



Local Tax Dollars at Work

2023
UPDATE

NEXT 10

DELIVERY PLAN

2023-2032

DRAFT



----- UPDATED NOVEMBER 2023 -----



On November 13, 2023, the Orange County Transportation Authority (OCTA) Board of Directors (Board) will consider adoption of the Draft 2023 Updated Next 10 Delivery Plan (Next 10 Plan). The 2023 Next 10 Plan maintains the time frame of fiscal year (FY) 2022-23 through FY 2031-32 and incorporates refined project information including cost estimates, schedules, and available external funding.

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**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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2023
UPDATE

NEXT 10

DELIVERY PLAN

Introduction



OCTA



Local Tax Dollars at Work

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2023 UPDATE

NEXT 10



DELIVERY PLAN

1.1. Introduction

Voters initially endorsed Measure M (M1) in 1990 with a sunset in 2011. On November 7, 2006, Orange County voters, by a margin of 69.7 percent, approved the Renewed Measure M Transportation Investment Plan (Plan) for the Measure M2 (M2) one-half cent sales tax for transportation improvements. With the approval of 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 OCTA 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 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. The Next 10 Plan was last updated in 2022 and spanned FY 2022-23 to FY 2031-32; the 2023 update maintains the same time frame. The intent is for the Next 10 Plan to be a living document with delivery time frames shifted every two years to ensure revenue and project information stay current.

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 Next 10 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 time frame 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. As a result of higher sales tax

collections, the 2021 update reduced the amount of the one bond issuance anticipated.

- The 2022 update incorporated a revised \$15 billion revenue forecast. Orange County's economy continued to strongly emerge from the COVID-19 pandemic. Sales tax collections for FY 2021-22 grew by 23 percent to \$424 million, which is the highest annual sales tax collection for M2. As a result of the higher sales tax collections, the 2022 update eliminated the one bond issuance with no additional bonding anticipated through 2041.

1.2. 2023 Review

The 2023 M2 sales tax revenue forecast of \$14.8 billion was presented to the Board on October 9, 2023. This represents a -1.3 percent, or a \$200 million decrease from what was assumed in the 2022 Next 10 Plan. Sales tax collections for FY 2022-23 grew by 3.35 percent to \$439 million, which is the highest annual sales tax collection for M2. Future year annual growth rates are forecasted to average approximately 3.3 percent. While a reduction in sales tax revenues affects the M2 Program as a whole, in most areas of the M2 Plan, programs can be scaled to available revenues.

Staff has reviewed and updated the cash flow for the complete M2 Plan of projects and programs. The 2023 update incorporates the latest M2 sales tax revenue forecast, current programmed external revenues, revised bonding assumptions, and refined project information. Through this process, staff confirms that the M2 Program remains deliverable; however, this update continues to emphasize that Metrolink operations require close monitoring.

1.3. Next 10 Plan Delivery Risks

Delivering a major program such as M2 is not without challenges. OCTA remains cognizant and continues to monitor delivery risks. Three key risks are highlighted below.

Financial – The 2023 sales tax revenue forecast of \$14.8 billion represents a slight decrease. While this may not affect the M2 programs that can scale to available revenue, programs that cannot do so easily such as Metrolink may be impacted. Additionally, 18 years of M2 delivery remain; fluctuations in economic conditions may affect future sales tax revenue forecasts.

Current external funding commitments are assumed in the M2 cash flow for the 2023 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 – 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.

Climate – Over the past several years, coastal storm surges, combined with several other environmental factors, have damaged the Los Angeles – San Diego - San Luis Obispo rail corridor. These events required increased maintenance and emergency repairs to stabilize the rail infrastructure. The emergency repairs have also led to intermittent service loss and delays. Although the affected portion of the railroad tracks in the City of San Clemente is located in Orange County, this rail corridor is vital for State-supported intercity rail (Pacific Surfliner), freight connection to the Port of San Diego, and plays a strategic role in the operations of Camp Pendleton. The long-term solution will require collaboration from key stakeholders to develop and implement. OCTA will be an active participant in the process; future implications to M2 with respect to service levels or costs are unknown at this time.

A summary of risks, explanations, and suggested management actions are included in Exhibit 1.3. These are tracked, updated, and included in the M2 Quarterly Progress Reports presented to the Board throughout the year.

Exhibit 1.3: Summary of Delivery Risks

Risk		Explanation	Action
	Moderate		One to Watch
Financial			
1	Sales tax revenues are driven by economic conditions. The 2023 M2 revenue forecast is \$14.8 billion, which represents a \$200 million (-1.3 percent) year-over-year decrease from the 2022 forecast.	While the 2023 M2 sales tax revenue forecast is slightly lower, in most areas of the M2 Plan, programs can be scaled to available revenues. Additionally, 18 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 2023 Next 10 Plan, but prospects of future revenues for freeway projects are low.

Risk	Explanation	Action
3	Potential for an environment of increasing cost for M2 capital projects.	The fall 2023 update of 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	Schedule and scope changes on capital projects that impact delivery and project costs.	OCTA will work closely with project partners and project contractors to limit changes in scope and schedules.
5	Increase Southern California Regional Rail Authority (Metrolink) train service as an alternative to driving within the limits of available revenue.	COVID-19 altered travel behavior, which has affected ridership and farebox revenues. The cost of Metrolink service continues to grow as contracted rates increase, the system ages, track-sharing arrangements with BNSF Railway Company (BNSF) are revised, and new air quality requirements are implemented.
Resource		
6	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.	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.

Risk	Explanation	Action
7 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 the 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.
Climate		
8 Climate-related hazards could affect M2 investments.	OCTA has experienced hazards affecting M2 investments. The 2022 Coastal Fire impacted the M2 Environmental Mitigation Program (EMP) Pacific Horizon Preserve. Additionally, tidal events, ocean currents and waves, storm surges, and slope movement affect OCTA's railroad track in San Clemente.	OCTA has developed Fire Management Plans (FMP) for the seven properties purchased as part of the M2 Freeway EMP. Additionally, the Board adopted resolutions to authorize OCTA to take all necessary actions to address the emergency need for railroad track stabilization and protection.
Regulatory		
9 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.

1.4. 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 and were used to identify projects to recommend moving from the environmentally cleared/shelf-ready list to advancement through construction.

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

1.5. Updated Next 10 Plan Deliverables

Significant M2 progress and accomplishments have been made since 2007. The 2023 update of the Next 10 Plan confirms that M2 can be delivered consistent with the commitment to voters, however, Metrolink operations require close monitoring. 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 FY 2022-23 through FY 2031-32, equating to approximately \$5.6 billion invested to improve the local transportation system.

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 of which 13 have been completed to date. Deliverable 1 includes 13 projects to be delivered through construction; Exhibit 1.5.1 reflects the projects along with latest phase, schedule and cost information. For more details, see updates in Section 2.1.

Exhibit 1.5.1. Phase, Schedule, and Cost of Deliverable 1 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	\$229.4
2. Project C, D	I-5 between Oso Parkway and Alicia Parkway/La Paz Road Interchange	2024	\$227.0
3. Project C	I-5 between Alicia Parkway and El Toro Road	2024	\$203.5
Project C, D	I-5 between SR-73 and El Toro Road Landscaping	2027	\$12.4
4. Project F	SR-55 between Interstate 405 (I-405) and I-5	2027	\$505.7
5. Project K	I-405 between SR-73 and Interstate 605 (I-605)	2024	\$1,620.0
		Subtotal	\$2,798.0
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 F	SR-55 between I-5 and SR-91	2029	\$131.3
9. Project G	SR-57 Northbound from Orangewood Avenue to Katella Avenue	2028	\$71.8
10. Project I	SR-91 between SR-55 and Lakeview Avenue	2028	\$126.3
11. Project I	SR-91 between La Palma Avenue and SR-55	2030	\$208.4

In Design		Construction Complete	Cost*
12. Project I	SR-91 between Acacia Street and La Palma Avenue	2029	\$116.2
13. Project M	I-605 Katella Avenue Interchange	2026	\$29.0
		Subtotal	\$1,113.9
		Deliverable 1 Total	\$3,911.9

*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; Exhibit 1.5.2 reflects the projects along with environmental clearance schedule and estimated cost. The 2023 update captures additional phases for two projects. Exhibit 2.1.3 reflects project schedules including these additional phases.

- OCTA is proposing to include the final design phase of the SR-57 Northbound from Lambert Road to Orange/Los Angeles County Line project in the 2024 State Transportation Improvement Program (STIP). The Board approved the finalization and submittal of the 2024 STIP on October 9, 2023. The California Transportation Commission (CTC) is anticipated to adopt the program in March 2024.
- OCTA is coordinating with the Riverside County Transportation Commission (RCTC) to advance the SR-91 between SR-241 and State Route 71 (SR-71) project through construction within the Next 10 Plan time frame. M2 is only responsible for the Orange County portion of this project.

The completion of the SR-91 between SR-241 and SR-71 project in addition to the 13 projects in Deliverable 1 would bring the total number of completed projects to 27 by 2030, which equates to approximately 90 percent of the M2 Freeway Program. For more details, see program updates in Section 2.1.

Exhibit 1.5.2. Environmental Clearance Schedule and Cost for Deliverable 2 Projects

Remaining Projects		Environmentally Clear Shelf-Ready	Cost*
1. Project D	I-5 El Toro Road Interchange	2026	\$120.5 ¹
2. Project G	SR-57 Northbound from Lambert Road to Orange/Los Angeles County Line	2028	\$218.6 ¹
3. Project J	SR-91 between SR-241 and Orange/Riverside County Line	2025	\$150.0 ^{1,2}

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

² Project schedule and cost assumptions subject to change and are contingent on the outcome of the environmental review process, availability of funding, and coordination with RCTC.

Remaining Projects		Environmentally Clear Shelf-Ready	Cost*
4. Project L	I-405 between I-5 and SR-55	2018	\$269.6
Remaining M2 Freeway Projects Total			\$758.7 ³

*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 2023, OCTA has awarded approximately \$525 million in competitive funding through the Regional Capacity Program (RCP {Project O}) and Regional Traffic Signal Synchronization Program (RTSSP {Project P}) through annual competitive calls for projects (call). Additionally, \$660.19 million⁴ in Local Fair Share (LFS {Project Q}) funds have been distributed to local jurisdictions. For more details, see program updates in Section 2.2.

Transit

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

Status: Project R provides funding for Metrolink operations and aims to increase rail services within the County and provide additional Metrolink service north of the City of Fullerton to the Los Angeles County Line. The program also provides for track improvements, the addition of trains and parking capacity, upgraded stations, and safety enhancements to allow cities to establish quiet zones along the tracks.

Close monitoring of Metrolink operations is necessary to ensure sustainability through 2041. The three lines serving Orange County currently operate 45 weekday trains, a 17 percent reduction from the 54 weekday trains operated prior to COVID-19. Metrolink ridership recovery continues to struggle, which impacts farebox revenues and cost recovery. To exacerbate this shortfall, operating costs have also increased. 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 2031-32. Staff has identified and is proposing to program Transit and Intercity Rail Capital Program (TIRCP) formula funds to help sustain Metrolink service. If this is

³ The total will be revised once the three remaining projects (Project D, G, and J) have a selected project alternative and complete environmental clearance.

⁴ Only includes disbursed funds. On May 22, 2023, the Board determined the City of Cypress ineligible to receive net M2 revenues. Disbursements of net M2 revenues have been suspended until the City of Cypress achieves compliance and the Board reconsiders the matter at a future meeting.

approved in the coming months, this infusion of external funds is anticipated to extend Metrolink operations through FY 2037-38. OCTA will continue to actively engage with Metrolink and the other member agencies to monitor ridership levels and the financial impacts to M2.

Railroad track stabilization efforts in south Orange County have become a major focus area given its importance to continued operation of Metrolink in Orange County. To date, OCTA has invested \$12 million of M2 funds along with \$16 million of State and Federal funds to ensure the safety of the railroad track. While emergency work has been completed and service has resumed, long-term solutions need to be developed to ensure the ability to provide rail service in this portion of the County. In partnership with key stakeholders, a planning study is currently underway to identify and evaluate short- and medium-term solutions with the goal of protecting the rail line in place. A separate study will follow to evaluate potential long-term solutions which may include relocation of the rail line. The lead agency for the long-term study has not been identified. The Next 10 Plan is reviewed annually, which will provide OCTA the opportunity to update and adjust assumptions as needed.

A rail station improvement project identified to be completed in the Next 10 Plan time frame is the Anaheim Canyon Metrolink Station Improvements Project. The project began construction in May 2021, and was completed in January 2023. For more details, see program updates in Section 2.3. Additionally, OCTA remains committed to delivering the Placentia Metrolink Station Project and will include project scope, schedule, and budget as they become available in future Next 10 Plan updates.

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, continued coordination with the Federal Transit Administration (FTA), and continued construction of the maintenance and storage facility (MSF). All eight cars are in the final stages of manufacturing, with Car 1 successfully completing its final walkthrough and pre-shipment inspection for testing at the MSF. Construction is anticipated to be complete to begin revenue operations in late 2024/early 2025. For more details, see project updates in Section 2.3.

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 \$120.1 million⁵ 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. For more details, see program updates in Section 2.3.

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. 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 2023, 16 projects are active, 13 have been cancelled (primarily due to low ridership), three have yet not initiated service (two projects are continuations of existing Project V grants with remaining funds and one project is anticipated to start in July 2023), 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. For more details, see program updates in Section 2.3.

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. As of June 2023, 56 improvements have been completed, 56 improvements are in various stages of implementation, and ten improvements have been cancelled by the awarded agency. For more details, see program updates in Section 2.3.

⁵ Only includes disbursed funds. On May 22, 2023, the Board determined the City of Cypress ineligible to receive net M2 revenues. Disbursements of net M2 revenues have been suspended until the City of Cypress achieves compliance and the Board reconsiders the matter at a future meeting.

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, 2023, the endowment balance was \$23,688,239. 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. For more details, see program updates in Section 2.1.

- 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 \$33.2 million in funding for 212 Tier 1 projects through 13 calls and \$27.9 million for 22 Tier 2 projects through two calls. For more details, see ECP updates in Section 2.4.

1.6. Oversight and Safeguards

The 2023 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 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 Ordinance No. 3 (M2 Ordinance), Section 10, there will be three performance assessments conducted during the Next 10 Plan time frame. 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 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.

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 frame. 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). 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.

1.7. 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 awarded 234 projects totaling over \$61 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.

1.8. Updated Next 10 Plan Funding Assumptions

The 2023 update of the Next 10 Plan includes funding assumptions for revenue and expenses that are merged into a high-level cash flow model. 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 are adjusted according to available revenues. However, the freeway portion defines specific project scopes which cannot be easily adjusted to revenue fluctuations. The revenue assumptions incorporate the latest 2023 M2 sales tax revenue forecast of \$14.8 billion and prior commitments in programmed local, state, and federal external revenues.

To support project delivery schedules in the Freeway Program, bond assumptions were included in earlier updates of the Next 10 Plan. Since the 2022 update, the increase in the M2 revenue forecast as well as refined project information eliminated additional bond issuances 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 time frame is 9x in 2024. This offers significant financial protection against unforeseen economic changes related to project delivery. For a more detailed discussion on assumed revenues, costs, and debt service, see Section 3.1 of the Appendix.

Funding for the freeway mode assumes \$9.2 billion in total revenue, with costs for the same period totaling \$9.0 billion. To date, OCTA has been very successful in capturing external funding to offset reductions in sales tax revenue and preserve M2 funds. 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 \$557 million in net excess 91 Express Lanes revenue and \$495 million in bond proceeds.

As a result of the lower forecasted sales tax and interest revenue, the freeway program net sales tax revenue through 2041 decreased by approximately \$14 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 design phase or in construction, project cost estimates have a higher level of engineering and are therefore better defined. While net revenues decreased slightly, no future bonding assumptions are included in 2023 Next 10 Plan update, which provides significant savings in the freeway program while maintaining project delivery schedules. Economic uncertainties were slightly reduced, with all of the funds 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 \$571 million in external revenues (state, federal, and local) primarily for the

OC Bridges grade separation projects. For more details, see Section 3.1 of the Appendix and the project updates contained in their respective sections.

For the transit mode, \$4.3 billion in total revenue is assumed, with costs for the same period totaling \$4.1 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 \$589.24 million in local, state, and federal revenues. This number is inclusive of \$158.36 million in Federal New Starts and \$175.43 million in State Cap-and-Trade revenues to partially fund the OC Streetcar project. For more detailed program assumptions for the Transit Program, see Section 3.1 of the Appendix.

The ECP assumes \$296 million in total revenue, with costs for the same period totaling \$268 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. For more detailed program assumptions for the ECP, see Section 3.1 of the Appendix.

1.9. 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 2023 M2 sales tax revenue forecast is \$14.8 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.

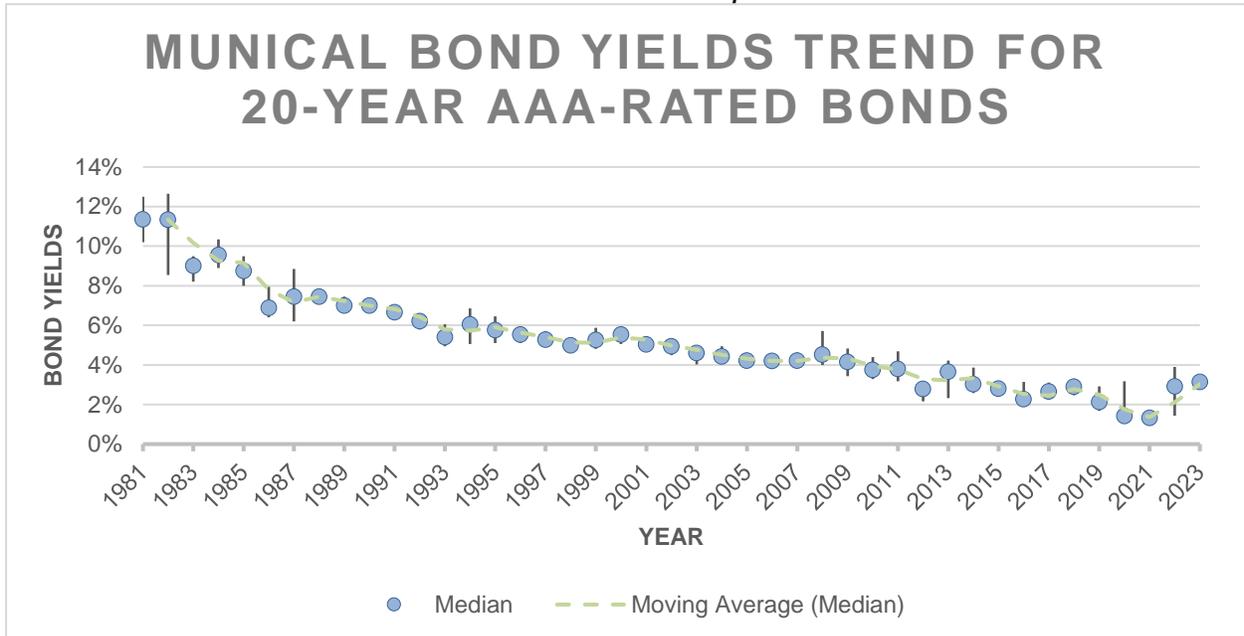
This year's update assumes no additional bonding is required through 2041. The update also continues to maintain prudent annual ending balances and an economic uncertainties allowance, which provides continued financial stability in the event of additional financial fluctuations.

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 relatively low and trending upwards, there are no additional issuances planned through 2041. Current 20-year bond rates have increased 30 basis points from last year from 2.98 percent to 3.28 percent. See Exhibit 1.9.1 showing historical issuance rates of 20-year bonds.

Exhibit 1.9.1. Historical Issuance Rates and Municipal Bond Yields for 20-Year Bonds



Source: TM3 AAA 20-year GO Bonds (inception through 2010), Bloomberg index of AAA 20-Year Municipal Bonds (2011 to date)

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 2023 Next 10 Plan anticipates no 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.

1.10. Future Outlook

As noted in the Next 10 Plan Delivery Risks in Section 1.3, 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, right-of-way (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. Recognizing the benefits of proactive monitoring and forecasting of market conditions, the Board directed staff to continue to work with OCBC and provide OCTA with cost risk factors for project delivery.

In October 2023, OCBC provided an updated forecast to the Board for 2024 through 2026. 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 (ICCPI), as reflected in Exhibit 1.10.1. The ICCPI incorporates a detailed trend analysis of building permits, unemployment rates, localized labor costs, material costs and general economic conditions.

Exhibit 1.10.1. ICCPI Range of Cost Fluctuations

ICCPI 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 three in 2024, which represents a potential cost fluctuation range of two percent to six percent. The forecast for 2025 and 2026 drops to a score of two, which anticipates a tempering of economic conditions. Exhibit 1.10.2 summarizes the forecasts. The updated forecast points to a gradual decline of inflation with the most recent data available. Major drivers include the decline of building permits, a slight increase in unemployment rates, and moderating construction wages. While Portland Cement Concrete structure prices have increased significantly, all other material prices have declined on an annualized basis.

Exhibit 1.10.2. OCBC Orange County Transportation ICCPI Score

OCBC Orange County Transportation ICCPI Score, 2024-2026		
Year	Index Score	Range of Cost Fluctuation
2024	3	2% - 6%
2025	2	1% - 2%
2026	2	1% - 2%

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:

- Federal Reserve increasing both the target federal funds rate and pace of increases,
- Economic uncertainty in China could impact foreign investment and supply chains, 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 time frame, provided the appropriate escalation to deliver projects successfully. Currently, using 3.5 to five percent for construction escalation, as well as incorporating contingency based on the project type and complexity, is staff’s preferred approach to cost estimating.

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2023
UPDATE

NEXT 10

DELIVERY PLAN

Freeway Program

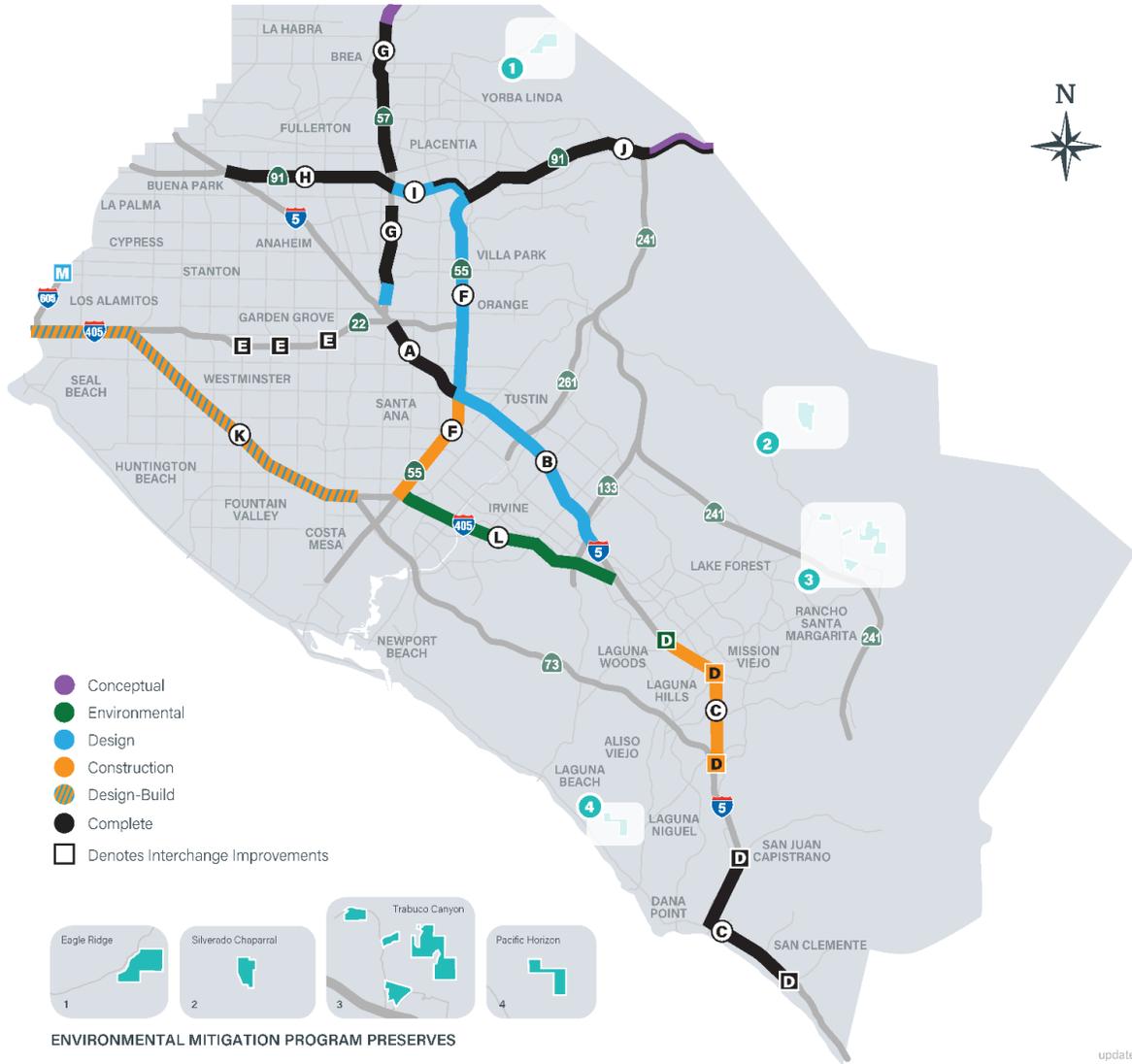


Local Tax Dollars at Work

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Exhibit 2.1.1. OC Go Freeway Program Countywide Map

OC GO FREEWAY PROGRAM



ENVIRONMENTAL MITIGATION PROGRAM PRESERVES

updated 8.10.23

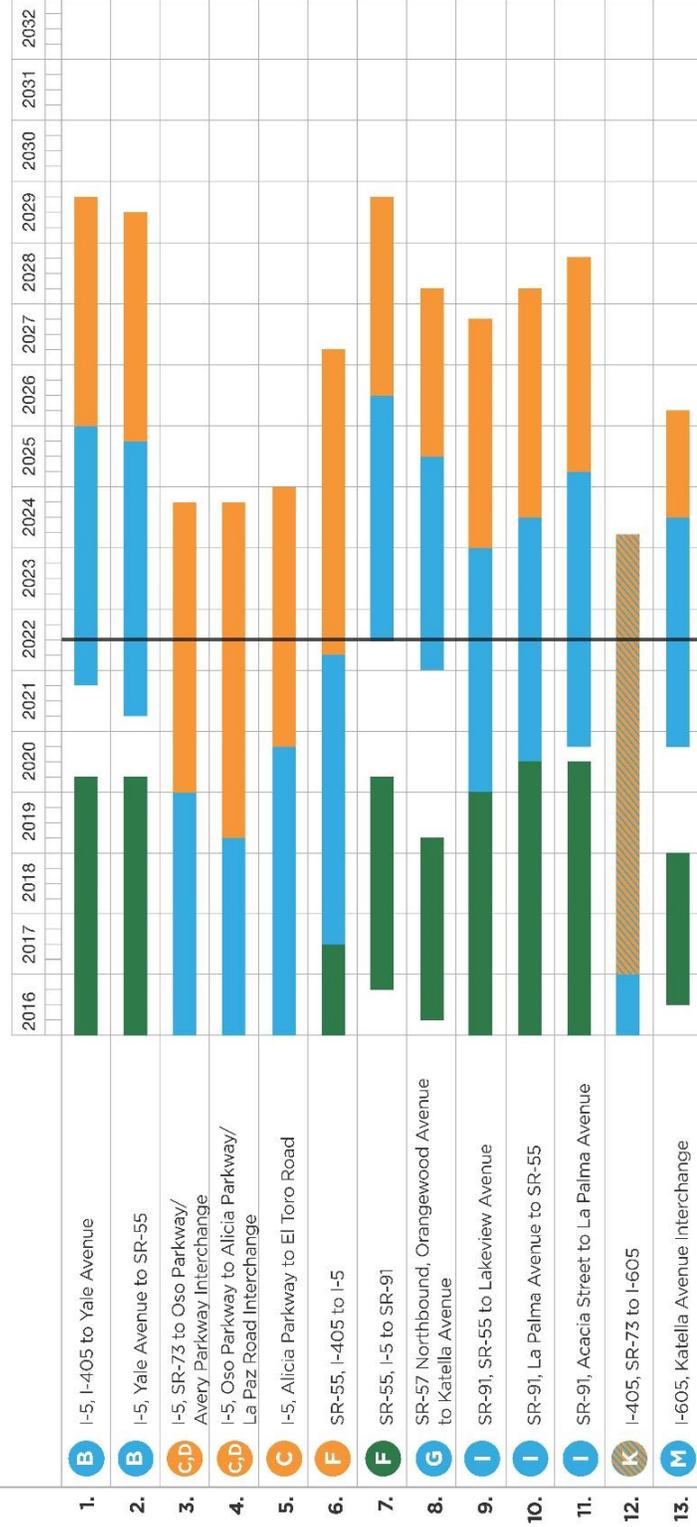
- | | |
|---|--|
| <ul style="list-style-type: none"> A I-5 (SR-55 to SR-57) B I-5 (I-405 to SR-55) C I-5 (Avenida Pico to San Juan Creek Road) C D I-5 (SR-73 to El Toro Road) D I-5/Ortega Highway Interchange Improvements D I-5/El Toro Road Interchange Improvements E SR-22 Access Improvements F SR-55 (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.

Exhibit 2.1.2. OC Go Freeway Projects Through Construction



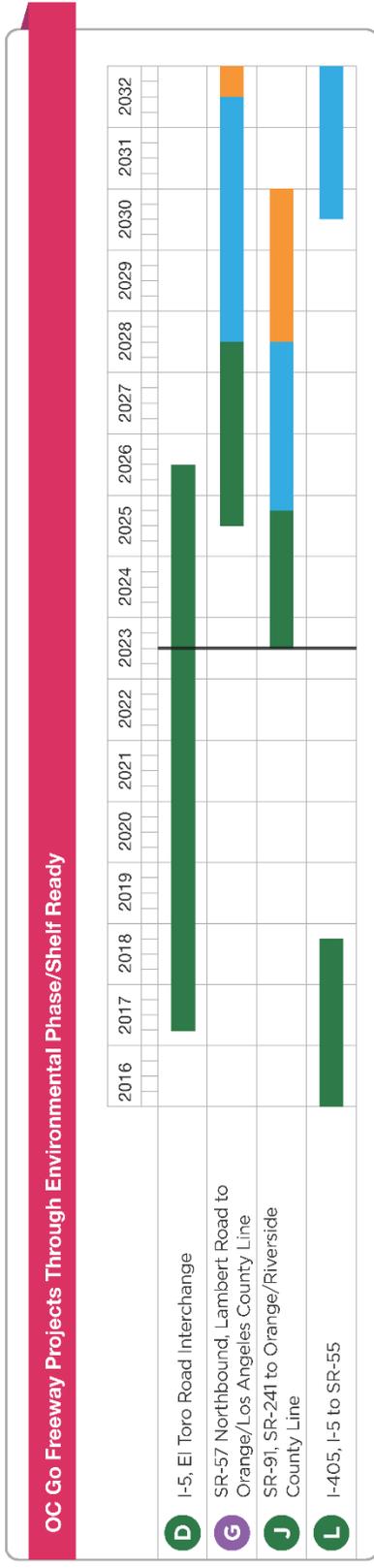
Environmental Design/Advertise & Award Design-Build Construction

OC Go Freeway Projects Through Construction



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

Exhibit 2.1.3. OC Go Freeway Projects Through Environmental Phase/Shelf Ready



Please note that schedules are updated as of June 30, 2023. 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.

* RCTC is the lead agency for advancing the environmental phase of the 91 Eastbound Corridor Operations Project (operational lane from SR-241 to SR-71) which began in June 2023. Future phases are contingent on the outcome of the environmental review process, availability of funding, and coordination with RCTC.

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2.1. Freeway Program



Overview:

The Freeway Program accounts for 43 percent of the M2 Program. Over the life of M2, approximately \$6.2 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 California Department of Transportation (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. For a list of completed projects, see Exhibit 3.1.1 in the Appendix. 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. See Exhibit 2.1.4 for a map of the approximate limits. 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:

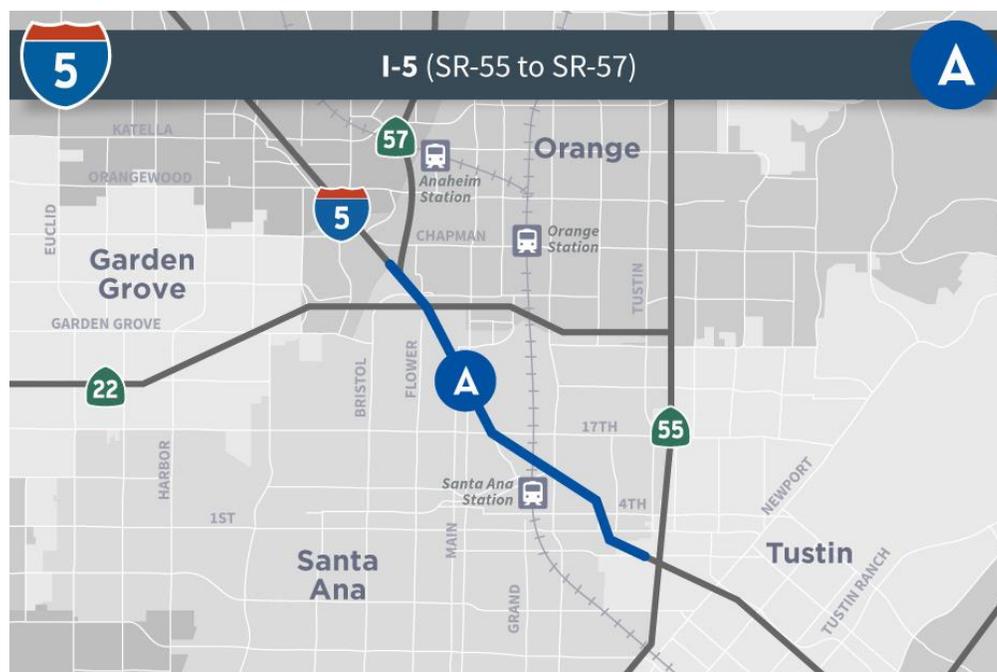
This project improved the HOV facility on I-5 in Santa Ana to meet traffic demands and eliminate bottlenecks. Improvements were needed to accommodate HOV traffic from both the SR-55/I-5 and SR-57/I-5 direct HOV connectors.

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.

Exhibit 2.1.4. Project A – Map of Approximate Limits



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

Risks:

None – project completed.

Related Projects:

Projects B and F.

Other Involved Agencies:

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

Assumptions:

Cost based on June 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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 (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. See Exhibit 2.1.5 for a map of the approximate limits. 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).

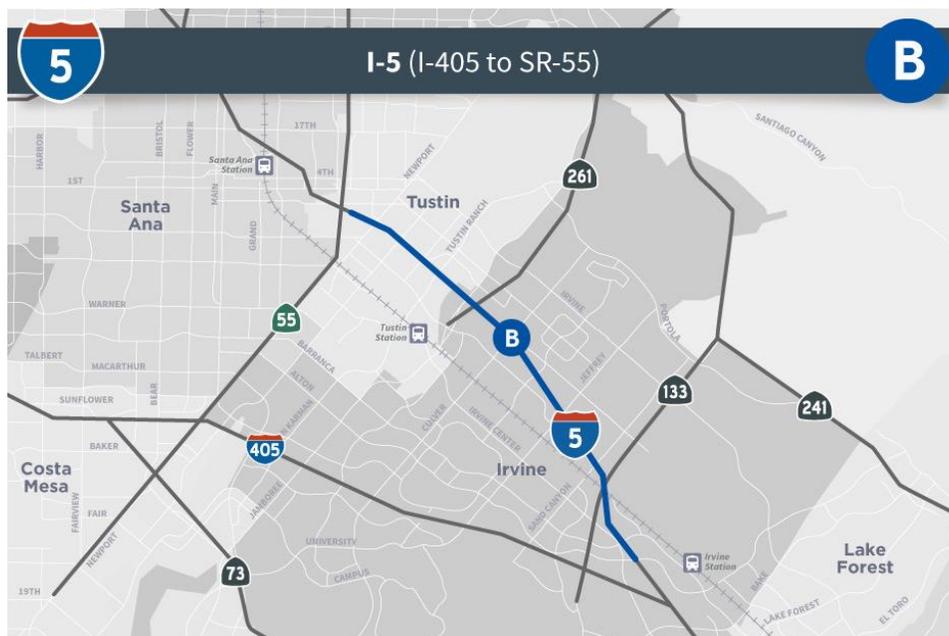
Status:

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

Segment 1: Final design was initiated in October 2021 and is anticipated to be complete in summer 2024.

Segment 2: Final design was initiated in May 2021 and is anticipated to be complete in summer 2024.

Exhibit 2.1.5. Project B – Map of Approximate Limits



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 delays.

External Funding:

The Board has approved funding that supports this project including:

Segment 1: \$52.89 million in federal funds and \$106.71 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 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

C,D. 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. See Exhibit 2.1.6 for a map of the approximate limits. This project is divided into three segments as described below.

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

Segment 2: This project will add one general purpose lane (approximately 2.6 miles) in both directions between Oso Parkway 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 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.

Exhibit 2.1.6. Project C,D – Map of Approximate Limits



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

Cost:

Segment 1: \$229.38 million (YOE).

Segment 2: \$227.03 million (YOE).

Segment 3: \$203.54 million (YOE).

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

Status:

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

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

Segment 3: Construction began in October 2020 and is anticipated 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 \$16.92 million in state funds.

Additionally, \$790,000 in federal funds and \$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.

Assumptions:

Costs are based on June 2023 (Segment 2 and revised cost estimates for segments 1 and 3) M2 Program cash flow.

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

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report (Segment 2)
- July 2023 Project Status Report (Segment 1 and 3)
- Capital Funding Program Report – State Highway Project (September 2023)

C,D. 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. See Exhibit 2.1.7 for a map of the approximate limits. This project was generally constructed within the existing ROW and was divided into three segments as described below.

Segment 1: This project added new continuous-access HOV lanes (approximately 0.7 miles) in each direction between Avenida Pico and Avenida Vista Hermosa. 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 added new continuous-access HOV lanes (approximately 2.5 miles) in each direction between Avenida Vista Hermosa and Pacific Coast Highway (PCH). 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 added new continuous-access HOV lanes (approximately 2.5 miles) in each direction between PCH and San Juan Creek Road. The project also reconstructed on- and off-ramps at

Exhibit 2.1.7. Project C,D – Map of Approximate Limits



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

Camino Las Ramblas/PCH and the I-5/PCH northbound connector and I-5/Camino Las Ramblas undercrossings 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 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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. See Exhibit 2.1.8 for the location of improvement.

Cost:

\$120.51 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.

Exhibit 2.1.8. Project D – Location of Improvement



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 \$9.21 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 have 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 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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. See Exhibit 2.1.9 for the location of the improvement.

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.

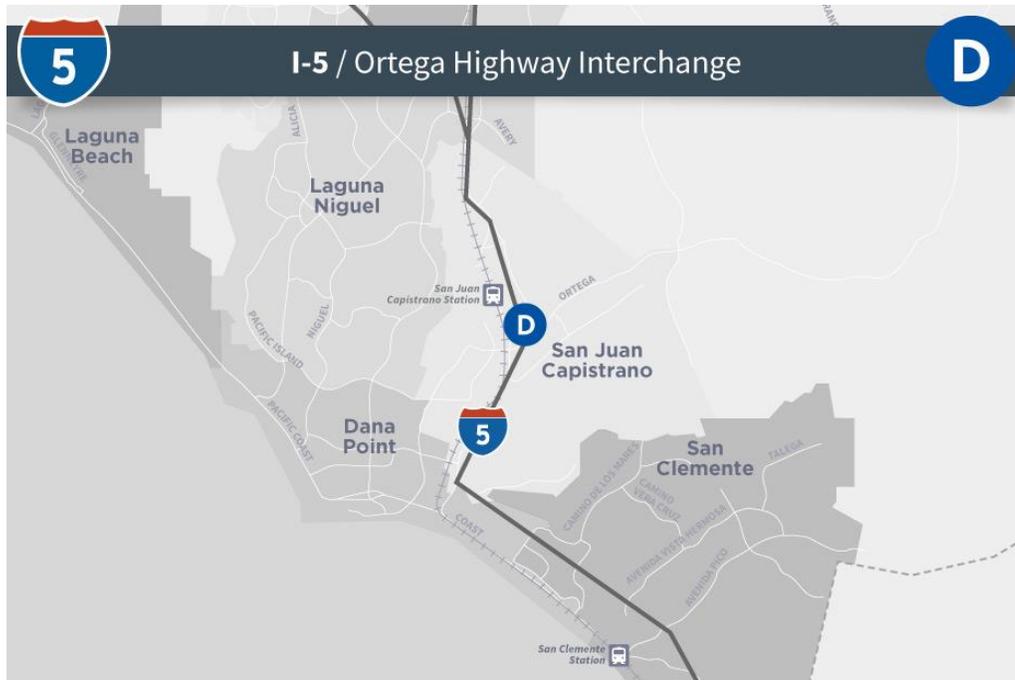
Related Projects:

Project C.

Other Involved Agencies:

Caltrans, City of San Juan Capistrano, and CTC.

Exhibit 2.1.9. Project D – Location of Improvement



D. I-5 (Ortega Highway Interchange) Improvements

Assumptions:

Cost based on January 2020 Project Status Report, which was incorporated in the June 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- January 2020 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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. See Exhibit 2.1.10 for the location of the improvements.

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:

This project widened the streets at the interchanges and was 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.

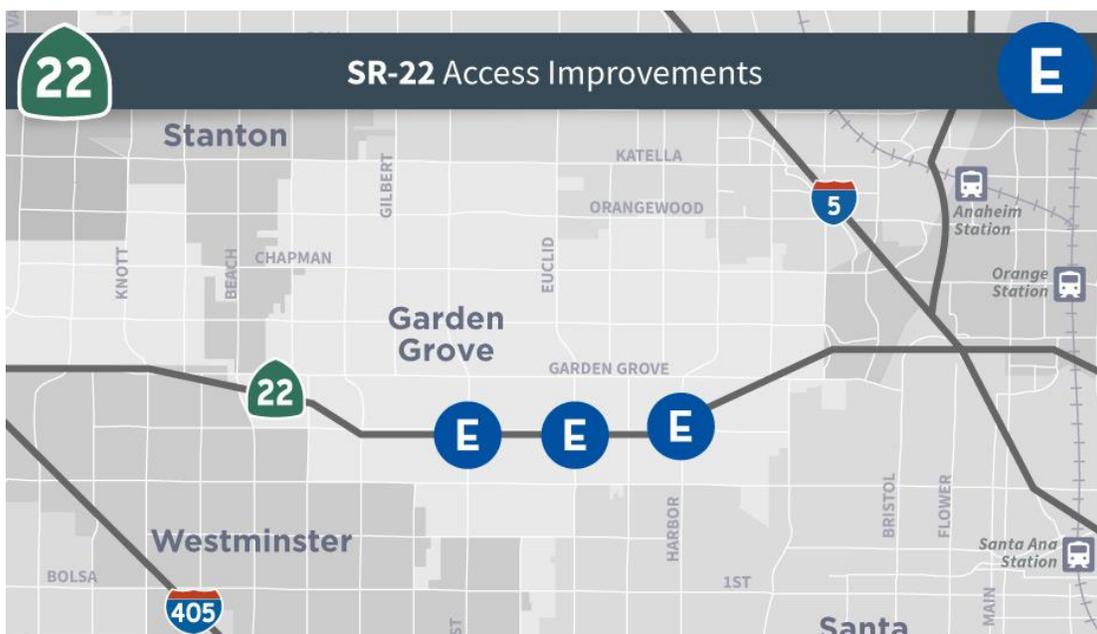
Other Involved Agencies:

Caltrans and City of Garden Grove.

Assumptions:

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

Exhibit 2.1.10. Project E – Location of Improvements



F. SR-55 Improvements

Description:

Project F will reduce congestion by adding lanes and operational improvements to SR-55 between I-405 and SR-91. See Exhibit 2.1.11 for a map of the approximate limits. 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, along with a northbound auxiliary lane between MacArthur Boulevard and Edinger Avenue with state 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: \$505.72 million (YOE) which includes cost for potential ROW risk.

Segment 2: \$131.31 million (YOE).

Status:

Segment 1: Construction began in August 2022 and is anticipated to be complete in February 2027.

Segment 2: The environmental phase was completed in March 2020. The final design was initiated in August 2022.

Exhibit 2.1.11. Project F – Map of Approximate Limits



F. SR-55 Improvements

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 \$160.50 million in federal funds and \$220.00 million in state funds. In addition, \$475,000 in federal earmarks and \$41.90 million in State Highway Operation and Protection Program funds were committed 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 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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. See Exhibit 2.1.12 for a map of the approximate limits.

Select northbound undercrossings will also be widened and seismically retrofitted, as required. The project is divided into three segments as described below.

Segment 1: This project consists of three segments that added a northbound general purpose lane from 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.

Segment 2: This project will provide an additional lane (approximately 1.3 miles) and other operational improvements in the northbound direction from Lambert Road to Tonner Canyon Road in the City of Brea (approximately one-half mile south of the Orange County/Los Angeles County Line).

Segment 3: This project will add 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.

Exhibit 2.1.12. Project G – Map of Approximate Limits



G. SR-57 Improvements

Cost:

Segment 1: \$144.36 million.

Segment 2: \$218.53 million (YOE).

Segment 3: \$71.78 million (YOE).

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 time frame. Through the SB 1 (SB 1) (Chapter 5, Statutes of 2017) Trade Corridor Enhancement Program, an initial phase for interchange improvements at the Lambert Road is currently underway and is anticipated to be completed in late 2023. Phase two, the mainline project, was approved for STIP funding in March 2022 to begin the environmental phase. The preparation of a new project study report-project development support document began in summer 2023 and is anticipated to be complete in 2025. OCTA is proposing to include the final design phase in the 2024 STIP. The Board approved the finalization and submittal of the 2024 STIP on October 9, 2023. The CTC is anticipated to adopt the program in March 2024.

Segment 3: The environmental phase for this segment was completed in March 2019. The final design was initiated in March 2022 and is anticipated to be complete in summer 2024.

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.

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

Segment 3: The Board approved \$14.74 million in federal funds.

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.

G. SR-57 Improvements

Other Involved Agencies:

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

Assumptions:

Cost based on June 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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. See Exhibit 2.1.13 for a map of the approximate limits.

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.

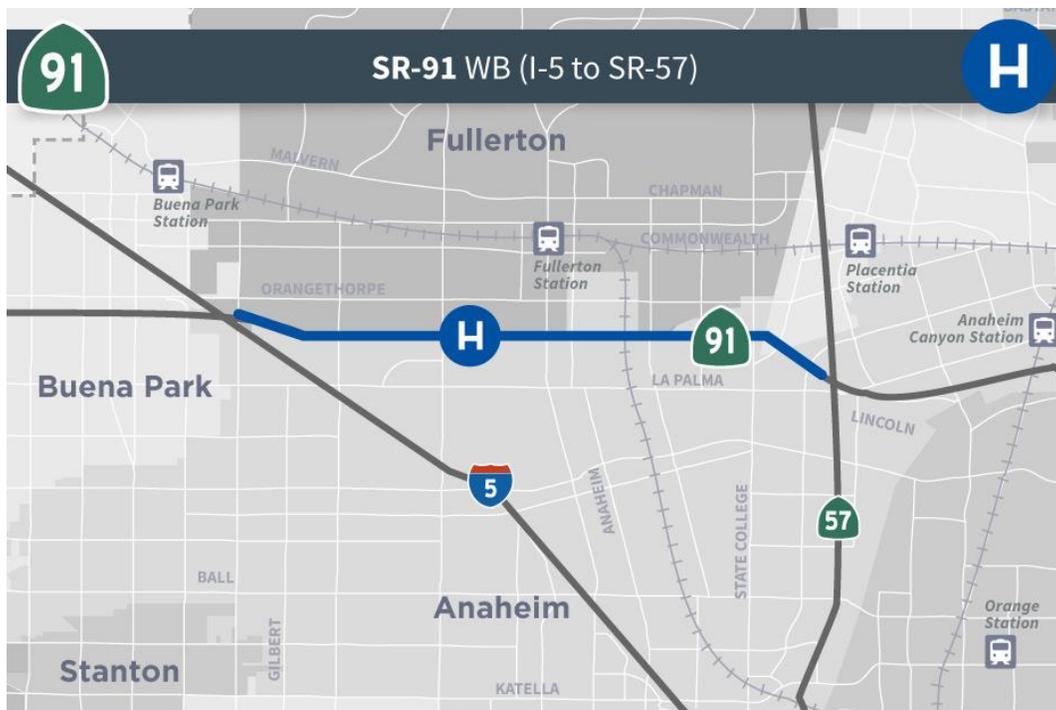
Benefits:

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

External Funding:

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

Exhibit 2.1.13. Project H – Map of Approximate Limits



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

Risks:

None – project completed.

Related Projects:

Project I.

Other Involved Agencies:

Caltrans, cities of Anaheim and Fullerton, and CTC.

Assumptions:

Cost based on June 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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. See Exhibit 2.1.14 for a map of the approximate limits.

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.

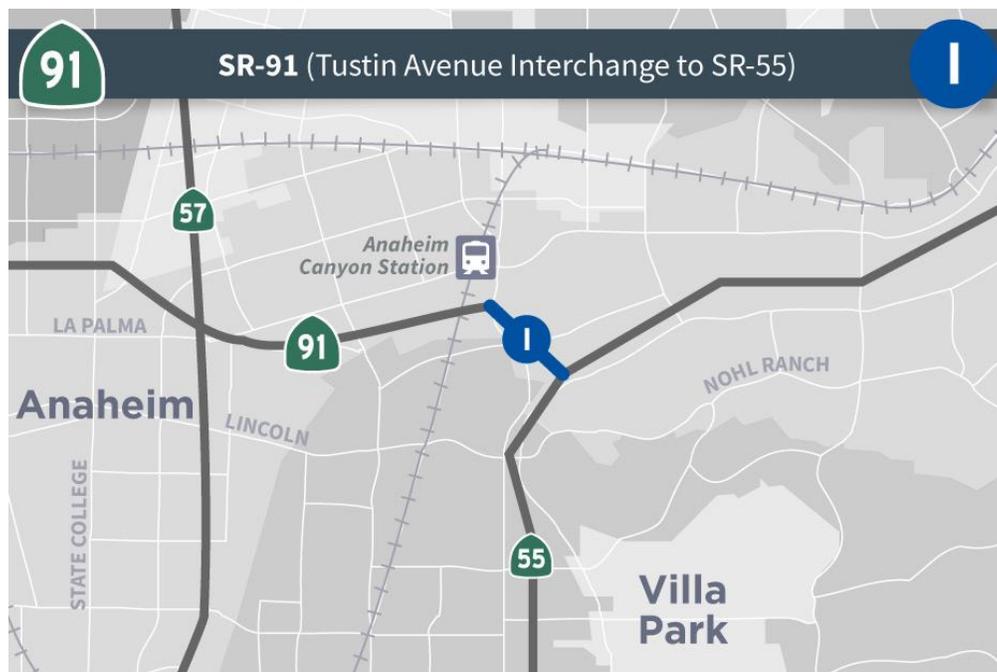
External Funding:

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

Risks:

None – project completed.

Exhibit 2.1.14. Project I – Map of Approximate Limits



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 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- January 2019 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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

Description:

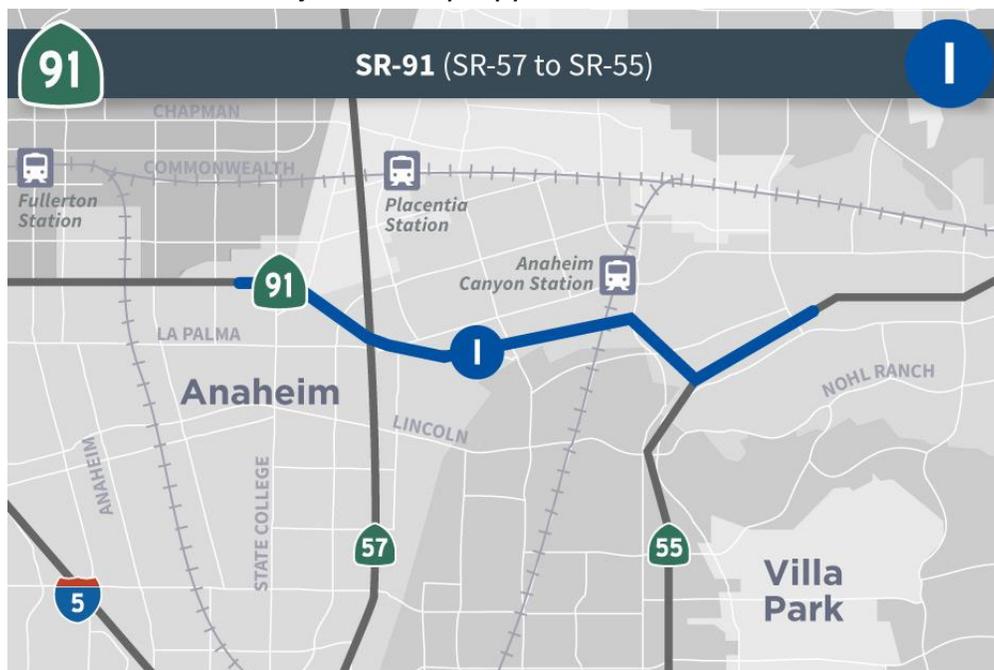
Project I from approximately SR-57 to SR-55 will add one westbound general purpose lane from northbound SR-57 connector to westbound SR-91 connector, and one eastbound general purpose lane between SR-57 and SR-55. See Exhibit 2.1.15 for a map of the approximate limits. The project is divided into three segments as described below.

Segment 1: This project from SR-55 to Lakeview Avenue (approximately 1.4 miles) will realign the westbound SR-91 on-ramp at Lakeview Avenue interchange, replace the Lakeview Avenue overcrossing bridge, and add a new on-ramp from the Lakeview Avenue bridge to connect directly to southbound SR-55 to improve traffic operations in the Anaheim area.

Segment 2: This project will add an eastbound general purpose lane on SR-91 between La Palma Avenue and SR-55 (approximately 2.7 miles) and include bridge widening over the Santa Ana River on eastbound SR-91 and 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 (approximately 1.7 miles) will add a fourth general purpose lane on westbound SR-91 from 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.

Exhibit 2.1.15. Project I – Map Approximate Limits



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

Cost:

Segment 1: \$126.26 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: Final design was initiated in March 2020 and was completed in March 2023. ROW certification is underway, and the project is anticipated to be advertised for construction in spring 2024.

Segment 2: Final design was initiated in June 2020 and is anticipated to be complete in December 2024.

Segment 3: Final design was initiated in November 2020 and is anticipated to be complete in August 2024.

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 and improve safety in both directions.

Segment 3: This project will enhance westbound operations.

External Funding:

The Board has approved funding that supports this project including:

Segment 1: \$14.11 million in federal funds, \$42.57 million in state funds, and \$58.76 million in 91 Express Lanes excess revenues.

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 2023 (segments 2 and 3 and revised cost estimate for segment 1) M2 Program cash flows.

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

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report (Segments 2 and 3)
- July 2023 Project Status Report (Segment 1)
- Capital Funding Program Report – State Highway Project (September 2023)

J. SR-91 (SR-55 to SR-71)

Description:

Project J includes improvements on SR-91 from SR-55 to SR-71 in Riverside County and is divided into three segments. See Exhibit 2.1.16 for a map of the approximate limits.

Segment 1: This project added one eastbound lane (approximately six miles) on SR-91 from one-mile east of SR-241 to SR-71 in Riverside County. This project was led by 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 of 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. M2 is only responsible for the Orange County portion of this project. Improvements beyond SR-71 are overseen by RCTC.

Cost:

Segment 1: \$57.77 million.

Segment 2: \$79.74 million.

Segment 3: \$150.00 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

Exhibit 2.1.16. Project J – Map of Approximate Limits



J. SR-91 (SR-55 to SR-71)

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 feasibility study to evaluate potential eastbound improvements from SR-241 to SR-71 was completed in April 2022. RCTC is the lead agency for advancing the environmental phase of the eastbound improvements known as the Eastbound Corridor Operations Project (ECOP), which began in June 2023.

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 delays.

Segment 3: This project will reduce congestion and delays 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.

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 estimates from RCTC (segment 3) which was incorporated in the June 2023 M2 Program cash flow. ECOP schedule and cost is subject to change and are contingent on the outcome of the environmental phase, availability of funding, and coordination with RCTC.

J. SR-91 (SR-55 to SR-71)

References:

- OCTA 2022 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 (September 2023)

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 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. See Exhibit 2.1.17 for a map of the approximate limits.

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:

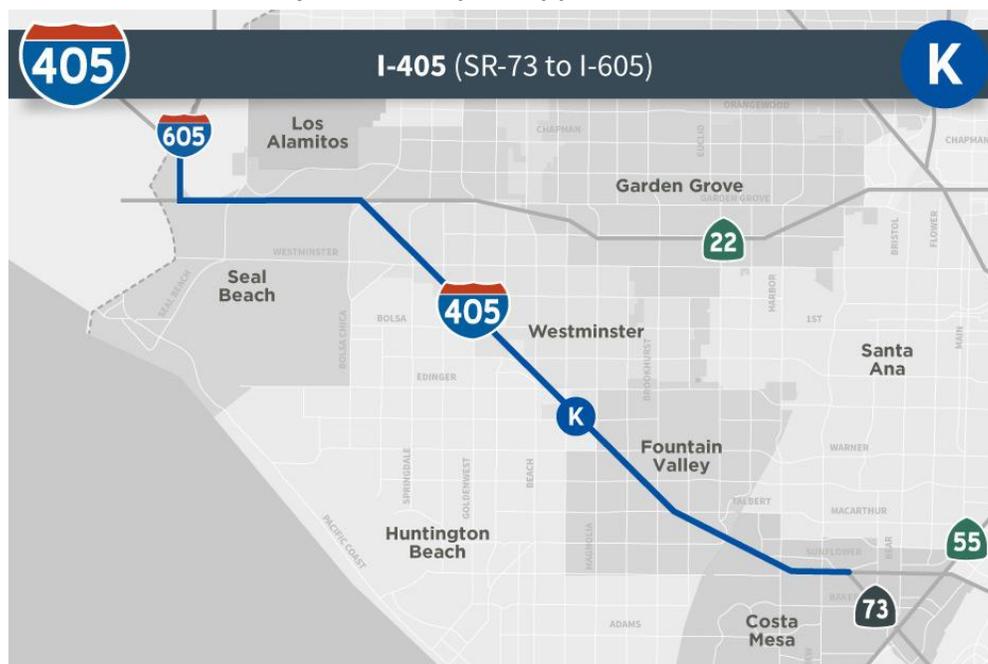
M2 Portion: \$1.62 billion (YOE).

Express Lanes Portion: \$540.00 million (YOE).

Status:

Construction began in January 2017 and is currently over 95 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. As of June 30, 2023, 15 of the 18 bridges have been completed and

Exhibit 2.1.17. Project K – Map of Approximate Limits



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

opened to traffic. The remaining three 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 \$45.65 million in federal funds and \$89.77 million

in state 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 2023 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 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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 delays. See Exhibit 2.1.18 for a map of the approximate limits. The project will generally be constructed within the existing ROW.

Cost:

\$269.60 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.

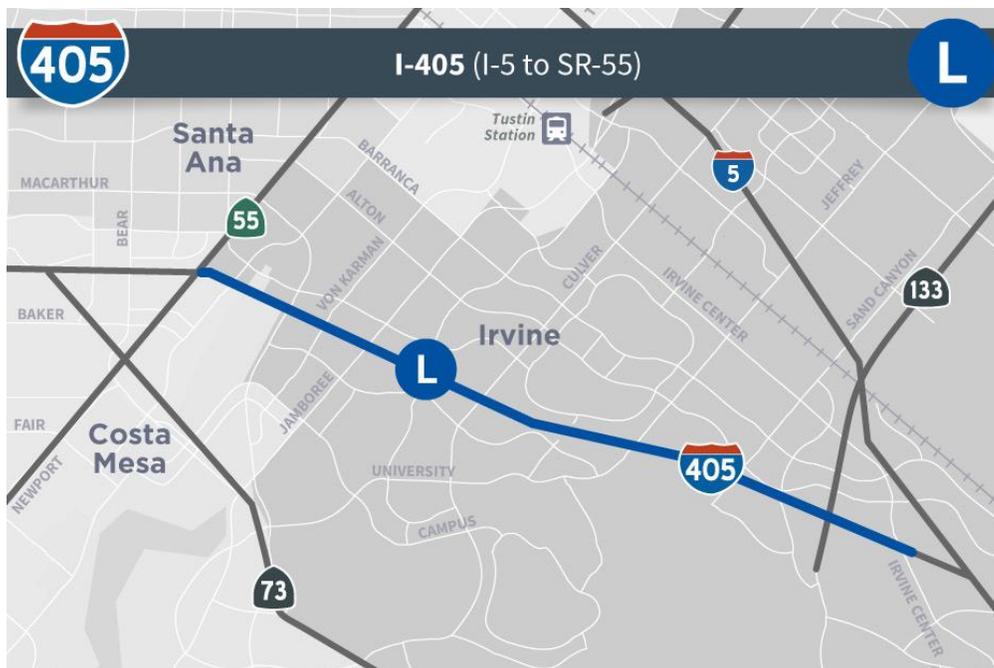
Benefits:

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

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.

Exhibit 2.1.18. Project L – Map of Approximate Limits



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

Risks:

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

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 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- February 2019 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

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. See Exhibit 2.1.19 for the location of the improvement.

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. Final design was initiated in December 2020 and was completed in January 2023. ROW Certification is underway and is anticipated to be complete in spring 2024.

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 delays within the interchange area.

External Funding:

The Board approved providing \$17.80 million in federal funds.

Exhibit 2.1.19. Project M – Location of Improvement



M. I-605 (Katella Avenue Interchange) Improvements

Risks:

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

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 2023 M2 Program cash flow.

References:

- OCTA 2022 Long-Range Transportation Plan
- June 2023 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2023)

N. Freeway Service Patrol

Description:

The FSP provides competitively-bid, privately contracted tow truck services to help stranded motorists in addition to clearing disabled vehicles and large debris from freeway lanes to reduce congestion caused by blocked traffic lanes and passing motorists rubbernecking. FSP is available on all Orange County freeways during peak traffic hours, Monday through Friday, and in specific congested areas on weekends. This project assures that this basic level of service will be continued through 2041.

Program Funding:

\$62.86 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 collected by the Department of Motor Vehicles each year. Since June 2012, the FSP has assisted more than 738,197 motorists along Orange County freeways.

As demand, congestion levels, and costs increase, this project will allow the program to maintain existing service hours and extend service 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. M2

funds a full-time dispatcher and CHP Officer overtime to ensure adequate program support seven days a week.

Present Day:

The FSP program assisted 59,129 motorists along the Orange County freeway system in FY 2022-23.

Benefits:

To keep Orange County moving, FSP provides free limited roadside assistance to motorists whose vehicles have become disabled and removes congestion-causing debris on Orange County freeways. Motorist 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 2021-22, Orange County received approximately \$5 of congestion relief benefit for every dollar invested in the program.

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 limited FSP support services 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 for FSP 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 FMPs 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 represents 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 attached to the RMPs. Staff will continue to oversee and manage the Preserves until a long-term management strategy is determined at which time, some or all of the Preserve responsibilities could 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, 2023, the balance was \$23,688,239, which includes seven deposits. Annual endowment deposits will continue to be made near the beginning of each FY.

The Wildlife Agencies finalized the issuance of their respective permits, as well as executing the Implementing Agreement in 2017. In early 2018, OCTA secured advanced 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 in 2024 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 have 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, five 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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Streets & Roads Program

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Exhibit 2.2.1. OC Go Streets and Roads Program Map

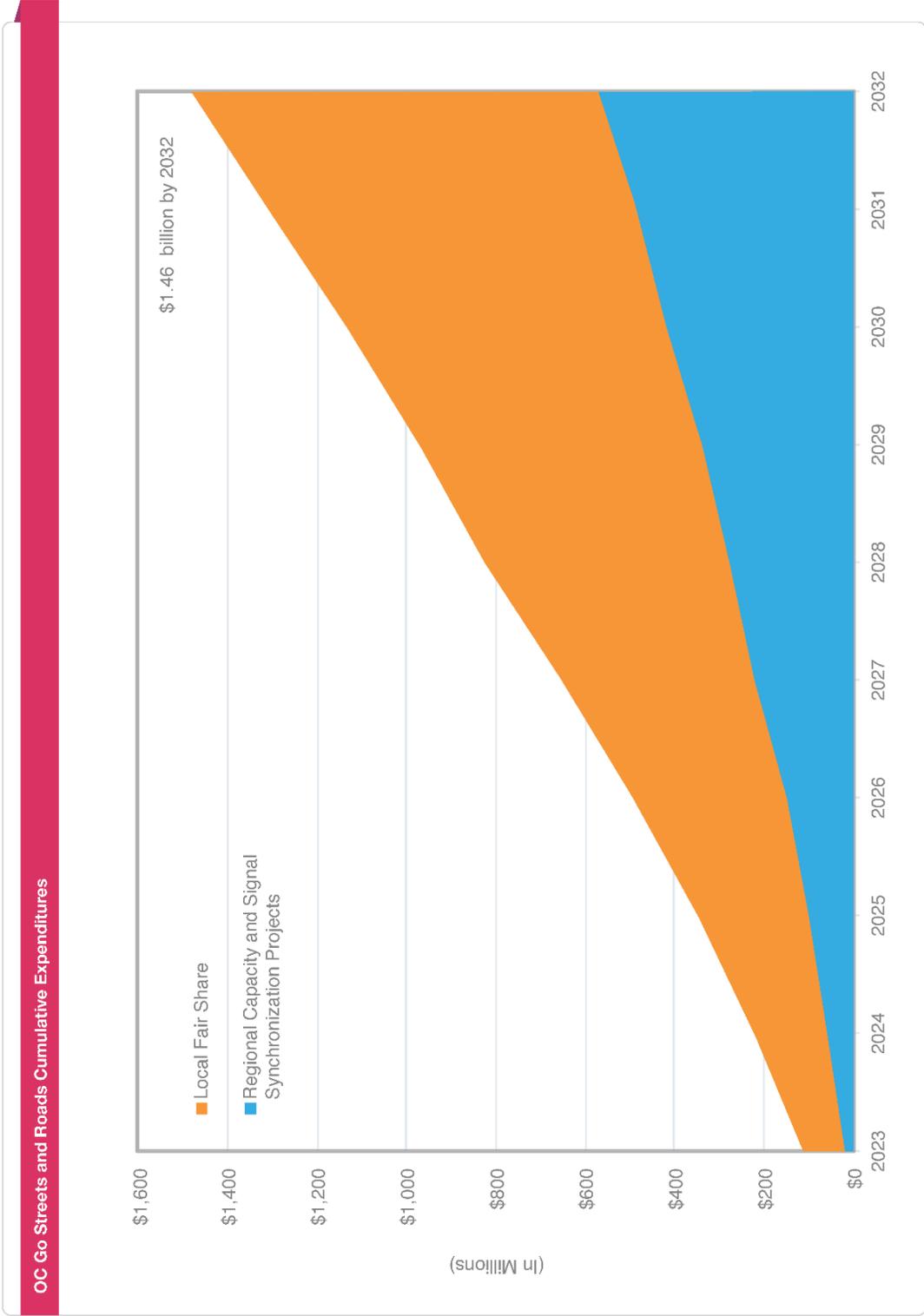
OC GO STREETS AND ROADS PROGRAM



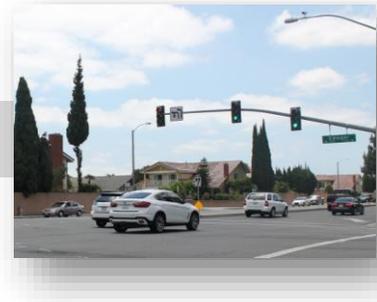
updated 8.10.23

- Ⓞ **Regional Capacity Program**
 - Competitive funding program with annual call for projects for roadway improvements (not mapped)
 - OC Bridges Grade Separation Projects
- Ⓟ **Regional Traffic Signal Synchronization Program**
 - Competitive funding program with annual call for projects for signal coordination
- Ⓞ **Local Fair Share Program**
 - Flexible funding to local jurisdictions for street maintenance and improvements (not mapped)

Exhibit 2.2.2 OC Go Streets and Roads Cumulative Expenditures



2.2. 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.

Within this program is 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. For more details, see Section 3.1 of the Appendix.

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 eliminated delays caused by trains.

Program Funding:

RCP: \$462.67 million between 2023 and 2032.

Status:

To date, OCTA has awarded \$387.63 million, which includes \$32.25 million in M1 and external funding, to 180 projects through 13 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 seven projects to date which qualified for and were awarded State-Local Partnership Program funds, amounting to approximately \$22.98 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 Program Guidelines
- Orange County MPAH Guidelines
- Capital Funding Program Report – Local Road Project (August 2023)

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:

\$182.74 million between 2023 and 2032.

Status:

As of June 2023, OCTA has funded approximately \$162.27 million, including \$30.48 million in M1 and external funding, to 131 projects. Since 2008, 101 corridor-based signal synchronization projects have been implemented, 27 are planned or underway, and three have been cancelled. Annual calls are planned for projects between 2023 and 2032. 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 101 corridors with 3,522 intersections covering 903 miles of roadway. On the average, each project resulted in a 13 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 call. In all, external funding (not including funds provided by

P. Regional Traffic Signal Synchronization Program

local jurisdictions) contributed is approximately \$30.48 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 (August 2023)

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 \$900.47 million will be provided between 2023 and 2032.

Status:

As of June 2023, approximately \$660.19 million⁶ 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.

⁶ Only includes disbursed funds. On May 22, 2023, the Board determined the City of Cypress ineligible to receive net M2 revenues. Disbursements of net M2 revenues have been suspended until the City of Cypress achieves compliance and the Board reconsiders the matter at a future meeting.

Q. Local Fair Share Program

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 (August 2023)

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Transit Programs

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Exhibit 2.3.1. OC Go Transit Programs Map



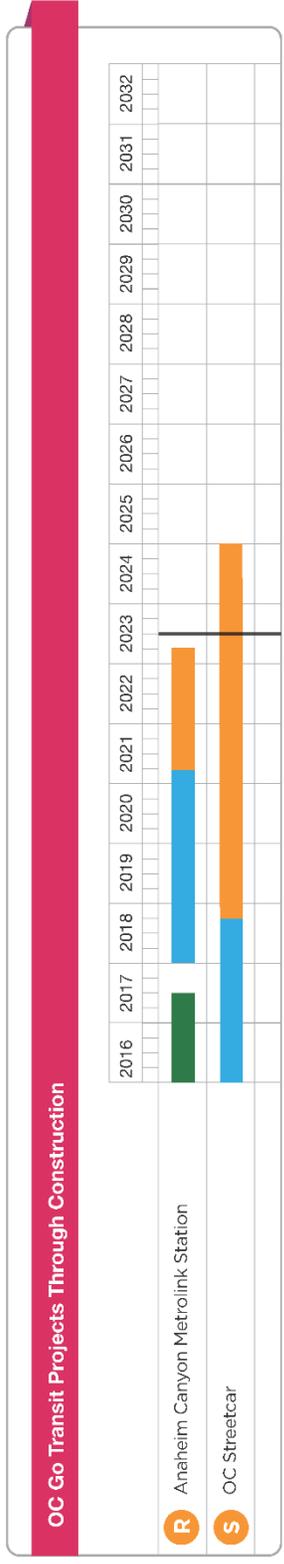
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<p>R High Frequency Metrolink Service</p> <ul style="list-style-type: none"> - Metrolink Grade Crossing Improvements  - Metrolink Station Improvement Projects  - Planned Metrolink Station  - Laguna Niguel-San Juan Capistrano Passing Siding Project  - Sand Canyon Grade Separation Project  <p>S Transit Extensions to Metrolink</p> <ul style="list-style-type: none"> - Bus and Station Van Extension Projects (not mapped) - OC Streetcar  	<p>T Metrolink Gateways</p> <ul style="list-style-type: none"> - Anaheim Regional Transportation Intermodal Center (ARTIC)  <p>U Expand Mobility Choices for Seniors and Persons with Disabilities (countywide, not mapped)</p> <ul style="list-style-type: none"> - Senior Mobility Program - Senior Non-Emergency Medical Transportation - Fare Stabilization Program <p>V Community Based Transit/Circulators </p> <p>W Safe Transit Stops (countywide, not mapped)</p>
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Exhibit 2.3.2. OC Go Transit Projects Through Construction



Environmental Design/Advertise & Award Construction



Please note that schedules are updated as of June 30, 2023. Shown schedules are subject to change.

2.3. 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 Funding:

Approximately \$445.77 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 rail improvement project was completed during the Next 10 Plan time frame: The Anaheim Canyon Metrolink Station improvement project, which began construction in May 2021 and was completed in January 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 and protection in San Clemente, Metrolink Preventive Maintenance Capitalized Operation, Metrolink

R. High Frequency Metrolink Service

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. 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: STIP, Propositions 1A, 1B, and 116, and TIRCP totaling \$291.80 million.

Federal: CMAQ, the Surface Transportation Block Grant Program, and FTA Sections 5307, 5309, and 5337, totaling \$467.99 million.

Other Local: Local funding from the cities as well as other entities is programmed for \$86.96 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. Metrolink is currently operating Orange County rail services at approximately 85 percent of pre-pandemic levels. Despite ridership continuing to improve quarter-over-quarter, ridership is still below pre-pandemic levels. 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 2031-32. Staff has identified and is proposing to program TIRCP formula funds to help sustain Metrolink service. If this is approved in the coming months, this infusion of external funds is anticipated to extend Metrolink operations through FY 2037-38. OCTA will continue to actively engage with Metrolink and the other member agencies to monitor ridership levels and the financial impacts to M2.

Another impact to Metrolink in Orange County is the railroad track stabilization effort in the City of San Clemente; OCTA owns the railroad ROW in the affected area. In September 2021, a failing slope severely degraded the railroad track structure [Mile Post (MP) 206.8]. Emergency repair efforts were taken between late 2021 and early 2022. However, 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

R. High Frequency Metrolink Service

OCTA to take all necessary actions to address the emergency need for railroad track stabilization. On April 17, 2023, track stabilization efforts were sufficiently completed to allow the passenger rail service to resume.

However, a hillside owned by the City of San Clemente at the Casa Romantica Cultural Center and Gardens (MP 204.6) failed and continues to incrementally move. Landslide debris continued to crumble down the slope and foul the tracks owned by OCTA, which again led to the suspension of all passenger rail services in the City of San Clemente and south Orange County on April 27, 2023. On June 26, 2023, the Board adopted a resolution to authorize OCTA to take all necessary actions to address the emergency need for railroad track protection. Construction on a temporary barrier wall at the bottom of the slope to protect the railroad track was completed on July 16, 2023. As a result, service through San Clemente resumed on July 17, 2023.

To date, OCTA has invested \$12 million of M2 funds along with \$16 million of State and Federal funds to ensure the safety of the railroad track. While emergency work has been completed and service has resumed, long-term solutions need to be developed to ensure the ability to provide rail service in this portion of the County. In partnership with key stakeholders, a planning study is currently underway to identify and evaluate short- and medium-term solutions with the goal of protecting the rail line in place. A separate study will

follow to evaluate potential long-term solutions which may include relocation of the rail line. The lead agency for the long-term study has not been identified.

The Next 10 Plan is reviewed annually, which will provide OCTA the opportunity to update and adjust assumptions as needed.

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 2023)

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 \$444.79 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 \$280.09 million in federal funds from federal American Rescue Plan, CMAQ, FTA Section 5307 and 5309, and New Starts funding, and \$175.43 million in state funds, totaling \$455.52 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 (April 2023)
- Capital Funding Program Report - Rail Project (August 2023)

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:

Federal: CMAQ, Regional Surface Transportation Program, FTA Sections 5309 and 5337, FTA Bus Livability, and Highway Safety Improvement Program, totaling \$76.07 million.

State: STIP totaling \$29.22 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 2023)

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 \$173.45 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 2023, there are 32 cities participating in the program.

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 2023, approximately \$48.70 million has supported approximately 142.23 million trips through the Fare Stabilization Program, \$34.50 million⁷ provided nearly \$2.75 million trips through SMP, and \$36.90 million provided \$1.45 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

⁷ Only includes disbursed funds. Only includes disbursed funds. On May 22, 2023, the Board determined the City of Cypress ineligible to receive net M2 revenues. Disbursements of net M2 revenues have been suspended until the City of Cypress achieves compliance and the Board reconsiders the matter at a future meeting.

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:

\$118.44 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.

Of the 35 projects awarded by OCTA, 16 are currently active, three have not yet initiated service (two projects are continuations of existing Project V grants with remaining funds and one project is anticipated to start in July 2023), 13 have been cancelled (primarily due to low ridership), and three have been completed.

Letters of interest in a future call were received by 18 local jurisdictions. Pending Board approval, a 2024 call is anticipated to be released in late 2023 or early 2024.

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, provide non-auto based mobility options that meet specific local needs, and convenient alternative that improves access to regular special events that attract large numbers of visitors (i.e., OC Fair).

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 maintain service performance and ridership by adapting to volatile changes in travel behavior and remote work trends will be key. Regional transit operator shortages and demand for capital investments in electric vehicle infrastructures may impact long-term financial viability of existing services and ability to fund additional new services.

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.

V. Community-Based Circulators

References:

- M2 Eligibility Guidelines
- Comprehensive Transportation Funding Program 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:

\$9.42 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, 56 stops have been completed, 56 stop improvements are either planned or underway, and ten improvements have been cancelled by the awarded agency. A future call will be evaluated based on local jurisdiction interest and cash flow analysis.

Present Day:

High volume stops are eligible for funding, which provides 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 jurisdictions are responsible for amenities at bus stops. Depending on the amenities selected, long-term maintenance and costs could be required. Local jurisdictions must meet eligibility requirements and timely use of funds provisions to receive M2 funding.

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

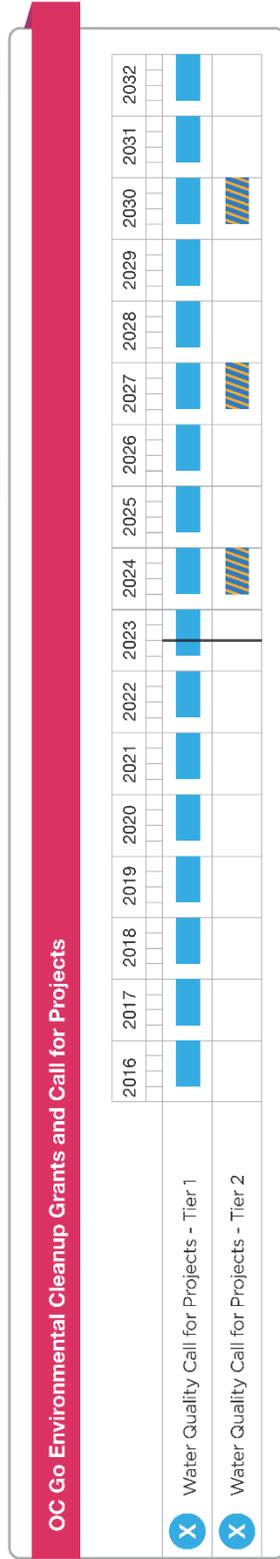
Environmental Cleanup Program

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Exhibit 2.4. OC Go Environmental Cleanup Grants and Calls



Call for Projects
 Call for Projects to be 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.

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2.4. Environmental Cleanup Program



Overview:

The ECP (Project X) allocates approximately \$296 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:

\$87.44 million between 2023 and 2032.

Status:

To date, the Board has awarded over \$33.18 million to fund 212 Tier 1 projects across the County through 12 rounds of funding since M2 inception. The 13th call was released in early 2023 for approximately \$3 million and programming recommendations are

anticipated in August 2023. The Board has also awarded approximately \$27.89 million for 22 Tier 2 projects in 12 cities and the County of Orange.

The 2023 Next 10 Plan will continue to commit to annual Tier 1 calls. A Tier 2 Call is anticipated to be released in early 2024, pending Board approval. The timing for future Tier 2 calls beyond 2024 will be evaluated based on local jurisdiction interest and cash flow analysis.

Present Day:

Staff estimates that nearly 60 million gallons (approximately 138 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
- Comprehensive Transportation Funding Program Guidelines
- Tier 2 Grant Program Planning Study
- OCTA's Comprehensive Business Plan

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NEXT 10 DELIVERY PLAN

Appendix



Local Tax Dollars at Work

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3.1. 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 2023 M2 revenue forecast of \$14.8 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.

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 \$3.58 billion in M2 revenue, \$495.44 million in prior bond proceeds, and \$1.71 billion in state/federal grants, \$89 million in committed TIFIA proceeds, \$486.54 million in net excess 91 Express Lanes revenue for eligible projects, \$33.69 million in interest, and \$20 million transferred in from M1 for a total of \$6.43 billion in total revenue. Costs for the same period total \$5.56 billion (including debt service payments against prior bonding).

For the 2023 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). There are no anticipated bond 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 Exhibit 3.1.1.

Exhibit 3.1.1. Completed M2 Freeway Projects

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 PCH	2017	\$75.3

3.1. Next 10 Plan Funding Assumptions

Completed M2 Freeway Projects		Construction Complete	Cost*
4. Project C	I-5 between PCH 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

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 \$2.67 billion in M2 revenue, \$42.93 million in interest, \$121.62 million in prior bond proceeds, and \$625.78 million in M1 and state/federal grants (primarily for the OC Bridges Program), for a total of \$3.46 billion in total revenue. This includes \$6.69 million in SB 1 and \$10.20 million in Solutions for Congested Corridors Program funding leveraged for Project P. Costs for the same period would total approximately \$3.31 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 Exhibit 3.1.2, increased safety for everyone traveling through the intersections and eliminated delays caused by trains.

Exhibit 3.1.2. Completed OC Bridges – Grade Separation Projects

Completed OC Bridges – Grade Separation Projects		Construction Complete	Cost*
1. Project O	Kraemer Boulevard (Anaheim/Placentia)	2014	\$63.8

3.1. Next 10 Plan Funding Assumptions

Completed OC Bridges – Grade Separation Projects		Construction Complete	Cost*
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	\$96.7
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			\$667.4

*Cost in millions

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 \$2.08 billion in M2 revenue, \$51.68 million in prior bond proceeds, \$589.24 million in external revenue, \$45.65 million transferred from M1, and \$18.24 million in interest for a total of \$2.79 billion. The cash flow includes \$158.36 million in Federal New Starts funding, \$164.36 million in federal CMAQ, \$13.60 million in federal FTA 5307, and \$175.43 million in State Cap-and-Trade for the OC Streetcar project. Expenses for this same time period total \$2.15 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 \$172.76 million in M2 revenue. Expenses for this same time period total \$133.88 million.

3.2. 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
Eastbound Corridor Operations Project	ECOP
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
High-Occupancy Vehicle	HOV
Infrastructure Construction Cost Pressure Index	ICCPPI
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	M2 Ordinance
Pacific Coast Highway	PCH
Regional Capacity Program	RCP
Regional Traffic Signal Synchronization Program	RTSSP

3.2. Common Abbreviations

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 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
Transportation Investment Plan	Plan
United States Army Corps of Engineers	USACE
United States Fish and Wildlife Service	USFWS
Year of Expenditure	YOE