



## CMCP Draft Improvement Strategies

DRAFT



**Metro**

I-405 COMPREHENSIVE MULTIMODAL CORRIDOR PLAN

## Our path forward.

The path to actualizing the I-405 Corridor goals includes near-, mid-, and long-term solutions across all modes of transportation, and all geographies across the I-405 Corridor. The figure below summarizes the nine proposed improvement strategies and how they correspond with the goals outlined in the plan. The following sections provide context and specific details on the types of investments and policy actions needed to support each strategy. Projects from the plan’s list of evaluated projects have been provided to offer examples of the types of projects that align with the strategy actions put forth.

<b>Strategies &amp; Goals</b>		 <b>Improve mobility &amp; accessibility</b>	 <b>Advance equity</b>	 <b>Support economic vitality</b>	 <b>Achieve sustainability</b>	 <b>Increase safety</b>
<b>1</b>	<b>Manage demand on the I-405 freeway and surrounding arterials</b>	✓		✓		✓
<b>2</b>	<b>Connect communities along the corridor</b>	✓	✓	✓	✓	✓
<b>3</b>	<b>Invest in high-quality transit options</b>	✓	✓	✓	✓	✓
<b>4</b>	<b>Expand the active transportation network</b>	✓	✓		✓	✓
<b>5</b>	<b>Reduce racial and economic disparities in transportation benefits and burdens</b>	✓	✓			✓
<b>6</b>	<b>Decarbonize mobility options</b>		✓		✓	
<b>7</b>	<b>Facilitate efficient and sustainable goods movement and local deliveries</b>	✓		✓	✓	
<b>8</b>	<b>Leverage emerging technologies</b>	✓		✓	✓	✓
<b>9</b>	<b>Provide a safe, resilient, and well-maintained multimodal transportation system</b>	✓	✓		✓	✓

**Manage demand on the I-405 freeway and surrounding arterials.**

The I-405 freeway is one of the most congested in the country. Traffic is expected to increase through 2047, significantly impacting people’s quality of life and stymieing regional economic growth. It is clear that adding capacity by widening freeways has only led to more traffic and related harmful impacts to neighboring communities<sup>88</sup>. Expanding highways also typically requires demolition of adjacent homes and displacement of those residents—leading to further inequities across the region. Since building more highways is not the solution, **we must manage our existing highway and arterial network within the existing footprint.**

Metro and its partners have many actions underway to manage current and future vehicular demand on the I-405 and surrounding arterials within the existing right-of-way, including I-405 ExpressLanes, auxiliary lane improvements, ramp metering, signal synchronization and other ITS improvements. These are intended to move more people in fewer vehicles, within the existing freeway footprint. Further, optimizing the existing highway and roadways create opportunities to move the transit services that operate on those facilities more efficiently. This strategy focuses on these improvements, and subsequent strategies focus on transit, active transportation and other non-auto investments that are also critical to managing future demand.

<b>Strategy 1—Manage the I-405 and Corridor arterials</b>		<b>Timeline</b>
1.1	Implement technology and ITS solutions such as dynamic corridor ramp metering and arterial traffic signal synchronization projects to improve vehicular flow and throughput within the existing right-of-way. <i>Projects examples: Inglewood Traffic Signal Synchronization #1619 and I-405/El Segundo Signal Improvements #0620</i>	Near
1.2	Manage trip making and demand through Transportation Demand Management Strategies and supporting policies around remote work and services. Implement strategies such as carpooling and car-sharing that can move more people in fewer vehicles. Coordinate with local jurisdictions and employers along the Corridor to reduce trip-making through telework, telehealth, and other remote activities, and/or stagger work hours to alleviate peak-hour demand on the transportation system. <i>Projects examples: Countywide Transportation Demand Management #1249 and Mobility Concept Plan Communications Strategies #2061</i>	Near
1.3	Construct the I-105 ExpressLanes from I-405 to I-605 to complete an essential extension of the ExpressLanes Network. <i>Project example: I-105 ExpressLanes #0937</i>	Near
1.4	Increase HOV lane minimums to at least 3+ to move more people in fewer cars and to better manage the overall throughput of the HOV lanes, that will allow commuter buses and other transit services on the Corridor to move more efficiently. <i>Project example: Countywide HOV Lane Occupancy Conversion #2063</i>	Near

1.5	Invest in infrastructure that supports mode shift away from personal auto use, through the actions identified in Strategies 3 and 4.	Near
1.6	Study and pilot congestion pricing strategies. <i>Project example: LAX Congestion Pricing Study #2064</i>	Mid
1.7	Build out HOV/Transit bypass lanes at intersections and ramps along the entirety of the I-405 freeway. <i>Project example: HOV/Transit Bypass Lanes #0669</i>	Mid
1.8	Reinvest HOT/ExpressLane revenues in complementary high quality transit services identified in Strategy 2.	Mid
1.9	Integrate the ExpressLanes and HOV networks through direct connectors between the I-405 and its bisecting freeways to make the ExpressLanes and HOV networks more seamless. <i>Project examples: I-405/I-105 Interchange #0652, HOV Direct Connector to LAX (#0659) and I-405/I-110 Interchange #0917</i>	Mid
1.10	Build out I-405 ExpressLanes along the entirety of the Corridor. <i>Project examples: I-405 ExpressLanes from I-110 to Orange County Line #0638, I-405 ExpressLanes from I-105 to I-110 #0637, I-405 ExpressLanes from I-105 to I-10 #0640 and I-405 ExpressLanes from I-10 to I-101 #0938</i>	Mid/ Long
1.11	Develop and implement regional means-based congestion pricing strategies such as VMT-based fees, cordon pricing and full freeway tolling.	Long
1.12	Complete the full buildout of the Metro ExpressLane Strategic Plan to have a comprehensive network of dynamically priced toll facilities to optimize travel time and person throughput on the network of freeways in LA County and beyond, tying into the tolled portion of the I-405 in Orange County.	Long

**Connect communities along the Corridor.**

The I-405 freeway travels through dozens of cities and communities, some of which are bisected by the freeway, and some that are disconnected because of infrastructure gaps and/or geographic barriers. Most notably, the Santa Monica Mountains separate the SV and North County from the rest of the Corridor, and driving over the Sepulveda Pass on I-405 is currently the only viable travel option. As discussed, the Sepulveda Transit Corridor Project—currently in planning stages—will provide a high-capacity, high-quality connection over the pass. At the same time, it will be critical to ensure that existing and future transit systems are well-connected and seamlessly integrated to improve transit speeds, reliability, affordability and customer experience. Connecting the I-405 Corridor to major transit facilities outside the Corridor—in particular, the future High Speed Rail access point at Burbank Station—will also be critical to supporting expanded use of transit within the Corridor.

In addition, stakeholders consistently voiced concerns about limited crossing options and unsafe infrastructure conditions across the I-405 freeway, particularly for those biking, walking or rolling. This strategy focuses on a range of projects that better connect communities along the I-405 Corridor,

including regional rail and transit integration, fare integration, mobility hubs, regional active transportation corridors, improved crossings for people biking and walking, coordinated ITS and active travel demand management strategies on key arterials, and more.

<b>Strategy 2—Connect communities</b>		<b>Timeline</b>
2.1	Improve multimodal connectivity across the I-405 freeway (protected bicycle facilities, safe pedestrian crossing infrastructure, especially at on- and off-ramps).	Near
2.2	Improve safety and accessibility of existing freeway crossings (through landscaping, lighting, sound attenuation, sidewalk expansion, etc).	Near
2.3	Implement holistic neighborhood connectivity projects and improve multimodal connectivity between neighboring communities in the I-405 study area Corridor. <i>Project examples: Sepulveda Blvd Class IV Bikeway #1336, Stress Free Connections #1244 and LA Neighborhood Enhanced Network #1299</i>	Near Mid
2.4	Expand mobility hubs that help people move across the I-405 and between communities. <i>Project example: Mobility Hub Expansion #1233</i>	Mid
2.5	Work with the Corridor COGs and cities to implement their active transportation plans and projects as outlined in Strategy 4.	Mid
2.6	Build out first/last mile improvements for stations immediately adjacent to or nearby the freeway. <i>Project example: First/Last mile improvements for the Westwood and Veterans Association D Line Station #1344</i>	Mid
2.7	Invest in regional bicycle connectivity projects between communities. <i>Project example: San Fernando Valley LA River Path #9046</i>	Mid
2.8	Improve accessibility and connectivity through the Sepulveda Pass for the communities in the North County and SFV and those south of the pass in the Westside Cities and South Bay Cities. <i>Project example: Sepulveda Transit Corridor Project #0610</i>	Mid
2.9	Expand local transit connections. <i>Project examples: Lincoln Blvd. BRT #2053 and Wilshire Blvd. BRT#1330</i>	Long
2.10	Improve connections between the I-405 Corridor and the North County. <i>Project example: Metrolink Antelope Valley Line #2029</i>	Long
2.11	Create new freeway crossings to expand crossing opportunities.	Long

**Invest in high-quality transit options.**

Investing in high-quality transit will help to improve connectivity throughout the study area by expanding access to and options for reaching the numerous Corridor area destinations. High-quality

transit means transit that is frequent, reliable, fast, affordable, and that is safe and pleasant to ride. Expanding service coverage will be just as critical to improving existing routes and services. Metro’s NextGen Bus Plan is already making many improvements to bus stop spacing, location and routing to make transit travel more competitive—but to provide people with a true alternative to driving, we must do more.

This strategy focuses on new high-capacity transit connections (such as the North San Fernando Valley BRT and Inglewood Transit Connector), rapid and express bus services, further improvements to local transit, expansion of transit centers and park & rides, and other on-demand and paratransit services. Implementation of ExpressLanes would also benefit transit on the freeway by creating uncongested lanes that would allow transit service on the freeway to be competitive and in fact operate much faster than driving a single-occupancy vehicle. One of the main impediments to achieving higher transit ridership is travel time, thus combined strategies that not only provide more transit, but also higher quality and efficient transit that will attract many riders, is one of the keys to successfully combining projects into multimodal packages. Delivering on this strategy will provide better service for existing transit users and make new transit trips possible, expanding options for the traveling public and encouraging more people to ride transit.

<b>Strategy 3—Invest in high-quality transit</b>		<b>Timeline</b>
3.1	Make improvements to existing rail stations and high-frequency bus stops (e.g. real-time signage, seating, new and improved shelters, etc) to improve the ease and comfort of transit trips. <i>Project examples: Metro Rail and BRT Station Improvements Project #2068 and Green Line Capital and Operational Improvements #0131</i>	Near
3.2	Expand microtransit options and on-demand transit improvements to offer flexible transit alternatives that are well suited to the high volume of shorter trips within the Corridor area.	Near
3.3	Continue speed, frequency and reliability upgrades to existing transit services as outlined in the NextGen Bus Plan and 2028 Mobility Concept Plan (MCP). <i>Project example: 2028 Mobility Concept Plan LRT Speed Improvements (#2066)</i>	Near
3.4	Improve transit agency coordination across all providers serving the I-405 Corridor.	Near
3.5	Implement priority bus enhancements along the Games Route Network (GRN) in preparation for the 2028 Olympics, particularly those enhancements that will have legacy benefits beyond the Games. <i>Project example: Game Route Network Bus Priority Enhancements #2051</i>	Near
3.6	Build out BRT corridor projects in Metro’s BRT Vision & Principles Study, especially along heavily-traveled arterials such as Santa Monica Boulevard, Sepulveda Boulevard and others.	Mid

	<i>Project examples: Atlantic Corridor BRT #2052 and Venice Boulevard BRT #2054</i>	
3.7	Complete bus lane improvements and dedicated lane infrastructure on core South Bay arterials. <i>Project examples: Arbor Vitae Bus Lane #2055 and Hawthorne/La Brea bus lane #2056</i>	Mid
3.8	Invest in Regional Commuter Rail improvements through the range of strategies identified in Metro’s LRTP.	Mid
3.9	Complete the build out of the planned rail system expansion to offer a more integrated and connected system across the Corridor and throughout the region.	Long

**Expand the active transportation network.**

By expanding the active transportation network, people will have more options for using non-motorized modes for local trips within the I-405 Corridor—particularly short trips that are less than five miles, which make up 80 percent of trips within the Corridor. Active transportation includes walking, biking, scooters, skateboarding and other human-powered modes. Investing in active transportation is important not only because it reduces car trips, but because it is healthy, affordable and fun. At the onset of the COVID-19 pandemic, active transportation—both for utilitarian and recreational travel—skyrocketed across LA County and the US. In response, municipalities implemented “slow streets” to provide more space for people using active modes. However, existing active transportation infrastructure within the I-405 Corridor is significantly lacking. 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. This strategy aims to build on the growing excitement around active transportation and address these core challenges by investing in permanent, protected, safe and continuous active transportation networks across the Corridor.

<b>Strategy 4—Expand the active transportation network</b>		<b>Timeline</b>
4.1	Prioritize closing small but critical gaps in the active transportation network.	Near
4.2	Focus improvements in areas where there is high active transportation commuting and limited existing active transportation facilities, such as the SFV and parts of Long Beach. <i>Project example: Route 1 Class-IV Bike Lane between Long Beach Traffic Circle and the LA City Limit #0948</i>	Near
4.3	Invest in protected bicycle infrastructure along key corridors (Class I and IV). <i>Project example: UCLA Ronald Reagan/ Santa Monica Hospital Bikeway Connection #1346</i>	Near
4.4	Invest in bicycle and pedestrian safety improvements at high-crash locations (new and enhanced crossings, Leading Pedestrian Intervals (LPIs), adding buffers to bike lanes, etc).	Near

4.5	Expand safe and secure bike parking and provide self-service bike maintenance facilities.	Near
4.6	Improve ADA accessibility around transit and rail stations. <i>Project examples: Metro Rail/BRT ADA Tactile Guidance Systems #2069 and Systemwide ADA Accessibility Improvements #2070</i>	Near
4.7	Build out Mobility Plan 2035 Enhanced Bicycle Network and Enhanced Pedestrian Network. <i>Project examples: Mobility Plan 2035 Bicycle Enhanced Network #1227 and Mobility Plan 2035 Pedestrian Enhanced Districts #1230</i>	Mid
4.8	Build out Complete Streets corridors, including the I-710 complete streets improvements and along the corridors of Imperial, Atlantic, Florence, Artesia, and Lakewood/Rosemead.	Mid
4.9	Invest in improvements in the Metro ATSP, Great Streets Initiative, Safe Routes to School, and Vision Zero plans.	Mid
4.10	Expand first/last mile connections. <i>Project example: J Line Harbor Gateway Transit Center, Mobility Hub and Park and Ride #2050</i>	Mid
4.11	Work with Gateway Cities implement the Strategic Transportation Plan 50 bike corridors and the Westside Cities' Pedestrian and Bike Network.	Mid
4.12	Complete the LA River Bike Path in the San Fernando Valley Gap Closure Project.	Mid
4.13	Expand the trail network within the Corridor to promote active transportation for health and recreational purposes. <i>Project example: Open Space Corridor Multiuse Trails Plan #1298</i>	Mid

**Reduce racial and economic disparities in transportation benefits and burdens.**

Multiple communities along the I-405 Corridor are highly racially segregated, with significant disparities across income, health, housing, services, education, and access to safe, affordable and reliable mobility. While Metro’s Equity Platform serves as an important starting point for directing transportation investments to underserved communities, stakeholders were clear that simply investing in infrastructure in EFCs is not enough. Improvements must target trips that are being taken by people who live in Metro-defined EFCs, such as those serving key job and activity centers (LAX, UCLA, large commercial corridors) in the I-405 Corridor. As noted previously, roughly 40 percent of all trips coming in and out of the Corridor are from EFCs in nearby Central City neighborhoods and Inglewood—directly east of the study area. Projects and programs that improve travel times, convenience and affordability across all modes that serve these trips will be critical to advancing regional equity goals.

Additionally, as advancing equity requires that we not only deliver benefits but also reduce burdens, remediating past harms and promoting environmental justice is an equally important element of this strategy. For example, investing in zero-emissions vehicle technology and other elements of sustainable transportation that improve health and wellbeing, particularly for those who have been most harmed by transportation investments of the past will help further environmental justice.

<b>Strategy 5—Reduce racial and economic disparities in transportation benefits and burdens</b>		<b>Timeline</b>
5.1	Increase bus service frequency, speed and reliability along routes serving EFC trips within and to the I-405 Corridor (SFV, Inglewood, Long Beach, and to/from Downtown LA).	Near
5.2	Target active transportation investments and safety improvements in EFCs.	Near
5.3	Direct managed lane/ExpressLane program subsidies to no- and low-income households and individuals within the Corridor.	Near
5.4	Coordinate with local municipalities on anti-displacement measures to pair with transportation investments, especially in areas like Inglewood that are rapidly undergoing gentrification and displacement.	Near
5.5	Integrate environmental justice (health and air quality measures) into all projects along the I-405 Corridor, including the decarbonization actions outlined in Strategy 6.	Mid
5.6	Build out rail and transit projects that improve access within EFCs and for EFC trips (regional rail service and capital improvements). <i>Project examples: North San Fernando Valley Transit Corridor #0928 and C Line (Green) Extension to Torrance #0608</i>	Mid
5.7	Implement a fare-free transit program for no- and low-income transit riders.	Mid
5.8	Implement regional active transportation facilities that serve EFCs such as the LA River Bike Path and the South Bay Open Space Corridor Multi-use Trail Plan.	Mid

**Decarbonize mobility options.**

Investing in sustainable mobility options that are low or no-emissions is essential to reducing GHG emissions and improving air quality along the I-405 Corridor. California has some of the most aggressive targets and supporting legislation to move the state toward a zero-emission future. Decarbonizing the transportation sector means continuing incentives and supportive infrastructure for vehicle electrification; electrifying transit systems; investing in truck, port, and other clean freight solutions; and development of fuel-cell technologies and expansion of electric shared mobility options such as e-bikes and e-scooters. The California Air Resources Board (CARB) 2020 Mobile Source Strategy forecasts that the number of plugs required in LA County would need to increase by more than 40 times by 2030 to support future targets for electric vehicle adoption. While decarbonizing mobility options is essential to meeting our sustainability goals, vehicle electrification alone will not alleviate congestion. This strategy must be paired with demand management solutions that focus on more efficient ways to use our existing roadway space.

<b>Strategy 6—Decarbonize mobility options</b>		<b>Timeline</b>
6.1	Invest in EV charging infrastructure for personal and commercial vehicles traveling along the I-405 Corridor	Near

	<i>Project example: Zero Emission Technologies for Bus Vehicles and Electric Charging Infrastructure #1243</i>	
6.2	Expand the BlueLA EV carshare system. <i>Project example: Regional Carshare Networks Expansion in LA County #1239</i>	Near
6.3	Develop a plan to ensure charging infrastructure and access to ZEVs is equitably distributed throughout Corridor communities.	Near
6.4	Continue transit fleet electrification (Metro and municipal transit providers) and charging infrastructure/clean energy generation. <i>Project examples: Gtrans Solar Energy Generation/Bus Fueling Infrastructure Project #2047 and the LA County Transit Fleet Electrification #1260</i>	Mid
6.5	Coordinate across jurisdictions to provide corridor-wide EV car-sharing options.	Mid
6.6	Establish a VMT mitigation bank/exchange to achieve VMT reductions and reduce transportation associated GHGs.	Mid
6.7	Electrify truck fleets and Port terminal equipment. <i>Project example: On Dock Railyard Expansion to Accommodate Electric Operated Rail-Mounted Gantry Cranes #1265</i>	Mid

**Facilitate efficient and sustainable goods movement and local deliveries.**

As noted, truck movements are expected to continue to increase due expansion of the SPB ports along with the anticipated growth in e-commerce and local deliveries. Without action, increased goods movement will exacerbate congestion and air pollution, with the Corridor’s most vulnerable populations facing the greatest burdens. Facilitating sustainable, efficient, and safer goods movement is a critical part of this plan. That will include measures such as focused grade separations over rail, improvements along the I-710 Corridor both north and south of I-405, investing in clean air vehicles and electric trucks, and more efficient curb management to accommodate the increased delivery of goods. Many of the improvements within the I-405 Corridor are located along Metro’s Countywide Strategic Truck Arterial Network (CSTAN), and are in alignment with Metro’s Goods Movement Strategic Plan, which focuses on five core initiatives including equitable goods movement, expanding clean trucks and urban freight delivery, developing a Southern California Rail Investment Partnership, and building logistics and workforce competency.

<b>Strategy 7— Facilitate sustainable and efficient goods movement</b>		<b>Timeline</b>
7.1	Implement applicable goods movement plan programs, policies and projects including the City of LA Mobility Plan 2035, the Metro Countywide Strategic Truck Arterial Network and the Goods Movement Strategic Plan, and freight TDM strategies identified in the MCP.  <i>Projects examples: The Mobility Plan 2035 #1232, Investment in Regional Significant Projects and Programs in the Metro 2021 Goods</i>	Near

	<i>Movement Strategic Plan #1245, Engagement with Freight Businesses to Plan for the Olympics #2065</i>	
7.2	Develop truck route system plans at the county and local levels to manage impacts of truck movements.	Near
7.3	Promote programs that encourage pick-up centers, bike couriers, and other sustainable alternatives to truck last-mile deliveries.	Near
7.4	Implement grade separations including along the Alameda Corridor, in and near the Ports of LA and Long Beach and other applicable locations to mitigate truck/auto/pedestrian and bike conflicts.  <i>Project example: Rail/Truck Grade Separation at Alameda Corridor Southern Terminus and Terminal Way #1264</i>	Mid
7.5	Electrify truck fleets and Port terminal equipment.  <i>Project example: On Dock Railyard Expansion to Accommodate Electric Operated Rail-Mounted Gantry Cranes #1265</i>	Mid
7.6	Implement curb management strategies to accommodate growing demand for e-commerce and urban freight delivery.	Mid
7.7	On-dock and near-dock railyard improvements to facilitate more efficient movement of cargo containers and reduction of drayage truck trips at both Ports including the Pier B Railyard in POLB.  <i>Project example: Rail Enhancements along the Countywide Strategic Truck Arterial Network #1280</i>	Long
7.8	I-710 Corridor improvements in and around the I-405 and I-710.	Mid Long

**Leverage emerging technologies.**

In addition to traditional infrastructure projects, the use of emerging technologies will be increasingly important in the I-405 Corridor. Traditional improvements, such as road repaving, restriping, reconfiguration and rehabilitation will also have elements of technology built into them. In lieu of adding capacity, Caltrans is very interested in implementing technology solutions that use existing roadway space more efficiently, in particular, in the area near LAX and Inglewood. This would include elements such as dynamic ramp meters with real-time traffic assignment based on congestion and bottlenecks, additional changeable message signs and other improvements to help traffic flow during special events in Inglewood and when LAX travel is high.

The I-405 Corridor, like the rest of the transportation system, must begin to prepare for CAV adoption through the planning, design and implementation of supportive infrastructure. This includes improvements to signals and ITS infrastructure, and ICM strategies such as advanced road markings, advanced traffic operations centers, signage readable by vehicles, improved wireless communications systems, road sensors, advanced parking systems, and many other roadway retrofits. While these may

not be short-term improvements that will be competitive for funding in the immediate future, they must be planned as more CAV capabilities emerge.

<b>Strategy 8—Leverage emerging technology</b>		<b>Timeline</b>
8.1	Upgrade and enhance communication systems along I-405 and connecting freeways and arterial interchanges including ramp system improvements, transportation management systems improvements and information systems such as enhanced dynamic messaging. <i>Project examples: Route 405: Ramp Metering System (RMS) Upgrades #1119, Route 405: Transportation Management Systems (TMS) Upgrades, #1171, Route 405: Installation of TMS #1173</i>	Near
8.2	Pilot congestion pricing along I-405 and other connecting freeways.	Mid
8.3	Invest in new and enhanced infrastructure to support all five levels of vehicle automation including enhanced lane markings, machine readable signage, fiber optic connections, sensors, smart traffic control devices, smart parking infrastructure.	Long

**Provide a safe, resilient, and well-maintained multimodal transportation system.**

Many of the previous strategies will not be possible if we do not maintain our existing multimodal infrastructure assets in a state of good repair. In addition to traditional state of good repair improvements such as re-paving, this means making safety-related improvements for all road users and implementing Vision Zero and Safe Routes to School plans that are focused on the most vulnerable roadway users. Safety is also a critical element of congestion reduction (as 50 percent of freeway non-recurrent congestion is caused by crashes). While many safety projects are not primarily oriented toward congestion reduction, they are important projects that can be combined with others to enhance safety along the Corridor. Safety is critical for quality of life, and this strategy aligns with the U.S. Department of Transportation’s National Roadway Safety Strategies (NRSS) to ensuring our approach addresses safety holistically and results in safer people, safer roads, safer vehicles and safer speeds.

This strategy also includes projects that are focused on resilience, such as seismic improvements, stormwater management, wildfire prevention measures, and emergency response and evacuation. These will be essential as we face growing impacts of climate change. A core element of increasing resiliency is increasing the number of multimodal options that people can rely on. It also means investing in a robust goods movement network that keeps goods flowing in and out of the region, especially during unexpected events such as the COVID-19 pandemic.

<b>Strategy 9— Provide a safe, resilient, and well-maintained multimodal transportation system</b>		<b>Timeline</b>
9.1	Implement state of good repair projects such as repaving, rail and transit infrastructure upgrades, detection repairs, and rehabilitation along the I-405 freeway and corridor arterials consistent with the Caltrans SHOPP.	Near

	<i>Project examples: Pavement rehabilitation on the I-405 between Venice Blvd. and I-101 #1155, Repair and Upgrade Pump Stations #0954, Route 107 curb upgrades to meet ADA standards #1046</i>	
9.2	Rehabilitate signage and markings (pavement and otherwise) to improve accessibility and navigation within the Corridor.  <i>Project example: Install pavement delineation and overhead sign guides at Los Alamitos Traffic Circle (SR 1 and Lakewood Blvd.) #0949</i>	Near
9.3	Develop a corridor-wide plan for “cool-off” centers for people walking, biking, and rolling during extreme heat events.	Mid
9.4	Build out drainage and other stormwater management projects along the Corridor to help cope with extreme weather events.	Mid
9.5	Implement seismic upgrades to prepare the Corridor for potential future earthquakes.  <i>Project example: Seismic Retrofit of I-405/710 #1128</i>	Mid
9.6	Larger-scale safety improvements projects (such as countywide Vision Zero efforts and Safe Routes to School projects).	Mid
9.7	Provide additional grade-separated crossings over the I-405 freeway that serve all Corridor users.	Long