

## **AGENDA**

- 1. Welcome**
- 2. Pledge of Allegiance**
- 3. Approval of Minutes/Attendance Report for August 13, 2019**
- 4. Action Items**
  - A. Annual Eligibility Review Subcommittee Eligibility Reports FY 2019-2020  
Dr. Pauline Merry, Annual Eligibility Review Subcommittee Chair
- 5. Presentation Items**
  - A. Measure M2 Quarterly Progress Report  
Francesca Ching, Measure M2 Program Analyst
  - B. Freeway Projects Update  
Rose Casey, Highway Programs Director
  - C. Investment Policy Update  
Robert Davis, Treasury and Public Finance Manager
  - D. Measure M2 Next 10: Market Conditions Forecast and Risk Analysis  
Tamara Warren, Measure M2 Program Manager
- 6. OCTA Staff Updates**
  - A. Measure M2 Sales Tax Forecast Update - Sean Murdock, Finance and Administration Director
  - B. Finance Directors Workshop Update - Sean Murdock, Finance and Administration Director
  - C. Staff Liaison – Alice Rogan, Marketing and Public Outreach Director
- 7. Annual Eligibility Review Subcommittee Report**
- 8. Audit Subcommittee Report**
- 9. Environmental Oversight Committee Report**
- 10. Committee Member Reports**
- 11. Public Comments\***
- 12. Adjournment**

*The next meeting will be held on December 10, 2019*

\*Public Comments: At this time, members of the public may address the Taxpayer Oversight Committee (TOC) regarding any items within the subject matter jurisdiction of the TOC, provided that no action may be taken on off-agenda items unless authorized by law. Comments shall be limited to three (3) minutes per person, unless different time limits are set by the Chairman, subject to the approval of the TOC.

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA Clerk of the Board, telephone (714) 560-5676, no less than two business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

**INFORMATION ITEMS**

<b>Staff Report Title</b>	<b>Board Meeting Date</b>
<b>1. Environmental Mitigation Program Endowment Fund Investment Report for June 30, 2019</b>	<b>September 9, 2019</b>
<b>2. 2019 Project X - Tier 1 Call for Projects Programming Recommendations</b>	<b>September 9, 2019</b>
<b>3. Measure M2 Quarterly Progress Report for the Period of April 2019 Through June 2019</b>	<b>September 9, 2019</b>
<b>4. Interstate 405 Improvement Project Update</b>	<b>September 9, 2019</b>

\*Public Comments: At this time, members of the public may address the Taxpayers Oversight Committee (TOC) regarding any items within the subject matter jurisdiction of the TOC, provided that no action may be taken on off-agenda items unless authorized by law. Comments shall be limited to five (5) minutes per person and 20 minutes for all comments, unless different time limits are set by the Chairman, subject to the approval of the TOC.

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**Measure M Taxpayer Oversight Committee**  
**Orange County Transportation Authority**  
**550 S. Main Street, Orange CA, Room 07**  
**August 13, 2019 @ 6:00 p.m.**

**MEETING MINUTES**

**Committee Members Present:**

Douglas P. Gillen, First District Representative  
Dr. Pauline Merry, First District Representative  
Mark Kizzar, Second District Representative  
Larry Tekler, Second District Representative, Co-Chairman  
Dr. Ronald Randolph, Third District Representative  
Tuan Nguyen, Third District Representative  
Larry Lang, Fourth District Representative  
Michael Pascual, Fourth District Representative  
Douglas Anderson, Fifth District Representative  
Jeffery Kaplan, Fifth District Representative

**Committee Member(s) Absent:**

**Orange County Transportation Authority Staff Present:**

Darrell Johnson, Chief Executive Officer  
Joseph Alcock, M2 Local Programs Section Manager  
Jim Beil, Executive Director of Capital Programs  
Christine Byrne, Department Manager, Public Outreach  
Jared Hill, Community Relations Specialist  
Kia Mortazavi, Executive Director of Planning  
Andrew Oftelie, Chief Financial Officer  
Dan Phu, Environmental Programs Manager  
Alice Rogan, Director, Marketing & Public Outreach  
Tamara Warren, Measure M Program Manager

**1. Welcome**

Co-Chair Larry Tekler welcomed everyone to the Orange County Transportation Authority (OCTA) Taxpayer Oversight Committee (TOC) meeting at 5:07 p.m. He asked everyone to introduce themselves.

**2. Pledge of Allegiance**

Co-Chair Larry Tekler led the Pledge of Allegiance to the Flag.

**3. CEO Welcome**

CEO Darrell Johnson acknowledged the passing of Orange County Auditor-Controller and TOC Co-Chair Eric Woolery. He said Eric was a member of the TOC for four years and was a big part of the TOC. Darrell said OCTA will be working with the Interim Auditor-Controller regarding this committee.

Darrell Johnson welcomed the new members to the TOC. He said this TOC has a wide variety of backgrounds which should bring good input and oversight for the citizens of Orange County. Darrell provided information on his background. He has 28 years' experience in transportation and 16 of those were with OCTA. Darrell talked about how OCTA tries to be extremely transparent and provides as much information as possible to the public. He then went through the background of Measure M. He said Measure M has recently been rebranded to OC Go to prevent confusion with Los Angeles County's Measure M.

#### **4. Approval of Minutes/Attendance Report for June 11, 2019**

Co-Chairman Larry Tekler asked if there are any corrections to the Minutes/Attendance Report for June 11, 2019. A motion was made by Dr. Ronald Randolph, seconded by Dr. Pauline Merry and carried unanimously to approve the June 11, 2019 TOC Minutes and the Attendance Report.

#### **5. Presentation Items**

##### **A. Measure M2 Environmental Mitigation Program Update**

Dan Phu provided background on the Measure M2 Environmental Mitigation Program (EMP) which includes comprehensive mitigation for the environmental impacts of 13 freeway projects in exchange for streamlined project approvals from the state and federal resources agencies. Dan said 43% of Measure M2 funds are dedicated to freeway programs and of that 5% is for the EMP. To date, OCTA has acquired seven conservation properties (about 1,300 acres), provided funding for 11 habitat restoration projects (about 350 acres) as part of the Natural Community Conservation Plan/Habitat Conservation Plan and one dam restoration project. Dan talked about the endowment put in place to keep the properties preserved. He said, on a parallel path, a similar approach was developed to obtain state and federal clean water permits to facilitate the implementation of the Measure M2 freeway projects. A summary of the first Annual Report for the Orange County Transportation Authority M2 Natural Community Conservation Plan/Habitat Conservation Plan covering all activities up to December 31, 2018, is provided. Additional EMP activities post-2018 is also provided in this report.

The committee asked if administrative changes in the federal government have affected the protected species list. Dan Phu said species on the endangered list progress up/down a scale depending on if the population has gotten better or worse. He said OCTA looks at species on the "watch" list as well in case they become endangered – since Measure M2 is a 30-year program staff tries to plan for the future.

The committee asked how many people at OCTA work on these projects. Dan Phu said it has fluctuated over the years, he said there are three to four staff members currently working on this, with help from consultants.

The committee asked if there might be a reason to purchase more properties to offset freeway projects. Dan Phu said in theory it could be the case. He said there is a process of checks and balances in place and, at this point, we have not exceeded the need for more properties. There are freeway projects that are yet to be implemented, but we are on track for planning for these needs.

The committee asked if tollroads are built, is OCTA responsible for that mitigation. Dan Phu said no, this is exclusively tied only to the 13 Measure M2 freeway projects.

The committee asked why preserves in some cases and restoration in other cases. The committee asked if OCTA does calls to the cities for restoration projects. Dan Phu said OCTA decided to have an 80/20 split between the projects. He said 80% of the funds go toward acquisitions and 20% to habitat restoration. Also, on the acquisitions, OCTA does a call soliciting voluntary sale of properties. He said OCTA has solicited property owners in the past to see if they would be interested in selling properties. On the restoration side, OCTA reaches out to cities, the County of Orange and the public at large for projects. He said all the projects are evaluated along with the wildlife agencies.

B. Comprehensive Transportation Funding Programs (CTFP) Update

Joseph Alcock provided an update on the CTFP and explained how the CTFP primarily consists of seven competitive funding programs within Measure M2. He provided background information on each of these programs. Joseph went through revisions to the 2020 CTFP Guideline. He said the OCTA Board of Directors recently approved these revisions along with authorization for a 2020 call for projects for Regional Capacity Program (RSP) and Regional Traffic Signal Synchronization Program (RTSSP).

The committee asked how many storm drain collection devices are in Orange County. Joseph Alcock said several hundred.

C. Project V Update

Joseph Alcock provided an update on Project V which funds community-based local transit circulators through a competitive program. He gave an overview of the types of services funded through this program which funds capital items, operations and maintenance. Joseph said to date there have been 29 projects funded through this program for about \$42 million. The services need to meet minimum performance standards and if the ridership is not met, OCTA works with the provider and service could be cancelled. Seasonal services seem to be the most successful. With each year boardings have increased overall with 1.9 million total boardings since the inception. The OCTA Board authorized staff to prepare for a fourth Project V call for projects.

The committee asked if the number of boardings was listed correctly for 2014 because it seems to be a big jump in four years. Joseph Alcock said yes, there were just a few services receiving their capital items and starting service in 2014, now there are 19 programs currently running.

The committee asked which is the strongest of these services. Joseph Alcock said Dana Point's service has always been strong, but it does fluctuate.

The committee asked about the Laguna Beach service that is being cancelled. Joseph Alcock said this was a residential service and it was underperforming.

The committee asked why boardings per revenue hours are focused on, but there is also a cost component. Kia Mortazavi said there are minimum requirements, but there is also a cap on how much OCTA subsidizes these rides. He said the cap is \$9 per passenger to be paid by OCTA. Kia said these services run roughly \$100 per hour for driver, maintenance, overhead, etc. He said roughly OCTA pays 90% and the cities cover 10% with the average boardings per hour being 10 this works out to \$9 per passenger.

The committee asked why the cumulative boardings significantly slowed between 2017 and 2018, and if it is a trend. Joseph Alcock said there were not a lot of new services in this time period. It could be a trend, but hopefully after this next call OCTA will see some new good services implemented.

#### D. OC Streetcar Update

Jim Beil provided background on the OC Streetcar which is funded through Project S in the Measure M2 Ordinance. The project includes in-ground track going east/west starting at the Santa Ana Transportation Center (SARTC) to Harbor Boulevard at Westminster Avenue. Jim said currently there is utility construction work being done, and construction of the operations/maintenance facility. He said recently OCTA found arsenic in the soil along the Pacific Electric Right of Way (PEROW) and contingency funds are needed for this unexpected remediation. He described some other items that caused OCTA to dip into contingency funds as well. Jim said the first vehicles will be delivered to OCTA in December 2019. He said OCTA is in the middle of procuring the operations and maintenance contract (O&M) and should have a contractor at the beginning of 2020. Jim talked about the extensive outreach to businesses, residents and stakeholders on this project. Jared Hill showed the committee a video used for outreach on the OC Streetcar Project.

The committee asked about the amount contingency funds built into the contract. Jim Beil said OCTA has spent \$3 million of the \$36.5 million in the contingency fund. According to federal guidelines the \$36.5 million is broken down into assigned/unallocated contingency funds. He said about \$13.7 allocated contingency for the construction and \$17.7 unallocated contingency. The

unallocated funds need federal approval. The committee asked if OCTA is in the range of expected dips into the contingency funds. Jim said yes OCTA is within the curve. He said OCTA works with the Federal Transit Administration (FTA) on a monthly basis to manage these funds.

The committee asked if there was an environmental study on the recycling property where an underground storage tank was later found or the other locations that needed remediation. Jim Beil said yes environmental studies were done and OCTA will be working to remediate and recover some of the costs. He said the underground storage tank was there for decades and the previous owner probably did not know about it. The committee asked if anyone had environmental insurance that might cover some of these issues. Jim said no.

The committee asked who the target is for the OC Streetcar video. Alice Rogan said it is used for general outreach purposes at open houses, on the OCTA website; speakers bureau, etc.

The committee asked how fast the streetcar will travel. Jim Beil said it cannot go faster than the speed limit on the arterials, but in the PEROW it can go 43 MPH due to federal regulations. Jim said it can get up to speed quickly and go with the flow of traffic. The committee asked about priority signalization. Jim said the streetcar will have some prioritization at signals.

The committee asked about the close-quarters along Santa Ana Boulevard and wonders how the community feels about the streetcar. Christina Byrne said people seem to be exceptionally tolerant of construction as long as they know what is happening. Jim Beil said the cities actually led the environmental process and community buy-in. The committee asked if the residents will like having the streetcar. Christina Byrne said the majority of the community seems to be positive.

The committee asked if the wires are DC operated. Jim Beil said yes, they are high voltage and there will be substations along the route.

The committee asked when the streetcar will begin operation. Jim Beil said Spring of 2022.

The committee asked if this is a localized route for the City of Santa Ana. Jim Beil said it originally was a project brought to study by the City of Santa Ana and the City of Garden Grove. OCTA is also working on a Bristol Corridor Study that may connect to this streetcar.

## **6. OCTA Staff Updates**

- A. I-405 Update – Christina Byrne said the I-405 Project began construction in the spring of 2018 and will be complete in 2023. She said there are 11 bridges under construction and the first one to reopen will be the Slater Bridge in August. In September, the Talbert and Bushard bridges will be closed and completely demolished. Christina said OCTA is scheduling a tour of the I-405 Project for TOC members and a poll will be sent out to determine the best date for the tour.
- B. City Eligibility Update – Andrew Oftelie said the cities of Stanton and Santa Ana were found ineligible to receive Measure M2 funds by the OCTA Board of Directors. These cities did not meet the Maintenance of Effort (MOE) requirements. He said the funds going to the cities are to augment, not replace funds for streets and roads improvements and senior mobility. During an audit led by the TOC the auditor found that some of the expenditures were ineligible for the MOE. As a result, this committee and the OCTA Board found them ineligible, which was the first time in Measure M and Measure M2 history. This means funds cannot flow to these cities while they are found ineligible. The City of Santa Ana and the City of Stanton have not received funds since May of 2019. Now these cities need to finish the fiscal year in order to re-instate their eligibility which will be validated by an audit in which they will pay for and make-up their shortfall as well. He said OCTA is holding the funds due to them and when they reestablish eligibility OCTA will release back funds to those cities. OCTA has received a settlement agreement from the City of Stanton and we are waiting to hear from the City of Santa Ana. This process can take some time.

The committee asked about the problems that led to the cities being ineligible. Andrew Oftelie said the auditors looked at a sampling of the expenditures. They found that one city reported some overhead costs without providing backup materials. Staff believes these were just oversights, but the ordinance clearly states the need for proof.

The committee talked about OCTA's attorney originally saying the cities would not get reimbursed. Andrew Oftelie said OCTA's attorney drafted a settlement document that stated OCTA has suspended the issuance of funds to the cities, but OCTA will hold the funds until they become eligible. Andrew said if they do not reestablish eligibility during the next eligibility cycle, the city would then lose those funds. Andrew said the cities argued that they could have included other expenditures to make them eligible, but the attorney said the cities cannot do that – they must make the items submitted correct.

The committee asked about three other cities that are going to be re-audited. Andrew Oftelie said those three cities will be up for audit during the next cycle, but will not be re-audited for this cycle.

- C. Staff Liaison Update – Alice Rogan welcomed the new members.

### **7. Annual Eligibility Review (AER) Subcommittee Report**

There was no AER subcommittee since the last meeting. Alice Rogan said the subcommittee members are Jeffrey Kaplan, Larry Tekler, Douglas Anderson, Douglas Gillan and Dr. Pauline Merry.

### **8. Annual Audit Subcommittee Report**

There was no meeting to report on. Larry Tekler said there has been talk about forecasted tax revenues to be received and actual revenues received. He said it looked like OCTA was expecting revenue to be higher than what was received. Andrew Oftelie said OCTA receives a monthly collection of sale tax revenues from the state. He said they call it an advance, but OCTA receives it two months arrears. At the end of the quarter they reconcile the amount due to OCTA. The agency that remits the sales tax got behind in remitting to agencies like OCTA. Throughout the year they have gotten pretty close to catching up and, in fact, back up to a five percent growth. One month revenues came in 15% lower than expected. Staff talked to the agency and they said the revenue was correct. Staff reported this to the OCTA Board stating staff believes this reporting was incorrect according to forecasts. Eventually OCTA received supplemental payments that averaged out to cover that 15% missing revenue. Currently the growth rate is a little under four percent, but it could come up to the five percent with the year-end payment.

The committee said OCTA probably lost a little interest. Andrew Oftelie said that is a good point. He said other agencies similar to ours have had the same issue. OCTA has always asked for timely remittance of funds for this reason.

### **9. Environmental Oversight Committee (EOC) Report**

Dr. Pauline Merry reported she attended her first EOC meeting on July 10. Dan Phu provided an overview earlier in this meeting covering this committee. She reported OCTA will be hosting a hike on August 17 at the Pacific Horizon Reserve in Laguna Beach.

### **10. Committee Member/Staff Reports**

There were no committee member comments.

### **11. Public Comments**

There were no public comments.

### **12. Adjournment**

Larry Tekler wanted to take a moment to honor Eric Woolery. The Measure M Taxpayer Oversight Committee meeting adjourned at 6:57 p.m. The next meeting will be on October 8, 2019 at 5 p.m.

# Taxpayer Oversight Committee

## Fiscal Year 2019-2020

### Attendance Record

X = Present      E = Excused Absence      \* = Absence Pending Approval      U = Unexcused Absence      -- = Resigned

Meeting Date	July	13-Aug.	Sept.	8-Oct.	Nov.	10-Dec.	Jan.	11-Feb.	March	14-Apr.	May	9-Jun.
Douglas P. Gillen		X										
Pauline Merry		X										
Larry Tekler		X										
Mark Kizzar		X										
Ronald T. Randolph		X										
Tuan Nguyen		X										
Larry A. Lang		X										
Michael Pascual		X										
Jeffrey Kaplan		X										
Douglas Anderson		X										

### Absences Pending Approval

Meeting Date

Name

Reason



*Action  
Items*





**October 8, 2019**

**To:** Taxpayer Oversight Committee  
**From:** Orange County Transportation Authority Staff  
**Subject:** Fiscal Year 2019-20 Measure M2 Annual Eligibility Review Subcommittee Recommendations

### **Overview**

The Measure M2 Ordinance requires all local agencies in Orange County to annually satisfy eligibility requirements in order to receive Measure M2 net revenues. The Annual Eligibility Review Subcommittee has convened and completed its review process for fiscal year 2019-20 eligibility items, recommendations are presented for Taxpayer Oversight Committee receipt and review.

### **Recommendations**

Affirm that the Taxpayer Oversight Committee has received and reviewed Pavement Management Plans for applicable local agencies, Congestion Management Programs, and Mitigation Fee Programs for all local agencies in Orange County.

### **Background**

According to the Measure M2 (M2) Ordinance, the Taxpayer Oversight Committee (TOC) is responsible for reviewing local agencies' Local Signal Synchronization Plans (LSSP), Mitigation Fee Programs (MFP), Expenditure Reports, Congestion Management Program (CMP), and Pavement Management Plans (PMP) for compliance with the M2 Ordinance. The Annual Eligibility Review (AER) Subcommittee has been designated by the TOC to review eligibility submittals with support from Orange County Transportation Authority (OCTA) staff to ensure that required documents have been submitted.

For this eligibility cycle, the CMP, MFP, and PMP were due. Expenditure Reports are reviewed later in the year. After its review, the findings of the TOC are presented to the OCTA Board of Directors (Board) for a conditional eligibility determination.

***Discussion***

Local agencies are required to annually submit eligibility packages by June 30. For this cycle, OCTA staff reviewed the CMP, MFP, and 14 PMP submittals that were required this cycle to ensure accuracy. Staff also worked closely with local agencies to obtain additional information and/or back up materials as needed. For reference, the PMP submittal schedule is included as Attachment A.

The AER Subcommittee convened on September 26, 2019 to review and discuss the three eligibility components. The AER Subcommittee reviewed and confirmed that all 35 local agencies had submitted appropriate documentation in order satisfy M2 eligibility requirements for the PMP, CMP, and MFP, and recommended advancement to the TOC for consideration. Summary compliance tables are provided for PMP (Attachment B), CMP (Attachment C), and MFP (Attachment D).

It should be noted that while the cities of Santa Ana and Stanton have submitted M2 required eligibility items for fiscal year 2019-2020, submittal of these documents does not modify their existing ineligible status, which is governed through separate OCTA Board action.

**Next Steps**

OCTA staff will present the TOC eligibility findings to the OCTA Regional Planning and Highways Committee and Board in December 2019. If approved by the Board, eligibility determination will remain conditional until review of the annual Expenditure Reports is completed in 2020.

***Summary***

All local agencies in Orange County have submitted FY 2019-20 Measure M2 eligibility packages. The AER subcommittee has completed its review of necessary PMP, CMP, and MFP documentation and offers its findings for TOC review and consideration.

***Attachments***

- A. Local Agency Pavement Management Plan Submittal Schedule
- B. 2019 M2 Eligibility Summary Table of Pavement Management Plan Elements
- C. 2019 M2 Eligibility Summary Table of Congestion Management Program Elements
- D. 2019 M2 Eligibility Summary Table of Mitigation Fee Program Elements

**Local Agency Pavement Management Plan (PMP)  
Submittal Schedule<sup>1</sup>**

<b>Local Agency</b>	<b>Updated PMP</b>
Aliso Viejo	June Even Year
Anaheim	June Odd Year
Brea	June Odd Year
Buena Park	June Even Year
Costa Mesa	June Even Year
County of Orange	June Odd Year
Cypress	June Odd Year
Dana Point	June Odd Year
Fountain Valley	June Even Year
Fullerton	June Even Year
Garden Grove	June Even Year
Huntington Beach	June Even Year
Irvine	June Odd Year
La Habra	June Odd Year
La Palma	June Even Year
Laguna Beach	June Even Year
Laguna Hills	June Even Year
Laguna Niguel	June Even Year
Laguna Woods	June Even Year
Lake Forest	June Odd Year
Los Alamitos	June Odd Year
Mission Viejo	June Even Year
Newport Beach	June Odd Year
Orange	June Even Year
Placentia	June Even Year
Rancho Santa Margarita	June Even Year
San Clemente	June Odd Year
San Juan Capistrano	June Odd Year
Santa Ana	June Even Year
Seal Beach	June Even Year
Stanton	June Odd Year
Tustin	June Odd Year
Villa Park	June Even Year
Westminster	June Even Year
Yorba Linda	June Even Year

<sup>1</sup>Shaded local agencies submitted a PMP update during this eligibility review cycle.

**2019 Measure M2 Eligibility  
Summary Table of Pavement Management Plan (PMP) Elements**

Local Agency	Current Network PCI	Current MPAH PCI	Current Local PCI	Projected Network PCI	Projected MPAH PCI	Projected Local PCI	7 Year R&R Plan Limits	7 Year R&R Plan Areas	7 Year R&R Plan Class	7 Year R&R Plan PCI	7 Year R&R Plan Inspection Dates	7 Year R&R Plan Treatment Type	7 Year R&R Plan Treatment Cost	7 Year R&R Plan Treatment Year	QA/QC	7 Years Current Budget \$ x 10 <sup>6</sup>	7 Years Maintain Network PCI \$ x 10 <sup>6</sup>	7 Years Improve Network PCI \$ x 10 <sup>6</sup>	Software	Certification Form	Compliant PMP (Y/N)
Anaheim	F	F	F	F	F	P	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓	Y
Brea	G	G	G	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓	Y
County of Orange	G	G	G	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓	Y
Cypress	VG	G	VG	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓	Y
Dana Point	VG	VG	G	VG	VG	VG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓	Y
Irvine	VG	VG	VG	VG	VG	VG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓	Y
La Habra	G	G	G	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓	Y
Lake Forest	G	G	G	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓	Y
Los Alamitos	F	F	F	P	P	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓	Y
Newport Beach	G	G	G	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓	Y
San Clemente	VG	VG	VG	VG	VG	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓	Y
San Juan Capistrano	F	F	F	F	F	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓	Y
Stanton	G	G	G	G	G	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓	Y
Tustin	VG	VG	VG	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓	Y

Legend		
Pavement Quality	Abbreviation	PCI
Very Good	VG	85-100
Good	G	75-84
Fair	F	60-74
Poor	P	41-59
Very Poor	VP	0-40

Acronyms	
Micro	MicroPaver Pavement Management Program
MPAH	Master Plan of Arterial Highways
PCI	Pavement Condition Index
QA/QC	Quality Assurance/Quality Control Plan
R&R	Road Maintenance & Rehabilitation Plan
SS	StreetSaver Pavement Management Program
*	All Laguna Woods local streets are private

I certify that the information contained in this table is an accurate representation of materials submitted to OCTA for purposes of meeting requirements related to the Pavement Management Plan.



Harry W. Thomas, OCTA

**2019 Congestion Management Program  
Summary of Compliance**

Jurisdiction	Capital Improvement Program	Deficiency Plan	Land Use	Level of Service	2019 Compliance
Aliso Viejo *	Yes	N/A	Yes	N/A	Yes
Anaheim	Yes	N/A	Yes	Yes	Yes
Brea	Yes	N/A	Yes	Yes	Yes
Buena Park	Yes	N/A	Yes	Yes	Yes
Costa Mesa	Yes	N/A	Yes	Yes	Yes
Cypress	Yes	N/A	Yes	Yes	Yes
Dana Point	Yes	N/A	Yes	Yes	Yes
Fountain Valley *	Yes	N/A	Yes	N/A	Yes
Fullerton	Yes	N/A	Yes	Yes	Yes
Garden Grove	Yes	N/A	Yes	Yes	Yes
Huntington Beach	Yes	N/A	Yes	Yes	Yes
Irvine	Yes	N/A	Yes	Yes	Yes
La Habra	Yes	N/A	Yes	Yes	Yes
La Palma*	Yes	N/A	Yes	N/A	Yes
Laguna Beach	Yes	N/A	Yes	Yes	Yes
Laguna Hills	Yes	N/A	Yes	Yes	Yes
Laguna Niguel	Yes	N/A	Yes	Yes	Yes
Laguna Woods	Yes	N/A	Yes	Yes	Yes
Lake Forest	Yes	N/A	Yes	Yes	Yes
Los Alamitos	Yes	N/A	Yes	Yes	Yes
Mission Viejo	Yes	N/A	Yes	Yes	Yes
Newport Beach	Yes	N/A	Yes	Yes	Yes
Orange	Yes	N/A	Yes	Yes	Yes
Placentia	Yes	N/A	Yes	Yes	Yes
Rancho Santa Margarita *	Yes	N/A	Yes	N/A	Yes
San Clemente *	Yes	N/A	Yes	N/A	Yes
San Juan Capistrano	Yes	N/A	Yes	Yes	Yes
Santa Ana	Yes	N/A	Yes	Yes	Yes
Seal Beach *	Yes	N/A	Yes	N/A	Yes
Stanton	Yes	N/A	Yes	Yes	Yes
Tustin	Yes	N/A	Yes	Yes	Yes
Villa Park *	Yes	N/A	Yes	N/A	Yes
Westminster	Yes	N/A	Yes	Yes	Yes
Yorba Linda *	Yes	N/A	Yes	N/A	Yes
County *	Yes	N/A	Yes	N/A	Yes

\*No CMP intersections within jurisdiction

I certify that the information contained in this table is accurate representation of materials submitted to OCTA for purposes of meeting requirements related to the Congestion Management Program.

  
Sam Sharvini, OCTA

**FY2019/2020 Measure M2 Eligibility  
Mitigation Fee Program Compliance Summary**

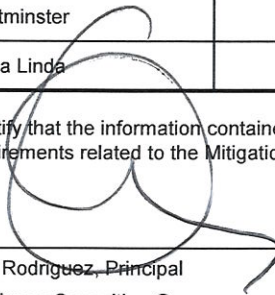
Agency	MFP Concurrence Resolution	Study	Fee Schedule	Policy	Letter	Status Recommendation
Aliso Viejo	Adopted		Fee schedule provided	Development Agreements	Brief summary provided	Meets requirement
Anaheim	Adopted		Fee schedule provided			Meets requirement
Brea	Adopted					Meets requirement
Buena Park	Adopted		Fee schedule provided			Meets requirement
Costa Mesa	Adopted		Fee schedule provided	Resolution provided		Meets requirement
County of Orange <sup>1</sup>	Adopted		Fee schedule provided			Contingent
Cypress	Adopted		Fee schedule provided	Resolution provided		Meets requirement
Dana Point	Adopted					Meets requirement
Fountain Valley	Adopted			Council policy provided		Meets requirement
Fullerton	Adopted		Fee schedule provided	Policy and Reso		Meets requirement
Garden Grove	Adopted		Fee schedule provided			Meets requirement
Huntington Beach	Adopted	Fee study provided	Fee schedule provided	Resolution provided		Meets requirement
Irvine	Adopted		Fee schedule provided	Municipal Code provided		Meets requirement
La Habra	Adopted		Fee schedule provided	Ordinance provided		Meets requirement
La Palma	Adopted					Meets requirement
Laguna Beach	Adopted				Municipal Code letter	Meets requirement
Laguna Hills	Adopted	Fee study provided		Municipal Code w/fee		Meets requirement
Laguna Niguel	Adopted		Fee schedule provided			Meets requirement
Laguna Woods	Adopted		Fee schedule provided			Meets requirement
Lake Forest	Adopted			Ordinance w/Fee		Meets requirement
Los Alamitos	Adopted		Fee schedule provided			Meets requirement
Mission Viejo	Adopted		Fee schedule provided			Meets requirement
Newport Beach	Adopted		Fee schedule provided			Meets requirement
Orange	Adopted		Fee schedule provided			Meets requirement



**FY2019/2020 Measure M2 Eligibility  
Mitigation Fee Program Compliance Summary**

<b>Agency</b>	<b>MFP Concurrence Resolution</b>	<b>Study</b>	<b>Fee Schedule</b>	<b>Policy</b>	<b>Letter</b>	<b>Status Recommendation</b>
Placentia	Adopted					Meets requirement
Rancho Santa Margarita	Adopted		Fee schedule provided	Resolution provided		Meets requirement
San Clemente	Adopted					Meets requirement
San Juan Capistrano	Adopted			Resolution provided		Meets requirement
Santa Ana	Adopted		Fee schedule provided			Meets requirement
Seal Beach	Adopted		Fee schedule provided			Meets requirement
Stanton	Adopted	Fee study provided		Ordinance provided		Meets requirement
Tustin	Adopted		Fee schedule provided			Meets requirement
Villa Park	Adopted				Municipal Code letter	Meets requirement
Westminster	Adopted	Fee study provided	Fee schedule provided	Resolution provided		Meets requirement
Yorba Linda	Adopted					Meets requirement

I certify that the information contained in this table is an accurate representation of materials submitted to OCTA for the purposes of meeting Renewed Measure M eligibility requirements related to the Mitigation Fee Program. (Ordinance No. 3, Attachment B, Section III.A.2)

  
 \_\_\_\_\_  
 Paul Rodriguez, Principal  
 Rodriguez Consulting Group

<sup>1</sup> County adopted Resolution and updated fees. Template language was modified. Revised conforming Resoution is in process.

***Presentation  
Items***





COMMITTEE TRANSMITTAL

**September 9, 2019**

**To:** Members of the Board of Directors

**From:** *Lu*  
Laurena Weinert, Clerk of the Board

**Subject:** Measure M2 Quarterly Progress Report for the Period of  
April 2019 Through June 2019

Executive Committee Meeting of September 5, 2019

**Present:** Chairman Shaw, Vice Chairman Jones, and Directors Davies,  
Do, Hennessey, and M. Murphy

**Absent:** Director Bartlett

**Committee Vote**

Following the discussion, no action was taken on this receive and file information item.

**Staff Recommendation**

Receive and file as an information item.



**September 5, 2019**

**To:** Executive Committee

**From:** Darrell E. Johnson, Chief Executive Officer

A handwritten signature in black ink, appearing to read "Darrell E. Johnson", is written over the printed name.

**Subject:** Measure M2 Quarterly Progress Report for the Period of April 2019 Through June 2019

### **Overview**

Staff has prepared a Measure M2 quarterly progress report for the period of April 2019 through June 2019, for review by the Orange County Transportation Authority Board of Directors. This report highlights progress on Measure M2 projects and programs, and will be available to the public via the Orange County Transportation Authority website.

### **Recommendation**

Receive and file as an information item.

### **Background**

On November 7, 2006, Orange County voters, by a margin of 69.7 percent, approved the Renewed Measure M Transportation Investment Plan (Plan) for the Measure M2 (M2) one half-cent sales tax for transportation improvements. The Plan provides a 30-year revenue stream for a broad range of transportation and environmental improvements, as well as a governing ordinance, which defines the requirements for implementing the Plan. Ordinance No. 3 designates the Orange County Transportation Authority (OCTA) as responsible for administering the Plan and ensuring that OCTA's contract with the voters is followed.

OCTA is committed to fulfilling the promises made in M2. This means not only completing the projects described in the Plan, but adhering to numerous specific requirements and high standards of quality called for in the measure, as identified in the ordinance. Ordinance No. 3 requires that quarterly status reports regarding the major projects detailed in the Plan be brought to the

OCTA Board of Directors (Board). On September 25, 2017, the Board approved rebranding M2 externally to OC Go to promote OCTA's Measure M awareness and public perception, as well as to avoid confusion with the recently approved, similarly named, Los Angeles County Metropolitan Transportation Authority's "Measure M." M2 progress is summarized in these quarterly progress reports, which are posted online for public review.

### ***Discussion***

This quarterly report reflects current activities and progress across all M2 programs for the period of April 1, 2019 through June 30, 2019 (Attachment A).

The quarterly report is designed to be easy to navigate and public friendly, reflecting OCTA's Strategic Plan transparency goals. The report includes budget and schedule information provided from the Capital Action Plan, and Local Fair Share and Senior Mobility Program payments made to cities during the quarter, as well as total distributions from M2 inception through June 2019.

Additionally, Attachment A includes a summary of the Program Management Office (PMO) activities that have taken place during the quarter. Two areas in particular are highlighted below.

### **Ordinance Safeguards**

To track compliance with the numerous requirements in Ordinance No. 3, the PMO created and annually updates an M2 Ordinance Compliance Matrix. The matrix details the status of each requirement and references documents verifying each response. The annual update is shared with the Taxpayers Oversight Committee (TOC) as a resource for committee members. This quarter, the TOC met on June 11, 2019, to conduct the required annual M2 hearing and determined that M2 is being delivered as promised to Orange County voters for the 28th consecutive year.

Part of the M2 Ordinance includes a requirement for a performance assessment at least once every three years to evaluate OCTA's efficiency and effectiveness in the delivery of M2 as promised to the voters. The fourth performance assessment covering the period between July 1, 2015 and June 30, 2018, was presented to the Board on March 11, 2019. The report found OCTA to be adept in the delivery of the M2 program and projects, and made recommendations for enhancements. The PMO continues to monitor implementation of the eight recommendations as appropriate from the assessment and intends to conclude the implementation with a final report to the Board by the end of the calendar year.

Next 10 Delivery Plan

Annually staff reviews the Board-adopted commitments included in the Next 10 Delivery Plan incorporating changes in revenues and project costs to ensure the plan remains deliverable. The 2019 review is underway, and a Next 10 Delivery Plan update will be presented to the Board in November 2019. The review will incorporate the revised 2019 sales tax revenue forecast (planned to be presented to the Board in October), updated project and program cash flows, and will take into consideration information provided through the updated construction cost pressure index (also planned to be presented to the Board in October) to update the Next 10 Plan.

Progress Update

The following provides an overview of M2 accomplishments to date by mode, as well as highlights of activities that occurred during the fourth quarter of fiscal year (FY) 2019.

**Freeway Program**

The M2 Freeway Program, which previously consisted of 27 projects or project segments, now has 30 projects or project segments to be delivered by 2041. Two projects, the Interstate 5 (I-5) between Interstate 405 (I-405) and State Route 55 (SR-55) (Project B) has now been broken into two segments, and State Route 91 (SR-91) between State Route 57 (SR-57) and SR-55 (Project I) has been broken into three segments. Segmenting takes place to provide more opportunity for bidders and to increase competition. While the new segment count will be tracked at 30, the increase does not change the overall commitment detailed in the plan.

Currently, while commencing year nine of the 30-year program, 12 segments are complete, three are in construction, and another three are readying for construction. The remaining 12 segments are in various stages of project development, with three of those slated to go into construction and be complete or nearing completion, by 2026.

Key freeway project activities taking place this quarter, along with updates, are highlighted below.

- Construction activities continued on the I-5 between SR-55 and SR-57 Project. A project update was presented to the Regional Planning and Highway (RPH) Committee on April 1, 2019, and to the Board on April 8, 2019. (Project A)

- An update was presented to the RPH Committee on May 6, 2019, and to the Board on May 24, 2019, for the I-5 between State Route 73 (SR-73) and El Toro Road Project. A groundbreaking ceremony took place on June 6, 2019, marking the start of the segment between Oso Parkway and Alicia Parkway, which includes reconstruction of the La Paz Road interchange. (Project C and Project D)
- Final design was completed for the I-5 between Alicia Parkway and El Toro Road Project. This is the northernmost of three segments that are part of the I-5 between SR-73 and El Toro Road Project. As design was refined and finalized for this segment, the consultant identified cost increases for construction. This cost increase is pending bid package preparation and the California Department of Transportation (Caltrans) review. Staff will provide updates to the Board as appropriate. (Project C)
- An update was provided to the RPH Committee on April 1, 2019, and to the Board on April 8, 2019, for the I-405 between SR-73 and Interstate 605 (I-605) Project. (Project K)

#### Streets and Roads

Since 2011, approximately \$777 million<sup>1</sup> has been allocated to local jurisdictions for transportation improvements through the streets and roads competitive and formula funding programs. Additionally, M2 provided a portion of the \$664 million to grade separate seven street and rail crossings, leveraging the majority of the funds (\$520 million) from local, state, and federal sources.

- On May 13, 2019, the Board found that the City of Santa Ana and the City of Stanton did not meet the M2 maintenance of effort (MOE) requirement and, therefore, found them ineligible to receive M2 revenues.

Disbursement of all net M2 funds to these cities has been suspended until the cities achieve compliance with their M2 MOE benchmark and the Board reconsiders the matter by May 2020.

- Final programming recommendations for the 2019 Regional Capacity Program (RCP) and the Regional Traffic Signal Synchronization Program (RTSSP) were approved by the Board on June 10, 2019, totaling \$8.35 million. The 2020 call for projects (call) for the RCP and the RTSSP was presented to the Board on August 12, 2019. (Project O and Project P)

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<sup>1</sup> Excludes suspended funds. On May 13, 2019, the Board determined the City of Stanton and City of Santa Ana ineligible to receive all net M2 revenues.



- The semi-annual review of the Comprehensive Transportation Funding Program projects was approved by the Board on June 10, 2019. Since the last review in September 2018, 26 project phases are now underway, and 29 project phases were completed. Nearly 90 percent of the funded projects are either underway or complete. (Project O, Project P, Project V, and Project X)
- FY 2019-20 M2 Eligibility Guidelines were approved at the April 8, 2019, Board meeting. In addition to the approval, staff was to return in summer 2019 with updates to the procedures related to finding a local agency ineligible to receive M2 funds. Staff has drafted revisions to the eligibility guidelines and intends to formalize the revisions as part of the annual guidelines Board approval process planned for early 2020.

## Transit

The M2 transit mode includes a number of programs designed to provide additional transportation options. M2 is the main funding source for Metrolink commuter rail service in Orange County and provides funding for rail station improvements and transit connections to extend the reach of the services.

Since 2011, M2 has provided competitive funding commitments for bus and station van extension projects to Metrolink (\$483,133 to date), local community-based transit circulators and planning studies (\$36 million to date), bus stop improvements (\$2 million to date), and funding to support specific programs to meet the needs of seniors and persons with disabilities (\$69.7 million<sup>2</sup> to date). Key transit project activities taking place this quarter are highlighted below.

- Construction of the Fullerton Transportation Center Elevator Upgrades Project was completed on May 1, 2019. The project modified the existing pedestrian bridge to add two new traction elevators, one on each side. (Project R)
- The Placentia Metrolink Station Improvements and Parking Structure Project has been ready to advertise and is planned for early 2020.

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<sup>2</sup> Excludes suspended funds. On May 13, 2019, the Board determined the City of Stanton and City of Santa Ana ineligible to receive all net M2 revenues. Disbursement of M2 funds have been suspended until the cities achieve compliance and the Board reconsiders the matter by May 2020.

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Metrolink and BNSF Railway are cooperatively working together negotiating an updated Shared Use Agreement, which will provide the required BNSF Railway approvals for construction of the station. The final Shared Use Agreement is targeted to be ready for Metrolink member agency approval at the end of October 2019. (Project R)

- OC Streetcar construction has commenced on the western half of the alignment. Preliminary design review for the vehicles was completed and transitioned into final design review in July 2019. (Project S)
- A ridership report for transit community circulators was provided to the Board on April 8, 2019. In addition, staff reviewed letters of interest received as a response to a letter OCTA sent out to all eligible local jurisdictions on March 21, 2019, to assess the level of interest for a future round of funding. On August 12, 2019, staff provided a report on local agencies' interest to the Board, along with consideration of issuing a fourth call. (Project V)
- Final programming recommendations were approved by the Board for \$.987 million for Safe Transit Stops on June 24, 2019. (Project W)

#### Environmental Programs

The M2 Program includes two innovative programs, the Environmental Cleanup Program (ECP) with specific activity, and the Environmental Mitigation Program (EMP) with funding from the freeway program. The ECP improves water quality by addressing transportation related pollutants while the EMP off-sets biological impacts of freeway projects.

Since 2011, the ECP has awarded \$48.1 million to local jurisdictions through a competitive process, which funded 159 projects for trash removal devices (Tier 1), and 20 projects for large scale water quality best management practices projects (Tier 2). More than 6.2 million cubic feet of trash (or over 2,600 40-foot shipping containers) have been captured so far.

Additionally, the Board has authorized \$55 million for the EMP to acquire conservation lands, fund habitat restoration projects, and to develop the Conservation Plan. OCTA has acquired more than 1,300 acres and funded 12 restoration projects across Orange County. The wildlife and habitat on the acquired lands are protected in perpetuity, and long-term management of the properties will be funded by an established endowment. It is estimated that it will take 12 years to fully fund the endowment with annual deposits, or until the fund

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totals approximately \$46.2 million. As of June 30, 2019, the balance of the endowment was \$9,534,374. The fourth deposit, of approximately \$2.9 million, took place on July 3, 2019.

- Applications for the ninth Tier 1 call are being reviewed, and final programming recommendations are planned to be presented to the Board on September 9, 2019.

### Challenges

As with all major programs, challenges arise and need to be monitored and addressed. A few key challenges are highlighted below.

On May 13, 2019, for the first time during the life of Measure M or M2, the Board found two cities ineligible to receive M2 revenues. Both the City of Stanton and the City of Santa Ana failed to satisfy the eligibility requirement of meeting the minimum MOE, a level of local streets and roads discretionary expenditures. OCTA has suspended allocation of M2 funds for the City of Santa Ana and the City of Stanton until the Board revisits the status of their compliance by May 2020. Staff continues to work closely with each city and with internal audit to resolve these issues. In addition, staff will remind all cities of the importance of following M2 Ordinance No.3 requirements to maintain their eligibility to receive M2 funding.

The OC Streetcar Project has faced some challenges which have impacted the construction schedule as a result of excess contaminated materials found during excavation work at the Maintenance and Storage Facility, as well as on the OCTA-owned Pacific Electric right-of-way (ROW). Staff continues to monitor this work and provides regular progress reports to the Board.

Significant construction activity continues to take place on the I-405, SR-73 to I-605 Project with extensive work accomplished to date. The project is approximately 33 percent of the way through the construction period, and substantial completion of the project is projected to be approximately six months behind schedule. The factors for this delay include above-average rainfall this past winter, issues related to utility relocations, and the contractor's inability to complete design and begin construction. OCTA is closely monitoring the contractor's activities to identify opportunities to overcome the delay and anticipates schedule recovery with alternative lane closure work windows and restaging of bridge work through agreements to reconstruct some of the remaining bridges using a one-stage process instead of the planned two-stage bridge process.

A challenge that may impact the public's ability to access draft and final environmental documentation is the Americans with Disabilities Act Compliance requirement for documents posted on State of California agencies' and entities' websites (Assembly Bill No. 434, Government Code 11546.7). The requirement became effective July 1, 2019. This resulted in amendments to consultants' contracts to modify the environmental documents, and projects' costs and schedules were slightly impacted due to this effort.

On all Measure M projects, staff is working to develop and implement the most cost-effective design that provides the highest congestion relief with the least impact to businesses and communities. This includes efforts to document and present design variations to Caltrans for approvals to achieve project scope while limiting ROW impacts. Three M2 freeway projects in particular are facing these issues as they are working through the environmental clearance process. These include the I-5 between I-405 and SR-55, SR-91 between SR-55 and SR-57 and El Toro Road interchange. Each of these projects is facing specific, but similar issues related to the need for design variations to avoid excessive ROW impacts. Additionally, staff will continue to urge Caltrans to coordinate Caltrans-initiated safety, operational, and maintenance projects with planned Measure M projects to avoid multiple impacts to the traveling public and inefficient use of funding and resources.

Based on the draft fund estimate for the 2020 State Transportation Improvement Program (STIP), Orange County is targeted to obtain \$6.96 million in new capacity. Over the past four STIP cycles, Orange County has averaged approximately \$62.6 million per cycle in new capacity. This significant decrease affects the availability of external funding from this source. Instead, local funds will need to be used to advance M2 freeway projects. The M2 Freeway Program has a budgeted line item for economic uncertainties, which will be analyzed and modified as needed.

M2 project delivery is monitored closely, and progress, as well as challenges, are presented to the Board through these quarterly staff reports, individual project staff reports, as well as through the Capital Action Plan quarterly performance metrics reports from the Capital Programs Division.

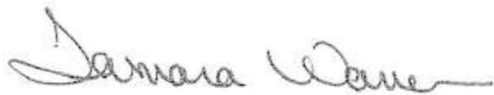
***Summary***

As required by M2 Ordinance No. 3, a quarterly report covering activities from April 2019 through June 2019 is provided to update progress in implementing the Plan. The above information and the attached details indicate significant progress on the overall M2 Program. To be cost-effective and to facilitate accessibility and transparency of information available to stakeholders and the public, the M2 Quarterly Progress Report is made available through the OCTA website. Hard copies are available by mail upon request.

***Attachment***

- A. Measure M2 Progress Report, Fourth Quarter Fiscal Year 2018-19, April 1, 2019 through June 30, 2019

**Prepared by:**



Tamara Warren  
Manager, Program Management Office  
(714) 560-5590

**Approved by:**



Kia Mortazavi  
Executive Director, Planning  
(714) 560-5741





# MEASURE M2 PROGRESS REPORT

Fourth Quarter of Fiscal Year 2018 – 19  
April 1, 2019 through June 30, 2019

- Fourth Quarter Highlights:
- Freeway Projects
  - Streets and Roads
  - Environmental Cleanup & Water Quality
  - Freeway Mitigation Program
  - Finance Matters
  - Program Management Office
  - Summary







## MEASURE M2 PROGRESS REPORT

### SUMMARY

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 with a sunset in 2011. The renewal of Measure M continues the investment of local tax dollars in Orange County's transportation infrastructure for another 30 years to 2041.

As required by the Measure M2 (M2) Ordinance No. 3, a quarterly report covering activities from April 1, 2019, through June 30, 2019, is provided to update progress in implementing the Measure M2 Transportation Investment Plan. On September 25, 2017, the Board of Directors (Board) approved externally rebranding M2 to OC Go to promote OCTA's Measure M awareness and public perception and to avoid confusion with Measure M in Los Angeles County.

To be cost effective and to facilitate accessibility and transparency of information available to stakeholders and the public, Measure M2 progress reports are presented on the Orange County Transportation Authority (OCTA) website. Hard copies are mailed upon request.



The cover photo shows the groundbreaking ceremony for the I-5, SR-73 to El Toro Road project that took place in Mission Viejo on June 6th, 2019. The project will be built in three segments and enhance traffic flow with roadway, structural, and operational improvements in South Orange County.



## MEASURE M2 PROGRESS REPORT

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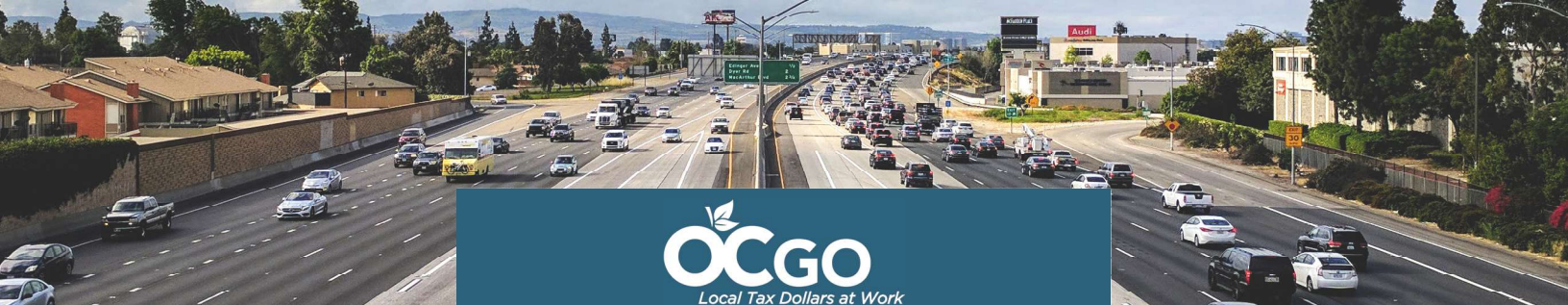
**OCGO**  
Local Tax Dollars at Work  
**COMMON ABBREVIATIONS**

Americans with Disabilities Act	ADA
Annual Eligibility Review	AER
Board of Directors	Board
Burlington Northern Santa Fe	BNSF
California Department of Fish and Wildlife	CDFW
California Department of Tax and Fee Administration	CDTFA
California Department of Transportation	Caltrans
California Transportation Commission	CTC
Capital Action Plan	CAP
Capital Investment Grant	CIG
Chief Executive Officer	CEO
Cost Estimate Review	CER
Congestion Mitigation and Air Quality	CMAQ
Draft Environmental Document	DED
Draft Project Report	DPR
Environmental Cleanup Allocation Committee	ECAC
Environmental Cleanup Program	ECP
Environmental Document	ED
Environmental Impact Report	EIR
Environmental Impact Statement	EIS
Environmental Mitigation Program	EMP
Environmental Oversight Committee	EOC
Federal Highway Administration	FHWA
Federal Transit Administration	FTA
Federal Transportation Improvement Program	FTIP
Freeway Service Patrol	FSP
Full Funding Grant Agreement	FFGA
High Occupancy Vehicle	HOV
Interstate 15	I-15
Interstate 405	I-405
Interstate 5	I-5
Interstate 605	I-605
Invitation for Bids	IFB
Local Faire Share Program	LFSP
Los Angeles – San Diego – San Luis Obispo	LOSSAN
Los Angeles County Metropolitan Transportation Authority	LA Metro
Measure M2 or Renewed Measure M	M2
Memorandum of Understanding	MOU
Metrolink Service Expansion Program	MSEP



## COMMON ABBREVIATIONS

Next 10 Delivery Plan	Next 10
Natural Community Conservation Plan/Habitat Conservation Plan	Conservation Plan
Orange County Transportation Authority	OCTA
Orange County Unified Transportation Trust	OCUTT
Pacific Coast Highway	PCH
Plans, Specifications and Estimates	PS&E
Program Management Office	PMO
Project Development Team	PDT
Project Study Report	PSR
Ready to List	RTL
Request for Proposals	RFP
Resource Management Plan	RMP
Right-of-Way	ROW
Riverside County Transportation Commission	RCTC
Santa Ana Regional Transportation Center	SARTC
Senate Bill 1	SB 1
Senior Mobility Program	SMP
Senior Non-Emergency Medical Transportation	SNEMT
Southern California Association of Governments	SCAG
State Route 133	SR-133
State Route 22	SR-22
State Route 241	SR-241
State Route 55	SR-55
State Route 57	SR-57
State Route 71	SR-71
State Route 74	SR-74
State Route 91	SR-91
State Transportation Improvement Program	STIP
State Water Resources Control Board	SWRCB
Southern California Regional Rail Authority	SCRRA
Taxpayer Oversight Committee	TOC
To Be Determined	TBD
Trade Corridors Improvement Funds	TCIF
Transportation Infrastructure Finance and Innovation Act	TIFIA
United States Army Corps of Engineers	ACOE
United States Fish and Wildlife Service	USFWS
United States Department of Transportation	USDOT



  
**MEASURE M2 PROJECT SCHEDULES**



Conceptual



Environmental



Design, Advertise, & Award



Design-Build



Construction

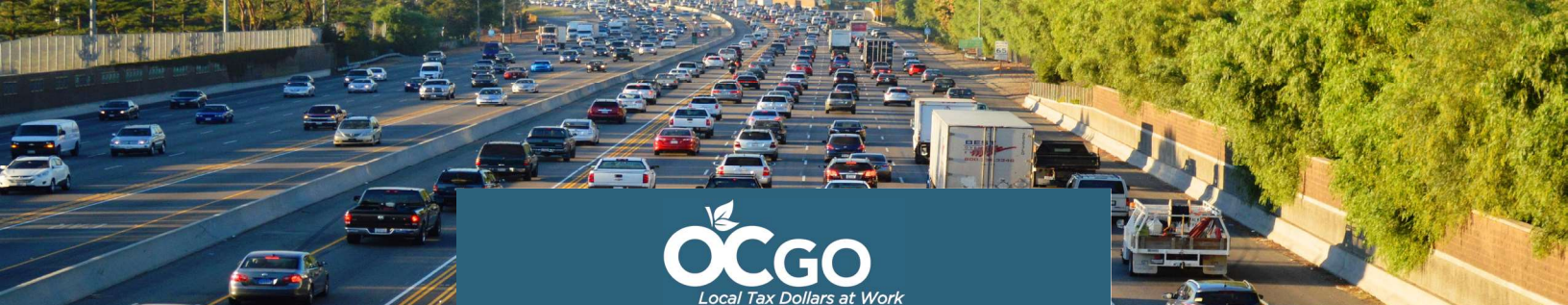


Complete

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>A</b>	I-5, SR-55 to SR-57	[Gantt bar: Green (2013-2014), Blue (2015-2018), Orange (2019-2021)]												
<b>B</b>	I-5, I-405 to SR-55 (Further Schedule TBD)	[Gantt bar: Green (2014-2020)]												
<b>C,D</b>	I-5, Avenida Pico to Avenida Vista Hermosa/Avenida Pico Interchange	[Gantt bar: Blue (2013-2014), Orange (2015-2018)]												
<b>C</b>	I-5, Avenida Vista Hermosa to Pacific Coast Highway	[Gantt bar: Blue (2013-2014), Orange (2015-2017)]												
<b>C</b>	I-5, Pacific Coast Highway to San Juan Creek Road	[Gantt bar: Blue (2013-2014), Orange (2015-2018)]												
<b>C,D</b>	I-5, SR-73 to Oso Parkway/Avery Parkway Interchange	[Gantt bar: Green (2013-2014), Blue (2015-2019), Orange (2020-2024)]												
<b>C,D</b>	I-5, Oso Parkway to Alicia Parkway/La Paz Road Interchange	[Gantt bar: Green (2013-2014), Blue (2015-2019), Orange (2020-2023)]												
<b>C</b>	I-5, Alicia Parkway to El Toro Road	[Gantt bar: Green (2013-2014), Blue (2015-2020), Orange (2021-2024)]												
<b>D</b>	I-5, El Toro Interchange (Further Schedule TBD)	[Gantt bar: Green (2017-2019)]												
<b>D</b>	I-5, Ortega Interchange	[Gantt bar: Orange (2013-2015)]												
<b>E</b>	SR-22, Access Improvements	<i>Completed in 2008</i>												
<b>F</b>	SR-55, I-405 to I-5	[Gantt bar: Green (2013-2017), Blue (2018-2021), Orange (2022-2025)]												
<b>F</b>	SR-55, I-5 to SR-91 (Further Schedule TBD)	[Gantt bar: Green (2016-2020)]												
<b>G</b>	SR-57 NB, Katella Avenue to Lincoln Avenue	[Gantt bar: Orange (2013-2015)]												
<b>G</b>	SR-57 NB, Orangethorpe Avenue to Yorba Linda Boulevard	[Gantt bar: Orange (2013-2015)]												
<b>G</b>	SR-57 NB, Yorba Linda Boulevard to Lambert Road	[Gantt bar: Orange (2013-2014)]												
<b>G</b>	SR-57 NB, Lambert Road to Tonner Canyon Road (TBD)	[Gantt bar: Orange (2013-2014)]												
<b>G</b>	SR-57, Orangewood Avenue to Katella Avenue (Further Schedule TBD)	[Gantt bar: Green (2016-2019)]												
<b>H</b>	SR-91 WB, I-5 to SR-57	[Gantt bar: Orange (2013-2015)]												
<b>I</b>	SR-91 WB, SR-55 to Tustin Avenue Interchange	[Gantt bar: Blue (2013-2014), Orange (2015-2016)]												
<b>I</b>	SR-91, SR-55 to SR-57 (Further Schedule TBD)	[Gantt bar: Green (2015-2020)]												
<b>J</b>	SR-91, SR-55 to SR-241	[Gantt bar: Orange (2013)]												
<b>J</b>	SR-91, SR-241 to SR-71	<i>Completed in 2011</i>												

Project schedules are based on phase start dates. Shown schedules are subject to change.





## MEASURE M2 PROJECT SCHEDULES

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>J</b> SR-91, SR-241 to I-15 (TBD)													
<b>K</b> I-405, SR-73 to I-605													
<b>L</b> I-405, I-5 to SR-55 (Further Schedule TBD)													
<b>M</b> I-605, Katella Interchange (Further Schedule TBD)													
<b>O</b> Kraemer Boulevard Grade Separation (Placentia)													
<b>O</b> Lakeview Avenue Grade Separation (Anaheim/Placentia)													
<b>O</b> Orangethorpe Avenue Grade Separation (Anaheim/Placentia)													
<b>O</b> Placentia Avenue Grade Separation (Placentia)													
<b>O</b> Raymond Avenue Grade Separation (Fullerton) <sup>1</sup>													
<b>O</b> State College Blvd Grade Separation (Fullerton) <sup>1</sup>													
<b>O</b> Tustin Ave/Rose Drive Grade Separation (Anaheim/Placentia)													
<b>R</b> Sand Canyon Grade Separation (Irvine)													
<b>R</b> Rail-Highway Grade Crossing Safety Enhancement													
<b>R</b> San Clemente Beach Trail Safety Enhancements													
<b>R</b> Anaheim Canyon Metrolink Station Improvements													
<b>R</b> Fullerton Transportation Center Improvements													
<b>R</b> Laguna Niguel/Mission Viejo Metrolink Station Americans with Disabilities Act (ADA) Ramps													
<b>R</b> Orange Transportation Center Metrolink Parking Structure													
<b>R</b> Placentia Metrolink Station Improvements and Parking Structure													
<b>R</b> San Clemente Pier Station Lighting													
<b>R</b> Laguna Niguel to San Juan Capistrano Metrolink Station Passing Siding Project													
<b>R</b> Tustin Metrolink Station Parking Structure													
<b>R,T</b> Anaheim Regional Transportation Intermodal Center (ARTIC) <sup>1</sup>													
<b>S</b> OC Streetcar													

Project schedules are based on phase start dates. Shown schedules are subject to change.

<sup>1</sup> Projects managed by local agencies



## MEASURE M2 PROGRESS REPORT

### M2 DELIVERY RISK UPDATE ▼

This section discusses the risks and challenges related to Measure M2 and the 2018 update of the Next 10 Delivery Plan (Next 10) that the Measure M2 Program Management Office (PMO) is monitoring – complete with associated explanations and proposed actions.

Delivery Risk	Explanation	Proposed Action
<b>Financial</b>		
1	The 2018 M2 revenue forecast estimate is \$13.1 billion, which represents a 46 percent decrease in forecasted revenue since M2 adoption.	Sales tax revenue has been impacted by the recession and changes in consumer spending habits.
		The 2018 forecast results in greater reliance on external funding to deliver the Freeway Program. OCTA will continue to pursue available state and federal revenue.
2	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 identify lower cost freeway alternative options for approval.
3	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 the system ages, track-sharing arrangements with BNSF are revised, and new air quality requirements are implemented.
		Staff will continue to work closely with Metrolink and our partners to ensure cost increases are minimized, while seeking external revenue.
4	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.
		A program level line item for an economic uncertainty allowance has been included in the freeway cash flow intended to safeguard the program and protect against over-committing. OCTA will continue to monitor and track key early warning indicators. While bid items have increased, there were no significant changes this quarter.



## MEASURE M2 PROGRESS REPORT

Delivery Risk	Explanation	Proposed Action
<b>Organizational</b>		
5	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.		
6	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 startup and daily operations.		
<b>Policy</b>		
7	New statewide directives create additional hurdles for the Freeway Program in particular.	New directives at the State for greenhouse gas emission reductions and concerns related to projects that have the potential to increase vehicles miles traveled, are giving deference to projects that do not increase highway system capacity. The one project type the State appears interested in supporting is managed lane projects. This may limit external funding opportunities for Measure M2 freeway projects.
OCTA will work closely with the California Transportation Commission (CTC), Caltrans and the state legislature to try to maintain funding opportunities for OCTA freeway projects.		





## MEASURE M2 PROGRESS REPORT

### Next 10 Delivery Plan ▼

**Contact:** Tami Warren, PMO Manager • (714) 560-5590

On November 14, 2016, the Board approved the Next 10 Delivery Plan (Next 10), providing guidance to staff on delivery of M2 projects and programs between 2017 and 2026. The Next 10 was updated to address and incorporate the 2018 sales tax revenue forecast of \$13.1 billion. The 2018 update of then Next 10 incorporates current revenue projections, bonding assumptions, project costs and schedule, and adjustments ensuring continued delivery of the complete M2 Program by 2041 as promised.

### Next 10 Plan Deliverables

The Next 10 Plan is based on ten deliverables intended to provide guidance on program and project delivery during the ten-year period. With two years of the ten-year plan complete, progress on the ten deliverables and accomplishments to date is provided. Significant progress has been made, with projects completing construction, projects in and advancing towards construction, as well as regular funding allocations to local jurisdictions through local programs.

#### **1. Deliver \$3.5<sup>1</sup> billion of freeway improvements approved through construction (Projects A-M).**

At the point of Next 10 adoption in November 2016 the M2 freeway program consisted of 27 projects or project segments, nine projects were completed, and another nine were designated to be complete within the Next 10 timeframe. Together, the segments designated for completion by 2026 made up a \$3.1 billion delivery promise. Funded with 91 Express Lanes excess revenues, a tenth project (broken into three segments this quarter), the SR-91 between SR-57 to SR-55 (Project I) was designated a priority project and is now part of Deliverable 1 (planned to be complete by 2029). With this project, OCTA will deliver \$3.5 billion of freeway improvements approved through construction. The I-5 between I-405 and SR-55 (Project B) was also broken into two segments this quarter, bringing the total number of projects or project segments to 30. While the total number of segments increased from 27 to 30, the project delivery commitment remains the same. To date, three segments of the Interstate 5 (I-5) between Avenida Pico and San Juan Creek Road, opened to traffic in March 2018, adding six miles of carpool lanes. The remaining eight segments are in design or construction. For more details, see [pages iii-iv](#) (Project Schedules) and the project updates contained in the following pages.

#### **2. Invest approximately \$715<sup>1</sup> million more in revenues, bringing the completed Freeway Program improvements to \$4.3 billion (Projects A-M).**

The final nine remaining project segments (of the 30 total) are environmentally cleared or on track to be environmentally cleared by 2026, making them “shelf ready” for future advancement. Currently, three of the nine (Projects G, L and M) are environmentally cleared and shelf ready. 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. For more details, see [pages iii-iv](#) (Project Schedules) and the project updates contained in the following pages.

<sup>1</sup>Because Project I is now included with Deliverable 1, the original Deliverable 1 investment increased to \$3.5 billion, and 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.



## MEASURE M2 PROGRESS REPORT

### **3. Allocate \$1 billion, with \$400 million in competitive funding to local jurisdictions to expand roadway capacity and synchronize signals (Project O and P) and \$600 million in flexible funding to local jurisdictions to help maintain aging streets or for use on other transportation needs, as appropriate (Project Q).**

Since the adoption of the Next 10 Plan in November 2016, OCTA has awarded approximately \$90 million in competitive funding through the Regional Capacity Program (Project O) and Regional Traffic Signal Synchronization Program (Project P). Additionally, \$153.8<sup>2</sup> million in Local Fair Share (Project Q) funds have been distributed to local agencies. This brings the total allocation to date to \$243.8 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 funding. Final programming recommendations were presented to the Board on June 10, 2019. Additionally, all seven bridges included in the OC Bridges program are complete. For more details, see the project updates on [page 18](#).

<sup>2</sup>Only includes disbursed funds. On May 13, 2019, the Board determined that the City of Santa Ana and the City of Stanton ineligible to receive M2 revenues. Disbursement of M2 funds have been suspended until the cities achieve compliance and the Board reconsiders the matter by May 2020.

### **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).**

Contingent upon cooperation and funding participation from route partners, OCTA plans to extend service on four intracounty trips to Los Angeles in two phases beginning in October 2019 and April 2020. Two northbound trips that currently operate between Laguna Niguel/Mission Viejo and Fullerton will be extended to Los Angeles and two southbound trips will begin in Los Angeles instead of Fullerton. Schedules for the extended service are being developed and will be kept consistent with the way schedules are currently written.

Within this program, funding is provided for rail corridor and station improvements to accommodate increased passenger train service - including station upgrades, parking expansions, and safety enhancements. The Next 10 Plan identifies six projects to be completed by 2026: 1) Laguna Niguel/Mission Viejo Metrolink Station ADA ramps (completed September 2017), 2) Orange Metrolink Station Parking Structure (completed in February 2019), 3) Placentia Metrolink Station (construction to begin early 2020- contingent on BNSF Construction and Maintenance Agreement being in place), 4) Anaheim Canyon Metrolink Station Improvement Project (construction to begin summer 2020), 5) Fullerton Transportation Center elevators (completed in May 2019), and 6) San Clemente Pier Metrolink/Amtrak Station Lighting Project (completed in March 2017). For more details, see the project updates on [page 23](#).

### **5. Complete design and construction, secure vehicles, 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 (Project S).**

#### OC Streetcar

Activities continue to move forward, including coordination with third parties on utility relocation, finalizing the scope of services for the operations and maintenance request for proposals released on November 12, 2018,





## MEASURE M2 PROGRESS REPORT

and continued coordination with the Federal Transit Administration (FTA). The streetcar vehicle manufacturing contract has been executed and the notice to proceed has been issued. The streetcar construction contract has been executed and Notice to Proceed was issued on March 4, 2019, and construction activities are underway. With strong FTA support for the project, a FFGA was executed in November 2018. Construction is anticipated to be complete in early 2022. See [page 27](#) for more information.

### Bristol Street Transit Corridor Study

The study is focused on Bristol Street between West 17th Street and Sunflower Avenue (South Coast Metro); and will also evaluate connections to the John Wayne Airport and the Santa Ana Regional Transportation Center. The study will analyze and develop up to six conceptual transit alternatives for the Bristol Street Corridor. During the quarter, the project team provided an update on the study purpose and need, mobility needs, and corridor definition to the OCTA Transit Committee on April 11, 2019, and Board of Directors on April 22, 2019. During these updates the Board asked staff to consider options for extending the study limits to include the University of California at Irvine campus. Following staff analysis and an additional presentation, the Board directed staff to proceed forward with the original scope of work and study limits. The outreach activities planned for this quarter were rescheduled for the next quarter, while the team sought final direction from the Board. Monthly Project Development Team (PDT) meetings were held on April 16, 2019, and May 21, 2019, and the PDT began discussing the development of alternatives. A transit field trip to the San Diego Metropolitan Transit System was coordinated for PDT members on June 21st in lieu of the monthly meeting, to allow the PDT to experience first-hand the transit concepts and features being considered for the Bristol Street corridor. During the next quarter, staff will conduct various outreach activities and continue working with the PDT to develop the six draft conceptual alternatives. The first of three Stakeholder workshops is scheduled for July 31, 2019, and open houses have been scheduled for August 3, 2019, and August 7, 2019, to solicit input.

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

Approximately \$29.6<sup>3</sup> 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. See [page 29](#) for more information.

<sup>3</sup>Only includes disbursed funds. On May 13, 2019, the Board determined that the City of Santa Ana and the City of Stanton ineligible to receive M2 revenues. Disbursement of M2 funds have been suspended until the cities achieve compliance and the Board reconsiders the matter by May 2020.

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

In December 2017, OCTA staff requested letters from local agencies to determine interest for a 2018 Project V Call for Projects. With 13 letters of interest received the Board initiated a Call for Projects in February 2018 and on June 25, 2018, the Board awarded \$5.2 million to fund five Community-Based Transit Circulators Projects and authorized the use of existing 2016 awarded funds to extend a San Clemente demonstration project out to FY 22-23.

In March 2019, OCTA once again requested letters of interest for another round of Project V funding. Responses



## MEASURE M2 PROGRESS REPORT

from eligible local agencies were due at the end of April. The response rate was strong with 10 letters received, and staff will present findings for the Board to consider whether to issue a fourth call for projects in August 2019. For additional details and information on current project program performance and service see [page 30](#).

### **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).**

Through two calls for projects, the Board has approved \$2.45 million to support 85 city-initiated improvements and three OCTA-initiated improvements. During the quarter, final funding recommendations were approved by the Board for the second call for projects and \$370,000 was deallocated for an OCTA initiated improvement, as funding was obtained from external sources. To date, the City of Anaheim postponed development of eight stops, 43 city-initiated improvements have been completed, 34 city-initiated improvements were recently approved and one OCTA-initiated improvement has been deallocated. For additional details see [page 31](#).

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

The Freeway Mitigation Program Preserves includes seven properties (1,300 acres), and 12 restoration projects (350 acres). In 2017, OCTA received biological resource permits after completing a state and federal Natural Community Conservation Plan/Habitat Conservation Plan (Conservation Plan) for the Environmental Mitigation Program, allowing streamlined project approvals for the freeway improvement projects. The Conservation Plan also includes a streamlined process for coordination of 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 Preserves. Approximately \$2.9 million will be deposited annually. The third deposit was made in August 2018. For more details, see the project updates on [page 33](#).

### **10. Work with the Environmental Cleanup Allocation Committee (ECAC) to develop the next tiers of water quality programs, with a goal of providing \$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 (ECP) (Project X).**

Since adoption of the Next 10 Plan in November 2016, OCTA has issued three calls for Tier 1 ECP projects. The Board awarded approximately \$5.59 million to fund 28 Tier 1 projects. Staff anticipates the next Tier 2 call in 2021, dependent on projected cash flow and local jurisdictions' interest in potential viable Tier 2 projects. For more details, see the project updates on [page 32](#).





## FREEWAYS

### INTERSTATE 5 (I-5) PROJECTS ▾

**Segment:** I-5, Between SR-55 and SR-57

PROJECT A

**Status:** Construction Underway – 17% complete

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project will increase high occupancy vehicle (HOV) capacity by adding a second HOV lane in both directions along I-5 between SR-55 and SR-57 for approximately 3 miles in Santa Ana. Construction began on February 20, 2019, and during the quarter activities included the installation of retaining walls at Lincoln Avenue and preparation for the demolition of the HOV ramp bridge, scheduled to take place in early August 2019. The project is expected to be completed in early 2021.

**Segment:** I-5, I-405 to SR-55

PROJECT B

**Status:** Environmental Phase Underway - 92% Complete

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project is studying the addition of one general purpose lane in each direction of the I-5 corridor and improved interchanges in the area between just north of I-405 to SR-55 in the cities of Tustin and Irvine. Additional features include the addition of auxiliary lanes in some areas and re-establishment in other areas within the project limits. The Draft Environmental Document (DED) was circulated in May 2018 and two open house format public hearings were held in late May 2018. To limit community and business impacts, design variations were recommended to address tight right-of-way constraints in the project area. Due to a lack of agreement over design variations recommended, the completion of the environmental document was delayed 15 months. Following discussions and further study, agreement was reached, and the Project Development Team recommended a preferred alternative in mid-March 2019. The Design Standard Decision Document (formerly Fact Sheet) process is underway to address the agreed upon design variations and completion of the final ED is expected in late-2019. This project has been segmented into two segments for the design phase which is anticipated to begin in late 2020.



## FREWAYS

### PROJECT C AND PART OF PROJECT D

**I-5, Avenida Pico to San Juan Creek Road is one project broken into three segments, as described below.**

**Segment:** I-5, Avenida Pico to Avenida Vista Hermosa/Avenida Pico Interchange

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** This segment added a carpool lane in each direction on I-5 between Avenida Pico and Avenida Vista Hermosa for approximately 0.7 miles in San Clemente, and included major improvements through reconstruction of the Avenida Pico Interchange (part of Project D). The project also added bicycle lanes in both directions on Avenida Pico. Construction began in February 2015 and all three segments of the I-5 between Avenida Pico to San Juan Creek were opened to traffic on March 13, 2018. The project was officially completed on August 23, 2018. During the quarter, plant establishment continued and was completed on May 2019.

**Segment:** I-5, Avenida Vista Hermosa to Pacific Coast Highway

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** This segment added a carpool lane in each direction of I-5 between Avenida Vista Hermosa and Pacific Coast Highway (PCH) for approximately 2.5 miles in San Clemente, and also reconstructed on- and off-ramps at Avenida Vista Hermosa and Camino de Estrella. Construction began in September 2014 and all three segments of the I-5 between Avenida Pico to San Juan Creek were opened to traffic on March 13, 2018. The project was officially completed on July 31, 2017, and the one-year plant establishment period for this segment was completed in May 2018.

**Segment:** I-5, Pacific Coast Highway to San Juan Creek Road

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** This segment added one carpool lane in each direction of the I-5 between PCH and San Juan Creek Road for approximately 2.5 miles in the Cities of San Clemente, Dana Point, and San Juan Capistrano. Project improvements also reconstructed the on and off ramps at PCH/Camino Las Ramblas. Construction began in March 2014 and all three segments of the I-5 between Avenida Pico to San Juan Creek were opened to traffic on March 13, 2018. The project was officially completed on July 3, 2018, and plant establishment was complete in March 2019. While the project is complete, an outstanding contractor claim remains to be resolved.





## FREWAYS

I-5, SR-73 to El Toro Road is one project broken into three segments in early 2018, as described below. With a cost estimate for this project of \$557.11 million, the project was above the \$500 million threshold for a “Major Project” designation, as determined by the Federal Highway Administration (FHWA). Major projects require a Cost Estimate Review (CER) workshop, and a CER was conducted by the FHWA, Caltrans, and OCTA in February 2018 and resulted in an estimated project cost of \$612.6 million. The OCTA cost estimate for the three segments is currently \$593.5 million.

**Segment:** I-5, SR-73 to Oso Parkway/Avery Parkway Interchange

**Status:** Design Complete. Construction bid package preparation underway

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project will make improvements along I-5 between SR-73 and Oso Parkway in the Cities of Laguna Hills, Laguna Niguel, and Mission Viejo. The improvements include the addition of a 2.2-mile general-purpose lane in each direction and reconstruction of the Avery Parkway Interchange (part of Project D). During the quarter, the consultant continued working on ROW acquisition and coordination with utility agencies. Staff continued to coordinate with Caltrans and obtained approval of all Fact Sheets, ROW certification and Ready to List (RTL) the project. The 100 percent Plans, Specifications, and Estimates (PS&E) was re-submitted to Caltrans on March 15th implementing the latest Caltrans Highway Design Manual standards. The plans identified a higher cost estimate due to unit price increases, rise in Caltrans support costs, and schedule changes to address bird nesting season restrictions. Due to extended ROW coordination, this project is marked “red” in the CAP, due to a delay of 12 months beyond the original schedule. Funding allocation of \$73.73 million in STIP and \$30.26 million in TCIF were approved at the June 2019 CTC meeting.

**Segment:** I-5, Oso Parkway to Alicia Parkway/La Paz Road Interchange

**Status:** Construction Underway – 3% Complete

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project will make improvements along I-5 between Oso Parkway and Alicia Parkway in the Cities of Mission Viejo, Laguna Hills, and Lake Forest. The proposed improvements include the addition of a 2.6-mile general-purpose lane in each direction and reconstruction of the La Paz Road Interchange (Part of Project D). The construction contract award was on April 4, 2019, and the first working day was May 29, 2019. Activities this quarter include clearing and grubbing, placing of K rail and restriping. The Construction Management team is working with the contractor on approval of the Baseline Schedule. Staff also continued coordination of the service contract with SCRR/Metrolink, and with Caltrans on ROW and utilities.



## FREEWAYS

**Segment:** I-5, Alicia Parkway to El Toro Road  
**Status:** Design Complete. Construction bid package preparation underway  
**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project will make improvements along I-5 between Alicia Parkway to El Toro Road in the Cities of Lake Forest, Laguna Hills, Laguna Woods and Mission Viejo. The proposed improvements include the addition of a 1.7-mile general-purpose lane in each direction and the extension of the second HOV lane from El Toro Road to Alicia Parkway. Major activities this quarter included continued coordination with Caltrans, California Department of Fish and Wildlife regarding the planned work at Aliso Creek. Final ROW mapping is approved, although third party utility realignments have necessitated the revision of two parcels. Due to extended ROW coordination with Caltrans and delayed design start date, this project is marked “red” in the CAP, with a delay of over 13 months beyond the original schedule. The 100 percent Design Submittal was on May 3, 2019, and the consultant coordinated with the Caltrans Office Engineer to prepare for achieving Ready to List Status. The 2018 STIP increased funding for this segment to \$69.1 million, but the segment is programmed in the STIP three years later than requested. Staff will work with the CTC staff and Caltrans to maintain the existing schedule.

### PROJECT D

This project will update and improve key I-5 interchanges at Avenida Pico, Ortega Highway, Avery Parkway, La Paz, and at El Toro Road. Three interchange improvements at La Paz, Avery Parkway, and Avenida Pico are included and discussed as part of the respective segments in Project C.

**Segment:** I-5, Ortega Highway Interchange  
**Status:** PROJECT COMPLETE  
**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** Construction began in February 2013 to reconstruct the SR-74 Ortega Highway Bridge over I-5 and improve local traffic flow along SR-74 and Del Obispo Street in the City of San Juan Capistrano. All lanes on the new bridge were opened to traffic on September 4, 2015. A dedication ceremony was held on October 1, 2015. The project was officially completed on January 15, 2016.

**Segment:** I-5, El Toro Interchange  
**Status:** Environmental Phase Underway - 65% Complete  
**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** Caltrans is the lead in the environmental phase of this project which included the study of four build alternatives that consider modifications to the existing interchange, ranging from an I-5 southbound direct connector to El Toro Road to modifications in how existing on and off ramp intersections operate. The project area includes the cities of Laguna Hills, Laguna Woods and Lake Forest who are direct stakeholders of the





## FREEWAYS

project improvements. The study began in April 2017 and the Draft Initial Study/Environmental Assessment (IS/EA) was completed in March 2019. The public comment review period was from April 2, 2019, through May 20, 2019, and a public hearing was held on April 18, 2019, in the City of Lake Forest. The four alternatives were reduced to two and the remaining two alternatives have large community and business impacts as a result of the project being in a densely built out area. The study does not have consensus from the three stakeholder cities and without consensus the project will not be able to move forward. Additionally, costs identified for the remaining alternatives are significantly higher than the assumed cost in the Next 10 Plan which creates additional challenges. The environmental phase is anticipated to be completed in late 2019 however, without the cities' consensus, OCTA will not likely be in support of finalization of the document.

### STATE ROUTE 22 (SR-22) PROJECTS ▼

**Segment:** SR-22 Access Improvements

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



PROJECT E

**Summary:** Completed in 2008, Project E made improvements at three key SR-22 interchanges (Brookhurst Street, Euclid Street, and Harbor Boulevard) in the City of Garden Grove to reduce freeway and street congestion in the area. This M2 project was completed early as a “bonus project” provided by the original Measure M (M1).

### STATE ROUTE 55 (SR-55) PROJECTS ▼

**Segment:** SR-55, I-405 to I-5

**Status:** Design Phase Underway - 70% Complete

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

PROJECT F

**Summary:** This project will widen SR-55 between I-405 and I-5 in the Cities of Irvine, Santa Ana, and Tustin. The improvements will include a 4-mile general purpose lane and a second HOV lane in both directions between the I-405 and I-5. Auxiliary lanes will be added and extended in some segments, within the project limits. Through a cooperative agreement, Caltrans and OCTA's consultant initiated the design together. During the quarter, the 95 percent design was completed at the end of June. The 95 percent design submittal will go through quality control reviews and audit before submittal to Caltrans on July 19, 2019. Caltrans is responsible for developing and seeking approval of the required Supplemental Fact Sheet addressing necessary design variations on the project. The Supplemental Fact Sheet is anticipated to be completed in September 2019. ROW and utility coordination have been initiated and are ongoing. The project is anticipated to be ROW Certified and ready to list (RTL) by December 2020. OCTA received \$80 million for this segment through the 2018 STIP, however the segment is currently programmed in the STIP one year later than requested. Staff will work with the CTC staff and Caltrans to maintain the existing schedule.



# FREEWAYS

**Segment:** SR-55, I-5 to SR-91  
**Status:** Environmental Phase Underway - 74% Complete  
**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project is studying approximately 7.5 miles of SR-55 between I-5 and SR-91 in the Cities of Santa Ana, Tustin, Orange and Anaheim. The environmental study is looking at the addition of one general purpose lane in each direction between SR-22 and the I-5 and providing operational improvements between SR-22 and SR-91. During the quarter, the consultant continued working on technical studies and obtained approval on most of technical studies. The Draft Environmental Document (ED) and Draft Project Report are anticipated to be complete in October 2019. The Draft ED is anticipated to be circulated for public review, and an open house format Public Hearing is anticipated to be held in late-2019. The Design Standard Decision Document (formerly Fact Sheet) process has been underway to address design variations needed to limit right-of-way impacts. The final ED is expected to be approved in early 2020.

## STATE ROUTE 57 (SR-57) PROJECTS ▾

**Segment:** SR-57 Northbound, Katella Avenue to Lincoln Avenue  
**Status:** PROJECT COMPLETE  
**Contact:** Rose Casey, Capital Projects • (714) 560-5729



PROJECT G

**Summary:** This project increased capacity and improved operations on northbound SR-57 between Katella Avenue and Lincoln Avenue in the City of Anaheim with the addition of a new 3-mile general purpose lane, on- and off-ramp improvements, and sound walls. Bridges at Katella Avenue and Douglas Road were also widened in the northbound direction. The project opened to traffic on November 19, 2014, and completed on April 21, 2015.

**Segment:** SR-57 Northbound, Orangethorpe Avenue to Yorba Linda Boulevard  
**Status:** PROJECT COMPLETE  
**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** This project increased capacity and improved operations on northbound SR-57 with a new 2.5-mile northbound general-purpose lane between Orangethorpe Avenue in the City of Placentia to Yorba Linda Boulevard in the City of Fullerton. In addition to the new lane, capital improvements include reconstruction of northbound on- and off-ramps, widening of seven bridges, and the addition of soundwalls. The new general purpose lane was opened to traffic on April 28, 2014. The project was completed on November 6, 2014.





## FREEWAYS

**Segment:** SR-57 Northbound, Yorba Linda Boulevard to Lambert Road

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** Completed on May 2, 2014, this project improved capacity, operations, and traffic flow on SR-57 with the addition of a new 2.5-mile northbound general-purpose lane between Yorba Linda Boulevard in the City of Fullerton and Lambert Road in the City of Brea. Additional project benefits include on- and off-ramp improvements, the widening and seismic retrofit (as required) of six bridges in the northbound direction and the addition of soundwalls. Existing lanes and shoulders were also widened to standard widths, enhancing safety for motorists. The new general purpose lane was opened to traffic on September 23, 2013. The project was completed on May 2, 2014.

**Segment:** SR-57 Northbound, Lambert Road to Tonner Canyon Road

**Status:** Environmental phase expected to begin in mid-2020

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** Caltrans previously completed a Project Study Report (PSR)/Project Development Support document for the Lambert Road to Tonner Canyon Road segment, which would add a truck-climbing lane from Lambert Road to Tonner Canyon Road in the City of Brea in the approximately 2.5 mile area. The mainline project includes interchange and ramp improvements at Lambert Road. Through the SB 1 Trade Corridor Enhancement Program, funds were allocated to initiate the construction phase for interchange improvements at Lambert Road which will complement and serve as a first phase to the freeway improvement project. Construction bids were opened for Phase 1 on February 13, 2019. The lowest responsive bidder was 16% under the engineers estimate. Phase 2, which is the mainline improvements, was approved for STIP funding in March 2018 to initiate the environmental phase to study the truck-climbing lanes in mid-2020. This project will coordinate with and take into consideration any related work by LA Metro across the county line.

**Segment:** SR-57 Northbound, Orangewood Avenue to Katella Avenue

**Status:** Environmental Phase Complete

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project studied the addition of a new one mile northbound general purpose lane on SR-57 from Orangewood Avenue to Katella Avenue in the Cities of Anaheim and Orange. The northbound general-purpose lane would join the northbound general purpose lane which was opened to traffic in 2014 between Katella Avenue and Lincoln Avenue. During the quarter the Final Environmental Document and Final Project Report were approved on March 29, 2019. The Next 10 Plan 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 project advancement. Using only Measure M funding, this project is scheduled to move into design beyond 2026, however, projects that compete best for external funding are those that are already environmentally cleared. OCTA continually looks for opportunities to accelerate construction by taking advantage of state and federal dollars.



# FREEWAYS

## STATE ROUTE 91 (SR-91) PROJECTS ▾

**Segment:** SR-91 Westbound, I-5 to SR-57

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



PROJECT H

**Summary:** This project increased capacity in the westbound direction of SR-91 by adding an additional 4.5-mile general purpose lane in the westbound direction between Anaheim and Fullerton and provided operational improvements at on and off-ramps between Brookhurst Street and State College Boulevard. The general purpose lane was opened to traffic on March 7, 2016, and the project was complete on June 23, 2016.

**Segment:** SR-91, SR-55 to Tustin Avenue Interchange

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



PROJECT I

**Summary:** This project improved traffic flow at the SR-55/SR-91 interchange by adding a westbound auxiliary lane beginning at the northbound SR-55 to westbound SR-91 connector through the Tustin Avenue interchange in the City of Anaheim in the approximately 2-mile area. The project reduced weaving congestion in the area and included reconstruction of the westbound side of the Santa Ana River Bridge to accommodate the additional lane. The bypass lane was open to traffic on May 14, 2016, and construction was completed on July 15, 2016.

**Segment:** SR-91, SR-55 to SR-57

**Status:** Environmental Phase Underway - 93% Complete

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project will improve traffic flow and operations along SR-91 within the Cities of Fullerton and Anaheim in the approximately 5-mile study area. The study is looking at the addition of one general purpose lane eastbound between SR-57 and SR-55, and one general purpose lane westbound from the NB SR-57 connector to State College Boulevard. Additional features of this project include improvements to various interchanges. Auxiliary lanes will be added in some segments and re-established in others within the project limits. The Project Development Team recommended the preferred alternative in late-March. Due to Caltrans requiring extra work to study interchange improvements outside of the completed PSR and the M2 promised project, the project is marked “red” in the CAP signifying a delay of 13 months from its original schedule. SR-91 Express Lanes excess revenue is designated to pay for the mainline freeway improvements included in M2. The draft ED was circulated to the public late-November 2018 and an open house format public hearing was held in December 2018. The finalization of the document has been delayed due to a requirement by Caltrans that OCTA provide additional information at the recycling facility for Caltrans to consider approval of design exceptions. This effort includes a site investigation at a former landfill and is currently operating as a metals recycling facility, which is a lengthy process and introduces significant risk to the project. The final ED is anticipated to be complete in April 2020. This project has been segmented into three segments for the design phase which is anticipated to begin in early 2020.



## FREEWAYS

**Segment:** SR-91, SR-55 to SR-241

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



PROJECT J

**Summary:** This completed Project J segment added six miles in the westbound and eastbound direction to a key stretch of SR-91 between SR-55 and SR-241 in the Cities of Anaheim and Yorba Linda. In addition to adding 12 lane miles to SR-91, the project also delivered a much needed second eastbound exit lane at the Lakeview Avenue, Imperial Highway and Yorba Linda Boulevard/Weir Canyon Road off-ramps. Beyond these capital improvements, crews completed work on safety barriers, lane striping and soundwalls. Completion of this project in March 2013 means a total of 18 lane miles have been added to SR-91 since December 2010. The lanes opened to traffic in December 2012, and construction completed on March 5, 2013.

**Segment:** SR-91, SR-241 to SR-71

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** Completed in January 2011, this segment added six miles through a key stretch of SR-91 between Orange County's SR-241 and Riverside County's SR-71. The project improves mobility and operations by reducing traffic weaving from traffic exiting at SR-71 and Green River Road. An additional eastbound general purpose lane on SR-91 was added and all existing eastbound lanes and shoulders were widened. The new facilities were opened to traffic on December 2, 2010, and construction completed January 31, 2011. Because this project was shovel-ready, OCTA was able to obtain American Recovery and Reinvestment Act funding for this M2 project, saving M2 revenues for future projects.

**Segment:** SR-91, SR-241 to I-15

**Status:** RCTC's Design-Build - Initial Phase Complete March 20, 2017

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** Freeway improvements that cross county lines require close coordination to maintain seamless travel. This project adds one general-purpose lane (bringing the total to 6 lanes in each direction) on SR-91 between SR-241 and I-15. Since the SR-91 corridor is one of the busiest in the region, implementation of this project requires constructing the improvements under multiple segments to minimize impacts to the traveling public. While the portion of this project between SR-241 and the Orange County/Riverside County line is part of OCTA's OC Go Project J, the matching segment between the county line and SR-71 is part of RCTC's Measure A. The 6th lane addition requires joint implementation to ensure smooth delivery of the project. To assist with coordination, RCTC included the 6th lane project into the RCTC Corridor Improvement Project between the Riverside/Orange County line to SR-241, which included several components. On March 20, 2017, the general purpose lane between SR-71 and I-15 was completed by RCTC as part of the \$1.3 billion initial phase freeway improvement project which extended the 91 Express Lanes from its terminus in Orange County to I-15 in Riverside County and provided tolled express connectors between SR-91 and I-15 in one direction. With significant SR-91



# FREEWAYS

freeway improvements taking place as a result of both counties sales tax measures, the construction of the final additional general purpose lane between SR-241 and SR-71 was anticipated to take place post-2035. However, RCTC has requested OCTA's support accelerating a portion of the ultimate project in the westbound direction to address a bottleneck issue occurring in the City of Corona. With OCTA's support, RCTC has initiated the 91 Corridor Operation Project to look at moving the project forward sooner. Discussions and coordination between OCTA and RCTC are ongoing. In addition, OCTA and RCTC will be jointly conducting an alternative analysis to determine how best to implement the 6th general-purpose lane in the eastbound direction between SR-241 and SR-71, while minimizing environmental and construction impacts.

## INTERSTATE 405 (I-405) PROJECTS ▼

**Segment:** I-405, SR-73 to I-605

PROJECT K

**Status:** Design-Build Underway

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** OCTA and Caltrans are working together to widen I-405 through the Cities of Costa Mesa, Fountain Valley, Garden Grove, Huntington Beach, Los Alamitos, Seal Beach, and Westminster in the approximately 16-mile project area. These improvements will add one general purpose lane, add a second lane to be combined with the existing HOV lane to provide a dual express lanes facility, and improve the local interchanges along the corridor from SR-73 to I-605.<sup>4</sup>

During the quarter, work continued on ROW acquisition, utility coordination, and public outreach. Other work includes review of design-builder submittals including design and construction submittals. OCTA's toll lanes system integrator, Kapsch, is now under contract and working with OCTA and the design-builder. Significant roadway construction activities, including installation of drainage systems, retaining walls, and paving operations are underway. Additionally, approximately 18 walls are under construction at this time as well. Construction of the Slater Avenue bridge is nearing completion, and construction of the approaching roadways is set to begin. The Slater Avenue bridge will be the first new bridge completed and is anticipated to open to traffic in late August or early September 2019. Construction on the McFadden Avenue bridge continues, and is anticipated to be open to traffic in the summer of 2020. Significant bridge construction also continued at Fairview Road, Magnolia Street, Goldenwest Street, Bolsa Chica Road and Westminster Boulevard bridges. These are two-stage bridges, which means traffic will be maintained on the remaining portion of the bridge while the first half of the new bridge is constructed. Construction also began recently on the Santa Ana River bridge and the Harbor Boulevard bridge. Construction at the Santa Ana River and Harbor Boulevard bridges consists of widening the existing freeway bridge over both of those facilities. Lastly, OCTA continued targeted public outreach this past quarter in the form of neighborhood meetings in anticipation of the construction activities mentioned previously. Construction is scheduled to be completed in 2023.

<sup>4</sup>The general purpose lane portion of the project is a M2 project and will be funded by a combination of local, state and federal funds, with the express lanes portion of the project financed and paid for by those who choose to pay a toll and use the 405 Express Lanes.





## FREEWAYS

**Segment:** I-405, I-5 to SR-55

PROJECT L

**Status:** Environmental Phase Complete

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project studied the addition of general purpose lanes on the I-405 corridor between I-5 and SR-55 in Irvine in the approximately 8.5-mile project area. The project development team reviewed the alternatives and public comments received during public circulation and as a result of the effort, recommended adding one general purpose lane in each direction. The final Project Report (PR) and Environmental Document (ED) were completed in August 2018. The Next 10 Plan 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 project advancement. Using only Measure M funding, this project is scheduled to move into design beyond 2026, however, projects that compete best for external funding are those that are already environmentally cleared. OCTA continually looks for opportunities to accelerate construction by taking advantage of state and federal dollars.

### INTERSTATE 605 (I-605) PROJECTS ▼

**Segment:** I-605, Katella Interchange Improvements

PROJECT M

**Status:** Environmental Phase Complete

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** This project will improve freeway access and the arterial connection to I-605 at Katella Avenue in the City of Los Alamitos and the County of Orange. Improvements under this project will include enhancements at the on-ramps and off-ramps in addition to operational improvements on Katella Avenue at the I-605 Interchange. The final ED was approved in October 2018 and the final PR was approved in November 2018. The Next 10 Plan 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 project advancement. Using only Measure M funding, this project is scheduled to move into design beyond 2026, however, projects that compete best for external funding are those that are already environmentally cleared. OCTA continually looks for opportunities to accelerate construction by taking advantage of state and federal dollars.

### FREEWAY SERVICE PATROL ▼

**Status:** Service Ongoing

PROJECT N

**Contact:** Cliff Thorne • (714) 560-5975

**Summary:** M2's Freeway Service Patrol (FSP) began operation in June 2012 and provides tow truck service for motorists with disabled vehicles on the freeway system to help quickly clear freeway lanes and minimize congestion. During the quarter, the FSP provided midday service assistance to 1,125 motorists and provided weekend service assistance to 837 motorists. No M2 funded construction service was needed. Since inception, M2 and construction funded FSP has provided a total of 77,072 assists to motorists on the Orange County freeway system.



# STREETS AND ROADS

## REGIONAL CAPACITY PROGRAM ▼

**Status:** 2019 Call for Projects in Progress

PROJECT O

**Contact:** Joseph Alcock, Planning • (714) 560-5372

**Summary:** This program, in combination with required local matching funds, provides funding for improvements on Orange County’s Master Plan of Arterial Highways. Since 2011, 147 projects totaling more than \$296<sup>5</sup> million, including \$24 million in external funding, have been awarded through nine calls for projects by the Board. On June 10, 2019, the OCTA Board approved the 2019 Programming Recommendations which provided \$0.834 million in Regional Capacity Program funds.

*<sup>5</sup>To date, 14 of the 183 phases awarded by OCTA totaling approximately \$21 million have been cancelled by the awarded local jurisdictions.*

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### OC Bridges Railroad Program

This program built seven grade separations (either under or over passes) where high volume streets are impacted by freight trains along the BNSF Railroad in North County. With all seven grade separations open to traffic, an OC Bridges completion ceremony was held on October 24, 2017. To date, the Board has approved approximately \$664 million in committed M2 and external funds for all seven of the OC Bridges Program grade separation projects. Minor activities this quarter include warranty work and close out of projects.

**Segment:** Kraemer Boulevard Grade Separation



**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729

**Summary:** The project located at Kraemer Boulevard railroad crossing is grade separated and open to traffic. The project separated the local street from railroad tracks in the City of Placentia by building an underpass for vehicular traffic. The grade separation was opened to traffic on June 28, 2014, and an event was held on July 8, 2014, to commemorate the opening. Project acceptance by the Cities of Anaheim and of Placentia, respectively, occurred in December 2014 and the cities assumed full maintenance responsibilities. In December 2015, the one-year warranty period expired with no issues or repairs identified.





## STREETS AND ROADS

**Segment:** Lakeview Avenue Grade Separation

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** The project located at Lakeview Avenue railroad crossing grade separated the local street from railroad tracks in the Cities of Anaheim and Placentia by building a bridge for vehicular traffic over the railroad crossing and reconfiguring the intersection of Lakeview Avenue and Orangethorpe Avenue. Construction began on July 1, 2014.

Lakeview Avenue was reopened on June 6, 2017. Construction acceptance from the Cities of Anaheim and Placentia was obtained on June 2, 2017, and OCTA has turned over the maintenance responsibilities to the cities and completed the one-year warranty on some constructed items. The one-year warranty was extended to July 2019 for some minor repair items. Close-out activities is nearing completion and staff will present recommendation for final claim resolution to the Board on July 22, 2019, for approval. Funding reimbursement and closeout were initiated and are ongoing.

**Segment:** Orangethorpe Avenue Grade Separation

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** The project located at Orangethorpe Avenue railroad crossing is grade separated and open to traffic. The project separated the local street from railroad tracks in the Cities of Placentia and Anaheim by building a bridge for vehicular traffic over the railroad tracks. On May 17, 2016, a joint-grand opening event was held to commemorate the opening to traffic for the Orangethorpe and Tustin/Rose Grade Separation projects. Construction was completed in October 2016 and construction acceptance was obtained from the Cities of Anaheim and Placentia on October 25, 2016. OCTA has turned over the maintenance responsibilities to the cities and completed the one-year warranty on the majority of constructed items. The one-year warranty was extended to June 2019 for some minor repair items. Funding reimbursement and closeout were initiated and are ongoing.

**Segment:** Placentia Avenue Grade Separation

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** The project located at Placentia Avenue railroad crossing is grade separated and open to traffic. This project separated the local street from railroad tracks in the City of Placentia by building an underpass for vehicular traffic. An event was held on March 12, 2014, to commemorate the opening. Project acceptance by the Cities of Anaheim and Placentia occurred in December 2014 and the cities assumed full maintenance responsibilities. In December 2015, the one-year warranty period expired with no issues or repairs identified.

## STREETS AND ROADS

**Segment:** Raymond Avenue Grade Separation

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** The project located at Raymond Avenue railroad crossing grade separated the local street from railroad tracks in the City of Fullerton by taking vehicular traffic under the railroad crossing. The City of Fullerton is managing construction and OCTA is providing construction oversight, public outreach, railroad coordination, and ROW support. Construction began on June 2, 2014. Raymond Avenue has been opened to traffic since October 2017. OCTA received conditional construction acceptance in May 2018. Activities this quarter include project closeout documentation and processing final invoices. Funding reimbursement and closeout were initiated and are ongoing.

**Segment:** State College Boulevard Grade Separation

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** The project located at State College Boulevard railroad crossing grade separated the local street from railroad tracks in the City of Fullerton by taking vehicular traffic under the railroad crossing. The City of Fullerton managed the construction and OCTA provided construction oversight, public outreach, railroad coordination, and ROW support. State College Boulevard was opened to through traffic on November 1, 2017. Construction acceptance and maintenance responsibilities from the City of Fullerton was obtained on March 7, 2018, and the one-year warranty began. Close-out activities and warranty work will be ongoing through mid-2019. Funding reimbursement and closeout were initiated and are ongoing.

**Segment:** Tustin Avenue/Rose Drive Grade Separation

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** The project located at Tustin Avenue/Rose Drive railroad crossing is grade separated and open to traffic. The project separated the local street from railroad tracks in the Cities of Placentia and Anaheim by building a bridge over the railroad crossing for vehicular traffic. On May 17, 2016, a joint-grand opening event was held to commemorate the opening to traffic for the Orangethorpe and Tustin/Rose Grade Separation projects. Construction was completed in October 2016 and construction acceptance was obtained from the Cities of Anaheim and Placentia on October 25, 2016. OCTA has turned over the maintenance responsibilities to the cities and completed the one-year warranty on the majority of constructed items. The one-year warranty was extended to November 2018 for some minor repair items. In November 2018, the warranty period expired with no additional issues or repairs identified.





## STREETS AND ROADS

### REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM ▼

**Status:** 2019 Call for Projects in Progress

PROJECT P

**Contact:** Anup Kulkarni, Planning • (714) 560-5867

**Summary:** This program provides funding and assistance to implement multi-agency signal synchronization. The target of the program is to regularly coordinate a network of 2,000 signalized intersections over 750 miles of roadway within Orange County. OCTA also leverages external funding to further enhance the efficiency of the street grid and reduce travel delay.

On June 10, 2019, the OCTA Board approved funding for five projects totaling \$7.7 million as part of the 2019 Call for Projects.

To date, OCTA and local agencies have synchronized more than 2,000 intersections over more than 702 miles of streets (78 completed projects). Through a competitive process, there have been nine rounds of M2 funding which awarded a total of 95 projects a total of more than \$95 million. Overall, the program has funded 111 projects<sup>6</sup> totaling more than \$106 million, including \$13.6 million in leveraged external funding.

<sup>6</sup>To date, three projects totaling approximately \$1.6 million have been cancelled by the awarded local jurisdictions.

### LOCAL FAIR SHARE ▼

**Status:** Ongoing

PROJECT Q

**Contact:** Ben Torres, Finance • (714) 560-5692

**Summary:** In order to help cities and the County of Orange keep up with the rising cost of repairing the aging street system, this program provides flexible funding intended to augment, not replace, existing transportation expenditures of the cities and the County. All local agencies have been found eligible to receive Local Fair Share funds. On a bi-monthly basis, 18 percent of net revenues are allocated to local agencies by formula. Approximately \$398<sup>7</sup> million in Local Fair Share payments have been provided to local agencies as of the end of this quarter.

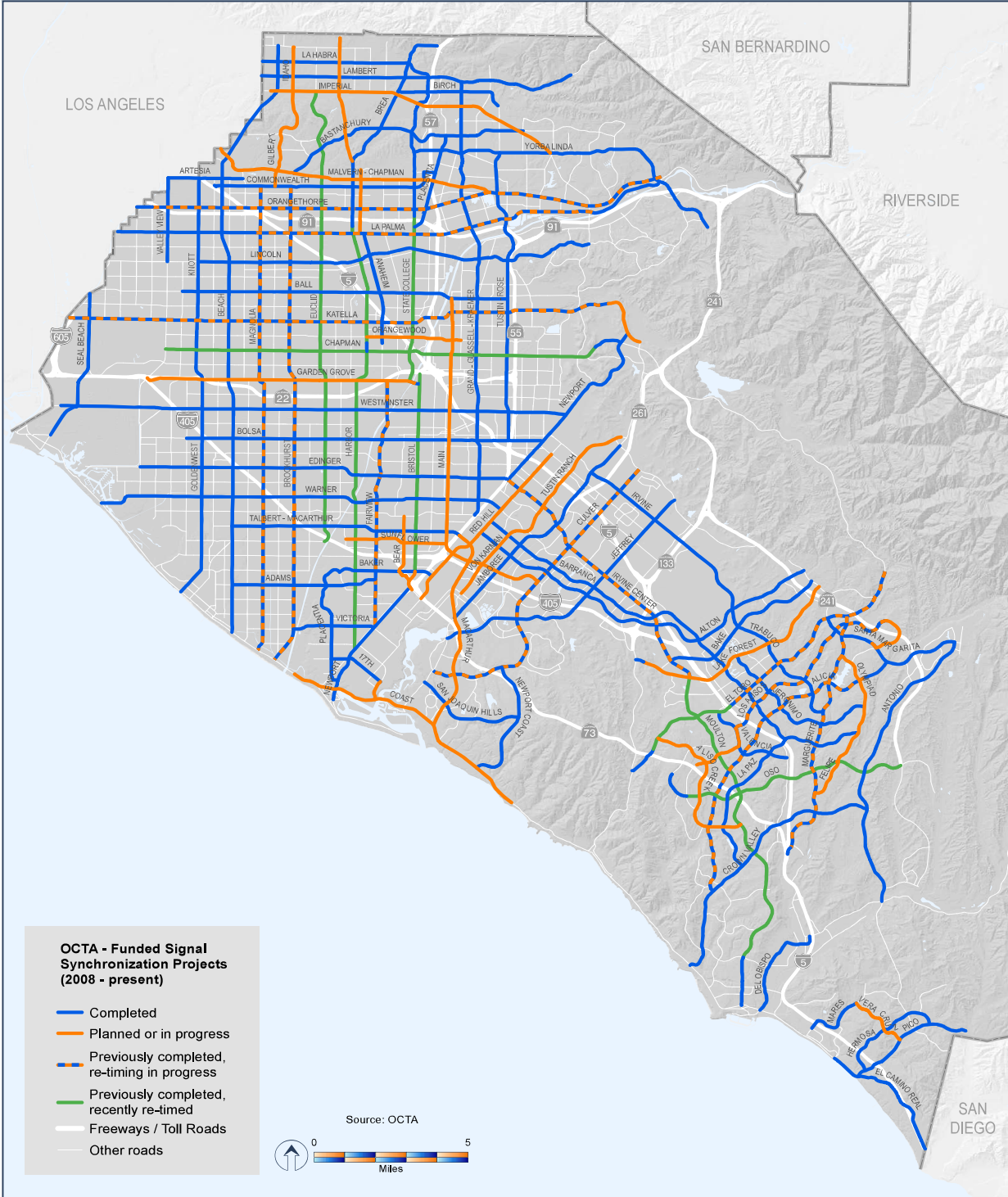
See [pages 49-50](#) for funding allocation by local agency.

<sup>7</sup>Only includes disbursed funds. On May 13, 2019, the Board determined that the City of Santa Ana and the City of Stanton ineligible to receive M2 revenues. Disbursement of M2 funds have been suspended until the cities achieve compliance and the Board reconsiders the matter by May 2020.



# STREETS AND ROADS

## OCTA - Funded Signal Synchronization Projects (2008 - present)



6/18/2019

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## TRANSIT

### HIGH FREQUENCY METROLINK SERVICE ▾

### PROJECT R

Project R will increase rail services within the County and provides additional Metrolink service north of Fullerton to Los Angeles. The program provides for track improvements, the addition of trains and parking capacity, upgraded stations, and safety enhancements to allow cities to establish quiet zones along the tracks. This program also includes funding for grade crossing improvements at high volume arterial streets, which cross Metrolink tracks.

**Project:** Metrolink Grade Crossing Improvements

**Status:** PROJECT COMPLETE

**Contact:** Jennifer Bergener, Rail • (714) 560-5462



**Summary:** Enhancement at 50 of the designated 52 Orange County at-grade rail-highway crossings were completed in support of the Metrolink Service Expansion Program (MSEP) in October 2012. As a result of one private crossing which did not allow for OCTA to make enhancements and one street closure that eliminated the need for enhancements, the final count of enhanced rail-highway crossings was 50. Completion of the safety improvements provided each corridor city with the opportunity to establish a “quiet zone” at their respective crossings. Quiet zones are intended to prohibit the sounding of train horns through designated crossings, except in the case of emergencies, construction work, or safety concerns identified by the train engineer. The Cities of Anaheim, Dana Point, Irvine, Orange, Santa Ana, San Clemente, San Juan Capistrano, and Tustin have established quiet zones within their communities.

**Project:** Metrolink Service Expansion Program

**Status:** Service Ongoing

**Contact:** Jennifer Bergener, Rail • (714) 560-5462

**Summary:** Following the completion of the MSEP improvements in 2012, OCTA deployed a total of ten new Metrolink intracounty trains operating between Fullerton and Laguna Niguel/Mission Viejo, primarily during the midday and evening hours. Efforts to increase ridership through a redeployment of the trains without significantly impacting operating costs have been underway since 2014. Average daily passenger boardings on the ten intracounty trains combined has increased by 23 percent, from 288 boardings in Fiscal Year (FY) 2012-13 to 354 boardings averaged for FY 2018-19.

In April 2015, a schedule change added a connection between the 91/PV Line and the intracounty service at Fullerton to allow a later southbound peak evening departure from Los Angeles to Orange County. Ridership on these two trains combined has increased by 53 percent since the improvement was implemented, from 130 boardings averaged in FY 2015-16 to 199 boardings averaged for FY 2018-19.

Contingent upon cooperation and funding participation from route partners, Metrolink will implement the following service improvements to provide new weekday service between Orange County and Los Angeles, in alignment





with OCTA's redeployment plan:

- OC Line: Replace three midday intracounty round trips with two midday round trips from Laguna Niguel/Mission Viejo to Los Angeles, and add one evening round trip from Oceanside to Los Angeles.
- 91/PV Line: Extend two existing round trips in Riverside County, from Perris – South to Los Angeles Union Station (with stops in Fullerton and Buena Park).

The service improvements are anticipated to roll out in two phases beginning in October 2019 and April 2020.

### Rail Corridor and Station Improvements

Additionally, under MSEP, funding is provided for rail line and station improvements to accommodate increased service. Rail station parking lot expansions, better access to platforms, among other improvements have been made or are underway. For schedule information on station improvement projects, please see the CAP pages on [pages 51-55](#).

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#### **Segment:** Anaheim Canyon Metrolink Station Improvements

**Status:** Design Underway – 95% Complete

**Contact:** Jim Beil, Capital Programs • (714) 560-5646

**Summary:** This OCTA-led project will include construction of a second main track and platform, lengthening the existing platform, and improved pedestrian circulation. The project will also include the addition of benches, shade structures, and ticket vending machines. The design plans have been completed to 95 percent. Plans are expected to be complete and ready to bid in December 2019. Construction of the project is expected to begin in March 2020 with completion anticipated in mid-2021.

#### **Segment:** Fullerton Transportation Center Improvements

**Status:** PROJECT COMPLETE

**Contact:** Jim Beil, Capital Programs • (714) 560-5646



**Summary:** Completed early on, a new 5-level parking structure was constructed to provide additional transit parking at the Fullerton Transportation Center for both intercity rail service and commuter rail passengers. This City-led project was completed on June 19, 2012. After completion, an elevator upgrade project was initiated with leftover savings. The elevator project modified the existing pedestrian bridge to add two new traction elevators, one on each side. The City of Fullerton was the lead on this project which was completed May 1, 2019. Close-out activities are underway. Final invoicing is dependent on the city and the contractor agreeing to the final cost.



## TRANSIT

**Segment:** Laguna Niguel/Mission Viejo Metrolink Station Americans with Disabilities Act (ADA) Ramps

**Status:** PROJECT COMPLETE

**Contact:** Jim Beil, Capital Programs • (714) 560-5646



**Summary:** The Laguna Niguel/Mission Viejo station accessibility improvements project was completed in September 2017. Improvements include new ADA-compliant access ramps on either side of the pedestrian undercrossing and a unisex ADA-compliant restroom, vending machine room, and three passenger canopies. Construction acceptance from the cities was obtained on September 20, 2017, and OCTA has turned over the maintenance responsibilities to the cities and commenced the one-year warranty. Close-out activities and final costs are underway.

**Segment:** Orange Transportation Center Metrolink Parking Structure

**Status:** PROJECT COMPLETE

**Contact:** Jim Beil, Capital Programs • (714) 560-5646



**Summary:** This project includes a 608-space, 5-level, shared use parking structure that is located on Lemon Street between Chapman Avenue and Maple Street in Orange. Per a cooperative agreement between OCTA and the City of Orange, the City of Orange led the design phase, and OCTA led the construction phase of the project. Construction began on July 17, 2017, and was completed on February 15, 2019. A dedication ceremony was held on February 19, 2019. Close-out activities and final costs are underway.

**Segment:** New Placentia Metrolink Station and Parking Structure

**Status:** Design Complete - Ready for Advertisement subject to BNSF construction and maintenance agreement

**Contact:** Jim Beil, Capital Programs • (714) 560-5646

**Summary:** Plans for the proposed Placentia Metrolink Station Project were near completion when the City of Placentia requested to modify them to include a parking structure to be built where surface parking had been designed. On June 27, 2016, the Board approved a new Cooperative Agreement with the City of Placentia that revised the project's scope and budget, and with the changes the City of Placentia will contribute towards the cost. The station will include platforms, parking, a new bus stop, and passenger amenities. OCTA is the lead agency for design and construction of the project. The project will also include a third track which should assist with the on-time performance of train operations and provide operational flexibility for both freight and passenger trains. BNSF will be the lead on the rail construction. Design plans for the station are complete and will be ready to advertise for bidding once a Construction and Maintenance (C&M) agreement with BNSF is in place. It is anticipated that this agreement will be in place by January 2020. Due to the dependency on the C&M agreement, this project is marked as a cost/schedule risk in the CAP.





**TRANSIT**

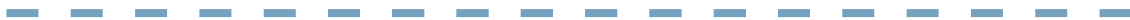
**Segment:** San Clemente Pier Station Lighting

**Status:** PROJECT COMPLETE

**Contact:** Jim Beil, Capital Programs • (714) 560-5646



**Summary:** This project was completed on March 17, 2017, and project closeout was completed in the same month. OCTA was the lead agency for design and installation of this project which added lighting to the existing platform and new decorative hand rails at the San Clemente Pier Station.



Additional rail corridor improvements include: completed Control Point project at Fourth Street in the City of Santa Ana, which provides rail operational efficiencies; completed Positive Train Control implementation, which improves rail safety by monitoring and controlling train movement; replacement of the San Juan Creek railroad bridge in the City of San Juan Capistrano, which will not preclude a future bike trail on the south end along the creek (design is 95 percent complete, environmental clearance and ROW acquisition are in progress); the Railroad ROW Slope Stabilization project, which includes eight locations within the OCTA-owned LOSSAN rail corridor that have been identified for improvements to prevent future erosion and slope instability (construction began in June 2018 and is 75 percent complete); and continued implementation of video surveillance systems.

**Segment:** Sand Canyon Grade Separation

**Status:** PROJECT COMPLETE

**Contact:** Rose Casey, Capital Projects • (714) 560-5729



**Summary:** The project separated the local street from railroad tracks in the City of Irvine by constructing an underpass for vehicular traffic. The westbound lanes were opened to traffic on June 12, 2014, and the eastbound lanes were opened to traffic on July 14, 2014. A road opening ceremony was held on August 11, 2014. The project is complete and construction acceptance was obtained from the City of Irvine on January 15, 2016. The project completed the one-year warranty period and no repairs were identified. The project closed out in January 2017.

**Segment:** Tustin Metrolink Station Parking Structure

**Status:** PROJECT COMPLETE

**Contact:** Jim Beil, Capital Programs • (714) 560-5646



**Summary:** This early completion project, provided additional parking at the Tustin Metrolink Station to meet increased requirements associated with the MSEP by constructing a new 4-story parking structure with approximately 735 spaces, plus on-site surface parking. The parking structure was opened to the public on September 22, 2011.



# TRANSIT

**Segment:** Laguna Niguel to San Juan Capistrano Passing Siding Project

**Status:** Construction Underway – 5% Complete

**Contact:** Jim Beil, Capital Programs • (714) 560-5646

**Summary:** The project is currently in the construction phase and will add approximately 1.8-miles of new passing siding railroad track adjacent to the existing mainline track, which will enhance operational efficiency of passenger services within the LOSSAN rail corridor. The construction contract was awarded on January 14, 2019, and the Notice to Proceed was issued on March 12, 2019. Construction continues with submittals review and procurement of materials; preconstruction biological surveys was completed; construction of two temporary at-grade crossings was completed; site preparation with removal of riprap and installation of signal conduits continues; and grading for retaining wall began. This project is anticipated to be completed by early 2021. This project is marked “red” in the CAP, signifying a delay of 25 months due to design coordination with utilities and water quality control permitting concerns with the City of San Juan Capistrano.

## TRANSIT EXTENSIONS TO METROLINK ▾

In order to broaden the reach of Metrolink to other Orange County cities, communities, and activity centers, Project S includes a competitive program which allows cities to apply for funding to connect passengers to their final destination via transit extensions. There are currently two categories for this program: a fixed guideway program (streetcar) and a rubber tire transit program.

### PROJECT S

**Project:** OC Streetcar

**Status:** Full Funding Grant Agreement (FFGA) Executed November 30, 2018, Notice To Proceed Issued to Construction Contractor, Operation and Maintenance Request For Proposals Released, Vehicle Exterior Design Selected, Utility Relocation Work Ongoing

**Contact:** Mary Shavalier, Rail • (714) 560-5725

**Summary:** The OC Streetcar Project will serve the Santa Ana Regional Transportation Center through downtown Santa Ana, and the Civic Center to Harbor Boulevard in the City of Garden Grove. OCTA is serving as the lead agency for the project.

Construction activities have commenced on the western half of the alignment, with the focus on preparations for construction of the Santa Ana River and Westminster Avenue bridges, the maintenance and storage facility, and storm drain sewer and water system relocations within the City of Santa Ana streets. The remaining permits needed from Army Corps of Engineers and the Orange County Flood Control District for the construction of the Project bridge across the Santa Ana River were obtained in April 2019.

Preliminary design review for the vehicles was completed and will transition into final design review beginning in July 2019. Major elements of the vehicle, representing over 34 technical submittals, including the carbody,



# TRANSIT

doors, cab layout, exterior/interior design, propulsion, auxiliary power, energy absorbing bumpers, and related manuals have been evaluated with Siemens consistent with the technical specifications.

On May 29, 2019, OCTA and FTA conducted its quarterly meeting to discuss project status and report on the Project schedule and cost estimate.

On June 19, 2019, the Stakeholder Working Group met and staff provided updates on the construction activities, vehicle manufacturing, upcoming procurement for O&M services, and the material developed for the community open houses. Approximately 30 attendees attended open houses on Saturday June 22, 2019, at the Santa Ana Corporate Yard facility and on Monday June 24, 2019, at the Santa Ana Senior Center.

Work continues to progress on other key OC Streetcar activities, including responding to questions on the Operations and Maintenance Request for Proposals, coordination with third parties on utility relocation, public outreach and continued coordination with the FTA.

**Project:** Bus and Station Van Extension Projects

**Status:** Service Ongoing for Anaheim Canyon Metrolink Bus Connection

**Contact:** Joseph Alcock, Planning • (714) 560-5372

**Summary:** Bus and Station Van Extension projects help enhance the frequency of service in the Metrolink corridor by linking communities within the central core of Orange County to commuter rail. To date, the Board has approved one round of funding for bus and van extension projects, totaling over \$730,000. One project located within the City of Anaheim and three proposals within the City of Lake Forest were approved for funding by the Board on July 23, 2012. Currently, the Anaheim project is in service and the Lake Forest projects have been canceled. The Anaheim Canyon Metrolink Station Bus Connection began service in February 2013 and is anticipated to continue providing service between the station and the Anaheim Resort area through 2020.

## METROLINK GATEWAYS ▼

**Status:** PROJECT COMPLETE

**Contact:** Jennifer Bergener, Rail • (714) 560-5462



PROJECT T

**Summary:** This project constructed the Anaheim Regional Transportation Intermodal Center (ARTIC) located at 2626 East Katella Avenue in the City of Anaheim. In addition to providing transit connections for OCTA bus service, Metrolink and Amtrak service, shuttle and charter bus service, taxis, bikes, and other public and private transportation services, ARTIC also accommodates future high-speed rail trains. The City of Anaheim, which led the construction effort, opened the facility to rail and bus service on December 6, 2014. A ribbon-cutting ceremony was held on December 8, 2014, with a grand opening celebration hosted on December 13, 2014. This facility replaced the former Anaheim Metrolink Station that was located on the opposite side of the freeway in the Los Angeles Angels of Anaheim Stadium parking lot.





## TRANSIT

### EXPAND MOBILITY CHOICES FOR SENIORS AND PERSONS WITH DISABILITIES ▾

Project U expands mobility choices for seniors and persons with disabilities, and includes the SMP, the SNEMT Program, and the Fare Stabilization Program. Since inception, approximately \$69.7<sup>8</sup> million in Project U funding has been provided under M2.

**Project:** Senior Mobility Program

PROJECT U

**Status:** Ongoing

**Contact:** Beth McCormick, Transit • (714) 560-5964

**Summary:** This program provides one percent of net M2 revenues to continue and expand local community transportation service for seniors under the SMP. According to the SMP Funding and Policy Guidelines, M2 revenue is allocated to local jurisdictions proportionally, relative to the total county's senior population, by the residents age 60 and above multiplied by available revenues. Remaining unallocated funds are distributed to the M2 Project U Fare Stabilization Program.

Since inception, approximately \$20.39<sup>8</sup> million and 2,230,000 boardings have been provided for seniors traveling to medical appointments, nutrition programs, shopping destinations, and senior and community center activities. This quarter, approximately \$872,000<sup>9</sup> was paid out to the 31 participating cities during the months of May and July. Additionally, on November 26, 2018, the Board approved revised Guidelines for the program.

**Project:** Senior Non-emergency Medical Transportation Program

**Status:** Ongoing

**Contact:** Beth McCormick, Transit • (714) 560-5964

**Summary:** This program provides one percent of net M2 revenues to supplement existing county-wide senior non-emergency medical transportation services. Since inception, more than \$22.2 million and 857,875 SNEMT boardings have been provided. This quarter, approximately \$1 million in SNEMT funding was paid<sup>9</sup> to the County of Orange in the months of May and July.

<sup>8</sup>Only includes disbursed funds. On May 13, 2019, the Board determined that the City of Santa Ana and the City of Stanton ineligible to receive M2 revenues. Disbursement of M2 funds have been suspended until the cities achieve compliance and the Board reconsiders the matter by May 2020.



# TRANSIT

**Project:** Fare Stabilization Program

**Status:** Ongoing

**Contact:** Sean Murdock, Finance • (714) 560-5685

**Summary:** Between years 2011-2015, one percent of net M2 revenues was dedicated to stabilizing fares and provide fare discounts for bus services and specialized ACCESS services for seniors and persons with disabilities. Effective January 28, 2016, an amendment to the M2 Ordinance No. 3, adjusted this amount to 1.47 percent of net M2 revenues to be dedicated to the Fare Stabilization Program.

Approximately \$1,473,000<sup>9</sup> in revenue was allocated this quarter to support the Fare Stabilization Program. The amount of funding utilized each quarter varies based on ridership. During the quarter, based on 3,400,000 program-related boardings recorded on fixed route and ACCESS services, approximately \$952,000 was utilized. Since inception of the program, more than \$27 million and 109 million program-related boardings have been provided.

## COMMUNITY BASED TRANSIT/CIRCULATORS ▼

**Status:** Service Updates

PROJECT V

**Contact:** Joseph Alcock, Planning • (714) 560-5372

**Summary:** This program provides funding for local jurisdictions to develop local bus transit services such as community-based circulators and shuttles that complement regional bus and rail services and meet needs in areas not adequately served by regional transit. To date, through a competitive process, OCTA has provided three rounds of funding (June 2013, June 2016, June 2018) which have awarded 28 projects and 7 planning studies totaling \$42 million. Out of the transit circulator projects: 19 are currently active; seven have been cancelled (primarily due to low ridership); and one has been completed.

In March 2019, OCTA requested letters of interest for a future round of Project V funding. Ten responses from eligible local agencies were received by the end of the April deadline and staff is scheduled to report findings to the Board for their consideration (of whether to issue a fourth call for projects for Project V) on August 12, 2019.

OCTA receives ridership reports from local agencies on a regular basis to monitor the success of these services against performance measures adopted by the Board. Currently, most of these services are generally meeting their required performance standards. The most recent Project V Ridership report was presented to the Transit Committee on February 14 and the Board on April 08, 2019. The next Project V Ridership report is scheduled for August 12, 2019. Lessons learned from the success of implemented services are incorporated into recommendations for future funding guidelines and programming recommendations.

<sup>9</sup>Payments are made every other month (January, March, May, July, September, and November). July payments are based on June accruals, and therefore counted as June payments. The amount totaled for one fiscal year quarter either covers one or two payments, depending on the months that fall within that quarter.



## TRANSIT

### SAFE TRANSIT STOPS ▼

### PROJECT W

**Status:** City-Initiated Improvements Underway or Complete

**Contact:** Joseph Alcock, Planning • (714) 560-5372

**Summary:** This program provides funding for passenger amenities at the 100 busiest transit stops across Orange County. Stop improvements are designed to ease transfers between bus lines and provide passenger amenities such as installation of bus benches or seating, shelters, lighting, and other passenger related amenities.

In 2014, the Board approved the first round of funding in the amount of \$1,205,666 to support 51 city-initiated improvements and \$370,000 for OCTA-initiated improvements. The City of Anaheim postponed development of eight stops and the OCTA initiated improvements were funded through another grant source and the funds were de-allocated and returned to the program in June 2019. Improvements funded through the first effort at all 43 stops are complete.

In October 2018, the Board authorized a second Project W allocation process; providing up to \$3 million (in total) to eligible agencies to support bus stop amenity. Eligible agencies were able to receive between \$20,000 to \$35,000 (per identified bus stop based on ridership). On June 13, 2019, funding recommendations were approved by the Board providing just under \$1 million to support improvements at 36 locations within the seven<sup>10</sup> eligible agencies and OCTA.

<sup>10</sup> The City of Santa Ana (City) submitted 36 Project W funding request applications. However, on May 13, 2019, the Board determined the City ineligible to receive M2 revenues, due to failure to meet maintenance of effort requirements and therefore these applications cannot be considered for funding at this time.



## ENVIRONMENTAL

### CLEAN UP HIGHWAY AND STREET RUNOFF THAT POLLUTES BEACHES ▾

**Project:** Environmental Cleanup Program

**Status:** Ongoing

**Contact:** Dan Phu, Planning • (714) 560-5907

PROJECT X

**Summary:** This program implements street and highway-related water quality improvement programs and projects that assist agencies countywide with federal Clean Water Act standards for urban runoff. It 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. The ECAC is charged with making recommendations to the Board on the allocation of funds for the ECP. These funds are allocated on a countywide, competitive basis to assist agencies in meeting the Clean Water Act standards for controlling transportation-related pollution.

Project X is composed of a two-tiered funding process focusing on early priorities (Tier 1), and a second program designed to prepare for more comprehensive capital investments (Tier 2). To date, there have been eight rounds of funding under the Tier 1 grants program. A total of 166 projects, amounting to approximately \$22.5 million, have been awarded by the Board since 2011. There have been two rounds of funding under the Tier 2 grants program. A total of 22 projects in the amount of \$27.89 million have been awarded by the Board since 2013. To date, all Orange County cities plus the County of Orange have received funding under this program. The ninth Tier 1 call for projects was released on March 11, 2019, in the amount of \$2.8 million and funding recommendations are anticipated to be approved by the Board in September 2019. Staff anticipates the next Tier 2 call in 2021, dependent on projected cash flow and local jurisdictions' interest in potential viable Tier 2 projects.

Staff estimates that over 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. Over time, the volume of trash captured is expected to increase. It is estimated that the funded Tier 2 projects, once fully functional, will have an annual groundwater recharge potential of approximately 157 million gallons of water from infiltration or through pumped and treated recharge facilities.



ENVIRONMENTAL

## FREEWAY MITIGATION ▼

**Project:** Environmental Mitigation Program

**Status:** Biological Permits Issued and Conservation Plan in Place

**Contact:** Dan Phu, Planning • (714) 560-5907

**Summary:** In June 2017, the United States Fish and Wildlife Service, and the California Department of Fish and Wildlife (Wildlife Agencies) finalized the issuance of their respective biological opinion, findings, and associated permits, as well as signed the Conservation Plan Implementing Agreement. Receipt of these permits represent the culmination of years of collaboration and support by the Board, environmental community, and Wildlife Agencies. As a result, the environmental process will be streamlined, allowing OCTA to move forward with the M2 freeway projects (as described in the Conservation Plan) with little additional coordination from the Wildlife Agencies. The OCTA Conservation Plan is unique as it is only the second state/federal conservation plan approved in Orange County.

The Conservation Plan also includes a streamlined process for coordination for streambed alteration agreements for portions of freeway projects that cross through streams and riverbeds. In 2017, the United States Army Corps of Engineers (Corps) issued a programmatic permit to OCTA and Caltrans (as owner/operator of the state highway system). The State Board provided a letter to OCTA in 2018, which further secured assurances related to advanced mitigation and freeway project permit issuance. These efforts are the result of years of collaboration between OCTA, the Corps, and State Board, and constitute another groundbreaking milestone for the M2 Environmental Mitigation Program.

The program is proceeding as planned, with seven properties (Preserves) acquired (1,300 acres), and 12 restoration projects approved for funding by the Board, totaling approximately 350 acres. The restoration project plans have been approved by the wildlife agencies and are currently at various stages of implementation. The Board authorized \$42 million (inclusive of setting aside funds for long-term land management) for property acquisitions, \$10.5 million to fund habitat restoration activities, and \$2.5 million for conservation plan development and program support, for a total of approximately \$55 million.

As part of the Conservation Plan requirement, an endowment has been established to pay for the long-term management of the Preserves. It is estimated that it will take approximately 12 years to fully fund the endowment with deposits annually. Approximately \$2.9 million will be deposited annually. The most recent deposit was made in August 2018. The next deposit is scheduled for July 2019. Staff will continue to oversee and provide endowment updates to the Finance and Administration and the Environmental Oversight Committee (EOC) on a regular basis.

Resource management plans (RMPs) for the Preserves were finalized in September 2018. These RMPs guide the management of the Preserves as outlined within the Conservation Plan. Staff will continue to oversee and manage the Preserves until a long-term manager(s) is established.

In consultation with the local fire authority, staff has begun to work with a consultant to draft fire management plans (Plans) for the seven Preserves. The Plans will provide guidelines for decision-making at all stages including fire





## ENVIRONMENTAL

prevention, pre-fire vegetation management, suppression activities, and post-fire responses that are compatible with conservation and stewardship responsibilities. These Plans are a requirement of the Conservation Plan and will require approval by the Wildlife Agencies. The Plans are anticipated to be complete in 2020.

The first Conservation Plan Annual Report will be presented to the EOC in July 2019. This report includes the tracking of impacts associated with covered freeway improvement projects, other management and monitoring activities on Preserves, status and activities, progress of the restoration projects, plan administration, and public outreach activities. In summary, the Annual Report documents that OCTA's activities through 2018 are in compliance and on target with the Conservation Plan commitments. OCTA will continue with its' efforts to complete the required objectives in a timely manner. This Annual Report has been reviewed and approved by the Wildlife Agencies. The Annual Report will be available for a public review in mid-August 2019 at [www.PreservingOurLegacy.org](http://www.PreservingOurLegacy.org).

To date, multiple freeway projects have utilized the Conservation Plan and/or the Clean Water Act streamlined permitting process. Some of the projects that benefit from these mechanisms include: Project K (I-405 Improvement Project from SR-73 to I-605) and Project C (I-5 from SR-73 to El Toro Road), and Project M (I-605 and Katella Interchange Project). If these mechanisms were not in place, it is anticipated that these projects would incur an additional \$700,000 to \$2.5 million (in 2018 dollars) in mitigation related costs and unknown schedule risks. Furthermore, a strong partnership has been forged through collaboration with the environmental community.

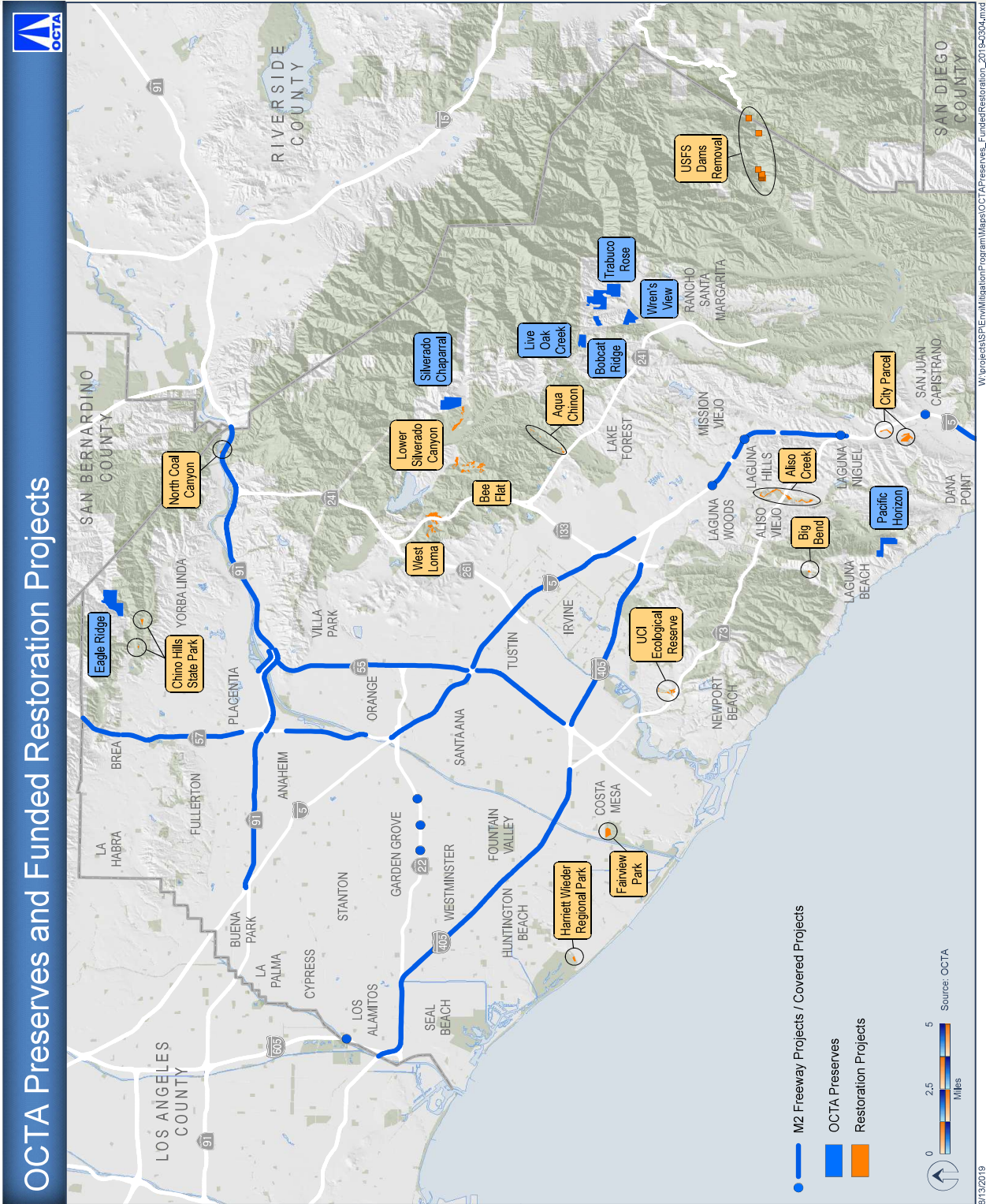
OCTA provides docent led hikes and equestrian rides in the Preserves. A list of scheduled 2019 wilderness Preserve tours is also available on the M2 website at [www.PreservingOurLegacy.org](http://www.PreservingOurLegacy.org).

As part of the safeguards in place for the M2 Program, a 12-member EOC makes recommendations on the allocation of environmental freeway mitigation funds and monitors the implementation of the Conservation Plan between OCTA and state and federal Wildlife Agencies. The EOC has led efforts with policy recommendations to the Board and has operated in an open and transparent manner that has garnered the trust of stakeholders, ranging from the environmental community to the recreational community to Orange County citizens.

See map of Preserves and funded restoration properties on the following page.



# ENVIRONMENTAL





## PROGRAM MANAGEMENT

### PROGRAM MANAGEMENT OFFICE ▼

**Contact:** Tami Warren, PMO Manager • (714) 560-5590

The M2 PMO provides inter-divisional coordination for all M-related projects and programs. To ensure agency-wide compliance, the PMO holds a bi-monthly committee meeting comprised of executive directors and key staff from each of the divisions, who meet to review significant issues and activities within the M2 programs. This quarter, the focus of the PMO has been on several major items, including the following.

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#### Market Conditions Forecast and Risk Analysis

In September 2017, the Board was presented with a Next 10 Market Conditions Forecast and Risk Analysis Report conducted by Dr. Wallace Walrod and Dr. Marlon Boarnet. The consultant's analysis identified a strong potential for OCTA to experience an increasing cost environment during the Next 10 delivery years. This, coupled with a reduction in revenue, could present the potential for significant challenges in the delivery of M2 and Next 10.

Given this analysis, the Board directed staff to continue to work with the consultant to monitor and track key early warning indicators and provide the Board with updates in a timeline consistent with updates on the M2 sales tax revenue forecast. With a rapidly changing construction market, staff looked to our contracted local economists for insights to better anticipate cost implications to our freeway program delivery. The consultant team continues to analyze trends in material costs, labor costs, and general economic conditions to determine a range of potential cost impacts.

This quarter, the consultant team contract was renewed to continue monitoring efforts. An updated market conditions forecast will be provided to the Board in the fall.

#### Next 10 Delivery Plan

On November 14, 2016, the Board adopted the Next 10 Delivery Plan providing staff guidance on the delivery of M2 projects and programs between 2017 and 2026. The PMO monitors the progress on the ten deliverables identified in the Plan and reports on them in this report. See [pages 3-6](#) for the status on deliverables.

Annually, OCTA reviews the M2 program assumptions and updates the cash flows and Next 10 assumptions as needed based on changes to the revenue forecast and project cost and schedule updates. As a result of a lower revenue forecast and the potential of higher costs in the near term as it relates to freeway delivery, staff prepared an updated 2018 Next 10 Plan. The updated 2018 Next 10 Plan was approved by the Board at the September 10, 2018, meeting.

The PMO will review the cash flow assumptions following the 2019 sales tax forecast along with updated project cost and schedule assumptions to determine if changes are needed. A staff update will be provided to the Board in the fall.





## PROGRAM MANAGEMENT

### M2 Performance Assessment

The M2 ordinance includes a requirement for a performance assessment to be conducted at least once every three years to evaluate OCTA's efficiency and effectiveness in delivery of M2 as promised to the voters. Three prior performance assessments have been completed covering fiscal years FY 2006-07 through FY 2008-09, FY 2009-10 through FY 2011-12, and FY 2012-13 through FY 2014-15. A fourth assessment covering the period between July 1, 2015, and June 30, 2018, along with findings and recommendations were presented to the Board on March 11, 2019. The PMO is monitoring progress and implementing the recommendations as appropriate and will report back to the Board by the end of the calendar year.

### M2 Ordinance Tracking Matrix

The M2 Ordinance and Transportation Investment Plan (Ordinance No. 3) includes numerous requirements that staff must follow in order to keep the promise to Orange County voters through the passage of M2. The PMO annually updates the M2 Ordinance Tracking Matrix to verify that OCTA is in compliance with all requirements detailed in Ordinance No. 3. The tracking matrix is helpful to the TOC when determining OCTA's compliance with Measure M. The TOC met on June 11, 2019, to conduct the annual M2 audit and determined that Measure M is being delivered as promised to Orange County voters for the 28th consecutive year.

### PMO M2 Tracking Tools

The PMO has developed several tracking tools to assist in reporting consistency and increased transparency of the M2 program. See the following for a brief explanation of PMO M2 tracking tools and their current status:

#### Local Jurisdiction Fact Sheets

Fact Sheets have been created for the County of Orange and each of Orange County's 34 cities. The Fact Sheets provide data on transportation and transit projects (funded through Measure M, state, and federal grants) in a format which emphasizes key points concisely on a single printed page. The City Fact Sheets are utilized when speaking with the jurisdictions to provide a summary overview of how OCTA has provided the local agency with funding (M2 and other) and transportation improvements. During the quarter, staff began updating the City Fact Sheets to include the March 2019 semi-annual review of CTFP projects approved by the Board on June 10, 2019, the 2019 Regional Capacity Program and signal synchronization projects also approved by the Board on June 10, 2019, and the 2019 Project W projects approved by the Board on June 24, 2019, as well as other programming updates. Updated City Fact Sheets are in progress and will be completed by the next quarter.

#### M2 Financial Picture

The M2 Financial Picture report provides a summary of each M2 project's total expenditures to date (external and internal), programmed funding, current estimate at completion per the latest quarter, and M2 program cash flow assumptions through 2041. This document allows the PMO to appropriately track and answer questions



## PROGRAM MANAGEMENT

regarding the M2 investment. The FY 2018-19 third quarter Financial Picture was updated in May 2019.

### Next 10 Tracking

The Next 10 Tracking report compares the current Next 10 Delivery Plan cash flow assumptions with the latest Project Controls quarterly assumptions. It highlights variances for a project's estimate at completion, project costs, and contingency utilization. The purpose of the Next 10 Tracking report is to highlight the impact to the bottom line when variances occur from the current plan and each quarterly update. The FY 2018-19 third quarter Next 10 Tracking report was updated in May 2019.

### Engineer's Estimate versus Bids Tracking

The Estimate versus Bid Tracking process allows the PMO to monitor the bidding environment for capital projects in the M2 Program. Capital projects that were planned for and began construction early in the M2 program have shown cost savings due to a favorable bidding environment during the recession. For these earlier M2 projects, savings can be primarily traced back to construction costs.

More recent market conditions analyses have indicated that OCTA will experience an increasing cost environment related to increased demand for construction services, lack of labor resources, and increased construction material costs. It should be noted that the engineer's estimate is based on a number of factors – such as bidding history and historical and current market rates (materials, labor, equipment, etc.) – and adjusted accordingly for the project's conditions. Because the estimate uses prior information, there may be a lag between an uptick or downtick in the market.

During the quarter, the construction contract for Project C (I-5 between Oso Parkway and Alicia Parkway/La Paz Road Interchange project) was awarded on April 4, 2019. The lowest bidder was 11.68 percent above the engineer's estimate.

### **M2 Administrative Safeguards**

M2 includes a one percent cap on administrative expenses for salaries and benefits of OCTA administrative staff on an annual basis. In a legal opinion on M2, it was determined that in years where administrative salaries and benefits are above one percent, only one percent can be allocated with the difference borrowed from other, non-M2 fund sources. Conversely, in years where administrative salaries and benefits are below one percent, OCTA can still allocate the full one percent for administrative salaries and benefits but may use the unused portion to repay the amount borrowed from prior years in which administrative salaries and benefits were above one percent.

Based on the original M2 revenue projections, OCTA expected to receive \$24.3 billion in M2 funds, with one percent of total revenues available to fund administrative salaries and benefits over the life of the program. As M2 revenue projections declined (currently \$13.1 billion or 46 percent lower) as a result of economic conditions, the funds available to support administrative salaries and benefits have also declined from the original expectations.



## PROGRAM MANAGEMENT

While revenue has declined, the administrative effort needed to deliver M2 remains the same. Additionally, the initiation of the Early Action Plan (EAP) in 2007 required administrative functions four years prior to revenue collection. While the EAP resulted in project savings and significant acceleration of the program, administrative functions were required during this time with associated administrative costs.

As a result of the aforementioned factors, OCTA has incurred higher than one percent administrative costs. OCTA currently has Board approval to use funds from the Orange County Unified Transportation Trust (OCUTT) fund to cover costs above the one percent, with the understanding that those funds will be repaid with interest in future years that OCTA administrative costs fall below the one percent cap. As of June 30, 2012, OCTA had borrowed approximately \$5.2 million from OCUTT. Over the last few years, OCTA has experienced under-runs in the one percent administration cap and has made payments to OCUTT to reduce the outstanding balance. As of the most recent June 2019 Taxpayer Oversight Committee Report, the outstanding principal balance was \$0.6 million.

Staff meets quarterly to review all labor costs to ensure proper cost allocation under M2. After the quarter ended, staff met on July 17, 2019, to review labor reports for this quarter to ensure costs attributed to the one percent cap were accurately reported and there were no misplaced project related costs, as well as to ensure project costs were applied to the correct projects. Staff will meet again on October 16, 2019, to conduct this quarterly review.

### Taxpayer Oversight Committee

The M2 Ordinance requires a Taxpayer Oversight Committee (TOC) oversee the implementation of the M2 plan and ensure compliance with all requirements of Measure M2 Ordinance No. 3. With the exception of the elected Auditor/Controller of Orange County who is identified as the chair in the Ordinance, all other members are not elected or appointed officials. Members are recruited and screened for expertise and experience independently by the Orange County Grand Jurors Association and are selected from the qualified pool by lottery. The TOC meets every other month. The TOC upholds the integrity of the measure by monitoring the use of M2 funds and ensuring compliance. The responsibilities of the 11-member Measure M2 TOC are to:

- Ensure all transportation revenue collected from M2 is spent on the projects approved by the voters as part of the plan
- Ratify any changes in the plan and recommend any major changes go back to the voters for approval
- Participate in ensuring that all jurisdictions in Orange County conform with the requirements of M2 before receipt of any tax monies for local projects
- Hold annual public meetings regarding the expenditure and status of funds generated by M2
- Review independent audits of issues regarding the plan and performance of the Orange County local Transportation Authority regarding the expenditure of M2 sales tax monies
- Annually certify whether M2 funds have been spent in compliance with the plan.



## PROGRAM MANAGEMENT

The TOC met on April 9, 2019, and again on June 11, 2019. At the April meeting, the TOC received the Measure M2 Performance Assessment as well as updates on both the OC Streetcar and Project V. In addition, Staff Updates were provided on the following areas: Local Agency Expenditure Reports, Measure M2 Bond Issuance, and the I-405 Improvement Project.

The Taxpayer Oversight Committee held its annual Measure M public hearing Tuesday, June 11 and unanimously found that the Orange County Transportation Authority is proceeding in accordance with the Measure M2 Ordinance for 2019 and the Chair certified that M2 revenues have been spent in compliance with the Plan. In addition, the TOC received a presentation on the Measure M2 Quarterly Progress Report for the First Quarter of 2019. Staff updates were also provided at this meeting and covered areas such as the I-405 Improvement Project and the I-5 project from 73 to El Toro Road. The next TOC meeting is scheduled for August 13th, 2019.

Two subcommittees assist the TOC with their safeguard responsibilities: the Annual Eligibility Review (AER) Subcommittee and the Audit Subcommittee. The AER Subcommittee meets a few times per year, as needed, to ensure local jurisdictions have submitted the following documents in order to be deemed eligible to receive M2 funding: Congestion Management Program, Mitigation Fee Program, Local Traffic Signal Synchronization Plan, Pavement Management Plan, and an Expenditure Report. The Audit Subcommittee meets bi-monthly and is responsible for reviewing the quarterly M2 Revenue and Expenditure Reports and the Annual M2 Audit, as well as any other items related to M2 audits.

## M2 FINANCING AND SCHEDULE OF FUNDING ▼

**Contact:** Sam Kaur, Revenue and Grants • (714) 560-5685

### Revenue Forecast and Collection

OCTA contracts with three universities (Chapman University; University of California, Los Angeles; and California State University, Fullerton) to provide a long-range forecast of taxable sales to forecast M2 revenues for purposes of planning projects and program expenditures.

In the past, OCTA has taken an average of the three university taxable sales projections to develop a long-range forecast of M2 taxable sales. On March 28, 2016, the Board approved a new sales tax forecast methodology as part of the FY 2016-17 budget development process. This methodology includes a more conservative approach by utilizing MuniServices, Inc forecast for the first five years and the three-university average for the remaining years. Historically, MuniServices, Inc. has been more conservative than the three universities over the first five years of M2 revenue collection.

Revenue forecast information is updated quarterly based on the actual revenues received for the previous quarter. As required by law, OCTA pays the California Department of Tax and Fee Administration (CDTFA) a fee to collect the sales tax. The M2 Ordinance estimated this fee to be 1.5 percent of the revenues collected over the life of the program.



## PROGRAM MANAGEMENT

### Current Forecast

Based on long-term forecasts updated in September 2018, OCTA staff forecasts total nominal sales tax collections over the life of M2 to be approximately \$13.1 billion. Original projections in 2005 during the development of M2 estimated total nominal M2 sales tax collections at \$24.3 billion. This is approximately \$11.2 billion (46 percent) less than the original 2005 projection.

OCTA's assumed growth rate for FY 2018 budget was 3.3 percent. The actual growth rate for FY 2018 came in higher at 4.8 percent with a total net annual sales tax receipts of \$320 million. For FY 2019, the assumed growth rate is 3.7 percent and the actual growth rate for the M2 Program is currently reported at approximately 1.7 percent as of April 2019. Based on the sales tax forecast information provided by Muni Services to date, the actual growth rate is anticipated to rise and is expected to exceed the assumed growth rate. The forecasted amount of sales tax to support the M2 Program remains at \$13.1 billion (reported to the Board in September 2018). The 2019 updated forecast is anticipated to be brought to the Board in the fall.

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## FINANCING

### Schedule of Revenues, Expenditures and Changes in Fund Balance as of June 30, 2019 (Unaudited) Schedule 1

(\$ in thousands)	Quarter Ended June 30, 2019	Year to Date June 30, 2019 (A)	Period from Inception to June 30, 2019 (B)
<b>Revenues:</b>			
Sales taxes	\$ 82,990	\$ 338,691	\$ 2,413,754
Other agencies' share of Measure M2 costs:			
Project related	9,010	60,046	684,356
Non-project related	-	-	454
Interest:			
Operating:			
Project related	162	246	838
Non-project related	745	8,616	31,728
Bond proceeds	4,500	9,194	60,512
Debt service	131	449	756
Commercial paper	-	-	393
Right-of-way leases	27	30	941
Proceeds on sale of assets held for resale	-	-	12,201
Donated assets held for resale			
Project related	-	2,071	2,071
Non-project related	-	(1,700)	371
Miscellaneous:			
Project related	-	-	270
Non-project related	-	-	100
<b>Total revenues</b>	<b>97,565</b>	<b>417,643</b>	<b>3,208,745</b>
<b>Expenditures:</b>			
Supplies and services:			
Sales tax administration fees	909	3,473	26,292
Professional services:			
Project related	17,128	36,374	381,484
Non-project related	1,326	4,508	26,509
Administration costs:			
Project related	2,432	9,724	72,905
Non-project related:			
Salaries and Benefits	633	2,533	25,066
Other	1,284	5,135	41,848
Other:			
Project related	29	86	5,027
Non-project related	44	908	4,915
Payments to local agencies:			
Project related	32,495	107,923	945,857
Capital outlay:			
Project related	95,801	168,801	1,025,503
Non-project related	-	-	31
Debt service:			
Principal payments on long-term debt	-	8,165	50,500
Interest on long-term debt and commercial paper	9	20,676	178,614
<b>Total expenditures</b>	<b>152,090</b>	<b>368,306</b>	<b>2,784,551</b>
Excess (deficiency) of revenues over (under) expenditures	(54,525)	49,337	424,194
<b>Other financing sources (uses):</b>			
Transfers out:			
Project related	(2,370)	(151,851)	(190,458)
Transfers in:			
Project related	579	1,379	84,079
Non-project related	-	-	-
Bond proceeds	-	446,032	804,625
Payment to refunded bond escrow agent	-	(45,062)	(45,062)
<b>Total other financing sources (uses)</b>	<b>(1,791)</b>	<b>250,498</b>	<b>653,184</b>
Excess (deficiency) of revenues over (under) expenditures and other sources (uses)	\$ (56,316)	\$ 299,835	\$ 1,077,378

# FINANCING

## Schedule of Revenues, Expenditures and Changes in Fund Balance as of June 30, 2019 (Unaudited) Schedule 2

<i>(\$ in thousands)</i>	Quarter Ended June 30, 2019 (actual)	Year to Date June 30, 2019 (actual) (C.1)	Period from Inception through June 30, 2019 (actual) (D.1)	Period from July 1, 2019 through March 31, 2041 (forecast) (E.1)	Total (F.1)
<b>Revenues:</b>					
Sales taxes	\$ 82,990	\$ 338,691	\$ 2,413,754	\$ 10,657,522	\$ 13,071,276
Operating interest	745	8,616	31,728	139,989	171,717
Subtotal	<u>83,735</u>	<u>347,307</u>	<u>2,445,482</u>	<u>10,797,511</u>	<u>13,242,993</u>
Other agencies share of M2 costs	-	-	454	-	454
Miscellaneous	-	-	100	-	100
Total revenues	<u>83,735</u>	<u>347,307</u>	<u>2,446,036</u>	<u>10,797,511</u>	<u>13,243,547</u>
<b>Administrative expenditures:</b>					
Sales tax administration fees	909	3,473	26,292	123,125	149,417
Professional services	1,326	4,508	22,734	97,884	120,618
<b>Administration costs:</b>					
Salaries and Benefits	633	2,533	25,066	113,436	138,502
Other	1,284	5,135	41,848	185,485	227,333
Other	44	82	1,914	8,546	10,460
Capital outlay	-	-	31	-	31
Environmental cleanup	2,491	7,173	41,920	213,116	255,036
Total expenditures	<u>6,687</u>	<u>22,904</u>	<u>159,805</u>	<u>741,592</u>	<u>901,397</u>
Net revenues	<u>\$ 77,048</u>	<u>\$ 324,403</u>	<u>\$ 2,286,231</u>	<u>\$ 10,055,919</u>	<u>\$ 12,342,150</u>
<hr/>					
(C.2) (D.2) (E.2) (F.2)					
<b>Bond revenues:</b>					
Proceeds from issuance of bonds	\$ -	\$ 446,032	\$ 804,625	\$ 1,425,000	\$ 2,229,625
Interest revenue from bond proceeds	4,500	9,194	60,512	94,619	155,131
Interest revenue from debt service funds	131	449	756	4,685	5,441
Interest revenue from commercial paper	-	-	393	-	393
Total bond revenues	<u>4,631</u>	<u>455,675</u>	<u>866,286</u>	<u>1,524,304</u>	<u>2,390,590</u>
<b>Financing expenditures and uses:</b>					
Professional services	-	-	3,775	4,988	8,763
Payment to refunded bond escrow	-	45,062	45,062	-	45,062
Bond debt principal	-	8,165	50,500	2,060,220	2,110,720
Bond debt and other interest expense	9	20,676	178,614	932,293	1,110,907
Other	-	826	3,001	-	3,001
Total financing expenditures and uses	<u>9</u>	<u>74,729</u>	<u>280,952</u>	<u>2,997,501</u>	<u>3,278,453</u>
Net bond revenues (debt service)	<u>\$ 4,622</u>	<u>\$ 380,946</u>	<u>\$ 585,334</u>	<u>\$ (1,473,197)</u>	<u>\$ (887,863)</u>

# FINANCING

Schedule of Revenues, Expenditures and Changes in Fund Balance as of  
**June 30, 2019 (Unaudited)**  
*Schedule 3*

		(Unaudited)		
Project	Description	Net Revenues through June 30, 2019	Total Net Revenues	
(G)		(H)	(I)	
(\$ in thousands)				
<b>Freeways (43% of Net Revenues)</b>				
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 90,112	\$ 486,467	\$
B	I-5 Santa Ana/SR-55 to El Toro	57,557	310,718	
C	I-5 San Diego/South of El Toro	120,213	648,968	
D	I-5 Santa Ana/San Diego Interchange Upgrades	49,466	267,040	
E	SR-22 Garden Grove Freeway Access Improvements	23,007	124,204	
F	SR-55 Costa Mesa Freeway Improvements	70,172	378,824	
G	SR-57 Orange Freeway Improvements	49,600	267,764	
H	SR-91 Improvements from I-5 to SR-57	26,842	144,905	
I	SR-91 Improvements from SR-57 to SR-55	79,855	431,093	
J	SR-91 Improvements from SR-55 to County Line	67,527	364,540	
K	I-405 Improvements between I-605 to SR-55	205,686	1,110,388	
L	I-405 Improvements between SR-55 to I-5	61,295	330,901	
M	I-605 Freeway Access Improvements	3,835	20,701	
N	All Freeway Service Patrol	28,759	155,256	
	Freeway Mitigation	49,154	265,356	
Subtotal Projects		983,080	5,307,125	
Net (Bond Revenue)/Debt Service		-	-	
<b>Total Freeways</b>		<b>\$ 983,080</b>	<b>\$ 5,307,125</b>	<b>\$</b>
%				
<b>Street and Roads Projects (32% of Net Revenues)</b>				
O	Regional Capacity Program	\$ 228,626	\$ 1,234,231	\$
P	Regional Traffic Signal Synchronization Program	91,446	493,670	
Q	Local Fair Share Program	411,522	2,221,587	
Subtotal Projects		731,594	3,949,488	
Net (Bond Revenue)/Debt Service		-	-	
<b>Total Street and Roads Projects</b>		<b>\$ 731,594</b>	<b>\$ 3,949,488</b>	<b>\$</b>
%				

# FINANCING

## Schedule of Revenues, Expenditures and Changes in Fund Balance as of June 30, 2019 (Unaudited) Schedule 3

Expenditures through June 30, 2019 (J)	Reimbursements through June 30, 2019 (K)	Net M2 Cost (L)
7,423	\$ 2,354	\$ 5,069
9,700	6,515	3,185
143,306	46,775	96,531
2,097	527	1,570
4	-	4
27,423	10,281	17,142
51,219	12,071	39,148
34,816	824	33,992
23,133	7,381	15,752
6,936	5,294	1,642
487,596	33,806	453,790
9,327	6,954	2,373
2,196	16	2,180
2,411	-	2,411
53,535	2,545	50,990
861,122	135,343	725,779
45,291	-	45,291
906,413	\$ 135,343	\$ 771,070
		40.2%
742,805	\$ 481,392	\$ 261,413
60,030	4,957	55,073
401,652	77	401,575
1,204,487	486,426	718,061
50,305	-	50,305
1,254,792	\$ 486,426	\$ 768,366
		40.0%



# FINANCING

## Schedule of Revenues, Expenditures and Changes in Fund Balance as of June 30, 2019 (Unaudited) Schedule 3

Project	Description	Net Revenues through June 30, 2019	Total Net Revenues
R	High Frequency Metrolink Service	\$ 215,429	\$ 1,230,946
S	Transit Extensions to Metrolink	201,821	1,089,526
T	Metrolink Gateways	30,041	63,084
U	Expand Mobility Choices for Seniors and Persons with Disabilities	73,509	427,966
V	Community Based Transit/Circulators	45,713	246,778
W	Safe Transit Stops	5,046	27,238
	<b>Subtotal Projects</b>	<b>571,559</b>	<b>3,085,538</b>
	Net (Bond Revenue)/Debt Service	-	-
	<b>Total Transit Projects</b>	<b>\$ 571,559</b>	<b>\$ 3,085,538</b>
	%		
	<b>Measure M2 Program</b>	<b>\$ 2,286,233</b>	<b>\$ 12,342,151</b>
	<b>Environmental Cleanup (2% of Revenues)</b>		
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 48,910	\$ 264,860
	Net (Bond Revenue)/Debt Service	-	-
	<b>Total Environmental Cleanup</b>	<b>\$ 48,910</b>	<b>\$ 264,860</b>
	%		
	<b>Taxpayer Safeguards and Audits</b>		
	Collect Sales Taxes (1.5% of Sales Taxes)	\$ 36,206	\$ 196,069
	%		
	Oversight and Annual Audits (1% of Revenues)	\$ 24,455	\$ 132,430
	%		

# FINANCING

## Schedule of Revenues, Expenditures and Changes in Fund Balance as of June 30, 2019 (Unaudited) Schedule 3

Expenditures through June 30, 2019	Reimbursements through June 30, 2019	Net M2 Cost
\$ 290,411	\$ 98,736	\$ 191,675
44,488	2,133	42,355
98,228	60,956	37,272
71,654	88	71,566
7,874	756	7,118
1,045	26	1,019
513,700	162,695	351,005
28,133	-	28,133
<u>\$ 541,833</u>	<u>\$ 162,695</u>	<u>\$ 379,138</u>
		19.8%
<u><u>\$ 2,703,038</u></u>	<u><u>\$ 784,464</u></u>	<u><u>\$ 1,918,574</u></u>
<u>\$ 41,920</u>	<u>\$ 292</u>	<u>\$ 41,628</u>
<u>-</u>	<u>-</u>	<u>-</u>
<u>\$ 41,920</u>	<u>\$ 292</u>	<u>\$ 41,628</u>
		1.7%
<u>\$ 26,292</u>	<u>\$ -</u>	<u>\$ 26,292</u>
		1.1%
<u>\$ 25,066</u>	<u>\$ 611</u>	<u>\$ 24,455</u>
		1.0%

LOCAL FAIR SHARE

M2 Funds		
ENTITY	4th Quarter FY 2018-19	FUNDS TO DATE
ALISO VIEJO	\$229,094	\$4,996,036
ANAHEIM	\$1,963,625	\$43,380,243
BREA	\$320,163	\$7,195,423
BUENA PARK	\$477,633	\$11,262,053
COSTA MESA	\$830,711	\$18,270,867
CYPRESS	\$288,147	\$6,649,582
DANA POINT	\$193,317	\$4,162,091
FOUNTAIN VALLEY	\$343,626	\$7,807,344
FULLERTON	\$731,643	\$16,348,379
GARDEN GROVE	\$830,336	\$18,699,501
HUNTINGTON BEACH	\$1,096,931	\$24,403,900
IRVINE	\$1,589,583	\$33,777,153
LAGUNA BEACH	\$144,130	\$3,208,869
LAGUNA HILLS	\$191,647	\$4,286,277
LAGUNA NIGUEL	\$366,497	\$8,380,721
LAGUNA WOODS	\$70,632	\$1,604,393
LA HABRA	\$291,604	\$6,614,757
LAKE FOREST	\$450,122	\$9,925,019

## LOCAL FAIR SHARE

<b>M2 Funds</b>		
<b>ENTITY</b>	<b>4th Quarter FY 2018-19</b>	<b>FUNDS TO DATE</b>
LA PALMA	\$84,964	\$2,087,294
LOS ALAMITOS	\$73,189	\$1,630,967
MISSION VIEJO	\$520,127	\$11,765,675
NEWPORT BEACH	\$621,217	\$13,815,420
ORANGE	\$930,617	\$20,706,668
PLACENTIA	\$268,500	\$5,979,184
RANCHO SANTA MARGARITA	\$237,987	\$5,328,246
SAN CLEMENTE	\$320,941	\$7,054,473
SAN JUAN CAPISTRANO	\$211,281	\$4,759,093
SANTA ANA	\$0*	\$33,406,560
SEAL BEACH	\$137,063	\$3,162,864
STANTON	\$0*	\$3,605,030
TUSTIN	\$507,201	\$11,223,088
VILLA PARK	\$29,328	\$656,501
WESTMINSTER	\$484,652	\$10,770,729
YORBA LINDA	\$339,550	\$7,545,525
COUNTY UNINCORPORATED	\$1,128,717	\$23,619,343
<b>TOTAL M2 FUNDS</b>	<b>\$16,304,773</b>	<b>\$398,089,266</b>

\*On May 13, 2019, the Board determined that the City of Santa Ana and the City of Stanton ineligible to receive M2 revenues. Disbursement of M2 funds have been suspended until the cities achieve compliance and the Board reconsiders the matter by May 2020. Below are the M2 Funds withheld from the ineligible cities.

<b>ENTITY</b>	<b>4th Quarter FY 2018-19</b>	<b>SUSPENDED FUNDS TO DATE</b>
SANTA ANA	\$1,566,635	\$1,566,635
STANTON	\$166,069	\$166,069
<b>TOTAL M2 FUNDS</b>	<b>\$1,732,704</b>	<b>\$1,732,704</b>



# CAPITAL ACTION PLAN

Grey = Milestone achieved

Green = Forecast milestone meets or exceeds plan

Yellow = Forecast milestone is one to three months later than plan

Red = Forecast milestone is over three months later than plan

Non-bolded = Planned/Baseline

**Bold = Forecasted/Actual**

Capital Projects	Cost	Schedule			
	Baseline/Forecast (millions)	Begin Environmental	Begin Design	Award Contract	Complete Construction
<b>Freeway Projects:</b>					
I-5, SR-55 to SR-57	\$38.1	Jul-11	Jun-15	Dec-17	Apr-21
Project A	\$41.5	<b>Jun-11</b>	<b>Jun-15</b>	<b>Nov-18</b>	<b>Apr-21</b>
I-5, I-405 to SR-55	TBD	May-14	TBD	TBD	TBD
Project B	TBD	<b>May-14</b>	TBD	TBD	TBD
I-5, Pico to Vista Hermosa	\$113.0	Jun-09	Jun-11	Dec-14	Aug-18
Project C	\$83.5	<b>Jun-09</b>	<b>Jun-11</b>	<b>Dec-14</b>	<b>Aug-18</b>
I-5, Vista Hermosa to Pacific Coast Highway	\$75.6	Jun-09	Jun-11	Dec-13	Mar-17
Project C	\$75.7	<b>Jun-09</b>	<b>Jun-11</b>	<b>Jun-14</b>	<b>Jul-17</b>
I-5, Pacific Coast Highway to San Juan Creek Road	\$70.7	Jun-09	Jun-11	Oct-13	Sep-16
Project C <b>Cost/Schedule Risk</b>	\$75.5	<b>Jun-09</b>	<b>Jun-11</b>	<b>Dec-13</b>	<b>Jul-18</b>
I-5, SR-73 to Oso Parkway	\$151.9	Sep-11	Mar-15	Dec-18	Jan-24
Project C & D <b>Cost/Schedule Risk</b>	\$196.1	<b>Oct-11</b>	<b>Mar-15</b>	<b>Dec-19</b>	<b>Feb-25</b>
I-5, Oso Parkway to Alicia Parkway	\$196.2	Sep-11	Nov-14	Jun-18	Nov-23
Project C & D	\$203.1	<b>Oct-11</b>	<b>Nov-14</b>	<b>Mar-19</b>	<b>Nov-23</b>
I-5, Alicia Parkway to El Toro Road	\$133.6	Sep-11	Mar-15	May-19	Jun-23
Project C <b>Cost/Schedule Risk</b>	\$182.0	<b>Oct-11</b>	<b>Mar-15</b>	<b>Jun-20</b>	<b>Jul-24</b>
I-5, SR-73 to El Toro Road (Landscape)	TBD	N/A	TBD	TBD	TBD
Project C	\$12.4	N/A	Jan-22	Jun-24	Dec-25
I-5, I-5/Ortega Interchange	\$90.9	Sep-05	Jan-09	Aug-12	Sep-15
Project D	\$78.2	<b>Sep-05</b>	<b>Jan-09</b>	<b>Aug-12</b>	<b>Jan-16</b>

\*Status through June 2019. For detailed project information, please refer to the individual project section within this report.

# CAPITAL ACTION PLAN

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**Bold = Forecasted/Actual**

Capital Projects	Cost	Schedule			
	Baseline/Forecast (millions)	Begin Environmental	Begin Design	Award Contract	Complete Construction
I-5, I-5/EI Toro Road Interchange	TBD	Apr-17	TBD	TBD	TBD
Project D	TBD	<b>Apr-17</b>	TBD	TBD	TBD
I-5, I-5/Ortega Interchange (Landscape)	N/A	N/A	N/A	N/A	N/A
Project D	N/A	N/A	<b>Jan-14</b>	<b>Sep-15</b>	<b>Sep-16</b>
SR-55, I-405 to I-5	\$410.9	Feb-11	Sep-17	Jul-21	Aug-25
Project F <b>Cost/Schedule Risk</b>	\$410.9	<b>May-11</b>	<b>Sep-17</b>	<b>Jul-21</b>	<b>Aug-25</b>
SR-55, I-5 to SR-91	TBD	Dec-16	TBD	TBD	TBD
Project F	TBD	<b>Dec-16</b>	TBD	TBD	TBD
SR-57 Northbound (NB), Orangewood Avenue to Katella Avenue	TBD	Apr-16	TBD	TBD	TBD
Project G	TBD	<b>Apr-16</b>	TBD	TBD	TBD
SR-57 (NB), Katella Avenue to Lincoln Avenue	\$78.7	Apr-08	Jul-08	Aug-11	Sep-14
Project G	\$38.0	<b>Apr-08</b>	<b>Aug-08</b>	<b>Oct-11</b>	<b>Apr-15</b>
SR-57 (NB), Katella Avenue to Lincoln Avenue (Landscape)	N/A	N/A	N/A	N/A	N/A
Project G	N/A	N/A	<b>May-09</b>	<b>Sep-17</b>	<b>Jun-18</b>
SR-57 (NB), Orangethorpe Avenue to Yorba Linda Boulevard	\$80.2	Aug-05	Feb-08	Oct-10	May-14
Project G	\$52.3	<b>Aug-05</b>	<b>Feb-08</b>	<b>Oct-10</b>	<b>Nov-14</b>
SR-57 (NB), Yorba Linda Boulevard to Lambert Road	\$79.3	Aug-05	Feb-08	Oct-10	Sep-14
Project G	\$54.1	<b>Aug-05</b>	<b>Feb-08</b>	<b>Oct-10</b>	<b>May-14</b>
SR-57 (NB), Orangethorpe Avenue to Lambert Road (Landscape)	N/A	N/A	N/A	N/A	N/A
Project G	N/A	N/A	<b>Oct-14</b>	<b>Feb-18</b>	<b>Apr-19</b>

\*Status through June 2019. For detailed project information, please refer to the individual project section within this report.

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Yellow = Forecast milestone is one to three months later than plan

Red = Forecast milestone is over three months later than plan

Non-bolded = Planned/Baseline

**Bold = Forecasted/Actual**

Capital Projects	Cost	Schedule			
	Baseline/Forecast (millions)	Plan/Forecast			
		Begin Environmental	Begin Design	Award Contract	Complete Construction
SR-57 (NB), Lambert Road to Tonner Canyon	TBD	TBD	TBD	TBD	TBD
Project G	TBD	Jul-20	TBD	TBD	TBD
SR-91 Westbound (WB), I-5 to SR-57	\$78.1	Jul-07	Oct-09	Nov-12	Apr-16
Project H	\$59.2	<b>Jul-07</b>	<b>Mar-10</b>	<b>Jan-13</b>	<b>Jun-16</b>
SR-91 Westbound (WB), I-5 to SR-57 (Landscape)	N/A	N/A	N/A	N/A	N/A
Project H	N/A	N/A	<b>Nov-14</b>	<b>Mar-17</b>	<b>Nov-17</b>
SR-91, SR-57 to SR-55	TBD	Jan-15	TBD	TBD	TBD
Project I <b>Cost/Schedule Risk</b>	TBD	<b>Jan-15</b>	TBD	TBD	TBD
SR-91 (WB), Tustin Interchange to SR-55	\$49.9	Jul-08	Jul-11	Oct-13	Jul-16
Project I	\$42.5	<b>Jul-08</b>	<b>Jun-11</b>	<b>Oct-13</b>	<b>Jul-16</b>
SR-91, SR-55 to SR-241	\$128.4	Jul-07	Jun-09	Sep-11	Dec-12
Project J	\$79.7	<b>Jul-07</b>	<b>Apr-09</b>	<b>May-11</b>	<b>Mar-13</b>
SR-91, SR-55 to SR-241 (Landscape)	N/A	N/A	N/A	N/A	N/A
Project J	N/A	N/A	<b>May-12</b>	<b>Oct-13</b>	<b>Feb-15</b>
SR-91 Eastbound, SR-241 to SR-71	\$104.5	Mar-05	Jul-07	Jul-09	Nov-10
Project J	\$57.8	<b>Mar-05</b>	<b>Jul-07</b>	<b>Aug-09</b>	<b>Jan-11</b>
I-405, I-5 to SR-55	TBD	Dec-14	TBD	TBD	TBD
Project L	TBD	<b>Dec-14</b>	TBD	TBD	TBD
I-405, SR-55 to I-605 (Design-Build)	\$1,900.0	Mar-09	Mar-14	Nov-16	May-23
Project K	\$1,900.0	<b>Mar-09</b>	<b>Mar-14</b>	<b>Nov-16</b>	<b>May-23</b>

\*Status through June 2019. For detailed project information, please refer to the individual project section within this report.



# CAPITAL ACTION PLAN

Grey = Milestone achieved  
 Green = Forecast milestone meets or exceeds plan  
 Yellow = Forecast milestone is one to three months later than plan  
 Red = Forecast milestone is over three months later than plan  
 Non-bolded = Planned/Baseline      **Bold = Forecasted/Actual**

Capital Projects	Cost	Schedule			
	Baseline/Forecast (millions)	Plan/Forecast			
		Begin Environmental	Begin Design	Award Contract	Complete Construction
I-605, I-605/Katella Interchange	TBD	Aug-16	TBD	TBD	TBD
Project M	TBD	<b>Aug-16</b>	TBD	TBD	TBD
<b>Grade Separation Projects:</b>					
Kraemer Boulevard Railroad Grade Separation	\$70.4	Jan-01	Jan-09	Aug-11	Oct-14
Project O	\$63.8	<b>Jan-01</b>	<b>Feb-09</b>	<b>Sep-11</b>	<b>Dec-14</b>
Lakeview Avenue Railroad Grade Separation	\$70.2	Jan-01	Feb-09	May-13	Mar-17
Project O	\$110.6	<b>Jan-01</b>	<b>Feb-09</b>	<b>Nov-13</b>	<b>Jun-17</b>
Orangethorpe Avenue Railroad Grade Separation	\$117.4	Jan-01	Feb-09	May-12	Sep-16
Project O	\$108.6	<b>Jan-01</b>	<b>Feb-09</b>	<b>Jan-13</b>	<b>Oct-16</b>
Placentia Avenue Railroad Grade Separation	\$78.2	Jan-01	Jan-09	Jun-11	Nov-14
Project O	\$64.5	<b>Jan-01</b>	<b>Jan-09</b>	<b>Jul-11</b>	<b>Dec-14</b>
Raymond Avenue Railroad Grade Separation	\$77.2	Feb-09	Mar-10	May-13	Aug-18
Project O	\$125.1	<b>Feb-09</b>	<b>Mar-10</b>	<b>Feb-14</b>	<b>May-18</b>
State College Boulevard Railroad Grade Separation (Fullerton)	\$73.6	Dec-08	Jul-06	May-13	May-18
Project O	\$100.3	<b>Dec-08</b>	<b>Jul-06</b>	<b>Feb-14</b>	<b>Mar-18</b>
Tustin Avenue/Rose Drive Railroad Grade Separation	\$103.0	Jan-01	Feb-09	Aug-12	May-16
Project O	\$98.3	<b>Jan-01</b>	<b>Feb-09</b>	<b>Feb-13</b>	<b>Oct-16</b>
<b>Rail and Station Projects:</b>					
17th Street Railroad Grade Separation	TBD	Oct-14	TBD	TBD	TBD
Project R	TBD	<b>Oct-14</b>	TBD	TBD	TBD

\*Status through June 2019. For detailed project information, please refer to the individual project section within this report.





# CAPITAL ACTION PLAN

Grey = Milestone achieved

Green = Forecast milestone meets or exceeds plan

Yellow = Forecast milestone is one to three months later than plan

Red = Forecast milestone is over three months later than plan

Non-bolded = Planned/Baseline

**Bold = Forecasted/Actual**

Capital Projects	Cost	Schedule			
	Baseline/Forecast (millions)	Plan/Forecast			
		Begin Environmental	Begin Design	Award Contract	Complete Construction
Sand Canyon Avenue Railroad Grade Separation	\$55.6	N/A	Jan-04	Feb-11	May-14
Project R	\$61.9	N/A	<b>Jan-04</b>	<b>Feb-11</b>	<b>Jan-16</b>
Rail-Highway Grade Crossing Safety Enhancement	\$94.4	Jan-08	Jan-08	Aug-09	Dec-11
Project R	\$90.4	<b>Jan-08</b>	<b>Jan-08</b>	<b>Aug-09</b>	<b>Dec-11</b>
San Clemente Beach Trail Safety Enhancements	\$6.0	Sep-10	Feb-12	Oct-12	Jan-14
Project R	\$5.0	<b>Sep-10</b>	<b>Feb-12</b>	<b>May-13</b>	<b>Mar-14</b>
San Juan Capistrano Passing Siding	\$25.3	Aug-11	Mar-15	Dec-16	Feb-21
	\$34.1	<b>Aug-11</b>	<b>Mar-15</b>	<b>Mar-19</b>	Feb-21
Placentia Metrolink Station and Parking Structure	\$34.8	Jan-03	Oct-08	TBD	TBD
Project R <b>Cost/Schedule Risk</b>	\$34.8	<b>Jan-03</b>	<b>Oct-08</b>	May-20	Dec-21
Anaheim Canyon Station	\$27.9	Jan-16	Mar-19	Nov-19	Mar-21
	\$29.9	<b>Jan-16</b>	<b>Mar-18</b>	Apr-20	Aug-21
Orange Station Parking Expansion	\$33.2	Dec-09	Nov-10	Nov-16	Feb-19
	\$32.3	<b>Dec-09</b>	<b>Nov-10</b>	<b>Jun-17</b>	<b>Feb-19</b>
Fullerton Transportation Center - Elevator Upgrades	\$3.5	N/A	Jan-12	Sep-14	Mar-17
<b>Cost/Schedule Risk</b>	\$4.6	N/A	<b>Jan-12</b>	<b>Apr-15</b>	<b>May-19</b>
Laguna Niguel/Mission Viejo Station ADA Ramps	\$3.5	Jul-13	Jul-13	Jan-15	Apr-17
	\$5.0	<b>Jul-13</b>	<b>Jul-13</b>	<b>Oct-15</b>	<b>Sep-17</b>
Anaheim Regional Transportation Intermodal Center	\$227.4	Apr-09	Jun-09	Jul-12	Nov-14
Project R & T	\$232.2	<b>Apr-09</b>	<b>Jun-09</b>	<b>Sep-12</b>	<b>Dec-14</b>
OC Streetcar	\$424.4	Aug-09	Feb-16	Aug-18	Dec-21
Project S <b>Cost/Schedule Risk</b>	\$424.4	<b>Aug-09</b>	<b>Feb-16</b>	<b>Sep-18</b>	Feb-22

\*Status through June 2019. For detailed project information, please refer to the individual project section within this report.

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January 2018

## FREEWAY IMPROVEMENT PROGRAM

### Interstate 5 (I-5) Projects

- A** I-5, SR-55 to SR-57
- B** I-5, El Toro "Y" Area to SR-55
- C** I-5, SR-73 to El Toro Road
- C** I-5, Avenida Pico to San Juan Creek Road
- D** I-5 Highway Interchanges

### State Route 22 (SR-22) Projects

- E** SR-22 Access Improvements

### State Route 55 (SR-55) Projects

- F** SR-55, I-405 to I-5
- F** SR-55, I-5 to SR-91

### State Route 57 (SR-57) Projects

- G** SR-57 NB, Orangewood Avenue to Katella Avenue
- G** SR-57 NB, Katella Avenue to Lincoln Avenue
- G** SR-57 NB, Orangethorpe Avenue to Lambert Road
- G** SR-57 NB, Lambert Road to Tonner Canyon Road

### State Route 91 (SR-91) Projects

- H** SR-91 WB, I-5 to SR-57
- I** SR-91, SR-57 to SR-55
- J** SR-91, SR-55 to Riverside County Line

### Interstate 405 (I-405) Projects

- K** I-405, I-605 to SR-73
- L** I-405, SR-55 to El Toro "Y" Area

### Interstate 605 (I-605) Projects

- M** I-605 Katella Interchange Improvements

**Freeway Mitigation Restoration Projects**  
Part of Projects A-M

**Freeway Mitigation Acquisition Projects**  
Part of Projects A-M

## STREETS & ROADS

- O** Grade Separation Program (shown)
- P** Signal Synchronization Project Corridors

## TRANSIT PROJECTS

- R** Grade Separation and Station Improvement Projects
- S** Transit Extensions to Metrolink
- T** Metrolink Station Conversion to accept Future High-Speed Rail Systems

## OC GO PROJECTS NOT SHOWN

- Project N:** Freeway Service Patrol
- Project O:** Streets & Roads - Regional Capacity Program
- Project Q:** Local Fair Share Program
- Project R:** Grade crossing and Trail Safety Enhancements
- Project X:** Metrolink Service Expansion Program

- Project U:** Senior Mobility Program (SMP), Senior Non-emergency Medical Transportation Program (SNEMT), and Fare Stabilization Programs
- Project V:** Community Based Transit/Circulators
- Project W:** Safe Transit Stops
- Project X:** Environmental Cleanup Program



**October 7, 2019**

**To:** Executive Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Measure M2 Next 10 Plan: Market Conditions Key Indicators Analysis and Forecast

A handwritten signature in blue ink, appearing to read "Darrell E. Johnson", is written over the "From:" line of the memo.

**Overview**

On September 10, 2018, a Market Conditions Key Indicators Analysis and Forecast was presented to the Board of Directors providing insight into delivery of the Measure M2 Next 10 Plan. At the request of the Board of Directors, continued monitoring of market conditions and potential risks of project delivery has taken place and an updated forecast has been prepared. A presentation on the results of this effort is provided.

**Recommendation**

Continue to monitor market conditions and their effects on the advancement of the Next 10 Delivery Plan and provide updates to the Board of Directors as appropriate.

**Background**

On November 7, 2006, Orange County voters approved the renewal of Measure M (M2), the one-half cent sales tax for transportation improvements. Since approval, the Orange County Transportation Authority (OCTA) Board of Directors (Board) has continued to advance implementation of M2 commitments through the adoption of a series of early delivery plans. These delivery plans are designed to streamline implementation of all 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, with the most recent being the Next 10 Plan (Next 10). The Next 10 provides a framework to accelerate the delivery of M2 freeway, streets and roads, transit, and environmental projects through the year 2026.



Following Board adoption of the Next 10 in November 2016, the Board directed staff to conduct a market analysis to provide an outlook on M2 project costs as influenced by demands on construction resources. The overall objective was to provide insight on construction market conditions in unison with the revenue outlook to assist with prudent project delivery decisions. The analysis was prepared by the Orange County Business Council (OCBC), led by Dr. Wallace Walrod, Chief Economic Advisor to OCBC, and Dr. Marlon Boarnet, Professor and Chair of the Department of Urban Planning and Spatial Analysis at the University of Southern California.

The results of the analysis were presented to the Board in September 2017 and identified four near-term cost risks that were expected to be particularly impactful to M2 project delivery. These included: neighboring county transportation construction programs (resulting in strained supply of materials and workers), construction wage pressures, sustained low statewide unemployment, and residential construction demand and the effect on the public works construction market. Overall, the consultant's analysis identified a strong potential that during the Next 10 delivery years, OCTA would experience an increasing cost environment.

Following the presentation, the Board directed staff to continue to work with the consultant to monitor and track early warning indicators and provide the Board with updates to cost risk factors on project delivery. In response, the consultant team spent early 2018 analyzing trends and creating an Infrastructure Construction Cost Index (ICCI) model. On September 10, 2018, the consultant team presented their ICCI model and their prediction for the 2018, 2019, and 2020 cost fluctuation range to the Board.

This data tracking, collecting, and analytics effort continued with planned annual fall forecasts, timed to occur with the sales tax revenue forecast, and a mid-year update to staff in the spring. The forecast presented in fall 2018 (forecasting 2018, 2019, and 2020), and the spring 2019 update (forecasting 2019, 2020, and 2021), is included in Attachment A.

### ***Discussion***

With staff direction, the consultant team continues to analyze trends in material costs, labor costs, and general economic conditions and perform data analytics on this information to determine a range of potential cost impacts.

Consultant Findings

Using a series of regression analyses and forward-looking projections, the consultant team updated the ICCI to see how the information provided in fall 2018 and spring 2019 held up; and prepared a fall 2019 three-year forecast through 2022. This fall 2019 forecast is also included in Attachment A for easy reference and comparison.

The projections forecast a range of cost fluctuation for OCTA to consider when reviewing the M2 cash flow in support of successful delivery of M2 capital projects. Attachment B, prepared by the consultant, shares the basis for the forecast and the methodology supporting their findings.

According to the consultant, the ranges developed are built to be forecasting tools, with scores indicating public construction forecast cost increase fluctuations. Index scores of two and three indicate somewhat normal inflationary environments. A value of four is a high inflation environment. A value of one is a low inflation/deflationary environment. Values of zero and five correspond to the most extreme conditions observed in Orange County immediately prior to and during the Great Recession, and the high cost inflation environment that occurred in the building boom years of the early 2000s.

Using the ICCI described above, combined with a detailed trend analysis of building permits, unemployment rates, localized labor costs, material costs, and general economic conditions, the consultant estimates an ICCI ranking of “three” in 2020, and in each subsequent year 2021 and 2022.

An ICCI ranking of three represents potential cost increases in the range of two percent to six percent in all three years.

OCBC Orange County Transportation ICCI Score, 2020-2022		
Year	Index Score	Range of Cost Fluctuation
2020	3	2%-6%
2021	3	2%-6%
2022	3	2%-6%

This suggests a tempering compared with the previous forecast from spring 2019, and that cost pressures have slowed in the most recent data available. As in prior forecasts, the consultant indicates that OCTA will also need to be aware and ready to respond to cost pressures that are not able to be modeled.

The consultant explains that there are 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 ICCI 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.

Overall, the consultant's analysis identifies a potential that during the next few years of delivering Next 10, OCTA will experience a moderate cost environment. The consultant's analysis also indicates that measurable cost pressures may be flattening and are not as pronounced as in the previous time period. The Market Conditions Key Indicators Analysis and Forecast concludes that OCTA may experience a cost increase of between two percent and six percent during the next three years of construction activity, which is the timeframe for the ICCI model. OCTA's current assumptions, developed by OCTA's Capital Programs Project Controls Department (Project Controls), assumes a 3.5 percent escalation, which is a decrease from last year's short-term project escalation assumptions of 4.0 percent. Project cost estimates also include a prudent contingency specifically developed for the project based on the individual project risks.

Project Controls' cost estimating process uses historical information, as well as current trends in the market, and follows a consistent and defined process. Looking back at the last 20 years, OCTA's cost estimates have included a 3.0 percent escalation, which, on average during this timeframe, provided the appropriate escalation to deliver projects successfully. Using 3.5 percent for construction escalation, as well as incorporating contingency based on the project type and complexity, is staff's best estimate using industry standards on cost estimating.

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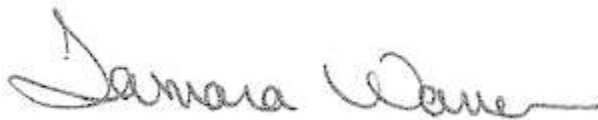
***Summary***

The Market Conditions Key Indicators Analysis and Forecast concludes that the Orange County Transportation Authority may experience a cost increase of between two percent and six percent during the 2020 through 2022 time period of construction activity. To reduce the potential risk of cost pressure and project delivery slowdowns due to unanticipated cost increases, staff will incorporate information from this analysis into the Measure M2 cash flow for the 2019 updated Next 10 Delivery Plan, which will be presented to the Executive Committee and Board of Directors in November 2019.

***Attachments***

- A. Orange County Business Council, Orange County Transportation Infrastructure Construction Cost Index Score, Fall 2018, Spring 2019, and Fall 2019 Forecasts
- B. Orange County Business Council, Orange County Transportation Infrastructure Construction Cost Index, Fall 2019

**Prepared by:**



Tamara Warren  
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**Approved by:**



Kia Mortazavi  
Executive Director, Planning  
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**Orange County Business Council  
Orange County Transportation Infrastructure Construction  
Cost Index Score  
Fall 2018, Spring 2019, and Fall 2019 Forecasts**

**Fall 2018**

OCBC Orange County Transportation ICCI Score, 2018-2020		
Year	Index	Cost Increase Range (annual)
2018	4	6% - 11%
2019	3	2% - 6%
2020	3	2% - 6%

**Spring 2019**

OCBC Orange County Transportation ICCI Score, 2019-2021		
Year	Index	Cost Increase Range (annual)
2019	4	6% - 11%
2020	3	2% - 6%
2021	3	2% - 6%

**Fall 2019**

OCBC Orange County Transportation ICCI Score, 2020-2022		
Year	Index	Cost Increase Range (annual)
2020	3	2% - 6%
2021	3	2% - 6%
2022	3	2% - 6%

**Orange County Business Council  
Orange County Transportation Infrastructure Construction Cost Index  
Fall 2019**

**Orange County Business Council Research Team**

Dr. Wallace Walrod - Chief Economic Advisor, Orange County Business Council  
Dr. Marlon Boarnet - Professor and Chair, Department of Urban Planning and Spatial Analysis,  
University of Southern California  
Benjamin Palmer - Research Associate, Orange County Business Council

**Background and Purpose**

As a supplementary examination to the Next 10: Market Conditions Forecast and Risk Analysis study delivered by Orange County Business Council (OCBC) in September 2017, the Orange County Transportation Authority (OCTA) Board of Directors (Board) requested further study and exploration of potential cost fluctuations beyond existing cost analysis from the California Department of Transportation’s (Caltrans) Construction Cost Index (CCI) and internal OCTA analysis. Recent increases in construction costs combined with concerns over sales tax revenue growth trends have necessitated forward looking projections to determine the ability for OCTA to adequately fund a number of transportation and infrastructure projects aimed at alleviating traffic congestion and increasing the quality of life for Orange County residents.

In order to do so, the OCBC team has analyzed annual trends in material costs, labor costs and general economic conditions to determine a range of potential cost increases with a time horizon out until 2022 by collecting and tracking relevant market data and indicators and performing data analytics on these datasets. In doing so, and providing these findings to OCTA’s Board, more accurate budgets can be determined reducing the potential risk of cost pressure and project delivery slowdowns due to financial constraints. The result of this analysis has been the creation of an Infrastructure CCI which provides a range of potential cost fluctuations for 2020, 2021, and 2022.

**Findings and Discussion**

OCBC has updated the Orange County Transportation Infrastructure CCI score, forecast to 2020, 2021, and 2022. The index value is “3” in each year.

Year	Index	Cost Increase Range (annual)
2020	3	2% - 6%
2021	3	2% - 6%
2022	3	2% - 6%

The cost pressure model shows cooling compared with the previous forecast from March 2019. Cost pressures have, on net, slowed in the most recently available data.

**Orange County Business Council**  
**Orange County Transportation Infrastructure Construction Cost Index**  
**Fall 2019**

Existing cost pressures are at cross-purposes, netting out to the mid-range index value of “3.” The cost pressure model has four primary inputs: California building permit activity, California unemployment rate, materials costs for transportation projects as tracked by Caltrans, and wages in Orange County’s construction workforce. Building permitting has slowed considerably in the state, and the unemployment rate, while still low, has leveled off. Materials costs are showing mixed signals, and Orange County construction wages continue to rise. The fundamentals are at cross-purposes. The slowdown in building permits is often associated with low infrastructure cost pressure, while rising wages are associated with rising cost pressure. At the current time, these factors are netting out to moderate annual cost increases forecast in the 2-6% range each year through 2022. We advise that OCTA continue to monitor conditions, as factors that influence unemployment rates, including the macro-economy, could tip the balance in either direction going forward. At this point we do not see sustained high cost pressures in the forecast.

**Recent Data Trends**

The cross-cutting economic trends can be seen in recent trends in key factors associated with infrastructure costs. Table 1 shows the values for 2016 through 2018 and the 2019 values based on projections from quarterly data. Building permitting in California is clearly slowing, the unemployment rate is dropping but at a less rapid pace, and construction labor costs (wages) in the county are rising. Building materials costs are multi-faceted and not shown, but on net building materials costs are rising at rates similar to but slightly less than in the 2016 to 2018 time-period.

**Table 1: Infrastructure Cost Correlates, Annual Percentage Changes, 2016-2019**

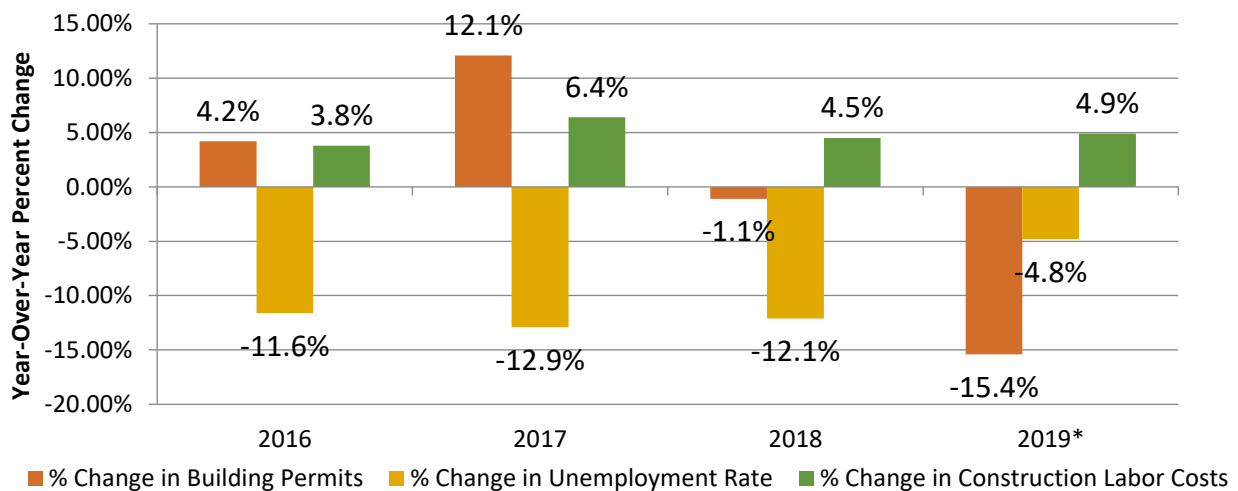
Year	California Building Permits	% change year-on-year	California Unemployment Rate	% change year-on-year	Orange County Construction Labor Costs (average. annual wage)	% change year-on-year
2016	102,350	4.2%	5.5%	-11.6%	\$67,179	3.8%
2017	114,780	12.1%	4.8%	-12.9%	\$71,474	6.4%
2018	113,502	-1.1%	4.2%	-12.1%	\$74,669	4.5%
2019*	96,067	-15.4%	4.0%	-4.8%	\$78,313	4.9%

\* 2019 values projected from year-on-year changes in quarterly data, 2018 to 2019.

**Orange County Business Council**  
**Orange County Transportation Infrastructure Construction Cost Index**  
**Fall 2019**

Building permitting activity has slowed notably in the most recent California data. While the statewide unemployment rate remains near record lows, the pace of decrease has started to decline, suggesting potential economic uncertainty in the future. Finally, percentage changes in Orange County construction labor costs remain steady at 4.9% in 2019, slightly above the increase seen in 2018, likely a result of low overall unemployment and the undersupply of Orange County construction workers. Meanwhile, the Caltrans CCI while anticipated to increase, is slowing after increasing by an annual average of nearly 13% between 2013 and 2018.

**Figure 1: Year-over-Year Percent Change in California Building Permits, California Unemployment Rate, and Orange County Construction Labor Costs, 2016-2019**



\* 2019 values projected from year-on-year changes in quarterly data, 2018 to 2019.

**Forecasting Method**

OCBC used a series of regression analyses, and forward-looking projections to create the Infrastructure CCI. This index provides a ranking from 0-5, with each rank corresponding to range of percent changes in overall construction costs. Table 2 below highlights each Index ranking and the proposed range of cost fluctuations which have been provided on a low, midpoint, and high scale.



**Orange County Business Council**  
**Orange County Transportation Infrastructure Construction Cost Index**  
**Fall 2019**

**Table 2: OCBC Orange County Transportation Infrastructure CCI Score Ranking - Implied Range of Construction Cost Change**

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

These ranges are built to be forecasting tools, with scores indicating public construction forecast cost increase. Values of 2 and 3 indicate somewhat normal inflationary environments. A value of 4 is a high inflation environment. A value of 1 is a low inflation/deflationary environment. Values of 0 and 5 correspond to the most extreme conditions observed in Orange County over the past two decades, and hence the ranges for those values are wide due to the unusual nature of the highly deflationary environment that occurred immediately prior to and during the Great Recession and the high cost inflation environment that occurred in the building boom years of the early 2000s.

**Methodology**

To determine the Transportation Infrastructure CCI, the OCBC team started by aggregating several datasets, measures, and indicators on an annual basis as far back as 1972. Among others, these measures included the Caltrans CCI, state-level building permits and unemployment rates, material costs, and construction labor costs.

The OCBC team examined how the various measures and indicators of construction costs varied with changes in (1) building permitting activity, (2) unemployment rates, (3) materials costs, (4) labor costs, and recent past trends in construction inflation. Using statistical analyses, the research team has built a forecasting model that projects forward cost increases.

**Appendix: Changes in Infrastructure Materials Costs 2016-2019 (all values are percent year-on-year changes)**

Year	Aggregate	PCC Pavement	PCC Structure	Steel Structure	Steel Bar
2016	9.4%	8.5%	7.6%	26.3%	35%
2017	24.2%	107.8%	26.9%	-51.0%	-21%
2018	18.9%	26.9%	17.2%	-58.8%	9.4%
2019 *	5.6%	-17.03%	13.4%	-34.9%	16.2%

Portland Concrete Cement

\* 2019 values projected from year-on-year changes in quarterly data, 2018 to 2019.

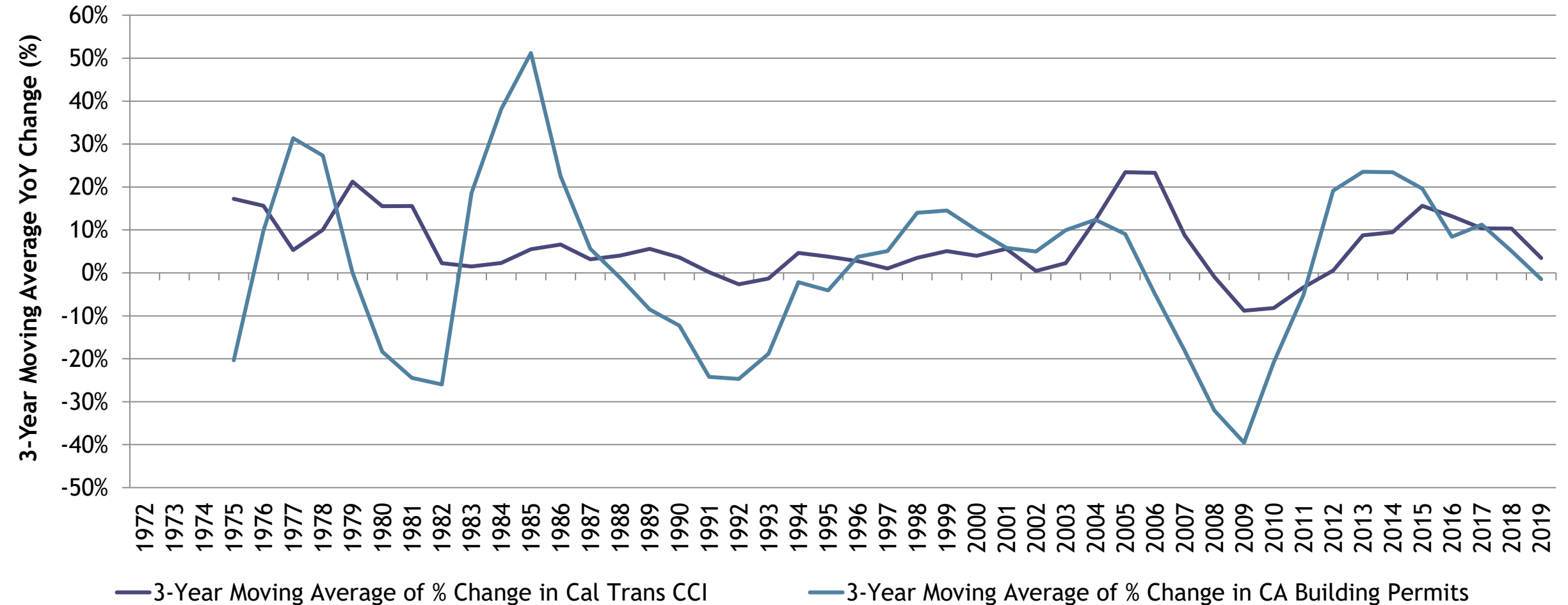
# Measure M2 Next 10 Plan: Market Conditions Key Indicators Analysis and Forecast

Orange County Transportation Infrastructure  
Construction Cost Index, Fall Update 2019  
Orange County Business Council

# Orange County Transportation Infrastructure CCI Model Components

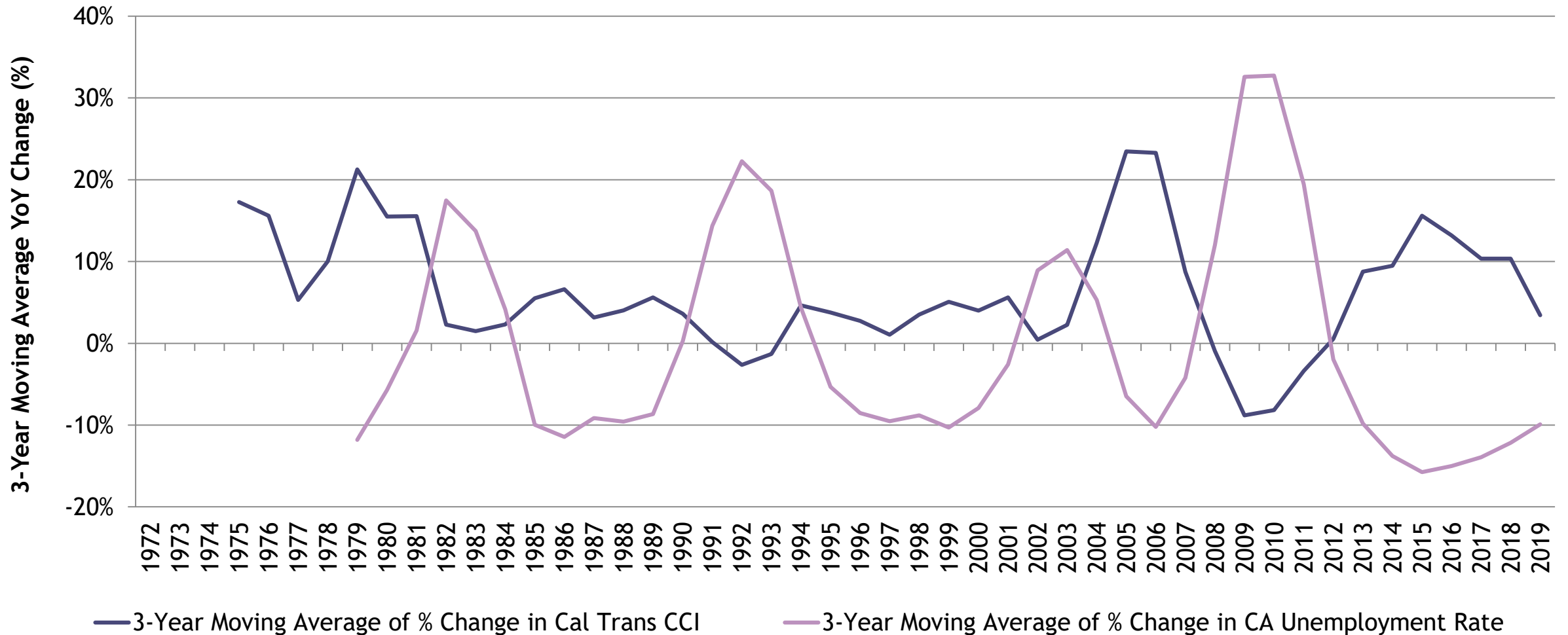
- Economic Trends - State-level building permits and unemployment rate (Census and California Employment Development Department)
- Material Costs - Construction Aggregate, PCC Pavement, PCC Structural Concrete, Structural Steel and Bar Steel (Caltrans)
- Labor Costs - Localized construction wages of NAICS defined sectors provided by Bureau of Labor Statistics
- Economic Conditions - Tight economy in 2002-2005 and slack economy in 2007-2011

# 3-Year Moving Average of Year-Over-Year Percent Change in Caltrans CCI and Building Permits





# 3-Year Moving Average of Year-Over-Year Percent Change in Caltrans CCI and CA Unemployment Rates



# Forecast and Range of Orange County Transportation Infrastructure Cost Increases by Index Value

- 2020 - Forecasted Index Value: 3
- 2021 - Forecasted Index Value: 3
- 2022 - Forecasted Index Value: 3

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

# Cost Pressures Are Mixed

- Statewide building permit issuance has slowed
- Slowing decrease in California unemployment rates
- Increasing Orange County construction labor costs
- Material cost shifts mixed, rising slightly less than 2016-2018

**Year-over-Year Changes in California Building Permits, California Unemployment Rate, and Orange County Construction Labor Costs, 2016-2019**

Year	California Building Permits	% change year-on-year	California Unemployment Rate	% change year-on-year	OC Construction Labor Costs (average annual wage)	% change year-on-year
2016	102,350	4.2%	5.5%	-11.6%	\$67,179	3.8%
2017	114,780	12.1%	4.8%	-12.9%	\$71,474	6.4%
2018	113,502	-1.1%	4.2%	-12.1%	\$74,669	4.5%
2019*	96,067	-15.4%	4.0%	-4.8%	\$78,313	4.9%

\* 2019 values projected from year-on-year changes in quarterly data, 2018 to 2019.

# OCBC Infrastructure Construction Cost Forecast

- Systematic Risks - more predictable and therefore in model
  - Construction/building environment
  - State's economy influencing demand and cost
  - Direct measures of labor and materials cost

OCBC Orange County Transportation ICCI Score, 2020-2022		
Year	Index Score	Range of Cost Fluctuation
2020	3	2%-6%
2021	3	2%-6%
2022	3	2%-6%

- Idiosyncratic Risks - not predictable and therefore not in model
  - Tariffs and associated effects on cost of materials, from changing trade policy
  - Regulatory requirements/changes creating additional hurdles to the bidding process



# Orange County's Construction Workforce: Labor Market Flows

Occupation (SOC Code)	Over/Under Supply in Orange County 2017*	Over/Under Supply in Orange County 2018*	Over/Under Supply in Orange County 2019*
Engineers (17-2000)	102	150	116
Civil Engineers (17-2051)	-130	-178	-181
Construction and Extraction Occupations (47-0000)	-10,799	-11,413	-11,572
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	-443	-688	-647
Construction Trades Workers (47-2000)	-9,136	-9,310	-10,012
Construction Laborers (47-2060)	-1,944	-2,093	-2,172
Construction Equipment Operators (47-2070)	-392	-380	-408
Other Construction and Related Workers (47-4000)	-421	-397	-419

\*Undersupply is indicated by negative number, over supply is indicated by positive number

SOC - Standard Occupational Classification

# Questions

*Information  
Items*







COMMITTEE TRANSMITTAL

**September 9, 2019**

**To:** Members of the Board of Directors  
**From:** Laurena Weinert, <sup>LA</sup>Clerk of the Board  
**Subject:** Environmental Mitigation Program Endowment Fund Investment Report for June 30, 2019

Finance and Administration Committee Meeting of August 28, 2019

**Present:** Directors Do, Hennessey, Hernandez, Jones, R. Murphy, and Steel  
**Absent:** Director Wagner

**Committee Vote**

This item was passed by the Members present.

**Committee Recommendation**

Receive and file as an information item.



**August 28, 2019**

**To:** Finance and Administration Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Environmental Mitigation Program Endowment Fund Investment Report for June 30, 2019

**Overview**

The Orange County Transportation Authority has developed a Natural Community Conservation Plan/Habitat Conservation Plan, acquired conservation properties, and funded habitat restoration projects to mitigate the impacts of Measure M2 freeway projects. California Community Foundation manages the non-wasting endowment required to pay for the long-term management of the conservation properties. Each quarter, the California Community Foundation publishes a comprehensive report detailing the composition of the pool and its performance. Attached is the quarterly investment report for the Endowment Pool for the period ending June 30, 2019. The report has been reviewed and is consistent with the pool objectives.

**Recommendation**

Receive and file as an information item.

**Background**

On September 26, 2016, the Board of Directors approved the selection of the California Community Foundation (CCF) as an endowment fund manager for the Measure M2 Freeway Environmental Mitigation Program. Approximately \$2.9 million on an annual basis will be deposited in the endowment. As of June 30, 2019, the Orange County Transportation Authority has made three deposits to the Endowment Pool, each in the amount of \$2,877,000. These annual deposits are expected to continue for ten to 12 years, or until the fund totals approximately \$46.2 million.

***Discussion***

As of June 30, 2019, total pool assets in the CCF Endowment Pool were \$1.128 billion. Total foundation assets were \$1.81 billion. Performance for the Endowment Pool was 4.2 percent for the month, 0.1 percent below the benchmark; 2.8 percent for the quarter, 0.2 percent below the benchmark. The one-year return was 5.5 percent, exceeding the benchmark by 0.1 percent.

The balance as of June 30, 2019, was \$9,534,374. The number exceeds the projected balance of \$9,097,957 due to higher than projected investment earnings and lower than projected fees.

The projected annualized cost for endowment services was 0.75 percent based on indications received during the due diligence process. Based on the current balance of the endowment, the cost for administration services is 0.25 percent.

***Summary***

The Orange County Transportation Authority is submitting a copy of the California Community Foundation Investment Report to the Board of Directors. The report is for the quarter ending June 30, 2019.

***Attachments***

- A. California Community Foundation Fund Statement – June 30, 2019
- B. California Community Foundation Endowment Pool Investments – June 30, 2019

**Prepared by:**



Sean Murdock  
Director,  
Finance and Administration  
714-560-5685

**Approved by:**



Andrew Oftelie  
Chief Financial Officer  
Finance and Administration  
714-560-5649



**Fund Name** OCTA - Measure M2 Environmental Mitigation Program Fund  
**Fund Start Date** 2/28/2017  
**Investment Pool(s)** Endowment Pool

**FUND STATEMENT**

**OCTA - Measure M2 Environmental Mitigation Program Fund (V398)**

4/1/2019 - 6/30/2019

**Fund Summary**

	Report Period 4/1/2019 - 6/30/2019	Calendar YTD 1/1/2019 - 6/30/2019
<b>Opening Fund Balance</b>	\$9,263,521.79	\$8,568,158.77
Contributions	0.00	0.00
Investment Activity, net	270,852.45	991,596.77
Administration & Grant Management Fees	0.00	(25,381.30)
Net Changes to Fund	270,852.45	966,215.47
<b>Ending Balance</b>	<b>\$9,534,374.24</b>	<b>\$9,534,374.24</b>

**Investment Pool Performance as of 06/30/2019**

	This Qtr.	1-Year	3-Years	5-Years	10-Years
<b>Endowment Pool</b>	2.8%	5.5%	9.0%	4.5%	7.7%
<b>Social Impact Endowment Pool</b>	3.8%	7.9%	8.3%	5.9%	8.5%
<b>Conservative Balanced Pool</b>	2.5%	6.7%	5.4%	4.4%	n/a
<b>Short Duration Bond Pool</b>	1.8%	5.2%	1.7%	n/a	n/a
<b>Capital Preservation Pool</b>	0.6%	2.3%	1.4%	0.9%	0.6%

**Endowment Pool** - invested for long-term growth and appreciation while providing a relatively predictable stream of distributions that keeps pace with inflation over time. The target asset allocation is 50% equities, 14% hedge funds, 22% fixed income and 14% real assets. Investment management fees are 66 basis points.

**Social Impact Endowment Pool** - invested in a diversified pool aiming for capital growth for long-term grantmaking; underlying instruments undergo rigorous environmental and social analysis, with an asset allocation of approximately 60%-75% equities and 25%-40% fixed income. Investment management fees are 68 basis points.

**Conservative Balanced Pool** - designed to aim for moderate growth and to offer diversified exposure to the U.S. equity market and to investment grade fixed income with maturities from one to five years and an asset allocation of 70% fixed income and 30% equities investments. Investment management fees are 9 basis points.

**Short Duration Bond Pool** - invested to offer diversified exposure to investment grade fixed income with maturities from one to five years for the purposes of grants over a near-term one to four year horizon. Investment management fees are 5 basis points.

**Capital Preservation Pool** - designed to preserve principal and provide liquidity for present grantmaking needs through investment in short-term fixed income and cash instruments. Investment management fees are 10 basis points.



**Fund Name** OCTA - Measure M2 Environmental Mitigation Program Fund  
**Fund Start Date** 2/28/2017  
**Investment Pool(s)** Endowment Pool

**BALANCE SHEET**  
**OCTA - Measure M2 Environmental Mitigation Program Fund (V398)**  
 6/30/2019

**Statement of Financial Position**

	6/30/2019	6/30/2018
<b>Assets</b>		
Cash & Pool Investments		
Endowment Pool	9,534,374.24	6,241,770.26
Cash & Pool Investments	9,534,374.24	6,241,770.26
<b>Total Assets</b>	<b>9,534,374.24</b>	<b>6,241,770.26</b>
<b>Liabilities and Fund Balance</b>		
Fund Balance	9,534,374.24	6,241,770.26
<b>Total Liabilities and Fund Balance</b>	<b>9,534,374.24</b>	<b>6,241,770.26</b>
<b>ENDING FUND BALANCE</b>	<b>\$9,534,374.24</b>	<b>\$6,241,770.26</b>

**Asset Allocation**

 Endowment Pool



**Investment Pool Performance as of 06/30/2019**

	This Qtr.	1-Year	3-Years	5-Years	10-Years
Endowment Pool	2.8%	5.5%	9.0%	4.5%	7.7%
Social Impact Endowment Pool	3.8%	7.9%	8.3%	5.9%	8.5%
Conservative Balanced Pool	2.5%	6.7%	5.4%	4.4%	n/a
Short Duration Bond Pool	1.8%	5.2%	1.7%	n/a	n/a



**Capital Preservation Pool**

0.6%

2.3%

1.4%

0.9%

0.6%

**Endowment Pool** - invested for long-term growth and appreciation while providing a relatively predictable stream of distributions that keeps pace with inflation over time. The target asset allocation is 50% equities, 14% hedge funds, 22% fixed income and 14% real assets. Investment management fees are 66 basis points.

**Social Impact Endowment Pool** - invested in a diversified pool aiming for capital growth for long-term grantmaking; underlying instruments undergo rigorous environmental, social and governance analysis, with an asset allocation of approximately 60%-75% equities and 25%-40% fixed income investments. Investment management fees are 68 basis points.

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**Short Duration Bond Pool** - invested to offer diversified exposure to investment grade fixed income with maturities from one to five years for the purposes of grants over a near-term one to four year horizon. Investment management fees are 5 basis points.

**Capital Preservation Pool** - designed to preserve principal and provide liquidity for present grantmaking needs through investment in short-term fixed income and cash instruments. Investment management fees are 10 basis points.



# Endowment Pool

June 2019

## INVESTMENTS

The Endowment Pool returned 4.2% for the month of June 2019, 10 basis points behind its benchmark. For the trailing year, the pool returned 5.5%, 10 basis points ahead of its benchmark.

### Total Pool Assets

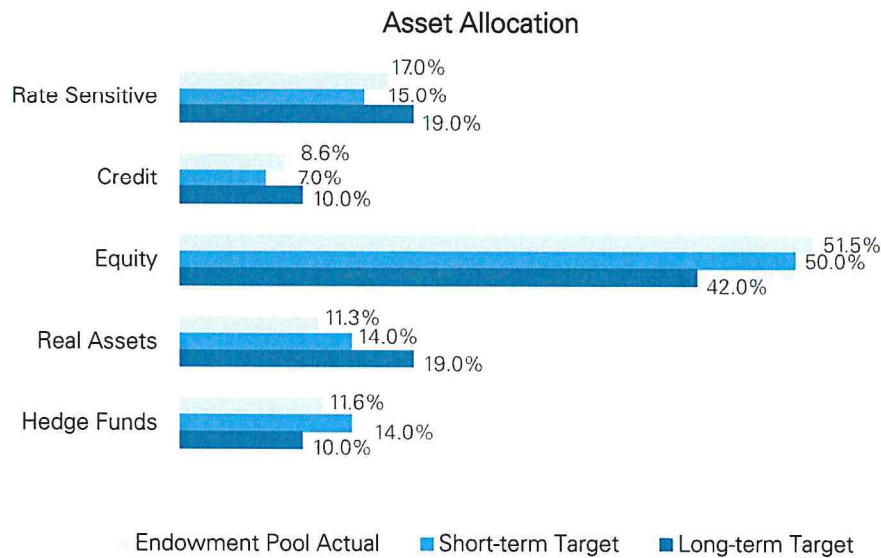
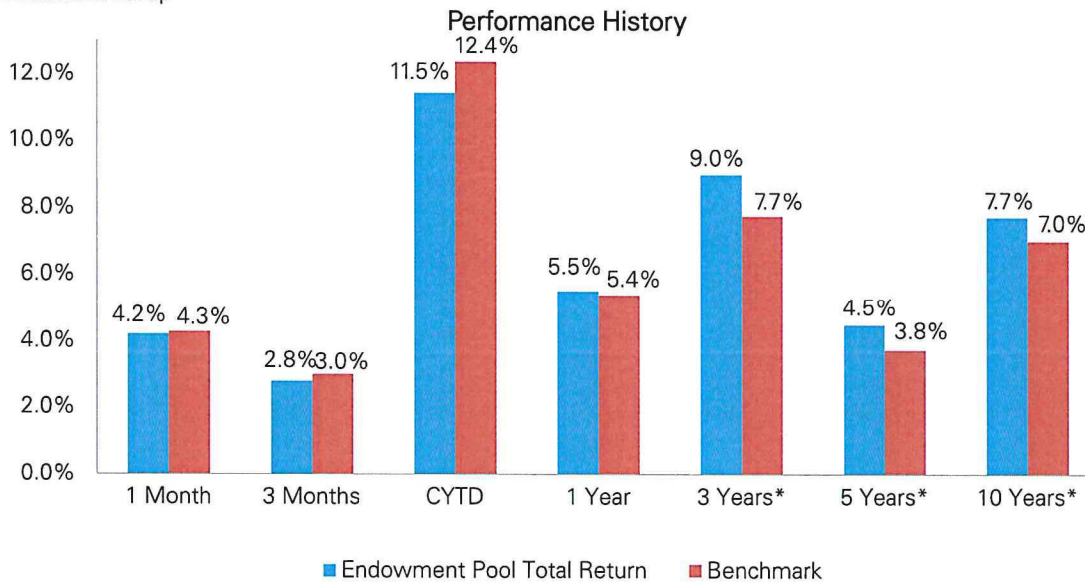
\$1.128 billion (Endowment Pool), \$1.81 billion (total foundation assets) as of June 30, 2019.

### Pool Objective

Preserve the real (i.e., inflation-adjusted) purchasing power of the investment pool net of annual distributions for grants and expenses. An additional objective is to provide a relatively predictable, stable stream of distributions for grants and expenses that keep pace with inflation over time.

### Investment Consultant

Meketa Investment Group



\*Represents annualized returns.

1) Investment expense ratio approximates 0.53%, excluding fund manager incentive fees.

2) Investment performance is presented net of investment expenses, including fund manager incentive fees.

3) Total Fund Benchmark is a combination of: 50% MSCI ACWI / 14% HFR FOF / 14% S&P Real Assets Indx / 15% Barc Agg. / 7% Barc High Yield.

4) Short-term target allocation is over 1-4 years, long-term target allocation is over 4-9 years.



COMMITTEE TRANSMITTAL

**September 9, 2019**

**To:** Members of the Board of Directors

**From:** Laurena Weinert,  Clerk of the Board

**Subject:** 2019 Project X - Tier 1 Call for Projects Programming Recommendations

Regional Planning and Highways Committee Meeting of September 5, 2019

**Present:** Directors Delgleize, Muller, M. Murphy, R. Murphy, and Pulido

**Absent:** Directors Bartlett and Chaffee

**Committee Vote**

This item was passed by the Members present.

Director Pulido was not present to vote on this item.

**Committee Recommendations**

- A. Approve the 2019 Tier 1 Environmental Cleanup Program's programming recommendation to fund ten projects, in the amount of \$1,962,452.
- B. Approve the 2019 Tier 1 Environmental Cleanup Program's programming recommendation to fund one project in the City of Fullerton, in the amount of \$82,782, subject to receipt of a revised city council resolution.



**September 5, 2019**

**To:** Regional Planning and Highways Committee

**From:** Darrell E. Johnson, Chief Executive Officer

A handwritten signature in black ink, appearing to read "Darrell Johnson for", is written over the printed name of the Chief Executive Officer.

**Subject:** 2019 Project X - Tier 1 Call for Projects Programming Recommendations

### **Overview**

The Orange County Transportation Authority's Environmental Cleanup Program provides Measure M2 funding for water quality improvement projects to address transportation-generated pollution. The fiscal year 2019-20 Tier 1 Grant Program call for projects was issued on March 11, 2019. Evaluations are now complete, and a list of projects and funding allocations are presented for review and approval.

### **Recommendations**

- A. Approve the 2019 Tier 1 Environmental Cleanup Program's programming recommendation to fund ten projects, in the amount of \$1,962,452.
- B. Approve the 2019 Tier 1 Environmental Cleanup Program's programming recommendation to fund one project in the City of Fullerton, in the amount of \$82,782, subject to receipt of a revised city council resolution.

### **Background**

In May 2010, the Orange County Transportation Authority (OCTA) Board of Directors (Board) approved a two-tiered approach to fund the Measure M2 Project X Environmental Cleanup Program (ECP). The Tier 1 Grant Program is designed to mitigate the more visible forms of pollutants, such as litter and debris, which collect on roadways and in catch basins (storm drains) prior to being deposited in waterways and the ocean. The Tier 2 Grant Program consists of funding larger (projects treating catchment areas of 50 acres or greater), potentially multi-jurisdictional, capital-intensive structural treatment best management practice (BMP) projects.

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Tier 1 funds are available for Orange County local governments to purchase equipment and upgrades for existing catch basins and other related BMPs that supplement current requirements. Examples include screens, filters, and inserts for catch basins, as well as other devices designed to remove the above-mentioned pollutants. Proposed projects must demonstrate a direct nexus to the reduction of transportation-related pollution, as developed and defined by the OCTA Environmental Cleanup Allocation Committee (ECAC).

To date, the Board has approved funding for 166 Tier 1 project phases, totaling approximately \$22 million. An estimated one 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.

The Board approved issuance of the 2019 ECP Tier 1 call for projects (call) on March 11, 2019.

### ***Discussion***

The 2019 ECP Tier 1 call deadline to submit applications was May 9, 2019. Eleven applications were submitted from ten local agencies (the City of Mission Viejo submitted two project applications) prior to the deadline. Applications were reviewed and evaluated by an evaluation committee consisting of OCTA staff, the ECAC Chairman, and an additional member of the ECAC. Project applications were ranked based on the following Board-approved criteria:

- Proposed project's effectiveness at removing trash and debris;
- Cost/benefit analysis of the proposed project;
- Drainage and flowrate analysis of the proposed project;
- Operations and maintenance plan adequate to maintain the efficiency of the proposed BMP(s) for regularly scheduled inspections, maintenance, and cleaning/disposal of pollutants;
- Clear and detailed work plan with a specific implementation period; and
- Project readiness.

The ECAC, which met on August 8, 2019, is recommending all 11 projects for funding for a total amount of \$2,045,234, based on final scores provided in Attachment A. All of the projects scored above 70 points and met overall program objectives and criteria. It should be noted that the City of Fullerton's programming recommendation is contingent upon receipt of a final revised city council resolution, which required a slight revision and is expected to be provided soon.



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The Tier 1 projects recommended for funding primarily consist of catch basin debris screen devices. This recommendation would fund the construction of 1,028 connector pipe screens, 667 automatic retractable screens, a bio-clean debris separating baffle box, two bioretention basins, one full capture trash screen vault, which would include a sedimentation chamber, two infiltration wells, and one pre-treatment vault. More detailed project descriptions are outlined in Attachment A, and a brief overview of project types is provided below.

- Catch basin debris screen devices. These screens prevent debris from entering the storm drain system.
- Debris separating baffle box (DSBB). The DSBB is an advanced stormwater treatment system utilizing a non-clogging screen technology and hydrodynamic separation to capture pollutants. The screening system stores trash and debris in a dry state, suspended above the sedimentation chambers, and allows for easier maintenance.
- Bioretention basins. This project consists of two bioretention basins to intercept and infiltrate dry weather flows and stormwater flows. The bioretention basin will intercept flows and remove pollutants, effectively preventing their entry into the storm drain system.
- Drain extension and storm water infiltration system. This project consists of a full capture trash screen vault and related improvements.

As part of this grant program, local agencies agree to contribute a minimum cash match of 20 percent of the project cost. Three of the ten cities are providing overmatch.

#### Next Steps

If these recommendations are approved by the OCTA Board, each funded agency will be required to execute a letter amendment prior to project implementation. OCTA will continue to monitor project status and project delivery through the Comprehensive Transportation Funding Programs semi-annual review process.

#### **Summary**

Staff is seeking Board approval to program \$2,045,234 to fund 11 projects. Of this amount, \$87,782 for the City of Fullerton's project is being recommend for programming subject to receipt of corrected city council resolution, which is anticipated soon.

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***Attachment***

- A. Project X 2019 Tier 1 Call for Projects, Programming Recommendations

**Prepared by:**



Alfonso Hernandez  
Senior Transportation Funding  
Specialist  
(714) 560-5857

**Approved by:**



Kia Mortazavi  
Executive Director, Planning  
(714) 560-5741

**Project X 2019 Tier 1 Call for Projects  
Programming Recommendations**

<b>Projects Recommended for Funding</b>					
<b>Agency</b>	<b>Project</b>	<b>Project Description</b>	<b>Final Score</b>	<b>Funding</b>	<b>Cumulative</b>
Laguna Hills	Laguna Hills CPS-Mod and ARS-CL Screen Project Phase VIII	Install 117 CPS and 244 ARS Devices	85	\$ 200,000	\$ 200,000
Mission Viejo	Mission Viejo Trash and Runoff Abatement Project (TRAP): CPS and ARS Installations in the Via Fabricante Industrial Area	Install 49 CPS and 123 ARS Devices	84	\$ 97,426	\$ 297,426
Seal Beach	2019 Environmental Cleanup Program Project	Install 52 CPS and 55 ARS Devices	83	\$ 100,000	\$ 397,426
Anaheim	La Palma Avenue and Richfield Road Storm Drain Extension and Storm Water Infiltration Project	Full Capture Trash Screen Vault, Sedimentation Chamber, Two Infiltration Wells and Pre-Treatment Vault, Co-use of Regional Infiltration Basins	78	\$ 500,000	\$ 897,426
Lake Forest	Catch Basin Retrofit (CPS and ARS), Phase 8	Install 20 CPS and 90 ARS Devices	77	\$ 53,240	\$ 950,666
Orange	DSBB and CPS BMP Installation	Install a Bio-Clean DSBB and Ten CPS Devices	73	\$ 249,360	\$ 1,200,026
Costa Mesa	2019 CPS Installation Project	Install 350 CPS Units	73	\$ 107,327	\$ 1,307,353
Mission Viejo	Mission Viejo Trash and Runoff Abatement Project (TRAP): Olympiad Road Bioretention Basins with Trash Capture	Construct Two Bioretention Basins, Install Five CPS and 17 ARS Devices	73	\$ 400,000	\$ 1,707,353
Newport Beach	Newport Bay Trash Mitigation Project Phase 2	Install 187 CPS Devices	73	\$ 55,099	\$ 1,762,452
Laguna Niguel	Purchase and Installation of Trash Control Devices on Storm Water Catch Basins 2019	Install 138 CPS and 138 ARS Devices	72	\$ 200,000	\$ 1,962,452


<b>Projects Recommended for Funding - Contingent on the Receipt of a Revised City Council Resolution</b>					
<b>Agency</b>	<b>Project</b>	<b>Project Description</b>	<b>Final Score</b>	<b>Funding</b>	<b>Cumulative</b>
Fullerton	Installation of Full Capture Trash Devices in Catch Basins	Install 100 CPS Devices	85	\$ 82,782	\$ 2,045,234

CPS - Connector Pipe Screen  
Mod - Modular  
ARS - Automatic Retractable Screen  
CL - CamLock  
DSBB - Debris Separating Baffle Box  
BMP - Best Management Practice



COMMITTEE TRANSMITTAL

**September 9, 2019**

**To:** Members of the Board of Directors  
**From:**  Laurena Weinert, Clerk of the Board  
**Subject:** Interstate 405 Improvement Project Update

Regional Planning and Highways Committee Meeting of September 5, 2019

**Present:** Directors Delgleize, Muller, M. Murphy, R. Murphy, and Pulido  
**Absent:** Directors Bartlett and Chaffee

**Committee Vote**

Following the discussion, no action was taken on this receive and file information item.

**Staff Recommendation**

Receive and file as an information item.



**September 5, 2019**

**To:** Regional Planning and Highways Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Interstate 405 Improvement Project Update

### **Overview**

The Orange County Transportation Authority is currently underway with the implementation of the Interstate 405 Improvement Project. This report provides a project update.

### **Recommendation**

Receive and file as an information item.

### **Background**

The Orange County Transportation Authority (OCTA), in cooperation with the California Department of Transportation, and the cities of Costa Mesa, Fountain Valley, Huntington Beach, Seal Beach, and Westminster, is implementing the Interstate 405 (I-405) Improvement Project between State Route 73 (SR-73) and Interstate 605 (I-605) (Project). The Project will add one general purpose lane from Euclid Street to I-605, consistent with Measure M2 Project K, and will add an additional lane in each direction that will combine with the existing high-occupancy vehicle lane to provide dual express lanes in each direction of I-405 from SR-73 to I-605, otherwise known as the 405 Express Lanes.

On November 14, 2016, the OCTA Board of Directors (Board) awarded the design-build (DB) contract to OC 405 Partners (OC405), a joint venture. OCTA executed the DB contract with OC405 and issued Notice to Proceed (NTP) No. 1 on January 31, 2017. NTP No. 1 was a limited NTP for mobilization, design, and administrative activities. On July 26, 2017, the Transportation Infrastructure Finance and Innovation Act (TIFIA) loan agreement was executed between OCTA and the United States Department of Transportation (USDOT). On July 27, 2017, OCTA issued NTP No. 2 to OC405. NTP No. 2 was a full NTP for all activities, including construction.



***Discussion***

A number of activities are ongoing as the final design, right-of-way (ROW) acquisition, utility relocations, and construction activities continue to advance. The following provides a more detailed status of Project activities.

**Financing and TIFIA Loan**

On July 26, 2017, OCTA executed a TIFIA loan agreement with the USDOT for up to \$628.93 million. Pursuant to the terms identified in the loan agreement, OCTA staff submits periodic reimbursement requisitions to the USDOT Build America Bureau and Federal Highway Administration. OCTA has received two TIFIA loan disbursements to date and anticipates receiving the third disbursement in September 2020.

**Tolling Contracts**

On February 26, 2018, the Board selected Kapsch TrafficCom USA, Inc., (Kapsch) to provide toll lanes system integration services for design, installation, operation, and maintenance of the electronic toll and traffic management system on both the 405 and 91 Express Lanes. Kapsch is currently under contract and is working closely with the design-builder to deliver fully functional express lanes upon opening in 2023.

Staff has initiated the development of a request for proposals for the back office support and customer service center contract for the 405 Express Lanes, and plans to seek Board approval for its release in early 2020.

**Design**

The final design is approximately 85 percent complete overall and is anticipated to be fully complete in early 2020.

**ROW Acquisition**

Construction of the Project impacts 288 properties, including 179 residential properties, 71 commercial/industrial properties, 37 public properties, and one railroad property. There are 287 properties identified as partial acquisitions and one property identified as a full acquisition at the owner's request. The real property requirements for the partial acquisitions are comprised of a combination of fee acquisitions, permanent easements, temporary construction easements (TCE), permanent and temporary ground lease reductions, and access control rights needed to construct the proposed highway and express

lane improvements for the Project. The full-fee acquisition, partial-fee acquisitions, permanent easements, and TCEs are required for roadway and bridge construction, soundwalls and retaining walls, drainage systems, and for the installation of above-ground and underground facilities, including electrical, telecommunication, water, sewer, gas, and storm drain systems.

The ROW acquisition program is currently on schedule. Of the 288 total parcels impacted, the following summarizes the status of the ROW acquisition:

- 288 offers presented,
- 269 agreements or possession (93 percent of 288 total parcels impacted),
- 60 resolutions of necessity approved.

#### Utility Relocations

There are currently 107 utilities that require relocation to accommodate the Project. OCTA is coordinating with 22 impacted utility companies to identify and resolve conflicts and relocation issues. There are several utility relocation risks, including Frontier Communication, Crimson and Chevron oil lines, and Southern California Edison facilities for which staff continues to develop and implement mitigation plans, as utilities are a shared risk between OCTA and OC405.

#### Construction

OC405 began construction on March 6, 2018. Initial construction activities included restriping portions of the freeway and setting up concrete barriers on the outside of the freeway to protect work areas for activities such as tree removals and grading. These initial construction activities are generally complete. Clearing and grubbing, including tree and ground cover removal, and rough grading activities have also advanced in the last quarter.

Significant roadway construction activities, including installation of drainage systems, retaining walls, and paving operations began earlier this year. Construction at Oceanview Channel, a major drainage facility that crosses under the freeway, has commenced. Additionally, over 20 walls are under construction at this time as well.

Construction of the Slater Avenue overcrossing bridge and approaching local roadways was recently completed. The Slater Avenue bridge was the first new bridge opened to traffic. Construction on the McFadden Avenue overcrossing bridge also continues, and is anticipated to be open to traffic in late summer of 2020. Both Slater Avenue and McFadden Avenue are one-stage bridges, which means the bridges are closed to traffic on both sides of I-405 during demolition and reconstruction.

Significant bridge construction also continued at Fairview Road, Magnolia Street, Goldenwest Street, and Bolsa Chica Road overcrossings. These are two-stage bridges, which means traffic will be maintained on the remaining portion of the bridge while the first half of the new bridge is constructed.

Construction began in the last several months at the Bolsa Avenue and Westminster Boulevard overcrossing bridges, both of which are two-stage bridges. Construction also began recently on the Santa Ana River bridge and the Harbor Boulevard overcrossing bridge. Construction at Santa Ana River and Harbor Boulevard consists of widening the existing freeway bridge over both of those facilities.

Looking ahead, the remainder of 2019 will remain busy related to bridge and wall construction. Now that the new Slater Avenue bridge is open to traffic, construction is anticipated to begin on the Talbert Avenue and Bushard Street overcrossing bridges. Both Talbert Avenue and Bushard Street are one-stage bridges, which means the bridges will be closed to traffic on both sides of I-405 during demolition and reconstruction. Additionally, the widening of three existing freeway bridges over Beach Boulevard, Bolsa overhead railroad crossing, and an old Navy railroad crossing is anticipated to begin in the next few months.

### Project Challenges

As would be expected on a project of this magnitude, certain challenges have been encountered, including the following:

- Oversight and approvals from many different agencies and third parties
- Cost and availability of construction resources in this active construction market
- Change management
- Minimizing impacts and disruptions to the public
- Schedule impacts and mitigations

OCTA has worked closely with its partners and OC405 to mitigate schedule impacts when identified. Schedule mitigations implemented to date include building the Slater Avenue and Edwards Street overcrossing bridges in one stage instead of two stages, improvements to the construction staging at Oceanview Channel, and the long-term closure of one of the two off-ramps from northbound I-405 to Westminster Boulevard. Other future schedule mitigations include the potential for longer ramp closure durations and extended nightly lane closure durations in order to increase the productivity of the contractor. These types of schedule mitigations are intended to maintain the original Project completion date and will be balanced with minimizing traffic impacts. OCTA staff is also focused on the other Project challenges as well.

### Project Cost/Contingency

The overall Project cost remains \$1.9 billion, and the Project contingencies have been approximately 30 percent expended to date. This is in line with the percent complete for the Project from both a time and earned value standpoint.

### Public Outreach

Over the last several months, in addition to communicating with the public about major construction activities such as bridge demolition and pile driving, the Outreach team has turned its focus to residents living along the freeway with backyard walls being rebuilt as part of the Project. These sensitive activities have required a substantial effort to ensure the impact to residents is minimized wherever possible. The Outreach team took a comprehensive and methodical approach to communicating with residents in multiple languages about temporary fence installation to ensure the safety of residents and pets. In addition, the team has facilitated nearly 100 preconstruction surveys where properties might be affected by wall construction, with dozens more scheduled.

Since April 2019, the Outreach team also has hosted three additional neighborhood meetings to apprise residents of construction at the Santa Ana River bridge, the Talbert Avenue and Bushard Street overcrossing bridges, and at soundwall locations. The team continues to find cost-effective ways to communicate about activities such as bridge and wall demolition, pile driving, and freeway closures. The team canvassed flyers in English, Vietnamese, and Spanish to nearly 110,000 addresses, reached more than a half-million people on social media through promoted posts, and emailed more than 10,000 recipients weekly with a construction update. In addition, there continues to be strong growth in the use of the Project's interactive map of closures and detours that is integrated with Waze, with an increase in monthly unique users of 156 percent (1,345 to 3,448) from April to June 2019. Nearly 600 users have downloaded the Project mobile app, up from 89 in March 2019. Meanwhile, the team continues to average about 110 inquiries a month from residents and business owners regarding the Project.

The Outreach team participated in a half-dozen community events, from festivals in Westminster and Rossmore to Fountain Valley's Summerfest and the Taste of Huntington Beach. Project updates were provided to key stakeholders such as the OC Fair & Events Center and Westminster Mall, presentations were made to the Irvine Chamber of Commerce Government Affairs Committee, OCTA's Diverse Community Leaders Committee, several service organizations, and site visits to the Slater Avenue bridge were facilitated for members of the Fountain Valley City Council. Last month, completion of the Slater Avenue bridge was highlighted with a community event, which was well attended.

In the coming months, the Outreach team will focus on an enhanced safety awareness campaign and expanded outreach in diverse communities, including face-to-face meetings with faith-based groups, coordination with social media influencers in the community to share Project information, “insider” tours led by Project team members that reflect the ethnic communities along the Project corridor, and participation in cultural youth group events.

**Next Steps**

Staff will continue to work closely with the design-builder as design and construction continue. This involves completing portions of the final design, obtaining permits, utility relocation coordination, and construction activities. Additionally, the ROW acquisition program will continue as planned.

**Summary**

Final design and construction continue to advance. Currently, final design, ROW acquisition, public outreach, and other activities are in process to continue the construction phase of the Project.

**Attachment**

None.

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