

2018
UPDATE

NEXT 10

DELIVERY PLAN



2017-2026

DRAFT



UPDATED ON SEPTEMBER 10, 2018



On September 10, 2018, the Orange County Transportation Authority (OCTA) Board of Directors (Board) will consider adoption of the Draft 2018 Next 10 Delivery Plan (Next 10). Original commitments from the adopted Next 10 Plan remain largely unchanged with the exception of some required refinements due to changes in forecasted revenue assumptions as well as updated 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**

Next 10 Plan Table of Contents

I. Next 10 Introduction

| | |
|--|----|
| Introduction..... | 2 |
| Measure M2 Timeline | 3 |
| 2018 Review..... | 3 |
| Program Delivery Risks | 3 |
| Guiding Principles..... | 7 |
| Updated Next 10 Deliverables | 7 |
| Oversight and Safeguards | 11 |
| Sustainable Communities Strategy..... | 12 |
| Updated Next 10 Plan Funding Assumptions | 14 |
| Funding and Financing | 16 |
| Future Outlook..... | 17 |

II. The Plan

Freeway Program

| | |
|------------------------------------|----|
| Map of Freeway Projects..... | 20 |
| Next 10 Project Schedules | 21 |
| Program Fact Sheets (A – N) | 24 |
| Freeway Mitigation Fact Sheet..... | 57 |

Streets and Roads Program

| | |
|---|----|
| Map of Signal Synchronization Corridors | 61 |
| Next 10 Project Schedules | 62 |
| Funding Chart | 63 |
| Program Fact Sheets (O, P, and Q) | 64 |

Transit Program

| | |
|---|----|
| Map of Transit Projects | 71 |
| Next 10 Project Schedules | 72 |
| Program Fact Sheets (R, S, T, U, V, and W)..... | 73 |

Environmental Cleanup Program

| | |
|-------------------------------|----|
| Next 10 Project Schedule..... | 87 |
| Program Fact Sheet (X) | 88 |

III. Appendix

| | |
|----------------------------------|----|
| Next 10 Funding Assumptions..... | 92 |
|----------------------------------|----|

2018
UPDATE

NEXT 10 **DELIVERY PLAN**

Introduction

2018 UPDATE NEXT 10 DELIVERY PLAN



Introduction

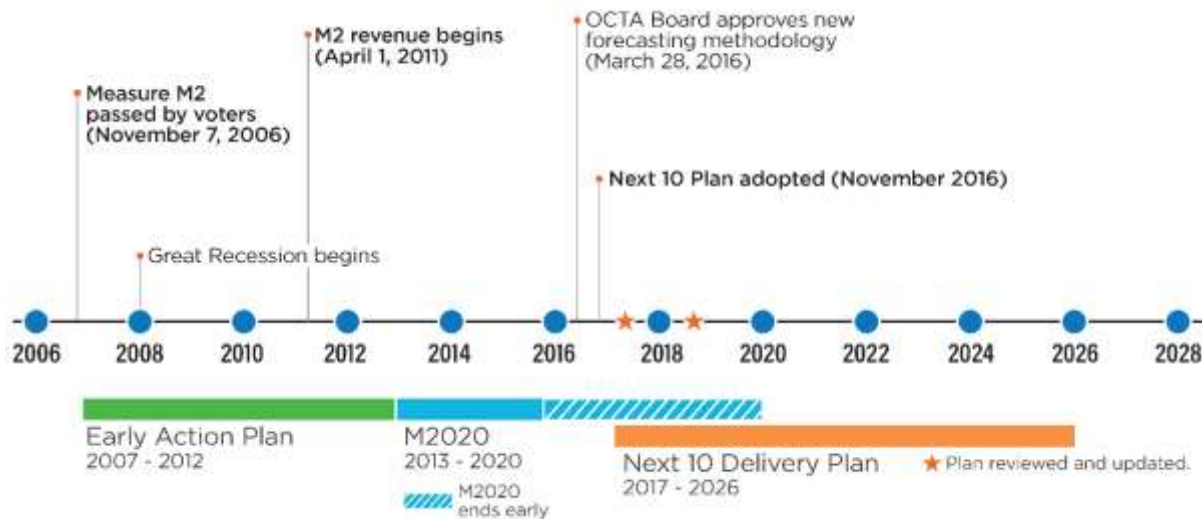
On November 7, 2006, Orange County voters, by a margin of 69.7 percent, approved the renewal of the Measure M one-half cent sales tax for transportation improvements. Voters originally endorsed Measure M in 1990 (M1) with a sunset in 2011. With the approval of Renewed Measure M (M2), the voters agreed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

Since M2 approval, the Orange County Transportation Authority (OCTA) Board of Directors (Board) has continued to advance implementation of M2 through the adoption of a series of early delivery plans. These early delivery plans were designed to ensure the delivery of projects and programs through 2041 as promised to the voters, bring transportation improvements earlier to residents and commuters of Orange County, and as appropriate, address slower growth in sales tax revenue projections through strategic financing and successfully capturing and augmenting the program with external revenue. To date there have been three early delivery plans, these include a five-year Early Action Plan (EAP) adopted in 2007 (completed in 2012), an M2020 Plan adopted in 2012 (intended to go through 2020), and the Next 10 Delivery Plan (Next 10 Plan). The M2020 Plan had to be revised due to a decrease in the sales tax revenue and was replaced with the Next 10 Plan that spans ten years through 2026. See Measure M2 Timeline on the following page.

On November 14, 2016 the Next 10 Plan was approved by the Board providing a blueprint for continued advancement of M2 projects and programs from Fiscal Year (FY) 2016-17 through FY 2025-26. The 2016 adopted Next 10 Plan set M2 project and program priorities and was based on a revenue forecast of \$14.2 billion through 2041. Included with the adoption of the Next 10 Plan in 2016, was Board action to dedicate and set aside local revenues through the allocation of net excess 91 Express Lanes (EL) revenue, in an amount not to exceed the project costs for two eligible projects¹. The 2017 Next 10 Plan incorporated a revised \$13.5 billion revenue forecast and required bonding adjustments and inclusion of the full amount of eligible excess 91 EL revenue. The 2017 update also designated Project I as a priority project for advancement.

¹The two eligible State Route 91 projects are Project I between State Route 55 (SR-55) and State Route 57 (SR-57), and Project J between State Route 241 (SR-241) and the Riverside County line.

Measure M2 Timeline



2018 Review

On July 11, 2018, the Board received an early sales tax revenue forecast of \$13.1 billion. Although this sales tax forecast is preliminary until OCTA is in receipt of final year end actuals, it is not anticipated to vary significantly from the assumed \$13.1 billion forecast. The reduction from \$13.5 to \$13.1 represents a \$400 million gross reduction from what was assumed in the 2017 Next 10 Plan. While a reduction in revenues affects the M2 Program as a whole, in most areas within the M2 Plan, programs can be scaled based on available revenue. The greatest area of risk is within the freeway program because projects cannot be scaled due to set project scopes. The net sales tax revenue reduction to the freeway program is \$127.1 million.

To ensure the delivery of the Next 10 Plan, staff reviewed and updated the cash flow for the complete M2 plan of projects and programs. While the 2018 update incorporates the lower M2 sales tax revenue forecast, OCTA has been fortunate in capturing an additional \$291.8 million in external state and federal funding that was not committed or programmed in the 2017 cash flow. The 2018 revised cash flow incorporates the current M2 revenue assumptions, current programmed external revenue, and revised bonding assumptions. Original project delivery commitments remain unchanged in the 2018 Next 10 Plan, although some refinements were required to account for revised revenue projections and updated project cost estimates and schedules. Through this process, staff confirmed that the 2018 review and update of the Next 10 Plan remains deliverable.

Program Delivery Risks

The Next 10 deliverables for projects and programs are not without risks. While the entire M2 Program continues to demonstrate financial viability and delivery of the complete M2 plan of projects and programs, risks continue to challenge the program. These include

financial, market, organizational, and regulatory risks. A table of risks is included on pages 5 through 7 with some of the key risks highlighted below.

Lower Sales Tax Revenues – OCTA has been challenged over the last six years with revenue forecasts not matching actuals and annual forecast updates coming in lower than the prior year. In March of 2016, the Board adopted a new sales tax forecasting methodology to address this issue. Using the new forecasting methodology, the sales tax forecast has been closer to actuals than in years past. This year's presentations by the four expert economic forecast entities were more conservative than in the prior years. Although this points to the probability of a more accurate forecast going forward, there are no assurances and, hence, the revenue outlook continues to be at risk.

OCTA regularly compares actual sales tax receipts with the forecast and provides updates to the Board quarterly.

Repeal of Senate Bill 1 (SB 1) (Chapter 5, Statutes of 2017) Gas Tax – With the passage of a gas tax increase in 2017, transportation funding was substantially increased and stabilized. If the repeal effort underway through Proposition 6 on the November 6, 2018 ballot is approved and the gas tax funding repealed, committed formula revenues may be impacted. While the M2 cash flow includes only a small amount of direct SB 1 competitive funding, staff anticipates that up to \$170 million of funding commitments programmed in the State Transportation Improvement Program (STIP) for M2 projects could be deprogrammed or delayed, impacting M2 delivery schedules with state funding commitments.

The cash flow update included in the Next 10 Plan assumes current law with the gas tax in place. To ensure the program remained deliverable in the event of a repeal, a second scenario was developed and analyzed with a reduction of \$170.2 million to the cash flow of currently committed state and federal funding. While this remains a net positive showing the full program (through 2041) is deliverable, the full impact of a repeal of the gas tax on programmed external revenues is unknown. More details will be available in late 2018/early 2019 pending the outcome of Proposition 6, and action by the California Transportation Commission on how to demobilize approved projects.

Potential for Cost Increases Impacting Freeway Delivery – In September of 2017, a Next 10 Market Conditions Forecast and Risk Analysis Report was conducted by respected local economists Dr. Wallace Walrod and Dr. Marlon Boarnet and identified a strong potential that OCTA would experience an increasing-cost environment during delivery of Next 10. The Board directed staff to continue to work with the consultant to monitor and track key early warning indicators. Through this follow on effort, the consultant team created a cost pressure index providing a range of potential cost fluctuations. The index identified that OCTA could experience a cost increase of between six to 11 percent during the 2018 through 2020 time period of construction activity. This is discussed further on page 17 in the section discussing Future Outlook.

Project Alternative Selection - In addition to project cost increases as a result of market forces, the freeway program is also at risk of cost impacts during alternative selection in the environmental phase. OCTA is committed to funding projects promised to the voters, and ensuring community and business support, while staying generally within the existing Right-of-Way (ROW). A number of projects are currently moving through the environmental process and alternative selection is, or will be, underway soon. While OCTA provides the funding commitments for the projects, the California Department of Transportation (Caltrans) ultimately makes the decision on alternative selection.

The cash flow of the Next 10 Plan includes estimated project costs based on the current information available. Funding projects that meet the intent of the M2 Plan with community and business support is important to successful delivery of the entire M2 Freeway Program. With the current risk of a cost-increasing environment this makes this even more important that OCTA work closely with our partners including Caltrans.

In order to be successful, OCTA needs to be aware and prepared to manage risks in several areas. A summary table of the risks, explanations, and suggested management actions are identified on the following pages and are tracked and reported in the M2 Quarterly Progress Reports presented to the Board, following each fiscal year quarter.

| Delivery Risk | | Explanation | Proposed Action |
|---------------|---|---|---|
| | On Track | | One to Watch |
| Financial | | | |
| 1 | The 2018 M2 revenue forecast estimate is \$13.1 billion, which represents a 46 percent decrease in forecasted revenue since M2 adoption. If sales tax revenue continues to be lower than projections, this will further challenge delivery. | Sales tax revenue has been impacted by the recession and changes in consumer spending habits. | The 2018 lower forecast results in greater reliance on external funding to deliver the entire Freeway Program as listed. OCTA will continue to actively pursue available state and federal revenue, and work with the Caltrans to identify cost effective freeway alternative options for approval. |
| 2 | SB 1 gas tax repeal (Prop 6) on November 6, 2018 ballot. | While M2 does not rely on gas tax funding, if Prop 6 passes and SB 1 is repealed, there is a likelihood that current state funding commitments in the STIP for M2 projects could be impacted and could delay M2 freeway delivery schedules. | The 2018 update of the M2 cash flow included a sensitivity run with lower external revenue to test the adopted version. With assumptions on programming impacts of a repeal, the cash flow remains financially solvent. However, the true impact will not be known until decisions are made following an actual repeal. |
| 3 | Inability to scale the Freeway Program to available revenue and still deliver the promise. | The freeway program includes set project scopes leaving very little flexibility in what is delivered. | OCTA will work closely with Caltrans to value engineering strategies on freeway projects. |

| | | | |
|-----------------------|---|---|---|
| 4 | Delay in receipt of OC Streetcar Full Funding Grant Agreement (FFGA) from the Federal Transit Administration (FTA), could impact the overall delivery schedule. | While the FTA and the Congressional delegation continue to show strong support for the project, authorization for the New Starts FFGA remains outstanding. | Continue to communicate the merits of the OC Streetcar and need for swift action on receipt of the FFGA to FTA, Congress, and the Administration. Move cautiously to protect the delivery schedule while at the same time minimizing financial risk. |
| 5 | Sustain Metrolink train service, as an attractive alternative to driving in Orange County with the limits of available revenue. | Operational cost of Metrolink service continues to grow as system ages, track-sharing arrangements with Burlington Northern Santa Fe Railway (BNSF) are revised, and new air quality requirements. These changes may impact service long term. | Staff will continue to work closely with Metrolink and our partners to ensure cost increases are minimized, while seeking external revenue. |
| 6 | The Next 10 Market Conditions Forecast and Risk Analysis identified strong potential for an increasing-cost environment during the Next 10 delivery years. | A construction cost pressure index model was created to provide insight on forecasting capital costs. The index tracks four near-term cost risks: economic trends (building permits and unemployment), material costs, wage pressures, and economic conditions. | OCTA will continue to monitor and track key early warning indicators as recommended and include a program level line item for an economic uncertainty allowance in the freeway cash flow. This is intended to safeguard the program and protect against overcommitting during this time of uncertainty. |
| Organizational | | | |
| 7 | Availability of specialized staff, given the scope of the M2 capital program. | External demand for key talent is becoming more of an issue as large infrastructure programs move forward in the region. Timely completion of engineering and construction related support of the capital program is key to reduce project delivery risk. | Expert and timely coordination between OCTA and Caltrans are imperative to manage this risk. Staff is currently working with Caltrans to ensure resource needs are met. Internally OCTA's Human Resources Division continues to implement programs to retain and attract talent. |
| 8 | New operational responsibilities with the OC Streetcar. | With the implementation of the OC Streetcar service, OCTA will be increasing its overall role in operations. OCTA holds a strong track record in operating various transportation systems including both a fixed and demand-based bus network. | To ensure success of the OC Streetcar, OCTA hired a streetcar operations manager with proven start-up experience to oversee start-up and daily operations. |

| Regulatory | | | |
|------------|---|--|---|
| 9 | New statewide directives create additional hurdles for the Freeway Program in particular. | New directives with greenhouse gas reductions and managed lane corridors focus, may impact approvals for four of the remaining freeway projects with general purpose lanes that are not yet environmentally cleared. | OCTA will monitor new directives and work closely with our partners including Caltrans to ensure that when freeway improvement projects are reviewed the commitment of the complete M2 program is understood. |

Guiding Principles

During the development of the EAP, guiding principles were established that set the direction for staff on establishing priorities for freeway project acceleration. These guiding principles continue to instruct us today.

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

Updated Next 10 Deliverables

The updated Next 10 Plan is based on ten deliverables intended to provide guidance on program and project delivery during the ten-year period 2017 through 2026. With nearly two years of the ten-year plan complete, progress on the ten deliverables and accomplishments to date is provided.

Freeways

1. Deliver \$3.5² billion of freeway improvements approved through construction.

Status: The M2 freeway program currently consists of 27 projects or project segments. At the point of Next 10 adoption in September 2016, nine were already, and another nine designated to be complete within the Next 10 time-frame. Together, the nine segments designated for completion by 2026 make up a \$3.1 billion delivery promise. Since Next 10 adoption, three segments of the Interstate 5 (I-5) between Avenida Vista Hermosa and San Juan Creek Road, opened to traffic in March 2018, adding six miles of carpool lanes. The remaining six segments are in design or construction. Funded with 91 Express Lanes excess revenues, a tenth project, the SR-91 between SR-57 to SR-55 (Project I) was designated a priority project and is now part of Deliverable 1 and is planned to be

² Project I was originally part of Deliverable 2 as a "shelf ready" project, but through Board action to prioritize and fund with 91 Express Lanes excess revenues, it will be delivered by 2029. This change resulted in an increase of Deliverable 1 from \$3.1 billion to \$3.5 billion however an equal reduction to Deliverable 2, the net freeway deliverables remain at \$4.3 billion total.

complete by 2029. With this project, OCTA will deliver \$3.5 billion of freeway improvements approved through construction.

| Completed | | | Year |
|------------------|------------------------|--|-----------------------|
| 1. | Project C | I-5, Vista Hermosa to PCH | 2017 |
| 2. | Project C | I-5 between Avenida Pico and Avenida Vista Hermosa | 2018 |
| 3. | Project C | I-5 between Pacific Coast Highway and San Juan Creek Road | 2018 |
| In Construction | | | Construction Complete |
| 4. | Project K | I-405 between SR-73 and I-605 | 2023 |
| In Design | | | Construction Complete |
| 5. | Project A | I-5 between SR-55 and SR-57 | 2021 |
| 6. | Project C,D | I-5 between Oso Pkwy and Alicia Pkwy/La Paz Road Interchange | 2023 |
| 7. | Project C | I-5 between Alicia Parkway and El Toro Road | 2024 |
| 8. | Project C, D | I-5 between SR-73 and Oso Pkwy/Avery Pkwy Interchange | 2024 |
| 9. | Project F | SR-55 between I-405 and I-5 | 2025 |
| In Environmental | | | Construction Complete |
| 10. | Project I ¹ | SR-91, SR-57 to SR-55 | 2029 |

SR-71 – State Route 71 / SR-22 – State Route 22 / I-405 – Interstate 405 / SR-73 – State Route 73 / I-605 – Interstate 605

2. Invest approximately \$715³ million more in revenues, bringing the completed Freeway Program improvements to \$4.3 billion (Projects A-M).

Status: The final eight remaining project segments (of the 27 total) are on track to be environmentally cleared by 2026, making them “shelf ready” for future advancement. In all, during the Next 10 time-period, approximately \$4.3 billion in freeway improvements promised to the voters in M2 will be completed or underway by 2026. Using the guiding principles adopted by the Board, Deliverable 2 includes approximately \$715 million in funding to move another project (or projects) directly into design and construction if assumptions on revenues and costs hold.

| In Environmental | | | Scheduled to be Cleared |
|------------------|-----------|--|-------------------------|
| 1. | Project L | I-405 between I-5 and SR-55 | 2018 |
| 2. | Project M | I-605 Katella Avenue Interchange | 2018 |
| 3. | Project G | SR-57 NB Orangetown Avenue to Katella Avenue | 2019 |
| 4. | Project B | I-5 between I-405 and SR-55 | 2019 |
| 5. | Project D | I-5 El Toro Road Interchange | 2019 |
| 6. | Project F | SR-55 between I-5 to SR-91 | 2020 |

³ Because Project I is now included with Deliverable 1, the original Deliverable 2 investment of \$1.2 billion has been reduced to \$715 million. The overall freeway deliverable commitment remains the same at \$4.3 billion.

| Begin Environmental in ~FY 2020 | | Anticipated to be Cleared by |
|---------------------------------|--|------------------------------|
| 7. | Project G SR-57 NB Lambert Road to County Line | 2023 |
| 8. | Project J SR-91 between SR-241 and I-15 | 2026 |

Streets and Roads

- 3. Allocate nearly \$1 billion with \$400 million in competitive funding to local jurisdictions to expand roadway capacity and synchronize signals (Project O and P) and nearly \$600 million in flexible funding to local jurisdictions to help maintain aging streets or for use on other transportation needs as appropriate (Project Q). In addition to above, this deliverable also includes completion of the seven grade separations included in the OC Bridges program.**

Status: All seven bridges included in the OC Bridges program are complete. Since the adoption of the Next 10 Plan in November 2016, OCTA awarded approximately \$82 million in competitive funding through the Regional Capacity Program (Project O) and Regional Traffic Signal Synchronization Program (Project P). Additionally, \$98.1 million in Local Fair Share (Project Q) funds have been distributed to local agencies. This brings the total allocation to date to \$188.1 million. On August 13, 2018, the Board approved the release of the 2019 Call for Projects for approximately \$32 million for Project O and \$8 million for Project P and funding recommendations will be presented to the Board by mid-2019.

Transit

- 4. Extend Metrolink service from Orange County into Los Angeles County, contingent upon cooperation and funding participation from route partners, complete six rail station improvements (Project R).**

| Completed | Year |
|--|--|
| 1. San Clemente Pier Metrolink/Amtrak Station Lighting | 2017 |
| 2. Laguna Niguel/Mission Viejo Station American Disabilities Act Ramps | 2017 |
| In Construction | Complete Construction |
| 3. Fullerton Transportation Center Elevator Upgrades | 2018 |
| 4. Orange Station Parking Structure | 2019 |
| In Design | Anticipated Construction Complete |
| 5. Anaheim Canyon Metrolink Station | 2021 |
| 6. Placentia Metrolink Station | 2021 |

- 5. Secure FFGA, start construction, oversee vehicle manufacturer and begin operating the OC Streetcar (Project S) and work with local agencies to consider recommendations from planning studies to guide development of future transit connections.**

Status: OC Streetcar - Activities continue to move forward, including final possession of remaining required ROW, procurement of demolition services, coordination with third parties on utility relocation, finalizing the California Public Utilities Commission safety approvals for the OC Streetcar's grade crossings certification, finalizing the scope of services for the operations and maintenance request for proposals, and continued coordination with the FTA on the status of the FFGA. The streetcar vehicle manufacturing contract has been executed and the notice to proceed has been issued.

The FTA continues to show strong support for the project, and a FFGA is anticipated in 2018.

Status: OC Transit Vision - The draft Transit Master Plan was presented to the Board in February 2018. The plan included an action plan which was divided into short, medium and long-term recommendations. The Board directed staff to consider the plan in the upcoming Long-Range Transportation Plan process. Staff will be advancing many of the short-term action plan items over the next year.

- 6. Provide up to \$115 million in funding to expand mobility choices for seniors and persons with disabilities (Project U).**

Status: Approximately \$20.2 million has been provided for the Senior Mobility Program (SMP), the Senior Non-Emergency Medical Transportation Program (SNEMT), and the Fare Stabilization Program since the Next 10 Plan adoption.

- 7. Work with local agencies to develop a plan for the next community circulator projects to provide grant opportunities for local agencies to implement efficient local transit services (Project V).**

Status: In December 2017, OCTA staff requested letters from local agencies to determine interest for a future round of Project V funding. OCTA received 13 letters of interest and in February 2018, the Board initiated a 2018 Project V Call for Projects. On June 25, 2018 the Board awarded \$6.8 million to fund six Community-Based Transit Circulators Projects.

- 8. Allocate up to \$7 million in funding to improve the top 100 busiest bus stops and support the modernization of the bus system to enhance the customer experience (Project W).**

Status: To date, the Board has approved up to \$1.2 million to support 51 city-initiated improvements and \$370,000 for OCTA-initiated improvements. The City of Anaheim postponed development of eight stops and plans to move forward in a future funding cycle. Of the remaining 43 stops, 14 stops have been completed and the remaining 29

stops are in the project closeout process. An additional funding cycle is anticipated in 2019.

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.

Status: In 2017, OCTA received biological resource permits after completing a state and federal Natural Community Conservation Plan/Habitat Conservation Plan (Conservation Plan) for the Environmental Mitigation Program (EMP), allowing streamlined project approvals for the freeway improvement projects. The Conservation Plan also includes a streamlined process for coordination for streambed alternation agreements. In January 2018, the OCTA secured programmatic permits and assurances for federal and state clean water permitting requirements. Receipt of these permits represent the culmination of years of collaboration and support by the Board, environmental community, and regulatory agencies.

To ensure ongoing preservation of the open space, an endowment was established to pay for the long-term management of the conservation properties (Preserves). The second deposit into the endowment was made in August 2017, and approximately \$2.9 million will be deposited on an annual basis.

10. Work with the Environmental Cleanup Allocation Committee to develop the next tiers of water quality programs with a goal of providing up to \$40 million in grants 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 (Project X).

Status: Since adoption of the Next 10 Plan in November 2016, OCTA issued two calls for Tier 1 Environmental Cleanup Program (ECP) projects. The Board awarded approximately \$3.1 million to fund Tier 1 projects during the 2017 annual call for projects. The 2018 Tier 1 Call for Projects was released on March 12, 2018 and funding recommendations are anticipated in late summer.

In total, during the Next 10 time period (2017-2026) more than \$6 billion in transportation improvements promised to the voters in M2 will be completed or underway by 2026.

Oversight and Safeguards

The 2018 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 will continue to be included in the M2 Quarterly Progress Reports that are prepared for the Board. These reports are included on the OCTA website, as well as other means, to

ensure accessibility and transparency of the information. Contact information for the OCTA staff member responsible for each program or project is included.

Additionally, as specified in the M2 Ordinance No. 3, Section 10, there will be three performance assessments conducted during the Next 10 time period. Performance assessments are to be conducted at least once every three years to evaluate the efficiency, effectiveness, economy, and program results of OCTA in satisfying the provisions and requirements of the M2 Plan and Ordinance No. 3. These assessments will take place during years 2018 (currently underway), 2021, and 2024.

Also included in Ordinance No. 3, Section 11, the second ten-year comprehensive review of M2 programs and projects will be initiated at the end of the Next 10 time period. Due to the early initiation of project development activities prior to the start-up of revenue collection in 2011, the first review was completed in fiscal year 2015. The second review is planned to take place in fiscal year 2025 (or sooner if warranted) and will determine the basis for setting the direction of future refinements to the M2 Plan. The ten-year review includes a comprehensive review of all projects and programs implemented under the M2 Plan to evaluate the performance of the overall program and may result in revisions to further improve performance.

Sustainable Communities Strategy

It is important to note that M2 also supports and enhances the ability of OCTA to support the regional Sustainable Communities Strategy in Orange County. M2 projects and programs are part of a larger suite of transportation improvements included in the 30-year M2 Plan. More than 50 percent of M2 funds are intended to fulfill transit, system optimization, enhanced environmental elements and infrastructure preservation goals.

The M2 Program was publicly reviewed through a Program Environmental Impact Report 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 Environmental Impact Reports prepared by the Southern California Association of Governments (SCAG).

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 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, the ECP has funded over 176 projects totaling over \$48 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 to provide emission reductions through congestion relief
- ✓ Projects O and P – Signal synchronization and street improvements that provide emission reductions through congestion relief and allow for bike and pedestrian project elements
- ✓ Project Q – Local funding for city-selected transportation projects that provides for preservation of the streets and roads system and includes bike, pedestrian, water quality, and transit enhancements as eligible expenditures
- ✓ Project R – Expanded Metrolink train capacity including improvements to stations and parking to improve transit reliability and convenience and reduce reliance on highways while also supporting potential transit-oriented development
- ✓ Project S – Transit extensions to improve access between Metrolink stations and residential/employment centers, and provide an alternative to driving
- ✓ Project T – Station improvements to connect to planned future High-Speed Rail services
- ✓ Project U – Sustain mobility choices for seniors and persons with disabilities and provides an alternative to driving
- ✓ Project V – Community-based circulators to complement regional transit services with local communities and provides an alternative to driving
- ✓ Project W – Transit stop improvements to support transfers between major bus lines, and support the implementation of mobile ticketing to ensure ease of fare purchase and convenience for bus passengers
- ✓ Project X – Water quality improvement programs/projects to meet federal Clean Water Act standards for urban runoff, and augment required mitigations
- ✓ Freeway Mitigation Program – Natural resource protection strategy to provide for more comprehensive mitigation of environmental impacts from M2 freeway improvements

Updated Next 10 Plan Funding Assumptions

Funding assumptions are included in the 2018 Next 10 Plan. The revenue assumptions of \$13.1 billion are based on the latest 2018 M2 revenue forecast. The 2018 revenue forecast results in a 46 percent reduction from the original 2005 sales tax projection of \$24.3 billion.

The Next 10 cash flow incorporates the revised revenue forecast of \$13.1 billion, as well as the contribution from the Transportation Infrastructure Finance and Innovation Act (TIFIA) in the amount of \$153.9 million, which is a contribution to the M2 general purpose lane project of the \$629 million TIFIA loan. This amount is a direct benefit to the M2 portion of the I-405 Improvement Project, as the loan will be repaid with toll revenues and not with M2. The cash flow also incorporates updated project cost estimates for all M2 Program elements, as well as committed programmed state and federal external revenues.

In addition to state and federal funding commitments, the cash flow also assumes the availability of a reasonable amount of federal and/or state funds from 2017 to 2041 and makes specific assumptions about near-term grants such as New Starts. Additionally, per the Board's direction, the cash flow also includes net excess 91 Express Lanes revenue within the freeway program for projects in the 91 corridor (as defined by the 91 Express Lanes governing legislation), in an amount not to exceed the total cost of Project I and Project J.

Revenues and expenses are merged into a high-level cash flow model. Bond assumptions are also included to support the project delivery schedules in the Freeway Program. Bond assumptions are constrained to debt coverage ratios, and the Appendix on page 92 of the 2018 Next 10 Plan includes a more detailed discussion on assumed revenues, costs, and debt service.

For the 2018 Next 10 Plan development, forecasted revenues and costs through 2041 were tested. This effort was conducted to ensure the complete M2 Program could be delivered consistent with commitments provided to the voters as part of M2 approval in November 2006. While a reduction in revenues affects the M2 Program as a whole, in many areas within the M2 Plan, programs can be scaled based on available revenues. The areas where this is not possible is in the Freeway Program due to set scopes for project delivery, and the Fare Stabilization Program portion of Project U within the Transit Program. The net freeway program loss in forecasted revenues from last year when the Next 10 was updated and adopted is \$127.1 million.

The funding assumptions in the freeway mode assume \$9.6 billion in total revenue, with costs for the same period totaling \$9.5 billion. OCTA has been very successful in capturing external funding in past years to offset the reduction in sales tax revenue and in the past year alone, net external revenue for the freeway program increased by \$291.9 million that was not available or programmed in the prior version of Next 10. While sales

tax revenue is down, the additional external revenue has resulted in a net positive revenue in the freeway program of \$164.8 million.

With the 2018 Next 10 Plan, each project in the freeway program was reviewed and cost estimates updated. With the majority of the projects now either in the environmental phase or in design, project cost estimates have a higher level of engineering and are therefore better defined. While some project costs increased, others decreased and resulted in a net decrease of \$278.8 million. This cost reduction, in tandem with the amount of external revenue captured and the resulting reduction in bonding need, provides an overall M2 revenue savings in the freeway program. Given concern over the potential of entering an increasing cost environment, this savings allowed for the addition of a 13 percent program level expense line item in the cash flow for an economic uncertainty allowance. This provides some financial protection against rising costs or lower revenues. This is discussed further on page 17 in the section discussing Future Outlook. These changes along with revised bonding assumptions, results in a delivery plan (through 2041) that remains solvent.

The long-term M2 freeway plan relies on the total receipt of \$1.6 billion in state and federal revenues. This assumes \$1.5 billion in programming commitments (this number is inclusive of \$46 million from Caltrans for Project F Segment 1, and \$153.9 million in TIFIA proceeds). Additionally, the program assumes \$1.9 billion in bond proceeds, and \$741.7 million in net excess 91 Express Lanes revenue, and \$10 million a year (a conservative amount of unprogrammed revenue) beginning in 2022 through 2036 in federal and/or state funds.

The funding assumptions in the streets and roads mode assume \$4.7 billion in total revenue, with costs for the same period totaling \$4.7 billion. The projects within the Streets and Roads Program are scaled to available revenue and are cash flowed on a pay-as-you-go basis. The Streets and Roads Program relies on the total receipt of \$601.1 million in external revenues (state, federal, and local) primarily for the OC Bridges grade separation projects. More detailed program assumptions for the Streets and Roads Program can be found in the Appendix on page 95.

For the transit mode, \$3.7 billion in total revenue is assumed, with costs for the same period totaling \$3.7 billion. The projects within the Transit Program are scaled to available revenue with the exception of one, Project U's Fare Stabilization Program. Ordinance No. 3 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 2041. While this program is not scalable, it remains solvent. 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 \$526.8 million in local, state and federal revenues. This number is inclusive of \$148.96 million in Federal New Starts and \$25.52 million in State Cap-and-Trade revenues to partially fund the OC Streetcar project. More detailed program assumptions for the Transit Program can be found in the Appendix on page 95.

The ECP assumes \$260 million in total revenue, with costs for the same period totaling \$260 million. The projects within the ECP are scaled to available revenue and are cash flowed on a pay-as-you-go basis. More detailed program assumptions for the ECP can be found in the Appendix on page 95.

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

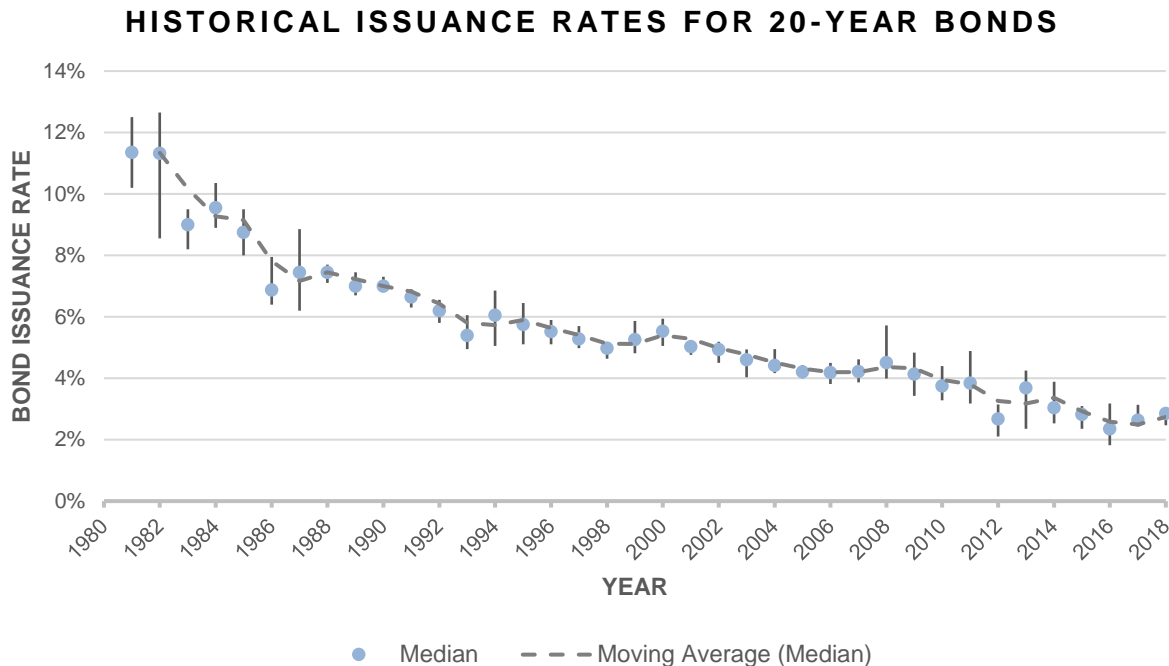
Funding and Financing

The Board's vision in developing the EAP created a great opportunity for the M2 Program. While the economy took a significant downturn due to the 2008 Great Recession, OCTA advanced projects years before revenue became available. Projects were accelerated, making them shelf-ready. This allowed OCTA to capture significant one-time external funding provided through State Proposition 1B and the American Recovery and Reinvestment Act. Using the revised forecasting methodology implemented in March 2016, the 2018 M2 sales tax revenue forecast is \$13.1 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 10 to 20 percent below engineers' estimates. Since that time, construction bids have been coming in closer to the engineers' estimates. Looking forward, it is anticipated that construction bids will begin to exceed the engineers' estimates (requiring estimates to adjust upward), which will put additional cost pressure on OCTA's delivery of M2 and the Next 10 Plan. This is a result of several factors. First, with the economy picking up, the demand for contractors has increased which results in less competition and higher bids. Additionally, the large amount of construction activity in the region is putting significant demand on available resources. This includes materials and skilled and professional labor resources.

To address the risk of cost increases and ensure a positive cash flow moving forward during Next 10 freeway delivery, staff incorporated a 13 percent economic uncertainty allowance line item into the freeway program cash flow in FY 2019 and through 2029. This is included at the program level and will provide financial stability in the event of a significant turn of events while projects within the Next 10 Plan move into and through construction.

Pay-as-you-go project funding is identified in Ordinance No. 3 as the preferred method of financing, while bond financing is an option that is within the purview of the Board. While the current cost of debt has increased it continues to be attractive relative to historic lows. Current 20-year bond rates remain at 2.89 percent versus all-time lows of 1.82 percent. While short-term rates increased significantly, long-term rates remain near all-time lows, producing a relatively "flat" yield curve that allows OCTA to take advantage of attractive mid- and long-term rates. See the graph below showing historical issuance rates of 20-year bonds.



OCTA has a strong track record of successfully delivering projects early by utilizing bond financing, as seen in M1, as well as M2, under the EAP and M2020 Plan. The updated Next 10 Plan anticipates bond financing for the Freeway Program as a means to deliver the freeway projects.

Future Outlook

As noted in the Risks section starting on page 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, ROW experts, skilled labor, and materials will be in higher demand.

On September 11, 2017, the Board was presented with a Next 10 Market Conditions Forecast and Risk Analysis report conducted by economists Dr. Wallace Walrod and Dr. Marlon Boarnet. The consultant's analysis identified strong potential for OCTA to experience an increasing-cost environment during the Next 10 delivery years. The Board directed staff to continue to work with the consultant team to monitor and track key early warning indicators and provide OCTA information on changes to the risk factors and potential cost impacts. The consultant team analyzed annual trends in material costs, labor costs, and general economic conditions to determine a range of potential cost increases. Looking out at a time horizon through 2020 the team tracked relevant market data and indicators and performed data analytics on this information. This analysis resulted in the creation of a cost pressure index which provides a range of potential cost fluctuations. Using the Infrastructure Construction Cost Pressure (ICCP) Index, combined

with a detailed trend analysis of building permits, unemployment rates, localized labor costs, material costs and general economic conditions; the consultant estimates potential cost increases ranging from six percent to 11 percent in 2018, two percent to six percent in 2019, and two percent to six percent in 2020.

| OCBC OC Transportation ICCP Index Score, 2018-2020 | | |
|--|-------------|---------------------------|
| Year | Index Score | Range of Cost Fluctuation |
| 2018 | 4 | 6%-11% |
| 2019 | 3 | 2%-6% |
| 2020 | 3 | 2%-6% |

The consultant further shares that OCTA will need to be aware and ready to respond to two different cost pressure groupings which are described as systematic and idiosyncratic. Systematic risks have characteristics that are observable and more predictable. Systematic risks are captured in the ICCP Index through the cost pressure model. Cost pressures in this group are reflections of the construction/building environment, the state's economy (which influences both the demand for construction services and the cost of construction labor and materials), and direct measures of material and labor costs.

Idiosyncratic risks are cost pressures which cannot be statistically modeled. These cost pressures are not related to historic or observable economic factors but are still real risks that may be important and warrant careful tracking. The consultant pointed to cost pressures in the idiosyncratic group as:

- Tariffs, and associated effects on cost of materials from the nation's changing trade policy,
- Regulatory requirements and changes that create additional hurdles during the bidding process.

In order to mitigate cost pressures, OCTA's Project Controls Department monitors and adjusts project cost escalation assumptions according to market trends. Project Controls makes use of schedule control, cost control, progress reporting, and change management to effectively monitor and control project escalation and execution. Imbedded in the Next 10 are cost assumptions based on historical information, current trends in the market, as well as review of the Caltrans Construction Cost Index. Higher cost assumptions are included on some elements of projects based on assessed potential risk. OCTA's current assumptions developed by OCTA's Capital Programs Project Controls Department, assumes a four percent escalation in the near term (next three years), and then three and one-half percent escalation for projects beyond 2022. Project cost estimates also include a prudent contingency specifically developed for the project based on the individual project risks. Additionally, to further protect against potential cost increases in our freeway capital program and conform to project controls' project estimating process, staff incorporated a 13 percent program level expense line item in the cash flow for an economic uncertainty allowance. This is intended to safeguard the program and ensure that OCTA does not over commit delivery during this time of uncertainty.

2018
UPDATE

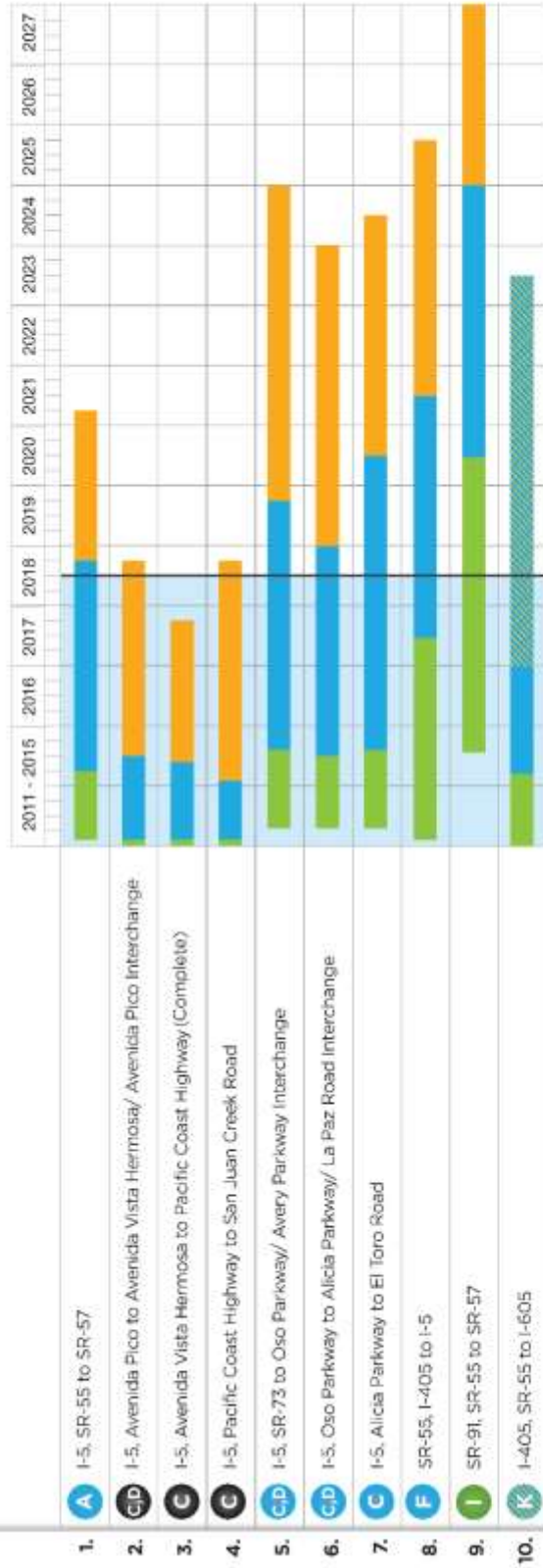
NEXT 10 **DELIVERY PLAN**

Freeway Program

M2 Freeway Projects



M2 Freeway Projects Through Construction



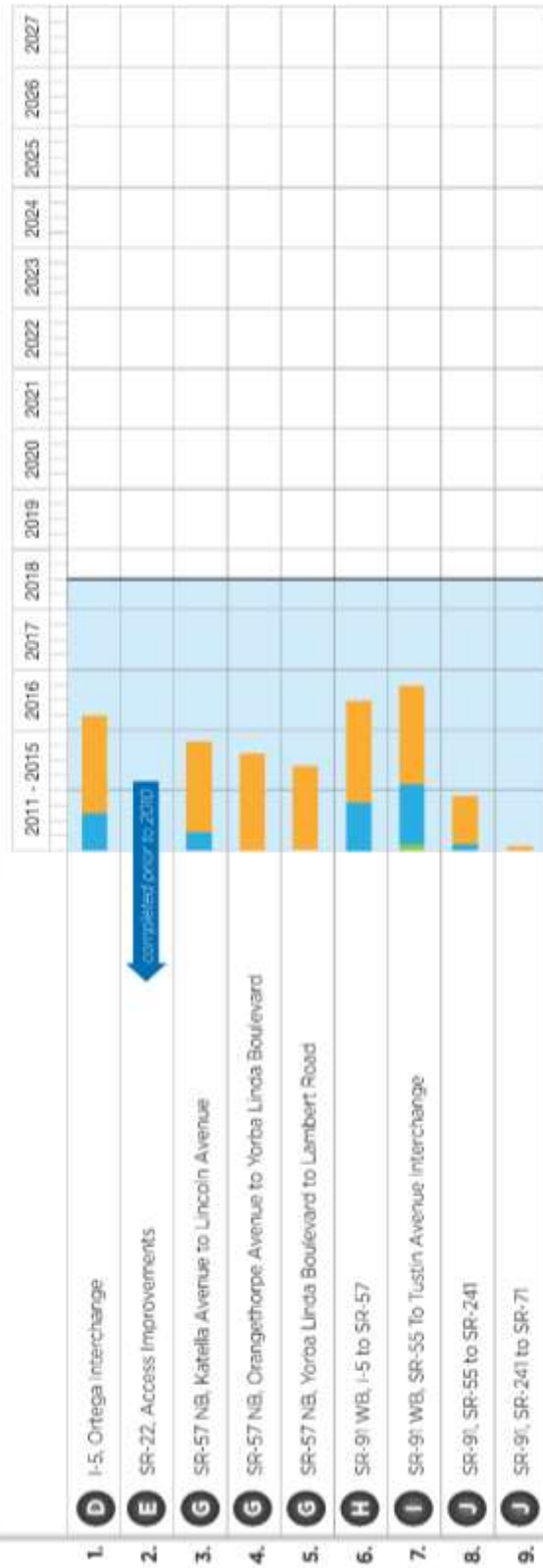
Please note that schedules are updated as of June 30, 2018. Shown schedules are subject to change.



Please note that schedules are updated as of June 30, 2018. Shown schedules are subject to change. Next 10 sets direction through 2026, as projects listed are completed, schedules and revenues will be reviewed, and the Board will adopt a new delivery plan providing direction on further advancement.

*Project environmentally reviewed as part of the Riverside County Transportation Commission's Corridor Improvement Project. Additional studies needed prior to construction.

M2 Freeway Projects Completed Prior to Next 10 Adoption



Freeway Program



Overview:

The Freeway Program accounts for 43 percent of the M2 Program. Over the life of M2, approximately \$5.1 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 the greatest 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 of congestion relief, cost escalation risk, and readiness.
- Continue to make M2 projects the priority for external funding.
- Work with Caltrans to seek cost effective measures on freeway projects through changes in scope and design parameters where possible.
- Tightly manage project scopes and schedule to reduce cost escalation risk.

Next 10 Deliverables:

When M2 originally passed, 13 freeway projects were highlighted in the M2

Transportation Investment Plan. Since then, these projects have been segmented into 27 projects. Of this amount, nine were completed prior to the adoption of Next 10. The remaining 18 freeway projects are included in the Next 10 deliverable goals through 2026 and have been adjusted to reflect Board action regarding Project I⁴:

1. Deliver construction of ten⁴ freeway project segments; seven along I-5 (three recently completed in 2018), one along I-405, one along SR-55, and one along SR-91 (Projects A, C, C/D, F, I, and K).
2. Complete the environmental phase for the remaining eight project segments to be shelf ready. This includes one on I-5, I-405, SR-91, and SR-55; two along SR-57; and two interchange projects, one at I-5/El Toro Road and one at Interstate 605 (I/605)/Katella Avenue (Projects B, D, F, G, J, L, and M).
3. Invest approximately \$715⁴ million in revenues (bringing the completed Freeway Program total to 78 percent) in revenues to move “shelf ready” projects forward using the guiding principles.

⁴ With its own local funding source (91 Express Lanes excess revenue), Project I is now included to move directly into design and construction and the cash flow assumes ten projects to be complete or in construction during the 2017-2026 timeframe. The deliverables have been adjusted to reflect this Board directed change

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

Description:

Project A will reduce freeway congestion by adding a second High-Occupancy Vehicle (HOV) lane, northbound and southbound, on I-5 between SR-55 and SR-57. The project will generally be constructed within the existing ROW.

Cost:

\$41.66 million (Year of Expenditure [YOE]).

Status:

Design was completed in mid-2017. Construction is expected to begin in late 2018 and the project is expected to be open to traffic in early 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 HOV capacity on this freeway segment.

Benefits:

This project will increase the capacity of the HOV facility on I-5 in Santa Ana to meet traffic demands and eliminate bottlenecks. Improvements are 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, is now part of the SR-55 Project F.

External Funding:

The Board has approved \$33.74 million in federal funds to support this project.

Risks:

Overall time, scope, and cost risks are moderate with this project. Bids were opened in May 2018 and the three Lowest Bidders were deemed "unresponsive." All remaining bidders rescinded their offers, which required the project to be rebid. Caltrans re-advertised the project in August 2018 and the bids will be opened in October 2018.

Related Projects:

Projects B and F.

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

Involved Agencies:

OCTA, City of Santa Ana, Caltrans, CTC, Federal Highways Administration (FHWA), and Southern California Regional Rail Authority (SCRRA).

Assumptions:

Costs based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- June 2018 Capital Action Plan
- Capital Funding Program Report – State Highway Project (June 2018)

B. I-5 (SR-55 to the El Toro “Y” Area)

Description:

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

Cost:

\$438.3 million (YOE), including advancement to environmental phase.

Status:

This project is currently in the environmental phase. The Next 10 Plan includes funding this project through the environmental phase. Environmental clearance is scheduled for early-2019.

Present Day:

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

Benefits:

Project improvements would alleviate congestion and reduce delay.

External Funding:

The Board has approved providing \$15.37 million in federal funds and \$12.63 million in state funds for preliminary engineering. 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 costs risks are high with this project due to tight ROW and need for design variations.



B. I-5 (SR-55 to the El Toro “Y” Area)

Related Projects:

Projects A and F.

Involved Agencies:

OCTA, Cities of Tustin and Irvine, Caltrans, and FHWA.

Assumptions:

Cost based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- 2015 Freeway Plan
- June 2018 Project Status Report
- Capital Funding Program Report – State Highway Project (June 2018)

C. I-5 (El Toro Road to SR-73 includes Avery & La Paz 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 State Route 73 (SR-73) in the Cities of Mission Viejo, Laguna Niguel, Laguna Hills, Laguna Woods, and Lake Forest. Improvements include continuous HOV access completion and major improvements at the Avery Parkway and La Paz Road interchanges, as part of Project D. The project will generally be constructed within the existing ROW. This project is divided into three segments as described below.

Segment 1:

This portion consists of the SR-73 to Oso Parkway segment, which will add one general purpose lane in each direction between SR-73 and Oso Creek (approximately 2.2 miles), reconstruct Avery Parkway interchange, and add auxiliary lanes where needed to increase freeway

capacity and reduce congestion in Laguna Niguel, Mission Viejo, and Laguna Hills areas.

Segment 2:

This portion consists of the Oso Parkway to Alicia Parkway segment, which will add one general purpose lane in each direction between Oso Creek and Alicia Parkway (approximately 2.6 miles), reconstruct La Paz Road interchange, and add auxiliary lanes where needed to increase freeway capacity and reduce congestion in Mission Viejo, and Laguna Hills areas.

Segment 3:

This portion consists of the Alicia Parkway to El Toro Road segment, which will add one general purpose lane in the southbound direction between Alicia Parkway and El Toro Road (approximately 1.7 miles), continue the additional general



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

purpose lane in the northbound direction from Segment 2 through Alicia Parkway, extend the second HOV lane in both directions from El Toro Road to Alicia Parkway, and add auxiliary lanes where needed to increase freeway capacity and reduce congestion in Laguna Hills and Lake Forest areas.

Cost:

Segment 1: \$188.12 million (YOE)
Segment 2: \$188.64 million (YOE)
Segment 3: \$164.17 million (YOE)

Landscaping for all three segments:
12.365 (YOE)

Status:

Segment 1 is scheduled to complete design in late 2018 and Segment 3 is scheduled to complete design in mid-2019. Construction is expected to start in early 2019 for Segment 2, and in 2019/20 for Segments 1 and 3, with all segments 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 and increase capacity for future projected traffic volumes. Adding an additional general purpose lane in Segment 1 and 2 will increase capacity of the freeway

to 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: \$28.17 million in federal funds and \$91.98 million in state funds.

Segment 2: \$55.60 million in federal funds.

Segment 3: \$49.90 million in federal funds and \$69.91 million in state funds.

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

Risks:

Overall time, scope, and costs risks are high with this project due to potential ROW impacts and delay from STIP funding schedule.

Related Projects:

Project C (Avenida Pico to San Juan Creek Road) and Project D (El Toro Road interchange).

Involved Agencies:

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

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

Assumptions:

Costs based on June 2018 M2
Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- 2015 Freeway Plan
- June 2018 Project Status Report
- Capital Funding Program Report – State Highway Project (June 2018)

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

Description:

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

Segment 1:

This portion consists of the Avenida Pico to Avenida Vista Hermosa segment, which added new continuous-access HOV lanes in each direction between Avenida Vista Hermosa Overcrossing and Avenida Pico Undercrossing. The Avenida Pico Interchange was reconstructed to optimize the traffic movements within the interchange and provide bicycle

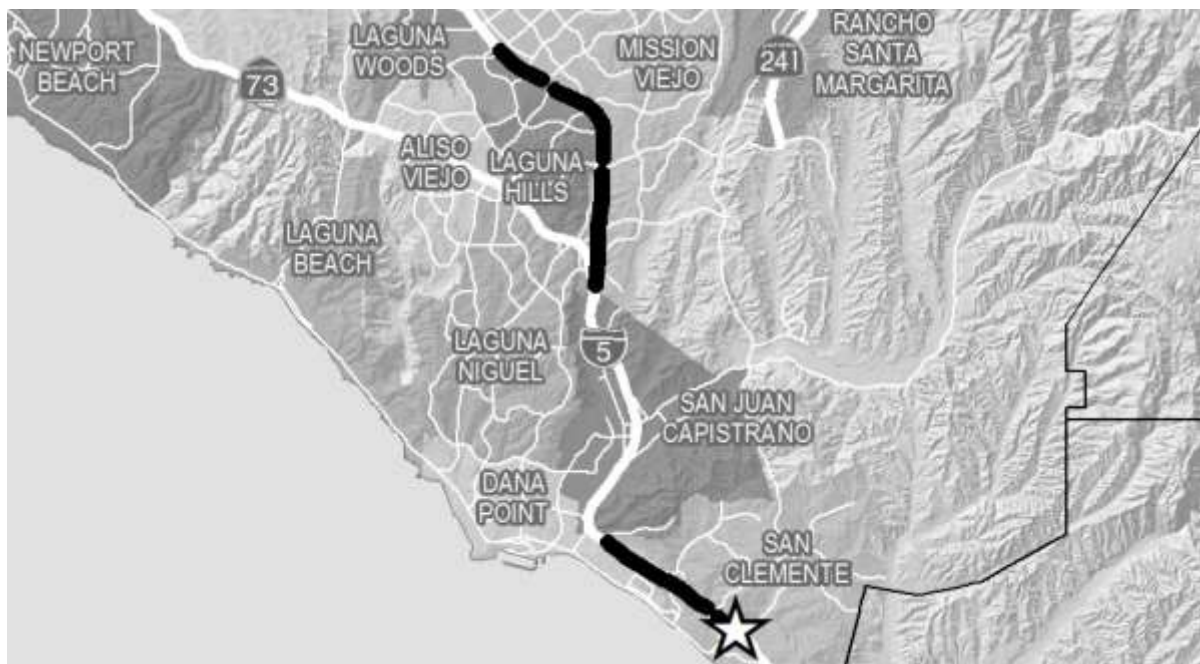
lanes in both directions of Avenida Pico.

Segment 2:

This portion consists of the Avenida Vista Hermosa to Pacific Coast Highway (PCH) segment, which added new continuous-access HOV lanes in each direction between Avenida Vista Hermosa Overcrossing and PCH Undercrossing. The project also reconstructed on- and off-ramps at Avenida Vista Hermosa and Camino de Estrella, and re-established existing auxiliary lanes. Avenida Vaquero Undercrossing was be widened in both directions to accommodate the new HOV lanes.

Segment 3:

This portion consists of the PCH to San Juan Creek Road segment, which added new continuous-access HOV lanes in each direction between



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

Camino Estrella Overcrossing to San Juan Creek Road Undercrossing. On- and off-ramps at Camino Las Ramblas/ PCH were reconstructed. Additionally, the I-5/PCH northbound connector and I-5/Camino Las Ramblas Undercrossing were widened in both directions.

Cost:

Segment 1: \$85.85 million
Segment 2: \$71.43 million
Segment 3: \$71.19 million

Status:

All segments of Project C were opened to traffic at the same time in early 2018. Segment 2 was completed in July 2017 and Segment 3 in July 2018. Remaining punch list work remains on Segment 1.

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 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 has approved funding that supports these projects including:

Segment 1: \$33.34 in federal funds and \$43.74 million in state funds.

Segment 2: \$13.47 million in federal funds and \$46.78 million in state funds.

Segment 3: \$11.80 million in federal funds and \$20.79 million in state funds.

Risks:

Overall time and scope risks are low with this project as all segments have been opened to traffic. Remaining punch list work remains on Segment 1. Cost risk is low.

Related Projects:

Project D.

Involved Agencies:

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

Assumptions:

Costs based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- June 2018 Project Status Report
- Capital Funding Program Report - State Highway Project (June 2018)

D. I-5 (El Toro Interchange)

Description:

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

Cost:

\$112.32 million (YOE), including advancement of the environmental phase.

Status:

The environmental phase for this project began in April 2017. The Next 10 Plan includes funding this project through environmental, with environmental clearance expected in late 2019.

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.

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 providing \$4.40 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.



D. I-5 (El Toro Interchange)

Risks:

Overall time, scope, and costs risks are high with this project due to community issues and potentially high ROW impacts with most of the alternatives.

Related Projects:

Project C.

Involved Agencies:

OCTA, Cities of Laguna Hills, Laguna Woods, and Lake Forest, Caltrans, and FHWA.

Assumptions:

Cost based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- 2015 Freeway Plan
- June 2018 Project Status Report
- Capital Funding Program Report - State Highway Project (June 2018)

D. I-5 (Ortega Highway Interchange)

Description:

Reconstruct the I-5 interchange at State Route 74 (SR-74) in south Orange County, including widening SR-74, modifying entrance and exit ramps, and replacing the existing bridge structure.

Cost:

The cost for this project was \$75.17 million.

Status:

The project was opened to traffic on September 4, 2015, and was officially completed on January 15, 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:

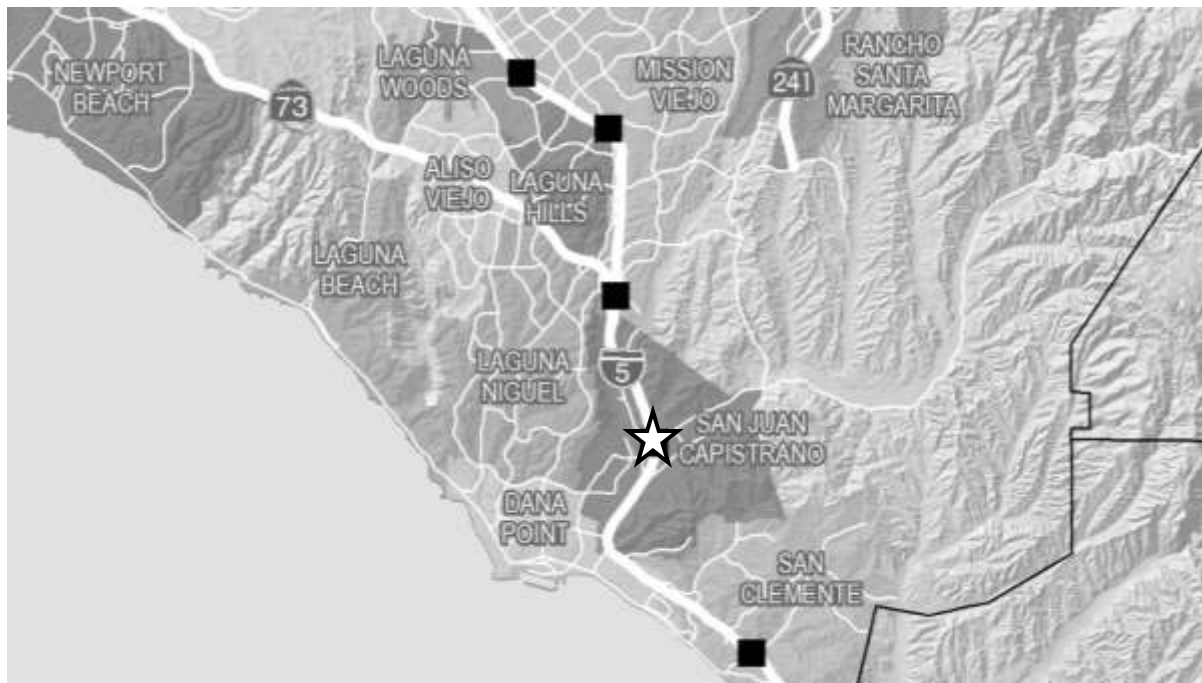
None – project completed.

Related Projects:

Project C.

Involved Agencies:

OCTA, City of San Juan Capistrano, Caltrans, and CTC.



D. I-5 (Ortega Highway Interchange)

Assumptions:

Cost based on June 2018 M2 Program
Cash Flow.

References:

- OCTA 2014 Long Range
Transportation Plan
- June 2018 Project Status Report
- Capital Funding Program Report -
State Highway Project (June 2018)

E. SR-22 Access Improvements

Description:

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

Cost:

The cost for this project was \$25.8 million.

Status:

These projects were completed in 2006 as part of the SR-22 widening project completed in late 2007 using M1 funds.

Present Day:

Prior to completion of the project, the existing freeway overcrossings did not allow clearance for the widening of these three streets to accommodate 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.

Additional improvements also include new freeway-to-freeway carpool ramps to the SR-22/I-405 and I-405/I-605 interchanges, which were completed in 2015 as part of a separate project.

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.

Involved Agencies:

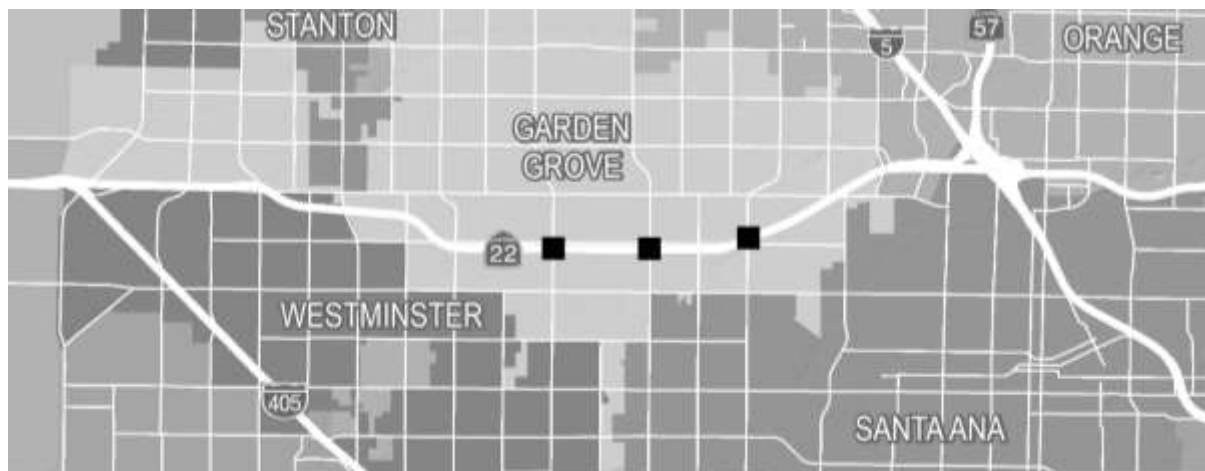
OCTA, City of Garden Grove, and Caltrans.

Assumptions:

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

References:

- OCTA 2014 Long Range Transportation Plan



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

Description:

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

Segment 1:

This portion will add one general purpose lane (approximately six miles) between I-5 and I-405, including merging lanes between interchanges to smooth traffic flow. The South Segment will generally be constructed within the existing ROW. The general purpose lane will be funded with M2, state, and federal funds. Concurrent with these efforts, an additional, second HOV lane will also be constructed between I-5 and I-405 with state and local funds.

Segment 2:

This future portion would add new lanes between SR-22 and I-5, including merging lanes between interchanges to smooth traffic flow. Operational improvements between SR-22 and SR-91 would also be incorporated. The Next 10 Plan includes advancing the North Segment through the environmental phase. The North Segment will generally be constructed within the existing ROW.

Cost:

Segment 1: \$410.91 million (YOE) including cost for potential ROW risk.

Segment 2: \$227.92 (YOE) including advancement of environmental phase.

Status:

Segment 1 is currently in the design phase. This project was accelerated by two years and construction is now expected to begin in 2021. Segment 2 began the environmental phase in late 2016, with the environmental document expected to be complete by early 2020.

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.



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

Benefits:

This project will increase freeway capacity, improving mobility and reducing congestion in central Orange County areas, by adding new lanes and operational improvements that provide an improved level of operation for existing and forecasted traffic volumes (especially for weaving and lane efficiency at ramp junctions).

External Funding:

Segment 1: The Board has approved providing \$103.81 million in federal funds and \$80.00 million in state funds. As previously mentioned, Caltrans has also committed \$46.80 million in state (SHOPP) funds for this project. This project is eligible for future state and federal funds.

Segment 2: The Board has approved providing \$5.00 million in federal funds for this project to support the environmental phase. This project is eligible for future state and federal funds.

Risks:

Overall time, scope, and costs remain high on Segment 1 due to ROW impacts which rely on design exceptions, increased project cost, and delay from STIP funding schedule.

Overall time, scope, costs, and risks are low on Segment 2.

Related Projects:

Projects A and B.

Involved Agencies:

OCTA, Cities of Orange and Santa Ana, Caltrans, and FHWA.

Assumptions:

Costs based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- 2015 Freeway Plan
- June 2018 Project Status Report
- Capital Funding Program Report - State Highway Project (June 2018)

G. SR-57 Improvements

Description:

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

Segment 1:

This portion consists of three northbound sections including Katella Avenue to Lincoln Avenue, Orangethorpe to Yorba Linda Avenue, and Yorba Linda Boulevard to Lambert Road in the Cities of Anaheim, Placentia, Fullerton, and Brea. Projects in this segment are complete.

Segment 2:

This portion would include the addition of a northbound truck-climbing lane from Lambert Road in the City of Brea to one-half mile north of the Los Angeles County line (approximately Tonner Canyon Road).

Segment 3:

This portion would include adding one northbound general purpose lane from approximately Orangewood Avenue in the City of Orange to Katella Avenue in the City of Anaheim. Segment improvements would maintain the existing auxiliary lane and address existing non-standard features between Orangewood Avenue and Katella Avenue.



Cost:

Segment 1: \$144.36 million.

Segment 2: \$167.55 million (YOE), including advancement of environmental phase.

Segment 3: \$47.69 million (YOE), including advancement of environmental phase.

Status:

Segment 1 was completed and opened to traffic in 2014. The Next 10 Plan includes funding Segments 2 and 3

G. SR-57 Improvements

through the environmental phase. Segment 2 is scheduled to begin the environmental phase in 2020. Segment 3 is currently in the environmental phase and environmental clearance is scheduled for early 2019.

Present Day:

This freeway carries about 302,000 vehicles on a daily basis. 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: \$104.68 million in state funds were used for the project.

Segment 2: The Board has approved the use \$4.05 million in state funds for the project.

Segment 3: The Board has approved \$2.50 million in federal funds to support the environmental phase of this project. Segments 2 and 3 are eligible for future state and federal funds.

Risks:

Overall time, scope, costs, and quality risks are low with this project due to construction within the existing ROW and relatively straightforward design issues.

Related Projects:

Project H.

Involved Agencies:

OCTA, CTC, FHWA, Caltrans, and the Cities of Orange, Anaheim, Placentia, Fullerton, and Brea.

Assumptions:

Costs based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- 2015 Freeway Plan
- June 2018 Project Status Reports
- Capital Funding Program Report - State Highway Project (June 2018)

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

Description:

Widen westbound SR-91 by connecting existing auxiliary lanes through interchanges, thus forming a fourth continuous general purpose lane between SR-57 and I-5. Replace the existing auxiliary lanes on westbound SR-91 between State College Boulevard and Raymond Avenue, and between Euclid Street and Brookhurst Street, and add a new auxiliary lane between Raymond Avenue and Lemon Street.

Cost:

The cost for this project was \$58.95 million.

Status:

The project was 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 on a daily basis. This volume is expected to increase by nearly 5 percent by 2035, bringing it up to 304,000 vehicles per day in the future.

Benefits:

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

External Funding:

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

Risks:

None – project completed.



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

Related Projects:

Project I.

Involved Agencies:

OCTA, Cities of Fullerton and Anaheim, Caltrans, and CTC.

Assumptions:

Cost based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- June 2018 Project Status Report
- Capital Funding Program Report – State Highway Project (June 2018)

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

Description:

Project I will add an auxiliary lane in the westbound direction from the SR-55/SR-91 connector to Tustin Avenue, one westbound general purpose lane from Glassell Street to State College Boulevard, and one eastbound general purpose lane between SR-57 and SR-55. The project is divided into two segments as described below.

Segment 1:

This completed segment 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.

Segment 2:

This future segment would include adding an eastbound general purpose lane on SR-91 between SR-57 and SR-55 and a westbound general purpose lane from Glassell Street to State College Boulevard. Additional features would include improvements to the Glassell, Tustin, and Lakeview interchanges, and freeway-to-freeway connectors from northbound SR-57 to SR-91 and southbound SR-57 to westbound SR-91. Select auxiliary lanes would be added or re-established. Segment 2 would generally be constructed within the existing ROW. The Next 10 Plan includes advancing this project through the environmental phase.



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

Cost:

Segment 1: The cost for this segment was \$42.63 million.

Segment 2: \$456.19 million (YOE), including advancement of the environmental phase of the project.

Status:

Segment 1 was completed in July 2016.

Segment 2 is currently in the environmental phase. Environmental clearance is expected by mid- 2019.

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 addressed choke-point 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.

Segment 2 improvements are expected to alleviate congestion and reduce delay by improving the connection from SR-57 to southbound SR-55.

External Funding:

Segment 1: \$29.75 million in state funds were used for the project.

Segment 2: The Board has approved providing \$7.00 million in federal funds to support the environmental phase of this project and the Board approved the use of SR-91 Express Lanes excess revenue for this project. Segment 2 is eligible for future state and federal funds.

Risks:

Overall time, scope and costs risks are low with Segment 2.

Related Projects:

Projects H and J.

Involved Agencies:

OCTA, Cities of Orange and Anaheim, Caltrans, CTC, and FHWA.

Assumptions:

Costs based June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- 2015 Freeway Plan
- June 2018 Project Status Report
- Capital Funding Program Report – State Highway Project (June 2018)

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

Description:

Project J adds capacity on the SR-91 beginning at SR-55 and extending to SR-71 in Riverside County. The project is divided into three segments as described below.

Segment 1:

This completed segment improved the portion of SR-91 east of SR-241 by adding one eastbound lane from one mile east of SR-241 to SR-71 in Riverside County. This project was led by the Riverside County Transportation Commission (RCTC) in coordination with Caltrans District 8.

Segment 2:

This completed segment improved the approximate 6-mile portion of SR-91 between SR-55 and SR-241 by adding one new lane in each direction and improving key interchanges. Additional improvements included the widening and seismic retrofitting for the Imperial Highway and Weir Canyon Road undercrossing bridges. This project was led by the OCTA in coordination with Caltrans District 12.

Segment 3:

This segment would add one additional generally purpose lane on SR-91 beginning at SR-241 and extending to State Route 71 in Riverside County. This projects is contingent upon RCTC's delivery of the complementary improvements within Riverside County.

Cost:

Segment 1: \$57.77 million.

Segment 2: \$79.74 million.

Segment 3: \$292.53 million (YOE), including advancement of the environmental phase.

Status:

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

Segment 3 is contingent on the future widening in Riverside County to match the planned lanes in Orange County. The segment was environmentally reviewed as part of the RCTC's Corridor Improvement Project. Additional studies will be needed prior to construction.



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

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 improvements 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 improvements helped to alleviate congestion and reduce delay. Segment 3 proposed improvements are expected to reduce congestion and delay and improve operational efficiency by increasing capacity and 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: \$79.19 million in state funds were used for this project.

Segment 3: The Board has approved the use of SR-91 Express Lanes

excess revenue for this segment, however this project requires coordination with the planned RCTC project.

Risks:

No risks for Segments 1 and 2, as they are complete. Overall time, scope, and costs risks for Segment 3 are dependent upon required coordination with RCTC, local jurisdictions and affected communities.

Related Projects:

Project I and the Riverside County Corridor Improvement Project.

Involved Agencies:

OCTA, Cities of Anaheim and Yorba Linda, County of Orange, Caltrans, CTC, and FHWA.

Assumptions:

Costs based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- 2015 Freeway Plan
- June 2018 Project Status Report
- Capital Funding Program Report – State Highway Project (June 2018)

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

Description:

Project K will add 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 current standards. The project will add one general purpose lane in each direction of I-405 from Euclid Street to I-605.

Concurrently with Project K, an additional lane 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 primarily with toll revenues.

Cost:

M2 Portion: \$1.43 billion (YOE).

Express Lanes Portion: \$475 million (YOE).

Status:

Project K is currently in the design/construction phase. This schedule is based on the design/build (D/B) project delivery method in which one team is hired to perform both the design and construction of the project. The project is expected to be open to traffic in 2023.

Present Day:

On average, I-405 carries between 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 increase freeway capacity, 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. These improvements would help reduce congestion and improve travel times. Additional improvements include



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

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 Euclid Street to the I-605 interchange.

External Funding:

The Board has approved funding supporting this project, including \$89.77 million in a contribution of state funds, and \$45.65 million in federal funds. Recently, a \$628.93 million TIFIA loan was successfully secured. The M2 cash flow will benefit from \$153.93 million in TIFIA revenues for this project. The entire TIFIA loan will be paid back solely with toll revenues.

Risks:

Overall time, scope, and costs 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).

Involved Agencies:

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

Assumptions:

Costs based on June 2018 M2 Program Cash Flow. Toll revenues will primarily pay for the 405 Express Lanes, and M2 will only pay for the addition of the general purpose lanes.

References:

- OCTA 2014 Long Range Transportation Plan
- June 2018 Project Status Report
- Capital Funding Program Report – State Highway Project (June 2018)

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

Description:

Project L will add new lanes to I-405 from SR-55 to the vicinity of I-5 to alleviate congestion and reduce delay. The project could also improve chokepoints at interchanges and add merging lanes near on/off ramps (such as Lake Forest Drive, Irvine Center Drive, and SR-133) to improve the overall freeway operations in the I-405/I-5 El Toro “Y” area. The project will generally be constructed within the existing ROW.

Cost:

\$323.60 million (YOE), including advancement to the environmental phase.

Status:

The project is currently in the environmental phase. The Next 10 Plan includes funding this project through environmental. Environmental clearance is expected in late 2018.

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 SR-55 and the El Toro ‘Y’ would help alleviate congestion and reduce delay.

External Funding:

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

Risks:

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

Related Projects:

Project K.



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

Involved Agencies:

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

Assumptions:

Costs based on June 2018 M2 Program Cash Flow.

References:

- OCTA 2014 Long Range Transportation Plan
- 2015 Freeway Plan
- June 2018 Project Status Report
- Capital Funding Program Report – State Highway Project (June 2018)

M. I-605 Interchange Improvements

Description:

Project M will improve freeway access and arterial connection to I-605 at Katella Avenue, which serves the communities of Los Alamitos and Cypress. The project will be coordinated with other planned improvements along the SR-22 and the I-405. Specific improvements will be subject to approved plans developed in cooperation with local jurisdictions and affected communities. Operational improvements have been identified on I-605 and Katella in order to increase the efficiency and safety of the interchange.

Cost:

The cost for this project is estimated to be \$29.59 million (YOE).

Status:

The planning phase for this project is complete and was done in cooperation with the City of Los Alamitos. The environmental phase began in 2016. The Next 10 Plan includes funding this project through the environmental

phase, which is expected to be completed in late 2018.

Present Day:

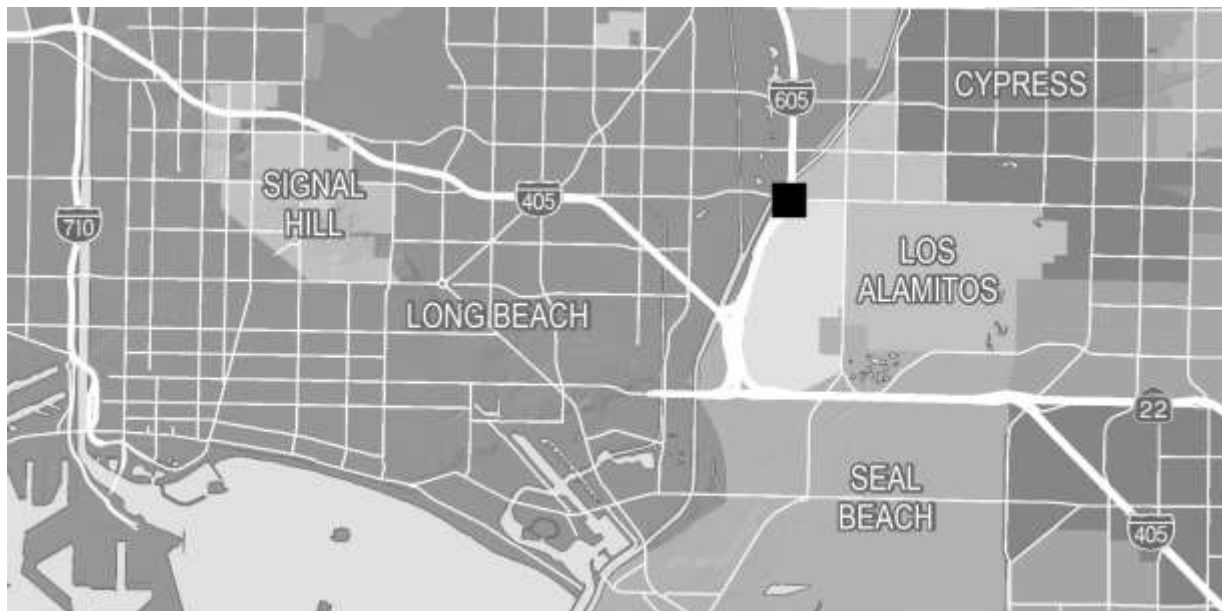
The existing interchange design is outdated and results in both arterial congestion and freeway queuing in the interchange area.

Benefits:

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

External Funding:

No external funding is currently programmed for this project. However, this project is eligible for future state and federal funds.



M. I-605 Interchange Improvements

Risks:

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

Related Projects:

I-405/I-605/SR-22 HOV connector project (West County Connector).

Involved Agencies:

OCTA, City of Los Alamitos, and Caltrans.

Assumptions:

Costs based on June 2018 M2 Program Cash Flow.

References:

- 2015 Freeway Plan
- June 2018 Project Status Report
- Capital Funding Program Report - State Highway Project (June 2018)

N. Freeway Service Patrol

Description:

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

Program Funding:

\$48.7 million in M2 revenue between 2017 and 2026.

Status:

FSP is largely funded by State Highway Account (SHA) funds. OCTA meets matching fund requirements by utilizing its share of Service Authority for Freeway Emergencies (SAFE) funds, which are collected by the Department of Motor Vehicles each year.

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

Measure M2 also helps support CHP as the partner responsible for field supervision. Currently, M2 funds a full time dispatcher to ensure coverage seven days a week.

Present Day:

As of June 2018, M2 and construction-funded Freeway Service Patrol has provided a total of 69,265 assists to

motorists on the Orange County Freeway system.

Benefits:

To keep Orange County moving, FSP provides a range of free services from a jump start or a gallon of gas, to changing a flat tire or towing a disabled vehicle off the freeway.

In FY 2015-16, statewide, for every dollar invested in this program approximately \$8 of congestion relief benefit was received.

In Orange County, for every dollar invested in the program approximately \$12 of congestion relief benefit was received. The result is the elimination of more than 2.8 million vehicle hours of delay and an estimated reduction of 4.8 million gallons of gasoline.

External Funding:

SHA allocation provided by Caltrans – approximately \$2.6 million annually. SB1 also provides funding for this program.

SAFE (\$1 per vehicle registration fee) – approximately \$2.8 million annually.

Risks:

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

Related Projects:

M2 Project N funds are designated to support FSP service for construction of Projects A-M.

N. Freeway Service Patrol

Involved Agencies:

OCTA, Caltrans, and the California Highway Patrol

Assumptions:

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

References:

- Measure M2 Project N Guidelines Freeway Service Patrol Project, Approved on February 13, 2012
- 2015 Freeway Plan

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. 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 27) 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 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 2026 consistent with the above framework:

1. Oversee and manage the Preserves while the endowment is being established and determine long term land manager(s) and endowment holder(s).
2. Focus environmental mitigation program resources funding as a first priority toward the establishment of the endowment for the Preserves.
3. Finalize the resource management plans on M2 Preserves including provisions for public access as appropriate (projects A-M).
4. Complete approximately 350 acres of restoration projects funded through M2 to fulfill the Conservation Plan commitments.

Environmental Mitigation Program

Description:

In July 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 late 2016; in accordance with the master agreement “advance credit” provision, funds were allocated prior to completion of the Conservation Plan.

Concurrent with efforts made toward completing the Conservation Plan and EIR/EIS, OCTA has been working 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 conjunction with the preparation of the final Conservation Plan and EIR/EIS, Resource Management Plans (RMPs) are being developed to address biological monitoring requirements and management activities, including access provisions, for each of the seven Preserves.

Cost:

In summer 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 September 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, and the third endowment deposit was made in early August 2018. Annual endowment deposits will continue to be made near the beginning of each fiscal year.

The United States Fish and Wildlife Service (USFWS), and the California Department of Fish and Wildlife (CDFW) – collectively referred to as Wildlife Agencies – finalized the issuance of their respective permits, as well as executing the Implementing Agreement in June 2017. In January 2018, OCTA secured advance streamlined state and federal clean water permitting requirements.

Present Day:

Five of the seven Preserve RMPs have been finalized and approved by the resources agencies in September 2017. The remaining two RMPs (Eagle Ridge Preserve and Horizon Preserve) will be finalized by late summer 2018.

In consultation with the local fire authority, staff will be preparing fire management plans for the seven Preserves. The Plans will 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

Environmental Mitigation Program

stewardship responsibilities. These Plans are a requirement of the Conservation Plan and will require 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 (27 segmented) 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:

The success of the restoration projects will support OCTA's Conservation Plan and regulatory permitting processes. However, recent wildfires occurring in short intervals may require plant reestablishment to ensure successful implementation of the restoration project, if Wildlife Agencies have not signed off on the project.

OCTA will need to establish the endowment over a ten to twelve-year period.

OCTA currently holds the title and interim land management responsibility of the Preserves, but will eventually need to secure a long-term land manager(s).

Related Projects:

Projects A-M.

Involved Agencies:

CDFW, USFWS, Caltrans, USACE, SWRCB and the environmental community.

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

2018
UPDATE

NEXT 10

DELIVERY PLAN

Streets & Roads Program

M2 Streets & Roads Program

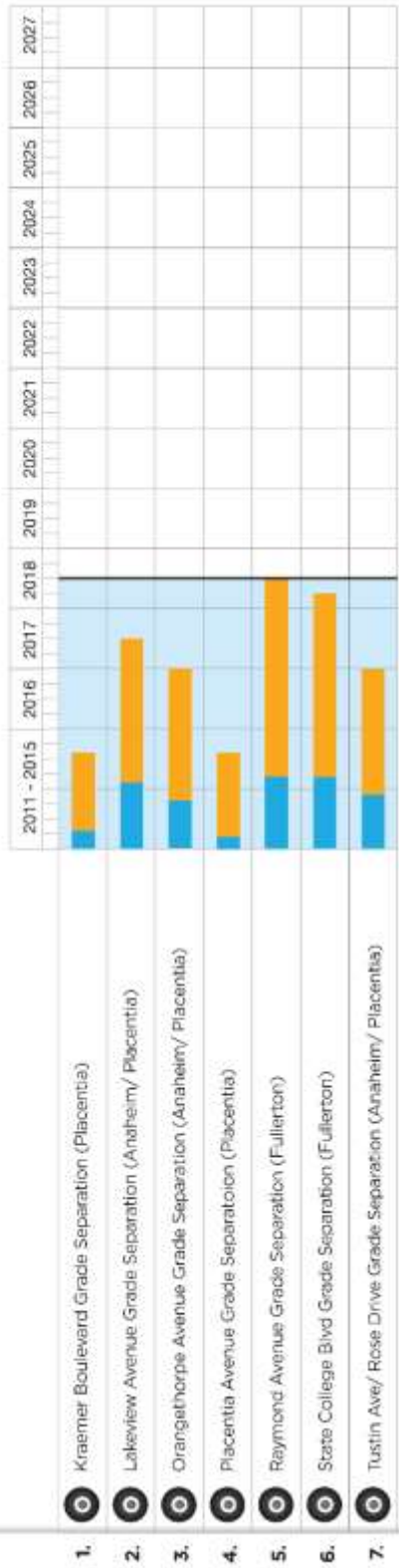


- R Regional Capacity Program** (not mapped)
 - Up to 300 miles of roadway improvements
 - Competitive Program with annual call for projects
 - OC Bridges Grade Separation Projects (●●)

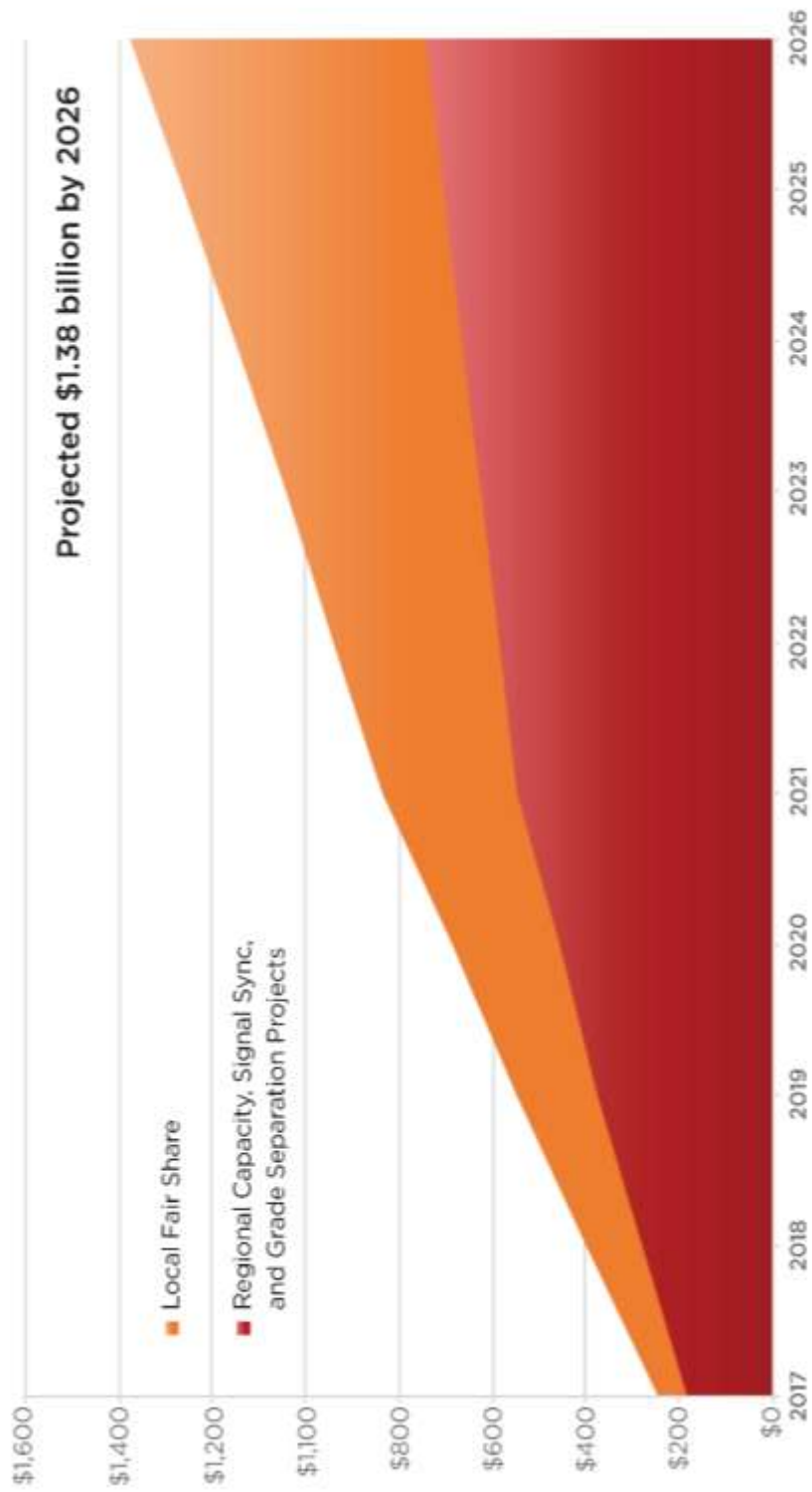
- L Local Fair Share Program** (not mapped)
 - Street maintenance and improvements

- P Regional traffic Signal Synchronization Program**
(see grid above)
 - Over 2,000 coordinated signals

M2 Grade Separation Projects



M2 Streets and Roads Cumulative Expenditures



Streets and Roads Program



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.
- Keep traffic moving on Orange County streets by completing key grade separations along the BNSF corridor in north Orange County.
- Consider all modes of travel when planning for added street capacity.

Next 10 Deliverables:

Allocate nearly \$1 billion in 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 three major initiatives through 2026, consistent with the above framework:

1. Provide \$400 million in competitive funding to local jurisdictions to expand roadway capacity and synchronize signals (Project O and P).
2. Complete the remaining OC Bridges grade separation projects by late 2018.
3. Provide approximately \$600 million in flexible funding to local jurisdictions to help maintain aging 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 Master Plan of Arterial Highways (MPAH), relieve congestion, are cost effective, and can proceed to construction quickly. These projects fall into one of two categories as described below.

Regional Capacity Program (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, that includes considerations for bicycle and pedestrian components as part of each project as applicable to local conditions. 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 includes funding for completion of seven over- or underpass grade separations that will eliminate car and train conflicts along the BNSF Railway (Orangethorpe corridor) in northern Orange County. These grade separations increase safety for everyone traveling through the intersections and eliminate the delays caused by trains.

Program Funding:

Project O and P: \$400 million for new competitive RCP and Regional Traffic

Signal Synchronization Program (RTSSP) calls for projects between 2017 and 2026.

OC Bridges: The current program funding is \$664.36 million. M2 is contributing a total of \$144.53 million.

Status:

To date, OCTA has awarded \$295 million to 146 projects through eight competitive RCP calls for projects. It is anticipated that there will be annual calls for projects between 2017 and 2026.

To date, all seven planned grade separation projects are complete (Placentia, Kraemer, Orangethorpe, Tustin/Rose, Lakeview, Raymond and State College).

Present Day:

Approximately 820 miles of new lanes remain to be completed, mostly in the form of widening existing streets to ultimate planned widths.

Benefits:

Improvements funded through this program are projected to improve peak period arterial speeds by nearly 25 percent by 2035 compared to not constructing those projects. Completion of the MPAH system, including grade separations and traffic signal synchronization, will result in better traffic flow and a more efficient transportation system.

External Funding:

RCP:

Local agencies are required to provide a 50 percent minimum local match.

O. Regional Capacity Program

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

OC Bridges:

The Board approved the use of \$218.05 in federal funds and \$262.49 million in state funds for this project. Additionally, local agencies provided \$39.30 million in funding. OC Bridges funding includes 78 percent in external local, state, and federal funds.

Risks:

Local agencies must meet eligibility requirements to receive funding. Local agencies must meet timely use of funds provisions included in M2.

Related Projects:

Project P and Project Q.

Involved Agencies:

All local agencies (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:

- Orange County Master Plan of Arterial Highways Guidelines
- Commuter Bikeways Strategic Plan
- Capital Funding Program Report – Local Road Project (June 2018)

P. Regional Traffic Signal Synchronization Program

Description:

Project P will provide funds to local agencies 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, and pollution, and saves commuters gas and money.

Program Funding:

Project O and P: \$400 million for new competitive RCP and RTSSP calls for projects between 2017 and 2026.

Status:

To date, OCTA has more than \$98 million, including \$18 million in external funding, to 103 projects.

Including early efforts, OCTA and local agencies have implemented 66 corridor-based signal synchronization projects since 2008 for a cost of approximately \$44 million (including non-M2 funds). Another 37 projects are planned or underway. From 2017-2026, 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 10-year period (2017 to 2026).

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 66 corridors with 2,258 intersections covering 597 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 agencies are required to provide a 20 percent minimum local match. Matching funds may be in-kind services. There may be future needs for more capital intensive investments as systems age. Projects started prior to the 2011 call for projects were funded with M1, federal Congestion Mitigation and Air Quality Improvement (CMAQ), and Prop 1B funds. The 2013 call for projects was partially funded with MSRC grant money. The 2018 call was able to leverage \$6.85 million in SB 1 Local Partnership Program competitive grant funds. In all, external funding (not including funds provided by local agencies) contributed is approximately \$18.65 million.

Risks:

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

P. Regional Traffic Signal Synchronization Program

Related Projects:

Project O (RCP) and Project Q.

Involved Agencies:

All local agencies (cities and County of Orange) and Caltrans.

Assumptions:

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

References:

- M2 Eligibility Guidelines
- OCTA's Comprehensive Business Plan
- Capital Funding Program Report – Local Road Project (June 2018)

Q. Local Fair Share Program

Description:

Project Q provides formula “Local Fair Share” funds that local agencies may use for a variety of purposes and needs, including repairing aging streets, residential street projects, bicycle lanes, and pedestrian safety (plus other transportation uses).

Key among these needs includes 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:

Approximately \$600 million between 2017 and 2026.

Status:

Orange County streets are in generally good condition on average (with a pavement condition index of 78 based on the 2016 statewide report). As roadway pavement conditions deteriorate, however, the cost for repairs increases exponentially. For example, it costs as much as 14 times more to reconstruct a 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 with these increases which has a direct impact on the ability to fund street maintenance and rehabilitation. As of June 2018, approximately \$342.35 million in Local Fair Share payments have been provided to local agencies and the County.

Benefits:

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

Local Fair Share funds are also flexible and can be used as matching funds for capacity and safety projects, bike and pedestrian facilities, as well as local transit services.

External Funding:

This program is not externally funded.

Risks:

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

Related Projects:

Project O (RCP) and Project P.

Involved Agencies:

All local agencies (cities and County of Orange).

Assumptions:

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

References:

- M2 Eligibility Guidelines
- 2016 California Statewide Local Streets and Roads Needs Assessment
- OCTA’s Comprehensive Business Plan
- Capital Funding Program Report – Local Road Project (June 2018)

2018
UPDATE

NEXT 10

DELIVERY PLAN

Transit Programs

M2 Transit Projects



R Metrolink Service Expansion Program

- Metrolink Grade Crossing Improvements (●)
- High Frequency Metrolink Service
- existing rail line/station (—)
- proposed station (●)

S Transit Extensions to Metrolink

- OC Streetcar (—)

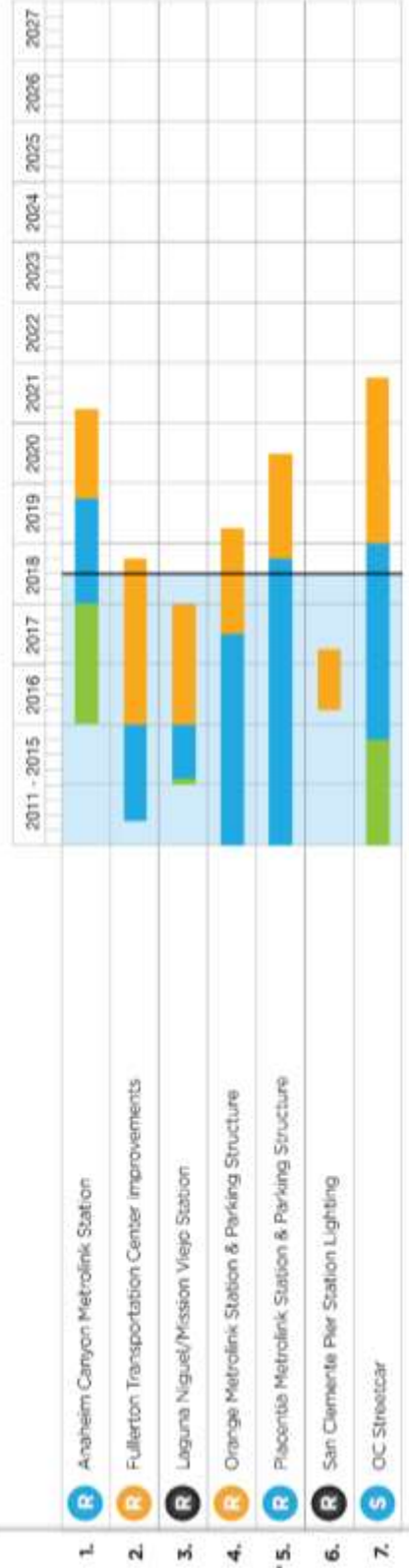
T Metrolink Gateways (—)

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

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

W Safe Transit Stops (countywide, not mapped)

M2 Transit Projects Through Construction



Please note that schedules are updated as of June 30, 2018. Shown schedules are subject to change.

* The Placentia Metrolink Station's ability to move into construction is subject to a track sharing agreement with Burlington Northern Santa Fe Railway

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 commuters 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 Deliverables:

The Next 10 Plan for transit recommends nine major initiatives

through 2026, consistent with the above framework.

1. Complete six rail station improvements.
2. Maintain existing Metrolink service levels.
3. Expand Metrolink service from Orange County into Los Angeles County, contingent upon cooperation and funding participation from route partners.
4. Complete design, construction and begin operating the OC Streetcar.
5. Incorporate recommendations from planning studies to guide development of future transit connections.
6. Provide \$49 million to stabilize OCTA's bus fares for seniors and persons with disabilities, provide \$33 million for senior community transportation programs and \$33 million for senior non-emergency medical transportation services.
7. Support and provide grant opportunities for local agencies to implement effective local transit services.
8. Allocate \$7 million in funding to improve the top 100 busiest bus stops in Orange County.
9. Support the modernization of the OC Bus system to enhance the customer experience.

R. High Frequency Metrolink Service

Description:

Project R provides for sustained and expanded rail service into Los Angeles and Orange Counties along the three along the three Metrolink lines serving Orange County (Orange County, Inland Empire-Orange County, and 91 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 \$335 million between 2017 and 2026 in sales tax revenue.

Status:

Metrolink is currently operating 54 weekday trains in Orange County. To date, rail safety enhancements at 52 at-grade rail-highway crossings have been completed, and as a result, quiet zones have been established in Anaheim, Dana Point, Irvine, Orange, San Clemente, Santa Ana, San Juan Capistrano, and Tustin (as part of the OCX improvements completed during the EAP).

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

The San Clemente Pier Metrolink/Amtrak Station lighting was completed in March 2017 and the Laguna Niguel/Mission Viejo Metrolink Station Americans with Disabilities Act (ADA) ramps was completed in September 2017. Four other rail station improvements are currently underway: Orange Transportation Center Parking Structure, Placentia Metrolink Station, Anaheim Canyon Metrolink Station improvement project, and Fullerton Transportation Center elevators. All projects are expected to be complete by 2020.

Completed rail corridor improvements include Control Point Stadium, the San Clemente Beach Trail Audible Warning System, and six Project Study Reports for potential grade separations along the Los Angeles-San Diego-San Luis Obispo Rail (LOSSAN) corridor, including: Santa Ana Boulevard, Ball Road, Orangethorpe Avenue, Main Street, Grand Avenue, and 17th Street. Rail corridor improvements underway include: the Laguna Niguel to San Juan Capistrano Passing Siding project, San Juan Creek Railroad Bridge Replacement, Control Point at 4th Street, Railroad ROW Slope Stabilization Project, Metrolink Preventive Maintenance Capitalized Operation, Metrolink Rehabilitation/ Renovation, and ongoing operation of Positive Train Control.

Present Day:

Most capital improvements required for expansion of Metrolink service during mid-day are complete. OCTA and partner agencies are working together with Metrolink and BNSF to implement improvements allowing expansion of

R. High Frequency Metrolink Service

service to Los Angeles. OCTA is coordinating with LOSSAN and its member agencies to continue to support improved service integration and coordination within the corridor.

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. During the peak hour, Metrolink carries the equivalent number of passengers that would fill one freeway lane on I-5.

External Funding:

State: STIP, Propositions 1A, 1B, and 116, and Transit and Intercity Rail Capital Program (TIRCP) totaling \$289.48 million.

Federal: CMAQ, the Surface Transportation Block Grant (STBG) Program, and Federal Transit Administration (FTA) Sections 5307, 5309, and 5337, totaling \$342.27 million.

Local Other: Local funding from the cities as well as other entities is programmed for \$83.71 million.

M1 also provided \$135.28 million.

Risks:

The current sales tax revenue projections limit the ability to expand Metrolink service to Los Angeles. Future expansion plans are contingent upon the cooperation and participation of route partner agencies.

Related Projects:

Project S, Project T, and Project V.

Involved Agencies:

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

Assumptions:

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

References:

- OCTA Comprehensive Business Plan
- Capital Funding Program Report - Rail Project (June 2018)

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 \$296 million between 2017 and 2026 (for fixed guideways and rubber tire) in sales tax revenue.

Status:

Fixed Guideway: Through a competitive process, one project, the OC Streetcar, is moving forward through the design process. This project will operate in the Cities of Santa Ana and Garden Grove. There is potential for future calls for projects at the Board's discretion.

Rubber Tire: One call for projects has been issued since 2012, providing approximately \$730,000 for four projects in the Cities of Anaheim and

Lake Forest. One project is in service and three have been cancelled.

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, more recently 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 \$4.12 million in federal FTA Section 5307 and city local funds. Additional external funding for the OC Streetcar project includes state Cap and Trade, federal CMAQ, and FTA Section 5307 and anticipated New Starts funding, totaling \$407.76 million.

M1 also provided \$10.98 million for preliminary studies.

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

S. Transit Extensions to Metrolink

Risks:

While the FTA and the Orange County Congressional delegation continue to show strong support for the project, authorization for the New Starts FFGA remains outstanding. Delay in receipt of OC Streetcar FFGA from the FTA, could impact the overall delivery schedule.

Related Projects:

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

Involved Agencies:

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

Assumptions:

OC Streetcar: Cities of Santa Ana and Garden Grove will be able to provide their required match and OCTA, is approved for New Starts funding for the guideway project.

Rubber Tire: Future calls for projects will be based on the level of interest from local jurisdictions.

References:

- M2 Eligibility Guidelines
- Federal 5309 Funding Guidelines
- OCTA's Comprehensive Business Plan
- Capital Funding Program Report - Rail Project (June 2018)
- OC Streetcar Project Revised Funding Plan (July 2018)

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 for projects 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 of Directors amended the M2 Ordinance No. 3 and Transportation Investment 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 (CAHSRA) is building a High-Speed Rail (HSR) system that is planned to extend as far north as Sacramento and as far south as San Diego. The system will be constructed in two phases, with Phase 1 extending from San Francisco to Anaheim. Phase 2 will be constructed as two connecting lines extending north to Sacramento from Merced, and south to San Diego from Los Angeles via the Inland Empire. Phase 1 includes construction of the connection between Los Angeles Union Station and the Anaheim ARTIC station. Expanding service to Phase 1 stations is planned to take place in 2029.

Benefits:

Early completion of Project T allowed for early investment in the Orange County rail system to facilitate the ultimate integration of various high-speed rail systems within the County. Additionally, this resolves long term parking constraints through the relocation of the station.

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

External Funding:

State: STIP totaling \$29.22 million.

Federal: CMAQ, Regional Surface Transportation Program (RSTP), FTA Sections 5309 and 5337, FTA Bus Livability, and Highway Safety Improvement Program, totaling \$74.00 million.

M1 also provided \$87.02 million of which \$32.50 million for ROW will be repaid plus interest by the City of Anaheim by 2025.

Risks:

None – project completed.

Related Projects:

California High-Speed Rail System

Involved Agencies:

CTC, Caltrans, FTA, CAHSR, Metrolink and the Cities of Anaheim, Fullerton, Irvine, and Santa Ana.

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
- California High-Speed Rail 2016 Business Plan
- Capital Funding Program Report - Rail Project (June 2018)

U. Expand Mobility Choices for Seniors and Persons with Disabilities

Description:

Project U provides funding to support mobility choices for seniors and persons with disabilities. This project is divided into three programs as described below. Each of these programs support OCTA's effort to expand mobility options for seniors.

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

The SMP, administered by OCTA, was first established in 2001. For the first ten years, this program was supported with Transit Development Act (TDA) funds. The allocation of M2 Project U funding ensures the continuation of dedicated resources to sustain this program for the next 25 years.

The SNEMT Program was established by the County of Orange in 2003, utilizing Tobacco Settlement Revenue (TSR) to fund the program. M2 Project U funding supplements existing TSR resources to expand the capacity of the program and increase the number of available SNEMT trips.

Program Funding:

\$115 million on a pay-as-you-go basis between 2017 through 2026.

Status:

Fare Stabilization: In December 2015, the Board approved an amendment to the M2 Ordinance No. 3 and Transportation Investment Plan that backfilled a funding shortfall identified

in this program with remaining Project T funds. Effective January 2016, an amendment to the M2 Ordinance No. 3 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.

SMP: This program offers a variety of senior transportation resources for medical, nutrition, shopping, and social trips to participating cities. Currently, there are 31 cities which participate.

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.

Present Day:

Studies of senior mobility needs have identified seniors' preference for utilizing local, community-based transportation services rather than countywide or regional services.

As of June 2018, more than \$22.46 million has supported over 96 million trips through the Fare Stabilization, \$17.45 million provided 1.955 million trips through SMP, and \$19.02 million provided 727,000 trips through SNEMT.

The SMP allows participating cities to identify the specific mobility needs of

U. Expand Mobility Choices for Seniors and Persons with Disabilities

the seniors in their communities and develop transportation programs to best meet those needs with available funding.

The SNEMT fills a gap in senior transportation services, as trips are often provided to seniors who do not qualify for OCTA ACCESS service, or to seniors whose advanced age or disposition make it difficult to use ACCESS service. Contracting with social service agencies to provide SNEMT services allows this program to provide enhanced service elements beyond the requirements of 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 OCTA 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:

Cities 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 (MOE) requirement.

Risks:

Cities must provide matching funds for SMP.

Related Projects:

Not Applicable

Involved Agencies:

Nearly all local agencies – Participating SMP cities include: Aliso Viejo, Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Dana Point, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Hills, Laguna Niguel, Laguna Woods, La Habra, 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:

- 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 will need to meet performance criteria for ridership, connection to bus and rail services, and financial viability to be considered for funding.

Program Funding:

\$67.3 million on a pay-as-you-go basis between 2017 through 2026.

Status:

To date, the Board has approved three rounds of funding, totaling over \$43.6 million for 28 projects (service expansions from the 2018 call counted as separate projects) and 7 planning grants located in the Cities of Anaheim, Costa Mesa, County of Orange, Dana Point, Fountain Valley, Garden Grove, Huntington Beach, Irvine, La Habra, Lake Forest, Laguna Beach, Laguna Niguel, Mission Viejo, Newport Beach, Placentia, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Tustin, and Westminster.

Out of the projects programmed by OCTA: 14 are currently active; five are expected to initiate new services; three have been cancelled (due to low ridership – Westminster in April 2017, La Habra in October 2017, and Anaheim in March 2018); and one is anticipated to be cancelled (Costa Mesa). In May 2017, the City of Garden

Grove sent a letter to OCTA to cancel the planning study that would evaluate ridership demand for expansion of Westminster's circulator route.

Present Day:

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

Benefits:

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

External Funding:

The local match requirement for both capital and any operating funds authorized by the Board is a minimum of 10 percent.

Risks:

Local agencies must meet eligibility requirements to receive funding. Ability to sustain service will be key to moving projects forward.

Related Projects:

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

Involved Agencies:

OCTA and 17 participating cities

V. Community Based Circulators

Assumptions:

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

References:

- M2 Eligibility Guidelines
- Project V Guidelines (under development)
- 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:

\$7.4 million on a pay-as-you-go basis between 2017 through 2026.

Status:

Eighty percent of available Project W funds will be provided to construct local bus stop amenities implemented by cities. Up to 20 percent of available Project W funds are proposed to be directed towards the development and implementation of regional, customer-facing technologies, such as real-time systems and other elements that benefit the 100 busiest stops, as well as the overall bus system.

Project W Guidelines were presented to the Board on March 10, 2014. Based on October 2012 ridership data (daily weekday passenger boardings), OCTA staff identified 15 cities eligible to receive Project W funding for city-initiated bus stop improvements. For the first call for projects, seven cities applied for funding and the Board approved up to \$1.2 million for 51 projects.

The City of Anaheim was not able to initiate the improvements for their eight projects and will reapply in the future. Upgrades to 14 of the busiest stops in the Cities of Brea, Costa Mesa, Irvine, Orange and Westminster have been completed to date, and the remaining

29 stop improvements in Santa Ana are currently in the project closeout process.

To date, \$370,000 has been contributed towards an OCTA-initiated improvement, a mobile ticketing application (app) that makes it more convenient to purchase bus passes, obtain trip information, and board buses using smart phone devices to display bus passes as proof of payment. In 2017, the app was launched and is now in use across all services including OC Fair, fixed route, and Express Bus service. The app may be used by fixed route and college pass users, and is available for seniors and persons with disabilities.

Present Day:

OCTA bus stops currently do not have real-time schedule and arrival time information, and some high volume stops lack passenger amenities commensurate with the volume of riders.

Benefits:

Passenger information and amenities such as real-time information and better lighting at key stops will be a significant benefit for OC Bus customers.

External Funding:

None. These projects are funded by M2 only.

W. Safe Transit Stops

Risks:

City-initiated: Cities are responsible for amenities at bus stops. Depending on the amenities selected, long-term maintenance and operating costs could be hard to sustain.

OCTA-initiated: Purchased passes are saved to customers' mobile devices to avoid data/service connection issues, however digital passes are not accessible without battery power. While mobile capabilities are a strong incentive to use OCTA services, customers in need of on-demand services will likely utilize Uber and Lyft real-time pick-up services as opposed to waiting for fixed-route, scheduled bus service.

Related Projects:

Not Applicable.

Involved Agencies:

Local agencies (cities and the County of Orange) with a top 100 busiest stop are eligible to receive funding.

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

2018
UPDATE

NEXT 10

DELIVERY PLAN

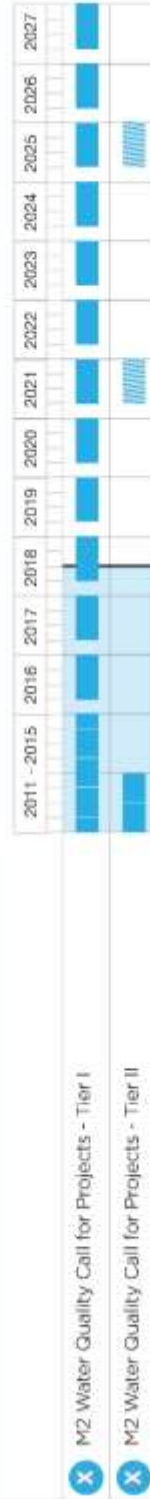
Environmental Cleanup Program



2018 UPDATE
NEXT100
 DELIVERY PLAN

M2 Environmental Cleanup Grants and Call for Projects

Call for Projects
 Call for projects to be determined based on revenue flow



Tier 1 grants program consists of funding for equipment purchases and upgrades to existing storm drains and related best management practices.

Tier 2 grants program consists of funding for regional, potentially multi-jurisdictional, capital-intensive projects.

Environmental Cleanup Program



Overview:

The ECP (Project X) allocates approximately \$269.7 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 Deliverables:

The Next 10 Plan for Project X recommends two major initiatives through 2026 consistent with the above framework:

1. Protect Orange County beaches by removing 25 ton⁵ of trash (during the ten year period) from entering waterways and inlets that ultimately lead to the ocean.
2. Work with the Environmental Cleanup Allocation Committee to develop the next tiers of water quality funding programs with a goal of providing up to \$40 million of grants 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.

⁵ Trash removal achieved by funded projects will be additive with each new call for projects and will continue yielding greater benefits as equipment is in operation over time

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:

Up to \$41.2 million will be available for the Tier 1 and Tier 2 grants funding programs over a ten-year period between 2017 and 2026, on a pay-as-you-go basis.

It is anticipated that there would be more frequency of calls for projects under the Tier 1 program. Depending on the availability of revenues for this program,

there may be one to two Tier 2 calls for project during this ten-year period.

Status:

The Board has awarded approximately \$20 million to fund 154 Tier 1 projects in 33 cities and the County of Orange through seven rounds of funding. An eighth call for projects was released in March 2018 in the amount of approximately \$2.8 million and programming recommendations are anticipated for late summer. The Board has also awarded approximately \$28 million for 22 Tier 2 projects in 12 cities and the County of Orange.

Annual Tier 1 calls for projects are anticipated moving forward. The timing and amount of the next Tier 2 call for projects will be determined based on funding availability and project readiness.

Present Day:

Staff has estimated that over a 6.2 million cubic feet of trash has been captured as a result of the installation of Tier 1 devices since the inception of the Tier 1 program in 2011. This is equivalent to over 2,600 forty-foot shipping containers (or 5,200 twenty-foot equivalent units). As the equipment is in service over time, the volume of trash captured is expected to increase. The funded Tier 2 projects 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 jurisdictions in meeting federal Clean

X. Environmental Cleanup Program

Water Act requirements for controlling transportation-generated pollution.

External Funding:

Local agencies 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.

Risks:

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

Related Projects:

Not Applicable.

Involved Agencies:

All local agencies (cities and County of Orange). Third parties such as water and wastewater public entities, environmental organizations, non-profit groups, and homeowner's associations 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 jurisdictions with improving water quality related to transportation pollution.

References:

- Tier 2 Grant Program Planning Study
- OCTA's Comprehensive Business Plan

2018
UPDATE

NEXT 10

DELIVERY PLAN

Appendix

To determine the status of the M2 Program, staff developed 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. This cash flow is reviewed annually and was updated as part of this 2018 Next 10 review. The revenue assumptions are based on the 2018 M2 revenue forecast of \$13.1 billion using the latest M2 revenue forecast methodology approved by the Board. Additionally, the Next 10 Plan assumes approved TIFIA proceeds and the availability of a viable amount of discretionary federal and/or state funds from 2017 to 2041 and makes specific assumptions about near term grants such as New Starts and net excess 91 Express Lanes revenues for eligible projects. Revenues and expenses were merged into a high-level cash flow model that will be refined through the Plan of Finance. Bond assumptions were also included 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 2026, the Freeway Program would receive approximately \$2.034 billion in M2 revenue, \$1.2 billion in bond proceeds (including \$95.4 million in prior bond proceeds), and \$1.3 billion in state/federal grants (\$1.3 billion of which is already programmed), \$153.9 million in committed proceeds, \$208.4 million in net excess 91 Express Lanes revenue for eligible projects, \$33.4 million in interest, and \$20 million transferred in from M1 for a total of \$5.036 billion in total revenue. With OCTA's success in bringing in significant external revenue during the most recent state and federal funding cycle along with a reduction in project costs, this has allowed for \$332.9 million (13 percent per year) program level line item to be added into the cash flow for economic uncertainties. Costs for the same period total \$4.694 billion. The Next 10 Plan assumes four new bond issuances between 2019 and 2026. Bond issues (treated as revenue source for cash flow purposes) would exceed the forecasted Freeway Program shortfall since debt service payments follow each bond issue. Bonding would be constrained to legal debt coverage ratios, and a Plan of Finance will be brought separately to the Board for approval as needed with refined bond assumptions.

For the Next 10 Plan Freeway Program update, forecasted revenues and costs through 2041 were also tested. This effort was conducted to ensure the complete M2 Freeway Program could be delivered consistent with commitments provided to the voters as part of M2 approval in November 2006. For shelf-ready projects (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) and escalated to YOY dollars (with schedules and costs

constrained to ending balances by year). These future projects may be advanced based on revenue availability. The table on the following page summarizes revenues and costs assumed in the M2 Freeway Program through 2041 (in YOE dollars).

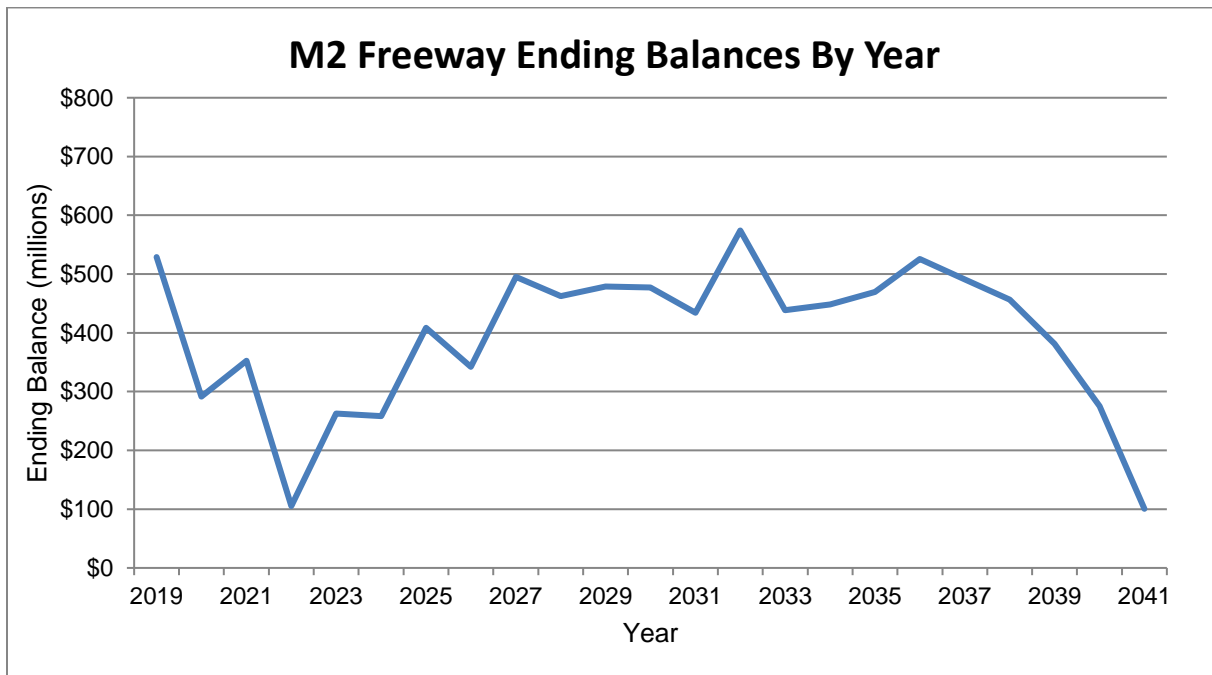
These assumptions assume that current law with regard to the recently enacted gas tax remains in place. If the repeal of the gas tax is successful, the program level economic uncertainties allowance would need to be reduced from 13 percent to seven percent but the program continues to be solvent. The freeway program cash flow has a low ending balance in 2022. This is the current control point of the program and will need to be closely monitored as OCTA continues to move into the potential of an increasing cost environment.

In summary, the analysis shows that despite the reduction in sales tax revenue and the potential of increasing costs, the addition of secured programmed external funds along with refined project costs and revised bonding assumptions allows the full scope of the M2 Program to be delivered as promised through 2041. The cash flow includes a program level line item allowance for economic uncertainties to provide OCTA with financial protection of unknown market risks.

Projected M2 Freeway Program Revenues, Estimated Costs, and Ending Balances

(Millions of Dollars; Year of Expenditure)

| | M2 Projected Revenue | Other Revenue | Estimated Costs (YOE) | Project Revenues - Costs |
|---|-------------------------|------------------|--------------------------|-----------------------------|
| M2 Freeway Project | A | B | C | D = A + B - C |
| Project A (I-5, SR-55 to SR-57) | \$488.6 | \$33.7 | \$41.7 | \$480.7 |
| Project B (I-5, SR-55 to "Y") | \$312.1 | \$28.0 | \$438.3 | \$(98.2) |
| Project C (I-5, South of "Y") | \$651.8 | \$471.5 | \$781.8 | \$341.5 |
| Project D (I-5 interchanges) | \$268.2 | \$86.1 | \$187.5 | \$166.8 |
| Project E (SR-22 access improvements) | \$124.7 | - | - | \$124.7 |
| Project F (SR-55 improvements) | \$380.5 | \$235.6 | \$638.8 | \$(22.8) |
| Project G (SR-57 improvements) | \$268.9 | \$111.2 | \$359.6 | \$20.6 |
| Project H (SR-91, I-5 to SR-57) | \$145.5 | \$27.2 | \$59.0 | \$113.8 |
| Project I (SR-91, SR-57 to SR-55) ¹ | \$433.0 | \$485.9 | \$498.8 | \$420.1 |
| Project J (SR-91, SR-55 to OC/RC line) ¹ | \$366.1 | \$422.6 | \$430.0 | \$358.6 |
| Project K (I-405, I-605 to SR-55) ² | \$1,115.2 | \$289.3 | \$1,425.0 | \$(20.5) |
| Project L (I-405, SR-55 to I-5) | \$332.3 | \$8.0 | \$323.6 | \$16.7 |
| Project M (I-605 access improvements) | \$20.8 | - | \$29.6 | \$(8.8) |
| Project N (Freeway Service Patrol) | \$155.9 | - | \$155.8 | \$0.1 |
| Mitigation Program @ 5% | \$266.5 | - | \$222.7 | \$43.8 |
| Transfer from M1 Savings | - | \$20.0 | - | \$20.0 |
| Interest Earnings | - | \$33.4 | - | \$33.4 |
| Bond Interest Costs ³ | - | - | \$909.3 | \$(909.3) |
| Other Non-Programmed Revenue | - | \$150.0 | - | \$150.0 |
| Freeway Program Economic Uncertainties ⁴ | - | - | \$1,130.6 | \$(1,130.6) |
| Subtotal Revenues and Costs | \$5,330.0 | \$2,402.6 | \$7,632.1 | |
| 2041 Projected Balance: | | | | \$100.6 |



¹ \$741.7 million in SR-91 Express Lanes excess revenues has been incorporated into Other Revenues for Project I (currently assumed at \$449.2 million) and Project J (currently assumed at \$292.5 million).

² \$153.9 million has been incorporated into Other Revenues for Project K. This amount is a direct benefit to the M2 portion of the I-405 Improvement Project, as the loan will be repaid with toll revenues and not with M2.

³ Total debt service less bond proceeds and investment earnings

⁴ The Plan allocates funds for economic uncertainties programmed in the first 10 years and the last 5 years of the Program.

Streets and Roads

The M2 Streets and Roads Program consists of Project O (RCP), Project P (RTSSP), and Project Q (Local Fair Share Program). Combined M2 revenues for these programs assume a proportional share (32 percent) of net M2 revenue. From inception to 2026, the Streets and Roads Program would receive approximately \$1.514 billion in M2 revenue, \$22.1 million in interest, \$121.6 million in prior bond proceeds, and \$607.9 million in M1 and state/federal grants (primarily for the OC Bridges Program), for a total of \$2.265 billion in total revenue. This includes \$6.9 million in SB 1 funding leveraged for Project P. Costs for the same period would total approximately \$2.368 billion (including debt service payments against prior bonding). While the overall Streets and Roads Program balance by 2026 runs a total deficit of \$102.8 million during the Next 10 years, the program is solvent by 2041. There are several years where internal borrowing is necessary to address negative ending balances.

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 25.0 percent) of net M2 revenue. From inception to 2026, the Transit Program would receive approximately \$1.201 billion in M2 revenue, \$51.7 million in prior bond proceeds, \$526.9 million in external revenue, and \$9.4 million in interest for a total of \$1.788 billion. Expenses for this same time period total \$1.507 billion. The cash flow includes the assumption of \$148.96 million in Federal New Starts funding, \$85.47 million in federal CMAQ, and \$25.52 million in State Cap-and-Trade for the OC Streetcar project. The un-programmed balance for Project S allows for capacity 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 2026, the ECP would receive approximately \$97.8 million in M2 revenue. Expenses for this same time period total \$97.8 million. Conservation of water quality improvements are on schedule with significant accomplishments at or above the planned objectives goal.