

2022
UPDATE



NEXT 10

DELIVERY PLAN

2023-2032



UPDATED NOVEMBER 2022



On November 14, 2022, the Orange County Transportation Authority Board of Directors adopted the 2022 Updated Next 10 Delivery Plan (Next 10 Plan). The 2022 update shifts the timeframe of the Next 10 Plan from fiscal year (FY) 2020-21 through FY 2029-30 to FY 2022-23 through FY 2031-32. As such, commitments have been reviewed and adjusted accordingly. The 2022 Updated Next 10 Plan also incorporates refined project information including cost estimates, schedules, and available external funding.

Printed November 2022

**For the latest version of the Next 10 Plan,
including any edits or corrections,
please visit: www.octa.net/Next10**

**For status updates on M2 projects and programs,
including quarterly progress reports,
please visit: www.octa.net/m2**

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2022
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NEXT 10

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Introduction



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2022 UPDATE NEXT 10 DELIVERY PLAN



Introduction

On November 7, 2006, Orange County voters, by a margin of 69.7 percent, approved the renewal of the Measure M one-half cent sales tax for transportation improvements. Voters initially endorsed Measure M (M1) in 1990 with a sunset in 2011. With the approval of Renewed Measure M (M2), the voters agreed to a continued investment of local tax dollars in Orange County's transportation infrastructure for another 30 years to 2041.

Since M2 (also branded externally as OC Go) approval, the Orange County Transportation Authority (OCTA) Board of Directors (Board) has continued to pursue the expeditious implementation of M2 through the adoption of delivery plans. These delivery plans validate OCTA's ability to deliver the entire slate of M2 plan elements, outline a near-term work plan to promote effectiveness and efficiency, establish a common understanding among M2 stakeholders, set a baseline upon which future changes are measured, and provide the basis for the preparation of OCTA's annual budgets for capital projects. They are developed based on three fundamental principles: to fulfill the commitments as promised to the voters, ensure fiscal sustainability, and implement projects and programs effectively and expeditiously. The goal is to bring transportation improvements to Orange County residents and commuters earlier, and as appropriate, address changes in sales tax revenue projections through strategic financing and augmenting the M2 Program with external revenue.

To date, there have been three delivery plans: Early Action Plan (EAP) adopted in 2007, M2020 Plan adopted in 2012 (intended to go through 2020), and the Next 10 Delivery Plan (Next 10 Plan) adopted on November 14, 2016. Due to significant changes in sales tax revenue projections, the M2020 Plan was replaced after four years with the Next 10 Plan that covered fiscal year (FY) 2016-17 through FY 2025-26. In December 2020, the Board approved a shift of the Next 10 Plan timeframe to span FY 2020-21 through FY 2029-30. The intent is for the Next 10 Plan to be a living document with delivery timeframes shifted every two years to ensure revenue and project information stay current. The 2022 update spans FY 2022-23 to FY 2031-32.

To ensure and reconfirm the ability to deliver M2 through 2041, annual reviews and updates of the Next 10 Plan have taken place incorporating changes in sales tax revenue forecast assumptions, external revenue, and project cost and schedule refinement.

A summary of the adopted plan and annual updates of the base assumptions follow:

- The 2016 adopted Next 10 Plan set M2 project and program priorities based on a revenue forecast of \$14.2 billion through 2041. The Next 10 Plan revenues were augmented by net excess 91 Express Lanes revenue, in an amount not to exceed the project costs for two eligible projects on State Route 91 (SR-91) – Project I between State Route 57 (SR-57) and State Route 55 (SR-55) and Project J between State Route 241 (SR-241) and the Riverside County Line. Net excess 91 Express Lanes revenue is designated for improvements on the SR-91 corridor.
- The 2017 update incorporated a revised \$13.5 billion revenue forecast and required bonding adjustments and inclusion of the full amount of eligible excess 91 Express Lanes revenue. The update also designated Project I as one of the priority projects for advancement through construction.
- The 2018 update incorporated a revised \$13.1 billion revenue forecast offset by an early \$300 million increase in captured external revenue. The update also responded to construction market concerns of potential project cost increases in the freeway program by incorporating a program level line item for economic uncertainty to ensure OCTA could weather fluctuations in M2 revenue receipts. The 2018 update anticipated up to four bond issuances during the Next 10 Plan period to accommodate market changes if necessary.
- The 2019 update incorporated a revised \$13.4 billion revenue forecast, which was the first increase in the M2 forecast since 2014. The increase was driven by the growing economy and the implementation of the Wayfair decision in California. The Wayfair related legislation enabled the collection of sales tax for out-of-state transactions. As a result of the decision, increased sales tax receipts were incorporated in the short-term forecast provided by MuniServices, LLC, which increased the overall long-term forecast.
- The 2020 update incorporated a revised \$11.6 billion revenue forecast, the lowest since M2 inception. The substantial decrease was driven by uncertainties regarding the economic impacts of the coronavirus (COVID-19) pandemic. The update also shifted the timeframe from FY 2016-17 through FY 2025-26 to FY 2020-21 through FY 2029-30 for more strategic, forward-thinking planning and adjusted commitments as appropriate. To maintain progress on near-term projects and ready additional projects for delivery per Board direction, one bond issuance was anticipated.
- The 2021 update incorporated a revised \$13.2 billion revenue forecast. While the COVID-19 pandemic negatively impacted sales tax revenues through the first half of FY 2020-21, the second half of the FY showed tremendous growth as the Orange County economy began emerging from the pandemic. Sales tax collections for FY 2021-22 grew by 8.6 percent to \$345 million, which was the highest annual sales tax collection for M2. As a result of higher sales tax collections, the 2021 update reduced the amount of the one bond issuance anticipated.

2022 Review

The 2022 M2 sales tax revenue forecast of \$15 billion was presented to the Board on September 26, 2022. This represents a 13.6 percent, or a \$1.8 billion dollar increase from what was assumed in the 2021 Next 10 Plan. Orange County's economy continued to strongly emerge from the coronavirus (COVID-19) pandemic in FY 2021-22. As a result, sales tax collections for FY 2021-22 grew by 23 percent to \$424 million, which is the highest annual sales tax collection for M2. Future year annual growth rates are forecasted to average approximately 3.29 percent. While this forecast indicates recovery, staff will continue to monitor variables that could impact short- and long-term M2 revenues.

Staff has reviewed and updated the cash flow for the complete M2 plan of projects and programs. The 2022 update incorporates the higher M2 sales tax revenue forecast, current programmed external revenues, revised bonding assumptions, and refined project cost estimates. Through this process, staff confirms that the M2 Program remains deliverable.

Next 10 Plan Delivery Risks

While the M2 Program continues to demonstrate financial viability, OCTA remains cognizant of the delivery risks of M2 projects and programs. A table of identified risks are included on pages 6 through 8 with two key risks highlighted below.

Funding – While the 2022 sales tax revenue forecast of \$15 billion is good news, a significant amount of risk remains with the high inflationary cost environment forecasted in 2023 and 2024; these increases in expenses could net out the forecasted increase in revenues. Current external funding commitments are assumed in the M2 cash flow for the 2022 Next 10 Plan, but prospects of future revenues for highway projects are uncertain. State transportation policies continue to shift towards projects that reduce automobile travel, which could affect access to currently programmed as well as future state funding opportunities for the M2 Freeway Program.

Regulatory Risks – Current state planning and project approval policies place great emphasis on reducing travel by automobile and encourage project alternatives that promote short trips where possible, travel by transit, bicycling or walking, and use of zero-emission vehicles. These requirements will affect the project environmental review process. The majority of M2 freeway projects, where this risk would manifest itself, have obtained the necessary approvals, but if the approvals require a review or revision, these new requirements could impact delivery.

A summary table of the risks, explanations, and suggested management actions are identified on the following pages and are tracked and reported in the M2 Quarterly Progress Reports presented to the Board, following each fiscal year quarter.

Risk		Explanation	Action
	Moderate		One to Watch
Financial			
1	Sales tax revenues were impacted by the Great Recession and the COVID-19 pandemic. The 2022 M2 revenue forecast is \$15 billion, which is a \$1.8 billion (13.6 percent) year-over-year increase from the 2021 forecast.	While the 2022 M2 revenue forecast is higher, 19 years of M2 delivery remain and fluctuations in economic conditions may affect future revenue projections.	Staff will continue to monitor sales tax revenue receipts to ensure delivery of M2 as promised to voters.
2	Reduced external funding opportunities for the M2 freeway program.	State and federal priorities continue to shift and favor projects that reduce automobile travel, which could affect access to currently programmed as well as future external funding opportunities for the M2 freeway projects.	Current external funding commitments are assumed in the M2 cash flow for the 2022 Next 10 Plan, but prospects of future revenues for highway projects are low.
3	Potential for an environment of increasing cost for M2 capital projects.	The fall 2022 update of the Next 10 Plan Market Conditions Forecast and Risk Analysis reflects a high inflationary environment in 2023 and 2024. This is driven by inflation, increases in construction wages, and construction materials.	To further protect against potential cost increases for capital projects, 11 percent program level expense line items have been incorporated in the 2022 M2 cash flow for an economic uncertainty allowance. The Next 10 Plan Market Conditions Forecast and Risk Analysis report is updated biannually and provides a three-year look ahead. OCTA will continue to monitor bid results and market conditions affecting project costs.
4	Inability to scale the M2 Freeway Program to available revenue and still deliver the M2 commitments.	The M2 Freeway Program includes set project scopes leaving limited flexibility in what is delivered.	OCTA will work closely with the California Department of Transportation (Caltrans) to apply value engineering strategies on projects to manage costs.
5	Schedule and scope changes on capital projects that impact delivery and project costs.	Changes as a result of updated highway standards, new regulatory requirements, or issues identified in the field may impact scope, schedule, and costs substantially.	OCTA will work closely with project partners and project contractors to limit changes in scope and schedules.

Risk	Explanation	Action	
6	Increase Southern California Regional Rail Authority (Metrolink) train service as an alternative to driving within the limits of available revenue.	COVID-19 has altered travel behavior, which affect ridership and revenue. Operational cost of Metrolink service continues to grow as the system ages, track-sharing arrangements with BNSF Railway Company (BNSF) are revised, and new air quality requirements are implemented.	External funding (one-time federal funds through the Coronavirus Aid, Relief and Economic Security Act, Coronavirus Response and Relief Supplemental Appropriations Act, and Infrastructure Investment and Jobs Act) has helped alleviate some near-term financial concerns. OCTA will continue to work closely with Metrolink and member agencies to ensure cost increases are minimized, while continuing to seek external revenue.
Resource			
7	Substantial work underway in the region has resulted in significant demand for professional and skilled labor which may impact delivery given the volume of the M2 capital program.	The fall 2022 update of the Next 10 Plan Market Conditions Forecast and Risk Analysis reflects a steep decrease in unemployment rates. If shortages continue, project delivery costs could rise but if additional labor resources are available, it may temper costs and reduce delivery risk.	OCTA will monitor resources for professional and skilled labor needed for project delivery. Expert and timely coordination between OCTA and project partners is imperative to manage this risk.
8	New operational responsibilities with the OC Streetcar.	With the implementation of the OC Streetcar service, OCTA will be increasing its overall role in operations.	To ensure success of the OC Streetcar, OCTA hired a streetcar operations manager with proven start-up experience to oversee start-up and daily operations. A contractor with extensive experience in operations of rail systems was selected to handle the startup and revenue operation phases.

Risk	Explanation	Action
Climate		
9	Climate-related hazards could affect M2 investments.	OCTA has experienced hazards affecting M2 investments. Recent events include the 2022 Coastal Fire which impacted the M2 Environmental Mitigation Program (EMP) Pacific Horizon Preserve and the tidal events, ocean currents and waves, and storm surges which continue to affect railroad track stabilization in San Clemente.
OCTA has developed Fire Management Plans for the seven properties purchased as part of the M2 Freeway EMP. Additionally, on October 3, 2022, the Board adopted a resolution to authorize OCTA to take all necessary actions to address the emergency need for railroad track stabilization.	Regulatory	
10	Changing federal and state directives could affect M2 freeway project approvals.	Current state planning and project approval policies place great emphasis on reducing travel by automobile and encourage project alternatives that promote short trips where possible, travel by transit, bicycling or walking, and use of zero-emission vehicles. These requirements will affect the project environmental review process.
The majority of M2 freeway projects, where this risk would manifest itself, have obtained the necessary approvals. If the approvals require a review or revision, these new requirements could impact delivery.		

Guiding Principles

During the development of the EAP, guiding principles were established that set direction for staff on establishing priorities for freeway project delivery. These guiding principles continue to instruct us today and were used to identify projects to recommend moving from the environmentally cleared/shelf-ready list to early funding through construction.

- Project Readiness
- Congestion Relief and Demand
- External Funding Availability
- Public Opinion and Support
- Project Sequencing and Connectivity
- Project Duration

Updated Next 10 Plan Deliverables

Significant progress and accomplishments have been made to M2 since 2007. The 2022 update of the Next 10 Plan confirms that M2 can be delivered consistent with the commitment to voters. To outline a near-term work plan to promote effectiveness and efficiency, ten deliverables on program and project delivery have been defined during the ten-year period from fiscal year (FY) 2022-23 through FY 2031-32.

Freeways

1. Deliver 13 freeway improvement projects through construction (Projects A-M).

Status:

The M2 Freeway Program is currently made up of 30 projects/project segments. Deliverable 1 includes 13 projects to be delivered through construction as reflected in the table below. The completion of these projects would bring the total number of completed projects to 26 by FY 2029-30, which equates to approximately 87 percent of the M2 Freeway Program. See Appendix page 105 for a table of the completed projects.

In Construction		Construction Complete	Cost*
1. Project C, D	Interstate 5 (I-5) between State Route 73 (SR-73) and Oso Parkway/Avery Parkway Interchange	2024	\$195.8
2. Project C, D	I-5 between Oso Parkway and Alicia Parkway/La Paz Road Interchange	2024	\$203.1
3. Project C	I-5 between Alicia Parkway and El Toro Road	2024	\$165.9
Project C, D	I-5 between SR-73 and El Toro Road Landscaping	2026	\$12.4
4. Project F	SR-55 between Interstate 405 (I-405) and I-5	2027	\$503.2
5. Project K	I-405 between SR-73 and Interstate 605 (I-605)	2024	\$1,560.2
In Design		Construction Complete	Cost*
6. Project B	I-5 between I-405 and Yale Avenue	2029	\$230.5
7. Project B	I-5 between Yale Avenue and SR-55	2029	\$200.4
8. Project G	SR-57 Northbound from Orangewood Avenue to Katella Avenue	2028	\$71.8
9. Project I	SR-91 between SR-55 and Lakeview Avenue	2027	\$100.9
10. Project I	SR-91 between La Palma Avenue and SR-55	2028	\$208.4
11. Project I	SR-91 between Acacia Street and La Palma Avenue	2028	\$116.2

In Design		Construction Complete	Cost*
12. Project M	I-605 Katella Avenue Interchange	2026	\$29.0
In Environmental		Construction Complete	Cost*
13. Project F	SR-55 between I-5 and SR-91	2029	\$131.3
Deliverable 1 Total			\$3,729.1

*Cost in millions

2. Prepare remaining freeway improvement projects for delivery (Projects A-M).

Status: The four remaining projects (of the 30 total) are environmentally cleared or on track to be cleared by 2032, making them shelf-ready for future advancement. These projects will continue to be reevaluated for earlier delivery as the Next 10 Plan is reviewed each year.

Remaining Projects		Environmentally Clear Shelf-Ready	Cost*
1. Project D	I-5 El Toro Road Interchange	2024	\$120.5 ¹
2. Project G	SR-57 Northbound from Lambert Road to Tonner Canyon Road	2028	\$227.1 ¹
3. Project J	SR-91 between SR-241 and Interstate 15 (I-15)	2026	\$300.0 ¹
4. Project L	I-405 between I-5 and SR-55	2018	\$262.4
Remaining M2 Freeway Projects Total			\$910.0²

*Cost in millions

Streets and Roads

3. Provide annual competitive funding opportunities for local jurisdictions to address bottlenecks and gaps in the street system (Project O), synchronize signals (Project P) and continue flexible funding to local jurisdictions to support pavement rehabilitation or other transportation needs as appropriate (Project Q).

Status: As of June 2022, OCTA has awarded approximately \$482.0 million in competitive funding through the Regional Capacity Program (RCP {Project O}) and Regional Traffic Signal Synchronization Program (RTSSP {Project P}) through annual calls for projects

¹ These cost estimates are preliminary and will be updated once the project alternative is selected at the completion of environmental clearance.

² The total will be revised once the three remaining projects (Project D, G, and J) have a selected project alternative and complete environmental clearance.

(call). Additionally, \$584.3 million in Local Fair Share (LFS {Project Q}) funds have been distributed to local jurisdictions.

Transit

4. Maintain Metrolink service and complete one rail station improvement project (Project R).

Status: In October 2019, three weekday intracounty round trips operating between Laguna Niguel/Mission Viejo and Fullerton were replaced with two round trips between Laguna Niguel/Mission Viejo (extended from Fullerton) into Los Angeles. Additional service changes were scheduled to be implemented in April 2020; however, in March 2020, all Metrolink services were severely impacted by the statewide enforcement of stay-at-home orders that resulted from the COVID-19 pandemic. Metrolink implemented temporary service reductions in March and November 2020 due to the decline in ridership resulting from these orders. In April 2022, Metrolink partially restored service in response to increasing ridership, customer feedback and demand for more train trips. The three lines serving Orange County (Orange County, Inland Empire-Orange County, and the 91/Perris Valley lines) currently operate 45 weekday trains, a 17 percent reduction from the 54 weekday trains operated prior to COVID-19.

Close monitoring of Metrolink operations is necessary to ensure sustainability through 2041. As shared with the Board earlier this year, Metrolink ridership has struggled to recover, continuing the impacts of farebox revenues and cost recovery. To exacerbate this shortfall, operating costs have increased. Consequently, Metrolink has postponed the full service restoration that was previously scheduled for implementation in October 2022 in order to manage costs while also working on campaigns to attract more riders. However, many variables affect ridership recovery, such as prevalence of flexible remote work policies. Without changes in service levels, ridership growth, and operations and rehabilitation costs or availability of external funds, the current service cannot be sustained beyond FY 2035-36. Staff will closely monitor ridership and these variables. The Next 10 Plan is reviewed annually, which will provide OCTA many opportunities to update and adjust assumptions as necessary. OCTA will continue to actively engage with Metrolink and the other member agencies to monitor ridership levels and the corresponding financial impacts to M2.

Another impact to Metrolink in Orange County is the on-going railroad track stabilization effort in the City of San Clemente. In September 2021, a failing slope severely degraded the railroad track structure. Emergency repair efforts were taken between late 2021 and early 2022. However, recent higher tidal events coupled with movement of an ancient slide have continued to impact the stability of the track, leading to a suspension of passenger rail service in this area. On October 3, 2022, the Board adopted a resolution to authorize OCTA to take all necessary actions to address the emergency need for railroad track stabilization. These repairs are funded from the commuter rail fund and some state emergency funds for this phase of the work. Long-term solutions need to be developed to ensure the ability to provide service in this portion of the County, the cost

for which is undetermined at present. Future updates to the Next 10 Plan will need to consider the financial implications of the long-term track improvement needs.

Within this program, funding is provided for rail corridor and station improvements to accommodate increased passenger train service including station upgrades, parking expansions, and safety enhancements. One station improvement project is anticipated to be completed during the Next 10 Plan timeframe. Construction on the Anaheim Canyon Metrolink Station Improvements Project began in May 2021 and is anticipated to be complete in early 2023.

5. Complete construction, secure vehicles, begin operating the OC Streetcar, and work with local jurisdictions to consider recommendations from planning studies to guide development of future high-quality transit connections (Project S).

Status: The 4.15-mile OC Streetcar will serve the Santa Ana Regional Transportation Center (SARTC) through Downtown Santa Ana and the Civic Center to Harbor Boulevard in the City of Garden Grove. Activities underway include construction of the tracks, installation of rail and overhead poles, communication with third parties on utility relocation, and continued coordination with the Federal Transit Administration. Other significant activities include construction of the maintenance and storage facility and an issued limited notice to proceed for the operations and maintenance contract. The first seven cars are in the final stages of equipping and the last car is in final assembly. Construction is anticipated to be complete in 2024.

6. Support expanded mobility choices for seniors and persons with disabilities (Project U).

Status: Project U is comprised of three programs: the Senior Mobility Program (SMP), the Senior Non-Emergency Medical Transportation (SNEMT) Program, and the Fare Stabilization Program. Since inception, approximately \$105.3 million³ has been provided to these three programs. The SMP provides funding to participating cities to design and implement transit service that best fits the needs of seniors (60 and above) in their communities. The SNEMT Program provides funding to the County of Orange Office on Aging for senior (60 and above) transportation to and from medical appointments, dentists, therapies, exercise programs, testing, and other health-related trips at a low cost to the rider than would otherwise be available. The Fare Stabilization Program provides stable discounted fares for seniors and persons with disabilities by lowering the cost of riding transit.

³ Only includes disbursed funds. On October 12, 2020, the Board approved a temporary exception to the SMP guidelines which allows for OCTA to hold allocations in reserve for agencies with suspended services due to the COVID-19 pandemic. The funds will be held until the State lifts the State of Emergency or the agency resumes transportation services, whichever occurs first.

7. Work with local jurisdictions to maintain successful community circulator projects and potentially provide grant opportunities for expanded or new local transit services (Project V).

Status: Since inception, OCTA has approved 35 projects and ten planning studies totaling approximately \$52 million through four calls. The most recent Project V call was programmed by the OCTA Board on April 13, 2020. OCTA receives ridership reports from local agencies on a regular basis to monitor the success of awarded services against performance measures adopted by the Board. As of June 2022, 17 projects are active, ten have been cancelled (primarily due to low ridership), five are suspended or not initiated as a result of the COVID-19 pandemic, and three have been completed. Staff continues to work with local jurisdictions through letters of interest requests, workshops, Comprehensive Transportation Funding Program Guidelines revisions, calls, and cooperative agreement amendments to fine-tune this program and facilitate successful project implementation, especially in light of the COVID-19 pandemic.

8. Continue to improve the top 100 busiest transit stops to enhance the customer experience (Project W).

Status: Through three calls, the Board has approved \$3.1 million to improve 122 city-initiated improvement projects at the busiest OCTA transit stops. The program is designed to ease transfers between bus lines and provide passenger amenities such as installation of bus benches or seating, shelters, improved lighting, and other passenger-related amenities. To date, 49 improvements have been completed, 63 improvements are in various stages of implementation, and ten improvements have been cancelled by the awarded agency.

Environmental

9. Ensure the ongoing preservation of purchased open space, which provides comprehensive mitigation of the environmental impacts of freeway improvements and higher-value environmental benefits in exchange for streamlined project approvals (Projects A-M).

Status: The M2 freeway EMP includes seven conservation properties (Preserves) totaling more than 1,300 acres and 12 restoration projects covering nearly 350 acres. In 2017, OCTA received biological resource permits after completing a state and federal Natural Community Conservation Plan/Habitat Conservation Plan (Conservation Plan) for the EMP, allowing streamlined project approvals for the M2 freeway improvement projects. The Conservation Plan also includes a streamlined process for coordination of streambed alteration agreements. In 2018, OCTA secured programmatic permits and assurances for federal and state clean water permitting requirements. Receipt of these permits represents the culmination of years of collaboration and support by the Board, environmental community, and regulatory agencies.

OCTA makes annual endowment deposits of approximately \$2.9 million. As of June 30, 2022, the endowment balance was \$19,332,924. While the performance of the endowment fund will affect the time frame for full funding, current projections indicate that OCTA is on track to meet the target of \$46.2 million in FY 2027-28.

10. Work with the Environmental Cleanup Allocation Committee (ECAC) to develop the next tiers of water quality programs to prevent the flow of trash, pollutants, and debris into waterways from transportation facilities. In addition, focus on improving water quality on a regional scale that encourages partnerships among the local agencies as part of the Environmental Cleanup Program (ECP) (Project X).

Status: In May 2010, the Board approved a two-tier approach to funding Project X. Tier 1 consists of funding equipment purchases and upgrades to existing catch basins and related best management practices, such as screens and other low-flow diversion devices. Tier 2 consists of funding regional, potentially multi-jurisdictional, and capital-intensive projects. Since inception, the Board has approved over \$30 million in funding for 199 Tier 1 projects through 11 calls and \$27.9 million for 22 Tier 2 projects through two calls.

Oversight and Safeguards

The 2022 Next 10 Plan is taking place with the full oversight and regular reporting promised to the voters. Regular progress reports on implementing the Next 10 Plan are included in the M2 Quarterly Progress Reports that are prepared for the Board. These reports are included on the OCTA website, as well as other means, to ensure accessibility and transparency of the information. Contact information for the OCTA staff member responsible for each program or project is also included.

Additionally, as specified in the M2 Ordinance No. 3 (M2 Ordinance), Section 10, there will be three performance assessments conducted during the Next 10 Plan time period. Performance assessments are to be conducted at least once every three years to evaluate the efficiency, effectiveness, economy, and program results of OCTA in satisfying the provisions and requirements of the M2 Transportation Investment Plan (Plan) and M2 Ordinance. These assessments will take place during 2024, 2027, and 2030. The latest performance assessment covering FY 2017-18 through FY 2020-21 was completed and shared with the Board in April 2022. The consultant's report reflected a positive assessment of OCTA's efficiency and effectiveness in the delivery of M2 projects and programs. While there were no significant findings, four recommendations for enhancements were made. Actions to address these recommendations are underway.

Also included in the M2 Ordinance, Section 11, is a ten-year comprehensive review of M2 programs and projects, which will be initiated during the Next 10 Plan time period. Due to the early initiation of project development activities prior to the start-up of revenue collection in 2011, the first review was completed in FY 2014-15. A second review is planned to take place in FY 2024-25 (or sooner if warranted) and will determine the basis for setting the direction of future refinements to the M2 Plan. The ten-year review includes a comprehensive review of all projects and programs implemented under the M2 Plan to evaluate the performance of the overall program and may result in revisions to further improve performance.

Sustainable Communities Strategy

It is important to note that M2 also supports and enhances the ability of OCTA to support the regional Sustainable Communities Strategy in Orange County. M2 projects and programs are part of a larger suite of transportation improvements included in the 30-year M2 Plan. Over 50 percent of M2 funds are intended to fulfill transit, system optimization, enhanced environmental elements and infrastructure preservation goals. In addition, the funding eligibility criteria encourages local agencies to consider accommodations for transit and non-motorized transportation.

M2 was publicly reviewed through a Program Environmental Impact Report (EIR) prior to voters approving the ballot measure in November 2006. Since 2008, the M2 Program has been included in the Regional Transportation Plans, Sustainable Communities Strategies, and the associated Program EIR prepared by the Southern California Association of Governments.

In addition to funding freeway improvements, the M2 Program dedicates funding for many transit and local street improvement projects. These include improvements such as:

- New transit connections between major Orange County activity areas that reduce the need for short automobile trips;
- Enhanced convenience and reliability for bus services and Metrolink commuter rail to encourage transit as a dependable commute option;
- Local funding for development of multimodal corridors and roadway preservation that improves the quality of mobility for all users; and
- Signal synchronization on 750 miles of roadways throughout Orange County to reduce congestion and tailpipe emissions.

The M2 freeway EMP has preserved 1,300 acres of wild lands that will be converted to the Preserves to enhance connectivity and wildlife movement between existing conservation areas – such as the Cleveland National Forest, the Chino Hills State Park, and the Irvine Ranch Conservancy lands – and to coastal areas. Furthermore, the program also provides critical habitat for endangered or listed species. Additionally, since M2 inception, the ECP has funded over 220 projects totaling over \$57 million to treat storm water runoff and help keep waterways and beaches clean in Orange County.

The aforementioned transit, local streets, and environmental programs collectively contribute to and enhance the quality of life, as well as provide a sustainable future, and an efficient transportation system that benefits the region.

Brief summaries of the specific programs are listed below.

- ✓ Projects A through N – Freeway improvements and Freeway Service Patrol (FSP) to provide emission reductions through congestion relief.
- ✓ Projects O and P – Signal synchronization and street improvements that provide emission reductions through congestion relief and flexibility to accommodate bike and pedestrian project elements as appropriate.
- ✓ Project Q – Local funding for city-selected transportation projects that provide for preservation of the streets and roads system and includes bicycle, pedestrian, water quality, and transit enhancements as eligible expenditures.
- ✓ Project R – Expanded Metrolink train capacity including improvements to stations and parking to improve transit reliability and convenience and reduce reliance on highways while also supporting potential transit-oriented development.
- ✓ Project S – Transit extensions to improve access between Metrolink stations and residential/employment centers and provide an alternative to driving.
- ✓ Project T – Station improvements to connect to planned future high-speed rail services.
- ✓ Project U – Sustain mobility choices for seniors and persons with disabilities and provides an alternative to driving.
- ✓ Project V – Community-based circulators to complement regional transit services with local communities and provides an alternative to driving.
- ✓ Project W – Transit stop improvements to support transfers between major bus lines and support the implementation of mobile ticketing to ensure ease of fare purchase and convenience for bus passengers.
- ✓ Project X – Water quality improvement programs/projects to meet federal Clean Water Act standards for urban runoff, and augment required mitigations.
- ✓ Freeway Mitigation Program – Natural resource protection strategy to provide for more comprehensive mitigation of environmental impacts from M2 freeway improvements.

Updated Next 10 Plan Funding Assumptions

Funding assumptions are included in the 2022 Next 10 Plan. The revenue assumptions incorporate the latest 2022 M2 sales tax revenue forecast of \$15 billion and prior commitments in programmed local, state, and federal external revenues.

Projected revenues and expenses are merged into a high-level cash flow model. To support project delivery schedules in the Freeway Program, bond assumptions were previously included. With the increase in the M2 revenue forecast as well as refined project costs, bond assumptions are no longer anticipated through 2041. Bonding capacity is available, as OCTA's debt coverage ratios are well above the allowable amount of 1.3x. The minimum forecasted debt coverage ratio during the Next 10 Plan timeframe is 9.2x in 2023. This offers significant financial protection against unforeseen economic changes related to project delivery. The appendix on page 104 includes a more detailed discussion on assumed revenues, costs, and debt service.

For the 2022 Next 10 Plan review and update, forecasted revenues and costs through 2041 were tested. This effort was conducted to ensure the complete M2 Program could be delivered consistent with commitments provided to the voters as part of M2 approval in November 2006. Revenues are expected to fluctuate over time. The M2 expenditure plan includes programmatic items which adjust according to available revenues. However, the freeway portion defines specific project scopes which cannot be easily adjusted to revenue fluctuations.

Funding for the freeway mode assumes \$9.3 billion in total revenue, with costs for the same period totaling \$9.2 billion. To date, OCTA has been very successful in capturing external funding to offset the reduction in sales tax revenue. The long-term M2 freeway plan relies on the total receipt of approximately \$1.7 billion in state and federal revenues. Additionally, the program includes \$692 million in net excess 91 Express Lanes revenue and \$495 million in bond proceeds.

As a result of the higher forecasted sales tax and interest revenue, the freeway program net sales tax revenue through 2041 increased by approximately \$899 million. In addition, each project in the freeway program was reviewed and cost estimates updated. With the majority of the projects now either nearing completion of the environmental phase or in design, project cost estimates have a higher level of engineering and are therefore better defined. This significant net increase allowed for the removal of future bonding assumptions, which provides significant savings in the freeway program while maintaining project delivery schedules. This also increased the economic uncertainty for the freeway mode, with most of it available between FY 2032-33 and FY 2040-41. As noted earlier, there is significant bonding capacity available should the freeway program require additional revenue to support project expenses.

Funding for the streets and roads mode assumes \$5.4 billion in total revenue, with costs for the same period totaling \$5.1 billion. The projects within the Streets and Roads Program are scaled to available revenue and are reflected in the cash flow on a pay-as-you-go basis. The Streets and Roads Program relies on the total receipt of approximately \$567 million in external revenues (state, federal, and local) primarily for the OC Bridges grade separation projects. More detailed program assumptions for the Streets and Roads Program can be found in the Appendix on page 107.

For the transit mode, \$4.2 billion in total revenue is assumed, with costs for the same period totaling \$4 billion. The majority of projects within the Transit Program are scaled to available revenue with the exception of Project U's Fare Stabilization Program. The M2 Ordinance specifically requires that the Fare Stabilization Program subsidize fares for seniors and persons with disabilities to the extent of maintaining the reduced fare rate effective on July 24, 2006, through FY 2040-41. While this program is not scalable, it remains solvent due to OCTA's proactive amendment to the M2 Ordinance. The remaining transit mode programs are assumed on a pay-as-you-go basis. The funding for the transit mode assumes the total receipt of \$407.4 million in local, state, and federal revenues. This number is inclusive of \$148.96 million in Federal New Starts and \$25.52 million in State Cap-and-Trade revenues to partially fund the OC Streetcar project. More detailed program assumptions for the Transit Program can be found in the Appendix on page 108.

The ECP assumes \$301.2 million in total revenue, with costs for the same period totaling \$237.8 million. The projects within the ECP are scaled to available revenue and are reflected in the cash flow on a pay-as-you-go basis. More detailed program assumptions for the ECP can be found in the Appendix on page 108.

With careful management of the projects and use of financial resources, the full scope of the M2 Program through 2041 can be delivered as promised.

Funding and Financing

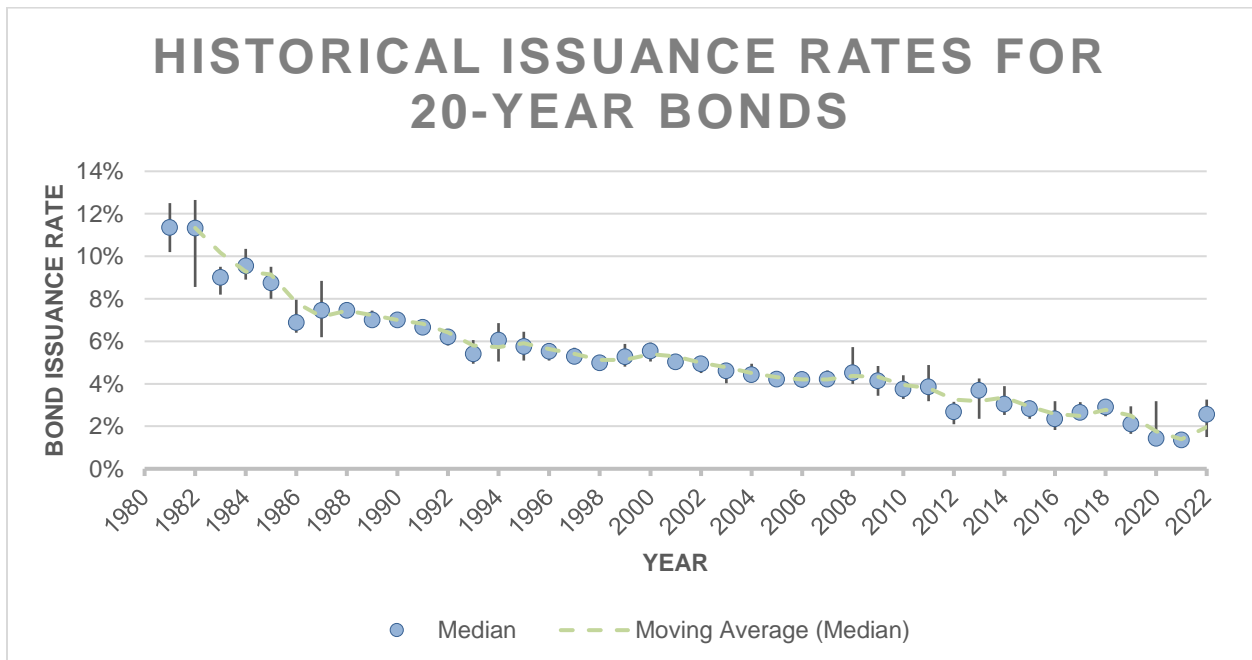
The Board's vision in developing the EAP created a great opportunity for the M2 Program. While the economy took a significant downturn due to the 2008 Great Recession, OCTA advanced projects years before revenue became available. Projects were accelerated, making them shelf-ready. This allowed OCTA to capture significant one-time external funding provided through State Proposition 1B and the American Recovery and Reinvestment Act. Using the revised forecasting methodology implemented in March 2016, the 2022 M2 sales tax revenue forecast is \$15 billion.

When it comes to the bidding environment, OCTA significantly benefited during the recession by capitalizing on a low-cost environment with early project development and acceleration. When the M2020 Plan was adopted in late 2012, staff reported that freeway construction bids were consistently coming in between ten to 20 percent below engineers' estimates. Since that time, construction bids have slowly risen to meet and in some cases exceed the engineers' estimates.

In the 2021 update of the Next 10 Plan, there was one bond issuance anticipated in 2023. As a result of higher forecasted sales tax collections, this year's update eliminates the one anticipated bond issuance and assumes no additional bonding is required through 2041. The update also continues to maintain prudent annual ending balances and an economic uncertainties allowance, which provides continued financial stability in the event of additional financial fluctuations.

Pay-as-you-go project funding is identified in the M2 Ordinance as the preferred method of financing, while bond financing is an option that is within the purview of the Board. It takes many years to bring projects to fruition therefore it is prudent to maintain current project schedules to deliver M2 benefits earlier.

While the current cost of debt remains low and continues to be attractive, there are no additional issuances planned through 2041. Current 20-year bond rates have increased from last year from 1.29 percent to 3.03 percent. Long-term rates remain near all-time lows of 1.49 percent, thus maintaining a relatively “flat” yield curve, allowing OCTA to take advantage of attractive mid- and long-term rates if needed. See the graph below showing historical issuance rates of 20-year bonds.



OCTA has a strong track record of successfully delivering projects by utilizing bond financing, as seen in M1, as well as M2, under the EAP and M2020 Plan. While the 2022 Next 10 Plan no longer anticipates additional bond financing for the Freeway Program through 2041, OCTA has significant bonding capacity available should the freeway program require additional revenue to support project expenses.

Future Outlook

As noted in the Risks section starting on page 5, major capital work is underway in the Southern California region that may impact OCTA's ability to secure resources needed for future project and program delivery. Competition for available resources for capital projects has increased with the major capital work currently underway in Los Angeles, Riverside, and San Bernardino counties. For future projects going forward, engineers, ROW experts, skilled labor, and materials will be in higher demand.

In September 2017, the Board was presented with a Market Conditions Forecast and Risk Analysis report conducted by economists Dr. Wallace Walrod and Dr. Marlon Boarnet through a contract with the Orange County Business Council (OCBC). The result of this analysis identified strong potential for OCTA to experience an increasing-cost environment in the near term. The Board directed staff to continue to work with OCBC to monitor and track key early warning indicators and provide OCTA information on changes to the risk factors and potential cost impacts.

In October 2022, OCBC provided an updated forecast to the Board for 2023 through 2025. OCBC tracked relevant market data and indicators, performed analytics, and incorporated this analysis to provide OCTA with a range of potential cost fluctuations through the use of an Infrastructure Construction Cost Pressure Index (ICCPPI). The ICCPPI incorporates a detailed trend analysis of building permits, unemployment rates, localized labor costs, material costs and general economic conditions.

ICCPPI Range of Cost Fluctuations			
Index Score	Low	Midpoint	High
0	-17%	-9.5%	-2%
1	-2%	-0.5%	1%
2	1%	1.5%	2%
3	2%	4%	6%
4	6%	8.5%	11%
5	11%	25.5%	40%

OCBC forecasts a score of four in 2023 and 2024, which represents a potential range of higher cost fluctuation of six to 11 percent. The forecast for 2025 drops to a score of two, which anticipates a tempering of economic conditions. The updated forecast points to continued volatile market conditions as cost pressures remain high in the most recent data available. Major drivers include low unemployment rates coupled with high inflation rates, which could result in rising labor and the cost of materials. Despite the Federal Reserve raising interest rates to curb inflation, the national and regional labor market remains strong. In the most recent data, some material prices saw large increases, specifically, Portland Cement Concrete pavement, aggregate base, and steel bar.

OCBC Orange County Transportation ICCPI Score, 2023-2025		
Year	Index Score	Range of Cost Fluctuation
2023	4	6 percent to 11 percent
2024	4	6 percent to 11 percent
2025	2	1 percent to 2 percent

As in prior forecasts, OCBC indicates that OCTA will also need to be aware and ready to respond to cost pressures that cannot be modeled. Examples of such forces include:

- Pace of Federal Reserve interest rate hikes largely unknown and subject to rapid changes,
- Lingering impacts of the pandemic, zero-tolerance policy in China, and
- General political uncertainty both domestically and internationally.

To mitigate cost pressures, OCTA’s Project Controls Department monitors and adjusts project cost escalation assumptions according to market trends. Project Controls’ cost estimating process uses historical information, as well as current trends in the market, and follows a consistent and defined process. Looking back at the last 20 years, OCTA’s cost estimates have included a three percent escalation, which, on average during this timeframe, provided the appropriate escalation to deliver projects successfully. Currently, using 3.5 percent for construction escalation, as well as incorporating contingency based on the project type and complexity, is staff’s best estimate using industry standards on cost estimating. Additionally, to further protect against potential cost increases in our freeway capital program, staff incorporated an 11 percent program level expense line item in the cash flow for an economic uncertainty allowance.

2022
UPDATE

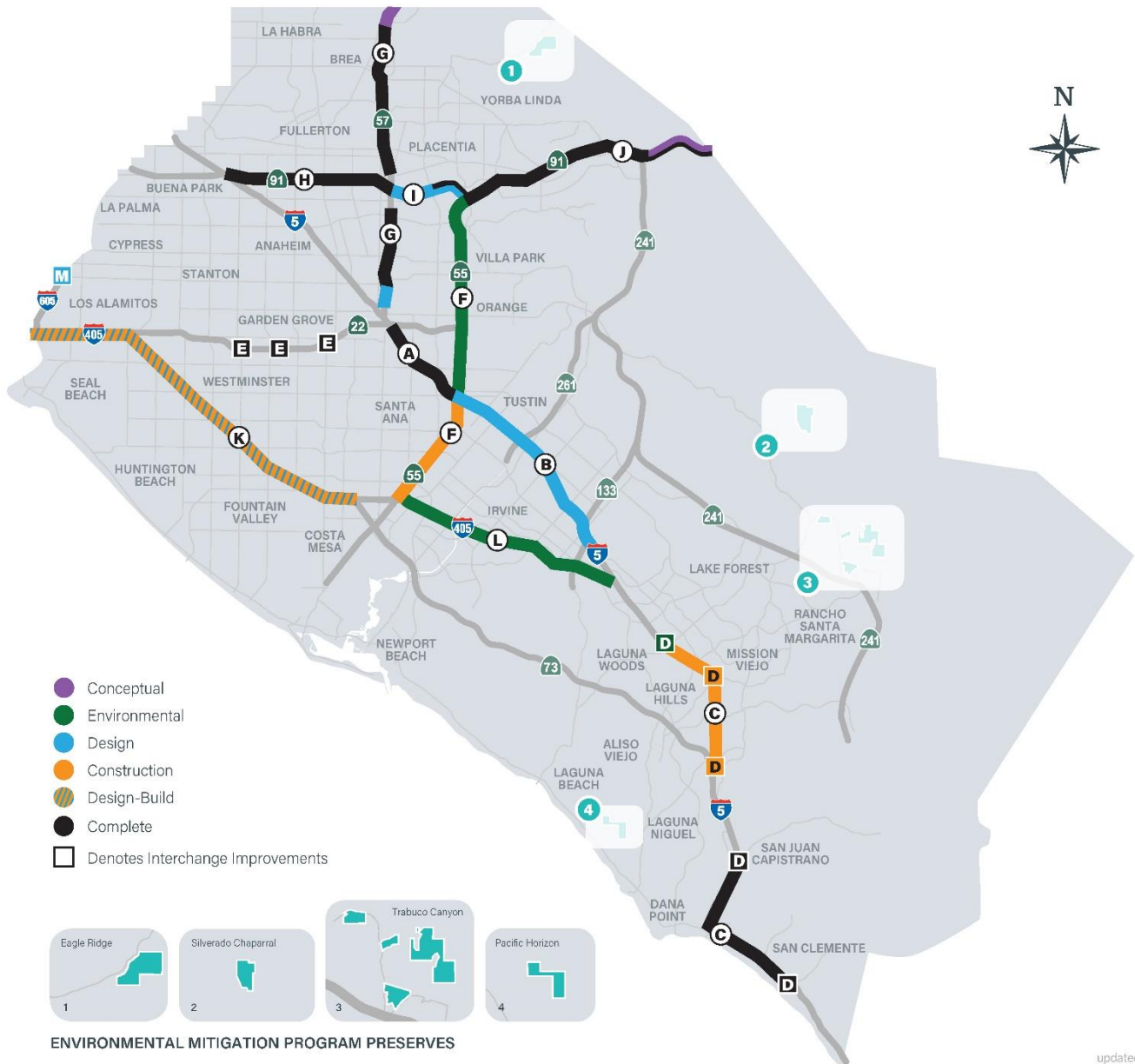
NEXT 10

DELIVERY PLAN

Freeway Program



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- Conceptual
- Environmental
- Design
- Construction
- Design-Build
- Complete
- Denotes Interchange Improvements

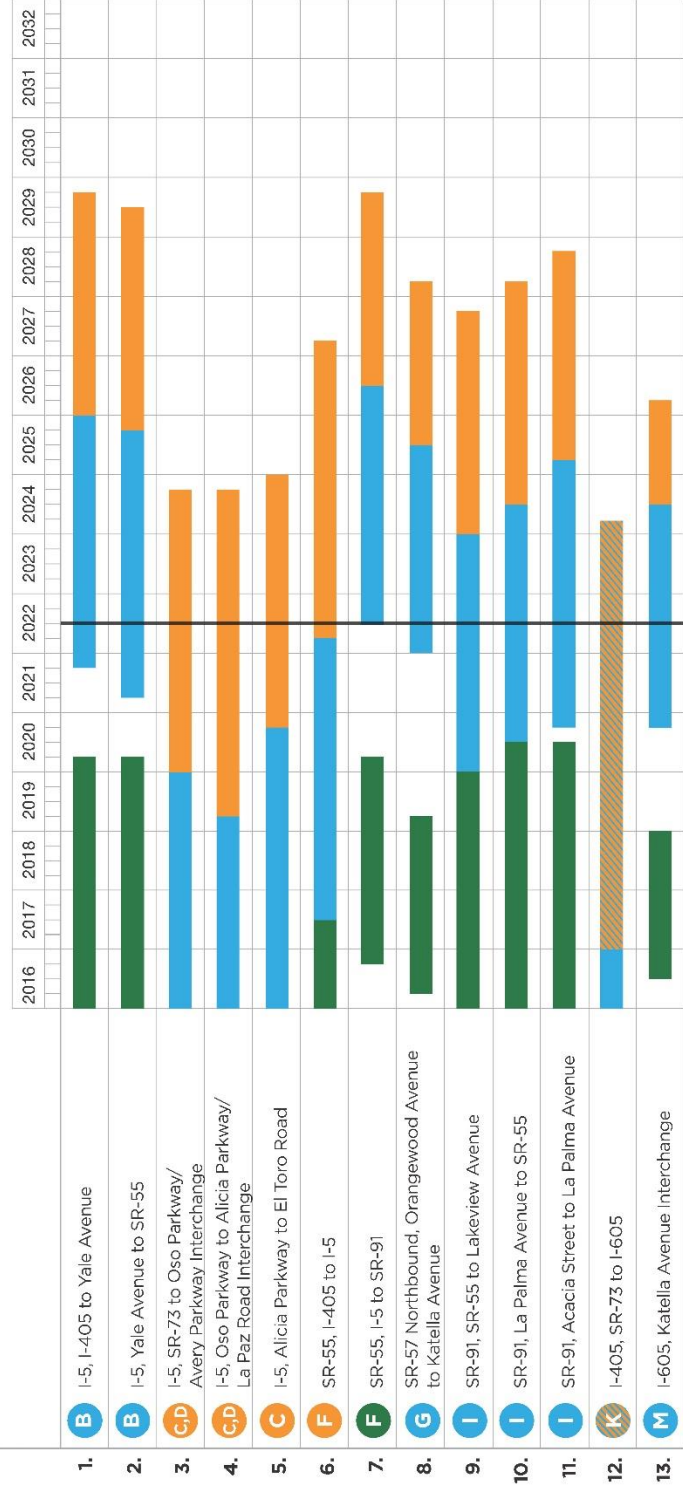


ENVIRONMENTAL MITIGATION PROGRAM PRESERVES

updated 9.20.22

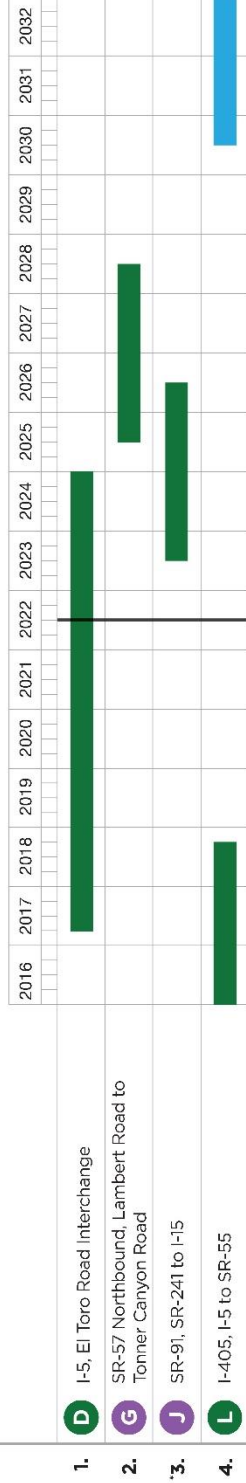
- | | |
|---|--|
| <ul style="list-style-type: none"> A I-5 (SR-55 to SR-57) B I-5 (I-405 to SR-55) C D I-5 (Avenida Pico to San Juan Creek Road) C D I-5 (SR-73 to El Toro Road) D I-5/Ortega Highway Interchange Improvements D I-5/El Toro Road Interchange Improvements E SR-22 Access Improvements F SR-55 (I-405 to I-5) F SR-55 (I-5 to SR-91) G SR-57 NB (Orangewood Avenue to Katella Avenue) G SR-57 NB (Katella Avenue to Lincoln Avenue) G SR-57 NB (Orangethorpe Avenue to Lambert Road) G SR-57 NB (Lambert Road to County Line) H SR-91 WB (I-5 to SR-57) | <ul style="list-style-type: none"> I SR-91 (SR-57 to SR-55) I SR-91 WB (Tustin Avenue to SR-55) J SR-91 (SR-55 to SR-71) J SR-91 (SR-241 to I-15)* K I-405 (SR-73 to I-605) L I-405 (I-5 to SR-55) M I-605/Katella Avenue Interchange Improvements N Freeway Service Patrol (not mapped) A-M Environmental Mitigation Program <ul style="list-style-type: none"> -1,300 acres of permanent open space -12 restoration projects totaling nearly 350 acres (not mapped) |
|---|--|
- *Project environmentally reviewed as part of the Riverside County Transportation Commission's Corridor Improvement Project. Additional studies needed prior to construction.

OC Go Freeway Projects Through Construction



Please note that schedules are updated as of June 30, 2022. Shown schedules are subject to change.

OC Go Freeway Projects Through Environmental Phase/Shelf Ready



Please note that schedules are updated as of June 30, 2022. Projected and active project schedules are subject to change. The Next 10 Plan provides direction through 2032. Schedules and revenues will be reviewed annually. The Board will adopt an updated delivery plan to provide direction on further advancement as appropriate.

* Riverside County Transportation Commission plans to proceed as the lead agency with the Project Approval and Environmental Document phase for the 91 Eastbound Corridor Operations Project (operational lane from SR-241 to SR-71) in FY 2023-24. It is estimated that this effort will take approximately two to three years.

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Freeway Program



Overview:

The Freeway Program accounts for 43 percent of the M2 Program. Over the life of M2, approximately \$6.3 billion is expected to be generated in sales tax revenues for freeway Projects A-N (not including the five percent of net revenues apportioned to the EMP). Improving Orange County freeways is a major investment of the M2 Program.

To ensure delivery of the Freeway Program, the Next 10 Plan includes the following framework:

- Bring congestion relief.
- Deliver projects using the guiding principles.
- Work with Caltrans to seek cost effective measures on freeway projects through changes in scope and design parameters where possible.
- Tightly manage project scopes and schedule to reduce cost escalation risk.

Next 10 Plan Deliverables:

When M2 originally passed, 13 freeway projects were highlighted in the M2 Plan. Since then, these projects have been segmented into 30 projects or project segments. Significant progress of the freeway program is included in the Next 10 Plan deliverable goals through 2032:

1. Deliver construction of 13 freeway projects or project segments: five along I-5, one along I-405, two along SR-55, three along SR-91, one along SR-57, and one at the I-605 Interchange (Projects B, C, C/D, F, G, I, K, and M).
2. Prepare the remaining four project segments for delivery. This includes one on I-405, SR-91, and SR-57; and one interchange project at I-5, El Toro Road (Projects D, G, J and L).

A. I-5 (SR-55 to SR-57)

Description:

Project A reduced freeway congestion by adding a second high-occupancy vehicle (HOV) lane (approximately three miles) in both directions on I-5 between SR-55 and SR-57. The project was generally constructed within the existing ROW.

Cost:

\$38.85 million.

Status:

All lanes opened to traffic in August 2020. Construction was completed in January 2021.

Present Day:

The current daily traffic volume on this segment of I-5 is about 380,000 vehicles and is severely congested. Traffic volumes are expected to increase nearly seven percent by 2035, bringing it up to 406,000 vehicles per day. The HOV lanes experience more congestion in the peak period than the adjacent general purpose lanes,

underscoring the need to add an HOV lane on this freeway segment.

Benefits:

This project improved the HOV facility on I-5 in Santa Ana to meet traffic demands and eliminate bottlenecks. Improvements were needed to accommodate HOV traffic from both the SR-55/I-5 and SR-57/I-5 direct HOV connectors.

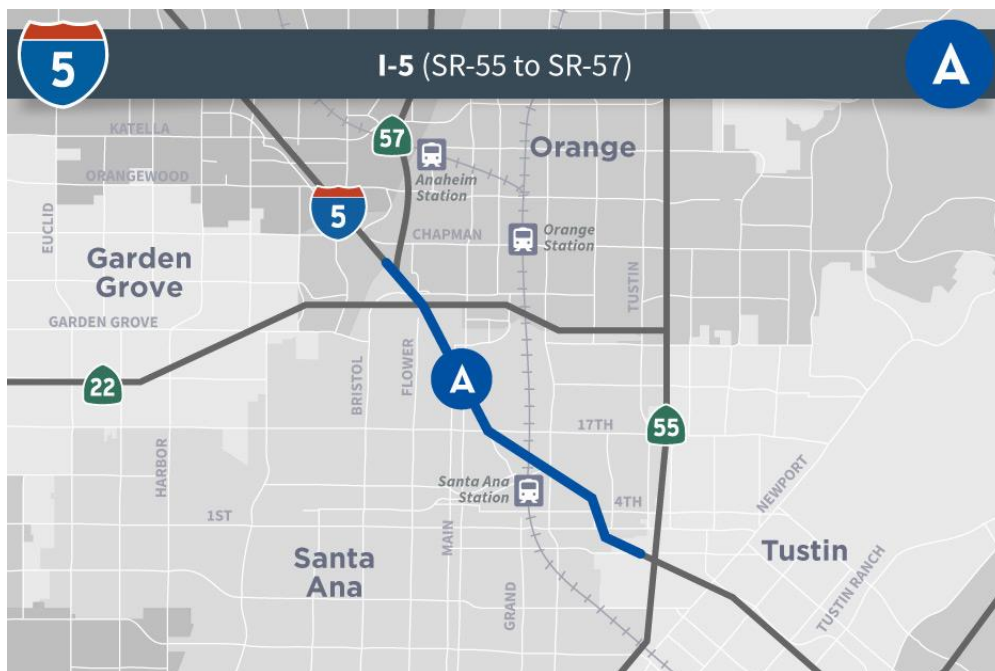
Originally considered under this project, the extension of the auxiliary lane from southbound I-5 to southbound SR-55 through the McFadden Avenue exit ramp on SR-55 to Edinger Avenue, was instead studied as part of SR-55 Project F.

External Funding:

The Board has approved \$36.19 million in federal funds to support this project.

Risks:

None – project completed.



A. I-5 (SR-55 to SR-57)

Related Projects:

Projects B and F.

Other Involved Agencies:

California Transportation Commission (CTC), Caltrans, City of Santa Ana, Federal Highways Administration (FHWA), and Metrolink.

Assumptions:

Cost based on June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

B. I-5 (I-405 to SR-55)

Description:

Project B will reduce congestion by constructing new northbound and southbound general purpose lanes and improving key interchanges in the area between SR-55 and State Route 133 (SR-133) (near the El Toro “Y”). This segment of I-5 is the major route serving activity areas in the cities of Irvine, Santa Ana, and Tustin, and north Orange County. The project will generally be constructed within the existing ROW. The project is divided into two segments as described below.

Segment 1: This project will add one general purpose lane in each direction between I-405 and Yale Avenue (approximately 4.5 miles), improve interchanges, and add auxiliary lanes where needed to improve traffic operations in the Irvine area.

Segment 2: This project will add one general purpose lane in each direction between Yale Avenue and SR-55 (approximately 4.5 miles), improve interchanges, and add auxiliary lanes where needed to improve traffic operations in Irvine and Tustin areas.

Cost:

Segment 1: \$230.48 million (Year of Expenditure [YOE]).

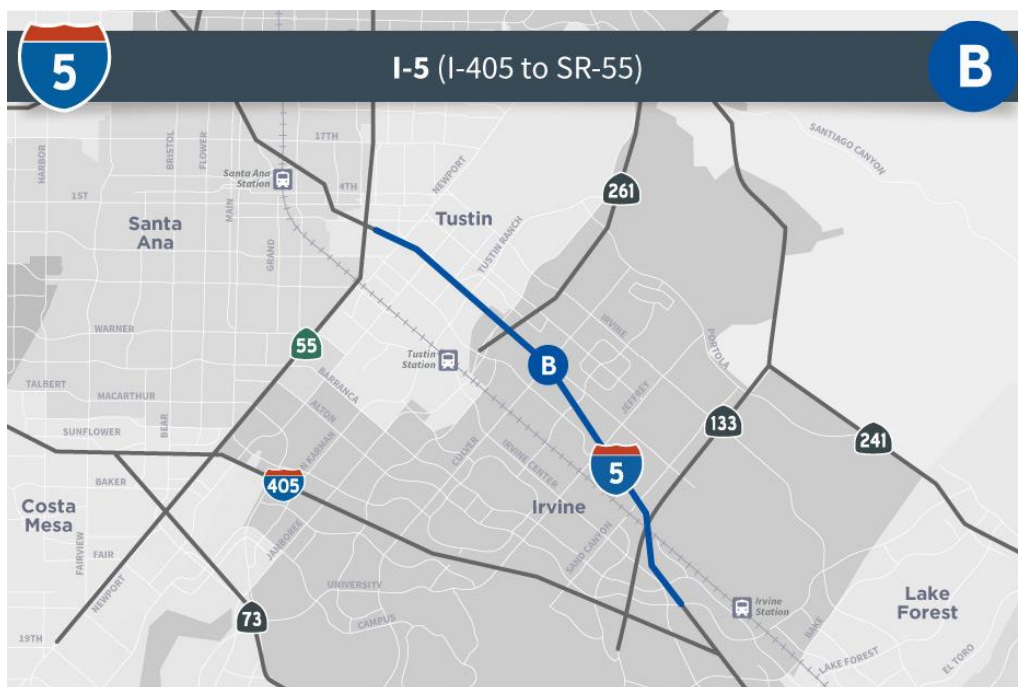
Segment 2: \$200.44 million (YOE).

Status:

The environmental phase for both segments was completed in January 2020.

Segment 1: The design phase was initiated in October 2021.

Segment 2: The design phase was initiated in May 2021.



B. I-5 (I-405 to SR-55)

Present Day:

The current traffic volume on this segment of I-5 is about 358,000 vehicles per day and is expected to increase by nearly 16 percent by 2035, bringing it up to 416,000 vehicles per day.

Benefits:

Project improvements would alleviate congestion and reduce delay.

External Funding:

The Board has approved funding that supports this project including:

Segment 1: \$52.36 million in federal funds and \$128.73 million in state funds.

Segment 2: \$32.53 million in federal funds.

Risks:

Overall time, scope, and costs risks are high with this project due to tight ROW and the need for design variations.

Related Projects:

Projects A and F.

Other Involved Agencies:

Caltrans, cities of Irvine and Tustin, and FHWA.

Assumptions:

Cost based on June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

C. I-5 (SR-73 to El Toro Road includes Avery Parkway and La Paz Road Interchanges)

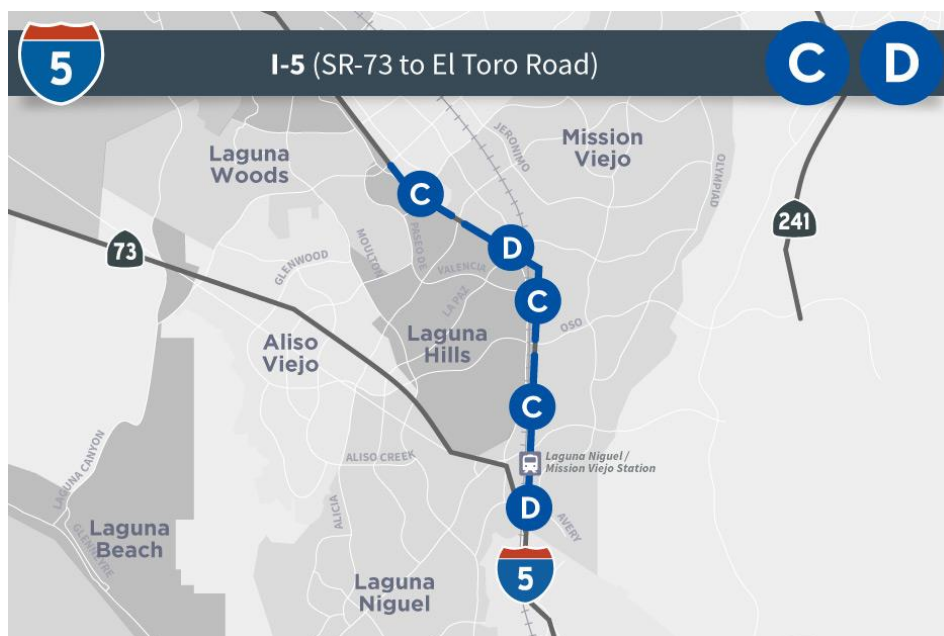
Description:

Project C will add new lanes to I-5 from El Toro Road in the City of Lake Forest to the vicinity of SR-73 in the cities of Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, and Mission Viejo. Additional improvements include continuous HOV access completion and major improvements at the Avery Parkway and La Paz Road interchanges, as part of Project D. The project will generally be constructed within the existing ROW. This project is divided into three segments as described below.

Segment 1: This project from SR-73 to Oso Parkway will add one general purpose lane (approximately 2.2 miles) in both directions between SR-73 and Oso Creek, reconstruct Avery Parkway interchange, and add auxiliary lanes where needed to reduce congestion in Laguna Niguel and Mission Viejo areas.

Segment 2: This project from Oso Parkway to Alicia Parkway will add one general purpose lane (approximately 2.6 miles) in both directions between Oso Creek and Alicia Parkway, reconstruct La Paz Road interchange, and add auxiliary lanes where needed to reduce congestion in Laguna Hills and Mission Viejo areas.

Segment 3: This project from Alicia Parkway to El Toro Road will add one general purpose lane (approximately 1.7 miles) in the southbound direction between Alicia Parkway and El Toro Road, continue the additional general purpose lane in the northbound direction through Alicia Parkway, extend the second HOV lane (approximately one mile) in both directions from El Toro Road to Alicia Parkway, and add auxiliary lanes where needed to reduce congestion in Laguna Hills, Lake Forest, and Mission Viejo areas.



C. I-5 (SR-73 to El Toro Road includes Avery Parkway and La Paz Road Interchanges)

Cost:

Segment 1: \$195.80 million (YOE).

Segment 2: \$203.07 million (YOE).

Segment 3: \$165.86 million (YOE).

Landscaping for all three segments: \$12.37 million (YOE).

Status:

Segment 1: Construction began in January 2020 and is scheduled to be complete and open to traffic in 2024.

Segment 2: Construction began in April 2019 and is scheduled to be complete and open to traffic in 2024.

Segment 3: Construction began in October 2020 and is scheduled to be complete and open to traffic in 2024.

Present Day:

The current traffic volume on I-5 near the El Toro “Y” is about 343,000 vehicles per day. This volume will increase in the future by 22 percent by 2035, bringing it up to 420,000 vehicles per day.

Benefits:

This project will help alleviate congestion and reduce traffic delays. The second HOV extension for segment 3 will enable more efficient operation of general purpose lanes for future projected traffic volumes. Adding an additional general purpose lane in Segments 1 and 2 will accommodate future projected traffic volumes. The I-5/La Paz Road and I-5/Avery Parkway interchange

improvement projects called for in M2 Project D will reduce chokepoints and congestion, as well as accommodate future traffic demands on the local roads at each interchange.

External Funding:

The Board has approved funding that supports this project including:

Segment 1: \$34.60 million in federal funds and \$121.81 million in state funds.

Segment 2: \$56.60 million in federal funds.

Segment 3: \$54.63 million in federal funds and \$9.39 million in state funds.

Additionally, \$6.00 million in state funds have been approved for landscape planting across all three segments.

Risks:

Utility relocation and management of contaminated materials pose significant risk to project scope, schedule and cost.

Related Projects:

Project C (I-5, Avenida Pico to San Juan Creek Road) and Project D (I-5, El Toro Road Interchange).

Other Involved Agencies:

Caltrans, cities of Laguna Hills, Laguna Niguel, and Mission Viejo, CTC, FHWA, and Transportation Corridor Agencies.

C. I-5 (SR-73 to El Toro Road includes Avery Parkway and La Paz Road Interchanges)

Assumptions:

Costs based on June 2022 M2
Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

C. I-5 (Avenida Pico to San Juan Creek Road includes Avenida Pico Interchange)

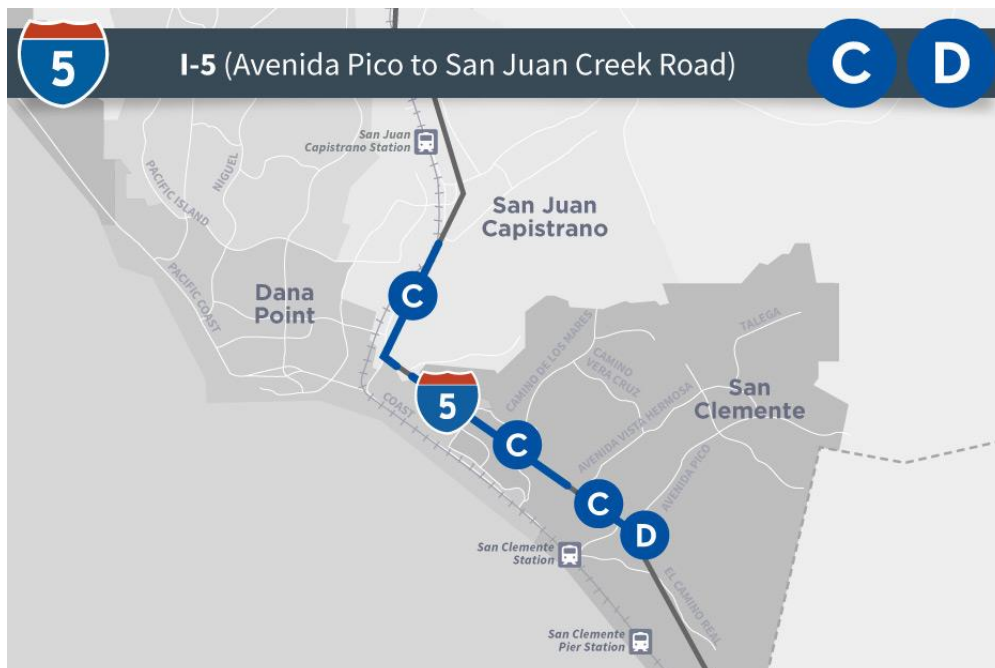
Description:

Project C extended the HOV lanes on I-5 from Avenida Pico to San Juan Creek Road in the cities of Dana Point, San Clemente, and San Juan Capistrano. Major interchange improvements were also included at Avenida Pico, as part of Project D. This project was generally constructed within the existing ROW and was divided into three segments as described below.

Segment 1: This project from Avenida Pico to Avenida Vista Hermosa added new continuous-access HOV lanes (approximately 0.7 miles) in each direction between Avenida Vista Hermosa overcrossing and Avenida Pico undercrossing. The Avenida Pico Interchange was reconstructed to optimize traffic movements within the interchange and provided bicycle lanes in both directions of Avenida Pico.

Segment 2: This project from Avenida Vista Hermosa to Pacific Coast Highway (PCH) added new continuous-access HOV lanes (approximately 2.5 miles) in each direction between Avenida Vista Hermosa overcrossing and PCH undercrossing. The project also reconstructed on- and off-ramps at Avenida Vista Hermosa and Camino de Estrella, and re-established existing auxiliary lanes. Avenida Vaquero undercrossing was widened in both directions to accommodate the new HOV lanes.

Segment 3: This project from PCH to San Juan Creek Road added new continuous-access HOV lanes (approximately 2.5 miles) in each direction between Camino Estrella overcrossing and San Juan Creek Road undercrossing. The project also reconstructed on- and off-ramps at Camino Las Ramblas/PCH and the



C. I-5 (Avenida Pico to San Juan Creek Road includes Avenida Pico Interchange)

I-5/PCH northbound connector and I-5/Camino Las Ramblas undercrossing were widened in both directions.

Cost:

Segment 1: \$83.60 million.

Segment 2: \$75.26 million.

Segment 3: \$74.27 million.

Status:

All segments of Project C opened to traffic at the same time in early 2018. Segment 1 was completed in August 2018, segment 2 in July 2017, and segment 3 in July 2018.

Present Day:

This section of I-5 has high levels of traffic during the weekdays and weekends, as well as holidays, throughout the proposed project limits. The current traffic volume on this segment of I-5 is about 250,000 vehicles per day and is expected to increase by nearly six percent by 2035, bringing it up to 266,000 vehicles per day.

Benefits:

This project eliminated a southbound lane drop at PCH by extending the southbound HOV lane between Camino Capistrano and Avenida Pico, and the northbound HOV lane between Avenida Pico and PCH. Elimination of the lane drop enabled more efficient operation of general purpose lanes and serves projected traffic volumes for the year 2040.

External Funding:

The Board approved funding that supported these projects including:

Segment 1: \$28.47 in federal funds and \$43.74 million in state funds.

Segment 2: \$12.07 million in federal funds and \$46.78 million in state funds.

Segment 3: \$11.33 million in federal funds and \$20.79 million in state funds.

Risks:

No risk to project delivery as the project is complete. Final claims remain pending in segment 3, however, cost risk is low.

Related Projects:

Project D.

Other Involved Agencies:

Caltrans, cities of Dana Point, San Clemente, and San Juan Capistrano, CTC and FHWA.

Assumptions:

Cost based on June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report - State Highway Project (August 2022)

D. I-5 (El Toro Road Interchange) Improvements

Description:

Proposed Project D improvements at I-5/El Toro Road Interchange include modifying entrance and exit ramps and modifying or replacing existing bridge structures.

Cost:

\$120.52 million (YOE) is currently included in the cash flow however, once the selected project alternative is determined this will need to be updated.

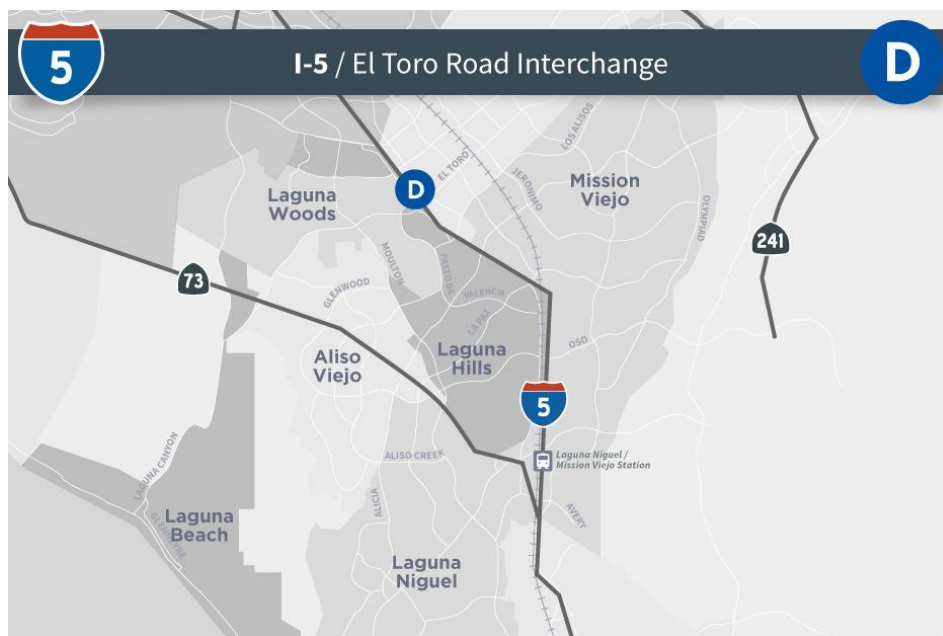
Status:

The environmental phase for this project began in April 2017. The Next 10 Plan includes funding this project through environmental. This project has faced challenges determining a build alternative that has local support and consensus with the three stakeholder cities (cities of Laguna Hills, Laguna Woods, and Lake Forest). Built into M2 is a promise that projects will be delivered in cooperation with local agencies. A

consultant was retained in September 2020 by OCTA to provide further assessment of the build alternatives to help facilitate reaching an agreement. The draft final assessment study was completed in October 2021. An agreement has been made with Caltrans and the three cities to include two new alternatives, in addition to the two alternatives from the draft environmental document, to be incorporated into the environmental phase.

Present Day:

This portion of I-5 has high levels of traffic during the weekdays and weekends, as well as holidays, throughout the proposed project limits. The current traffic volume on this segment of I-5 is about 355,000 vehicles per day and is expected to increase nearly nine percent by 2035, bringing it up to 388,000 vehicles per day.



D. I-5 (El Toro Road Interchange) Improvements

Benefits:

This project would reduce the chokepoint and better accommodate forecasted traffic demands. Modification of the entrance and exit ramps would alleviate congestion at adjacent intersections.

External Funding:

The Board has approved \$9.2 million in federal funds for the environmental phase. Future phases are also eligible for state and federal funds. Any additional funding is expected to be submitted for Board approval at a later time.

Risks:

Overall time, scope, and cost risks are high with this project due to the challenging project area with significant ROW impacts with study alternatives under consideration. Community concerns has resulted in a lack of consensus between the three stakeholder local jurisdictions. This project will need local jurisdiction consensus, before moving forward.

Related Projects:

Project C.

Other Involved Agencies:

Caltrans, cities of Laguna Hills, Laguna Woods, and Lake Forest, and FHWA.

Assumptions:

Cost based on conceptual estimates, which was incorporated in the June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report - State Highway Project (August 2022)

D. I-5 (Ortega Highway Interchange) Improvements

Description:

Project D improvements included reconstructing the I-5 interchange at State Route 74 (SR-74) in south Orange County, as well as widening SR-74, modifying entrance and exit ramps and replacing the existing bridge structure.

Cost:

\$79.80 million.

Status:

The project opened to traffic in September 2015 and was officially completed in January 2016.

Present Day:

Prior to completion of the project, the existing freeway overcrossing and on- and off-ramps did not accommodate existing and projected to-and-from street/freeway traffic.

Benefits:

This project alleviated a major chokepoint and reduced congestion by widening the Ortega Highway bridge and improving local traffic flow through reconfigured streets and on- and off-ramps.

External Funding:

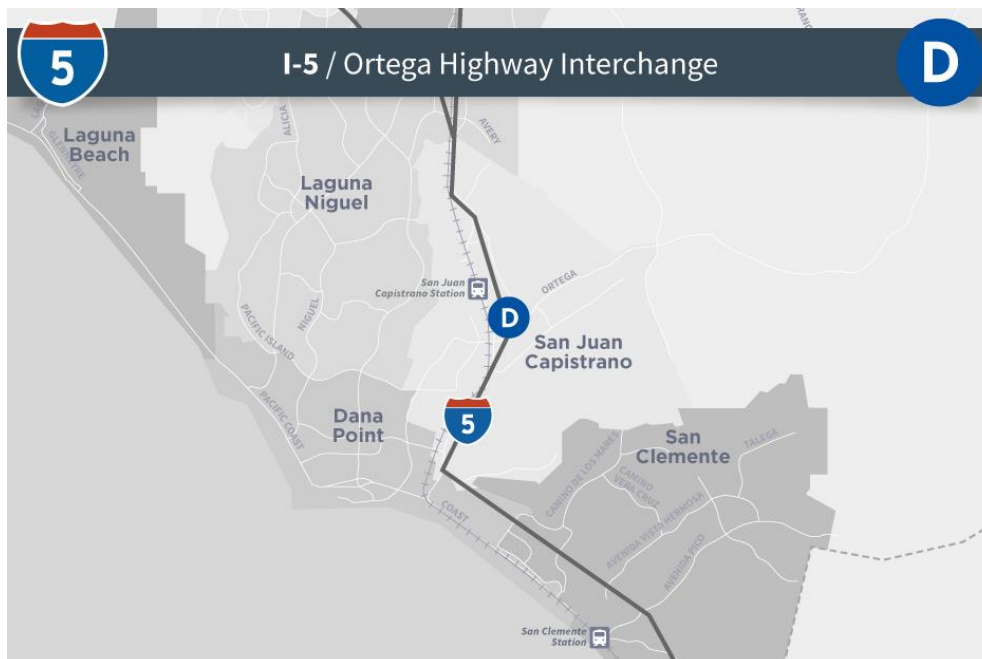
\$752,000 in federal funds, \$73.48 million in state funds, \$2.50 million in M1 funds from the regional interchange program, and \$5.01 million in other local funds were used for the project.

Risks:

None – project completed.

Related Projects:

Project C.



D. I-5 (Ortega Highway Interchange) Improvements

Other Involved Agencies:

Caltrans, City of San Juan Capistrano, and CTC.

Assumptions:

Cost based on January 2020 Project Status Report, which was incorporated in the June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- January 2020 Project Status Report
- Capital Funding Program Report - State Highway Project (August 2022)

E. SR-22 Access Improvements

Description:

Project E constructed interchange improvements at Euclid Street, Brookhurst Street, and Harbor Boulevard to reduce freeway and street congestion near these interchanges.

Cost:

\$25.80 million.

Status:

These projects were part of the State Route 22 (SR-22) Widening Project completed in 2008 using M1 funds.

Present Day:

The project widened the streets at the interchanges and were designed to improve accommodation of existing and projected traffic.

Benefits:

The project reconstructed the freeway overcrossings to allow these streets to be widened through the interchange area. These improvements reduced congestion and delay at all three interchanges.

External Funding:

\$15.9 million of M1 funds and \$9.9 million of other non-M2 (federal, state and city) funds were used for the project.

Risks:

None – project completed.

Related Projects:

West County Connector (WCC) improvements at SR-22/I-405 and I-405/I-605 interchanges.

Other Involved Agencies:

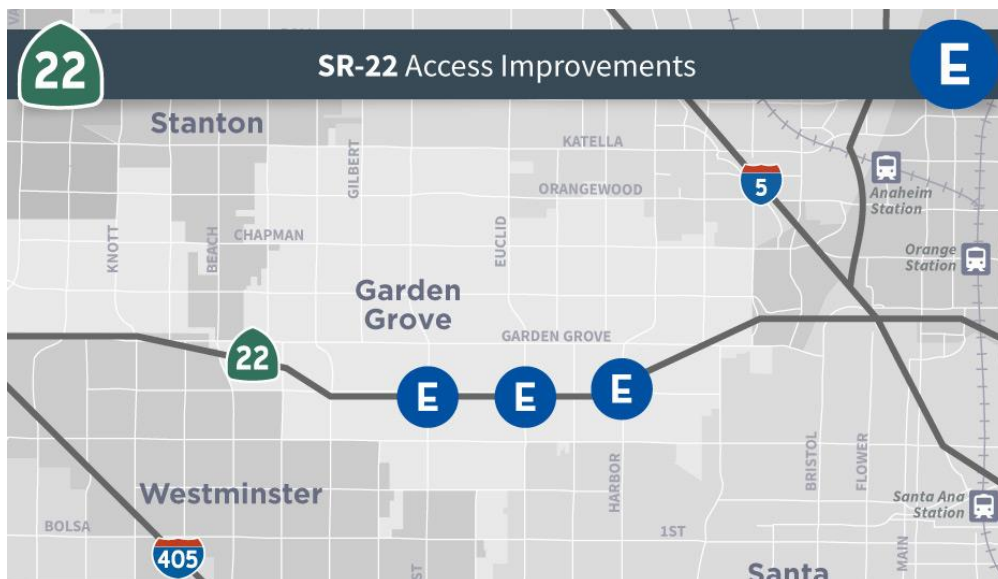
Caltrans and City of Garden Grove.

Assumptions:

Completed as part of the M1 SR-22 Design/Build project.

References:

- OCTA 2014 Long-Range Transportation Plan



F. SR-55 (I-405 to SR-91)

Description:

Project F will reduce congestion by adding lanes and operational improvements to SR-55 between I-405 and SR-91. This project is divided into two segments as described below.

Segment 1: This project will add one general purpose lane (approximately four miles) between I-405 and I-5, including auxiliary lanes between interchanges to smooth traffic flow. The general purpose lane will be funded with M2, state, and federal funds. Concurrent with these efforts, a second HOV lane will also be constructed between I-5 and I-405 with state and local funds.

Segment 2: This project will add new lanes (approximately 7.5 miles) between I-5 and SR-22, including merging lanes between interchanges to smooth traffic flow. Operational improvements between SR-22 and SR-91 would also be incorporated. The environmental phase of this segment was completed in March 2020 and is ready to advance into design and construction. This segment will generally be constructed within the existing ROW.

Cost:

Segment 1: \$503.22 million (YOE) which includes cost for potential ROW risk.

Segment 2: \$131.31 million (YOE).



F. SR-55 (I-405 to SR-91)

Status:

Segment 1: The project was advertised for construction in December 2021, awarded by Caltrans in May 2022, and approved in June 2022. Construction began in June 2022 and is anticipated to be complete in February 2027.

Segment 2: The environmental phase for this project was completed in March 2020. The project was advertised for design services in September 2021, and the Board approved a design consultant in February 2022. Final design is anticipated to begin in August 2022.

Present Day:

This freeway carries about 316,000 vehicles on a daily basis. This volume is expected to increase by nearly eight percent by 2035, bringing it up to 340,000 vehicles per day in the future.

Benefits:

This project will improve mobility and reduce congestion in central Orange County areas by adding new lanes and make operational improvements for existing and forecasted traffic volumes (especially for weaving and lane efficiency at ramp junctions).

External Funding:

Segment 1: The Board has approved providing \$160.5 million in federal funds and \$220.00 million in state funds. As previously mentioned, Caltrans has also committed \$41.90

million in State Highway Operation and Protection Program funds for this project.

Segment 2: The Board has approved providing \$11.00 million in federal funds for this project. This project is eligible for future state and federal funds.

Risks:

Schedule, scope, and cost risks remain high on Segment 1 due to complex ROW impacts which rely on design variations. This may also delay receipt of the State's share of funding.

Overall schedule, scope, cost risks are low on segment 2 at this time.

Related Projects:

Projects A and B.

Other Involved Agencies:

Caltrans, cities of Anaheim, Orange, Santa Ana, and Tustin, and FHWA.

Assumptions:

Cost based on June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report - State Highway Project (August 2022)

G. SR-57 Improvements

Description:

Project G will reduce congestion by adding one general purpose lane in the northbound direction from Orangewood Avenue in the City of Orange to approximately Tonner Canyon Road in the City of Brea. Select northbound undercrossings will also be widening and seismically retrofitted, as required. The project is divided into three segments as described below.

Segment 1: This project consists of three northbound sections including Katella Avenue to Lincoln Avenue (approximately 2.8 miles), Orangethorpe to Yorba Linda Avenue (approximately 2.4 miles), and Yorba Linda Boulevard to Lambert Road (approximately 2.5 miles) in the cities of Anaheim, Brea, Fullerton, and Placentia. Projects in this segment are complete.

Segment 2: This project includes the addition of a northbound truck-climbing lane (approximately 2.5 miles) from Lambert Road in the City of Brea to one-half mile south of the Los Angeles County Line (approximately Tonner Canyon Road).

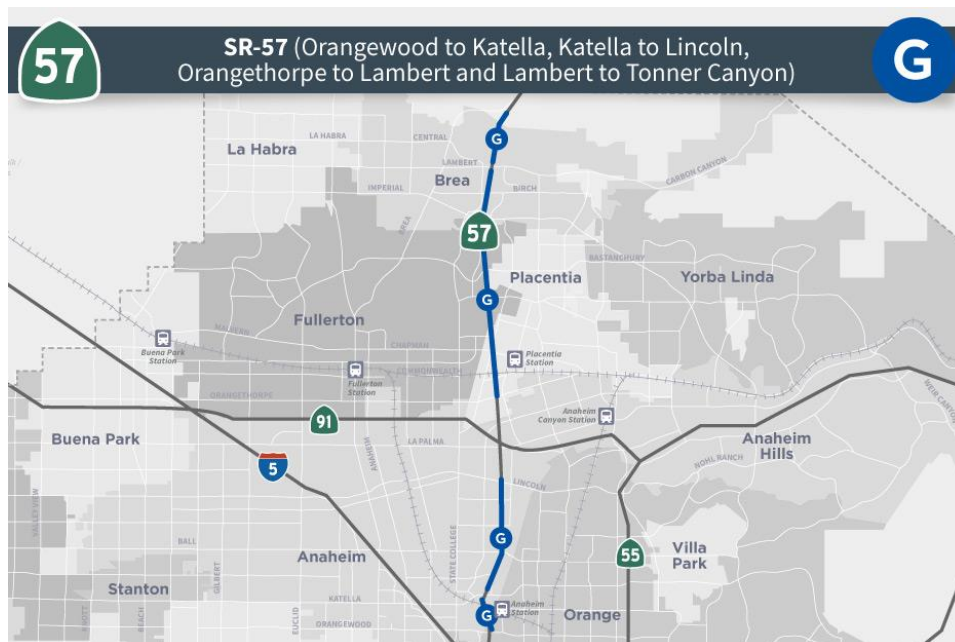
Segment 3: This project includes adding one northbound general purpose lane (approximately one mile) from Orangewood Avenue in the City of Orange to Katella Avenue in the City of Anaheim. Segment improvements would maintain the existing auxiliary lane and address existing non-standard features between Orangewood Avenue and Katella Avenue.

Cost:

Segment 1: \$144.36 million.

Segment 2: \$227.1 million (YOE).

Segment 3: \$71.78 million (YOE).



G. SR-57 Improvements

Status:

Segment 1: This project was completed and opened to traffic in 2014.

Segment 2: This project is planned to be environmentally cleared during the Next 10 Plan timeframe. Through the SB 1 (Chapter 5, Statutes of 2017) Trade Corridor Enhancement Program, an initial phase for interchange improvements at the Lambert Road interchange is currently underway and is anticipated to be completed in late 2022. The mainline project could be a strong candidate for additional trade corridor funding and will require coordination to address connectivity with Los Angeles County.

Segment 3: The environmental phase for this segment was completed in March 2019 and the design phase was initiated in March 2022.

Present Day:

This freeway carries about 302,000 vehicles daily. This volume is expected to increase by nearly 13 percent by 2035, bringing it up to 342,000 vehicles per day in the future.

Benefits:

This project will substantially improve existing and future mobility, reduce congestion, improve mainline weaving, and merge/diverge movements, which will improve both traffic operations and safety. Combined improvements from Orangethorpe Avenue to Tonner Canyon Road could achieve a 40 percent reduction in total delay through the SR-57 northbound corridor.

External Funding:

Segment 1: \$104.85 million in state funds were used for the project.

Segment 2: The Board approved \$6.50 million in state funds to support the environment phase of this project.

Segment 3: The Board approved \$5.74 million in federal funds to support the environmental phase of this project.

Risks:

No risk on segment 1 as the project is complete. For segment 2 and segment 3, overall time, scope, costs, and quality risks are low to medium with this project due to construction within the existing ROW and relatively straightforward design issues. However, risks exist due to the potential need for seismic retrofitting of existing bridges and proximity to the Southern California Regional Rail Authority and future High Speed Rail ROW.

Related Projects:

Project H.

Other Involved Agencies:

Caltrans, cities of Anaheim, Brea, Fullerton, Orange, and Placentia, CTC, and FHWA.

Assumptions:

Cost based on June 2022 M2 Program cash flow.

G. SR-57 Improvements

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report - State Highway Project (August 2022)

H. SR-91 (I-5 to SR-57)

Description:

Project H widened westbound SR-91 by connecting existing auxiliary lanes (approximately 4.5 miles) through interchanges, thus forming a fourth continuous general purpose lane between I-5 and SR-57. The project also replaced existing auxiliary lanes on westbound SR-91 between State College Boulevard and Raymond Avenue, and between Euclid Street and Brookhurst Street, and added a new auxiliary lane between Raymond Avenue and Lemon Street.

Cost:

\$59.23 million.

Status:

The project opened to traffic in March 2016 and was officially completed in June 2016.

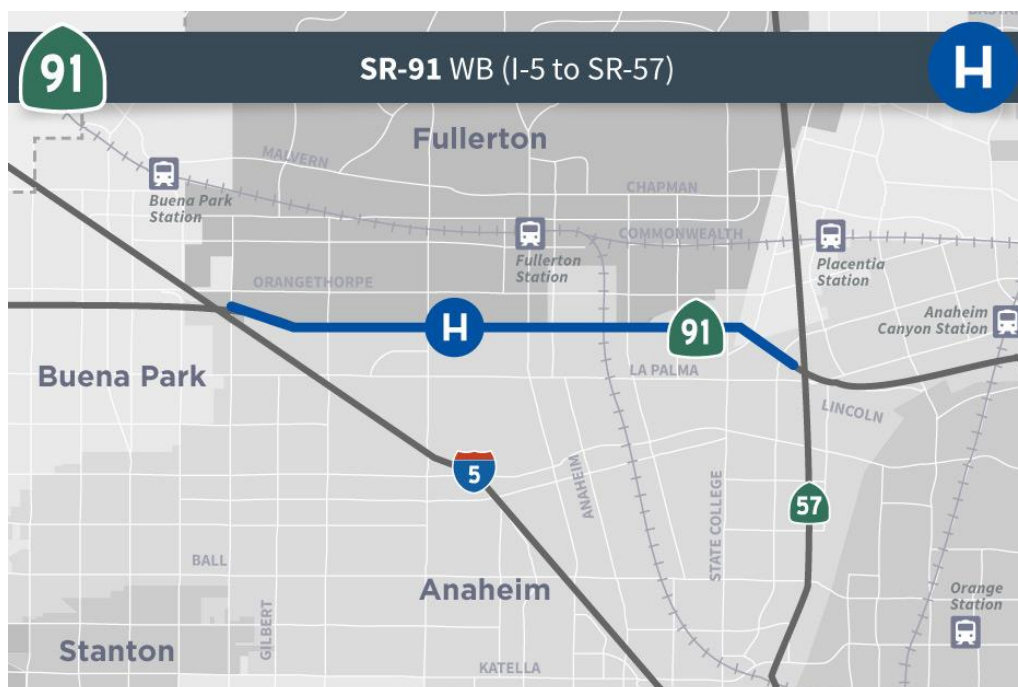
Present Day:

SR-91 serves as a major commuting route connecting Orange County with Riverside and Los Angeles counties.

SR-91 is also one of the most congested freeways in Southern California. This freeway carries about 290,000 vehicles daily. This volume is expected to increase by nearly five percent by 2035, bringing it up to 304,000 vehicles per day in the future.

Benefits:

This project alleviated congestion by adding a continuous general purpose lane and replaced existing auxiliary lanes, which improved merging operations at each interchange.



H. SR-91 (I-5 to SR-57)

External Funding:

\$27.23 million in state funds were used for the project.

Risks:

None – project completed.

Related Projects:

Project I.

Other Involved Agencies:

Caltrans, cities of Anaheim and Fullerton, and CTC.

Assumptions:

Cost based on June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

I. SR-91 (Tustin Avenue Interchange to SR-55)

Description:

Project I from Tustin Avenue Interchange to SR-55 added a westbound auxiliary lane, beginning at the northbound SR-55 to westbound SR-91 connector, through the Tustin Avenue interchange. The overall segment length was approximately two miles. Additional features of this project included widening the westbound Santa Ana River Bridge to accommodate the auxiliary lane.

Cost:

\$42.47 million.

Status:

The project was completed and opened to traffic in 2016.

Present Day:

SR-91 serves as a major commuting route connecting Orange County with Riverside and Los Angeles counties.

SR-91 is also one of the most congested freeways in Southern California. This freeway carries about 290,000 vehicles daily. This volume is expected to increase by nearly five percent by 2035, bringing it up to 304,000 vehicles per day in the future.

Benefits:

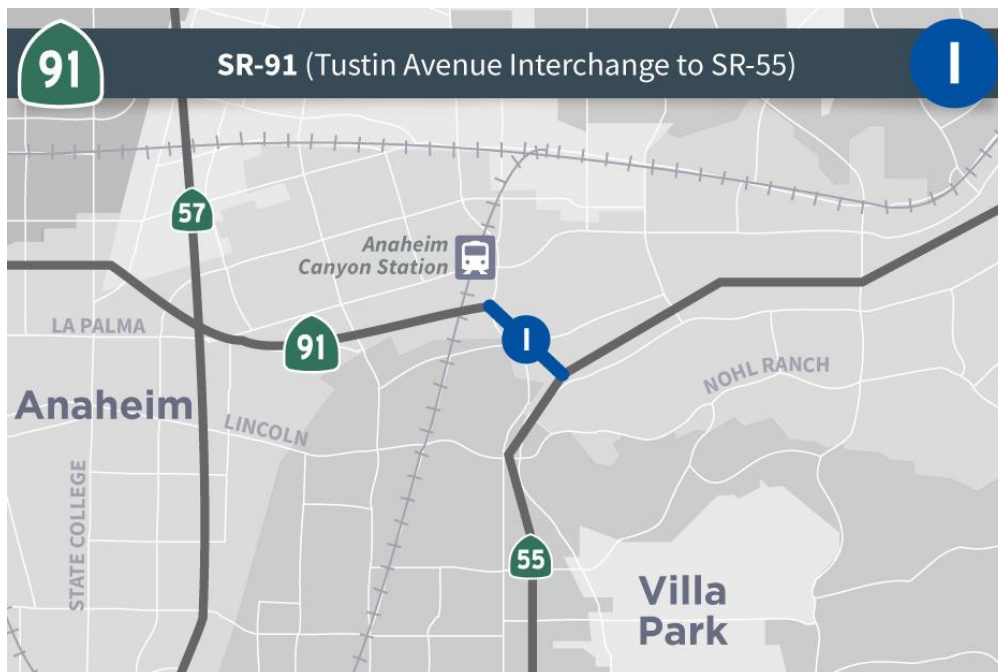
This project addressed chokepoint conditions and reduced operational problems, including weaving and merging maneuvers, which were primarily caused by extensive weaving between the northbound SR-55 to westbound SR-91 connector and the westbound SR-91 off-ramp to Tustin Avenue.

External Funding:

\$29.75 million in state funds were used for the project.

Risks:

None – project completed.



I. SR-91 (Tustin Avenue Interchange to SR-55)

Related Projects:

Projects H, I (SR-57 to SR-55) and J.

Other Involved Agencies:

Caltrans, City of Anaheim, CTC, and FHWA.

Assumptions:

Cost based on January 2019 Project Status Report, which was incorporated in the June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- January 2019 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

I. SR-91 (SR-57 to SR-55)

Description:

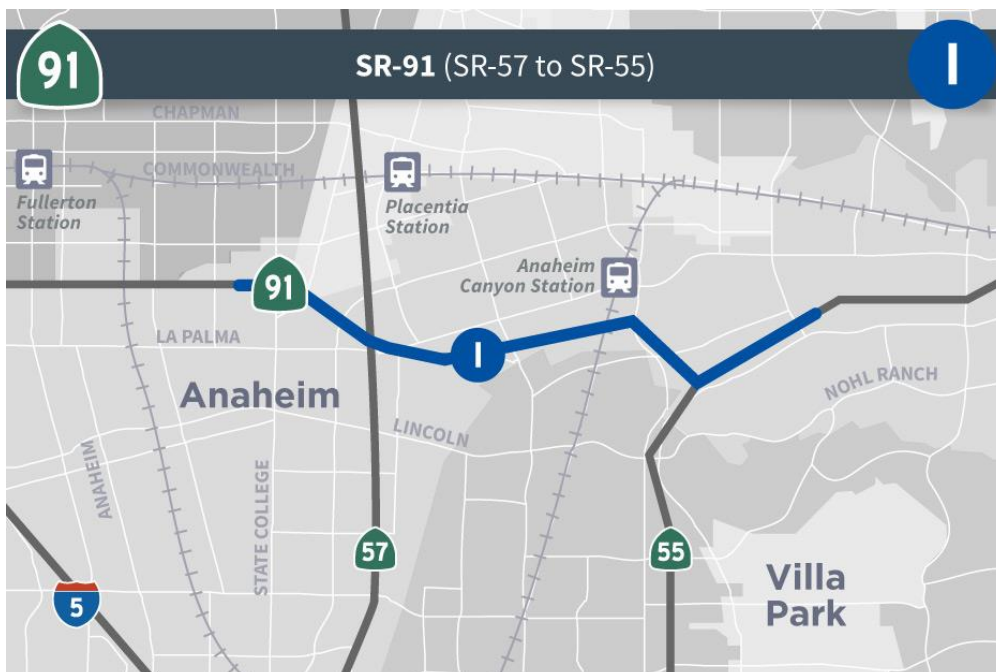
Project I from approximately SR-57 to SR-55 will add one westbound general purpose lane from northbound SR-57 connector to westbound SR-91 connector, and one eastbound general purpose lane between SR-57 and SR-55. The project is divided into three segments as described below.

Segment 1: This project from SR-55 to Lakeview Avenue (approximately 1.4 miles) will realign the westbound on-ramp to direct traffic to westbound SR-91. This project will replace the Lakeview Avenue bridge that will feature a new on-ramp from the Lakeview Avenue bridge connecting directly to southbound SR-55 to improve traffic operations in the Anaheim area.

Segment 2: This project from La Palma Avenue to SR-55 will add an eastbound general purpose lane (approximately 2.7 miles) on SR-91 between La Palma Avenue and SR-55 and include bridge replacements at Glassell Street/Kraemer Boulevard and Tustin Avenue to reduce congestion in the cities of Anaheim and Fullerton.

Segment 3: This project from Acacia Street to La Palma Avenue will add a fourth general purpose lane (approximately 1.7 miles) on westbound SR-91 from the northbound SR-57 to westbound SR-91, make improvements to the weave from westbound SR-91 to northbound and southbound SR-57, and replace the bridge at La Palma Avenue to enhance westbound operations on SR-91, to reduce congestion in the cities of Anaheim and Fullerton.

Cost:



I. SR-91 (SR-57 to SR-55)

Segment 1: \$100.91 million (YOE).

Segment 2: \$208.45 million (YOE).

Segment 3: \$116.20 million (YOE).

Status:

The environmental phase for all three segments was completed in June 2020.

Segment 1: The design phase was initiated in March 2020.

Segment 2: The design phase was initiated in June 2020.

Segment 3: The design phase was initiated in November 2020.

Present Day:

Current freeway volume on this segment of the SR-91 is about 250,000 vehicles per day. This vehicular demand is expected to increase by 12 percent by 2035, bringing it up to 280,000 vehicles per day in the future.

Benefits:

Segment 1: This project is anticipated to alleviate congestion and reduce delay by improving the connection from Lakeview Avenue to southbound SR-55.

Segment 2: This project is anticipated to alleviate congestion in the eastbound direction.

Segment 3: This project will enhance westbound operations.

External Funding:

The Board has approved funding that supports this project including:

Segment 1: \$1.77 million in federal funds and \$13.98 million in 91 Express Lanes excess revenue.

Segment 2: \$3.46 million in federal funds and \$42.81 million in 91 Express Lanes excess revenue.

Segment 3: \$1.77 million in federal funds and \$16.37 million in 91 Express Lanes excess revenue.

Risks:

Overall time, scope and costs risks are high due to coordination with the Caltrans multi-asset project and refined design options that require Caltrans concurrence, which remains under review.

Related Projects:

Projects H, I (Tustin Avenue Interchange to SR-55), and J.

Other Involved Agencies:

Caltrans, cities of Anaheim, Fullerton, Orange, and Placentia, CTC, and FHWA.

Assumptions:

Cost based on June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

J. SR-91 (SR-55 to I-15)

Description:

Project J includes improvements on SR-91 from SR-55 to I-15 in Riverside County and is divided into three segments.

Segment 1: This project added one eastbound lane (approximately six miles) on SR-91 from one-mile east of SR-241 to State Route 71 (SR-71) in Riverside County. This project was led by Riverside County Transportation Commission (RCTC) in coordination with Caltrans District 8.

Segment 2: This project added one new lane (approximately six miles) in both directions of SR-91 between SR-55 and SR-241 and improved key interchanges. Additional improvements included the widening and seismic retrofitting for the Imperial Highway and Weir Canyon Road undercrossing bridges. This project was led by OCTA in coordination with Caltrans District 12.

Segment 3: This project requires coordination and funding agreements with RCTC to deliver complementary improvements between SR-241 and

SR-71 in Riverside County. Improvements between SR-71 and I-15 are overseen by RCTC.

Cost:

Segment 1: \$57.77 million.

Segment 2: \$79.74 million.

Segment 3: \$300.00 million (YOE), which does not include RCTC's cost share.

Status:

Segment 1 was completed in January 2011, and segment 2 was completed in March 2013.

Segment 3: This project was environmentally reviewed as part of the RCTC's Corridor Improvement Project. RCTC and OCTA advanced the westbound direction of this segment by adding a general purpose lane (two miles in length) from Green River Road to SR-241. RCTC was the lead agency and OCTA contributed \$15 million towards the project. Construction began in November 2020 and was completed in January 2022. A



J. SR-91 (SR-55 to I-15)

feasibility study to evaluate potential eastbound improvements from SR-241 to SR-71 was completed in April 2022. RCTC will be the lead agency for advancing the eastbound improvements known as the Eastbound Corridor Improvement Project.

Present Day:

Today, this freeway carries about 328,000 vehicles every day. This volume is expected to increase by 15 percent, bringing it up to 378,000 vehicles by 2035.

Benefits:

Segment 1: This project added one general purpose lane, which improved weaving by reducing the volume of exiting vehicles in the SR-91 mainline through lanes that are exiting at Green River Road and SR-71.

Segment 2: This project helped to alleviate congestion and reduce delay.

Segment 3: This project will reduce congestion and delay and improve operational efficiency by reducing the existing chokepoints within the project limits.

External Funding:

Segment 1: \$45.91 million in federal funds and \$4.92 million in local funds were used for this project.

Segment 2: \$76.30 million in state funds were used for this project and \$2.90 million in state funds were used for replacement planting.

Segment 3: \$15.00 million of 91 Express Lanes excess revenue is

Board approved for the Orange County portion of this segment. RCTC will contribute \$26.80 million.

Risks:

No risks for Segments 1 and 2 as they are complete. For segment 3, time, scope, and costs risks are dependent upon required coordination with RCTC. Eastbound improvements have engineering challenges due to project area topography (Santa Ana Canyon) and natural constraints (Santa Ana River).

Related Projects:

Project I and the Riverside County Corridor Improvement Project.

Other Involved Agencies:

Caltrans, cities of Anaheim and Yorba Linda, Corona, County of Orange, CTC, FHWA, and RCTC.

Assumptions:

Cost based on December 2012 Project Status Report (Segment 1), June 2018 Project Status Report (segment 2), and conceptual estimates (segment 3) which was incorporated in the June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- December 2012 Project Status Report (segment 1)
- June 2018 Project Status Report (segment 2)
- Capital Funding Program Report – State Highway Project (August 2022)

K. I-405 (SR-73 to I-605)

Description:

Project K includes the addition of new lanes to I-405 between SR-73 and I-605. The project will make the best use of available freeway property by staying generally within the freeway ROW and updating key local interchanges to the current Master Plan of Arterial Highway (MPAH) standards. The project will add one general purpose lane (approximately 14 miles) in each direction of I-405 from Euclid Street to I-605. Additional improvements include reconstruction of local interchanges and making improvements to freeway entrances and exits along the corridor from SR-73 to I-605 through the cities of Costa Mesa, Fountain Valley, Garden Grove, Huntington Beach, Los Alamitos, Seal Beach, and Westminster.

Concurrently with Project K, an additional lane (approximately 16 miles) will be added in each direction that would combine with the existing

HOV lane to provide dual express lanes in each direction on I-405 from SR-73 to I-605. The general purpose lanes will be funded with M2, state, and federal funds; the express lanes will be funded solely with toll revenues.

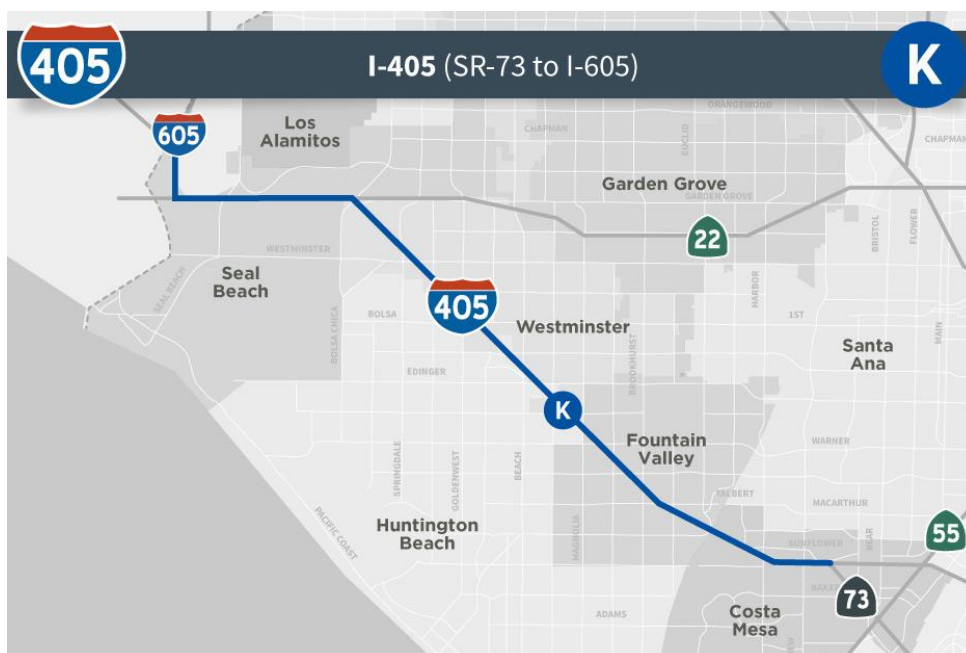
Cost:

M2 Portion: \$1.560 billion (YOE).

Express Lanes Portion: \$520 million (YOE).

Status:

Construction began in January 2017 and is currently over 80 percent complete related to the design/build contract. Design/build is a project delivery method in which one team is hired to perform both the design and construction of the project. The project's substantial completion and opening of the 405 Express Lanes milestones are currently anticipated to be met in late 2023 with full project completion anticipated in early 2024. To date, nine of the 18 bridges have been completed and opened to traffic.



K. I-405 (SR-73 to I-605)

The remaining nine bridges are in various stages of construction.

Present Day:

On average, I-405 carries approximately 392,000 vehicles daily. The volume is expected to increase by 20 percent by 2035, bringing it up to 472,000 vehicles daily. The project will reduce congestion, enhance operations, increase mobility, improve trip reliability, and maximize throughput on I-405.

Benefits:

Project K includes the addition of auxiliary and general purpose lanes that will help reduce congestion and improve travel times. Additional improvements include interchange and local street improvements, and a direct Express Lanes connector at the I-405/SR-73 interchange.

The express lanes will operate congestion-free throughout the day, due to toll rates that vary based on traffic demand. The express lanes provide commuters with a reliable travel option compared to the adjacent, general purpose lanes.

M2 improvements, in combination with express lanes improvements, will provide more throughput in the corridor. These improvements will add two additional freeway lanes to I-405 in both directions between SR-73 to the I-605 interchange.

External Funding:

The Board has approved funding that supports this project, including \$89.77 million in state funds, and

\$45.65 million in federal funds. The project also successfully secured \$628.93 million from Transportation Infrastructure Finance and Innovation Act (TIFIA), a low-cost federal loan. The M2 cash flow will benefit from \$108.93 million in TIFIA revenues for this project. The entire TIFIA loan will be paid back solely with toll revenues.

Risks:

Overall time, scope, utility relocation, archeological discoveries and cost risks are high with this project due to the extensive project scope.

Related Projects:

Project L and WCC improvements at SR-22/I-405 and I-405/I-605 interchanges (mentioned under Project E).

Other Involved Agencies:

Caltrans, Build America Bureau TIFIA Office, cities of Costa Mesa, Fountain Valley, Huntington Beach, Seal Beach, and Westminster, Community of Rossmoor, CTC, and FHWA.

Assumptions:

Costs based on June 2022 M2 Program cash flow. M2 will only pay for the addition of the general purpose lanes. Toll revenues will pay for the 405 Express Lanes.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

L. I-405 (I-5 to SR-55)

Description:

Project L will add new lanes (approximately 8.5 miles) to I-405 from the vicinity of I-5 to SR-55 to alleviate congestion and reduce delay. The project will generally be constructed within the existing ROW.

Cost:

\$262.39 million (YOE).

Status:

The project completed the environmental phase in August 2018 and is shelf-ready to begin the design phase.

Project B (I-5, I-405 to SR-55) is a parallel project designated for construction. As a result, Project L will follow to avoid excessive inconvenience to the traveling public. Additionally, a significant Caltrans safety project is scheduled to take place within the Project L project limits and will require additional coordination.

Present Day:

This segment of the freeway carries 296,000 vehicles a day. This number will increase by nearly 22 percent, bringing it up to 362,000 vehicles per day by 2035.

Benefits:

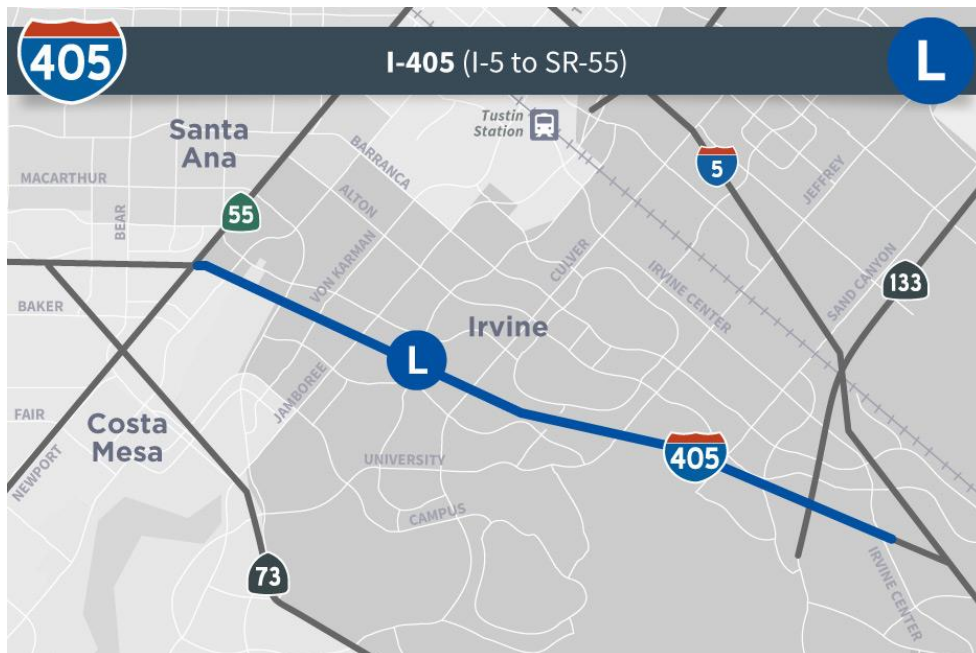
Improvements between I-5 and SR-55 would help alleviate congestion and reduce delay.

External Funding:

The Board approved providing \$8.00 million in federal funds to support the environmental phase of the project. This project is eligible for future state and federal funds.

Risks:

Overall time, scope, and costs risks are low with this project due to low ROW impacts and straightforward design.



L. I-405 (I-5 to SR-55)

Related Projects:

Projects B and K.

Other Involved Agencies:

Caltrans, City of Irvine, CTC, FHWA, and Transportation Corridor Agencies.

Assumptions:

Cost based on estimate developed in the environmental phase which was incorporated in the June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- February 2019 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

M. I-605 (Katella Avenue Interchange) Improvements

Description:

Project M includes improvements to I-605 freeway access and the arterial connection at Katella Avenue, which serves communities in the cities of Cypress and Los Alamitos.

Cost:

\$29.02 million (YOE).

Status:

The environmental phase for this project was completed in late 2018 and was done in cooperation with the City of Los Alamitos. The design phase was initiated in December 2020.

Present Day:

The existing interchange design is outdated and results in both arterial congestion and freeway queuing in the interchange area.

Benefits:

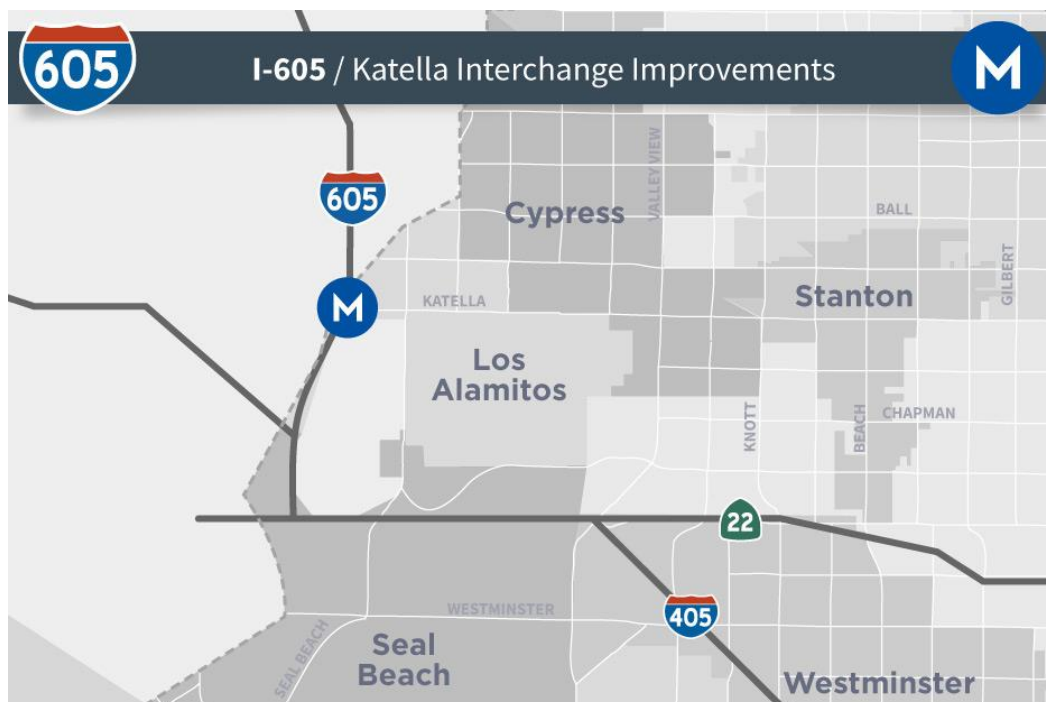
The I-605 Katella Avenue interchange project would include both freeway and arterial improvements that would improve interchange traffic operations and improve bicycle and pedestrian facilities while minimizing adjacent ROW and environmental impacts. Additionally, these improvements would reduce congestion, traffic queuing, and delay within the interchange area.

External Funding:

The Board approved providing \$17.80 million in federal funds to support the construction phase of the project

Risks:

Overall time, scope, and costs risks are low with this project due to low ROW impacts and straightforward design.



M. I-605 (Katella Avenue Interchange) Improvements

Related Projects:

Project K and WCC improvements at the SR-22/I-405 and I-405/I-605 interchanges (mentioned under Project E).

Other Involved Agencies:

Caltrans and City of Los Alamitos.

Assumptions:

Cost based on June 2022 M2 Program cash flow.

References:

- OCTA 2018 Long-Range Transportation Plan
- June 2022 Project Status Report
- Capital Funding Program Report – State Highway Project (August 2022)

N. Freeway Service Patrol

Description:

The FSP provides competitively-bid, privately contracted tow truck services to help stranded motorists quickly clear disabled vehicles and large debris from freeway lanes to minimize congestion caused by blocked traffic lanes and passing motorists rubbernecking. Currently, FSP is available on various Orange County freeways, seven days a week. This project assures that this basic level of service will be continued through 2041.

Program Funding:

\$64.75 million in M2 revenue between 2023 and 2032.

Status:

FSP is primarily funded by State Highway Account (SHA) and Road Repair and Accountability Act of 2017 (SB 1) funds. OCTA meets matching fund requirements by utilizing a portion of its share of Service Authority for Freeway Emergencies (SAFE) funds, which are collected by the Department of Motor Vehicles each year. Since June 2012, the FSP has assisted more than 679,068 motorists along Orange County freeways.

As demand, congestion levels, and costs increase, this project will allow the program to maintain existing service hours and allow service to be extended throughout the day and on weekends on additional freeway segments.

M2 also helps support the California Highway Patrol (CHP) as the partner responsible for field supervision. Currently, M2 funds a full-time

dispatcher to ensure dispatcher coverage seven days a week.

Present Day:

In FY 2021-22, the FSP program provided a total of 67,224 assists to motorists along the Orange County freeway system.

Benefits:

To keep Orange County moving, FSP provides free limited roadside assistance to motorists whose vehicles have become disabled on an Orange County freeway. Assistance is limited to taping a leaking hose, providing water for a radiator, a jump start, a gallon of gas, a tire change, or towing a disabled vehicle off the freeway to a designated drop zone where the motorist may seek additional assistance.

In FY 2019-20, for every dollar invested in the program, Orange County received approximately \$6 of congestion relief benefit.

External Funding:

SHA allocation provided by Caltrans – approximately \$2.2 million annually.

SB 1 allocation provided by Caltrans – approximately \$2 million annually.

SAFE (\$1 per vehicle registration fee) - funds not allocated to the Freeway Call Box and 511 Motorist Assistance and Traveler Information programs are available for FSP program use, to meet local match fund requirements – approximately \$1.2 million annually.

N. Freeway Service Patrol

Risks:

Should the State of California stop funding FSP through the SHA and SB 1, M2 will not be sufficient to maintain existing service levels.

Related Projects:

M2 Project N funds are designated to maintain existing service levels, provide mid-day and weekend service, and support FSP service for construction of Projects A-M.

Other Involved Agencies:

Caltrans and CHP.

Assumptions:

Project N is assumed to be funded on a pay-as-you-go basis. Funding provided through the SHA and SB 1 are allocated first, and then M2 funding is applied as needed.

References:

- M2 Project N Guidelines Freeway Service Patrol Project, approved on February 13, 2012

Environmental Mitigation Program



Overview:

The EMP provides for allocation of five percent of the total M2 freeway budget for comprehensive environmental mitigation related to impacts from freeway improvements (projects A-M). The EMP was approved by Orange County voters under the M2 half-cent sales tax for transportation improvements in 2006.

A master agreement between OCTA, Caltrans, and state and federal resource agencies was approved in January 2010. This offers higher-value environmental benefits such as habitat protection, connectivity, and resource preservation in exchange for streamlined project approvals for the 13 (segmented into 30) M2 freeway projects.

To adhere to the promise of M2, the Next 10 Plan includes the following framework for the Mitigation Program as it relates to Projects A-M:

- Streamline freeway projects through the biological permitting process.
- Provide comprehensive environmental mitigation.
- Partner with state and federal resource and regulatory agencies.
- Provide higher-value environmental benefits such as habitat protection, connectivity, and resource preservation.

Next 10 Plan Deliverables:

In 2009, the Board approved a policy to allocate approximately 80 percent of the revenues to acquisitions and 20 percent to fund restoration projects. This policy will need to be revisited periodically to ensure it continues to meet program needs. The Next 10 Plan recommends four major initiatives through 2032 consistent with the above framework:

1. Oversee and manage the Preserves while the endowment is being established and determine potential long-term land manager(s) and endowment holder(s). This includes coordinating with local fire authorities and the Wildlife Agencies to monitor habitat recovery after wildfires impact the Preserves, such as the 2022 Coastal Fire that impacted the Pacific Horizon Preserve.
2. Focus EMP resources funding as a first priority toward the establishment of the endowment for the Preserves.
3. Review and update the resource management plans (RMP) on the Preserves as appropriate. This includes the development of fire management plans (FMP) for each of the Preserves.
4. Complete approximately 350 acres of restoration projects funded through M2 to fulfill the Conservation Plan commitments.

Environmental Mitigation Program

Description:

In 2010, OCTA began preparing a Conservation Plan, which examines habitat resources within broad geographic areas and identifies conservation and mitigation measures to protect habitat and species. This analysis was completed in 2016; in accordance with the master agreement “advance credit” provision, funds were allocated prior to completion of the Conservation Plan. In 2017, the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) (collectively, Wildlife Agencies) finalized the issuance of their respective biological opinion, findings, and associated permits, as well as signed the Conservation Plan Implementing Agreement. Receipt of these permits represent the culmination of years of collaboration and support by the Board, environmental community, and Wildlife Agencies.

Concurrent with efforts made toward completing the Conservation Plan and EIR/Environmental Impact Statement (EIS), OCTA collaborated with the United States Army Corps of Engineers (USACE) and the State Water Resources Control Board (SWRCB) - regulatory agencies - to streamline the regulatory permitting process. In 2017, the USACE issued a programmatic permit to OCTA and Caltrans (as owner/operator of the state highway system). The SWRCB provided a letter to OCTA in 2018, which further secured assurances related to advanced mitigation and freeway project permit issuance.

RMPs for each of the seven Preserves were finalized in 2018. These RMPs guide the management of the Preserves as outlined within the Conservation Plan. The Conservation Plan also requires that each Preserve also have a Preserve-specific FMP. These FMPs were developed in coordination with local fire agencies and will require approval from the Wildlife Agencies. The FMPs will be attachments to the RMPs. Staff will continue to oversee and manage the Preserves until a long-term management strategy is determined at which time, the Preserve responsibilities would be transferred to another entity.

Cost:

In 2007, the Board approved approximately \$55 million as part of the EAP. Accordingly, \$42 million and \$10.5 million were allocated for acquisition and restoration, respectively. An additional \$2.5 million was allocated for the Conservation Plan development and program support, including appraisals and biological surveys.

Status:

Since 2010, a total of \$10 million has been allocated for 12 projects to restore approximately 350 acres of open space lands throughout Orange County.

On September 26, 2016, the Board approved the selection of the endowment fund manager. Annually, approximately \$2.9 million is deposited in the endowment. These annual deposits are expected over a ten to 12 year period, or until the fund totals

Environmental Mitigation Program

approximately \$46.2 million. As of June 30, 2022, the balance was \$19,332,924, which includes six deposits. Annual endowment deposits will continue to be made near the beginning of each fiscal year.

The Wildlife Agencies finalized the issuance of their respective permits, as well as executing the Implementing Agreement in 2017. In early 2018, OCTA secured advance streamlined state and federal clean water permitting requirements.

All seven Preserves have finalized RMPs and are being managed and protected for an interim period by OCTA staff and contractors. These RMPs will be reevaluated every five years and revised as necessary. Staff will continue to oversee and manage the Preserves while a long-term management strategy and manager is determined.

Present Day:

In consultation with the local fire authority, staff has developed FMPs for the seven Preserves. The plans provide guidelines for decision-making at all stages including fire prevention, pre-fire vegetation management, suppression activities, and post-fire responses that are compatible with conservation and stewardship responsibilities. These plans are a requirement of the Conservation Plan and are currently being reviewed for approval by the Wildlife Agencies.

Benefits:

The completed Conservation Plan and regulatory permitting process are tools

by which OCTA obtains biological and regulatory permits/assurances for the 13 (segmented into 30) M2 freeway projects. This comprehensive process enables OCTA to streamline future M2 freeway improvement projects.

External Funding:

Examples of external funding available for this program include:

- USFWS contribution toward the acquisition of open space land in the Trabuco Canyon area.
- USFWS Habitat Conservation Planning Assistant Grant to help fund the completion of the Conservation Plan.
- Restoration project sponsors utilize external funds and resources to implement their projects.

Risks:

To date, four restoration projects have been completed and signed off by the Wildlife Agencies. The success of the restoration projects will support OCTA's Conservation Plan and regulatory permitting processes. However, unforeseeable conditions such as the frequency of drought and wildfires have and may continue to impact plant reestablishment. Additional funding may be necessary to ensure successful implementation of the restoration projects if the Wildlife Agencies do not sign off on the project under current conditions.

OCTA will need to establish the endowment over a ten to 12-year period. OCTA currently holds the title and interim land management responsibility of the Preserves but will

Environmental Mitigation Program

potentially secure a long-term land manager(s) in the future.

Related Projects:
Projects A-M.

Other Involved Agencies:
Caltrans, CDFW, the environmental community, SWRCB, USACE, and USFWS.

Assumptions:
This program is assumed to be funded primarily on a pay-as-you-go basis in the future, in addition to prior bonding issuances. More detailed assumptions are included in the appendices.

References:

- Final Conservation Plan and EIR/EIS
- Additional resources can be found online: www.octa.net/environmental

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2022
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DELIVERY PLAN

Streets & Roads Program



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updated 9.20.22

① Regional Capacity Program

- Competitive funding program with annual call for projects for roadway improvements (not mapped)
- OC Bridges Grade Separation Projects

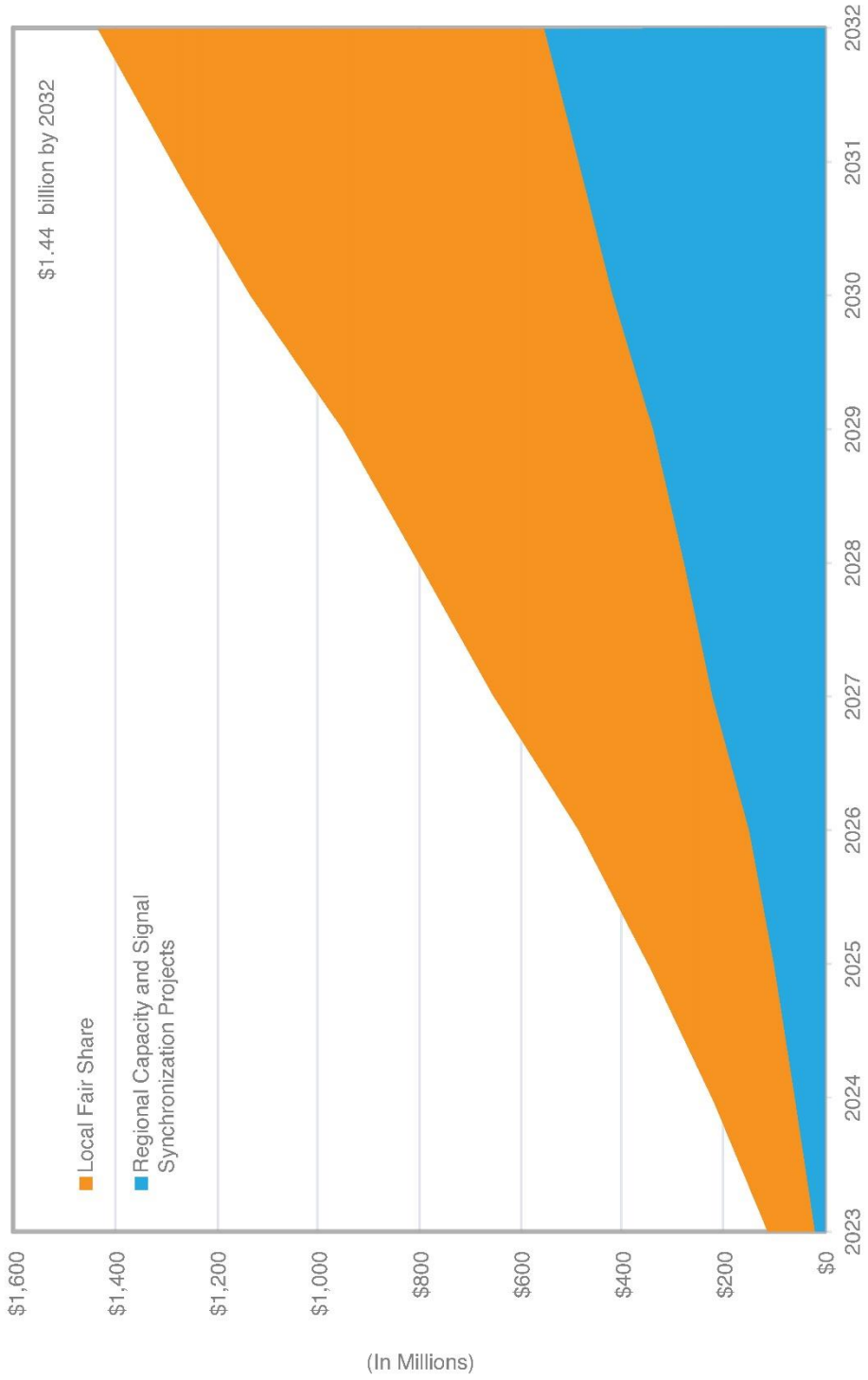
② Regional Traffic Signal Synchronization Program

- Competitive funding program with annual call for projects for signal coordination

③ Local Fair Share Program

- Flexible funding to local jurisdictions for street maintenance and improvements (not mapped)

OC Go Streets and Roads Cumulative Expenditures



Streets and Roads



Overview:

Local streets provide the capacity for the movement of people and goods which is essential to Orange County's commerce and vitality. Streets carry approximately half of Orange County's car and truck traffic and nearly all of Orange County's bicycle and pedestrian traffic. Keeping people moving on local streets is an essential function of the M2 funding programs for local streets. To meet this broad mobility goal, the Next 10 Plan includes the following framework for the Streets and Roads Program:

- Target M2 competitive program funds for streets with the worst traffic congestion.
- Maintain the value of investments in streets by synchronizing traffic signals and keeping pavement in good condition.
- Consider all modes of travel when planning for added street capacity.

Next 10 Plan Deliverables:

Continue to provide funding to improve the countywide network of streets and roads making them safer and more efficient. The Next 10 Plan for streets and roads recommends two major initiatives through 2032, consistent with the above framework:

1. Provide annual calls for competitive funding to local jurisdictions to address bottlenecks and gaps in the street system and synchronize signals (Project O and P).
2. Provide flexible funding to local jurisdictions to preserve the quality of streets or for use on other transportation needs as appropriate (Project Q).

O. Regional Capacity Program

Description:

Project O provides funding through a competitive process to local jurisdictions for recommended streets and roads projects which complete the Orange County MPAH, relieve congestion, are cost effective, and can proceed to construction quickly. These projects fall into one of two categories as described below.

RCP: This portion of Project O provides a funding source to complete the Orange County MPAH, a plan for future roadway improvements throughout Orange County. This includes intersection improvements and other projects that help improve street operations and reduce congestion. The M2 goal for these projects is to complete roughly 1,000 miles of new street lanes, mostly in the form of widening existing streets to their ultimate planned width. Matching local funds are required for these projects.

OC Bridges: This portion of Project O funded seven over- or underpass grade separations that eliminate car and train conflicts along the BNSF railway (Orangethorpe Avenue corridor) in northern Orange County. These grade separations increased safety for everyone traveling through the intersections and eliminate delays caused by trains.

Program Funding:

RCP: \$378.45 million between 2023 and 2032.

Status:

To date, OCTA has awarded \$350 million, which includes \$24 million in external funding, to 173 projects through 12 competitive RCP calls. Annual calls are planned for projects between 2023 and 2032.

As of November 2017, all seven grade separation projects were opened to traffic (Kraemer Boulevard, Lakeview Avenue, Orangethorpe Avenue, Placentia Avenue, Raymond Avenue, State College Boulevard, and Tustin Avenue/Rose Drive). No future calls for grade separations are anticipated.

Present Day:

Annual RCP calls take place providing local jurisdictions the opportunity to request funding for street improvements.

Benefits:

Completion of the MPAH system, including grade separations, will result in better traffic flow and a more efficient transportation system.

O. Regional Capacity Program

External Funding:

RCP: Local jurisdictions are required to provide a 50 percent local match. Matching funds may be reduced contingent on participation in pavement and signal programs, as well as use of non-M2 funds for local match. While other external state and federal funding are not typically used for RCP projects, there have been eight projects to date which qualified for and received State-Local Partnership Program funds, amounting to approximately \$24 million.

OC Bridges: The Board approved the use of \$209.7 million in federal funds and \$260.8 million in state funds for this project. Additionally, local jurisdictions provided \$44.4 million in funding. OC Bridges funding includes 75 percent in external local, state, and federal funds.

Risks:

Local jurisdictions must meet and maintain eligibility requirements to receive net M2 funds. Additionally, funds received are subject to M2 timely use of funds provisions.

Related Projects:

Project P and Project Q.

Other Involved Agencies:

All local jurisdictions (cities and County of Orange).

Assumptions:

Project O is assumed to be funded primarily on a pay-as-you-go basis with bonding for the seven OC Bridges projects. More detailed assumptions are included in the appendices.

References:

- M2 Eligibility Guidelines
- Comprehensive Transportation Funding Guidelines
- Orange County MPAH Guidelines
- Capital Funding Program Report – Local Road Project (June 2022)

P. Regional Traffic Signal Synchronization Program

Description:

Project P provides funds to local jurisdictions to implement new signal timing on a 750-mile regional network that covers most of Orange County. Optimizing traffic signal timing is a low-cost, high-benefit approach to reducing congestion and improving traffic flow. Better signal timing results in fewer traffic stops, delays, pollution, and saves commuters gas and money.

Program Funding:

\$180.68 million between 2023 and 2032.

Status:

Annual calls are planned for projects between 2023 and 2032. As of June 2022, OCTA has funded approximately \$157 million, including \$30.5 million in external funding, to 128 projects. Since 2008, 96 corridor-based signal synchronization projects for a cost of approximately \$82.2 million (including non-M2 funds) have been implemented, 29 are planned or underway, and three have been cancelled. Including early efforts, OCTA and local jurisdictions have synchronized more than 3,300 intersections. From FY 2022-23 through FY 2031-32, the entire network of signals is anticipated to have been retimed or optimized at least two times. This equates to more than 4,000 intersections retimed over a ten-year period.

Present Day:

In the past, many traffic signal synchronization projects were limited to segments of roads in individual cities. M2 provides funds to expand these

projects to benefit neighboring cities and regional corridors.

Benefits:

Optimizing signal timing offers substantial benefits in reducing traffic delays and improving air quality. To date, OCTA has implemented optimized signal timing on 96 corridors with 3,338 intersections covering 858 miles of roadway. On the average, each project resulted in a 12 percent travel time savings for corridor end-to-end travel, saving commuters time and money for a relatively low investment. Future projects may see comparable benefits when combined with capital improvements to reduce physical bottlenecks where appropriate.

External Funding:

Local jurisdictions are required to provide a 20 percent local match. Matching funds may be in-kind services. There may be future needs for more capital-intensive investments as systems age.

Projects that started prior to the 2011 call were funded with \$4.95 million in M1, \$1.77 million in federal Congestion Mitigation and Air Quality Improvement (CMAQ), and \$3.82 million in Prop 1B funds. The 2013 call was partially funded with \$1.25 million in Mobile Source Air Pollution Reduction Review Committee grant money. The 2018 call was able to leverage \$6.69 million in SB 1 Local Partnership Program competitive grant funds. OCTA was also able to leverage \$12 million in SB 1 Solutions for Congested Corridor Program competitive grant funds for three corridor projects outside the 2020

P. Regional Traffic Signal Synchronization Program

call. In all, external funding (not including funds provided by local jurisdictions) contributed is approximately \$30.4 million.

Risks:

Local jurisdictions must meet and maintain eligibility requirements to receive net M2 funds. Additionally, funds received are subject to M2 timely use of funds provisions.

Related Projects:

Project O (RCP) and Project Q.

Other Involved Agencies:

Caltrans and all local jurisdictions (cities and County of Orange).

Assumptions:

Project P is assumed to be funded on a pay-as-you-go basis.

References:

- M2 Eligibility Guidelines
- Comprehensive Transportation Funding Program Guidelines
- OCTA's Comprehensive Business Plan
- Capital Funding Program Report – Local Road Project (June 2022)

Q. Local Fair Share Program

Description:

Project Q provides formula-based funds that local jurisdictions may use for a variety of transportation purposes and needs, including repairing aging streets, residential street projects, bicycle lanes, and pedestrian safety.

Key among these needs is pavement preservation, which involves extending the useful life of pavement and avoiding costly street reconstruction. Preserving and maintaining roads in good condition is a key goal of M2 and Project Q in particular.

Program Funding:

Up to \$926.52 million will be provided between 2023 and 2032.

Status:

As of June 2022, approximately \$584.32 million in LFS payments have been provided to local jurisdictions and the County.

Orange County streets are in generally good condition on average (with a pavement condition index of 79 based on the 2020 statewide report, the best in state). As roadway pavement conditions deteriorate, however, the cost for repairs increases exponentially. For example, it costs as much as 14 times more to reconstruct pavement than to preserve it when it is in good condition.

Present Day:

The cost of street rehabilitation has increased substantially in recent years, and gas tax revenues have not kept pace, which has a direct impact on the ability to fund street maintenance and rehabilitation.

Benefits:

Investments in streets and roads save future costs, keep traffic moving, and offer expanded travel choices.

LFS funds are also flexible and can be used as matching funds for capacity and safety projects, bicycle and pedestrian facilities, as well as local transit services.

External Funding:

This program is not externally funded.

Risks:

Local jurisdictions must meet and maintain eligibility requirements to receive net M2 funds. Additionally, funds received are subject to M2 timely-use of funds provisions.

Related Projects:

Project O (RCP) and Project P.

Other Involved Agencies:

All local jurisdictions (cities and County of Orange).

Assumptions:

Project Q is assumed to be funded on a pay-as-you-go basis.

References:

- M2 Eligibility Guidelines
- 2018 California Statewide Local Streets and Roads Needs Assessment
- OCTA's Comprehensive Business Plan
- Capital Funding Program Report – Local Road Project (June 2022)

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NEXT 10

DELIVERY PLAN

Transit Programs



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updated 9.20.22

R High Frequency Metrolink Service

- Metrolink Grade Crossing Improvements
- Metrolink Station Improvement Projects
- Planned Metrolink Station
- Laguna Niguel-San Juan Capistrano Passing Siding Project
- Sand Canyon Grade Separation Project

S Transit Extensions to Metrolink

- Bus and Station Van Extension Projects (not mapped)
- OC Streetcar

T Metrolink Gateways

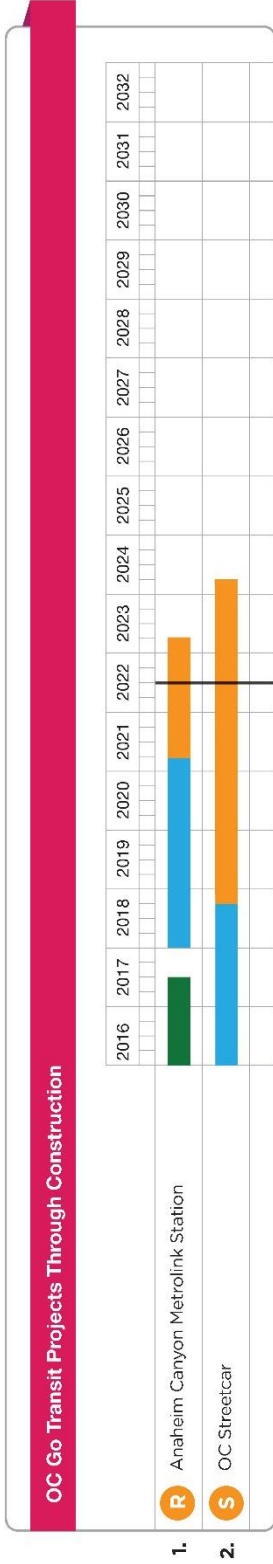
- Anaheim Regional Transportation Intermodal Center (ARTIC)

U Expand Mobility Choices for Seniors and Persons with Disabilities (countywide, not mapped)

V Community Based Transit/Circulators (countywide, not mapped)

W Safe Transit Stops (countywide, not mapped)

Environmental Design/Advertise & Award Construction



Please note that schedules are updated as of June 30, 2022. Shown schedules are subject to change.

Transit Program



Overview:

The goal of the Transit Program is to build a visionary transit system that is safe, clean, and convenient, with a focus on Orange County's transportation future. Providing mobility choices and connectivity for Orange County residents and workers are key components of the overall M2 Plan. To meet this broad mobility goal, the Next 10 Plan includes the following framework for the Transit Program:

- Ensure efficient and integrated Metrolink service for Orange County residents.
- Assess and deliver transit options providing riders first and last mile connections and alternatives to driving.
- Provide services and programs to meet the growing transportation needs of seniors and persons with disabilities.
- Support local agency efforts to deliver Board-approved community-based transit projects.
- Advance improvements to the busiest transit stops across the County to provide passenger amenities that ease transfers between bus lines.

Next 10 Plan Deliverables:

The Next 10 Plan for transit recommends seven major initiatives through 2032, consistent with the above framework.

1. Complete one rail station improvement.
2. Sustain Metrolink service as an attractive alternative to driving in Orange County.
3. Complete construction and begin operating the OC Streetcar.
4. Incorporate recommendations from planning studies to guide development of future transit connections.
5. Support expanded mobility choices for seniors and persons with disabilities.
6. Work with local jurisdictions to maintain successful community circulator projects and potentially provide grant opportunities for expanded or new local transit services.
7. Continue to improve the top 100 busiest bus stops in Orange County.

R. High Frequency Metrolink Service

Description:

Project R provides for sustained and expanded rail service into Los Angeles and Orange counties along the three Metrolink lines serving Orange County (Orange County, Inland Empire-Orange County, and 91/Perris Valley Lines). Project R also provides for safety and operational improvements to the railroad infrastructure necessary to support existing and expanded train service, including grade crossing improvements, track improvements, signal and communications system improvements, as well as other projects as necessary to support the rail system. Grade separation projects will be considered as available funding permits.

Program Cost:

Approximately \$503.03 million between 2023 and 2032.

Status:

To date, rail safety enhancements at 50 at-grade rail-highway crossings have been completed. As a result, quiet zones have been established in the cities of Anaheim, Dana Point, Irvine, Orange, San Clemente, San Juan Capistrano, Santa Ana, and Tustin.

Station improvements completed during the EAP include parking expansion projects at the Fullerton Transportation Center, Tustin Station and Laguna Niguel/Mission Viejo Station, as well as safety repairs to the San Clemente Pier Station platform.

Since then, several station improvement projects have been completed: the San Clemente Pier Metrolink/Amtrak Station lighting, the

Laguna Niguel/Mission Viejo Metrolink Station Americans with Disabilities Act (ADA) ramps, the Orange Transportation Center Parking Structure, the Fullerton Transportation Center elevator upgrades project and stair replacement project, and detectable tile replacements at various stations.

One major rail station improvement is anticipated to be completed during the Next 10 Plan: Anaheim Canyon Metrolink Station improvement project.

The Anaheim Canyon Metrolink Station project began construction in May 2021 and is anticipated to be complete in early 2023. The new Placentia Metrolink Station project is on hold pending a shared-use agreement between Metrolink and BNSF prior to advertisement and construction. There is no projected date for when this agreement will be completed at this time.

Completed rail corridor improvements include Control Point at 4th Street, Control Point Stadium, the San Clemente Beach Trail Audible Warning System, Laguna Niguel to San Juan Capistrano Passing Siding, Railroad ROW Slope Stabilization, and six Project Study Reports for potential grade separations along the Los Angeles-San Diego-San Luis Obispo Rail (LOSSAN) corridor, including: 17th Street, Ball Road, Grand Avenue, Main Street, Orangethorpe Avenue, and Santa Ana Boulevard.

Rail corridor improvements underway include: San Juan Creek Railroad Bridge Replacement, track stabilization

R. High Frequency Metrolink Service

in San Clemente, Metrolink Preventive Maintenance Capitalized Operation, Metrolink Rehabilitation/Renovation, and ongoing operation of Positive Train Control.

Present Day:

Metrolink is currently operating 45 weekday trains. In October 2019, four intracounty trips operating between Laguna Niguel/ Mission Viejo and Fullerton were extended to Los Angeles, however the extended trips were temporarily suspended due to COVID-19. In April 2022, Metrolink partially restored some service in response to customer feedback and demand for more train trips. OCTA will continue to actively engage with Metrolink and other member agencies and monitor ridership levels and the corresponding financial impacts to M2.

Benefits:

Project R allows for sustained operation and enhanced capacity of Metrolink trains serving Orange County, providing a viable alternative to single-occupant vehicle travel, thereby reducing congestion on crowded roadways and freeways.

External Funding:

State: State Transportation Improvement Program (STIP), Propositions 1A, 1B, and 116, and Transit and Intercity Rail Capital Program totaling \$285.78 million.

Federal: CMAQ, the Surface Transportation Block Grant Program, and FTA Sections 5307, 5309, and 5337, totaling \$467.04 million.

Other Local: Local funding from the cities as well as other entities is programmed for \$86.26 million.

M1 also provided \$136.58 million.

Risks:

Close monitoring of Metrolink operations is necessary to ensure sustainability through 2041. Metrolink ridership recovery has struggled to meet projections, thereby reducing farebox revenues. To exacerbate this shortfall, operating costs have increased. Consequently, Metrolink has postponed full service restoration that was scheduled for October 2022 to manage costs and is working on campaigns to attract more riders. However, many variables affect ridership recovery, such as prevalence of flexible remote work policies, pandemic worries, and longer than average travel times. Without changes in service levels, ridership growth, and operations and rehabilitation costs or availability of external funds, the current service cannot be sustained beyond FY 2035-36. Staff will closely monitor as these variables change.

Another impact to Metrolink in Orange County is the railroad track stabilization effort in the City of San Clemente; OCTA owns the railroad right-of-way in the affected area. In September 2021, a failing slope severely degraded the railroad track structure. Emergency repair efforts were taken between late 2021 and early 2022. However, recent higher tidal events have continued to impact the stability of the track, leading to a suspension of rail service. On October 3, 2022, the Board adopted a resolution to authorize OCTA to take all

R. High Frequency Metrolink Service

necessary actions to address the emergency need for railroad track stabilization. These repairs are funded from the commuter rail fund and some state emergency funds for this phase of the work. More enduring treatments need to be developed to ensure the ability to provide rail service in this portion of the county, the cost for which is undetermined at present. Future updates to the Next 10 Plan will need to consider the financial implications of the long-term track improvement needs.

Related Projects:

Project S, Project T, and Project V.

Other Involved Agencies:

BNSF, Caltrans, California Office of Emergency Services, California Public Utilities Commission (CPUC), California State Transportation Agency (CalSTA), Corridor Agencies, CTC, FTA, Los Angeles County Metropolitan Transportation Authority, Metrolink, RCTC, San Bernardino County Transportation Authority, and Ventura County Transportation Commission.

Assumptions:

Funding and operating agreements with partner agencies will be successfully implemented.

References:

- OCTA's Comprehensive Business Plan
- Capital Funding Program Report - Rail Project (August 2022)

S. Transit Extensions to Metrolink

Description:

Project S establishes a competitive program for local jurisdictions to broaden the reach of Metrolink to other Orange County cities, communities, and activity centers via transit, to connect passengers to their final destinations. With approximately 60 percent of Orange County's population and employment centers located within a four-mile radius of Metrolink stations, the emphasis of Project S is on expanding access to the core rail system and establishing connections to destinations that are not immediately adjacent to the Metrolink corridor, within the central core, north and south of Orange County. These connections may include a variety of transit technologies such as conventional bus or vanpool (Rubber Tire), bus rapid transit or high capacity rail transit systems (Fixed Guideways), as long as they can be fully integrated and provide seamless transition for the users.

Program Funding:

Approximately \$390.04 million between 2023 and 2032 for fixed guideways in sales tax revenue.

Status:

Fixed Guideway: Through a competitive process, one project (OC Streetcar) advanced beyond initial study. The OC Streetcar is under construction and will operate in the cities of Garden Grove and Santa Ana.

Rubber Tire: One call has been issued since 2012, providing approximately \$732,000 for four projects in the cities of Anaheim and Lake Forest. The City of Lake Forest has cancelled all

three projects. The City of Anaheim project successfully completed its grant on June 30, 2020, and is being funded on a go-forward basis through a subsequent Project V grant. No future calls for rubber tire projects are anticipated.

Present Day:

Maintaining and growing Metrolink ridership relies on convenient and seamless bus and rail connections. Currently, OCTA fixed bus service and company shuttles are the prime providers of transit connections. However, Uber/Lyft paid-ridesharing services have been a growing presence.

Benefits:

Project S will provide expanded transit access to the centralized Metrolink system, thereby allowing Metrolink commuters to connect to other parts of the County without using an automobile.

External Funding:

Fixed Guideways: External funds for two preliminary studies for the cities of Anaheim and Santa Ana were funded with \$3.12 million in federal FTA Section 5307 and city local funds. M1 also provided \$20.63 million for preliminary studies.

The Board has approved funding supporting the OC Streetcar project, including \$25.59 million in contribution of state funds, and \$299.93 million in federal funds from federal ARP, CMAQ, FTA Section 5307 and 5309, and New Starts funding, totaling \$325.52 million.

S. Transit Extensions to Metrolink

Rubber Tire: None. These projects are funded by M2 and local city matching funds.

Risks:

Overall schedule, scope, and cost risks are high with this project due to the extensive project scope.

Related Projects:

Project R (High Frequency Metrolink Service), Project T, and Project V.

Other Involved Agencies:

CalSTA, Caltrans, CPUC, CTC, FTA, and local jurisdictions.

Assumptions:

OC Streetcar: Cities of Garden Grove and Santa Ana will provide their required match for operations.

Funding for a future call will be at the Board's discretion.

Rubber Tire: Future calls will be at the Board's discretion based on the level of interest from local jurisdictions but will likely be transitioned to Project V which provides for greater flexibility.

References:

- M2 Eligibility Guidelines
- Project S Guidelines
- Federal 5307 and 5309 Funding Guidelines
- OCTA's Comprehensive Business Plan
- OC Streetcar Project Revised Funding Plan (December 2021)
- Capital Funding Program Report - Rail Project (August 2022)

T. Convert Metrolink Stations to Regional Gateways that Connect Orange County with High-Speed Rail Systems

Description:

Provide funding for local improvements to stations along the LOSSAN corridor in Orange County to facilitate connections to future high-speed rail systems, thereby ensuring Orange County's presence in the development and implementation of high-speed rail systems that will serve Orange County. One project, the Anaheim Regional Transportation Intermodal Center (ARTIC), moved forward to completion.

Cost:

M2 contributed \$35.29 million of the \$225.53 million cost of the ARTIC project.

Status:

As part of EAP efforts, OCTA held a competitive call in 2009 for eligible station cities for the development and implementation of station projects in preparation of future high-speed rail systems. The cities of Anaheim, Fullerton, Irvine, and Santa Ana were awarded funding for planning of major expansions of their Metrolink Stations. The City of Anaheim received environmental clearance for the ARTIC project in early 2012. The completed facility opened to rail and bus service on December 6, 2014.

On December 14, 2015, the Board amended the M2 Ordinance and Plan to officially close out Project T by considering the completion of ARTIC as fulfilling the intent of Project T, as the only Orange County station on the planned high-speed rail route. The remaining balance of M2 funds were then transferred to two projects in need: the Metrolink Service Expansion

Program (part of Project R), and the Fare Stabilization Program for Seniors and Persons with Disabilities (part of Project U).

Present Day:

In partnership with transportation agencies, corridor cities, and stakeholders, the California High-Speed Rail Authority in 2008 planned a high-speed rail system that was envisioned to extend as far north as Sacramento and as far south as San Diego with a connection in Anaheim. Work on the Central Valley segment from Bakersfield to Merced continues, however other areas of the system have been postponed.

Benefits:

Early completion of Project T allowed for investment in Orange County's rail system to facilitate the planned ultimate integration of various high-speed rail systems within the County. The project relocated the prior rail station from leased land in the Los Angeles Angels of Anaheim parking lot, to its new permanent location as a multimodal station for all transit riders.

External Funding:

State: STIP totaling \$29.22 million.

Federal: CMAQ, Regional Surface Transportation Program, FTA Sections 5309 and 5337, FTA Bus Livability, and Highway Safety Improvement Program, totaling \$76.00 million.

M1 also provided \$87.02 million of which \$32.50 million for ROW will be

T. Convert Metrolink Stations to Regional Gateways that Connect Orange County with High-Speed Rail Systems

repaid plus interest by the City of Anaheim by 2025.

Risks:

None – project completed.

Related Projects:

California High-Speed Rail System.

Other Involved Agencies:

California High-Speed Rail Authority, Caltrans, cities of Anaheim, Fullerton, Irvine, and Santa Ana, CTC, FTA, and Metrolink.

Assumptions:

The California High-Speed Rail System will extend to the City of Anaheim as identified in their 2016 Business Plan.

References:

- M2 Eligibility Guidelines
- Section 5309 and 5337 Funding Guidelines
- California High-Speed Rail 2016 Business Plan
- December 2017 Project Status Report
- Capital Funding Program Report – Rail Project (August 2022)

U. Expand Mobility Choices for Seniors and Persons with Disabilities

Description:

Project U provides funding for three programs to expand mobility choices for seniors and persons with disabilities.

The SMP, administered by OCTA, was first established in 2001. For the first ten years, this program was supported with Transit Development Act funds. The allocation of Project U funding ensures the continuation of dedicated resources to sustain this program.

The SNEMT Program was established by the County of Orange in 2003, utilizing Tobacco Settlement Revenue (TSR) to fund the program. Project U funding supplements existing TSR resources to expand the capacity of the program and increase the number of available SNEMT trips.

The Fare Stabilization Program ensures that fares for seniors and persons with disabilities continue to be discounted at the same percentage as 2006 levels.

Program Funding:

Up to \$178.61 million will be provided between 2023 through 2032.

Status:

SMP: This program offers a variety of senior transportation resources. Participating cities determine the services that best meet the needs of the seniors in their community. Examples of services include transportation for medical, nutrition, shopping, and social trips. As of June 2022, there are 32 cities

participating; however, one cities' service remains temporarily suspended due to COVID-19.

SNEMT: This program is administered by the County of Orange Office on Aging and is carried out by two transportation contractors. This program provides approximately 140,000 annual trips under Project U for non-emergency services such as trips to doctor and dental appointments, therapy, dialysis, and pharmacy visits.

As of June 2022, approximately \$42.40 million has supported over 132.7 million trips through the Fare Stabilization Program, \$30.28⁴ million provided nearly 2.6 million trips through SMP, and \$32.61 million provided nearly 1.4 million trips through the SNEMT Program since the inception of M2.

Fare Stabilization: In December 2015, the Board approved an amendment to the M2 Ordinance and M2 Plan that backfilled a funding shortfall identified in this program with remaining Project T funds. Effective January 2016, an amendment to the M2 Ordinance adjusted this amount to 1.47 percent of net M2 revenues. With the amendment, projected Fare Stabilization revenues are expected to be solvent through the life of the M2 Program.

Present Day:

Studies of senior mobility needs have identified seniors' preference for utilizing

⁴ Only includes disbursed funds. On October 12, 2020, the Board approved a temporary exception to the SMP guidelines, which allows OCTA to hold allocations in

reserve for agencies with suspended services due to the COVID-19 pandemic. The funds will be held until the State lifts the State of Emergency or the agency resumes transportation services, whichever occurs first.

U. Expand Mobility Choices for Seniors and Persons with Disabilities

local, community-based transportation services rather than countywide or regional services.

The SMP allows participating cities to identify the specific mobility needs of the seniors in their communities and develop transportation programs to best meet those needs with available funding.

The SNEMT Program fills a gap in senior transportation services, as trips are often provided to seniors who do not qualify for OC ACCESS service, or to seniors whose advanced age or disposition make it difficult to use OC ACCESS service. Contracting with social service agencies to provide SNEMT services allows this program to provide enhanced service elements beyond the requirements of OC ACCESS, a paratransit service that complements OCTA's fixed-route bus service and is provided to comply with ADA.

Benefits:

M2 funding of these programs, combined with OC ACCESS service and other senior transportation services funded with public and private resources, provide a menu of mobility options for Orange County seniors, allowing them to select the service that most appropriately meets their transportation need.

External Funding:

Local jurisdictions contribute a 20 percent match to their SMP services. A variety of funding sources are used by cities for their SMP match requirement, including general fund, Community Development Block Grants, sponsorships, advertising revenue, and

administrative in-kind resources. The County of Orange utilizes primarily TSR funds to meet their maintenance of effort requirement.

Risks:

Local jurisdictions must meet eligibility requirements and provide matching funds for SMP.

Related Projects:

Not Applicable.

Other Involved Agencies:

Nearly all local jurisdictions. Participating SMP cities include: Aliso Viejo, Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Dana Point, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, La Habra, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, Mission Viejo, Newport Beach, Orange, Placentia, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda. The Orange County Office on Aging administers the SNEMT Program.

Assumptions:

Project U is assumed to be funded on a pay-as-you-go basis.

References:

- M2 Eligibility Guidelines
- Project U Funding and Policy Guidelines
- OCTA's Comprehensive Business Plan

V. Community-Based Circulators

Description:

Project V provides funding to local jurisdictions through a competitive process to develop local bus transit services, such as community-based circulators, shuttles, and bus trolleys that complement regional bus and rail services and meet local needs in areas not adequately served by regional transit. Projects need to meet performance criteria, connect to bus and rail services, and document financial viability to be considered for funding.

Program Funding:

\$99.30 million between 2023 through 2032.

Status:

Since M2 inception, the Board has approved \$52 million for 35 projects (Note: service expansions and/or extensions from the 2018 & 2020 calls are counted as separate projects) and ten planning studies through four calls.

Out of the 35 projects awarded by OCTA: 17 are currently active, five are suspended (or not initiated) due to COVID-19, ten have been cancelled (primarily due to low ridership), and three have been completed.

Present Day:

Project V helps address the regularly-expressed need for local community-based transit service by Orange County communities.

Benefits:

Community-based circulators can provide relief to arterials in high traffic areas, and provide non-auto based mobility options that meet specific local needs.

External Funding:

The local match requirement for both capital and any operating funds authorized by the Board is a minimum of ten percent.

Risks:

Local jurisdictions must meet eligibility requirements to receive funding. Ability to sustain service and ridership will be key to moving projects forward. Changes in travel behavior and flexible remote work schedules may also impact ridership as services are re-initiated post-pandemic.

Related Projects:

Project S (some Project S and V routes could serve dual purposes).

Other Involved Agencies:

Participating local jurisdictions.

Assumptions:

Project V is assumed to be funded on a pay-as-you-go basis.

References:

- M2 Eligibility Guidelines
- Project V Guidelines
- OCTA's Comprehensive Business Plan

W. Safe Transit Stops

Description:

Project W provides funding for passenger amenities at the 100 busiest transit stops across Orange County. The intent is to assist bus riders in the ease of transfer between bus lines and provide passenger amenities.

Program Funding:

\$9.19 million between 2023 through 2032.

Status:

Since inception, the Board has approved over \$3.1 million for 122 stop improvements through three calls. To date, 49 stops have been completed, 63 stop improvements are either planned or underway, and ten improvements have been cancelled by the awarded agency.

Present Day:

High volume stops are eligible for funding providing needed passenger amenities commensurate with the volume of riders.

Benefits:

Eligible improvements in locations where such amenities do not exist to enhance the customer experience. Improvements include enhancements such as sun/rain protection, passenger seating, improved lighting, etc.

External Funding:

Minimal local match provided for design requests; the rest is 100 percent M2 funded up to the Project W funding caps. If over the cap, then additional local agency funds are required.

Risks:

Local jurisdiction-initiated: Local jurisdictions are responsible for amenities at bus stops. Depending on the amenities selected, long-term maintenance and costs could be required.

Related Projects:

Not Applicable.

Other Involved Agencies:

Local jurisdictions with a top 100 busiest stop are eligible to receive these funds.

Assumptions:

Project W is assumed to be funded on a pay-as-you-go basis.

References:

- M2 Eligibility Guidelines
- Project W Guidelines
- OCTA's Comprehensive Business Plan

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NEXT 10

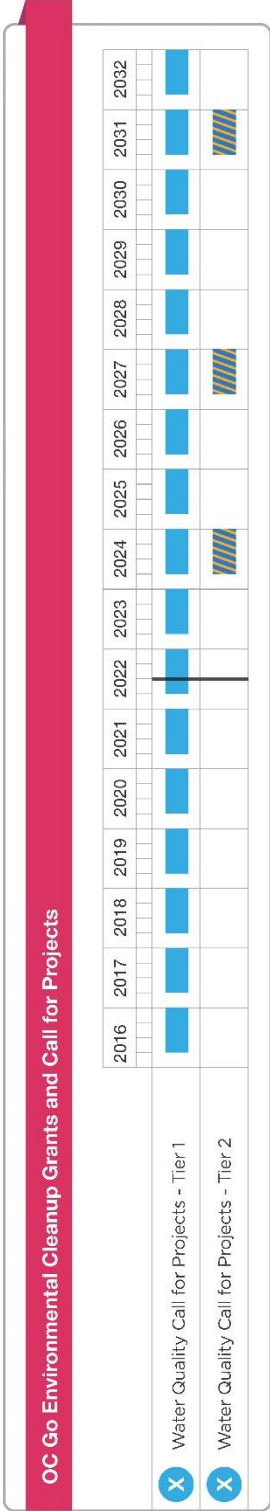
DELIVERY PLAN

Environmental Cleanup Program



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Call for Projects determined based on revenue flow



1. Water Quality Call for Projects - Tier 1
2. Water Quality Call for Projects - Tier 2

Tier 1 grants program consists of funding for equipment purchases and upgrades to existing storm drains and related best management practices.
Tier 2 grants program consists of funding for regional, potentially multi-jurisdictional, capital-intensive projects.

Environmental Cleanup Program



Overview:

The ECP (Project X) allocates approximately \$301 million toward improving overall water quality in Orange County from transportation-related pollution. Project X was approved by Orange County voters under the M2 half-cent sales tax for transportation improvements in 2006.

To adhere to the promise of M2, the Next 10 Plan includes the following framework for Project X:

- Provide supplemental funds (not supplant) for existing transportation-related water quality programs.
- Allocate funds on a competitive basis to improve water quality standards in Orange County.
- Reduce transportation-generated pollutants along Orange County's streets, roads, and freeways.
- Implement best management practices to improve runoff from streets, roads, and freeways.

Additionally, as part of the overall M2 Plan, all M2 capital projects (freeway, street, and transit) must include water quality mitigation as part of their respective project scope and cost. Therefore, this source of funding is not eligible for environmental mitigation efforts.

Next 10 Plan Deliverables:

The Next 10 Plan for Project X recommends two major initiatives through 2032 consistent with the above framework:

1. Protect Orange County beaches by removing trash from entering waterways and inlets that ultimately lead to the ocean.
2. Work with the ECAC to develop the next tiers of water quality funding programs to prevent the flow of trash, pollutants, and debris into waterways from transportation facilities. In addition, focus on improving water quality on a regional scale that encourages partnerships among the local agencies as part of Project X.

X. Environmental Cleanup Program

Description:

Project X implements street- and highway-related water quality improvement programs and projects that assist Orange County cities, the County of Orange and special districts in meeting federal Clean Water Act standards for urban runoff. Project X is intended to augment, not replace existing transportation-related water quality expenditures and to emphasize high-impact capital improvements over local operations and maintenance costs.

In May 2010, the Board approved a two-tiered approach to fund Project X. The Tier 1 grant program is designed to mitigate the more visible forms of pollutants, such as litter and debris that collect on roadways and in storm drains. Tier 1 consists of funding equipment purchases and upgrades to existing catch basins and related best management practices, such as screens and other low-flow diversion devices.

The Tier 2 grant program consists of funding regional, potentially multi-jurisdictional, and capital-intensive projects. Examples include constructed wetlands, detention/infiltration basins, and bioswales which mitigate pollutants such as heavy metals, organic chemicals, and sediment and nutrients.

Program Funding:

\$68.86 million between 2023 and 2032.

Status:

To date, the Board has awarded over \$30 million to fund 199 Tier 1 projects across the County through 11 rounds of funding since M2 inception. The 12th call was released in early 2022 for approximately \$3 million and

programming recommendations are anticipated in late 2022. The Board has also awarded approximately \$27.89 million for 22 Tier 2 projects in 12 cities and the County of Orange.

The 2022 Next 10 Plan will continue to commit to annual Tier 1 calls. The timing for the next Tier 2 call is currently being evaluated, with future calls determined based on local jurisdiction interest and cash flow analysis.

Present Day:

Staff estimates that over 45 million gallons (approximately 105 football fields at one-foot deep) of trash have been captured as a result of the installation of Tier 1 devices since the inception of the Tier 1 Program in 2011. As the equipment is in service over time, the volume of trash captured is expected to increase. The funded Tier 2 projects, once fully operational, have the potential to recharge 157 million gallons of groundwater annually.

Benefits:

Improvements funded through this program will improve overall water quality in Orange County. Funds allocated on a countywide competitive basis will assist agencies in meeting federal Clean Water Act requirements for controlling transportation-generated pollution.

External Funding:

Local jurisdictions are required to provide a 20 percent (Tier 1) and 50 percent (Tier 2) minimum local cash match. Tier 2 matching funds may be reduced, depending on project readiness and operations and maintenance above the ten-year minimum requirement.

X. Environmental Cleanup Program

Risks:

Local jurisdictions must meet eligibility requirements and timely-use-of-funds provisions to M2 receive funding.

Related Projects:

Not Applicable.

Other Involved Agencies:

All local jurisdictions (cities and County of Orange). Third parties such as environmental organizations, homeowner's associations, non-profit groups, and water and wastewater public entities cannot be a lead agency applicant; however, they could jointly apply with an eligible applicant.

Assumptions:

Funds will be allocated on a countywide competitive basis to assist agencies with improving water quality related to transportation pollution.

References:

- M2 Eligibility Guidelines
- Project X Guidelines
- Tier 2 Grant Program Planning Study
- OCTA's Comprehensive Business Plan

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UPDATE

NEXT 10 DELIVERY PLAN

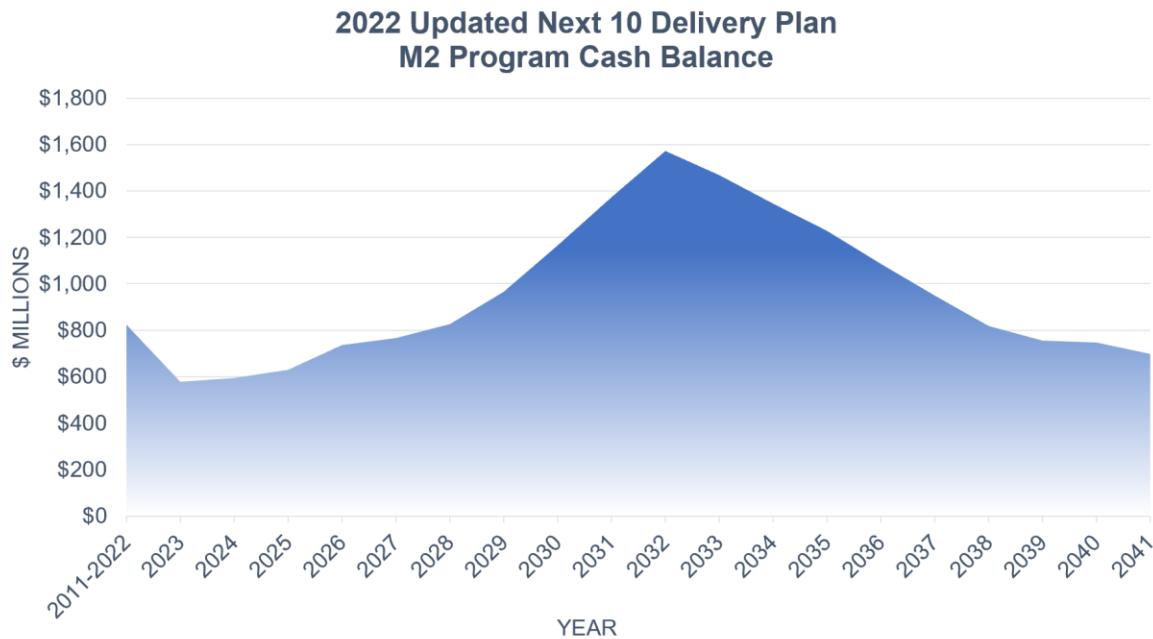
Appendix



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Next 10 Plan Funding Assumptions

To determine the status of the M2 Program, staff reviewed and updated cash flows for the Next 10 Plan for each of the program elements to test whether commitments provided to the voters as part of the M2 approval in November 2006 remain achievable. The revenue assumptions are based on the 2022 M2 revenue forecast of \$15 billion using the latest M2 revenue forecast methodology approved by the Board. The Next 10 Plan also assumes approved TIFIA proceeds, Full Funding Grant Agreement, and net excess 91 Express Lanes revenues for eligible projects. Revenues and expenses were merged into a high-level cash flow model. Bonding assumptions were reviewed to determine the need to address projected negative ending balances by year (compared to a pay-as-you-go scenario) and are constrained to minimum debt coverage ratios. An M2 cash flow summary chart showing ending balances in all years is shown below.



Freeway Program

Revenues for the M2 Freeway Program assumed a proportional share (43 percent) of net M2 revenue. From inception to 2032, the Freeway Program would receive approximately \$3.65 billion in M2 revenue, \$495.44 million in prior bond proceeds, and \$1.65 billion in state/federal grants, \$108.93 million in committed proceeds, \$430 million in net excess 91 Express Lanes revenue for eligible projects, \$31.60 million in interest, and \$20 million transferred in from M1 for a total of \$6.38 billion in total revenue. Costs for the same period total \$5.28 billion (including debt service payments against prior bonding).

Next 10 Plan Funding Assumptions

For the 2022 Next 10 Plan update, forecasted revenues and costs through 2041 were also tested for the complete M2 Freeway Program to ensure it could be delivered consistent with commitments. For projects currently in environmental or final design, project schedules and costs were based on data provided by OCTA's Project Controls Department. For projects that have not yet entered the environmental phase, conceptual estimates were prepared based on a scoring of congestion relief, project readiness, and cost escalation risks (associated with project delays). The 2022 update eliminates the one bond issuance that was anticipated in the 2021 Next 10 Plan; there are no anticipated issuances looking out to 2041. As always, bonding is constrained to legal debt coverage ratios, and a Plan of Finance is brought separately to the Board for approval as needed with refined bond assumptions.

Prior to FY 2022-23, 13 of the 30 freeway projects have been completed, as listed in the table below.

Completed M2 Freeway Projects		Construction Complete	Cost*
1. Project A	I-5 between SR-55 and SR-57	2021	\$38.9
2. Project C, D	I-5 between Avenida Pico and Avenida Vista Hermosa/Avenida Pico Interchange	2018	\$83.6
3. Project C	I-5 between Avenida Vista Hermosa and Pacific Coast Highway	2017	\$75.3
4. Project C	I-5 between Pacific Coast Highway and San Juan Creek Road	2018	\$74.3
5. Project D	I-5, Ortega Highway Interchange	2016	\$79.8
6. Project E	SR-22 Access Improvements at Euclid Street, Brookhurst Street, and Harbor Boulevard	2008	M1\$'s
7. Project G	SR-57 Northbound from Katella Avenue to Lincoln Avenue	2015	\$38.0
8. Project G	SR-57 Northbound from Orangethorpe Avenue to Yorba Linda Boulevard	2014	\$52.3
9. Project G	SR-57 Northbound from Yorba Linda Boulevard to Lambert Road	2014	\$54.1
10. Project H	SR-91 Westbound from I-5 to SR-57	2016	\$59.2
11. Project I	SR-91 Westbound from Tustin Avenue Interchange to SR-55	2016	\$42.5
12. Project J	SR-91 between SR-55 to SR-241	2013	\$79.7
13. Project J	SR-91 Eastbound from SR-241 to SR-71	2011	\$57.8
Completed M2 Freeway Projects Total			\$735.5

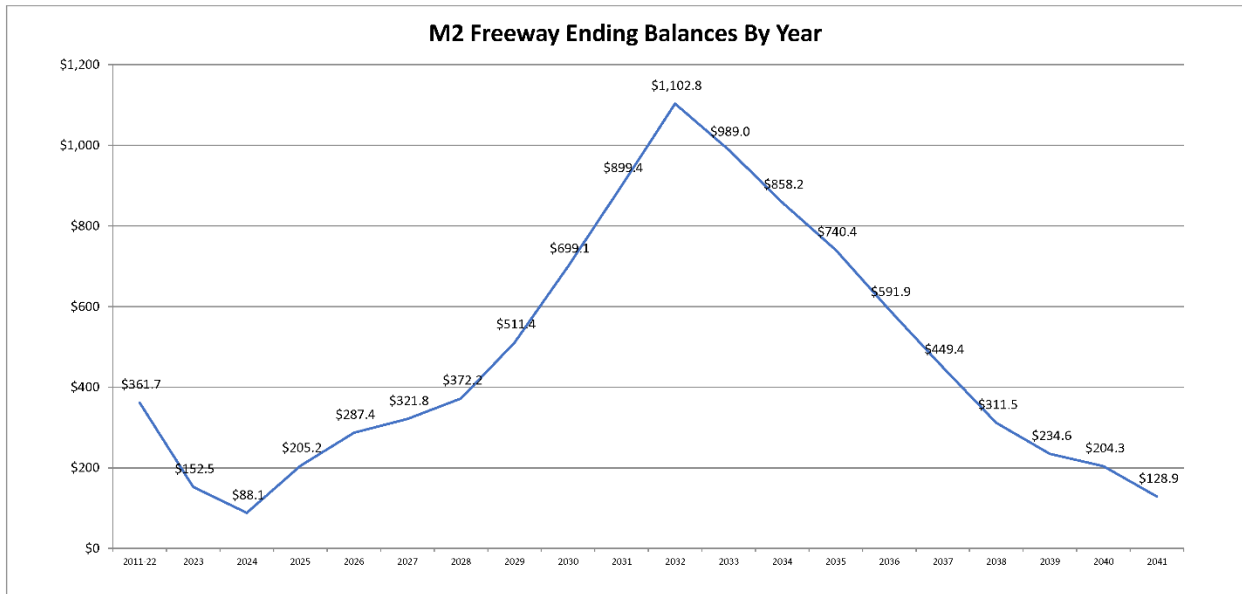
* Cost in millions

Next 10 Plan Funding Assumptions



2022 Next 10 Update - M2 Freeway Program Revenues, Estimated Costs, and Ending Balances (Millions of Dollars; Year of Expenditure)

	M2 Projected Revenue A	Programmed Other Revenue B	Estimated Costs (YOE) C	Project Revenues - Costs D = A + B - C
Project A (I-5, SR-55 to SR-57)	\$ 574.5	\$ 36.2	\$ 38.9	\$ 571.8
Project B (I-5, SR-55 to "Y")	\$ 366.9	\$ 187.6	\$ 430.9	\$ 123.6
Project C (I-5, South of "Y")	\$ 766.4	\$ 446.2	\$ 810.2	\$ 402.3
Project D (I-5 interchanges)	\$ 315.4	\$ 88.5	\$ 200.3	\$ 203.5
Project E (SR-22 access improvements)	\$ 146.7	\$ -	\$ -	\$ 146.7
Project F (SR-55 improvements)	\$ 447.4	\$ 433.4	\$ 634.5	\$ 246.2
Project G (SR-57 improvements)	\$ 316.2	\$ 117.1	\$ 443.3	\$ (10.0)
Project H (SR-91, I-5 to SR-57)	\$ 171.1	\$ 27.2	\$ 59.2	\$ 139.1
Project I (SR-91, SR-57 to SR-55) ¹	\$ 509.1	\$ 455.3	\$ 468.0	\$ 496.4
Project J (SR-91, SR-55 to OC/RC line) ¹	\$ 430.5	\$ 430.0	\$ 437.5	\$ 423.0
Project K (I-405, I-605 to SR-55) ²	\$ 1,311.3	\$ 244.3	\$ 1,560.2	\$ (4.5)
Project L (I-405, SR-55 to I-5)	\$ 390.8	\$ 8.0	\$ 262.2	\$ 136.5
Project M (I-605 access improvements)	\$ 24.4	\$ 17.8	\$ 29.0	\$ 13.2
Project N (Freeway Service Patrol)	\$ 183.3	\$ -	\$ 187.9	\$ (4.5)
Mitigation Program @ 5%	\$ 313.4	\$ -	\$ 281.0	\$ 32.4
Transfer from M1 Savings	\$ -	\$ 20.0	\$ -	\$ 20.0
Interest Earnings	\$ -	\$ 31.6	\$ -	\$ 31.6
Bond Interest Costs ³	\$ -	\$ -	\$ 290.2	\$ (290.2)
Other Non-Programmed Revenue	\$ -	\$ 4.7	\$ -	\$ 4.7
Freeway Program Economic Uncertainties	\$ -	\$ -	\$ 2,553.1	\$ (2,553.1)
Subtotal M2 Revenues and Costs:	\$ 6,267.3	\$ 2,548.0	\$ 8,686.4	\$ 128.9
2041 Projected Balance				\$ 128.9



¹ \$691.8 million in 91 Express Lanes excess revenue has been incorporated into Other Revenues for portions of Project I (currently assumed at \$18.6 million) and Project J (currently assumed at \$273.2 million).
² \$108.9 million has been incorporated into Other Revenues for Project K. This is a direct benefit to the M2 portion of the I-405 Improvement Project, as the loan will be repaid with toll revenues and not M2.
³ Total debt service less bond proceeds.

Next 10 Plan Funding Assumptions

Streets and Roads

The M2 Streets and Roads Program consists of Project O (RCP), Project P (RTSSP), and Project Q (LFS). Combined M2 revenues for these programs assume a proportional share (32 percent) of net M2 revenue. From inception to 2032, the Streets and Roads Program would receive approximately \$2.72 billion in M2 revenue, \$40.27 million in interest, \$121.62 million in prior bond proceeds, and \$621.10 million in M1 and state/federal grants (primarily for the OC Bridges Program), for a total of \$3.50 billion in total revenue. This includes \$16.89 million in SB 1 funding leveraged for Project P. Costs for the same period would total approximately \$3.24 billion (including debt service payments against prior bonding).

Part of Project O includes the OC Bridges Program, which funded seven over- or underpass grade separations that eliminated car and train conflicts along the BNSF railway in northern Orange County. These grade separations, listed in the table below, increased safety for everyone traveling through the intersections and eliminated delays caused by trains.

Completed OC Bridges – Grade Separation Projects		Construction Complete	Cost*
1. Project O	Kraemer Boulevard (Anaheim/Placentia)	2014	\$63.8
2. Project O	Placentia Avenue (Fullerton/Placentia)	2014	\$64.5
3. Project O	Orangethorpe Avenue (Anaheim/Placentia)	2016	\$105.9
4. Project O	Tustin Avenue/Rose Drive (Anaheim/Placentia)	2016	\$96.6
5. Project O	Lakeview Avenue (Anaheim/Placentia)	2017	\$110.7
6. Project O	Raymond Avenue (Fullerton)	2018	\$126.2
7. Project O	State College Boulevard (Fullerton)	2018	\$99.6
Completed OC Bridges – Grade Separation Projects Total			\$667.3

*Cost in millions

Next 10 Plan Funding Assumptions

Transit Program

The M2 Transit Program consists of Project R (High Frequency Metrolink Service), Project S (Transit Extensions to Metrolink), Project T (Metrolink Gateways), Project U (Seniors/Disabled Persons Mobility Programs), Project V (Community-Based Transit/Circulators), and Project W (Safe Transit Stops). Revenues for the M2 Transit Program assume a proportional share (approximately 25 percent) of net M2 revenue. From inception to 2032, the Transit Program would receive approximately \$2.12 billion in M2 revenue, \$51.68 million in prior bond proceeds, \$407.40 million in external revenue, \$45.65 million transferred from M1, and \$17.11 million in interest for a total of \$2.64 billion. The cash flow includes \$148.96 million in Federal New Starts funding, \$108.13 million in federal CMAQ, and \$25.59 million in State Cap-and-Trade for the OC Streetcar project. Expenses for this same time period total \$2.49 billion (including debt service payments against prior bonding). The unprogrammed balance for Project S allows for the option of an additional future transit connection project.

Environmental Cleanup Program

The M2 ECP consists of Project X (Cleanup Highway and Street Runoff that Pollutes Beaches). Revenues for the M2 ECP assume two percent of gross annual M2 sales tax revenue. From inception to 2032, the ECP would receive approximately \$176.07 million in M2 revenue. Expenses for this same time period total \$115.30 million.

Common Abbreviations

Americans with Disabilities Act	ADA
Anaheim Regional Transportation Intermodal Center	ARTIC
BNSF Railway Company	BNSF
Board of Directors	Board
California Department of Fish and Wildlife	CDFW
California Department of Transportation	Caltrans
California Highway Patrol	CHP
California Public Utilities Commission	CPUC
California State Transportation Agency	CalSTA
California Transportation Commission	CTC
Call for Projects	Call
Congestion Mitigation and Air Quality	CMAQ
Conservation Properties	Preserves
Coronavirus	COVID-19
Early Action Plan	EAP
Environmental Cleanup Allocation Committee	ECAC
Environmental Cleanup Program	ECP
Environmental Impact Report	EIR
Environmental Impact Statement	EIS
Environmental Mitigation Program	EMP
Federal Highways Administration	FHWA
Federal Transit Administration	FTA
Fire Management Plan	FMP
Fiscal Year	FY
Freeway Service Patrol	FSP
Full Funding Grant Agreement	FFGA
High-Occupancy Vehicle	HOV
Infrastructure Construction Cost Pressure Index	ICCPPI
Interstate 15	I-15
Interstate 405	I-405
Interstate 5	I-5
Interstate 605	I-605
Local Fair Share	LFS
Los Angeles-San Diego-San Luis Obispo	LOSSAN
Master Plan of Arterial Highways	MPAH
Measure M	M1
Measure M2 or Renewed Measure M	M2
Natural Community Conservation Plan/Habitat Conservation Plan	Conservation Plan
Next 10 Delivery Plan	Next 10 Plan
Orange County Business Council	OCBC
Orange County Transportation Authority	OCTA
Ordinance No. 3	Ordinance
Pacific Coast Highway	PCH

Common Abbreviations

Regional Capacity Program	RCP
Regional Traffic Signal Synchronization Program	RTSSP
Resource Management Plan	RMP
Right-of-Way	ROW
Riverside County Transportation Commission	RCTC
Senate Bill 1	SB 1
Senior Mobility Program	SMP
Senior Non-Emergency Medical Transportation	SNEMT
Service Authority for Freeway Emergencies	SAFE
State Highway Account	SHA
State Route 133	SR-133
State Route 22	SR-22
State Route 241	SR-241
State Route 55	SR-55
State Route 57	SR-57
State Route 71	SR-71
State Route 73	SR-73
State Route 74	SR-74
State Route 91	SR-91
State Transportation Improvement Program	STIP
State Water Resources Control Board	SWRCB
Tobacco Settlement Revenue	TSR
Transportation Infrastructure Finance and Innovation Act	TIFIA
United States Army Corps of Engineers	USACE
United States Fish and Wildlife Service	USFWS
Year of Expenditure	YOE