – Their mission is to activate and mobilize historically disinvested communities in Los Angeles, transforming streets into safe, accessible, and vibrant environments for people who walk.
9. **Loyola Marymount University** – This university offers undergraduate, graduate, and professional programs to academically ambitious students committed to lives of meaning and purpose.
10. **New Mount Pleasant Missionary Baptist Church** – Their mission is teaching, preaching, and outreach with a focus on cultural expression, addressing community needs, and serving Inglewood and beyond.
11. **Sisters of Watts** – This nonprofit aims to inspire generational change for the citizens of Watts. Their mission centers on uniting neighborhoods, promoting community, strengthening families, and forming meaningful relationships.
12. **South Bay Bicycle Coalition** – Advocates for safer streets for bicyclists by creating a network of connected bikeways, supporting mobility solutions and needs of all ages and abilities, promoting healthy activity in the South Bay cities.
13. **Street Racing Kills** – A non-profit organization passionate about creating awareness regarding the dangers of illegal street racing and reckless driving among youth and communities.
14. **Streets Are for Everyone** – Aims to improve the quality of life for pedestrians, bicyclists, and drivers by reducing traffic fatalities to zero. They focus on community planning, civic engagement, workforce development, and economic growth.
15. **Verbum Dei Jesuit High School** – Provides a college prep curriculum, corporate work experience, and faith formation for young men from supportive families of limited resources.
16. **Willowbrook Inclusion Network (WIN)** – A non-profit social enterprise dedicated to community planning, civic engagement, workforce development, and economic growth in the Willowbrook community.





CBO Roundtable Meetings

The project team hosted 10 monthly roundtable meetings to engage the project's 16 CBO partners. CBO partners not only represented their organization, but also the diverse communities they serve. The goal of these meetings was for Metro to gain a better understanding of the community's unique needs, collaborate on a list of potential projects that the community in general would support, and finalize a prioritized project list to share with the community and Metro Board.

Roundtable meetings lasted approximately an hour and a half and typically took place on the first Thursday of each month. During these meetings, the project team shared updates, explained the processes for preparing the proposed and prioritized lists, and provided opportunities for feedback from each of the CBOs. The Project Vision and Project Evaluation Criteria were developed through multiple discussions with the CBOs. The project team took detailed notes during each meeting to capture all feedback provided by CBO partners. Table 3 provides a summary of agenda topics for each monthly CBO roundtable.

Compensation

Consistent with Metro's Advisory Body Compensation (ABC) Policy, eligible CBO partners were compensated at a rate of \$100 per meeting for attending CBO roundtable meetings. In furtherance of the Equity Platform, the ABC Policy recognizes the expertise of community members and the value of their time, experience, and insights. Its use in the I-105 ExpressLanes Segment 1 Equity Assessment process yielded a high level of quality engagement and commitment from CBO partners.

Table 3. Summary of CBO Roundtables

CBO ROUNDTABLE MEETING NO.	DATE	PRIMARY AGENDA TOPICS
1	November 2, 2023	Introduction, overview of the project, and roles/responsibilities and expectations discussion
2	December 7, 2023	Review and feedback on vision statement, present data analysis
3	January 11, 2024	Review and feedback on evaluation criteria and walk audit training
4	January 26, 2024	Walk audits at Avalon Station
5	January 26, 2024	Walk audits at Hawthorne/Lennox Station
6	February 1, 2024	Recap findings and charette about potential improvements
7	April 4, 2024	Review and feedback on the project list and present results of the travel survey
8	May 2, 2024	Review updated project list and provide input on weights and scoring
9	June 6, 2024	Review and feedback on the draft prioritized project list and project report
10	September 5, 2024	Finalize prioritized project list and project report



Walk Audits

Metro and CBO partners conducted walk audits of a half-mile radius around the Metro Avalon and Hawthorne/Lennox Stations. These locations were selected based on data analysis, CBO feedback, and geographic representation of the 78-square-mile assessment area. The goal of the audit was to build a foundational understanding of the existing transportation system within the I-105 assessment area related to transit, active transportation, and roadway. The following were the key objectives of the walk audits:

- > Experience challenges and barriers of mobility within the corridor in-person with the community
- > Collect community members' expertise, insights, and qualitative feedback on existing conditions
- > Inform the identification and assessment of the project list

Community members were empowered to observe existing conditions by using their senses, like seeing, hearing,

smelling, and touching. They were also to identify what they liked and what they did not like. Community members were also given an improvements toolkit to envision potential solutions and what the conditions could be like in the future to help identify potential projects.

The walk audits began at Willowbrook/Rosa Park Station and included a presentation on the project, audit and safety training, and logistics planning. From there, participants rode the Metro C Line to the walk audit locations. Participants were split into two groups and fanned out from the C Line Station with one group doing the southern radius and the other group doing the northern radius. The audits took approximately 60 to 90 minutes to complete. Following the audits, participants rode back to the Willowbrook/Rosa Park Station to discuss their observations and suggestions to improve the locations. Table 4 provides a summary of the discussion, while Figure 37 and 38 share the details from the audit findings at the two locations.

Table 4. What we Heard and Potential Strategy

WHAT WE HEARD	POTENTIAL STRATEGY DISCUSSED WITH THE CBOs
<ul style="list-style-type: none"> > Poor conditions at underpasses > Inadequate lighting 	<ul style="list-style-type: none"> > Underpass improvements > Pedestrian-scaled lighting
<ul style="list-style-type: none"> > Cracked, uplifted, and narrow sidewalks > Debris on streets and sidewalks > Need more places to sit and rest comfortably 	<ul style="list-style-type: none"> > New or improved sidewalks > Street furniture
<ul style="list-style-type: none"> > Unclear, inconsistent, or missing signage 	<ul style="list-style-type: none"> > Wayfinding
<ul style="list-style-type: none"> > More visibility and safety needed at intersections for all modes 	<ul style="list-style-type: none"> > Curb extension > Curb ramps > High-visibility crosswalks
<ul style="list-style-type: none"> > More separation from traffic, protection and visibility needed for cyclists 	<ul style="list-style-type: none"> > Protected bicycle lane (Class IV) > Shared-used/off-street Path (Class I)
<ul style="list-style-type: none"> > More shade and tree cover needed 	<ul style="list-style-type: none"> > Shade structures > Street trees
<ul style="list-style-type: none"> > Noise from freeway traffic on C Line platforms 	<ul style="list-style-type: none"> > Sound walls and noise reductions strategies
<ul style="list-style-type: none"> > Access to more mobility options 	<ul style="list-style-type: none"> > Metro Bike Share Expansion



Figure 37

Avalon Blvd & 120th Street in the Unincorporated Area of Willowbrook

WALK AUDIT FINDINGS

1. Long block- no signalized intersections between 120th and 126th
2. Jurisdictional change between 120th and 121st – changes in bike infrastructure, wayfinding, and number of lanes
3. Nearby school, care facility, and church = vulnerable road users
4. Lack of crosswalks and ADA curb ramps



PROPOSED ACTIVE TRANSPORTATION IMPROVEMENTS BY WALK AUDIT/CBO PARTICIPANTS

1. Continue green-paint bike lanes south of 120th
2. Add yellow continental crosswalks at 121st
3. Add curb extensions at 120th and 121st intersections
4. Add ADA curb ramps
5. Add raised medians with landscaping at 121st along Avalon Blvd
6. Harden centerlines to prevent street takeovers

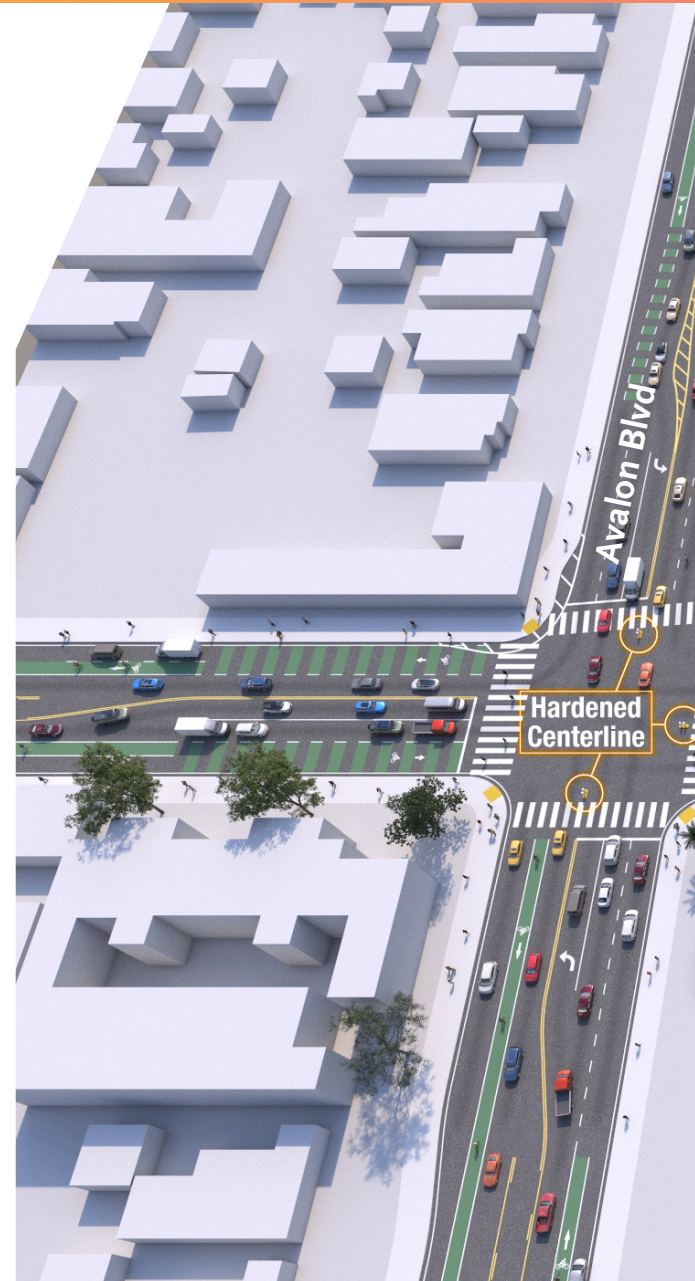




Figure 38

Hawthorne Blvd & I-105 On/Off-Ramps in the City of Hawthorne

WALK AUDIT FINDINGS

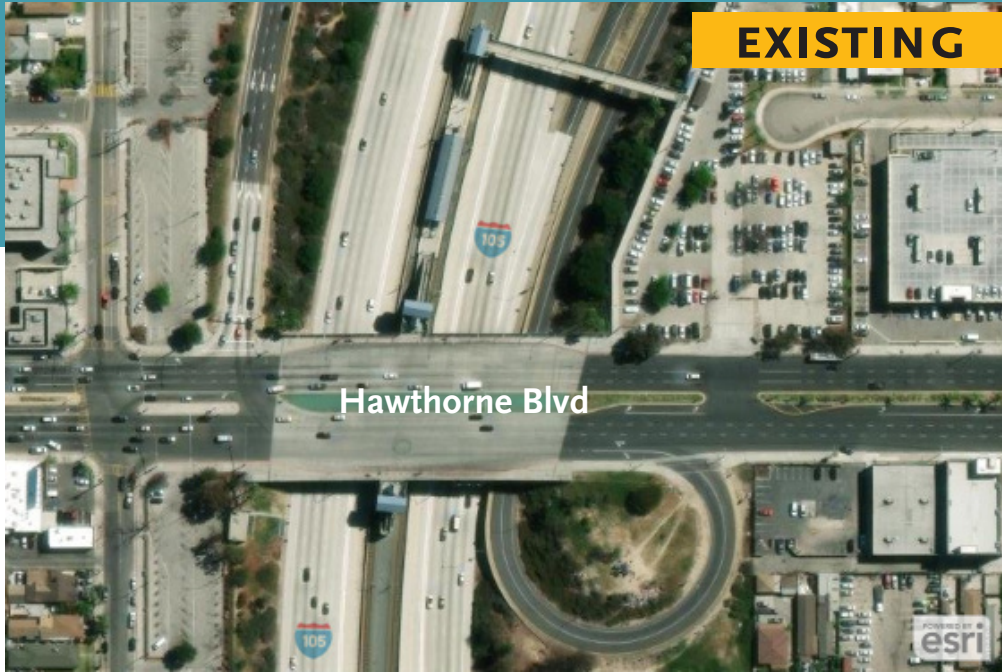
1. Cars do not yield or slow down to pedestrians at the I-105 EB on-ramp
2. Major transfer point between Metro rail/bus – need to know which exit to use
3. Lots of traffic and noise
4. Lack of shade
5. Encampments blocking sidewalk near the park-&-ride lots



PROPOSED ACTIVE TRANSPORTATION IMPROVEMENTS BY WALK AUDIT/CBO PARTICIPANTS

1. Install traffic signals or other safety measures at I-105 exit/entrance ramps to improve pedestrian safety
2. Repaint lanes to improve visibility
3. Improve bike lane signage, install protected bike lanes and bike parking
4. Install shading, bus shelters, street benches, and railing for pedestrians, fill in large puddles in front of bus stops
5. Replace broken sidewalks, widen sidewalks, widen and light up crosswalks, install bi-directional ramps, install more stop signs
6. Remove parking spaces near intersections to prevent congestion
7. Install dedicated bus lanes
8. Improve cleanliness and create a dedicated space for street vendors
9. Beautify medians with art and/or landscaping





EXISTING

Hawthorne Blvd

Hawthorne Blvd

Extended Sidewalk

Bike Share

Wayfinding

sidewalk

Bus Only Lane

Signage

Bus Shelter

PROPOSED IMPROVEMENTS FROM WALK AUDIT



Pop Up Events

Four pop-up events were hosted by the outreach team to spread awareness of the Equity Assessment Study, promote the travel survey, gain input from additional community members, and encourage sign-ups for continued project updates relating to the Assessment and upcoming construction. Each event provided project information, sign-in sheets, flyers promoting the travel survey, printed surveys, and tablets or laptops to encourage online completion of the travel survey during the event. These pop-ups took place in January 2024 within four different Segment 1 communities. Staffing of the four pop-ups was supported by the outreach team and a member of Sisters of Watts, one of the project's CBO partners. Details on the events staffed are provided below. Nearly 500 community members were engaged through these four pop-up events as shown in Table 5.



Table 5. List of Pop Up Events

DATE	COMMUNITY	EVENT NAME	NO. OF ENGAGEMENTS
Wednesday, January 24th, 2024	Watts	Food Distribution Event hosted by Eastside Riders Bike Club	250
Wednesday, January 24th, 2024	Willowbrook	Watts Willowbrook Farmers' Market at Martin Luther King, Jr. Community Hospital	85
Sunday, January 28th, 2024	Inglewood	Pop-up at New Mt. Pleasant Baptist Church	35
Thursday, February 1st, 2024	Lawndale/Torrance	Pop-up at El Camino College	108
Total =			478

“Leverage other projects already being planned to add more value to them.”

“Improve maintenance and cleanliness along the freeway.”

“Address safety and security and incorporate crime prevention through environmental design.”



Transit Intercept

To engage existing transit riders within the project corridor, the outreach team conducted eight transit intercepts at some of the busiest bus and rail stations throughout the Segment 1 corridor during morning and afternoon peak hours between Mondays and Thursdays in January 2024. The goal of these intercepts was to encourage transit riders to participate in the travel survey and provide them with an overview of the Equity Assessment Study. At each bus stop and rail station, staff provided flyers to riders and pedestrians and encouraged them to complete the survey while they waited for their bus or train or to take it during their ride. For each of the bus stops, staff moved to each corner of the intersection that had a bus stop to maximize engagement. Staffing was supported by the outreach team and members of Sisters of Watts, one of the project’s CBO partners. Over 900 community members were engaged through these eight transit intercepts as listed in Table 6.



Table 6. List of Transit Intercept

DATE	COMMUNITY	INTERCEPT LOCATION	NO. OF ENGAGEMENTS
Monday, January 22, 2024	South LA	Bus Stops: Manchester / Western	35
Monday, January 22, 2024	Gardena	Bus Stops: Harbor Transitway / Rosecrans	60
Tuesday, January 23, 2024	Florence Firestone	Bus Stops: Avalon / Manchester	150
Thursday, January 23, 2024	Hawthorne	Bus Stops: Hawthorne / El Segundo	27
Tuesday, January 23, 2024	Lawndale/ Torrance	Bus Stops: Crenshaw / Manhattan Beach (at El Camino College)	60
Thursday, January 25, 2024	West Athens	C Line: Vermont / Athens Station	180
Monday, January 29, 2024	Inglewood	Bus Stops: Century / La Brea	60
Wednesday, January 31, 2024	Willowbrook	C Line: Willowbrook / Rosa Parks Station	350
Total =			922

“Add more ingress/egress points for the ExpressLanes and make it more accessible by providing discounts for lower income populations.”

“Avoid any and all residential and business displacement.”



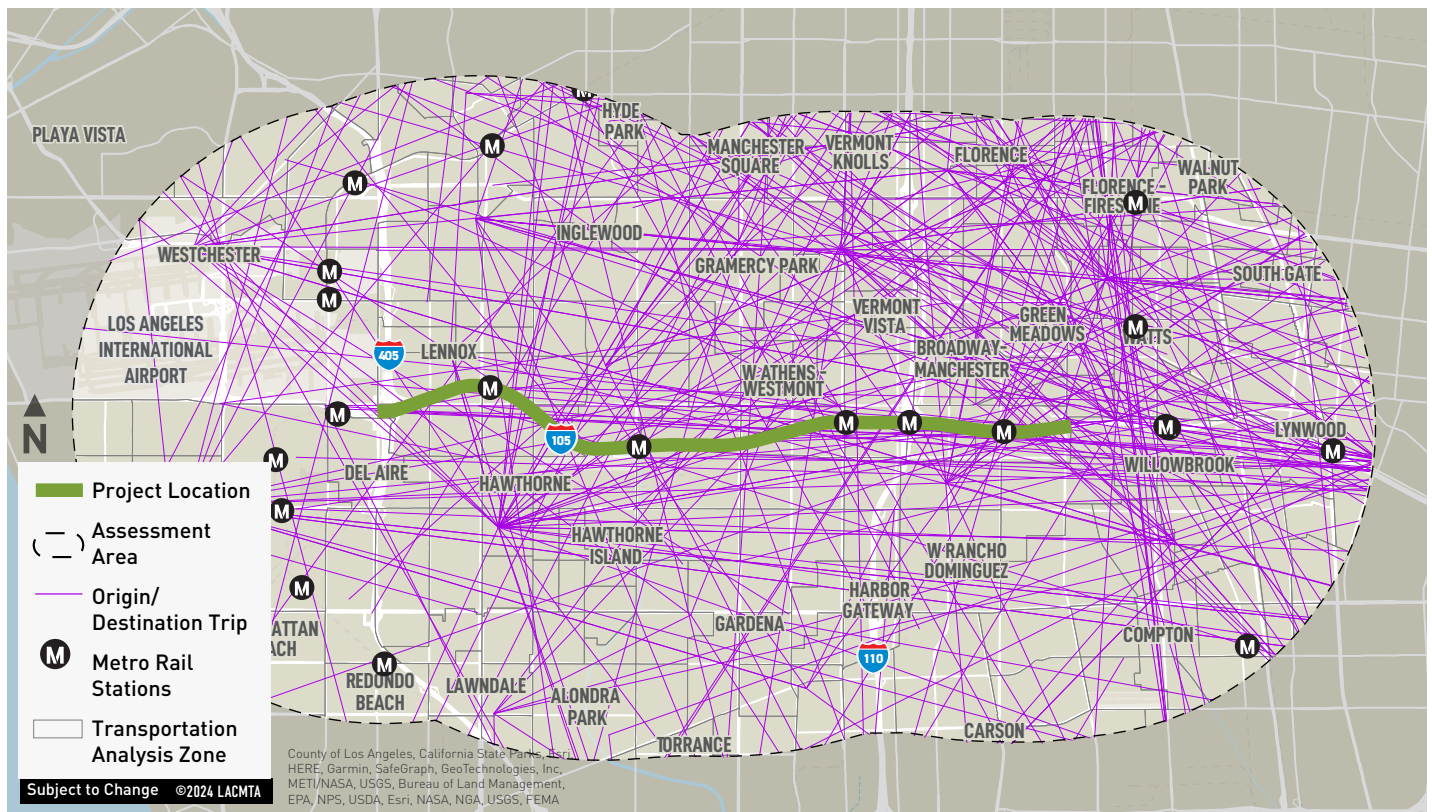
Travel Survey

Metro conducted a comprehensive outreach campaign to promote the travel survey, which included pop-up events, social media advertising, CBO partnerships, and intercept surveys at Metro rail stations and bus stops. In total, Metro engaged approximately 2,200 people between January and February 2024 to support the travel survey.

The I-105 ExpressLanes Equity Assessment Travel Survey was launched on January 17, 2024, and as of February 23, 684 English responses and 200 Spanish responses were received for a total of 848 responses. The survey consisted of 10 questions ranging from multiple choice, yes/no, and open-ended questions. Questions focused on origins and destinations, travel behaviors regarding type of trips and mode choice, and demographic information. The following provides a summary, maps (Figure 39), and pie charts of the travel survey responses (Figures 40 - 44).

Figure 39

Travel Survey Origin-Destination Trips



Key Findings

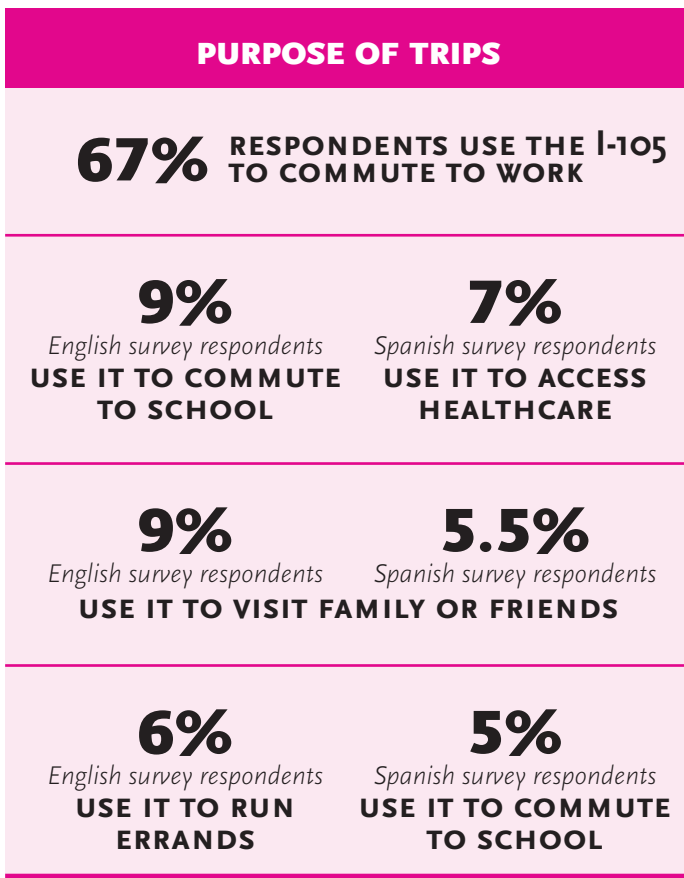


Figure 40

What is the purpose of your typical trip?

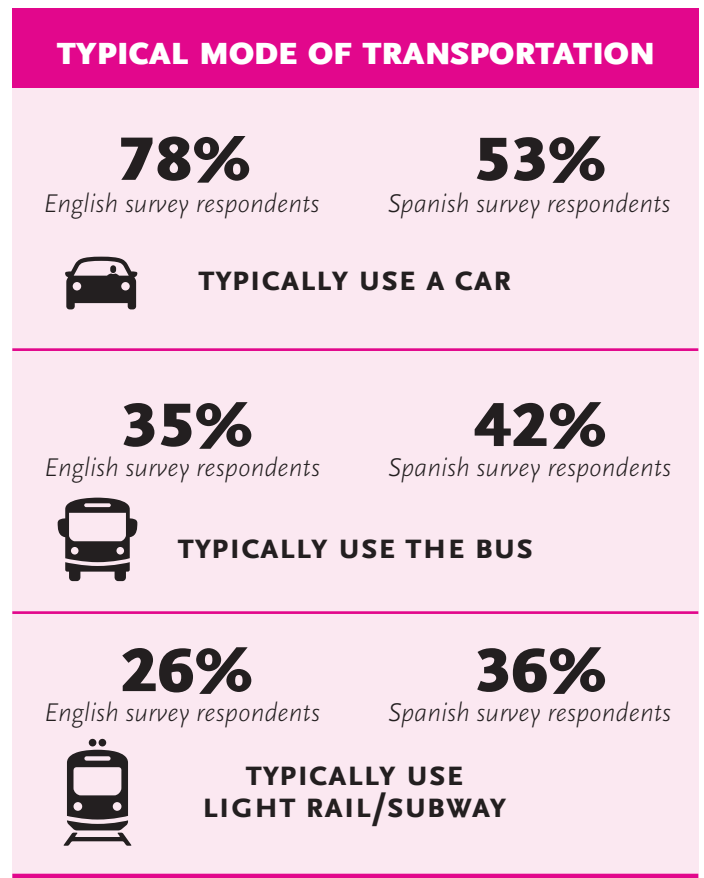
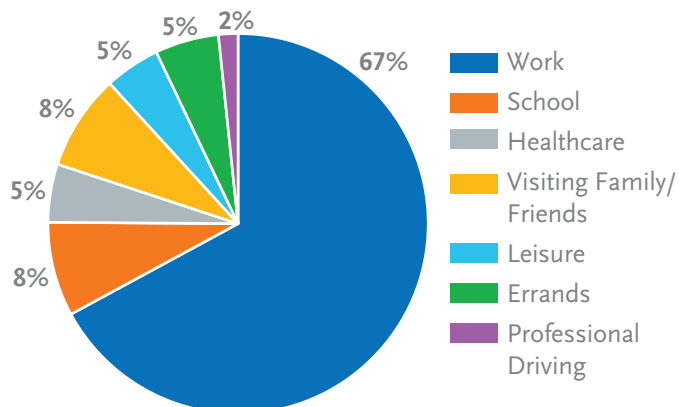
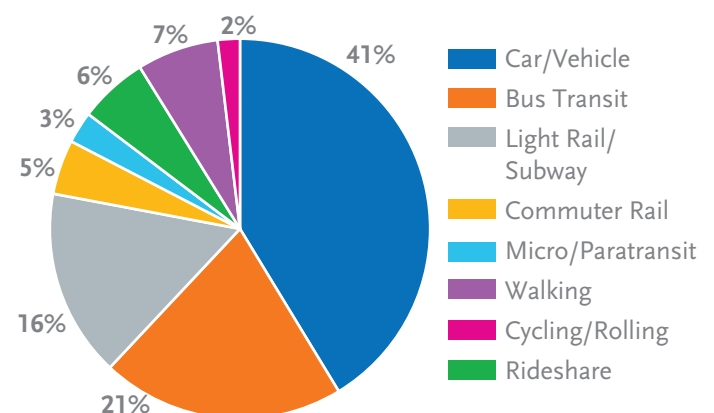


Figure 41

What modes of transportation do you typically use? (Select all that apply)



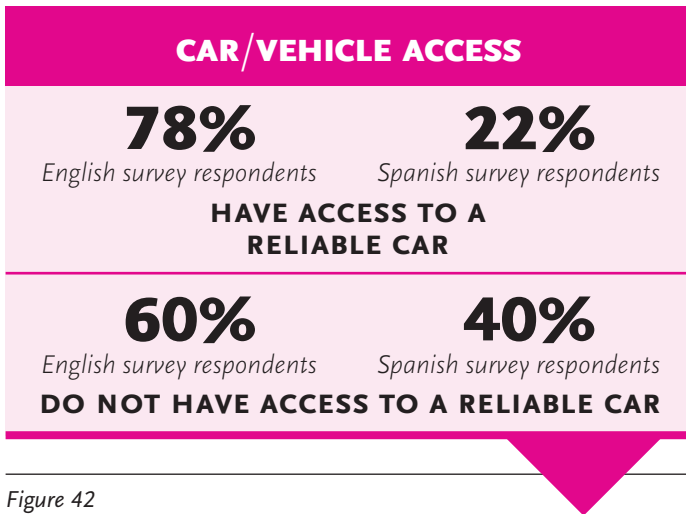


Figure 42

Do you have access to a reliable car/vehicle to make your trip?

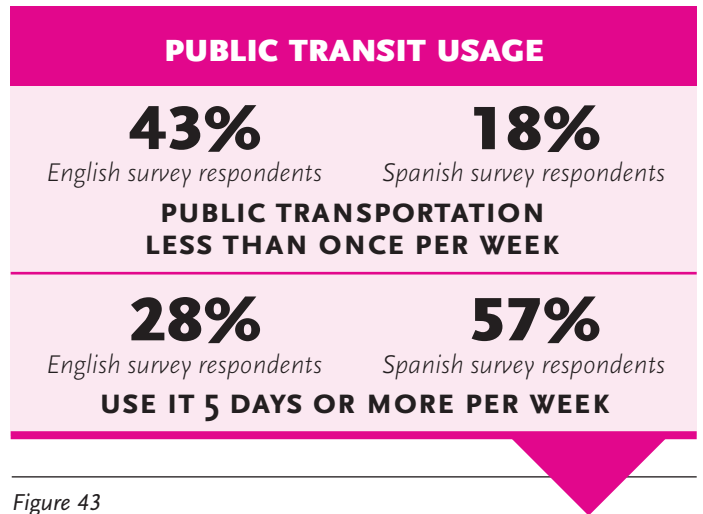
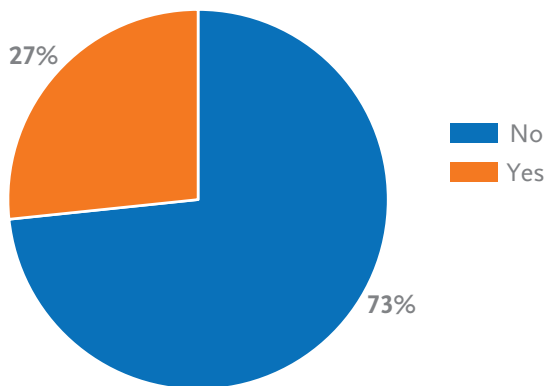
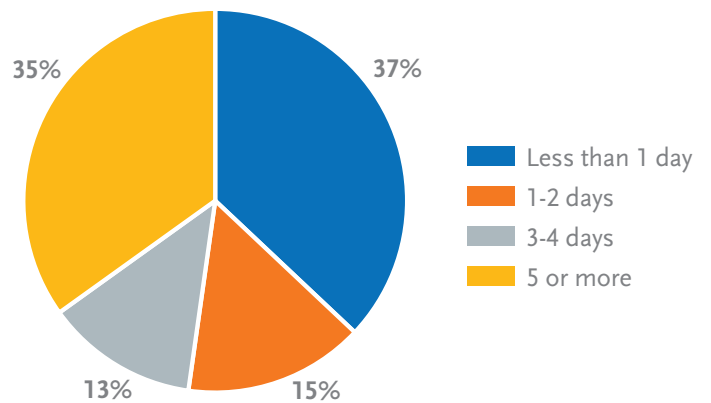


Figure 43

How many days a week do you usually ride public transportation?





RESPONDENT DEMOGRAPHICS

ENGLISH SURVEY RESPONDENTS IDENTIFY AS

59% *Hispanic/Latino* **24%** *Black/African American* **10%** *White/Caucasian* **5%** *Asian* **5%** *other ethnicities*

SPANISH SURVEY RESPONDENTS IDENTIFY AS

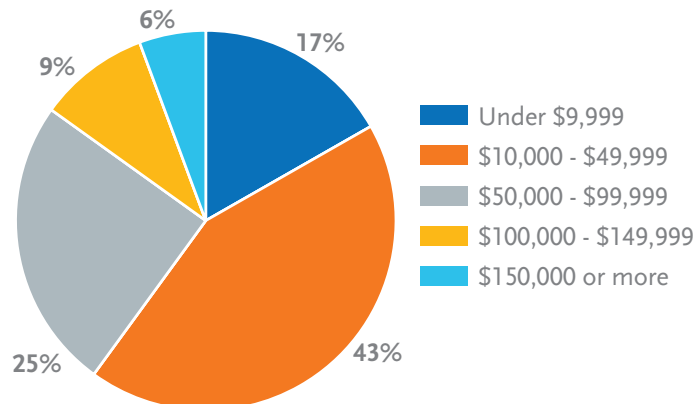
100% *Hispanic/Latino*

50% *English survey respondents* **92%** *Spanish survey respondents*

ANNUAL HOUSEHOLD INCOMES BELOW \$50,000

Figure 44

What are your household's total annual income?





Community Meeting

Two community meetings were held in July 2024 to inform the public on the Equity Assessment Study, collect feedback on the Draft Project List, encourage participation in the prioritized project list survey, and answer questions. One meeting was held in person, while the second meeting was held virtually on Zoom to expand options for public participation. A total of 32 community members joined one or both meetings. 8 of the project’s CBO partners were also in attendance. Table 7 provides the meeting details for the virtual and in-person meeting, along with the number of participants.

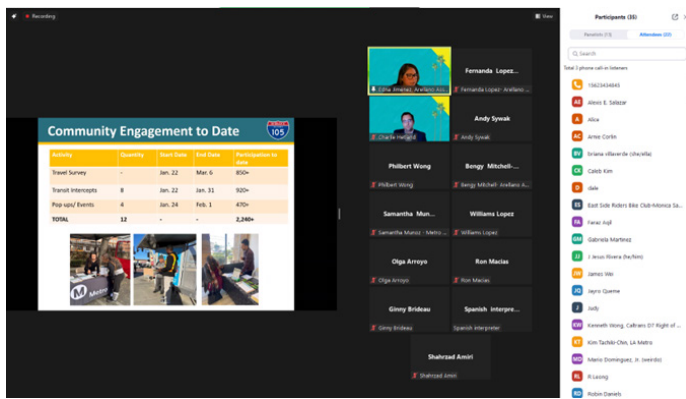
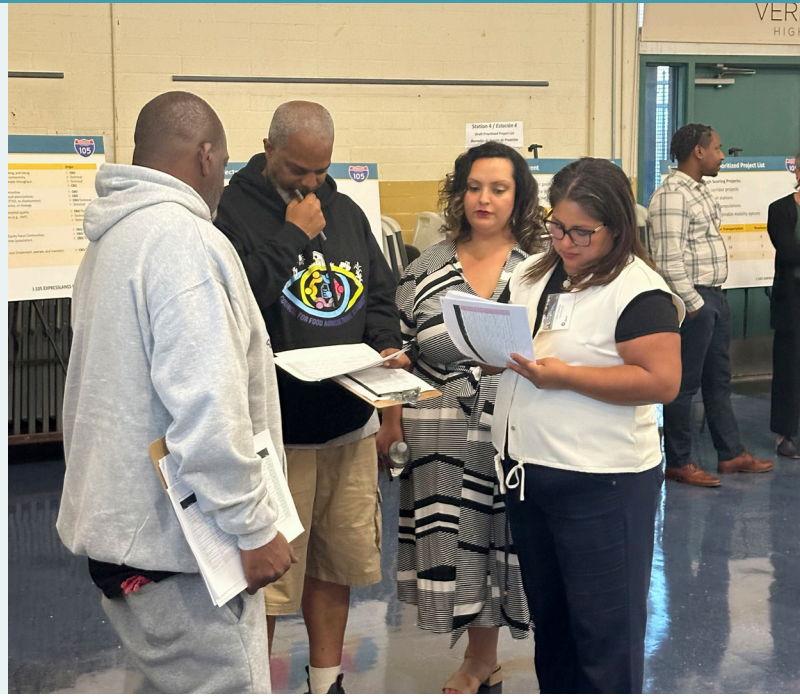


Table 7. List of Community Meetings

DATE	LOCATION	NO. OF PARTICIPANTS
Monday, July 15, 2024	Zoom	24
Wednesday, July 17, 2024	Verbum Dei Jesuit High School 11100 S Central Ave., Los Angeles, CA 90059	12
Total:		36



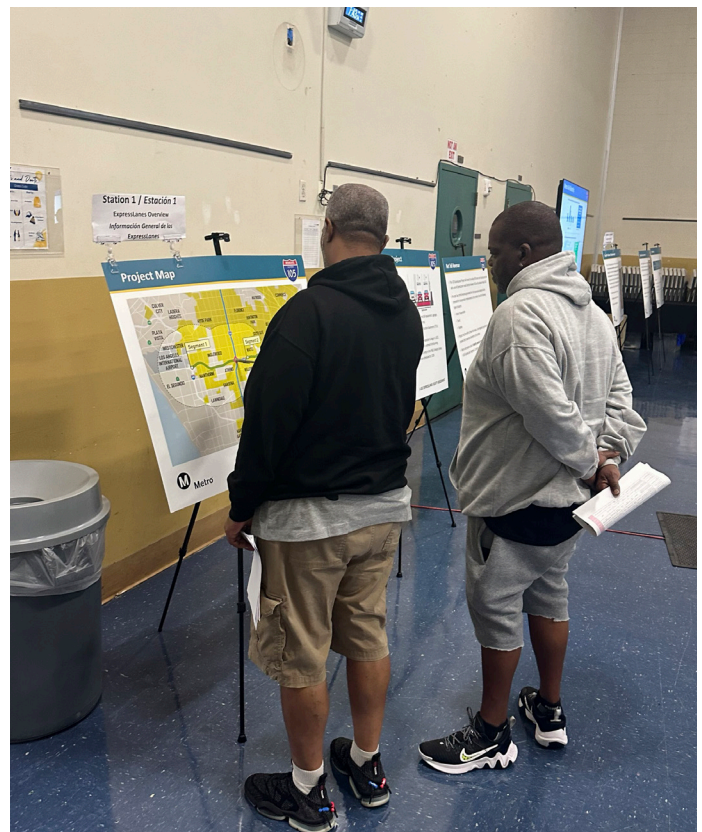
Attendees of note included:

- > East Side Riders Bike Club (CBO Partner)
- > Sisters of Watts (CBO Partner)
- > LA South Chambers (CBO Partner)
- > LA Walks (CBO Partner)
- > Charles Drew University (CBO Partner)
- > Verbum Dei Jesuit High School (CBO Partner)
- > Willowbrook Inclusion Network (CBO Partner)
- > New Mount Pleasant Missionary Baptist Church (CBO Partner)
- > Caltrans District 7
- > Office of Congresswoman Maxine Waters

Some key comments shared at the meetings are provided below:

- > **Maintenance and upkeep**
 - Maintenance and upkeep of the projects should be a factor (i.e. bus shelters)
- > **Public safety**
 - Safety needs to be made a priority and is an important factor in all projects
- > **Toll rates and low-income program**
 - Clarity on the toll rates/carpool rules
 - Clarity on the qualification level for the low-income program is needed
 - The ExpressLanes tolls seem high
- > **Funding and Construction**
 - Confusion on Segment 1 funding
 - Concern over property acquisitions
 - Confusion over the lane configuration and any changes to general use lanes
 - Support for onsite construction noticing
 - Clarification needed on where the Segments start and end
- > **Other**
 - Questions about whether previous studies and projects were consulted
 - Confusion on what CBO stands for and what it means
 - Question on possibility of future soundwalls at C Line stations

Notifications were led by Metro with support from CBO partners. A new database was created to include previous contacts from the PA/ED process, address changes in elected offices, added new contacts acquired during the Equity Assessment Study, and removed contacts outside of Segment 1. A postcard was mailed to approximately 540 interested stakeholders, including community members engaged during the PA/ED process and community engagement activities in January and February 2024 (travel survey, pop-ups, and transit intercepts). Flyers were also provided to CBO partners for support with distribution to their members, businesses, libraries, community centers, and other key destinations along the corridor. Eblasts and text messages were also distributed to the list of contacts from the project's updated database. A digital toolkit was also distributed to CBO partners, cities, elected offices, and other key organizations within Segment 1 to support promotion of the community meetings. Additionally, the outreach team coordinated updates to Metro's official I-105 ExpressLanes project website, which included a link to the project fact sheets, details for both community meetings, and links to the slide deck and meeting recording, which were posted following the conclusion of the community meetings.





Prioritized Project List Survey

Metro also launched a prioritized project list survey which went hand in hand with community meeting notification. The goal of the survey was to present the project lists to the public and garner feedback on whether projects designated as low priority needed to be designated as high priority instead, or vice versa. Metro’s outreach campaign to promote the prioritized project survey included distribution of a digital toolkit to CBO partners, cities, elected offices, and other key organizations within Segment 1 to support survey promotion. In addition to the toolkit, Metro’s efforts to promote the survey included updates to the I-105 ExpressLanes project website, community meetings, text messages, and eblasts.



The I-105 ExpressLanes Equity Assessment Prioritized Project List Survey was launched on Monday, June 24th and ran through Friday August 2nd. As of the closure of the survey, Metro received a total of 140 responses. The survey consisted of 3 sections, one for each project type, which each included 4 questions (with 4 optional follow-up questions depending on the selected responses). Questions focused on identifying projects that needed to be reprioritized, whether the lists align with overall project goals, and whether any major problems existed within the prioritized list.

Themes that emerged from the responses to the prioritized project list survey were strong support for pedestrian improvements at or near on-/off-ramps along the I-105 freeway, freeway underpass improvements along major arterials cross under the I-105 and I-110 freeways, and soundwalls at C Line Stations. Overall, a majority of approximately 2/3 of responses indicated that the project lists achieved the five evaluation criteria and had no major concern. The following provides a series of pie charts showing the responses about the project lists (Figures 45 - 50).

Figure 45

Do you think this draft prioritized project list for active transportation meets the five goals?

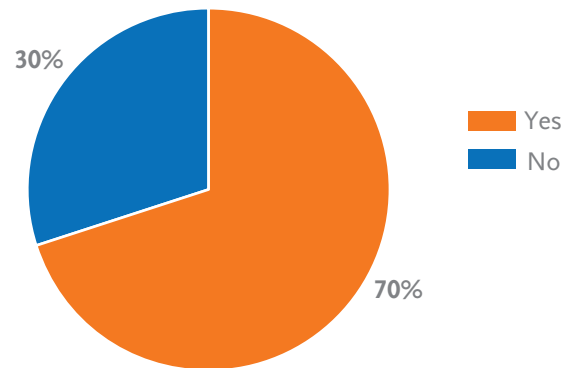


Figure 46

Do you have any major concerns with the draft prioritized project list for active transportation?

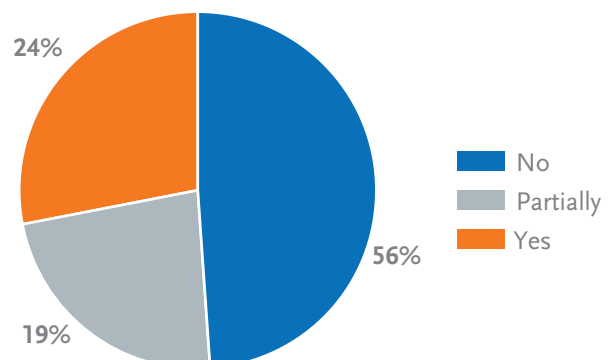




Figure 47

Do you think this draft prioritized project list for roadway meets the five goals?

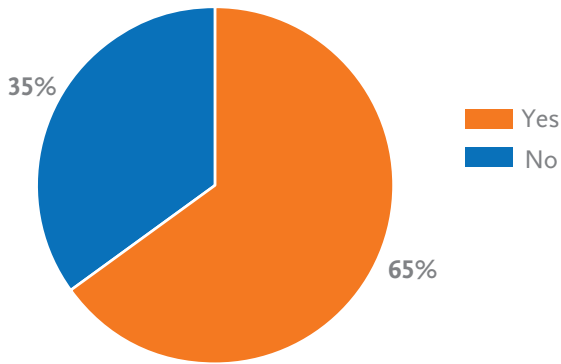


Figure 49

Do you think this draft prioritized project list for transit meets the five goals?

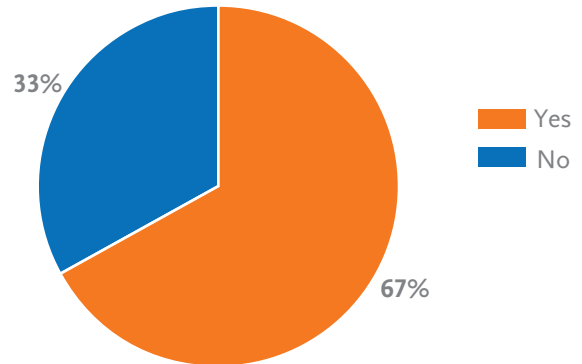


Figure 48

Do you have any major concerns with the draft prioritized project list for roadway?

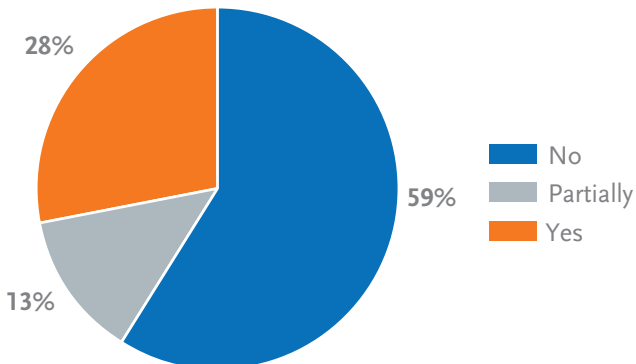
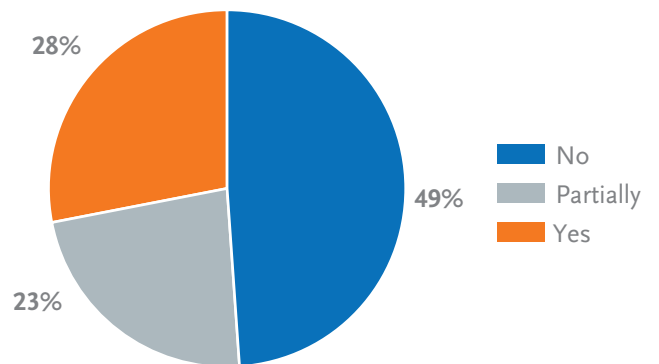


Figure 50

Do you have any major concerns with the draft transit project list for roadway?



CHAPTER 5

Identification and Evaluation of Projects

The generation of net toll revenues from the future I-105 ExpressLanes Segment 1 project offers a unique opportunity to fund multimodal projects for a more equitable and sustainable transportation system along the Assessment Area. Using an equity lens and input from community-based organizations (CBOs), Metro undertook a comprehensive and robust process to identify and evaluate potential projects. This Equity Assessment was a multistep technical process of establishing evaluation criteria, project identification, and scoring to recommend the most valuable and equitable projects for future net toll revenue funding. This section describes the process in detail and sets the stage for the recommended projects.





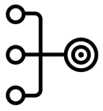
Goals and Evaluation Criteria

At the heart of the process was alignment with Metro’s Net Toll Revenue Grant Program’s mission to increase mobility and person throughput through a series of integrated strategies. This started with reviewing the goals for Metro’s most recent round of Net Toll Revenue Grants. The existing goals of the Net Toll Revenue Reinvestment Grant Program are the following: connect people and places, create community value, and conserve resources.

With input from CBOs and an equity perspective, the goals for the Assessment were expanded to include prioritizing EFCs and cost-effectiveness and the evaluation criteria were established for each goal. The evaluation criteria are either quantitative or qualitative in nature and measure how well each project performs in achieving the stated goal. Table 8 lists the goals and evaluation criteria used for the Assessment.

Table 8. Goals and Evaluation Criteria

GOAL	EVALUATION CRITERIA
1. Connect People and Places	1.1 Improve and encourage transit, walking, and biking/rolling 1.2 Improve transportation access and connectivity 1.3 Reduce congestion by increasing people throughput 1.4 Make all modes of travel safer
2. Create Community Value	2.1 Provide access for economic opportunities 2.2 Align with community input, including local plans and policies 2.3 Enhance the quality of life (e.g., Crime Prevention Through Environmental Design principles, no displacement) 2.4 Adopt innovative technology, practice, or strategy
3. Conserve Resources	3.1 Foster local and regional environmental quality 3.2 Reduce GHG emissions 3.3 Leverage matching funds
4. Prioritize Equity Focus Communities	4.1 Minimize disruption during construction 4.2 Provide long-term benefits to EFCs
5. Cost-Effectiveness	5.1 Effectiveness in relationship to the total project cost and consideration of life-cycle costs



Project Identification

With the goals and evaluation criteria set, Metro set out to identify potential projects for each of the three project categories (transit, active transportation, and roadway) listed in the Net Toll Revenue Grant Program.

Each project identified in this effort is an “equity opportunity” that represents a decision to identify transportation projects that enhance positive impacts or reduce negative impacts for historically marginalized communities or others facing disparities in access to opportunities. The following two-step process was used to identify projects and equity opportunities for evaluation.



Step 1: Identify universe of projects

Gather, analyze, and develop the universe of potential projects informed by the following:

- > CBO engagement and agency input
- > Feedback from Metro departments and local jurisdictions
- > Walk audits
- > Community input through surveys
- > Previous studies and plans
- > Socioeconomic and land use data
- > Existing transportation system analysis
- > Field visits by the project team

The purpose of this step is to develop a comprehensive universe of project ideas based on technical analysis and community input.

Step 2: Address equity outcomes

Address each of the following questions to determine whether the identified project is an equity opportunity:

- > What areas of opportunity or concern can the project improve?
- > What disparities are being addressed?
- > Who is most likely to benefit from the proposed project?

This step serves as an initial screening by considering whether the project is a good and equitable idea.

This two-step process helped to create effective community results and proposal outcomes that takes guidance from Government Alliance on Race and Equity’s methodology for preparing equity action plans (Figure 51). This process ensures no projects are identified that could result in residential or business displacements.

Figure 51

Equity Outcomes



Project List

The initial project list of approximately 143 projects is presented in Appendix B. The projects included in the list vary in development because some are specific and more advanced while others are new ideas that will need further study.

The initial project list includes project information such as a detailed description, jurisdiction, cost, duration, funding status, lead agency, origin, percent located with an EFC, and responses to the three equity questions previously described.

Figure 52 provides an illustrative flow chart to show how the goals and evaluation criteria, the identification of project, and evaluation process are filtered to create a prioritized project list that is focused on equitable outcomes.

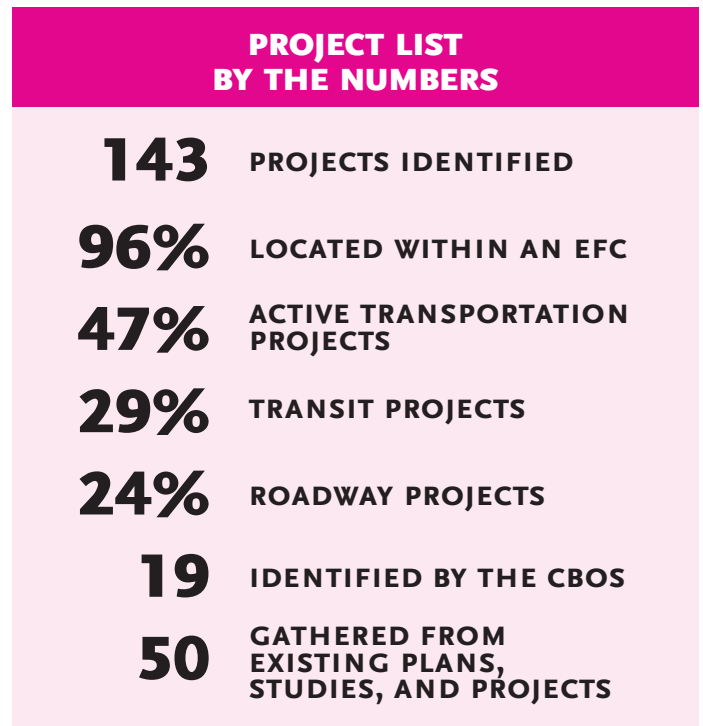
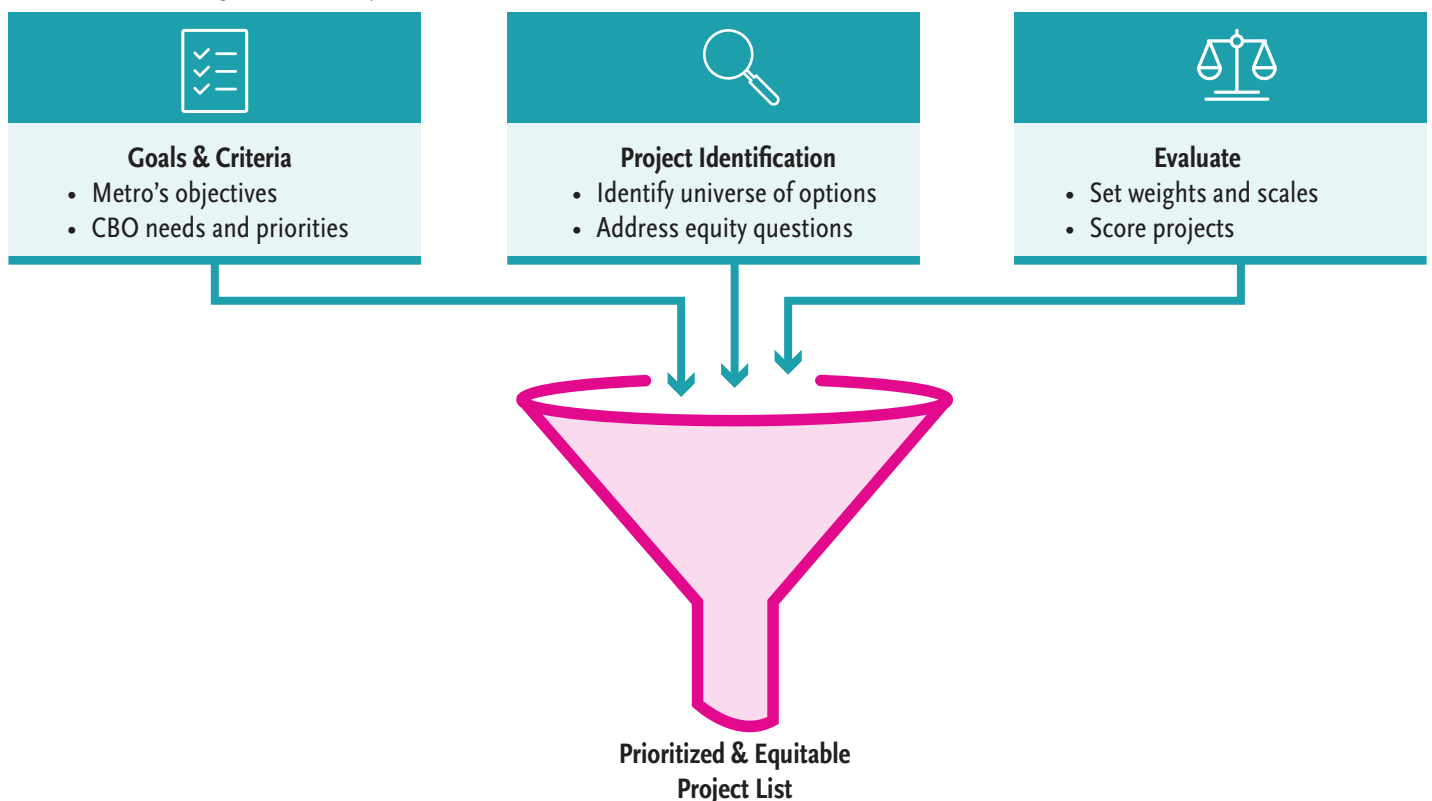


Figure 52

Prioritized & Equitable Project List



Active Transportation

Projects identified for active transportation include infrastructure enhancements that promote a variety of walking and cycling needs. These improvements aim to foster safer, more accessible, and more appealing environments for pedestrians and cyclists, ultimately inducing a larger number of individuals to utilize active transportation options. Table 9 identifies the types of projects and examples identified for active transportation.

Table 9. Active Transportation Project Types

PROJECT TYPE	EXAMPLES
First/Last Mile	Improve first/last mile access to high need A Line/C Line/J Line stops; improve underpasses, enhance lighting, add trees
Bikeway	Address gaps in bike lane/path network
Pedestrian Improvements	Add curb extensions, pedestrian refuge islands, high-visibility crosswalks, increased lighting, signals and Safe Routes to School

Roadway

Projects identified for roadways encompass enhancements and improvements to arterial roads, to improve their traffic flow, safety, efficiency, and overall effectiveness for all road users. These roadway improvements serve as vital transportation arteries, managing substantial traffic volumes and connecting diverse neighborhoods within a city or linking cities together. A summary of the project types and examples for roadway is shown in Table 10.

Table 10. Roadway Project Types and Examples

PROJECT TYPE	EXAMPLES
Traffic Signals	Signal synchronization, smart technology, intersection improvements
Safety	Additional lighting at freeway undercrossings, safety enhancements at high collision arterials and intersections
Ramp/Interchange Enhancement	Improve lighting, crosswalks, sidewalks at freeway on ramps and ramp termini such as Hawthorne Boulevard and Central Avenue
Beautification	Landscaping improvements

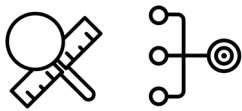
Transit

Transit improvements range from operations to infrastructure for bus and rail. The objectives of these enhancements are to improve service quality, expand accessibility, and boost overall mobility for commuters and other travelers. By making public transit more attractive, convenient, and rapid, these improvements are intended to improve travel for existing transit users and promote a shift to public transportation as a viable and sustainable alternative to using private vehicles. Table 11 identifies the types of projects and examples identified for transit.

Table 11. Transit Project Types and Examples

PROJECT TYPE	EXAMPLES
BRT	Transit signal prioritization, bus priority lanes, bus stop bulb-outs, bus stop and layover improvements
Station improvements	Platform sound enclosures, additional lighting, signage
Mobility hubs	Improve/enhance park-and-ride facilities
Bus infrastructure	New/improved bus shelters
Bus service	Service enhancements on arterial bus routes/feeders supporting the ExpressLanes
Zero-emissions	Electric bus purchases, electric vehicle chargers at C Line stations





Scoring and Prioritization

The vision statement described in Chapter 1 and equity considerations outlined in Chapter 2 provided the foundation for the evaluation process, resulting in 30 metrics.

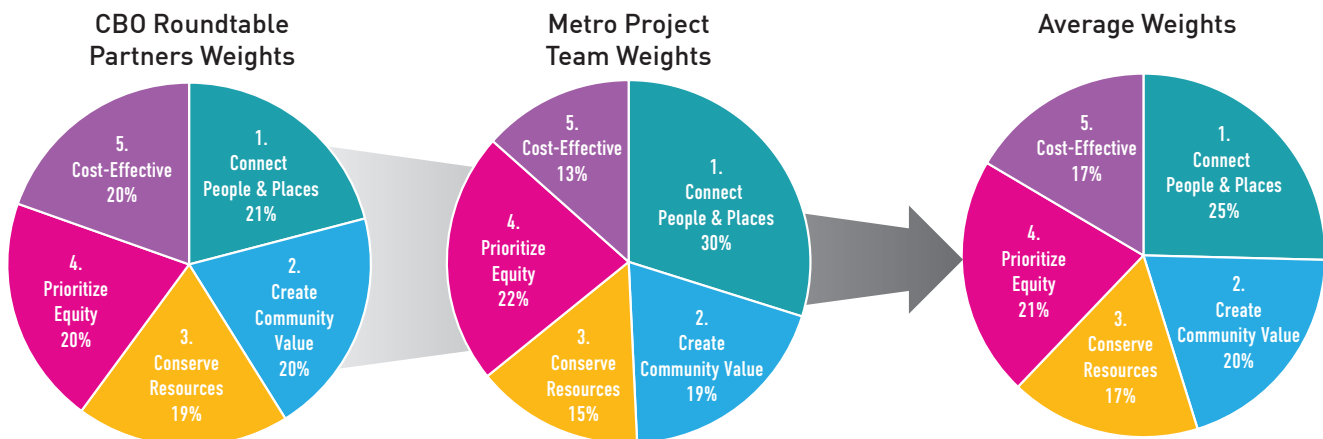
Weighting

With 5 different goals and 14 evaluation criteria, there are several factors to consider when scoring the project list. For this reason, weights were assigned to each goal and evaluation criteria. Weighting is a method to determine what is most important and creates a structured approach for evaluating, reflecting Metro’s priorities and community values.

Workshops on weighting were held separately with Metro’s project team and the CBO Roundtable partners. The workshops asked participants to prioritize the evaluation criteria based on what is most important to them. For transparency, the results were averaged and are summarized in Figure 53. This process resulted in the following weights – Connect People and Places, 25%; Prioritize Equity, 21%; Create Community Value, 20%; Conserve Resources, 17%; and Cost-Effective, 17%, demonstrating strong alignment between Metro and the CBO partners on importance and priorities.

Figure 53

Results of Weighting Exercise to Score Project List



Measurement Scales

Scoring measurement scales were developed for each of the metrics to define how they would be applied to assess the potential performance of each project in addressing that metric. Each rubric was developed by an experienced technical professional with knowledge of evaluation methods and tools. For each of the evaluation criteria listed in Table 8, a project received a score between 1 and 5, with 5 being the best outcome or highest benefits (Figure 54). In cases where quantitative data was not available for a particular evaluation criterion, the scores are a qualitative assessment based on professional judgement of the project team.

Figure 54

Scoring Scales



Scoring

Scoring for quantitative criteria was done using data (for example, number of jobs within a one-mile radius of the project) and normalized to fairly compare projects. The scoring for qualitative metrics was done based on professional expertise by subject matter experts, literature on expected benefits, potential adverse impacts related to project types, and stated features of the project or program based on available information. Scoring results are presented in Appendix B.

Prioritization and Tiering

The last step was prioritizing the projects and categorizing them into different tiers based on value. The value is based on the weights and scores, which allowed the project team and CBO partners to see a ranking of the projects. Thresholds were set based on the value scores to identify

similar high-, medium-, or low-performing projects. Thresholds were set to draw distinctions between projects where there is a statistically significant variation and were not set to draw differentiation between very similar results. Projects were tiered as high, medium, and low and grouped into three categories consistent with the existing I-10/I-110 ExpressLanes net toll grants – active transportation, transit, and roadway improvements. The scoring and prioritization process is described in more detail in Appendix C.

The tiered project lists were presented to the CBO Roundtable Partners in June 2024 and the community at the July 2024 virtual and open house meetings. The CBOs and community provided feedback on the tiering. This was done through a survey that allowed the public to suggest changes in prioritization and tiers. In total, 140 survey responses were received. Recommendations from the results of prioritization and tiering are presented in the next chapter.



Prioritized Project List and Recommended Actions

As a strategic planning document, the Assessment establishes an overarching vision and identifies equitable projects that could be funded with future net toll revenue from the I-105 ExpressLanes. Improving both equity and mobility along the I-105 requires a focused implementation approach. No single project or mode can do it alone. Actualizing these goals includes near-, mid-, and long-term projects and action that integrate all modes of transportation and community input across the I-105 assessment area. The following summarizes the recommendations and how they correspond with the vision outlined in the Equity Assessment.



Prioritized Project List

The evaluation and prioritization process, as described in Chapter 5, resulted in prioritized list of potential projects recommended for consideration when the Net Toll Revenue funding becomes available from the I-105 ExpressLanes. These high scoring projects represent meaningful steps towards using the I-105 ExpressLanes Project as a catalyst to enhance equity in multimodal transportation planning within some of the most disadvantaged communities in Los Angeles County. The following provides a summary, table, and map of the prioritized projects by mode.

Of the nearly 160 projects identified, approximately 38% of the projects are prioritized as high, 32% are medium, and 30% are low. The characteristics of high-scoring projects include assessment area-wide or corridor projects, projects near Metro rail/BRT stations, projects within high EFC populations, and projects focused on sustainable mobility options. Figure 55 provides a breakdown of the numbers and percentages of each tier by mode. Tables 12, 13, and 14 list the high priority projects for active transportation, roadway, and transit projects respectively. For the complete list of high, medium, and low priority projects please see Attachment C.

Definitions of the three durations and five cost ranges are as follows:

- > Duration
 - > Short-Term: less than 1 year
 - > Medium-Term: between 1 and 3 years
 - > Long-Term: more than 3 years
- > Cost Range
 - > \$: less than \$4.9 million
 - > \$\$: between \$5 million and \$9.9 million
 - > \$\$\$: between \$10 million and \$14.9 million
 - > \$\$\$\$: between \$15 million and \$19.9 million
 - > \$\$\$\$\$: more than \$20 million

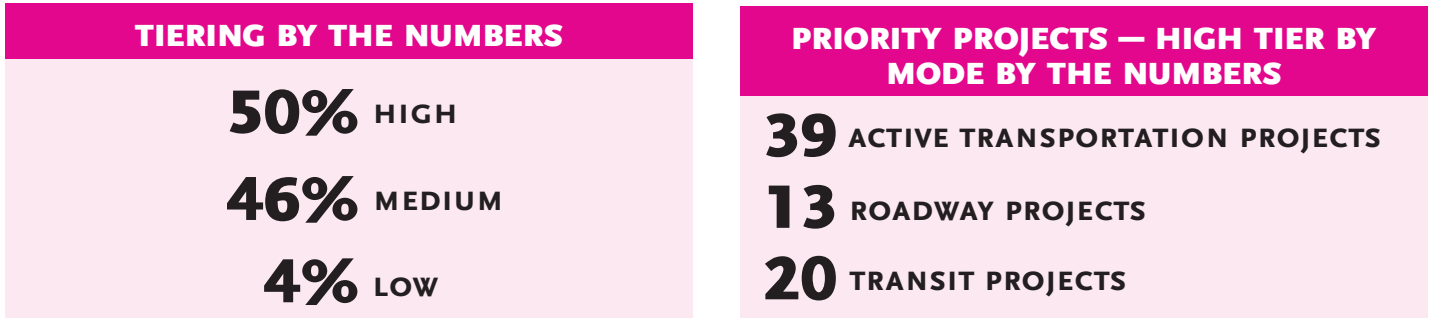
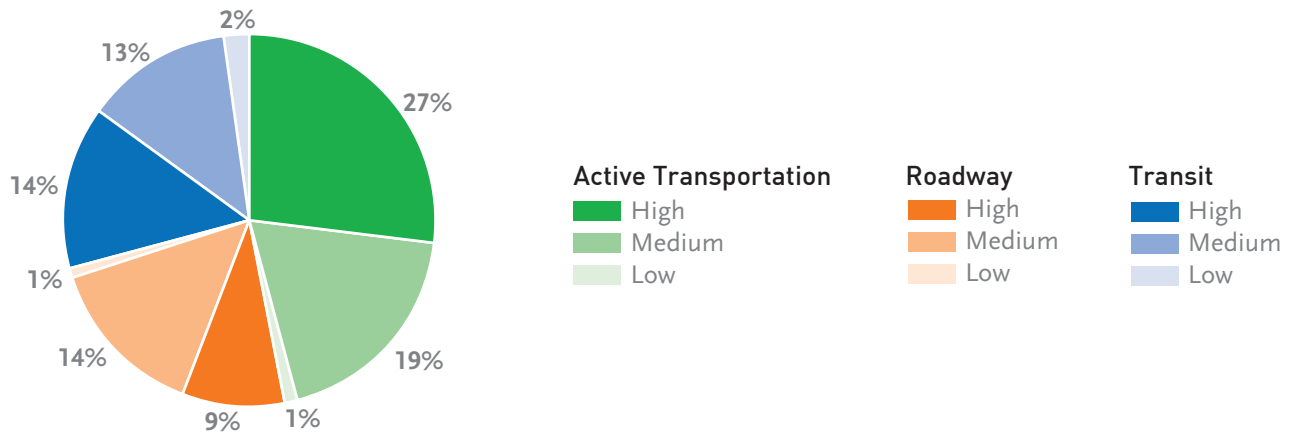


Figure 55
Breakdown of Projects by Mode and Tier



Active Transportation

By expanding the active transportation network, people will have more options for using non-motorized modes for local trips in the Assessment Area—particularly short trips that are less than 5 miles. Active transportation includes walking, biking, scooters, skateboarding, and other human-powered modes. Investing in active transportation is important not only because it can reduce car trips, but also because it is healthy, affordable, and fun.

However, the existing active transportation infrastructure along I-105 has significant gaps and limitations.

Where infrastructure does exist, it is often disconnected and unprotected; for example, bike lanes without a buffer from high-speed vehicular traffic, and bike lanes that end at city boundaries and are not coordinated between jurisdictions or even throughout a subregion.

The high priority list of potential active transportation projects, shown in Table 12 and Figure 56, aims to provide equitable infrastructure for pedestrians and bicyclists with protected, safe, and continuous networks across the Assessment Area.

Table 12. High Priority List of Potential Active Transportation Projects

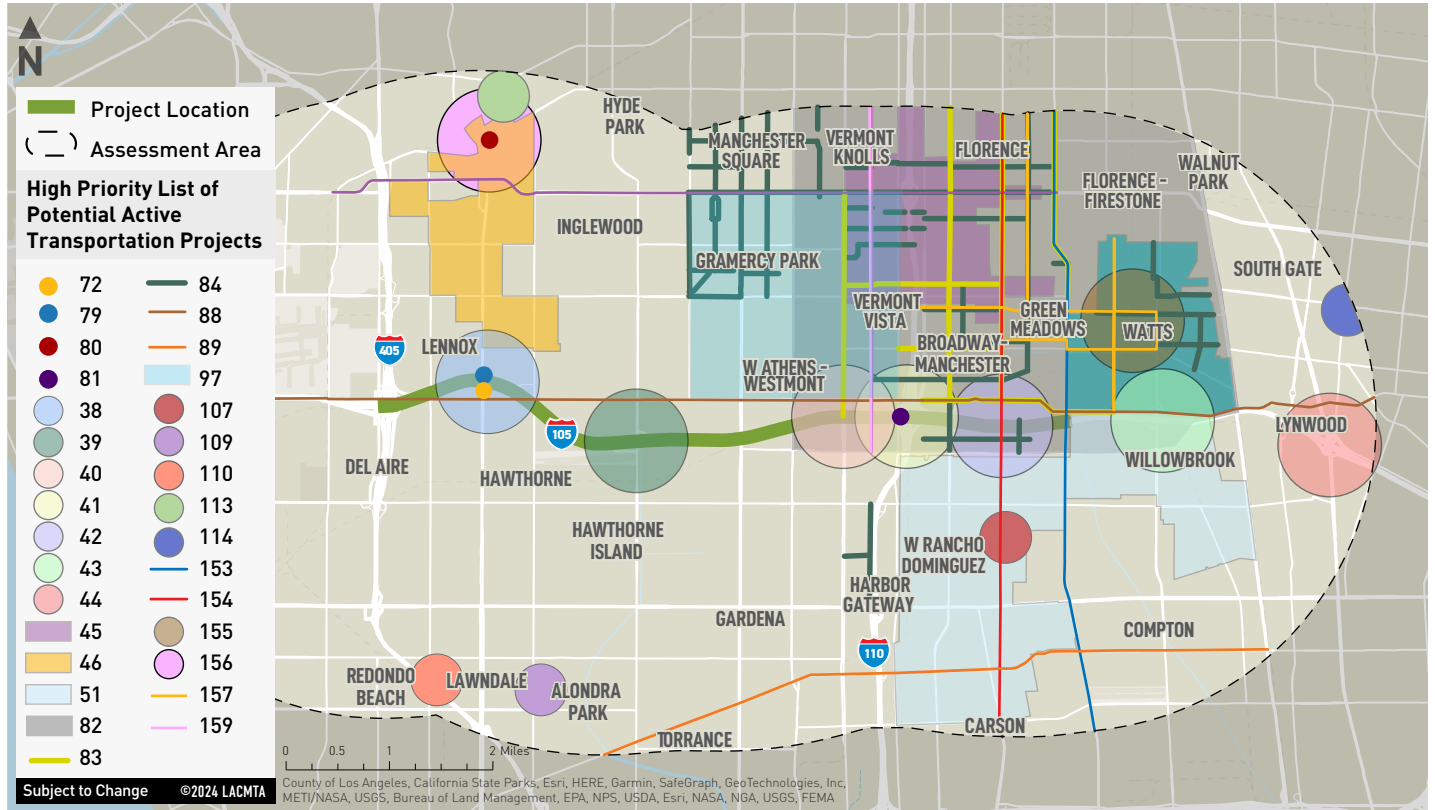
ID	PROJECT NAME	DESCRIPTION	JURISDICTION	COST	PROJECT ORIGIN
38	FLM Improvements near Metro C Line Hawthorne/Lennox Station	Implement active transportation infrastructure improvements within 1 mile of the station and enhance transfer/station experience.	Inglewood/Hawthorne	\$\$\$	CBO Partners
39	FLM Improvements near Metro C Line Crenshaw Blvd Station	Implement active transportation infrastructure improvements within 1 mile of the station and enhance transfer/station experience.	Inglewood/Hawthorne	\$\$	Technical Team
40	FLM Improvements near Metro C Line Vermont Station	Implement active transportation infrastructure improvements within 1 mile of the station and enhance transfer/station experience.	City of LA/LA County	\$\$	CBO Partners
41	FLM Improvements near Metro C Line Harbor Freeway Station	Implement active transportation infrastructure improvements within 1 mile of the station and enhance transfer/station experience.	City of LA/LA County	\$\$	LADOT
42	FLM Improvements near Metro C Line Avalon Station	Implement active transportation infrastructure improvements within 1 mile of the station and enhance transfer/station experience.	City of LA/LA County	\$\$\$	CBO Partners
43	FLM Improvements near Metro C Line Willowbrook/Rosa Parks Station	Implement active transportation infrastructure improvements within 1 mile of the station and enhance transfer/station experience.	LA County	\$\$	LA County
44	FLM Improvements near Metro C Line Long Beach Boulevard Station	Implement active transportation infrastructure improvements within 1 mile of the station.	Lynwood	\$\$	LA County
45	South LA Pedestrian Improvements	Add curb extensions, leading pedestrian intervals, pedestrian refuge islands, High visibility crosswalks, and increased lighting at the following intersections: Manchester/Normandie, Manchester/Vermont, Century/Avalon, Manchester/Figueroa, and Manchester/Broadway.	City of Los Angeles	\$\$	LADOT

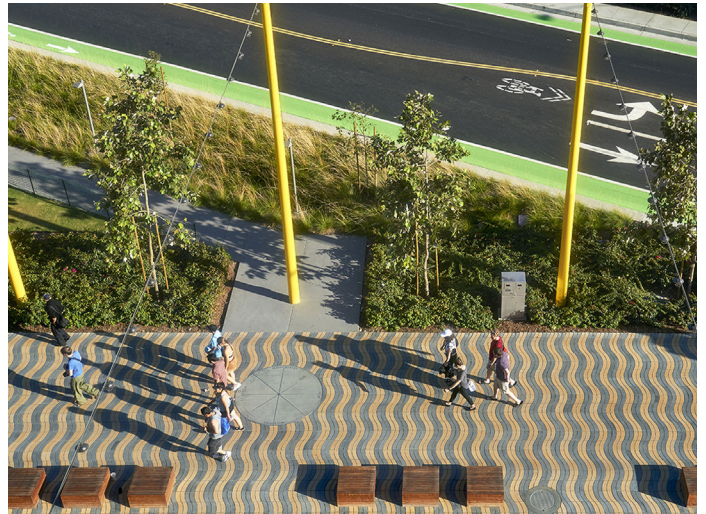
ID	PROJECT NAME	DESCRIPTION	JURISDICTION	COST	PROJECT ORIGIN
46	Inglewood/ Lennox Pedestrian Improvements	Upgrade crosswalks and curb ramps, add leading pedestrian intervals, upgrade traffic signals, and add RRFBs, pedestrian activated warning systems, pedestrian refuge islands, curb extensions, and signage.	Multi- Jurisdictional	\$\$\$	Metro
51	Willowbrook/West Rancho Dominguez Pedestrian Plan Improvements	Upgrade crosswalks and curb ramps, add leading pedestrian intervals, upgrade traffic signals, and add RRFBs, pedestrian activated warning systems, pedestrian refuge islands, curb extensions, and signage.	Unincorporated LA County	\$\$\$	LA County
72	Hawthorne Blvd On-/Off-ramp Pedestrian Crossing Improvements	Add continental crosswalks with in-road warning lights, curb extensions to alter corner radii, RRFBs with ped push buttons, and signage to improve pedestrian visibility at I-105 exits and entrances.	Multi- Jurisdictional	\$	CBO Partners
79	Hawthorne/Lennox Station Mobility Hub	Improve multimodal connectivity and transportation options.	Hawthorne	\$\$\$\$	CalTrans
80	Downtown Inglewood Station Mobility Hub	Improve multimodal connectivity and transportation options.	Inglewood	\$\$\$\$	Technical Team
81	Harbor Freeway Station Mobility Hub	Improve multimodal connectivity and transportation options.	City of Los Angeles	\$\$\$\$	Technical Team
82	South LA FLM Bikeshare	Install bikeshare docks near transit stations in areas with protected facilities and dedicated lanes near C Line Stations.	City of Los Angeles	\$\$\$\$	CBO Partners
83	South LA Bike Infrastructure Upgrades	Improve safety for cyclists by upgrading existing Class II and III facilities to buffered/protected bike lanes.	City of Los Angeles	\$\$\$\$	Technical Team
84	South LA Bike Network Gap Closures	Improve safety and connectivity for cyclists by filling in gaps in the existing bike network through neighborhood Class II and III connections.	City of Los Angeles	\$\$\$	Technical Team
88	Imperial Hwy Class IV Bike Lane	Add Class IV bikeways.	Multi- Jurisdictional	\$\$\$\$\$	Technical Team
89	Redondo Beach Blvd/ Compton Blvd Class IV Bike Lane	Add Class IV bikeways.	Multi- Jurisdictional	\$\$\$\$\$	Existing Plan
97	South LA Commercial Corridor Public Space Improvements	Add parklets, public space improvements, play streets, trees, etc. on commercial corridors S Vermont Ave, Manchester Ave, S Hoover St, S Van Ness Ave, and S Figueroa St.	City of Los Angeles	\$\$	Technical Team
107	Safe Routes for Seniors West Rancho Dominguez	Implement safety and pedestrian access improvements near senior housing, centers, and services.	Unincorporated LA County	\$	Technical Team
109	Safe Routes for Seniors Alondra Park	Implement safety and pedestrian access improvements near senior housing, centers, and services.	Unincorporated LA County	\$	Technical Team

ID	PROJECT NAME	DESCRIPTION	JURISDICTION	COST	PROJECT ORIGIN
110	Safe Routes for Seniors Lawndale	Implement safety and pedestrian access improvements near senior housing, centers, and services.	Lawndale	\$	Technical Team
113	Safe Routes for Seniors South Gate	Implement safety and pedestrian access improvements near senior housing, centers, and services.	South Gate	\$	Technical Team
114	Safe Routes for Seniors Inglewood	Implement safety and pedestrian access improvements near senior housing, centers, and services.	Inglewood	\$	Technical Team
153	Central Ave Class IV Bike	Add Class IV bikeways.	City of Los Angeles	\$\$\$\$\$	LADOT
154	Avalon Blvd Pedestrian Improvements	The project scope consists of vision zero elements by installing curb extensions, pedestrian islands, bus boarding islands, and protected bike lanes.	City of Los Angeles	\$\$\$\$\$	CBO Partners
155	FLM Improvements near Metro A Line 103rd St / Watts Towers Station	Implement active transportation infrastructure improvements within 1 mile of the station.	City of Los Angeles	\$\$\$	Technical Team
156	FLM Improvements near Metro K Line Downtown Inglewood Station	Implement active transportation infrastructure improvements within 1 mile of the station.	Inglewood	\$\$\$	Technical Team
157	Stress Free Connections: Watt	Aims to improve pedestrian and bicyclist safety and connectivity, enable safer and more accessible travel across neighborhoods, aligning with the Neighborhood Enhanced Network and promoting walking and biking while reducing vehicle miles traveled.	City of Los Angeles	\$\$\$\$	LADOT
159	Hoover Street Safety Improvements	Install bike lanes from MLK Blvd to 120th St.	City of Los Angeles	\$\$\$\$\$	LADOT

Figure 56

Map of High Priority List of Potential Active Transportation Projects





Roadway

The high priority list of potential roadway projects is intended to increase the efficiency of the roadway network by moving more people in fewer vehicles within the existing roadway footprint. Further, optimizing the existing roadway network creates opportunities to move the transit services that operate on those facilities more efficiently and create safer conditions

for all users. In addition, there are projects to enhance landscaping and beautification of the roadway network. The high priority list of potential roadway projects, shown in Table 13 and Figure 57, aims to provide equitable improvements to improve people throughout along the roadway network within the Assessment Area.

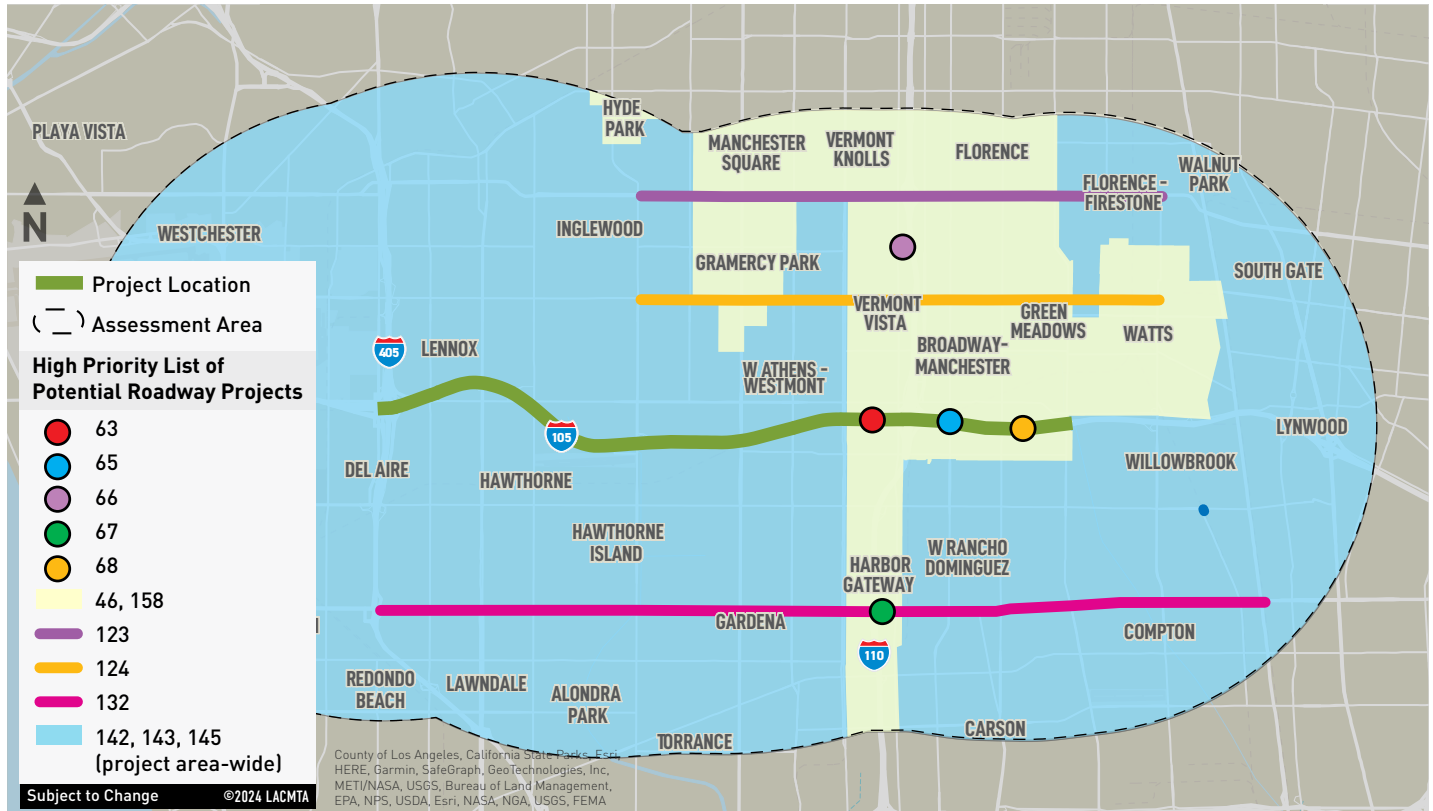
Table 13. High Priority Project List for Roadway Projects

ID	PROJECT NAME	DESCRIPTION	JURISDICTION	COST	PROJECT ORIGIN
46	Universal Basic Mobility	Expand the pilot program (south of Florence Ave) focusing on Metro EFCs; passes for Lyft, Metro Micro, etc.	City of Los Angeles	\$\$\$	LADOT
63	Hoover St I-105 Underpass Improvements	Reconnect neighborhoods separated by I-105 with underpass improvements such as lighting, public art, and landscaping.	City of Los Angeles	\$	Technical Team
66	Manchester Blvd I-110 Underpass Improvements	Reconnect neighborhoods separated by I-110 with underpass improvements such as lighting, public art, and landscaping.	City of Los Angeles	\$	Technical Team
67	Rosecrans Ave I-110 Underpass Improvements	Reconnect neighborhoods separated by I-110 with underpass improvements such as lighting, public art, and landscaping.	City of Los Angeles	\$	Technical Team
65	Main St I-105 Underpass Improvements	Reconnect neighborhoods separated by I-105 with underpass improvements such as lighting, public art, and landscaping.	City of Los Angeles	\$	Technical Team
68	Stanford Ave I-105 Underpass Improvements	Reconnect neighborhoods separated by I-105 with underpass improvements such as lighting, public art, and landscaping.	City of Los Angeles	\$	Technical Team
123	Manchester Ave Intersection Improvements	Implement intersection improvements to reduce collision rates at High accident locations along Manchester Ave between Crenshaw Blvd and Wilmington Ave	Multi-Jurisdictional	\$\$\$\$\$	Technical Team
124	Century Blvd Intersection Improvements	Implement intersection improvements to reduce collision rates at High accident locations along Century Blvd between Crenshaw Blvd and Wilmington Ave.	Multi-Jurisdictional	\$\$\$\$\$	Technical Team
132	Rosecrans Ave Signal Synchronization	Multi-jurisdictional signal synchronization along Rosecrans Ave between I-405 and Alameda Street to improve traffic congestion	Compton, Gardena, Hawthorne, Unincorporated LA County	\$	Technical Team

ID	PROJECT NAME	DESCRIPTION	JURISDICTION	COST	PROJECT ORIGIN
142	RIITS Communications Upgrades	Upgrade RIITS communication connection to the local agencies adjacent to the I-105 corridor.	Multi-Jurisdictional	\$	Metro
143	RIITS Video Distribution	Implement a regional video distribution system for video sharing amongst the local agencies within the I-105 corridor.	Multi-Jurisdictional	\$	Metro
145	RIITS/ATSAC Integration	Upgrade ATSAC SPAT and Enhanced IEN XML Interfaces to support TMDD standards.	Multi-Jurisdictional	\$	Metro
158	BlueLA Expansion	Expand electric vehicle carshare program to communities disproportionately impacted by the environmental and socio-economic impacts of historical patterns of development.	City of Los Angeles	\$\$\$\$	LADOT

Figure 57

Map of High Priority List of Potential Roadway Projects





Transit

Investing in high-quality transit will further the reach of the transportation system, expanding access to and options for reaching the numerous destinations within and beyond the I-105 communities. High-quality transit means transit that is frequent, reliable, fast, and affordable; and that is safe and pleasant to ride. Expanding service coverage will be just as critical as improving existing routes and services. There is also an emphasis on improving the transit user experience by adding bus shelters to provide protection from the elements.

The high priority list of potential transit projects, shown in Table 14 and Figure 58 provides better service for existing transit users and makes new transit trips possible, expanding options for the traveling public and encouraging more people to use transit.

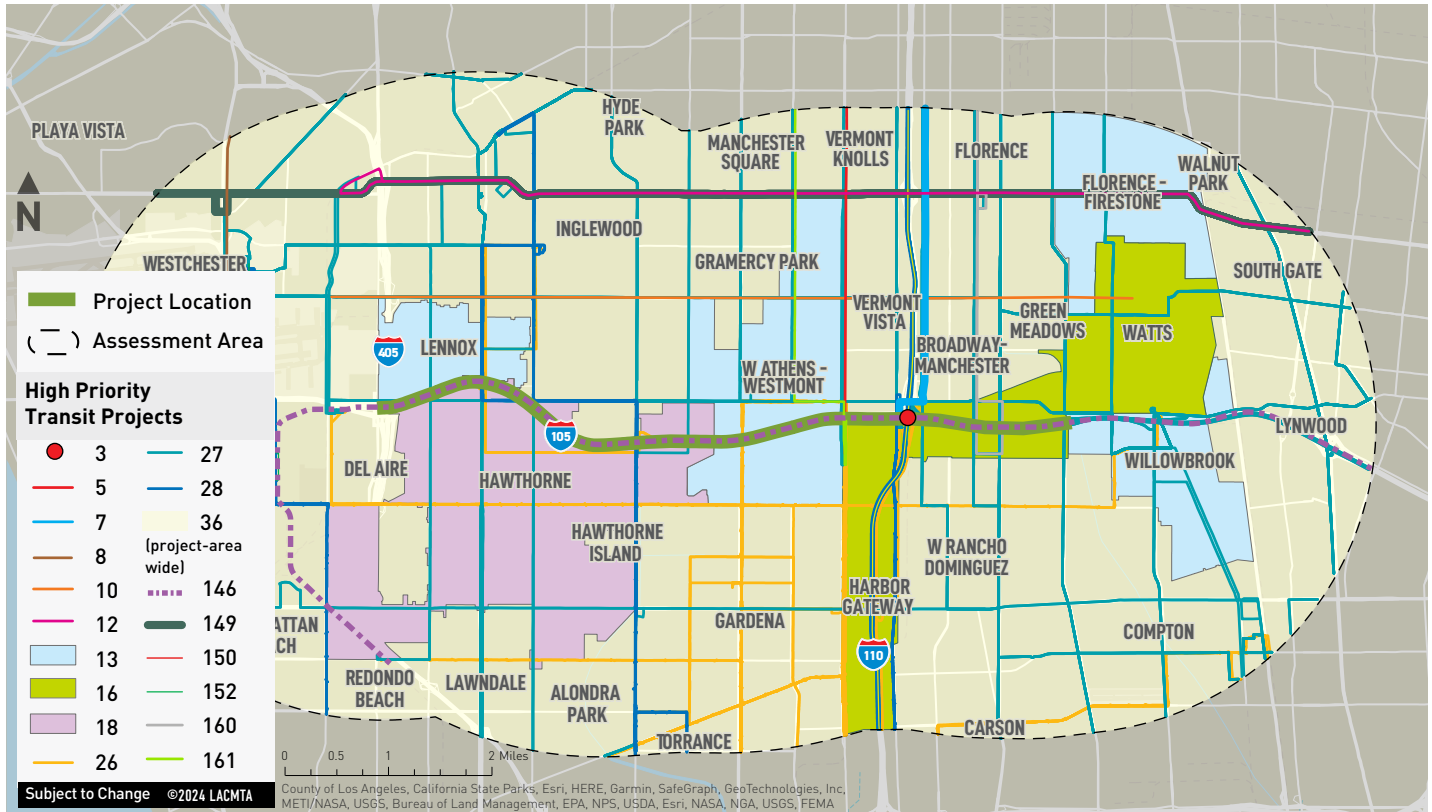
Table 14. High Priority List of Potential Transit Projects

ID	PROJECT NAME	DESCRIPTION	JURISDICTION	COST	PROJECT ORIGIN
3	Harbor Freeway Transit Center and Facilities Improvements Project	Convert a section of the existing parking lot at the Harbor Freeway Station to be a Transit Center, as well as implement station facilities and grounds improvements (e.g., improved station lighting, improved pedestrian access and wayfinding, and pedestrian, bicycle and micromobility amenities, etc.).	Unincorporated LA County	\$\$\$\$\$	Technical Team
5	Vermont Transit Corridor Project	Funding for Vermont Transit Corridor Project north of 120th St.	City of Los Angeles	\$\$\$\$\$	Metro
7	Broadway BRT	Funding for BRT on Broadway within the project area from 75th St to Harbor Fwy Station.	City of Los Angeles	\$\$\$\$\$	Metro
8	Sepulveda BRT	Funding for center-running BRT on Sepulveda Blvd within the project area from 80th St to LAX.	City of Los Angeles	\$\$\$\$\$	Technical Team
10	Century Blvd Bus Priority Corridor	Transit signal prioritization, bus priority lanes, bus stop bulb outs, all door boarding, bus stop and layover improvements on Century Blvd between Van Ness and Wilmington.	Multi-Jurisdictional	\$\$\$\$\$	Technical Team
12	Firestone/Manchester Blvd Bus Priority Corridor	Transit signal prioritization, bus priority lanes, bus stop bulb outs, all door boarding, bus stop and layover improvements on Firestone Blvd/Manchester Blvd.	Multi-Jurisdictional	\$\$\$\$\$	Metro
13	Bus Stop Shelters/ Amenities - Unincorporated LA County	Install up to 113 shelters and other amenities at existing bus stops without shelters within the project area in unincorporated LA County neighborhoods of Lennox, West Athens-Westmont, Florence-Firestone, and Willowbrook.	Unincorporated LA County	\$\$\$	Technical Team
16	Bus Stop Shelters/ Amenities - COLA CD 15	Install up to 80 shelters and other amenities at existing bus stops without shelters within the project area in the City of Los Angeles Council District 15.	City of Los Angeles	\$\$\$	Technical Team

ID	PROJECT NAME	DESCRIPTION	JURISDICTION	COST	PROJECT ORIGIN
18	Bus Stop Shelters/ Amenities - Hawthorne	Install up to 86 shelters and other amenities at existing bus stops without shelters within the project area in the City of Hawthorne.	Hawthorne	\$\$\$	Technical Team
26	GTrans Bus Electrification and Charging Facilities	Electrification of GTrans buses and construction of charging facilities.	Multi-Jurisdictional	\$\$\$\$\$	Gardena Transit
27	Metro Bus Electrification	Electrification of Metro buses.	Multi-Jurisdictional	\$\$\$\$\$	Metro
28	Torrance Transit Electrification	Electrification of Torrance Transit buses.	Multi-Jurisdictional	\$\$\$	Torrance Transit
36	Access Services Cutaway Paratransit Vehicle Electrification	Replace cutaway paratransit buses with zero-emissions vehicles.	Multi-Jurisdictional	\$	Technical Team
146	Metro C Line Improvements	Add signage, sound enclosures, and lighting at Metro C Line stations and make improvements to increase rail frequency.	Multi-Jurisdictional	\$\$\$\$\$	CBO Partners
149	Metro Bus 115 Service Frequency Improvements	Increase bus frequency on Manchester/Firestone.	Multi-Jurisdictional	\$	Metro
150	Metro Bus 232 Service Frequency Improvements	Increase bus frequency on Sepulveda Blvd.	Multi-Jurisdictional	\$	Metro
152	Metro J Line Service Frequency Improvements	Increase bus frequency on Metro's J Line.	Multi-Jurisdictional	\$\$\$	Metro
160	Metro Bus 48 Service Frequency Improvements	Metro Bus 48 Service Frequency Improvements	Multi-Jurisdictional	\$	Metro
161	Metro Bus 206 Service Frequency Improvements	Increase bus frequency on Vermont Avenue.	Multi-Jurisdictional	\$	Metro

Figure 58

Map of High Priority List of Potential Transit Projects



LIVING PLAN

The priority lists of potential active transportation, roadway, and transit projects serve as a living plan and represent current priorities. Priorities and projects may evolve once the I-105 ExpressLanes are operational and generating Net Toll Revenue. Projects submitted for the future Net Toll Revenue grants will ultimately be up to local agencies.





Recommended Actions

Addressing equity and the mobility challenges along I-105 and future ExpressLanes requires a focused implementation approach. Staying on track to achieving our goals for greater accessibility, equity, economic vitality, sustainability, and safety means we must continue to do more. The recommendations summarized in Table 15 are designed to ensure that equity is at the forefront of decisions relative to the next steps of the I-105 ExpressLanes project. 15.

Incorporate Equity Solutions into the I-105 ExpressLanes Construction Contract

The timing of this Study provides a rare opportunity to implement cost-effective projects from the prioritized project list and realize their benefits sooner. For example, as part of construction of the ExpressLanes project lighting at freeway undercrossings that will be widened as part of the project can

be improved. Figure 59 illustrates lighting enhancements at the I-105/San Pedro Street undercrossing that can be made at other undercrossings that currently lack sufficient lighting. This improvement would enhance safety and encourage active transportation in the corridor. In addition, Metro intends to implement wayfinding, lighting, and state of good repair improvements at the C line Avalon and Harbor stations as part of the ExpressLanes project. Incorporating these improvements into the construction contract will reduce the cost of implementation and ensure greater equity outcomes from the outset of project development.

Figure 59

Example of Lighting Enhancements at the I-105/San Pedro Street Undercrossing



Modify Net Toll Revenue Guideline's Evaluation Criteria and Application Process

While the current evaluation criteria approved by the Metro Board of Directors address equity as an element in scoring, the guidelines can be further enhanced and updated to include the following findings from this assessment:

- > Revise the evaluation criteria to ask applicants to emphasize equity by considering and referencing how their projects address the metrics identified in Chapter 5 Table 8.
- > Give priority to projects recommended as high or medium in this Equity Assessments by awarding points to these projects in the evaluation criteria.

Advance Project Development

Metro should encourage the identified lead agencies to advance the projects prioritized as high or medium to begin or continue project development including environmental, design, right-of-way, and cost estimating. Advancing the development of these prioritized projects in preparation of the I-105 Net Toll Revenue Grant Program will increase the project's readiness score, thus increasing the probability of the project receiving funding. Metro can also encourage potential applicants to work with the subregions to program future Measure M Multi-Year Subregional Program funding, apply for federal/state funding opportunities, and identify other local funding opportunities as a project with a higher local match will receive more points. Since many of the projects on the list are in city or county right of way and net toll grants are awarded on a competitive basis, Metro can only grant funding if the local jurisdictions apply to Metro for funding.

Monitoring and Reporting

This Assessment provides an opportunity to determine whether our actions are achieving the desired outcomes. Ongoing monitoring and reporting will allow for the reassessment, refinement, and possible realignment of objectives, to further inform strategies for future rounds of the Net Toll Revenue grant funding. The current guidelines require applicants to collect before and after data including pedestrian and bicycle counts, transit ridership, vehicle throughput, speed, and volumes. Metro can develop and prepare a Net Toll Grant Progress Report to enable a process that will allow for the results of the plan's monitoring and to be reported to guide future Net Toll Revenue grant funding.

Continue Community Engagement

This Study cannot be the end of community engagement. The CBO partners are invested in the future of their communities as attested by their time and resource commitment to this study. Metro must continue engaging them at every step to leverage their pulse on community needs and networks. Continued engagement by the CBOs is critical to ensure support for the prioritized projects in the future. This can be accomplished through outreach meetings to be held during I-105 ExpressLanes construction.

Additionally, the prioritized project list is meant to be a living list that evolves to focus on current and future disparities. Combined with the previous recommendation, Metro can build trust and provide transparency by regularly updating the community on key metrics and reporting.

Table 15. Summary of Recommendations with Timeline and Relation to Goals

RECOMMENDATIONS	NEAR-TERM	MEDIUM-TERM	LONG-TERM	CONNECT PEOPLE & PLACES	CREATE COMMUNITY VALUE	CONSERVE RESERVE	PRIORITIZE EQUITY	COST-EFFECTIVENESS
Incorporate undercrossing and C line improvements into the I-105 ExpressLanes project	X	X		X	X	X	X	X
Modify Net Toll Revenue Guideline's evaluation criteria and process to prioritize equity		X		X	X	X	X	X
Advance project development of prioritized projects	X	X	X	X	X		X	
Monitor and report on key equity metrics on projects funded through the Net Toll Revenue program			X	X	X	X	X	X
Continue to engage the community and CBOs along the I-105	X	X	X	X	X		X	

Conclusion

The development and presentation of the Assessment to the Metro Board is just the starting point—the beginning of a collaborative process where agencies, CBOs, and the public continue to work together to improve mobility and equity through I-105 ExpressLanes net toll revenue. Using this roadmap, Metro and partners can get to work on these improvements that will not only meet the demands of today and those anticipated in the future, but also achieve a more equitable, sustainable, efficient, and connected I-105 ExpressLanes corridor.



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APPENDIX A

I-105 ExpressLanes Segment 1 Community Spotlight Profiles

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APPENDIX B

Project List and Scoring Results

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APPENDIX C

Scoring and Prioritization Methodology Memo

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Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.9200 Tel
213.922.5259 Fax
metro.net

