

Highway Operational Improvement Projects Currently Pursued

I-5 HOV Lanes and truck climbing lanes between SR-14 in Santa Clarita and Parker Road in Castaic

The project was approved by the Board, has passed the environmental process, completed final design, has received State grants for its validated purpose and need, is strongly supported by the North County JPA, the Golden State Gateway Coalition, and other entities, and will be in construction by early 2021. The project will improve roadway congestion created by suburban land use practices resulting in significant VMT and traffic destined to remote job centers and services. It also promotes carpooling and accommodates freight movement in the corridor.

SR-60/7th Avenue Interchange Improvements Project

Operational improvement by correcting design deficiencies at a local interchange/freeway off-ramp that currently result in traffic backing up onto the freeway mainline slowing the mainline flow. The accident rate at this interchange is 31% higher than the statewide average for comparable facilities. This project was studied and prioritized under the I-605 Hot Spots study and is supported by both the Gateway Cities COG and the San Gabriel Valley COG and approved by the Board.

SR-57/SR-60 Interchange Improvements Project

The project was approved by the Board, supported by the San Gabriel Valley Council of Governments, Caltrans, and the cities of Diamond Bar and Industry and was included in the Measure M Expenditure Plan (Line Item 18). The project has received State grants, has environmental clearance, is currently in final design. The start of construction in the Measure M Expenditure Plan is 2025. Staff is pursuing State and federal grants to accelerate project delivery by early construction start in 2022. The project will correct geometric design deficiencies contributing to high number of traffic accidents, slow down, recurring congestion and lost time/productivity as well as interruption in freight movement. This location has one of the highest number of truck accidents (27 accidents per mile per year due to high weaving from one freeway to the other, its accident rate is 50% higher than the statewide average for comparable facilities and has been ranked fourth-worst truck bottleneck in the nation by the American Transportation Research Institute.

SR-71 Improvements Project

The project was approved by the Board and strongly supported by the San Gabriel Valley Council of Governments and the City of Pomona and is one of Caltrans' highest priority projects. The project was included in the Measure M Expenditure Plan (Line Item 12) as a regional high priority project. It is environmentally cleared and will be constructed in 2 phases. Phase 1 between Mission and the south County Line is an expressway bottleneck

between the northerly segment (Freeway - between Mission and the I-10) and the freeway segment to the south in Orange County and will start construction in 2020. Phase 2 will include modifications to the northerly segment between Mission and I-10 and will follow when full funding is available.

SR-91 Improvement Projects

Several location-specific operational improvement projects along SR-91 identified and validated through extensive studies, promoted by the Gateway Cities Council of Governments, listed in the Measure M Expenditure Plan (Line Item 61), and collectively and individually approved by the Board. The projects are:

- SR-91, Central to Acacia: In environmental phase. Construction start is anticipated in 2024.
- SR-91, Atlantic to Cherry: In environmental phase with anticipated construction start in 2022.
- SR-91/I-605 Interchange Improvements: Is environmentally approved, in final design, and scheduled for construction in 2022

I-405 Improvement Projects

Proposed operational improvements along the most congested freeway in the nation. The I-405 provides access to the Los Angeles International Airport, Ports of Los Angeles and Long Beach, in provides countywide connectivity via I-5, I-210, SR-118, US-101, I-10, SR-91, I-105, I-110, I-710, SR-22, and SR-55.

The I-405 was identified as a major regional priority in the Measure M Expenditure Plan (Line Item 37). The South Bay Cities Council of Governments placed bulk of their funds in Measures R and M in highway investments but currently is proposing to repurpose their 2nd decade Measure R funds to non-highway projects.

The segment of the I-405 between I-10 and US-101 is prioritized for implementation of ExpressLanes. Extension of those lanes south of I-10 will maximize the effectiveness and operational benefits of the ELs. The Current active projects are:

- Crenshaw Interchange: This project was developed by Caltrans and has environmental and final design approvals. Construction is scheduled for 2021
- Auxiliary lane between El Segundo Blvd. and Artesia Blvd.
- Auxiliary lane between I-110 and Wilmington

I-605 “Hot Spots” Operational Improvement Projects

Several location-specific operational improvement projects along I-605 identified and validated through extensive studies, strongly supported by the Gateway Cities Council of Governments, listed in the Measure M Expenditure Plan (Line Item 61) and collectively and individually approved by the Board. Improvements at the I-605/I-10 interchange are listed as Line Item 33., Projects in the I-605 Corridor currently in progress are:

- I-605/South Street Interchange Improvements: significant back up at the

southbound off-ramp due to high traffic destined to the auto mall, a regional mall, the Cerritos Civic Center, and residential communities. Backup extends into the freeway mainline and impacts both I-605 and SR-91 interchange. Slow/stopped traffic approaching the South Street off-ramp poses high accident risk on the freeway.

- I-605/Beverly Interchange Improvements: The project will eliminate an existing short weaving distance between the loop on and off-ramps by replacing the current design with a diamond configuration. The project benefits include reducing weaving conflicts, thereby improving freeway operations and safety. Additionally, the project will include all directional movements at the S/B interchange, easing congestion at the intersections near the interchange. The project has environmental approval, is in final design, and scheduled for construction in 2021.
- I-605/Valley Blvd. Interchange Improvements: significant back up at the northbound off-ramp due to operational deficiencies which are forecasted to increase and exacerbate existing traffic conditions without planned improvements. The project will reduce congestion, improve traffic operations and mobility by increasing ramp storage, implementing minor geometric revisions, adding right-turn pockets and improving the signals. The project is in environmental phase with construction start anticipated in 2021.

SR-710 Mobility Improvement Projects

Metro Highway Department supported implementation of mobility improvement projects along the SR-710 gap between I-10 and I-210 to off-set the impacts of the current and future anticipated escalating traffic that was planned to be resolved by the completion of the freeway gap at much higher cost and impact. Development of the mobility improvement projects will start as early as the current Fiscal Year. Most of those projects will not have any environmental impacts. None of those projects will generate “new demand”. In fact, not implementing these projects will have further negative impacts on local streets and neighborhoods. Potential impacts of the larger projects will be fully mitigated.

I-710 Corridor and Early Action Projects

I-710 South Corridor Improvements are listed as Line Items 20 and 28 in the Measure M Expenditure Plan. Metro Highway Department, in collaboration with the Gateway Cities Council of Governments (GCCOG) has identified early action operational improvement projects that can be implemented incrementally along the corridor until there is support for major investment in improving the capacity of the I-710. The early action projects will be implemented within the current financial capacity and with no significant environmental impacts.

Other Metro Highway-based projects/programs:

Congestion Reduction/ExpressLanes:

Congestion reduction program strives to reduce congestion through dynamically pricing the roadway based on congestion and distance traveled to reduce delay and increase throughput (both vehicle and person) in underutilized HOV lanes. ExpressLanes rely on economic cues and operational improvements to manage demand on the roadways and

encourage carpooling, transit, and alternative transportation usage. As currently implemented in Los Angeles County, congestion reduction is designed to improve mobility by reducing idling and stop and go traffic resulting in reduced greenhouse gas emissions. The on-going efforts include:

- I-105 ExpressLanes: The project will convert HOV lanes between I-405 and I-605 to ExpressLanes enabling carpoolers to travel free of charge and SOVs to use the lanes for a toll. This project received Measure M funding, is in the environmental phase and has received tolling authority from the California Transportation Commission.
- I-10 HOV Conversion to ExpressLanes: This project, upon completion of an 11-mile gap in the I-10 HOV lanes, will convert those lanes to toll lanes to improve mobility along this corridor. Once completed, the lanes in Los Angeles County will connect to the ExpressLanes in San Bernardino County to accommodate the daily commute traffic between the two counties.
- I-405 Sepulveda Pass ExpressLanes: Currently beginning the environmental phase, this project aims to improve mobility through the heavily congested 10-mile segment of the I-405 between I-10 and US-101 with the goal of future extension along the I-405 corridor.
- Countywide Congestion Pricing Assessment Study: LA Metro began this two-year study in 2019 to assess the potential benefits of congestion pricing in Los Angeles County with the intent of reducing peak hour traffic congestion, promoting ridesharing, use of alternative modes of transportation, and ultimately improving the air quality and environmental quality in the LA basin.

Goods Movement

Movement of goods through the County depends on efficient performance of the freeways and other truck corridors. According to the Federal Highway Administration, Freight Analysis Framework (FAF) 4.5, 2019 report, 68% of the total 740.5 million tons of goods moved in the LA region is moved by trucks. This equates to 60% of the total value of \$1.7 billion.

Lack of capacity, deficient operation, and recurring and non-recurring congestion result in delayed and unreliable movement of goods with economic consequences. The land-based goods movement-related infrastructure in Southern California was built with reliance on strategic and progressive investment in roadways. Lack of investment in roadways without a well-planned alternative system to support timely and cost-effective movement of goods will have negative impacts on jobs, lives, and the economy of Southern California and the LA County. All proposed Metro-funded highway operational improvements on major freight routes consider improvements to accommodate movement of goods.

Other Contributions to Mobility Improvements

Metro Highways is working with Caltrans and local jurisdictions on development of “**Connected Corridors**” – a concept to combine the State highways and parallel local arterials with addition of ITS elements such as signal synchronization and electronic signage/message boards - to improve mobility along the State highways

without major highway widening and through active traffic management. This concept is presently being implemented on I-210.

Metro Highways also engaged with the Ports of Los Angeles and Long Beach and the private sector in testing a “**Truck Platooning**” concept, in which, through on-board computer systems, trucks can be connected to operate as trains with minimum headways at constant speeds for improved efficiency and mobility. A pilot project was successfully conducted on I-710. Further development of the concept and identification of the appropriate corridors are in progress.