Appendix F- Corridor Geographic Spotlights

Equity Focus Communities in the San Fernando Valley

The northern-most segment of the I-405 Corridor runs through the most densely populated portion of the San Fernando Valley and facilitates the movement of people and goods to this part of LA County. Out of over 200,000 people residing in the spotlight area (outlined in blue in Figure 1), more than one-third (36 percent) live in areas designated as Equity Focus Communities (EFCs). These EFCs are located within parts of the North Hills, Panorama City, Reseda and Van Nuys communities. Within the I-405 study area, this spotlight area has one of the highest concentration of EFCs, and more than half of residents identify as Hispanic/Latino (Table 1).

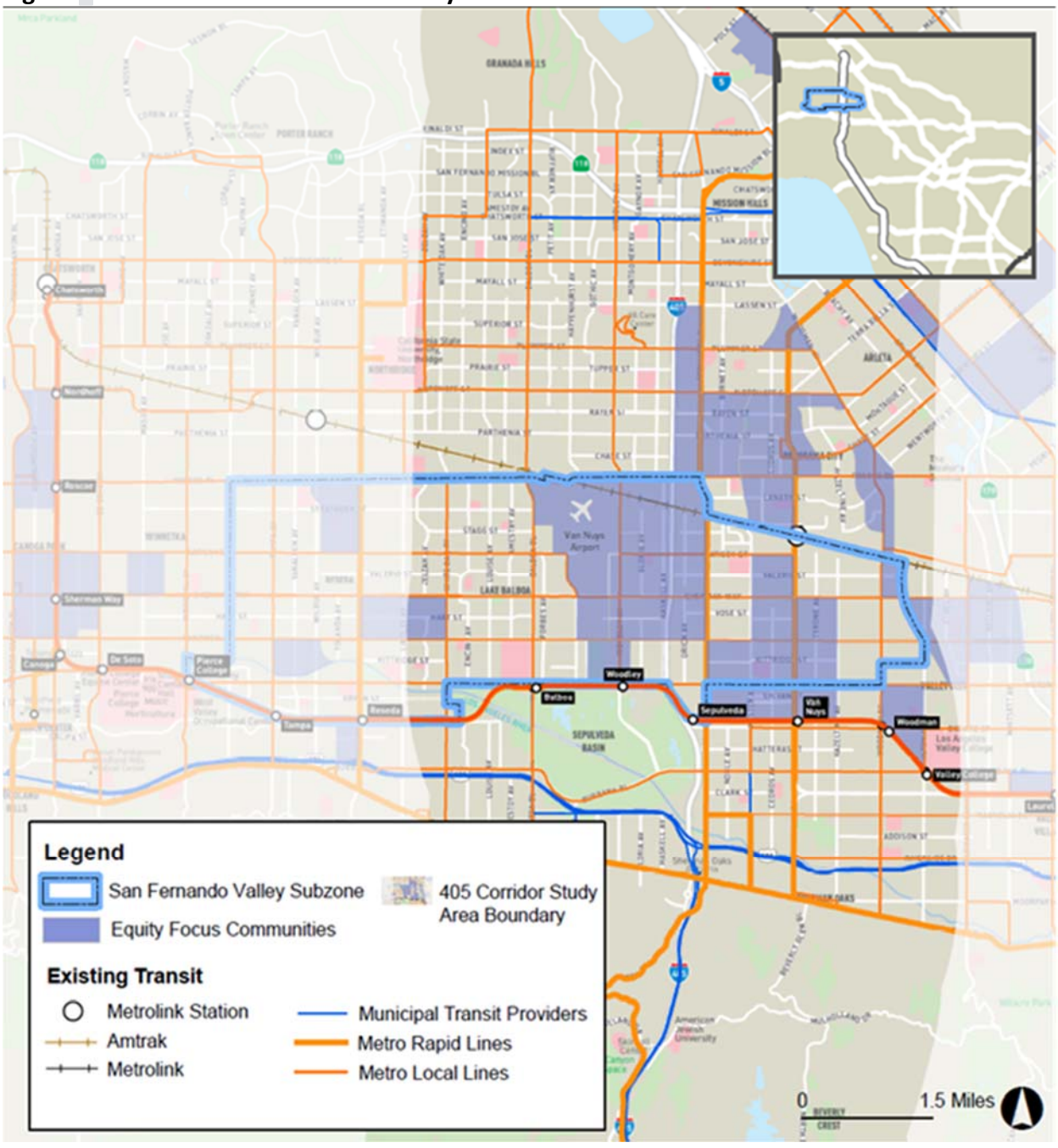
EFCs in the spotlight area experience poverty at higher rates than the rest of the corridor and have lower rates of vehicle access. Compared to other parts of the study area, these residents use transit, biking, and walking at higher rates to reach jobs and other destinations, despite the unsupportive transportation conditions they must navigate including limited transit options, poor first/last mile conditions, a lack of connected and protected bike lanes, and several collision hotspots. Improving access to and the efficiency of affordable transportation options that are safe and reliable will support the needs of San Fernando Valley communities, especially residents of EFCs in this area.

Table 1 San Fernando Valley Community Characteristics

COMMUNITY CHARACTERISTICS	EFCS IN SPOTLIGHT	SPOTLIGHT AREA	I-405 CORRIDOR
PEOPLE OF COLOR	61,342 (79%)	153,856 (73%)	1,630,322 (69%)
HISPANIC/LATINO	49,993 (65%)	118,239 (56%)	962,358 (49%)
HOUSEHOLDS LIVING IN POVERTY ($35,000 PER YEAR OR LESS)	15,090 (60%)	19,003 (30%)	313,197 (38%)
ZERO-CAR HOUSEHOLDS	3,043 (12%)	6,004 (9%)	60,954 (7%)

Source: U.S. Census Bureau, American Community Survey, 5-Year estimates, 2014 - 2019

Figure 1 EFCs in the San Fernando Valley



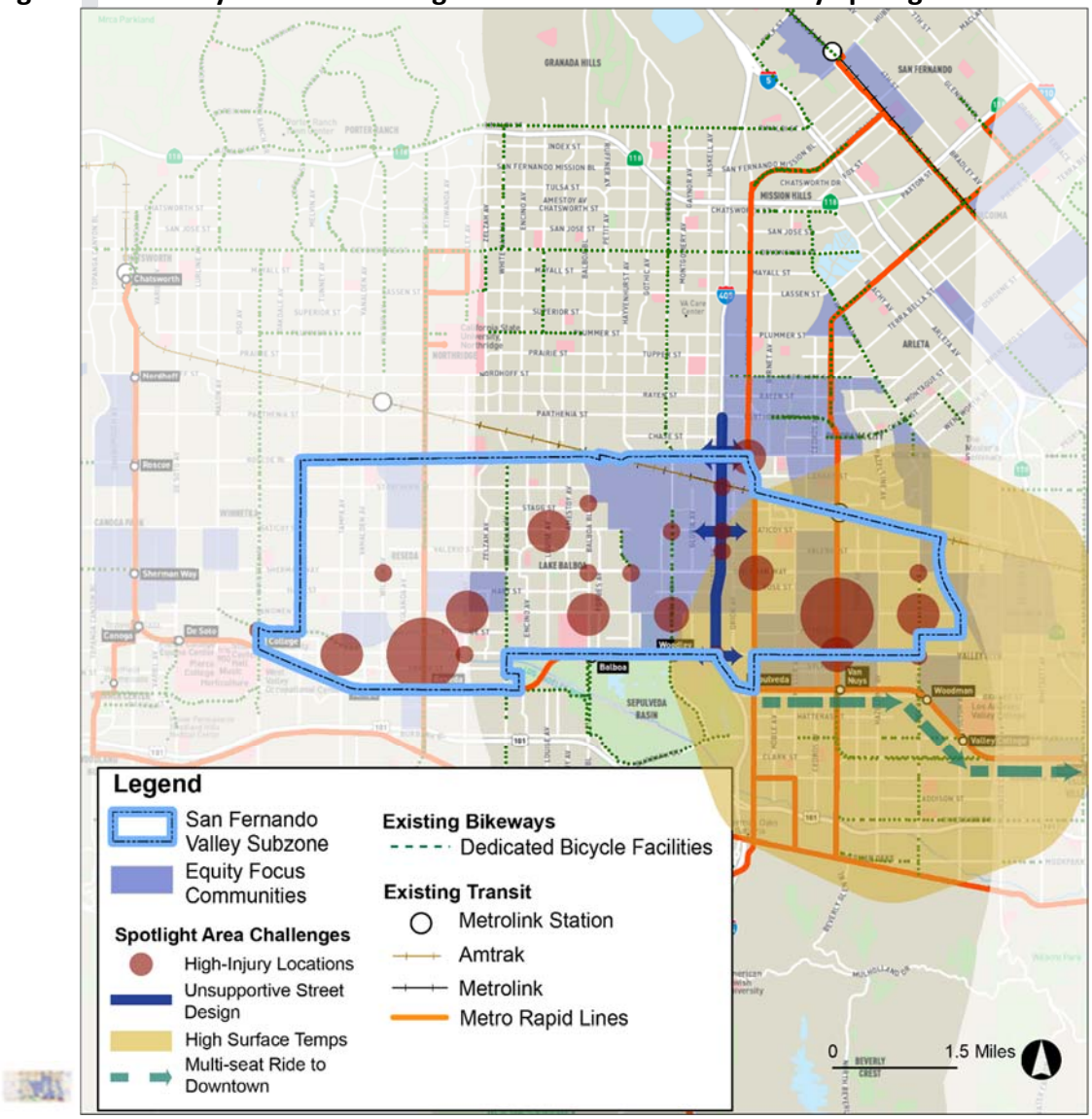
Source: Metro EFCs

Key Mobility Challenges

Nearly nine percent of workers living in this area walk, bike or ride transit to get to their jobs, compared to six percent of workers countywide, indicating that residents of these areas are more likely to rely on transit, walking, bicycling, scooting, shared rides and other shared mobility to access destinations and opportunities. At the same time, this area has some of the most apparent gaps in active transportation and transit infrastructure throughout the I-405 study area. One of the core gaps is a non-auto connection between the San Fernando Valley, West LA and beyond.

In addition to these gaps, the existing transportation system and limited amenities available place a greater burden on those that opt for alternatives to driving, and those who do not have access to a vehicle. The San Fernando Valley also suffers from extreme heat, forcing residents that walk, bike or wait for a bus to do so in high temperatures, and in some cases with little to no shade or shelter. Further, these travelers face safety challenges as several road segments are part of the City of LA's High-Injury Network (HIN), the subset of city streets where 70 percent of deaths and severe injuries for people walking have taken place.[1] Moreover, there are notably high bicycle and pedestrian collisions with vehicles in Van Nuys, especially along Van Nuys Boulevard, Vanowen Street, Sherman Way, and Sepulveda Boulevard.[2] Together, these conditions indicate that this part of the SFV, it's EFCs, and particularly its residents that travel by transit, walking and biking have limited transportation options, and those options that they have are in many ways inhospitable.

Figure 2 Summary of Core Challenges in the San Fernando Valley Spotlight Area

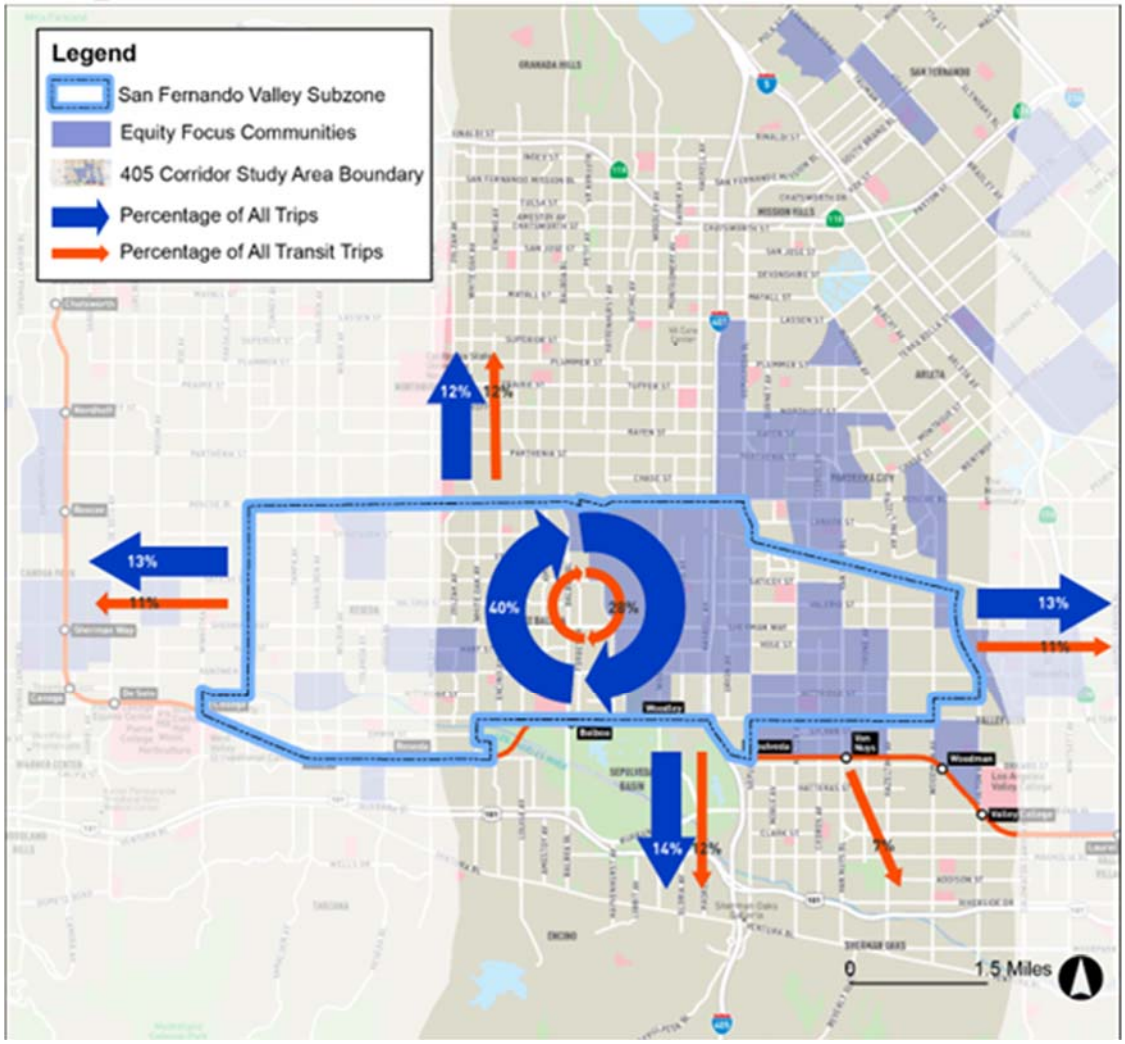


Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley; 2021

Travel Patterns

Nearly 1 million daily trips are made to, from, or occur within this spotlight area. By far the largest share of trips, approximately 40 percent, stay within the Van Nuys and Reseda neighborhoods, as shown in Figure 3. The remaining trips are spread primarily between destinations to the north, south, and west, with the second largest share of trips heading south through the Sepulveda Pass and toward West LA.

Figure 3 Trip Origins for All Trips by All Modes in the San Fernando Valley Spotlight Area



Source: Cambridge Systematics, LOCUS Dataset; 2019

About 200,000 daily trips are regularly occurring home-based trips (e.g. trips to school, work, etc). Of these trips, about 45 percent are less than 2.5 miles. The spotlight area has a higher share of trips that are between 2.5 and 10 miles compared to the I-405 study area and County, likely due to the dispersed land use pattern and auto-oriented nature of this area.

About 5 percent of regularly occurring home-based trips are taken on transit, or about 3 percent of total daily trips.[3] Of all transit trips within the spotlight area, only a quarter stay within the area, indicating that transit is used for longer trips to other parts of the San Fernando Valley and LA County.

Mobility Options

Transit

There are few high-quality transit options for regional connections in San Fernando Valley EFCs, especially for north-south travel along the I-405 Corridor. Transit riders experience minimal amenities at bus stops, such as seating, shade, real-time bus arrival information, lighting, tree cover on local streets, etc. This combined with recurring high surface temperatures makes waiting for the bus uncomfortable. Wide streets with heavy traffic volumes do not provide adequate facilities for people to comfortably, safely, and efficiently walk, roll, or ride a bicycle to transit.

Current transit options include:

- **Bus:** LA Metro local buses and G Line busway, LADOT DASH and Commuter Express
- **Metro Rail:** East San Fernando Valley Light Rail Transit Project (future project)
- **Commuter Rail:** Van Nuys Amtrak/Metrolink Station
- **Cityride access services:** Discounted taxi and dial-a-ride services

Active Transportation

Though existing bicycle lanes offer some dedicated space for north-south bicycle travel, there is a lack of a broader connected bikeway network that physically separates bicyclists from higher speed vehicles. There are no protected bicycle facilities in the spotlight area, despite the higher-than-average levels of bike, walk and transit commuting. Before the pandemic, the Van Nuys area was one of the top five neighborhood destinations for dockless micromobility trips using shared electric scooters in the San Fernando Valley.[4]

Safety is a major concern for pedestrians and cyclists. The I-405 on- and off-ramps and underpasses physically separate neighborhoods, reduce crossing opportunities, and create long and complex intersections. In addition, narrow or missing sidewalks and vehicle speeding contribute to pedestrians and cyclists feeling unsafe.[5] According to 2013-2017 collision data, vehicle crashes with bicycles and pedestrians are especially high along Van Nuys Blvd, Vanowen St, Sherman Way, and Sepulveda Blvd. Several road segments are also part of the City of Los Angeles High-Injury Network (HIN).[6]

Personal Vehicles

The I-405 Corridor is the primary link for regional vehicle trips to this area but is heavily congested. While peak vehicle travel demand eased as more professional workers telecommuted post-pandemic, SFV streets are still designed to prioritize vehicle movements at high travel speeds.[7] Parking on and off streets is plentiful, and the City of LA owns and operates seven public parking lots near Victory Boulevard and Van Nuys Boulevard. The Van Nuys Amtrak/Metrolink station features a park-and ride lot shared with riders of the LADOT Commuter Express Route 761 headed to the Metro E Line Sepulveda Station.

Initiatives and Opportunities

People who live in EFCs in the San Fernando Valley spotlight area depend on walking, bicycling and transit at higher rates than most other parts of the I-405 study area, yet experience many barriers to multimodal transportation and unmitigated impacts that affect public health, safety and access. There are several potential upcoming investments that could address the gaps around north/south transit service and connectivity, safe and convenient transit access, pedestrian and bicycle safety, and active transportation options for local trips. The following multimodal improvements have potential to improve access and remove barriers for people who live in the spotlight area:

What is the cost of doing nothing?

Exacerbated existing income and wealth disparities experienced by people of color
Increased travel and access inequities for low-income and zero-car travelers
Increased pedestrian and bicyclist fatalities and severe injuries
Harder for residents, employees, business patrons, and visitors to access services.

- **I-405 ExpressLanes** will improve travel through the Sepulveda Pass by moving more people in fewer vehicles, and improving travel times and flows for those driving over the pass.
- **The Sepulveda Transit Corridor Project** will address the lack of north-south transportation alternatives to driving over the Sepulveda Pass by providing a high-capacity transit option that will improve connectivity between the SFV and West LA.
- **Expanded transit options** will deliver better rail and bus service and improve connectivity to stations, including the North San Fernando Valley Transit Corridor Project, the East San Fernando Valley (ESFV) Light Rail Transit Project and ESFV First/Last Mile Plan and first/last mile improvements around the Van Nuys Metrolink station.
- **Safe and comfortable pedestrian and bicycle connections** and amenities (lighting, shade, seating and wayfinding) across the I-405 study area, including projects like the LA River Bike Path that will expand active transportation access and safety. The addition of separated and protected bike facilities running north-south will solve for gaps where such facilities do not currently exist.
- **Increased density and diversity of land uses around existing transit stations,** including Metrolink and future light rail that will bring jobs and destinations closer to this area.
- **EV charging and affordable electric car share opportunities** such as BlueLA will increase sustainable mobility options for residents without vehicle access.

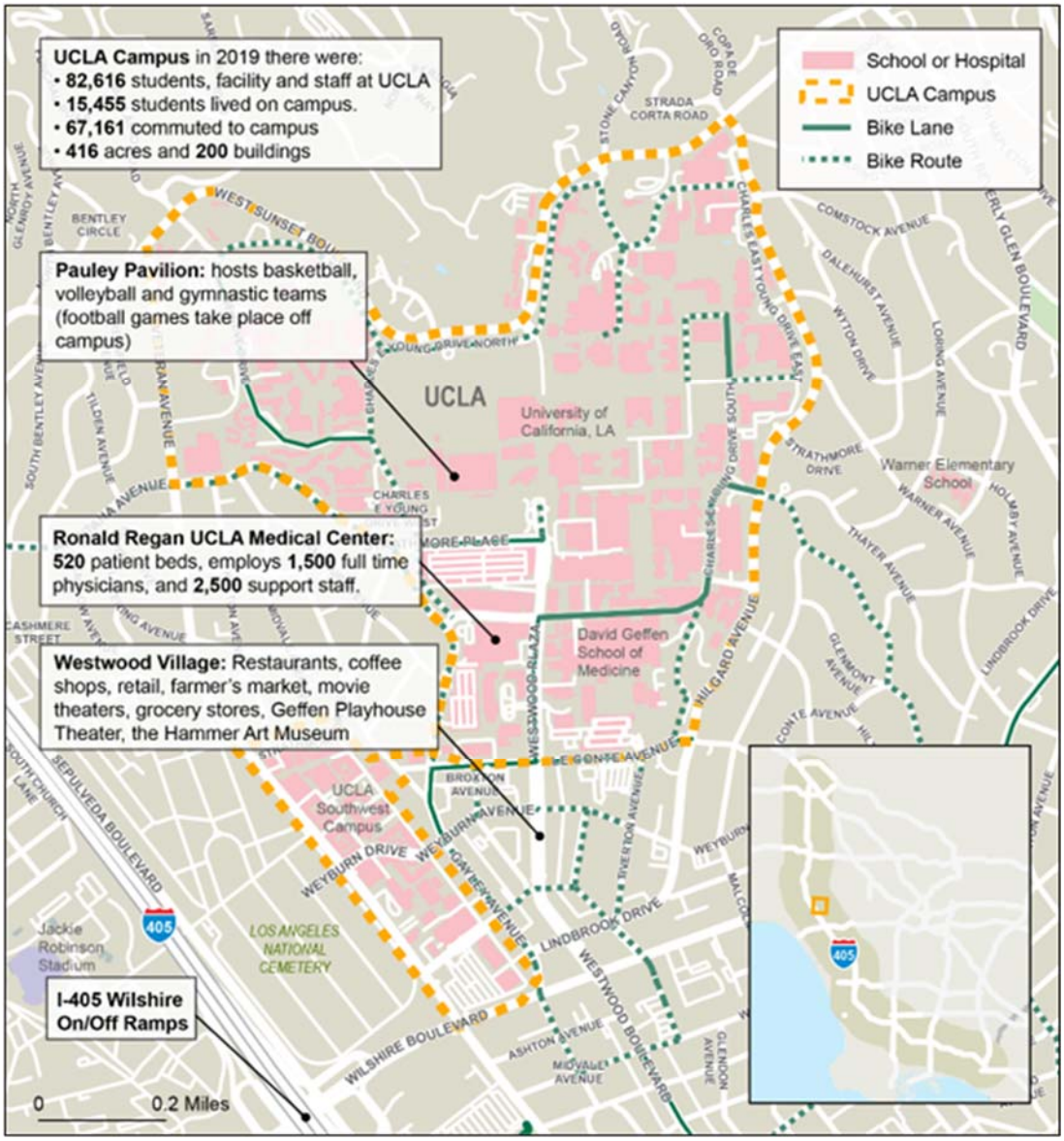
UCLA Campus and Community

The UCLA campus is a hub of major activity along the I-405 Corridor. Located between the Sunset and Wilshire Boulevard exits of I-405, UCLA generates roughly 110,000 daily trips. The campus minimizes daily auto trips through transportation demand management strategies so that most trips (over 63 percent) are made by transit, carpooling, biking, walking and other alternatives to driving alone.[9] While it is served by multiple well-used bus lines (both Metro and municipal bus services), service coordination and connectivity to campus present challenges for operators and passengers alike. Robust and well-connected mobility options will be critical to managing demand now and into the future.

The UCLA Community

The UCLA campus has over 80,000 community members including over 40,000 faculty and staff, and another 40,000 in students. A growing student body with limited on-campus housing—roughly 37 percent of students live on campus—requires many to either pay for very expensive housing in surrounding areas or to live far from campus and commute longer distances. Thirty-one percent of students are first-generation and around 34 percent are Pell Grant recipients—which means they come from a household that earns less than $60,000 a year.[10] In addition to students and employees, campus facilities and venues attract visitors daily and the Ronald Reagan Medical Center is supported by over 4,000 staff serving hundreds of patients a day.

Figure 1 UCLA Context Map

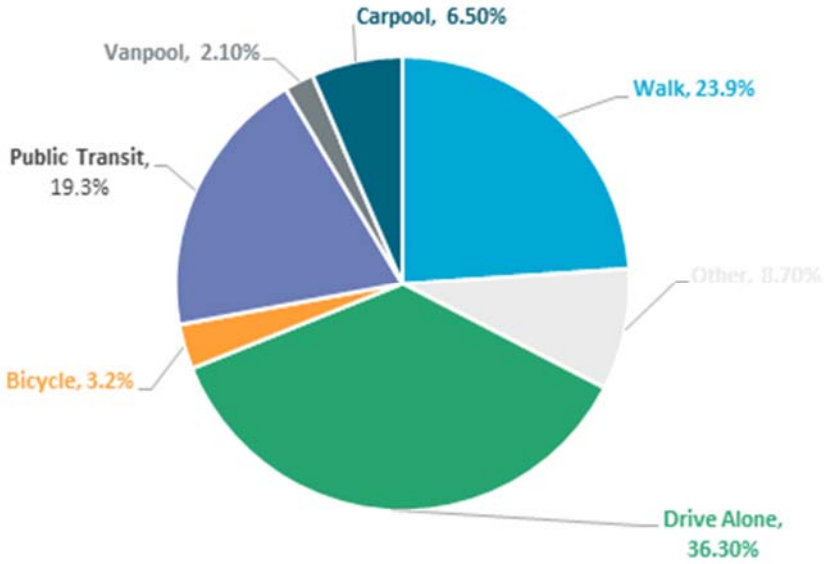


Mobility Options

There are many existing mobility options serving the UCLA campus. There are eight transit operators serving the campus, and on average there are 802 buses traveling to and from campus every day. No rail currently serves the campus directly; however, the D Line (Purple) extension is under construction and the Sepulveda Transit Corridor Project would provide transit service parallel to I-405. In 2019, the League of American Bicyclists awarded UCLA with a gold-rating for being a bicycle friendly campus, with multiple active transportation facilities to support the large number of people biking, walking and rolling on the campus.

While driving is the dominant form of transportation in the I-405 Corridor making up roughly 98 percent of trips, mode split across students and employees who drive alone to campus is 36 percent, which is represented by 23 percent of students and 48 percent of employees. The combined pre-pandemic commute mode split for all modes is shown in Figure 2.2.

Figure 2 UCLA Commute Mode Split for Students and Employees, 2019



Source: UCLA State of the Commute; 2019

Transit

Transit commuting is roughly four times higher on the UCLA campus compared to the rest of the I-405 corridor–at 19.3 percent for students and employees combined (Figure 2.2). Within the I-405 Corridor, roughly five percent of commute trips are taken on transit. Transit commuting within the student body alone is higher, at 25.5 percent of all trips.

There are eight transit operators serving the UCLA Campus, and on average there are 802 buses traveling to/from campus every day. LA Metro provides service from across the county, the Big Blue Bus, Culver City Bus, and BruinBus provide service from the westside (West LA, Santa Monica, Culver City, Mar Vista, and Palms), Long Beach Transit has a commuter line that runs on I-405 from Long Beach, Santa Clarita Transit and Antelope Valley Transit Authority run commuter lines on I-405 from the North Valley and Palmdale/Lancaster, and LADOT provides commuter service from downtown LA. No rail currently serves the campus; however, the D Line (Purple) is under construction and the Sepulveda Transit Corridor is a future project that would provide transit service parallel to I-405. In addition, there are bus routes connecting to the Metro E Line (Expo) to campus–providing service from Union Station in downtown LA and communities along the I-10 corridor.

Active Transportation

Walking and biking make up a large number of commute trips on the UCLA campus–27 percent for students and employees combined.[11] While bicycle commuting is higher than the county average (typically less than one percent) and UCLA itself is a Gold-rated Bicycle Friendly Campus, gaps in the bikeway network and unsafe conditions may prevent more commuters from considering this mode. Only 2.5 percent of employees and 3.9 percent of off-campus students commute by bicycle.[12] Portions of the campus are located on a hill, which can make walking and biking challenging for some.

The 'other' commuting category in Figure 2.2 includes people who are dropped off, commute on motorcycle, ride-hail or use shared mobility options. UCLA students were early adopters of e-scooters and other small shared mobility devices, approximately 1.1 percent of commuters use scooters and more students use their own skateboards to get around campus.[13] However, shared mobility devices that

are left on the campus have interfered with ADA accessibility, and the school is now working with e-scooter providers to eliminate these obstacles. Not surprisingly walking is the primary transportation mode for 84 percent of students who live in residence halls or other on-campus facilities.

Personal Vehicles and Transportation Network Companies

In 2019 UCLA reported just over 100,000 average daily vehicles trips to/from campus; down from 105,584 in 2010 despite a 20 percent increase in campus population during that same nine-year period. UCLA uses travel demand management (TDM) techniques such as parking management, parking permit bike exchange, commuter benefits programs, student discounts on transit passes, and commuter vanpool programs to incentivize people to find alternatives to driving. In 2019 roughly 36 percent of the campus population commuted by private vehicle. The campus is also building four new student housing complexes that will reduce the need to drive to, from, and around campus.

Transportation Network Companies (TNCs) like Uber and Lyft are permitted to operate on campus with minor restrictions. There are 12 designated on-campus pick-up locations that operate during weekday business hours from 7 AM to 6 PM. Passenger drop-offs are allowed throughout campus. TNC trip-making at UCLA has declined dramatically since the pandemic started, with Lyft reportedly making around 80 percent less trips on campus than prior to the pandemic.

Key Mobility Challenges

Housing costs near campus are high and on-campus housing is limited, causing many people to live and commute from all over LA County. Twenty six percent of UCLA commuters come to campus from northern parts of the County.[17] Many come from the SFV, where housing is more affordable, with some people traveling as far as Palmdale and Lancaster. Commuters from the SFV, who are disproportionately lower-income students and faculty, rely on the heavily congested Sepulveda Pass which has limited non-auto mobility options, adding to their travel time and transportation costs. Other key transportation challenges include:

- The I-405 is the main regional access route, and it is highly congested near campus. Key arterials such as Wilshire Boulevard, which is the main access route to campus, are also heavily congested;
- Many commuters (roughly one third) rely on a personal vehicle to access campus;
- Overlapping transit services on Westwood Boulevard and a high volume of buses exacerbate the already congested roadway;
- Connectivity via walking, biking and other active transportation modes to the campus from the surrounding street system is challenging due to heavy auto traffic, narrow lanes shared with autos and narrow sidewalks that hinder pedestrian safety;
- The I-405 is a physical barrier for campus access from the west side, especially for people walking, biking and rolling; and
- Additional traffic and mobility obstacles related to the significant truck and delivery trips that support the operations of campus facilities and retail in Westwood Village.

Initiatives and Opportunities

The UCLA campus will continue to be a major travel destination along the I-405 Corridor. The campus population is more likely than most to opt for alternatives to driving alone, when those options are plentiful, convenient and cost-effective. This presents a variety of opportunities to improve mobility and accessibility within the I-405 Corridor as well as the campus itself:

- **Continue transportation demand management strategies** such as parking management and telework policies that occurred at the start of the COVID-19 pandemic to reduce trip-making to and from campus, while retaining a collaborative learning environment.
- **Improve transit options.** As part of the D Line (Purple) extension, surrounding areas will need to accommodate high volumes of pedestrian travel as more people access campus by transit. In addition, there are opportunities for bus lanes on the I-405 freeway, and the Sepulveda Transit Corridor Project will provide a transit option for students and staff living in the SFV. In addition, improved coordination across the eight transit agencies serving the campus may help reduce bus congestion on Wilshire Boulevard while providing a similar level of service.
- **Improve connectivity for active modes across the I-405 underpass.** Freeway interactions for people walking or rolling are unpleasant due to high traffic, noise and unsafe conditions even on mostly separated pedestrian facilities like the I-405 underpass. Better lighting, wider sidewalks and protected crossings would help encourage more people to walk or bike to campus.
- **Improve convenience for essential auto trips.** There are many people for whom transit, walking or biking to and around campus is not an option, including custodial and maintenance staff that may need to work off-hours or travel long distances, or people with physical disabilities. Mode shift and congestion reduction strategies, such as the I-405 ExpressLanes project, will improve the ease of travel for individuals who must rely on a personal vehicle.
- **Build more on-campus housing** to reduce housing and transportation burdens for the student body, especially for those that currently have to contend with high housing costs near campus or are forced to commute long distances. UCLA has successfully reduced their trips generated for many years, in large part due to adding on-campus housing.

What is the cost of doing nothing?

If no action is taken to improve mobility on the I-405 corridor it will be harder for students, faculty, and staff to access the campus and hospital areas. If there continues to be an affordable housing shortage near campus, people will continue to seek out more affordable options further from campus, increasing bottlenecks through the Sepulveda Pass, and increasing delay on Sunset, Wilshire, and Santa Monica Boulevards, and other local streets.

This all leads to **increased travel inequities for low-income students and personnel.** While students and employees of means will be able to live and walk to campus, low-income students and employees will be forced to travel longer distances to access the same educational and job opportunities. Investing in congestion reduction strategies along the I-405 corridor, such as Sepulveda Transit, I-405 ExpressLanes, and other TDM programs is critical to ensuring equitable access to the campus now and into the future.

Inglewood and the SoFi Stadium

Situated northeast of the I-405/I-105 interchange, the City of Inglewood has a population of approximately 100,000. New and planned developments are transforming the City into a major entertainment hub that will draw an increasing number of visitors from the LA Basin and beyond.

Coming Attractions:

- ***2023 College Football National Championship (CFP)***
- ***2026 FIFA World Cup***
- ***2028 Summer Olympics***

The Inglewood Entertainment District includes the 70,000-seat SoFi sports stadium—home of the LA Rams and Chargers football teams—that is adjoined by the 6,000-guest indoor YouTube Theater. Hollywood Park Casino and the Inglewood Forum (17,000 guests) are also major destinations. Forthcoming is the Intuit Dome (18,000 guests) that will be the new home of the LA Clippers in 2024, the Aria Hotel and the Hollywood Park retail area.

Inglewood includes many EFCs. Fifty percent of residents identify as Hispanic or Latino and 40 percent as Black or African American. Poverty rates in the City are some of the highest in LA County. Just over 15 percent of the Inglewood population lives in poverty, compared to the national average of 11.4 percent. Median gross rent is $1,410 and there are on average three people living in each household. Sixty percent of people, aged 5 and above, speak a language other than English at home. The median household income (in 2020 dollars) is $58,536, compared to the national average of $67,521.

While new developments may bring jobs and greater economic activity, there is also high potential for continued gentrification and displacement of long-time residents. Managing the mobility needs of community members and visitors alike and expanding access to opportunities through safe and affordable transportation options will be critical for the City's long term economic vitality and fostering a more livable community for its residents.

Figure1 Inglewood Context Map

Mobility Options

In addition to the I-405; I-105, and many large arterials and local roadways facilitate vehicle travel through Inglewood and to its many attractions. The area is served by the Metro C Line (Green), which runs parallel to the I-105 freeway. The city has a fairly consistent bus network provided by Metro, Long Beach, Torrance Transit and LADOT Commuter Express, primarily on the main arterials such as La Brea Boulevard, Century Boulevard, Manchester Boulevard, Inglewood Avenue, and others, with a bus transfer center in Downtown Inglewood. New rail connections through the K Line (Crenshaw/LAX) will expand high-capacity transit options for reaching LAX, Baldwin Hills/Crenshaw, and beyond as the K Line's initial northern terminus ties into the E Line (Expo) which travels between Santa Monica and Downtown Los Angeles. The Inglewood Transit Connector (ITC) will expand transit connectivity within the City connecting the Downtown Inglewood K Line Station to the SOFI Stadium. These new services will expand rail access and complement the existing C Line (Green) service.

The area is also served by many new and shared mobility services including bike-share, car-share, scooter-share and transportation network companies such as Lyft and Uber. However, the City of Inglewood lacks bike facilities, creating unsafe conditions for bicyclists and other non-motorized travel. There are currently under two miles of existing bike facilities within the City. However, the City has plans to build out the active transportation network. New Class II bicycle facilities (bike lanes adjacent to roadways) are proposed along main north/south and east/west corridors such as Arbor Vitae Street, Inglewood Avenue, and La Brea Avenue. Protected facilities (Class IV) are proposed along key corridors such as Prairie Avenue, Crenshaw Boulevard, and portions of Florence Avenue, along with multiple shared facilities (Class III) and first-last mile improvements (Figure 2).

Sidewalks on the streets of Inglewood vary in width and quality, as do the existing crosswalks. Some key crosswalks are missing, for example those crossing the wide and busy Florence Avenue near I-405. As with many other cities in LA County, blocks in Inglewood can be long. Long blocks mean infrequent pedestrian crossings, which pose a challenge for people walking. Many of the city's main arterials are wide, vehicular-oriented thoroughfares (70-100 feet wide) which can be unpleasant to walk along due to swiftly moving vehicles.

Between 2016 and 2020, there were over 100 on-street collisions involving pedestrians and over 200 collisions involving people who were riding a bicycle. Vehicle/bike collisions were scattered throughout the City, especially along main arterials like Century Boulevard, La Brea Boulevard, Crenshaw Boulevard, and Arbor Vitae Street. As expected, bicycle collisions often occurred at the intersections where these main arterials meet. Eight collisions during this time frame occurred directly at or adjacent to I-405.

Vehicle/pedestrian collisions were similarly scattered throughout the City, however compared to bike collisions, pedestrian collisions also often occurred on non-arterial, side streets, as well as main arterials. Collision hotspots for vehicles/pedestrians include Downtown Inglewood,

along Manchester Boulevard and the La Brea Avenue corridor. Projects that address safety will be of paramount importance for the City of Inglewood, especially along main arterial streets that connect to I- 405. This will be of particular importance for Inglewood residents who rely on non-motorized modes to access residential communities, job centers and entertainment venues.

Figure 2 Inglewood Rail and Bike Infrastructure

Travel Patterns

Currently, forty-three percent of all trips that originate in Inglewood stay local, half of which are trips less than 2.5 miles.[22] Only 19 percent of transit trips that start in Inglewood stay local. For the 57 percent of all trips that start in Inglewood and go elsewhere, the most common destinations include the immediate surrounding areas of Hawthorne, Westchester, Lawndale, LAX, Playa Vista, Athens, Manchester Square, Baldwin Hills and Crenshaw. As visitation to the area increases, trips will come from across LA County and beyond, putting more pressure on existing infrastructure.

Travel Patterns During Events

In February 2022, SoFi Stadium welcomed a crowd of 70,000 to see the LA Rams and Cincinnati Bengals playoff in Superbowl LVI 2022. Twenty thousand of those attendees reached the stadium through public transportation and parking shuttles provided by Metro, Municipal Operators and special event shuttles through partnership with the Super Bowl Organization. Metro parking lots were comparably priced with rates implemented by the City of Inglewood and LAX area to strategically utilize the parking available while minimizing spillover impacts on surrounding neighborhoods.

To support game-day operations on Metro services and shuttles, Metro mobilized an event strike force consisting of members from Metro's System Security & Law Enforcement, Communications, Rail Transportation Operations Supervisors (RTOS), Vehicle Operations (VO) supervisors, Customer Information and Customer Care employees, various field support staff as well as People Assisting the Homeless (PATH) support. Deployment of these resources is necessary to successfully manage and transport event-attendees, preserve quality service for regular transit users and reduce impacts on local streets and communities.

Key Mobility Challenges

If all of the existing venues in downtown Inglewood hosted events at the same time, there would be more than 90,000 people accessing area. Once the Intuit Dome opens, the number of visitors converging in the area will further increase, as it anticipates generating up-to 19,000 daily inbound and outbound vehicles trips for sold-out events.[23] These venues and the large-scale events they host create a unique strain on the City's existing infrastructure, while increasing congestion on I-405 and the local arterials including Century Boulevard and Manchester Boulevard that have I-405 on/off ramps. The generated traffic spills over to the City of Inglewood, impacting not only mobility but air quality, safety, and quality of life. There are many challenges associated with surges in travel demand that will only become worse if not addressed proactively. These include:

- Wide and busy arterials with fast-moving vehicular traffic that poses safety risks to people biking walking, and rolling;
- Limited transit and other non-auto mobility options;
- A lack of safe and connected bicycle and pedestrian facilities, especially first/last mile connections linking people to existing and future transit services;
- Long block lengths with limited pedestrian crossing opportunities;
- Coordination of Caltrans, Inglewood, LAWA and other traffic management systems to ensure the most responsive traffic operations during peak event times combined with LAX and other local travel demands; and
- Parking and traffic overflow into residential neighborhoods.

Initiatives and Opportunities

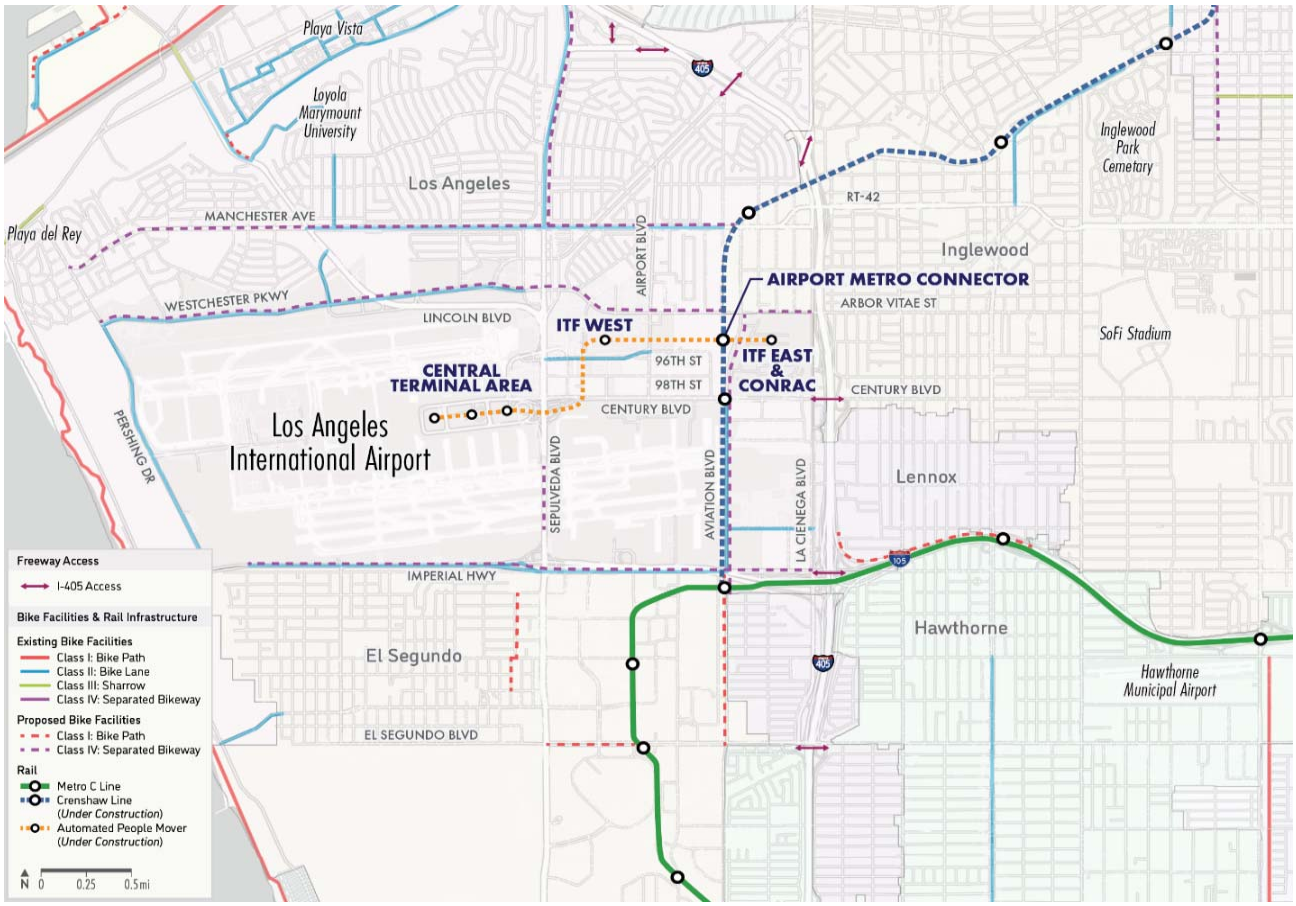
As the City plans and implements new developments over the next decade, several transportation related initiatives are underway. Many of them focus on improving multimodal access and increasing flexibility in infrastructure to accommodate game-day and other event-

related traffic. Given the City's projected economic growth, infrastructure investments should prioritize: safety, particularly for people biking, walking, and rolling; adding first-last mile connections around new transit stations; enhancing key event corridors and facilities for all users; and improving the interface between I-405 and local streets. Additionally, with major events planned in the future and the growing Inglewood entertainment hub, the transportation system is going to need to be nimble to not only support the daily needs of the residents and employees, but also visitors and surges of crowds attending major events. Key initiatives and opportunities underway include:

- **The Metro Crenshaw/LAX Project** will introduce three new rail stations within Inglewood (the Fairview Heights Station, the Downtown Inglewood Station and the Westchester/Veterans station), opening in 2022. Additionally, the Aviation/96th Street Station and the Aviation/Century Station will connect travelers from LAX to Inglewood.
- **The Inglewood Transit Connector (ITC)**, a 1.6 mile elevated and automated transit system, will connect the K Line (at the Inglewood Downtown Station) to the Inglewood Forum, the SoFi Stadium and Intuit Dome. The ITC is anticipated to open in 2027, in advance of the 2028 Olympic Games. Mobility enhancement projects that address event venue access and venue/community mobility conflicts should be prioritized.
- **The Active Transportation and Safe Routes to School Plan** (soon-to-be-adopted) proposes a full network of bicycle facilities through the City of Inglewood. Three proposed bicycle facilities cross the I-405 freeway (on Florence Avenue, Hillcrest Boulevard and Arbor Vitae Street).
- **First/Last Mile Plans** such as the Inglewood First/Last Mile Plan, Inglewood Mobility Plan, and Arbor Vitae Bike Plan will ensure that residents and visitors have safe, convenient, and reliable access to and egress from current and future transit services.
- **Technology and Operational Improvements** such as the Prairie Avenue Dynamic Lane project, Crenshaw Resurfacing project, Downtown Inglewood ITS, Manchester/Prairie ITS, and CMS and CCTV signs will reduce congestion and improve the flow of vehicular traffic throughout the City.
- **Transit-Oriented Development Plans** in Downtown Inglewood, Fairview Heights, and Westchester/Veterans will locate more housing, shopping and services near current and future transit services, reducing reliance on personal autos. This is a critical strategy to accommodate future growth while managing growing demands on the transportation system network.

SPOTLIGHT—Los Angeles International Airport (LAX)

LAX, located directly west of I-405, draws travelers and employees from across the greater LA region and serves as a major cargo hub for domestic and international goods movement. In 2019, LAX was the second-busiest airport in the U.S., and third in the world, serving 88.1 million passengers and over 2.2 million tons of air freight [1] Pre-pandemic, this significant movement of people and goods was supported by over 50,000 employees employed by Los Angeles World Airports (LAWA) and other LAX on and off-campus employers. Post-pandemic, the airport provided service to 48 million passengers for 2021, making it the fifth busiest in the world.[29] Together, these passengers, goods, and employees rely on the surrounding network of multimodal surface transportation infrastructure to access the airport in a convenient, safe and reliable way.



Mobility Options for People Traveling to and from LAX

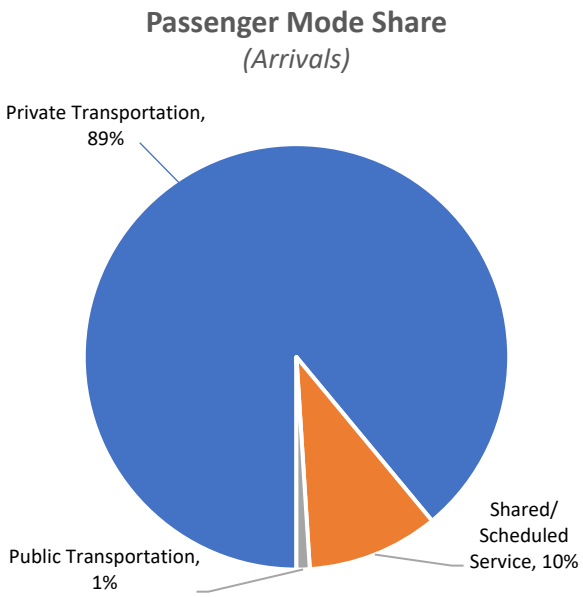
Freeway access to LAX is provided by the I-405, I-105, Pacific Coast Highway (PCH), and many large arterials including Sepulveda Boulevard, Century Boulevard, and Pacific Coast Highway (PCH). The Metro C Line (Green) connects to LAX at the LAX/Aviation station. In 2024, LAX will open the Automated People Mover (APM) that will connect to Metro's C Line (Green), and K Line

[1] *Ibid.*

(Crenshaw/LAX) at the new Airport Metro Connector (AMC) Station. In addition, LAWA operates a FlyAway transit service that provides two express bus routes to and from LAX, Van Nuys, and Union Station. These FlyAway routes connect with regional transit at Union Station, including the Metro B (Red) and L (Gold) lines and the Metrolink system. LAWA is in the process of exploring expansion into new areas for the FlyAway service. LAWA, in partnership with the City of Inglewood, offers on-demand shuttle service (Iride) to Inglewood and Lennox residents who work at LAX. Iride provides a free, fast, and efficient commute alternative for LAX badged employees. Additionally, LAWA collaborates with Metro to encourage and increase public transit use to LAX.

Traveling to and from LAX

A 2019 passenger survey indicated that eighty-nine percent of passengers arriving to and/or departing from LAX use private transportation such as a private vehicle, rental car, taxi, or ridesharing services offered by Transportation Network Companies (TNCs) such as Uber and Lyft. For those arriving by private transportation, 52 percent used the I-405 freeway to access LAX.[2] Ten percent used shared or scheduled services such as shuttle vans, hotel courtesy vans, and Flyaway services, and only one percent used public transportation.[3]



About half of LAWA's 50,000 employees commute regularly.[4] Employees' residences are most concentrated in Lennox, Inglewood, Hawthorne, the City of LA, and unincorporated areas of LA County. Only 27 percent live within five miles of the airport.[5]

Trucks account for roughly five percent of all daily vehicle traffic into and out of LAX, though much of this traffic does not access the Central Terminal area but rather cargo areas on the South and East sides of the airport.[6] The heavy truck routes serving the airport include Century Boulevard, Highway 1 (Lincoln Boulevard/Sepulveda Boulevard), Aviation Boulevard, Airport Boulevard and Arbor Vitae Street.

[2] *LAX Passenger Survey; 2019*
[3] *Ibid.*
[4] *LAWA 2019 Transportation Management Organization (TMO) Employee Commute Patterns Study; 2019*
[5] *Ibid.*
[6] *LAWA Airfield & Terminal Modernization Project (ATMP), DEIR Appendix G Transportation*

Key Mobility Challenges

Currently, there are several bottlenecks within the airport complex and on the surrounding surface streets and highway corridors that connect trips to LAX. Core challenges include:

- Significant vehicle congestion within the airport's Central Terminal Area (CTA) and on the adjoining ground transportation network to and from LAX, including on the I-405, Sepulveda Boulevard, Century Boulevard, I-105 off ramps to Sepulveda Boulevard and the ramps leading to the arrival and departure terminals; and
- Limited transit options that connect directly to the airport and low transit use to and from the airport.
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Initiatives and Opportunities

To address existing congestion and future growth, LAX has a large capital program underway to improve mobility and accessibility to and within the LAWA campus for goods movement and for people arriving and departing by vehicle, transit and other modes. Key opportunities include:

- **The Landside Access Modernization Program (LAMP)** consists of several primary components tied together by the **Automated People Mover (APM)**, an elevated train with six stations that will transport passengers between the Central Terminal Area (CTA) and the other main project components located to the east. These components include:

- The **Intermodal Transportation Facility West (ITF-W)** located at 94th Street and Jetway Boulevard, will function as a new entry point to LAX outside of the CTA for passengers arriving and departing by automobile, transportation network company (TNC) vehicles, taxis, and shuttles. ITF-W will have pick up/drop off curbs and a new 4,300 space parking structure named LAX Economy Parking. LAX Economy Parking opened in 2021 and will be served by shuttle bus to and from the terminals until the APM is operational. LAX Economy Parking is a modern garage with Smart Parking features including a Parking Guidance System, 500 EV chargers, and the ability to Pre-Book your space. So far more than 60% of passengers using the facility pre-book their space online. (LAX Official Airport Parking | Pre-book and Save (flylax.com)
- The **Intermodal Transportation Facility East (ITF-E)** (located at 96th St. and Aviation Blvd.) will be adjoined to the **Airport Metro Connector (AMC)** and will provide additional pick up/drop off curbs.
- **The Airport Metro Connector (AMC)** is being built by Metro and will provide a direct Airport connection via the APM to Metro's C Line (Green), and K Line (Crenshaw/LAX). The AMC will also provide an expansive 16-bay bus plaza with EV charging for the buses that will serve Metro and other municipal bus operators including Santa Monica Big Blue Bus, Culver City Bus, Torrance Transit, GTrans (Gardena) and Beach Cities Transit.

- **The Consolidated Rent-a-Car Facility (ConRAC)** will consolidate over 20 rental car operation locations currently spread across the surrounding area of LAX into one convenient location. At the ConRAC, customers will be able to pick up and drop off their rental car vehicles and access APM at the station in the facility, which will connect to the CTA in 10 minutes or less. Once open, the ConRAC facility will remove 3,200 daily rental car shuttles from the surrounding roads and CTA – helping reduce traffic congestion and free up critical curbside space.
- **Improved traffic flow** related to roadway reconfigurations to provide access between the CTA, ITFs, ConRAC, and adjacent surface streets, including a new Jetway Boulevard, improvements to 96th Street, extension of 98th Street and widening of eastbound Century Boulevard as part of the LAMP project.
- **Intelligent Transportation Systems (ITS)** that optimize existing roadway networks by improving signal timing and directional wayfinding to respond to ongoing traffic.
- **Improved FlyAway** service on current routes and expansion to new areas, as well as other transit improvements that provide better service coverage.
- **Active transportation** access improvements associated with the AMC, including an expansion of the bike network and bike storage which will be available to LAX employees and passengers wishing to take the Automated People Mover (APM) for travel into and out of the CTA.
- **Commute LAX, a Transportation Management Organization,** was formed in 2021 providing LAX based employees with options and incentives to use carpools, vanpools, and mass transit to commute to LAX. Membership is required for LAX tenants and employers.
- **A Transit Pass program** is in development to offer subsidized monthly transit passes (TAP cards) to LAX employees.

Goods Movement at the I-405/I-710 Interchange

The I-405 Corridor has relatively typical truck volumes for an urban corridor; however, the southern part of the Corridor around the I-405/I-710 interchange has significantly more freight activity due to the nearby SPB Ports. In addition, the commercial land uses around the I-405/I-710 interchange are heavily logistics focused and include large areas of industrial facilities, warehousing, container storage and intermodal yards, generating great volumes of heavy-duty trucks on the I-710 and parallel arterial roadways. Meanwhile, these industrial land uses and heavily utilized roadway facilities are located adjacent to residential areas, and present significant community health risks associated with poor air quality from port-related truck and equipment emissions as well as other industrial activity that is not directly related to the ports. Many of the communities surrounding the I-405/I-710 interchange, particularly south of the I-405 freeway and northeast of the interchange, are Metro-designated EFCs.

Figure 1 I-710/I-405 Context Map

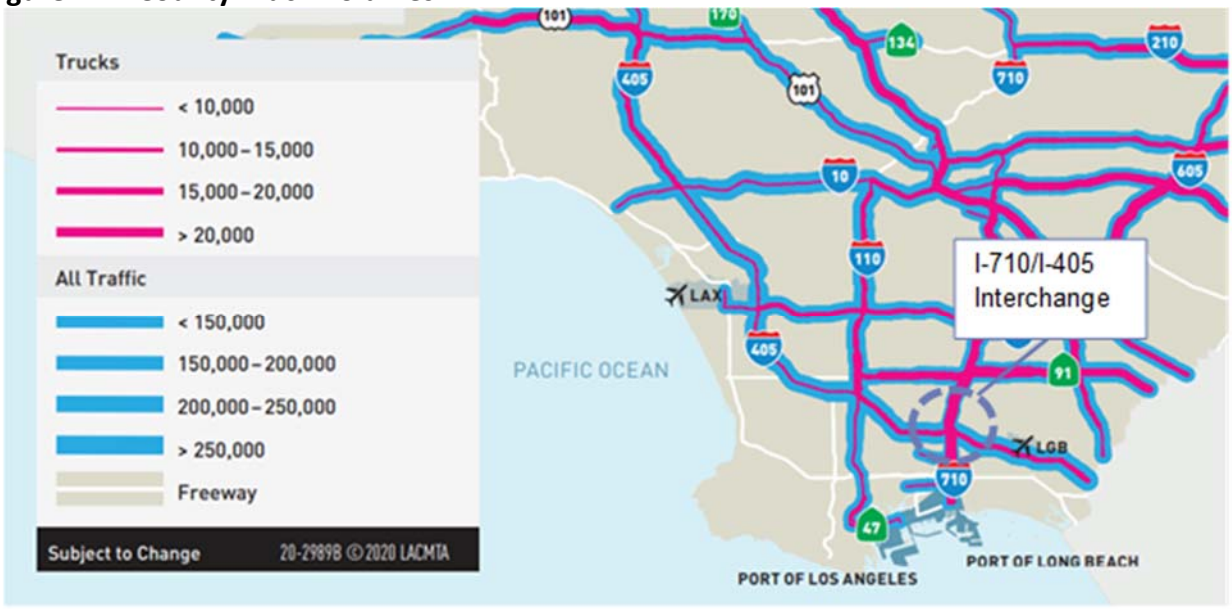
Goods Movement

The SPB Ports are the largest container complex (by volume) in the U.S. and ninth busiest in the world.[40] Approximately 32 percent of all containers in the U.S. move through the SPB Ports.[41] This is a factor in extensive delay that already exists on the I-710 and on the section of the I-405 near I-710. The total container volume is expected to grow to over 34 million by 2045, a 120 percent increase over current conditions. [42]

I-710 offers direct access to the San Pedro Bay Ports, as well as access to intermodal rail terminals that handle the majority of international intermodal cargo (The Intermodal Cargo Transfer Facility (ICTF), Hobart Yard, and East Los Angeles Yard), warehouse concentrations in Downtown Los Angeles and East Los Angeles, transloading facilities and logistics service providers in the Gateway Cities subregion.[43]

The I-405 and the CSTAN network provide direct access to I-710 as well as to clusters of air cargo facilities where sorting and consolidation/de-consolidation activities occur near LAX[44]. Thus, while I-405 itself is not a major regional goods movement corridor, it plays a large role in the goods movement system via its direct connections to not only I-710 as well as to clusters of industrial and warehousing land uses such as the Rancho Dominguez/Carson area which is located near both the I-405 and I-710.

Figure 2 LA County Truck Volumes



Source: Metro Goods Movement Strategic Plan

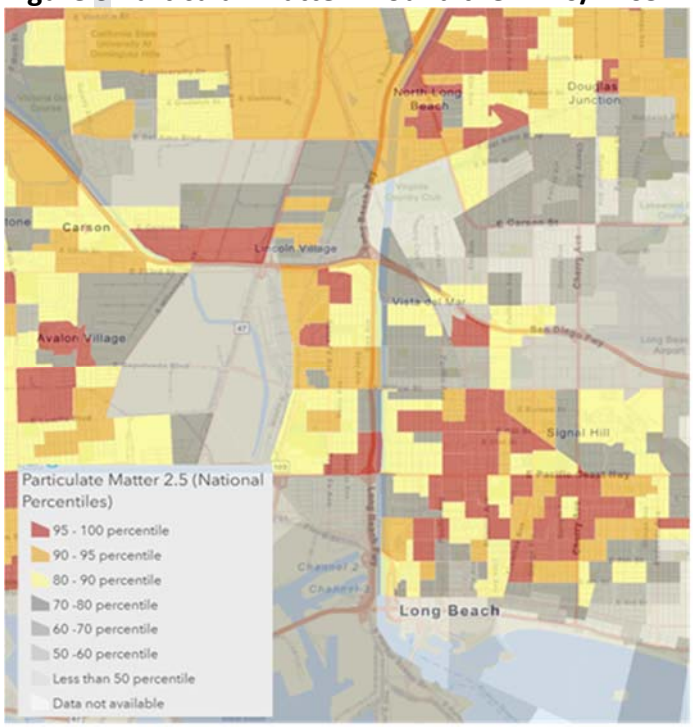
Environmental Justice Issues

Transportation-related environmental impacts including pollution and other environmental stressors burden communities and create added hardships--particularly for low-income communities of color that also face other compounding conditions and challenges. Moving freight is responsible for generating large amounts of criteria pollutants, as defined by the Environmental Protection Agency (EPA), from diesel trucks and ships that negatively impact the health of communities near the SPB Ports and along major trade corridors like I-710.

Of the six criteria air pollutants, particulate matter (PM) and ozone pose the most widespread and significant health threats. 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 particles in DPM can reach deep into the lungs, causing health problems including heart and lung disease, asthma and lung cancer. Children and the elderly are most sensitive to the effects of DPM. Levels of DPM are elevated near the Port of Long Beach and along the I-710 freeway.

Census tracts immediately west of the I-405/I-710 interchange have Diesel PM levels higher than 99 percent of the census tracts in California. The areas where the I-405 and the I-710 intersect have PM2.5 levels higher than between 62 percent and 70 percent of the census tracts within California. The area slightly further north, by Carson and Rancho Dominguez, has PM2.5 levels higher than 93 percent of census tracts in California. These high levels of PM2.5 result from a combination of trucks, other equipment, ships and stationary sources such as refineries and industry.

Figure 3 Particular Matter Around the I-710/I-405 Interchange

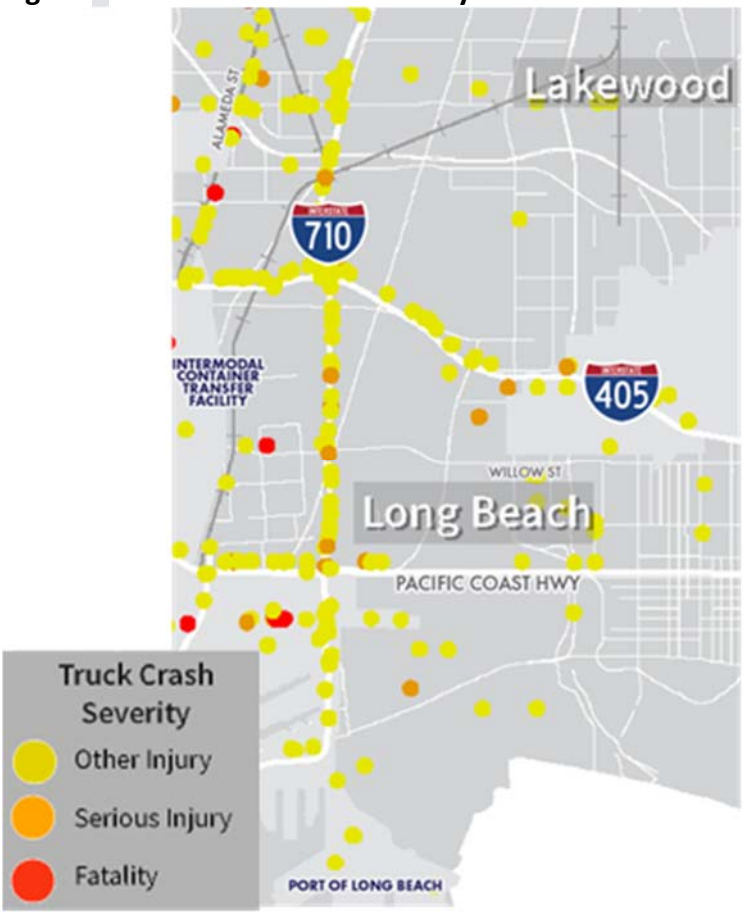


Source: CalEnviroScreen 4.0

High Truck-Involved Collision Rates and Safety Concerns

There are a significant number of truck-involved collisions along the I-710 and the and I-405/I-710 interchange. Truck collisions that result in serious injury and fatalities also occur on major streets that run parallel to these two freeways, particularly to the west of I-710 on Alameda Street/SR-47 and near the Intermodal Container Transfer Facility. The high crash frequency along the I-710 freeway is correlated with areas that also experience significant delay.

Figure 4 Truck Crashes and Severity



Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2021.

Initiatives and Opportunities

The issues associated with impacts resulting from goods movement activities in the vicinity of I-405 and I-710 are well known and have been studied for many years. Both ports have made significant efforts to reduce their environmental footprint and technology continues to result in cleaner trucks, ships, trains and equipment. Local industry also has been a part of cleaning up the air and mitigating impacts. Despite these efforts, much remains to be done in terms of significantly reducing emissions, improving health and mitigating congestion caused by goods movement both on the I-710 near the I-405 as well as in the communities surrounding the I-

405. Further, I-405 could see an increase in truck traffic delivering cargo in the future as capacity on I-710 diminishes and trucks divert to other north/south corridors such as I-605 and I-110, thus spreading these impacts more acutely to other communities within the Corridor. Some of the key initiatives to mitigate the historical and on-going impacts in this portion of the I-405 corridor study area include:

- **Clean truck technologies** are an important component of the California Sustainable Freight Action Plan (2016) which includes a Zero Emission Technology Target. Under this initiative, the California Air Resources Board (CARB) has a vision for zero emission transportation where possible, and near-zero everywhere else. The first target is for over 100,000 freight vehicles and equipment capable of zero or near-zero emission in operation by 2030.
- **The I-710 Corridor Project** was reset by Caltrans and Metro in early 2021 due to concerns that the project would not meet desired outcomes for air quality, equity, mobility and sustainability upheld by the EPA. Metro initiated the I-710 Task Force in late 2021 to re-engage with local communities and regional stakeholders to develop a new approach to reduce disparities and improve mobility for communities adjacent to the I-710.
- **The Southern California International Gateway Project (SCIG)** would provide a new near-dock intermodal rail facility to handle containerized cargo transported through the SPB Ports. The proposed project is located southwest of the I-710/I-405 interchange in the neighborhoods of Westside in Long Beach. BNSF Railway proposes to construct and operate the facility that could handle cargo containers up to a maximum capacity of 2.8 million twenty-foot equivalents (TEUs), or 1.5 million containers, per year. Most of the trucks currently traveling between the ports and Hobart intermodal railyard, near downtown LA, a journey of over 20 miles, would instead travel approximately four miles between the terminals and the SCIG facility. There are sensitive sites near the SCIG, including schools, where source emissions exceed standard levels – concerns regarding these sites have impacted environmental clearance of this project.
- **The Green Terminal Island (TI) Freeway Transition Plan** will transform a stretch of city-owned freeway on the western edge of Long Beach into a local serving road with an associated greenbelt with a linear park. The proposed project is based on extensive community input and considerations for the local history and environmental impact. The plan, as proposed, would help mitigate the environmental impacts of nearby polluting sources from the industrial land uses to the west of the project area.