



Measure M Taxpayer Oversight Committee
550 S. Main Street, Orange CA, Room 07
February 14, 2017 @ 5:00 p.m.

AGENDA

- 1. Welcome**
- 2. Pledge of Allegiance**
- 3. Approval of Minutes/Attendance Report for October 11, 2016**
- 4. Action Items**
 - A. AER Subcommittee Eligibility Report FY 16-17
Presentation – Matthew McGuinness, AER Chair
 - B. M2 Quarterly Revenue & Expenditure Report (June 16)
Receive and File – Sean Murdock, Director, Finance and Administration
 - C. M2 Quarterly Revenue & Expenditure Report (September 16)
Receive and File – Sean Murdock, Director, Finance and Administration
 - D. M2 Quarterly Revenue & Expenditure Report (December 16)
Receive and File – Sean Murdock, Director, Finance and Administration
- 5. Presentation Items**
 - A. Fourth Quarter 2016 Debt and Investment Report
Presentation – Rodney Johnson, Deputy Treasurer
 - B. I-405 Improvement Project Update
Presentation – Jim Beil, Executive Director, Capital Programs
 - C. Final Natural Community Conservation Plan/Habitat Conservation Plan and Associated Environmental Impact Report/Environmental Impact Statement for the Measure M2 Environmental Mitigation Program
Presentation – Dan Phu, Program Manager, Strategic Planning
- 6. OCTA Staff Updates (5 minutes each)**
 - Measure M Next 10 Plan - Tamara Warren, Measure M Program Manager
 - OC Streetcar - Jim Beil, Executive Director, Capital Programs
 - Other
- 7. Audit Subcommittee Report**
- 8. Environmental Oversight Committee Report**
- 9. Committee Member Reports**
- 10. Public Comments***
- 11. Adjournment**

The next meeting will be held on April 11, 2017

*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.



Measure M Taxpayer Oversight Committee INFORMATION ITEMS

Staff Report Title	Board Meeting Date
1. Financial and Compliance Audits of Eight Measure M2 Comprehensive Transportation Funding Program Projects	October 24, 2016
2. Capital Programs Division - First Quarter Fiscal Year 2016-17 Capital Action Plan Performance Metrics	November 14, 2016
3. Measure M2 Sales Tax Forecast	
4. OC Bridges Railroad Grade Separation Program Funding Plan Update	
5. Award of Design-Build Contract for the Interstate 405 Improvement Project	
6. Project V Community-Based Transit Circulators Program Ridership Report	December 12, 2016
7. Comprehensive Transportation Funding Programs Semi-Annual Review – September 2016	
8. Measure M2 Quarterly Progress Report for the Period of July 2016 Through September 2016	
9. Rail Programs and Facilities Engineering Quarterly Report	January 23, 2017
10. Fiscal Year 2015-16 Annual Financial and Agreed-Upon Procedures Reports	

*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
550 S. Main Street, Orange CA, Room 07
October 11, 2016 @ 5:00 p.m.

MEETING MINUTES

Committee Members Present:

Eric Woolery, Orange County Auditor-Controller, Chair
Richie Kerwin Lim, First District Representative
Anthony Villa, First District Representative
Margie Drilling, Second District Representative
Alan P. Dubin, Second District Representative
Eugene Fields, Third District Representative
Dr. Ronald T. Randolph, Third District Representative, Co-Chair
Stanley F. Counts, Fourth District Representative
Guita Sharifi, Fifth District Representative

Committee Member(s) Absent:

Sony Soegiarto, Fourth District Representative
Matt McGuinness, Fifth District Representative

Orange County Transportation Authority Staff Present:

Julianne Brazeau, Public Reporter
Marissa Espino, Community Relations Officer, External Affairs
Darrell Johnson, Chief Executive Officer
Kia Mortazavi, Executive Director, Planning
Sean, Murdock, Director, Finance & Administration
Andrew Oftelie, Executive Director, Finance & Administration
Tresa Oliveri, Community Relations Officer
Alice Rogan, Public Outreach Manager, External Affairs
Mary Shavalier, Program Manager, Rail Programs & Facilities Engineering
Tamara Warren, Program Manager, M Program Management Office

1. Welcome

Dr. Ronald T. Randolph, Co-Chairman, welcomed everyone to the Orange County Transportation Authority (OCTA) Taxpayer Oversight Committee (TOC) meeting at 5:03 p.m.

2. Pledge of Allegiance

Dr. Ronald T. Randolph, Co-Chairman, led the Pledge of Allegiance to the Flag.

3. CEO Welcome

Darrell Johnson, Chief Executive Officer, introduced himself, provided an overview of OCTA and outlined OCTA's plans for the future.

4. Approval of the Minutes/Attendance Report for August 9, 2016

A motion was made by Richie Lim, seconded by Alan Dubin, and carried unanimously to approve the August 9, 2016 TOC Minutes/Attendance report as presented.

5. Presentation Items

A. Sales Tax Update

Andrew Oftelie, Executive Director, Finance and Administration, presented the Sales Tax Update

Richie Lim asked about the accuracy of Muni Service's forecasts. Andrew Oftelie said in 2012, Muni Service was within a 10th of a percent and has continued to be within a minimal percentage in the following years.

Eric Woolery asked if OCTA is using Muni Services solely or are other forecasts being averaged in. Andrew Oftelie said Muni Services will only give a five-year forecast and for those five years, OCTA is using only Muni Service's numbers. He said for year six and beyond, OCTA is using an average of the three universities.

Eric Woolery asked if Measure M revenue forecast is down 34%. Tamara Warren said we are actually down 41-42%.

Guita Sharifi asked if OCTA is predicting the revenue will ultimately be higher than \$14.2 billion. Andrew said our best guess is we will receive about \$14.2 billion in revenue.

Alan Dubin asked if OCTA scales the predictions from Muni Service and the universities to meet at the six year mark. Andrew Oftelie said OCTA uses the percentage growth rate from Muni Services for the first five years and then a percentage growth rate from the universities for the following six years.

Eugene Fields asked if OCTA plans to use Muni Service after five years. Andrew Oftelie said Muni Services operates on a five-year rolling period. He said it is up to the OCTA Board whether to continue each year. Each year, Muni Services will provide a forecast for the next five years.

Eric Woolery asked what steps are being taken to ensure recessions are predicted. Richie Lim asked if another recession is being predicted. Andrew Oftelie said they all predict average growth. Muni Service and the universities predict there will be some down years, but it is covered in the averages.

Eric Woolery asked if there is a cushion on the predictions since borrowing money is based on the predictions. Andrew Oftelie said OCTA has coverage ratios.

Alan Dubin asked if bonds are covered only by Measure M Sales Tax. Andrew Oftelie said yes only Measure M. He said if OCTA were ever to default on these bonds, it would be the bond holders that would lose the money, not OCTA.

B. Measure M2 Next 10

Tamara Warren, Measure M Program Manager, Planning, presented the Measure M2 Next 10 Plan.

Eugene Fields asked about scenario 3 where it says SR-91 and/or I-405. Tamara Warren said currently the SR-91 Express Lanes has a positive cash flow, and is a known resource. The I-405 is a possible option in the future in the event there are excess revenues on the I-405 Express Lanes. Eugene asked if there are projections on excess revenue for the I-405. Andrew Oftelie said within the course of the project development, OCTA hired a consultant to do a toll study and within the study, they do a traffic and revenue study. He said there should be positive cash flow on the I-405 Express Lanes starting in 2028, which is five years after opening. Eugene asked what are the guestimates. Andrew said he does not have an exact estimate, but it is predicted to be substantial.

Guita Sharifi asked if the toll revenues are restricted. Andrew Oftelie said they are restricted under AB 194 to be used within the I-405 corridor.

Eric Woolery asked how excess toll revenue is defined. Andrew Oftelie said first debt is paid back, then operation costs, and then the rest is excess. Eric asked if the debt on the toll lanes will be paid off by 2028. Andrew said no, but OCTA is working with the State to get a Transportation Infrastructure Finance an Innovation Act (TIFIA) loan for this project. The TIFIA loan would work similar to a home equity loan.

Margie Drilling asked if excess funds on SR-91 falls into the same criteria policy as the I-405 project. Andrew Oftelie said yes, excess revenues can only be used within the corridor.

Anthony Villa asked if the revenue from SR-91 has to be paid back. Tamara Warren said that money does not have to be paid back.

C. Comprehensive Transportation Funding Programs (CTFP) Overview

Kia Mortazavi, Executive Director, Planning, presented an overview of the CTFP.

Margie Drilling said previously there was an issue with the City of San Juan Capistrano cancelling a project after spending Measure M money. Kia Mortazavi said OCTA is in the process of getting the money back from the

City of San Juan Capistrano in regards to a project on Ortega Highway. The City spent some of the money on Engineering before cancelling the project. The City was never funded money for Right of Way. OCTA is in the process of getting a portion of the money back and evaluating how much interest the City owes OCTA/Measure M.

Dr. Ronald Randolph said it appears planning is done based on the premise OCTA can keep ahead of traffic growth. Kia Mortazavi said OCTA's planning is to keeping up with traffic/growth – we not getting ahead, but not getting behind either. Ronald said it appears OCTA is holding their own and it is very reassuring.

D. OC Bridges Update

Tresa Oliveri, Community Relations Officer, presented an update on the OC Bridges.

Alice Rogan asked if the committee is interested in a tour of the bridge sites. She said she would send an email out polling the committee.

6. OCTA Staff Updates

- Other – There were no updates.

7. Environmental Oversight Committee (EOC) Report

Anthony Villa said there has not been a meeting since the last TOC meeting. The EOC will meet on October 26, 2016.

8. Committee Member Reports

There were no further reports

11. Public Comments

John Smead asked about the difference on the projected average growth of Measure M Funds at the time of the recession? Andrew Oftelie said the original forecast by the universities for Measure M was done in 2005. Andrew said he would get Mr. Smead the information after the meeting and present the information at the next TOC meeting.

12. Adjournment

The Measure M Taxpayer Oversight Committee meeting adjourned at 6:15 p.m. The next meeting will be held on December 13, 2016.

Taxpayer Oversight Committee

Fiscal Year 2016-2017

Attendance Record



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

Meeting Date	12-Jul	9-Aug	13-Sep	11-Oct	8-Nov	13-Dec	10-Jan	9-Feb	14-Mar	11-Apr	9-May	13-Jun
Stanley F. Counts		X		X		M E E T I N G C A N C E L E D						
Margie Drilling		X		X								
Alan Dubin		X		X								
Eugene Fields		X		X								
Richie Kerwin Lim		X		X								
Matt McGuinness		X		*								
Ronald Randolph		E		X								
Guita Sharifi		X		X								
Sony Soegiarto		E		*								
Anthony Villa		X		X								
Eric Woolery		E		X								

Absences Pending Approval

<u>Meeting Date</u>	<u>Name</u>	<u>Reason</u>
10/11/16	Matt McGuinness	Personal
10/11/16	Sony Soegiarto	Ill

Action Items



February 14, 2017

To: Taxpayer Oversight Committee
From: Orange County Transportation Authority Staff
Subject: Fiscal Year 2016-17 Measure M2 A Annual Eligibility Review Subcommittee Recommendations

Overview

The Measure M2 Ordinance requires all local jurisdictions in Orange County to annually satisfy eligibility requirements in order to receive Measure M2 net revenues. The Annual Eligibility Review Subcommittee review process for fiscal year 2016-17 has been completed.

Recommendations

- A. Approve Pavement Management Plans for even-numbered year agencies, and find these local jurisdictions (21) eligible to receive Measure M2 net revenues for fiscal year 2016-17.
- B. Direct Orange County Transportation Authority staff to communicate concerns regarding deteriorating pavement to the cities of Fullerton and Placentia.

Background

The Taxpayer Oversight Committee (TOC) is responsible for reviewing local jurisdictions Local Signal Synchronization Plan (LSSP), Mitigation Fee Program, Expenditure Report, Congestion Management Plan, and Pavement Management Plan (PMP) for compliance with the ordinance. The Annual Eligibility Review (AER) Subcommittee has been designated by the TOC to review the eligibility submittals with support from Orange County Transportation Authority (OCTA) staff to ensure all required documents have been submitted.

The eligibility component due this cycle is the PMP for even numbered year agencies. After the annual eligibility review, the determination of the TOC is presented to the OCTA Board of Directors for final eligibility determination.

Discussion

Local jurisdictions are required to annually submit eligibility packages required for the cycle by June 30. For this cycle, OCTA staff received PMP submittals from 21 even numbered local jurisdictions (Attachment A) as per the Eligibility Guidelines adopted by the OCTA Board of Directors on April 11, 2016. OCTA staff reviewed the PMP documentation to ensure accuracy, and worked closely with the local jurisdictions to obtain additional information and/or back up materials as needed. The AER Subcommittee convened on September 20, 2016 and October 20, 2016 to review and discuss the PMP certifications for 21 local agencies (Attachment B). The AER Subcommittee found these submittals to be in compliance with the Measure M2 Ordinance and recommend for approval to the TOC.

Upon TOC approval, OCTA staff will present the eligibility findings to the Regional Planning and Highways Committee and to the OCTA Board of Directors in March 2017. Eligibility determination is conditional upon review of the expenditure reports due December 31, 2016, with the exception of city of Huntington Beach that has an expenditure report due by March 31, 2017.

AER Subcommittee members expressed concerns about the downward trend in pavement conditions based on the seven-year projections provided in the current PMPs for the cities of Fullerton and Placentia. AER Subcommittee members noted that it is important to continue to address the condition of pavement on an ongoing basis to avoid further deterioration. OCTA staff presented the eligibility requirements as identified in the Measure M2 Ordinance emphasizing that local jurisdictions are only required to submit Pavement Management Plans and are not required to remedy the pavement conditions reported in the plans. The AER Subcommittee asked staff to communicate their concerns with the cities of Fullerton and Placentia. OCTA staff will be sending out letters to the cities of Fullerton and Placentia to express concerns raised by the committee members during the AER subcommittee meetings.

Summary

All even numbered local jurisdictions in Orange County have submitted the Pavement Management Plan documentation. The Annual Eligibility Review Subcommittee reviewed the necessary Pavement Management Plan documentation, and found local jurisdictions meet the PMP requirements for fiscal year 2016-17. The AER Subcommittee also directed staff to communicate their concerns regarding pavement deterioration for the Cities of Fullerton and Placentia.

Attachments

- A. Local Jurisdiction Pavement Management Plan Submittal Schedule
- B. 2016 M2 Eligibility Summary Table of Pavement Management Plan (PMP) Elements

**Local Jurisdiction Pavement Management Plan (PMP)
Submittal Schedule**

Local Jurisdiction	Updated PMP
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
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
La Habra	June Odd Year
La Palma	June Even 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

2016 M2 Eligibility
Summary Table of Pavement Management Plan (PMP) Elements

Local Agency	Current PCI			Projected PCI				7 Year R&R Plan				Funding Scenarios \$ x 10 ⁶			Software	Cert Form	Compliant PMP (Y/N)			
	Network	MPAH	Local	Network	MPAH	Local	Limits	Areas	Class	PCI	Inspection Date	Treatment		QA/QC				7 Yrs Current Budget \$ x 10 ⁶	7 Yrs Maintain ex. Network PCI \$ x 10 ⁶	7 Yrs Improve Network PCI \$ x 10 ⁶
												Type	Cost Year							
Aliso Viejo	G	G	G	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Buena Park	G	G	G	F	F	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓		
Costa Mesa	VG	VG	VG	VG	VG	VG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Fountain Valley	VG	G	VG	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Fullerton	F	F	P	P	F	P	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Garden Grove	G	G	G	F	G	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Huntington Beach	G	F	G	F	F	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Laguna Beach	VG	VG	VG	G	VG	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Laguna Hills	G	G	VG	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Laguna Niguel	G	G	VG	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Laguna Woods*	VG	VG	N/A	VG	VG	N/A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
La Palma	VG	VG	VG	VG	VG	VG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Mission Viejo	VG	VG	VG	G	G	VG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓		
Orange	G	G	G	F	G	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Piacentia	F	F	G	P	VP	P	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Rancho Santa Margarita	G	G	G	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	SS	✓		
Santa Ana	G	G	G	F	G	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Seal Beach	G	G	VG	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Villa Park	G	G	G	G	G	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Westminster	G	F	G	G	F	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		
Yorba Linda	G	VG	G	F	G	F	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micro	✓		

Legend	
Pavement Quality	Abbreviation
Very Good	VG
Good	G
Fair	F
Poor	P
Very Poor	VP

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

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.

Mary Thomas
Mary Thomas, OCTA RCE 18542

Measure M2
Schedule of Revenues, Expenditures and Changes in Fund Balance
as of June 30, 2016
(Unaudited)

(\$ in thousands)	Year to Date June 30, 2016 (A)	Period from Inception to June 30, 2016 (B)
Revenues:		
Sales taxes	\$ 300,937	\$ 1,450,309
Other agencies' share of Measure M2 costs:		
Project related	93,242	476,195
Non-project related	74	439
Interest:		
Operating:		
Project related	-	2
Non-project related	9,039	17,082
Bond proceeds	6,443	35,997
Debt service	32	76
Commercial paper	-	393
Right-of-way leases	110	814
Miscellaneous:		
Project related	72	270
Non-project related	93	100
Total revenues	<u>410,042</u>	<u>1,981,677</u>
Expenditures:		
Supplies and services:		
State Board of Equalization (SBOE) fees	3,571	15,888
Professional services:		
Project related	50,216	272,849
Non-project related	2,115	15,043
Administration costs:		
Project related	8,527	44,540
Non-project related:		
Salaries and Benefits	2,365	17,440
Other	4,679	26,638
Other:		
Project related	275	1,678
Non-project related	118	3,800
Payments to local agencies:		
Project related	105,378	607,896
Capital outlay:		
Project related	89,240	546,493
Non-project related	-	31
Debt service:		
Principal payments on long-term debt	7,210	27,085
Interest on long-term debt and commercial paper	21,613	115,537
Total expenditures	<u>295,307</u>	<u>1,694,918</u>
Excess of revenues over expenditures	<u>114,735</u>	<u>286,759</u>
Other financing sources (uses):		
Transfers out:		
Project related	(10,618)	(22,659)
Transfers in:		
Project related	23,740	75,544
Non-project related	(23,740)	5,937
Bond proceeds	-	358,593
Total other financing sources (uses)	<u>(10,618)</u>	<u>417,415</u>
Excess of revenues over expenditures and other financing sources (uses)	<u>\$ 104,117</u>	<u>\$ 704,174</u>

Measure M2
Schedule of Calculations of Net Revenues and Net Bond Revenues (Debt Service)
as of June 30, 2016
(Unaudited)

<i>(\$ in thousands)</i>	Year to Date June 30, 2016 (actual) <i>(C.1)</i>	Period from Inception through June 30, 2016 (actual) <i>(D.1)</i>	Period from July 1, 2016 through March 31, 2041 (forecast) <i>(E.1)</i>	Total <i>(F.1)</i>
Revenues:				
Sales taxes	\$ 300,937	\$ 1,450,309	\$ 13,359,584	\$ 14,809,893
Operating interest	9,039	17,082	224,117	241,199
Subtotal	<u>309,976</u>	<u>1,467,391</u>	<u>13,583,701</u>	<u>15,051,092</u>
Other agencies share of M2 costs	74	439	-	439
Miscellaneous	93	100	-	100
Total revenues	<u>310,143</u>	<u>1,467,930</u>	<u>13,583,701</u>	<u>15,051,631</u>
Administrative expenditures:				
SBOE fees	3,571	15,888	200,474	216,362
Professional services	2,115	11,267	91,546	102,813
Administration costs:				
Salaries and Benefits	2,365	17,440	133,574	151,014
Other	4,679	26,638	234,882	261,520
Other	118	3,800	23,036	26,836
Capital outlay	-	31	-	31
Environmental cleanup	9,588	18,150	267,192	285,342
Total expenditures	<u>22,436</u>	<u>93,214</u>	<u>950,704</u>	<u>1,043,918</u>
Net revenues	<u>\$ 287,707</u>	<u>\$ 1,374,716</u>	<u>\$ 12,632,997</u>	<u>\$ 14,007,713</u>
<hr/>				
Bond revenues:				
Proceeds from issuance of bonds	\$ -	\$ 358,593	\$ 2,000,000	\$ 2,358,593
Interest revenue from bond proceeds	6,443	35,997	25,760	61,757
Interest revenue from debt service funds	32	76	54	130
Interest revenue from commercial paper	-	393	-	393
Total bond revenues	<u>6,475</u>	<u>395,059</u>	<u>2,025,814</u>	<u>2,420,873</u>
Financing expenditures and uses:				
Professional services	-	3,776	17,020	20,796
Bond debt principal	7,210	27,085	2,242,636	2,269,721
Bond debt and other interest expense	21,613	115,537	1,507,609	1,623,146
Total financing expenditures and uses	<u>28,823</u>	<u>146,398</u>	<u>3,767,265</u>	<u>3,913,663</u>
Net bond revenues (debt service)	<u>\$ (22,348)</u>	<u>\$ 248,661</u>	<u>\$ (1,741,451)</u>	<u>\$ (1,492,790)</u>

Measure M2
Schedule of Revenues and Expenditures Summary
as of June 30, 2016
(Unaudited)

Project	Description	Net Revenues through June 30, 2016	Total Net Revenues	Expenditures through June 30, 2016	Reimbursements through June 30, 2016	Net M2 Cost
(G)	(H)	(I)	(J)	(K)	(L)	
<i>(\$ in thousands)</i>						
Freeways (43% of Net Revenues)						
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 54,183	\$ 552,116	\$ 4,434	\$ 937	\$ 3,497
B	I-5 Santa Ana/SR-55 to El Toro	34,609	352,649	4,537	2,191	2,346
C	I-5 San Diego/South of El Toro	72,285	736,546	84,771	30,751	54,020
D	I-5 Santa Ana/San Diego Interchange Upgrades	29,744	303,076	1,759	527	1,232
E	SR-22 Garden Grove Freeway Access Improvements	13,834	140,966	4	-	4
F	SR-55 Costa Mesa Freeway Improvements	42,195	429,945	7,591	23	7,568
G	SR-57 Orange Freeway Improvements	29,825	303,899	44,983	10,281	34,702
H	SR-91 Improvements from I-5 to SR-57	16,140	164,460	32,146	608	31,538
I	SR-91 Improvements from SR-57 to SR-55	48,017	489,269	16,629	1,620	15,009
J	SR-91 Improvements from SR-55 to County Line	40,604	413,734	6,928	5,294	1,634
K	I-405 Improvements between I-605 to SR-55	123,679	1,260,233	54,110	3,267	50,843
L	I-405 Improvements between SR-55 to I-5	36,857	375,556	5,508	3,234	2,274
M	I-605 Freeway Access Improvements	2,306	23,494	682	16	666
N	All Freeway Service Patrol	17,293	176,207	196	-	196
	Freeway Mitigation	29,556	301,166	45,968	1,688	44,280
	Subtotal Projects	591,127	6,023,316	310,246	60,437	249,809
	Net (Bond Revenue)/Debt Service	-	-	30,326	-	30,326
	Total Freeways	\$ 591,127	\$ 6,023,316	\$ 340,572	\$ 60,437	\$ 280,135
	%					27.8%
Street and Roads Projects (32% of Net Revenues)						
O	Regional Capacity Program	\$ 137,473	\$ 1,400,789	\$ 593,652	\$ 332,426	\$ 261,226
P	Regional Traffic Signal Synchronization Program	54,987	560,291	23,651	3,580	20,071
Q	Local Fair Share Program	247,449	2,521,388	237,070	77	236,993
	Subtotal Projects	439,909	4,482,468	854,373	336,083	518,290
	Net (Bond Revenue)/Debt Service	-	-	33,683	-	33,683
	Total Street and Roads Projects	\$ 439,909	\$ 4,482,468	\$ 888,056	\$ 336,083	\$ 551,973
	%					54.7%
Transit Projects (25% of Net Revenues)						
R	High Frequency Metrolink Service	\$ 124,519	\$ 1,397,062	\$ 161,432	\$ 92,749	\$ 68,683
S	Transit Extensions to Metrolink	121,356	1,236,557	11,559	2,074	9,485
T	Metrolink Gateways	25,382	71,597	98,211	60,956	37,255
U	Expand Mobility Choices for Seniors and Persons with Disabilities	41,902	485,719	40,010	88	39,922
V	Community Based Transit/Circulators	27,487	280,080	2,072	120	1,952
W	Safe Transit Stops	3,034	30,914	62	26	36
	Subtotal Projects	343,680	3,501,929	313,346	156,013	157,333
	Net (Bond Revenue)/Debt Service	-	-	18,838	-	18,838
	Total Transit Projects	\$ 343,680	\$ 3,501,929	\$ 332,184	\$ 156,013	\$ 176,171
	%					17.5%
	Measure M2 Program	\$ 1,374,716	\$ 14,007,713	\$ 1,560,812	\$ 552,533	\$ 1,008,279

Measure M2
Schedule of Revenues and Expenditures Summary
as of June 30, 2016
(Unaudited)

Project	Description	Revenues through June 30, 2016	Total Revenues	Expenditures through June 30, 2016	Reimbursements through June 30, 2016	Net M2 Cost
(G)	(H.1)	(I.1)	(J)	(K)	(L)	
	<i>(\$ in thousands)</i>					
	Environmental Cleanup (2% of Revenues)					
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 29,348	\$ 301,022	\$ 18,150	\$ 292	\$ 17,858
	Net (Bond Revenue)/Debt Service	-	-	-	-	-
	Total Environmental Cleanup	\$ 29,348	\$ 301,022	\$ 18,150	\$ 292	\$ 17,858
	%					1.2%
	Taxpayer Safeguards and Audits					
	Collect Sales Taxes (1.5% of Sales Taxes)	\$ 21,755	\$ 222,148	\$ 15,888	\$ -	\$ 15,888
	%					1.1%
	Oversight and Annual Audits (1% of Revenues)	\$ 14,674	\$ 150,511	\$ 17,440	\$ 2,766	\$ 14,674
	%					1.0%

Measure M2
Schedule of Revenues, Expenditures and Changes in Fund Balance
as of September 30, 2016
(Unaudited)

(\$ in thousands)	Quarter Ended Sept 30, 2016	Year to Date Sept 30, 2016 (A)	Period from Inception to Sept 30, 2016 (B)
Revenues:			
Sales taxes	\$ 77,836	\$ 77,836	\$ 1,528,145
Other agencies' share of Measure M2 costs:			
Project related	15,483	15,483	491,678
Non-project related	16	16	455
Interest:			
Operating:			
Project related	-	-	2
Non-project related	1,631	1,631	18,713
Bond proceeds	3,243	3,243	39,240
Debt service	5	5	81
Commercial paper	-	-	393
Right-of-way leases	59	59	873
Miscellaneous:			
Project related	-	-	270
Non-project related	-	-	100
Total revenues	<u>98,273</u>	<u>98,273</u>	<u>2,079,950</u>
Expenditures:			
Supplies and services:			
State Board of Equalization (SBOE) fees	894	894	16,782
Professional services:			
Project related	2,449	2,449	275,298
Non-project related	201	201	15,244
Administration costs:			
Project related	2,132	2,132	46,672
Non-project related :			
Salaries and Benefits	591	591	18,031
Other	1,170	1,170	27,808
Other:			
Project related	19	19	1,697
Non-project related	4	4	3,804
Payments to local agencies:			
Project related	19,155	19,155	627,051
Capital outlay:			
Project related	6,943	6,943	553,436
Non-project related	-	-	31
Debt service:			
Principal payments on long-term debt	-	-	27,085
Interest on long-term debt and commercial paper	10,665	10,665	126,202
Total expenditures	<u>44,223</u>	<u>44,223</u>	<u>1,739,141</u>
Excess (deficiency) of revenues over (under) expenditures	<u>54,050</u>	<u>54,050</u>	<u>340,809</u>
Other financing sources (uses):			
Transfers out:			
Project related	(702)	(702)	(23,361)
Transfers in:			
Project related	493	493	76,037
Non-project related	(493)	(493)	5,444
Bond proceeds	-	-	358,593
Total other financing sources (uses)	<u>(702)</u>	<u>(702)</u>	<u>416,713</u>
Excess (deficiency) of revenues over (under) expenditures and other sources (uses)	<u>\$ 53,348</u>	<u>\$ 53,348</u>	<u>\$ 757,522</u>

Measure M2
Schedule of Calculations of Net Revenues and Net Bond Revenues (Debt Service)
as of September 30, 2016
(Unaudited)

(\$ in thousands)	Quarter Ended Sept 30, 2016 (actual)	Year to Date Sept 30, 2016 (actual)	Period from Inception through Sept 30, 2016 (actual)	Period from October 1, 2016 through March 31, 2041 (forecast)	Total
	(C.1)	(C.1)	(D.1)	(E.1)	(F.1)
Revenues:					
Sales taxes	\$ 77,836	\$ 77,836	\$ 1,528,145	\$ 12,635,966	\$ 14,164,111
Operating interest	1,631	1,631	18,713	204,950	223,663
Subtotal	<u>79,467</u>	<u>79,467</u>	<u>1,546,858</u>	<u>12,840,916</u>	<u>14,387,774</u>
Other agencies share of M2 costs	16	16	455	-	455
Miscellaneous	-	-	100	-	100
Total revenues	<u>79,483</u>	<u>79,483</u>	<u>1,547,413</u>	<u>12,840,916</u>	<u>14,388,329</u>
Administrative expenditures:					
SBOE fees	894	894	16,782	189,616	206,398
Professional services	201	201	11,468	86,587	98,055
Administration costs :					
Salaries and Benefits	591	591	18,031	126,339	144,370
Other	1,170	1,170	27,808	217,771	245,579
Other	4	4	3,804	21,788	25,592
Capital outlay	-	-	31	-	31
Environmental cleanup	3,590	3,590	21,740	252,679	274,419
Total expenditures	<u>6,450</u>	<u>6,450</u>	<u>99,664</u>	<u>894,781</u>	<u>994,445</u>
Net revenues	<u>\$ 73,033</u>	<u>\$ 73,033</u>	<u>\$ 1,447,749</u>	<u>\$ 11,946,135</u>	<u>\$ 13,393,884</u>
<hr/>					
(C.2) (D.2) (E.2) (F.2)					
Bond revenues:					
Proceeds from issuance of bonds	\$ -	\$ -	\$ 358,593	\$ 2,000,000	\$ 2,358,593
Interest revenue from bond proceeds	3,243	3,243	39,240	21,010	60,250
Interest revenue from debt service funds	5	5	81	54	135
Interest revenue from commercial paper	-	-	393	-	393
Total bond revenues	<u>3,248</u>	<u>3,248</u>	<u>398,307</u>	<u>2,021,064</u>	<u>2,419,371</u>
Financing expenditures and uses:					
Professional services	-	-	3,776	17,020	20,796
Bond debt principal	-	-	27,085	2,240,761	2,267,846
Bond debt and other interest expense	10,665	10,665	126,202	1,492,021	1,618,223
Total financing expenditures and uses	<u>10,665</u>	<u>10,665</u>	<u>157,063</u>	<u>3,749,802</u>	<u>3,906,865</u>
Net bond revenues (debt service)	<u>\$ (7,417)</u>	<u>\$ (7,417)</u>	<u>\$ 241,244</u>	<u>\$ (1,728,738)</u>	<u>\$ (1,487,494)</u>

Measure M2
Schedule of Revenues and Expenditures Summary
as of September 30, 2016
(Unaudited)

Project	Description	Net Revenues through Sept 30, 2016	Total Net Revenues	Expenditures through Sept 30, 2016	Reimbursements through Sept 30, 2016	Net M2 Cost
(G)	(H)	(I)	(J)	(K)	(L)	
<i>(\$ in thousands)</i>						
Freeways (43% of Net Revenues)						
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 57,062	\$ 527,921	\$ 4,475	\$ 937	\$ 3,538
B	I-5 Santa Ana/SR-55 to El Toro	36,448	337,196	4,629	2,191	2,438
C	I-5 San Diego/South of El Toro	76,125	704,270	88,449	30,799	57,650
D	I-5 Santa Ana/San Diego Interchange Upgrades	31,324	289,795	1,773	527	1,246
E	SR-22 Garden Grove Freeway Access Improvements	14,569	134,788	4	-	4
F	SR-55 Costa Mesa Freeway Improvements	44,436	411,105	7,664	23	7,641
G	SR-57 Orange Freeway Improvements	31,409	290,582	45,044	10,281	34,763
H	SR-91 Improvements from I-5 to SR-57	16,998	157,253	32,414	608	31,806
I	SR-91 Improvements from SR-57 to SR-55	50,568	467,828	16,747	1,620	15,127
J	SR-91 Improvements from SR-55 to County Line	42,761	395,604	6,933	5,294	1,639
K	I-405 Improvements between I-605 to SR-55	130,250	1,205,009	55,026	3,267	51,759
L	I-405 Improvements between SR-55 to I-5	38,815	359,099	5,686	3,234	2,452
M	I-605 Freeway Access Improvements	2,428	22,465	702	16	686
N	All Freeway Service Patrol	18,212	168,486	219	-	219
	Freeway Mitigation	31,127	287,969	46,177	1,688	44,489
	Subtotal Projects	622,532	5,759,370	315,942	60,485	255,457
	Net (Bond Revenue)/Debt Service	-	-	33,041	-	33,041
	Total Freeways	\$ 622,532	\$ 5,759,370	\$ 348,983	\$ 60,485	\$ 288,498
	%					28.1%
Street and Roads Projects (32% of Net Revenues)						
O	Regional Capacity Program	\$ 144,777	\$ 1,339,405	\$ 603,994	\$ 343,762	\$ 260,232
P	Regional Traffic Signal Synchronization Program	57,908	535,739	24,294	4,693	19,601
Q	Local Fair Share Program	260,595	2,410,899	245,416	77	245,339
	Subtotal Projects	463,280	4,286,043	873,704	348,532	525,172
	Net (Bond Revenue)/Debt Service	-	-	36,699	-	36,699
	Total Street and Roads Projects	\$ 463,280	\$ 4,286,043	\$ 910,403	\$ 348,532	\$ 561,871
	%					54.7%
Transit Projects (25% of Net Revenues)						
R	High Frequency Metrolink Service	\$ 131,803	\$ 1,335,841	\$ 162,154	\$ 93,941	\$ 68,213
S	Transit Extensions to Metrolink	127,803	1,182,370	11,789	2,663	9,126
T	Metrolink Gateways	25,755	68,459	98,212	62,707	35,505
U	Expand Mobility Choices for Seniors and Persons with Disabilities	44,434	464,435	41,614	88	41,526
V	Community Based Transit/Circulators	28,947	267,807	2,298	126	2,172
W	Safe Transit Stops	3,195	29,559	62	26	36
	Subtotal Projects	361,937	3,348,471	316,129	159,551	156,578
	Net (Bond Revenue)/Debt Service	-	-	20,524	-	20,524
	Total Transit Projects	\$ 361,937	\$ 3,348,471	\$ 336,653	\$ 159,551	\$ 177,102
	%					17.2%
	Measure M2 Program	\$ 1,447,749	\$ 13,393,884	\$ 1,596,039	\$ 568,568	\$ 1,027,471

Measure M2
Schedule of Revenues and Expenditures Summary
as of September 30, 2016
(Unaudited)

Project	Description	Revenues through Sept 30, 2016 (H.1)	Total Revenues (I.1)	Expenditures through Sept 30, 2016 (J)	Reimbursements through Sept 30, 2016 (K)	Net M2 Cost (L)
	(G) (\$ in thousands)					
	Environmental Cleanup (2% of Revenues)					
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 30,937	\$ 287,755	\$ 21,740	\$ 292	\$ 21,448
	Net (Bond Revenue)/Debt Service	-	-	-	-	-
	Total Environmental Cleanup	<u>\$ 30,937</u>	<u>\$ 287,755</u>	<u>\$ 21,740</u>	<u>\$ 292</u>	<u>\$ 21,448</u>
	%					1.4%
	Taxpayer Safeguards and Audits					
	Collect Sales Taxes (1.5% of Sales Taxes)	\$ 22,922	\$ 212,462	\$ 16,782	\$ -	\$ 16,782
	%					1.1%
	Oversight and Annual Audits (1% of Revenues)	\$ 15,469	\$ 143,878	\$ 18,031	\$ 2,562	\$ 15,469
	%					1.0%

Measure M2
Schedule of Revenues, Expenditures and Changes in Fund Balance
as of December 31, 2016
(Unaudited)

(\$ in thousands)	Quarter Ended Dec 31, 2016	Year to Date Dec 31, 2016	Period from Inception to Dec 31, 2016
	(A)	(A)	(B)
Revenues:			
Sales taxes	\$ 81,565	\$ 159,401	\$ 1,609,710
Other agencies' share of Measure M2 costs:			
Project related	11,746	27,229	503,424
Non-project related	-	15	454
Interest:			
Operating:			
Project related	-	-	2
Non-project related	1,787	3,418	20,500
Bond proceeds	-	3,243	39,240
Debt service	8	14	90
Commercial paper	-	-	393
Right-of-way leases	30	89	903
Miscellaneous:			
Project related	-	-	270
Non-project related	-	-	100
Total revenues	<u>95,136</u>	<u>193,409</u>	<u>2,175,086</u>
Expenditures:			
Supplies and services:			
State Board of Equalization (SBOE) fees	886	1,780	17,668
Professional services:			
Project related	8,430	10,879	283,728
Non-project related	499	700	15,743
Administration costs:			
Project related	2,132	4,267	48,807
Non-project related :			
Salaries and Benefits	591	1,183	18,623
Other	1,170	2,340	28,978
Other:			
Project related	45	64	1,742
Non-project related	16	20	3,820
Payments to local agencies:			
Project related	28,801	47,957	655,853
Capital outlay:			
Project related	8,851	15,794	562,287
Non-project related	-	-	31
Debt service:			
Principal payments on long-term debt	-	-	27,085
Interest on long-term debt and commercial paper	6	10,671	126,208
Total expenditures	<u>51,427</u>	<u>95,655</u>	<u>1,790,573</u>
Excess (deficiency) of revenues over (under) expenditures	<u>43,709</u>	<u>97,754</u>	<u>384,513</u>
Other financing sources (uses):			
Transfers out:			
Project related	(963)	(1,665)	(24,324)
Non-project related	-	-	-
Transfers in:			
Project related	-	493	76,037
Non-project related	-	(493)	5,444
Bond proceeds	-	-	358,593
Total other financing sources (uses)	<u>(963)</u>	<u>(1,665)</u>	<u>415,750</u>
Excess (deficiency) of revenues over (under) expenditures and other sources (uses)	<u>\$ 42,746</u>	<u>\$ 96,089</u>	<u>\$ 800,263</u>

Measure M2
Schedule of Calculations of Net Revenues and Net Bond Revenues (Debt Service)
as of December 31, 2016
(Unaudited)

<i>(\$ in thousands)</i>	Quarter Ended Dec 31, 2016 (actual)	Year to Date Dec 31, 2016 (actual)	Period from Inception through Dec 31, 2016 (actual)	Period from January 1, 2017 through March 31, 2041 (forecast)	Total
	(C.1)	(C.1)	(D.1)	(E.1)	(F.1)
Revenues:					
Sales taxes	\$ 81,565	\$ 159,401	\$ 1,609,710	\$ 12,558,021	\$ 14,167,731
Operating interest	1,787	3,418	20,500	206,009	226,509
Subtotal	<u>83,352</u>	<u>162,819</u>	<u>1,630,210</u>	<u>12,764,030</u>	<u>14,394,240</u>
Other agencies share of M2 costs	-	15	454	-	454
Miscellaneous	-	-	100	-	100
Total revenues	<u>83,352</u>	<u>162,834</u>	<u>1,630,764</u>	<u>12,764,030</u>	<u>14,394,794</u>
Administrative expenditures:					
SBOE fees	886	1,780	17,668	188,446	206,114
Professional services	499	700	11,967	86,053	98,020
Administration costs :					
Salaries and Benefits	591	1,183	18,623	125,560	144,183
Other	1,170	2,340	28,978	216,715	245,693
Other	16	20	3,820	21,654	25,474
Capital outlay	-	-	31	-	31
Environmental cleanup	3,092	6,681	24,831	251,120	275,951
Total expenditures	<u>6,254</u>	<u>12,704</u>	<u>105,918</u>	<u>889,548</u>	<u>995,466</u>
Net revenues	<u>\$ 77,098</u>	<u>\$ 150,130</u>	<u>\$ 1,524,846</u>	<u>\$ 11,874,482</u>	<u>\$ 13,399,328</u>
<hr/>					
Bond revenues:					
Proceeds from issuance of bonds	\$ -	\$ -	\$ 358,593	\$ 1,450,000	\$ 1,808,593
Interest revenue from bond proceeds	-	3,243	39,240	6,405	45,645
Interest revenue from debt service funds	8	14	90	3,889	3,979
Interest revenue from commercial paper	-	-	393	-	393
Total bond revenues	<u>8</u>	<u>3,257</u>	<u>398,316</u>	<u>1,460,294</u>	<u>1,858,610</u>
Financing expenditures and uses:					
Professional services	-	-	3,776	12,340	16,116
Bond debt principal	-	-	27,085	1,771,748	1,798,833
Bond debt and other interest expense	6	10,671	126,208	888,611	1,014,819
Total financing expenditures and uses	<u>6</u>	<u>10,671</u>	<u>157,069</u>	<u>2,672,699</u>	<u>2,829,768</u>
Net bond revenues (debt service)	<u>\$ 2</u>	<u>\$ (7,414)</u>	<u>\$ 241,247</u>	<u>\$ (1,212,405)</u>	<u>\$ (971,158)</u>

Measure M2
Schedule of Revenues and Expenditures Summary
as of December 31, 2016
(Unaudited)

Project	Description	Net Revenues through Dec 31, 2016	Total Net Revenues	Expenditures through Dec 31, 2016	Reimbursements through Dec 31, 2016	Net M2 Cost
(G)	(H)	(I)	(J)	(K)	(L)	
(\$ in thousands)						
Freeways (43% of Net Revenues)						
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 60,101	\$ 528,135	\$ 5,190	\$ 937	\$ 4,253
B	I-5 Santa Ana/SR-55 to El Toro	38,389	337,333	4,982	2,191	2,791
C	I-5 San Diego/South of El Toro	80,179	704,556	92,028	33,888	58,140
D	I-5 Santa Ana/San Diego Interchange Upgrades	32,992	289,913	1,786	527	1,259
E	SR-22 Garden Grove Freeway Access Improvements	15,345	134,843	4	-	4
F	SR-55 Costa Mesa Freeway Improvements	46,803	411,272	7,737	23	7,714
G	SR-57 Orange Freeway Improvements	33,082	290,700	45,103	10,281	34,822
H	SR-91 Improvements from I-5 to SR-57	17,903	157,317	32,733	809	31,924
I	SR-91 Improvements from SR-57 to SR-55	53,261	468,019	17,040	1,902	15,138
J	SR-91 Improvements from SR-55 to County Line	45,038	395,765	6,938	5,294	1,644
K	I-405 Improvements between I-605 to SR-55	137,186	1,205,499	58,882	3,267	55,615
L	I-405 Improvements between SR-55 to I-5	40,882	359,245	6,159	3,669	2,490
M	I-605 Freeway Access Improvements	2,558	22,474	760	16	744
N	All Freeway Service Patrol	19,181	168,554	243	-	243
	Freeway Mitigation	32,784	288,086	46,856	1,688	45,168
	Subtotal Projects	655,684	5,761,711	326,441	64,492	261,949
	Net (Bond Revenue)/Debt Service	-	-	33,040	-	33,040
	Total Freeways	\$ 655,684	\$ 5,761,711	\$ 359,481	\$ 64,492	\$ 294,989
	%					27.8%
Street and Roads Projects (32% of Net Revenues)						
O	Regional Capacity Program	\$ 152,487	\$ 1,339,950	\$ 627,149	\$ 353,759	\$ 273,390
P	Regional Traffic Signal Synchronization Program	60,992	535,956	25,721	3,629	22,092
Q	Local Fair Share Program	274,472	2,411,879	253,872	77	253,795
	Subtotal Projects	487,951	4,287,785	906,742	357,465	549,277
	Net (Bond Revenue)/Debt Service	-	-	36,698	-	36,698
	Total Street and Roads Projects	\$ 487,951	\$ 4,287,785	\$ 943,440	\$ 357,465	\$ 585,975
	%					55.2%
Transit Projects (25% of Net Revenues)						
R	High Frequency Metrolink Service	\$ 139,492	\$ 1,336,384	\$ 162,505	\$ 95,083	\$ 67,422
S	Transit Extensions to Metrolink	134,609	1,182,850	12,189	2,103	10,086
T	Metrolink Gateways	26,149	68,487	98,213	60,956	37,257
U	Expand Mobility Choices for Seniors and Persons with Disabilities	47,107	464,624	43,235	88	43,147
V	Community Based Transit/Circulators	30,489	267,916	2,387	131	2,256
W	Safe Transit Stops	3,365	29,571	198	26	172
	Subtotal Projects	381,211	3,349,832	318,727	158,387	160,340
	Net (Bond Revenue)/Debt Service	-	-	20,523	-	20,523
	Total Transit Projects	\$ 381,211	\$ 3,349,832	\$ 339,250	\$ 158,387	\$ 180,863
	%					17.0%
Measure M2 Program		\$ 1,524,846	\$ 13,399,328	\$ 1,642,171	\$ 580,344	\$ 1,061,827

Measure M2
Schedule of Revenues and Expenditures Summary
as of December 31, 2016
(Unaudited)

Project	Description	Revenues through Dec 31, 2016 (H.1)	Total Revenues (I.1)	Expenditures through Dec 31, 2016 (J)	Reimbursements through Dec 31, 2016 (K)	Net M2 Cost (L)
	(G) (\$ in thousands)					
	Environmental Cleanup (2% of Revenues)					
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 32,604	\$ 287,885	\$ 24,831	\$ 292	\$ 24,539
	Net (Bond Revenue)/Debt Service	-	-	-	-	-
	Total Environmental Cleanup	\$ 32,604	\$ 287,885	\$ 24,831	\$ 292	\$ 24,539
	%					1.5%
	Taxpayer Safeguards and Audits					
	Collect Sales Taxes (1.5% of Sales Taxes)	\$ 24,146	\$ 212,516	\$ 17,668	\$ -	\$ 17,668
	%					1.1%
	Oversight and Annual Audits (1% of Revenues)	\$ 16,302	\$ 143,942	\$ 18,623	\$ 2,321	\$ 16,302
	%					1.0%

***Presentation
Items***



January 23, 2017

To: Members of the Board of Directors
From: Darrell Johnson, Chief Executive Officer
Subject: Fourth Quarter 2016 Debt and Investment Report

Overview

The California Government Code authorizes the Orange County Transportation Authority Treasurer to submit a quarterly investment report detailing the investment activity for the period. This investment report covers the fourth quarter of 2016, October through December, and includes a discussion on the Orange County Transportation Authority's debt portfolio.

Recommendation

Receive and file the Quarterly Debt and Investment Report prepared by the Treasurer as an information item.

Discussion

The Treasurer is currently managing the Orange County Transportation Authority's (OCTA) investment portfolio totaling \$1.5 billion as of December 31, 2016. The portfolio is divided into two managed portfolios: the liquid portfolio for immediate cash needs and the short-term portfolio for future budgeted expenditures. In addition to these portfolios, OCTA has funds invested in a debt service reserve fund for the 91 Express Lanes.

OCTA's debt portfolio had an outstanding principal balance of \$434.6 million as of December 31, 2016. Approximately 75 percent of the outstanding balance is comprised of Measure M2 debt and 25 percent is associated with the 91 Express Lanes Program.

Economic Summary: In a well-telegraphed and long-anticipated move, the Federal Open Market Committee (Fed) raised the Fed Funds rate from 0.25 percent to 0.50 percent. Fed officials later voiced growing confidence that the United States economy is moving closer to the central bank's targets on unemployment and inflation. The new focus is just how quickly to raise interest

rates this year amid investor optimism that President-elect Donald Trump can shake the economy out of its low-growth pace by delivering tax cuts and investment and regulatory reforms. Minutes of the Fed policy meeting last month showed officials were shifting their attention toward the risk that expansionary fiscal policy may warrant a faster pace of rate hikes than expected. Still, most members of the committee agreed that a gradual pace of rate increases was likely to be appropriate.

The labor market continued to grow throughout 2016 averaging 180,000 new jobs per month and a year-end unemployment rate of 4.7 percent. The bigger story, at least in the eyes of the Fed, was the increase in average hourly earnings rising 2.9 percent from a year earlier, the biggest jump since 2009. A result of lower unemployment is evidenced in job openings where there were 1.3 unemployed people applying for every opening in November, compared with 1.9 people when the recession began at the end of 2007.

Debt Portfolio Activity: There was no debt activity during the quarter. The outstanding balances for each of OCTA's debt securities are presented in Attachment A.

During the quarter, OCTA continued with its pursuit of a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan for the Interstate 405 Improvement Project (405 Project). In December 2016, Chair Donchak, Vice-Chair Hennessey, OCTA staff, and various finance team consultants traveled to New York to meet with Standard and Poor's, Moody's Investment Service, Fitch Ratings, Kroll Bond Rating Agency, and DBRS to discuss the 405 Project and a TIFIA loan. OCTA will need to provide two investment grade ratings to TIFIA in order to close on the loan.

During the meetings, OCTA representatives discussed the background of the 405 Project, TIFIA loan, and our current schedule for funding the project. The meetings focused on risk mitigations, right-of-way acquisition, utility relocation, design-build selection, toll operating agreement, a review of our traffic and revenue study, and the financial model used to forecast future revenues and operations. The meetings were well received.

OCTA also continues to have update calls with TIFIA staff members to monitor the status of the TIFIA loan.

Investment Portfolio Activity: On November 9, 2016, OCTA transferred \$70 million from the liquid portfolio to the short-term portfolio. The transfer was a strategic move to increase diversification and reduce the balance of the liquid portfolio.

Investment Portfolio Compliance: There were no compliance violations during the quarter. OCTA continues its policy of reviewing the contents of the investment portfolio on a weekly basis to ensure compliance for each day of the week. Attachment B provides a comparison of the portfolio holdings as of December 31, 2016, to the diversification guidelines of the policy.

Investment Portfolio Performance Versus Selected Benchmarks: OCTA uses Clearwater Analytics to calculate performance for each manager within the respective portfolios. The performance reports calculate monthly total rates of return based upon the market value of the portfolios they manage. The securities are marked-to-market daily based on pricing data provided by the custody banks.

OCTA has calculated the total returns for each of the investment managers for short-term operating monies and has compared the returns to specific benchmarks as shown in Attachment C. Attachment D contains an annualized total return performance comparison by investment manager for the previous two years. Attachment E provides a five-year yield comparison between the short-term investment managers, Orange County Investment Portfolio, and Local Agency Investment Fund.

The returns for OCTA's short-term operating monies are compared to the Bank of America Merrill Lynch (BAML) 1-3 year Treasury (Treasury) and the BAML 1-3 year AAA-A U.S. Corporate and Government (Corporate/Government) benchmarks. The BAML 1-3 year indices are among the most commonly used short-term fixed-income benchmarks. Each of the four managers invests in a combination of securities that all conform to OCTA's 2016 Investment Policy. For the quarter ending December 31, 2016, the weighted average total return for OCTA's short-term portfolio was -0.39 percent, outperforming the Treasury benchmark return of -0.43 percent by 4 basis points, and outperforming the Corporate/Government benchmark return of -0.42 percent by three basis points. For the 12-month period ending December 31, 2016, the portfolio's return totaled 1.06 percent, exceeding the Treasury benchmark by 17 basis points while underperforming the Corporate/Government benchmark by 1 basis point for the same period.

Total return performance for the quarter was negative as yields rose across the board on the increase in short-term rates by the Fed. As yields rise, the market value of fixed-income securities falls. Total return is the interest earned during a given period of time, plus or minus any market gains or losses, both realized and unrealized. Two-year treasuries began the quarter yielding 0.86 percent. By December 31, 2016, the yields climbed to 1.20 percent. OCTA's investment

managers added value by investing in high-quality, non-government fixed-income securities with higher yields during the period.

Investment Portfolios: A summary of each investment manager's investment diversification, performance, and maturity schedule is provided in Attachment F. These summaries provide a tool for analyzing the different returns for each manager.

A complete listing of all securities is provided in Attachment G. Each portfolio contains a description of the security, maturity date, book value, market value, and yield provided by Clearwater Analytics.

Cash Availability for the Next Six Months: OCTA has reviewed the cash requirements for the next six months. It has been determined that the liquid and the short-term portfolios can fund all projected expenditures during the next six months.

Summary

As required under the California Government Code, the Orange County Transportation Authority is submitting its quarterly debt and investment report to the Board of Directors. The report summarizes the Orange County Transportation Authority's debt and investment activities for the period October 2016 through December 2016.

Attachments

- A. Orange County Transportation Authority Outstanding Debt December 31, 2016.
- B. Orange County Transportation Authority Investment Policy Compliance December 31, 2016.
- C. Orange County Transportation Authority Short-term Portfolio Performance Review Quarter Ending December 31, 2016.
- D. Orange County Transportation Authority Short-term Portfolio Performance December 31, 2016.
- E. Orange County Transportation Authority Comparative Yield Performance December 31, 2016.
- F. Investment Manager Diversification and Maturity Schedules December 31, 2016.
- G. Orange County Transportation Authority Portfolio Listing as of December 31, 2016.

Prepared by:



Rodney Johnson
Deputy Treasurer
Treasury/Toll Roads
714-560-5675

Approved by:



Andrew Oftelie
Executive Director,
Finance and Administration
714-560-5649

**Orange County Transportation Authority
Outstanding Debt
December 31, 2016**

Orange County Local Transportation Authority (OCLTA) - M2 Program

	<u>Issued</u>	<u>Outstanding</u>	<u>Final Maturity</u>
2010 Series B Sales Tax Revenue Tax-Exempt Bonds	\$ 59,030,000	\$ 31,945,000	2020
2010 Series A Sales Tax Revenue Taxable Bonds	\$ 293,540,000	\$ 293,540,000	2041
Sub-total	\$ 352,570,000	\$ 325,485,000	

91 Express Lanes

	<u>Issued</u>	<u>Outstanding</u>	<u>Final Maturity</u>
2013 OCTA 91 Express Lanes Refunding Bonds	\$ 124,415,000	\$ 109,130,000	2030

TOTAL OUTSTANDING BALANCE	\$ 434,615,000
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ORANGE COUNTY TRANSPORTATION AUTHORITY
Investment Policy Compliance
December 31, 2016

<u>Investment Instruments</u>	<u>Dollar Amount Invested</u>	<u>Percent Of Portfolio</u>	<u>Investment Policy Maximum Percentages</u>
U.S. Treasuries	\$712,579,144	48.2%	100%
Federal Agencies & U.S. Government Sponsored	158,934,098	10.8%	100%
State of California & Local Agencies	10,036,645	0.7%	25%
Money Market Funds & Mutual Funds	87,244,063	5.9%	20%
Bankers Acceptances	0	0.0%	30%
Negotiable Certificates of Deposit	12,995,634	0.9%	30%
Commercial Paper	35,846,316	2.4%	25%
Medium Term Maturity Corporate Securities	270,466,356	18.3%	30%
Mortgage and Asset-backed Securities	111,842,359	7.6%	10%
Repurchase Agreements	39,918,912	2.7%	75%
Investment Agreements Pursuant To Indenture	0	0.0%	100%
Local Agency Investment Fund	10,216,772	0.7%	\$ 40 Million
Orange County Investment Pool (OCIP)	29,306	0.0%	\$ 40 Million
CAMP	0	0.0%	10%
Variable & Floating Rate Securities	26,704,545	1.8%	30%
Debt Service Reserve Funds - Investment Agreements	0	0.0%	Not Applicable
Bank Deposits	62,395	0.0%	5%
Derivatives (hedging transactions only)	0	0.0%	5%
TOTAL	<u>\$1,476,876,544</u>	100.0%	

**Orange County Transportation Authority
Short-term Portfolio Performance Review*
Quarter Ending December 31, 2016**

Month Ending	Bank of America Merrill Lynch Treasury 1-3 Year Index Benchmark		Bank of America Merrill Lynch Gov/Corp 1-3 Year Index Benchmark		JP Morgan		Payden & Rygel		Western Asset Mgmt.		State Street Global Advisors	
	Monthly Return	Duration	Monthly Return	Duration	Monthly Return	Duration	Monthly Return	Duration	Monthly Return	Duration	Monthly Return	Duration
10/31/2016	-0.07%	1.89 years	-0.05%	1.89 years	-0.06%	years	0.00%	years	-0.09%	years	-0.03%	years
11/30/2016	-0.40%	1.91 years	-0.41%	1.90 years	-0.47%	years	-0.26%	years	-0.55%	years	-0.41%	years
12/31/2016	0.03%	1.89 years	0.05%	1.89 years	0.06%	years	0.07%	years	0.10%	years	0.06%	years
Oct 16 - Dec 16 Total Return	-0.43%		-0.41%		-0.47%		-0.19%		-0.54%		-0.37%	

HISTORICAL QUARTERLY RETURNS

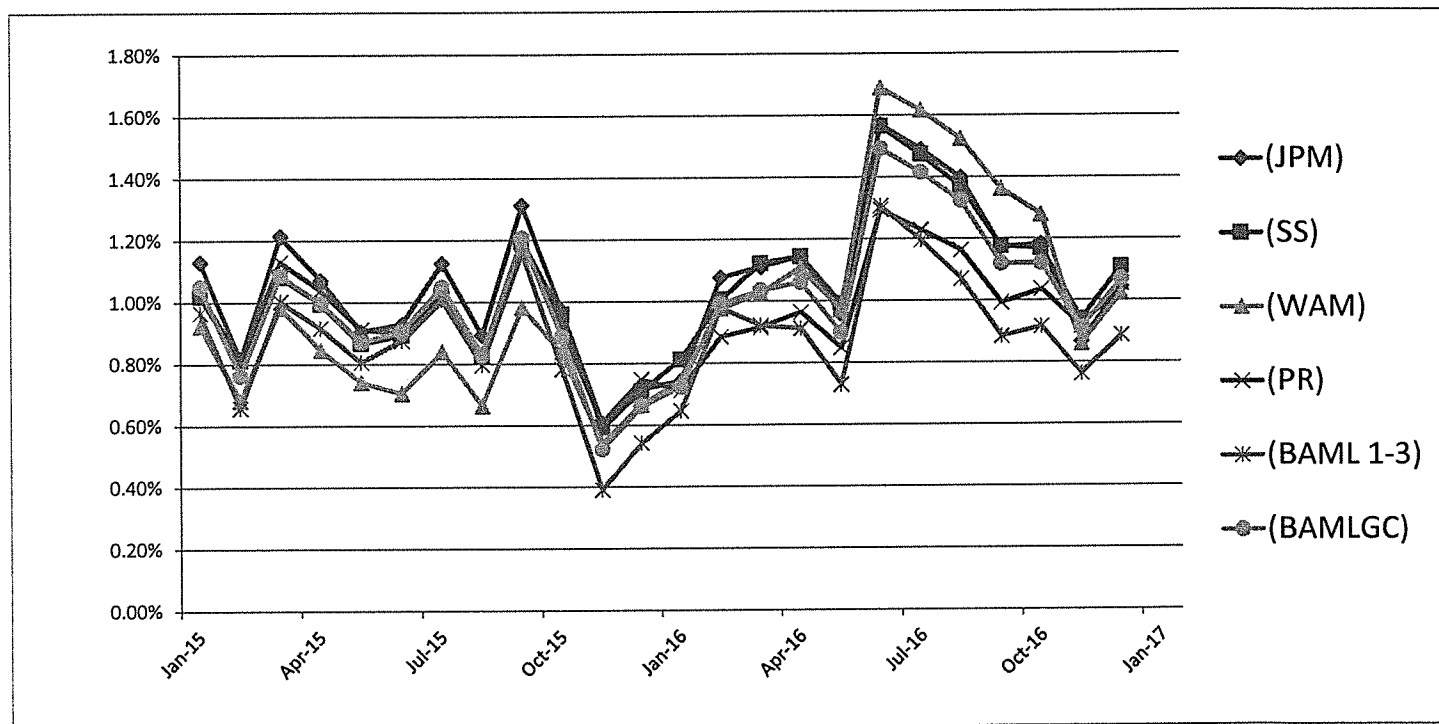
Jan 16 - Mar 16 Total Return	0.90%	0.94%	1.00%	0.74%	0.86%	0.97%
Apr 16 - Jun 16 Total Return	0.53%	0.59%	0.53%	0.48%	0.71%	0.56%
Jul 16 - Sep 16 Total Return	-0.11%	-0.04%	-0.02%	0.02%	-0.01%	-0.05%
Oct 16 - Dec 16 Total Return	-0.43%	-0.41%	-0.47%	-0.19%	-0.54%	-0.37%
12-Month Total Return	0.89%	1.07%	1.04%	1.05%	1.02%	1.11%

* - Month End Rates of Return are Gross of Fees

12-Mo Total Return (Net of Fees)	N/A	N/A	0.90%	0.92%	0.88%	1.01%
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Orange County Transportation Authority Short-Term Portfolio Performance December 31, 2016

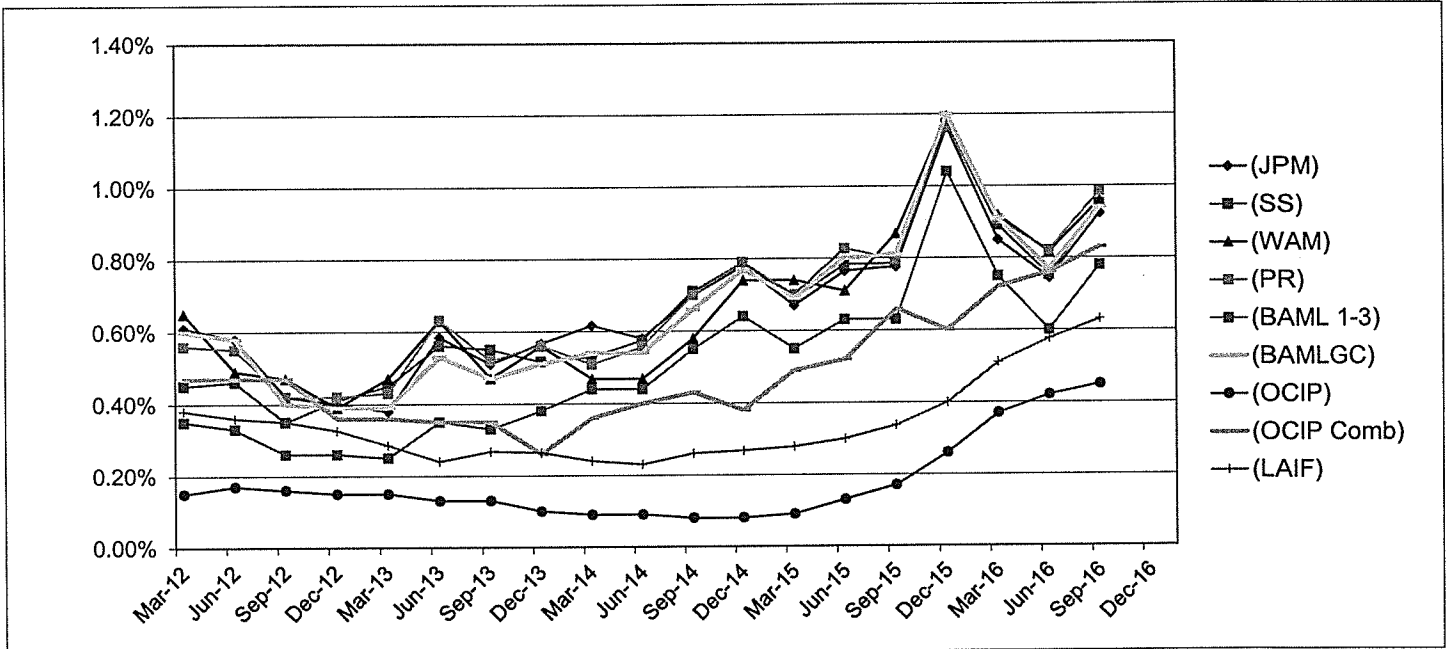
**Trailing 1-Year Total Return
Vs. The Bank of America Merrill Lynch (BAML) 1-3 Benchmarks**



	JP Morgan <u>(JPM)</u>	State Street <u>(SS)</u>	Western Asset Mgmt <u>(WAM)</u>	Payden Rygel <u>(PR)</u>	BAML 1-3 Yr Trsy <u>(BAML 1-3)</u>	BAML 1-3 Yr Gov/Corp <u>(BAMLGC)</u>
Jan-15	1.13%	1.02%	0.92%	1.03%	0.97%	1.05%
Feb-15	0.82%	0.81%	0.68%	0.81%	0.66%	0.76%
Mar-15	1.21%	1.08%	0.98%	1.13%	1.00%	1.09%
Apr-15	1.07%	1.00%	0.85%	1.04%	0.92%	1.00%
May-15	0.91%	0.87%	0.74%	0.91%	0.81%	0.87%
Jun-15	0.93%	0.89%	0.70%	0.90%	0.88%	0.91%
Jul-15	1.13%	1.03%	0.84%	1.04%	1.01%	1.05%
Aug-15	0.89%	0.83%	0.66%	0.83%	0.80%	0.83%
Sep-15	1.31%	1.20%	0.98%	1.19%	1.16%	1.21%
Oct-15	0.97%	0.96%	0.84%	0.91%	0.78%	0.89%
Nov-15	0.61%	0.59%	0.54%	0.61%	0.39%	0.52%
Dec-15	0.72%	0.71%	0.67%	0.75%	0.54%	0.66%
Jan-16	0.74%	0.81%	0.74%	0.71%	0.65%	0.72%
Feb-16	1.08%	1.01%	0.98%	0.89%	0.98%	0.99%
Mar-16	1.11%	1.12%	1.03%	0.92%	0.92%	1.04%
Apr-16	1.15%	1.14%	1.11%	0.96%	0.91%	1.06%
May-16	0.96%	0.99%	0.97%	0.85%	0.73%	0.90%
Jun-16	1.57%	1.56%	1.69%	1.30%	1.31%	1.49%
Jul-16	1.49%	1.47%	1.62%	1.23%	1.20%	1.42%
Aug-16	1.40%	1.37%	1.52%	1.16%	1.07%	1.32%
Sep-16	1.17%	1.18%	1.36%	0.99%	0.88%	1.12%
Oct-16	1.18%	1.17%	1.28%	1.04%	0.92%	1.12%
Nov-16	0.87%	0.94%	0.86%	0.92%	0.76%	0.91%
Dec-16	1.04%	1.11%	1.02%	1.05%	0.89%	1.07%

Orange County Transportation Authority Comparative Yield Performance December 31, 2016

Historical Yields Vs. The Bank of America Merrill Lynch (BAML) 1-3 Benchmarks

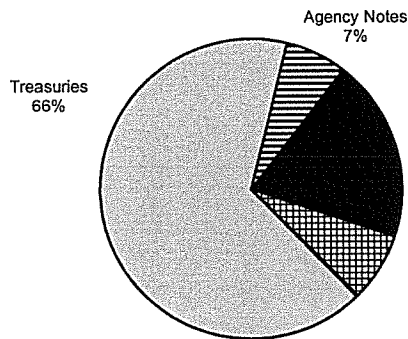


	JP Morgan (JPM)	State Street (SS)	Western Asset Mgmt (WAM)	Payden Rygel (PR)	BAML 1-3 Yr Trsy (BAML 1-3)	BAML 1-3 Yr Gov/Corp (BAMLGC)	(OCIP)	(OCIP Comb)	(LAIF)
Mar-12	0.61%	0.45%	0.65%	0.56%	0.35%	0.60%	0.15%	0.47%	0.38%
Jun-12	0.58%	0.46%	0.49%	0.55%	0.33%	0.58%	0.17%	0.47%	0.36%
Sep-12	0.42%	0.35%	0.47%	0.42%	0.26%	0.40%	0.16%	0.47%	0.35%
Dec-12	0.40%	0.41%	0.39%	0.42%	0.26%	0.39%	0.15%	0.36%	0.33%
Mar-13	0.38%	0.45%	0.47%	0.43%	0.25%	0.39%	0.15%	0.36%	0.29%
Jun-13	0.59%	0.56%	0.63%	0.63%	0.35%	0.53%	0.13%	0.35%	0.24%
Sep-13	0.51%	0.55%	0.47%	0.52%	0.33%	0.47%	0.13%	0.35%	0.27%
Dec-13	0.57%	0.52%	0.56%	0.56%	0.38%	0.51%	0.10%	0.26%	0.26%
Mar-14	0.62%	0.53%	0.47%	0.51%	0.44%	0.54%	0.09%	0.36%	0.24%
Jun-14	0.58%	0.57%	0.47%	0.56%	0.44%	0.54%	0.09%	0.40%	0.23%
Sep-14	0.70%	0.71%	0.58%	0.70%	0.55%	0.66%	0.08%	0.43%	0.26%
Dec-14	0.78%	0.79%	0.74%	0.79%	0.64%	0.77%	0.08%	0.38%	0.27%
Mar-15	0.67%	0.69%	0.74%	0.70%	0.55%	0.69%	0.09%	0.49%	0.28%
Jun-15	0.77%	0.78%	0.71%	0.83%	0.63%	0.80%	0.13%	0.52%	0.30%
Sep-15	0.78%	0.79%	0.87%	0.80%	0.63%	0.81%	0.17%	0.66%	0.34%
Dec-15	1.16%	1.17%	1.19%	1.16%	1.04%	1.20%	0.26%	0.60%	0.40%
Mar-16	0.85%	0.89%	0.92%	0.91%	0.75%	0.91%	0.37%	0.72%	0.0051
Jun-16	0.74%	0.75%	0.82%	0.82%	0.60%	0.77%	0.42%	0.76%	0.58%
Sep-16	0.92%	0.95%	0.96%	0.98%	0.78%	0.94%	0.45%	0.83%	0.63%
Dec-16	1.30%	1.31%	1.34%	1.26%	1.18%	1.34%	N/A	N/A	N/A

Investment Manager Diversification and Maturity Schedules

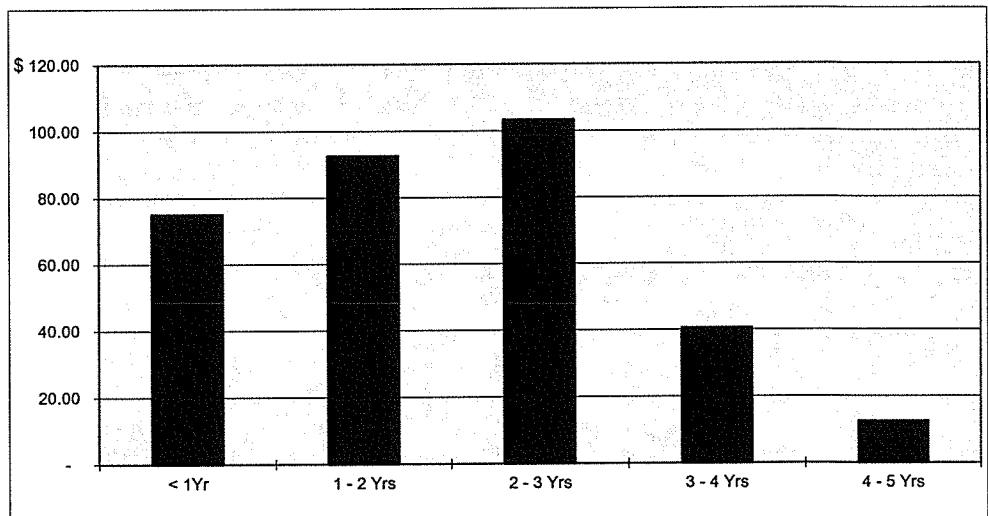
**JP Morgan
December 31, 2016**

SHORT-TERM PORTFOLIO (\$324.0 M)



	Book Value	Market Value
Treasuries	\$214,033,193	\$213,090,784
Agency Notes	21,355,901	20,908,858
Medium Term Notes	63,749,397	62,267,745
Mortg. & Asset-Back Sec.	24,261,748	24,195,942
Money Market Funds	<u>557,927</u>	<u>557,927</u>
	<u>\$323,958,167</u>	<u>\$321,021,256</u>

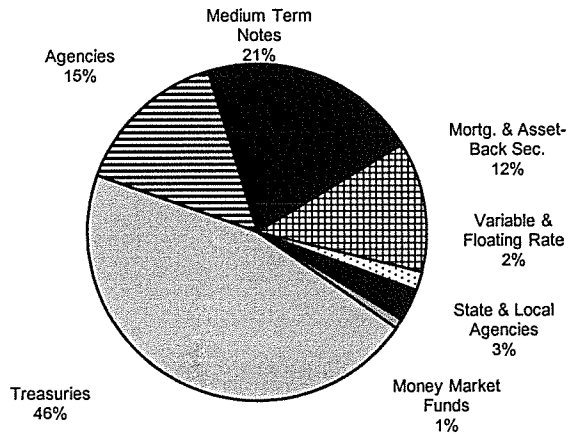
Wtd Avg Life	1.86 Yrs
Duration	1.82 Yrs
Quarter-end Yield	1.30%
TSY Benchmark	1.18%
Gov/Corp Benchmark	1.34%
Quarter Return	-0.47%
TSY Benchmark	-0.43%
Gov/Corp Benchmark	-0.41%
12 Month Return	1.04%
TSY Benchmark	0.89%
Gov/Corp Benchmark	1.07%



Investment Manager Diversification and Maturity Schedules

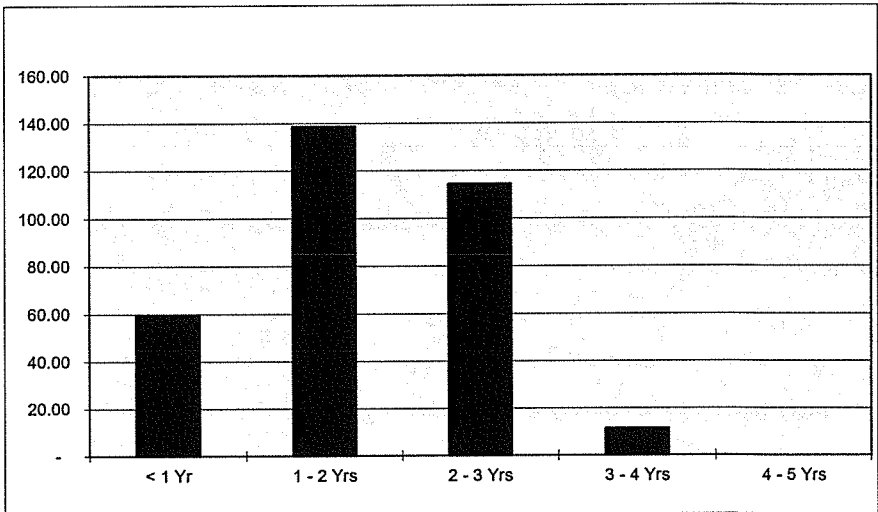
Payden & Rygel
December 31, 2016

SHORT-TERM PORTFOLIO (\$324.3 M)



	Book Value	Market Value
Treasuries	\$148,533,222	\$147,997,354
Agencies	47,972,393	47,782,532
Medium Term Notes	68,050,746	67,723,572
Mortg. & Asset-Back Sec.	40,650,849	40,362,681
Variable & Floating Rate	5,872,986	5,897,948
State & Local Agencies	10,036,645	10,004,946
Money Market Funds	<u>3,136,242</u>	<u>3,136,242</u>
	<u>\$324,253,081</u>	<u>\$322,905,274</u>

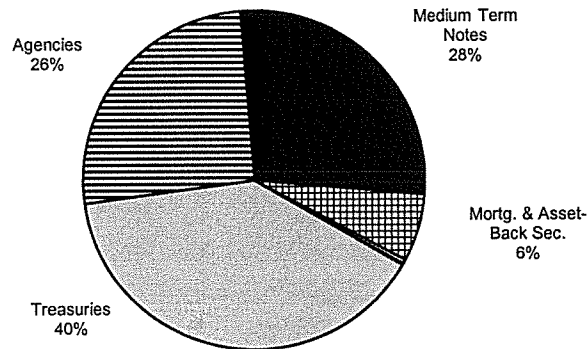
Wtd Avg Life	1.56 Yrs
Duration	1.50 Yrs
Quarter-end Yield	1.26%
TSY Benchmark	1.18%
Gov/Corp Benchmark	1.34%
Quarter Return	-0.19%
TSY Benchmark	-0.43%
Gov/Corp Benchmark	-0.41%
12 Month Return	1.05%
TSY Benchmark	0.89%
Gov/Corp Benchmark	1.07%



Investment Manager Diversification and Maturity Schedules

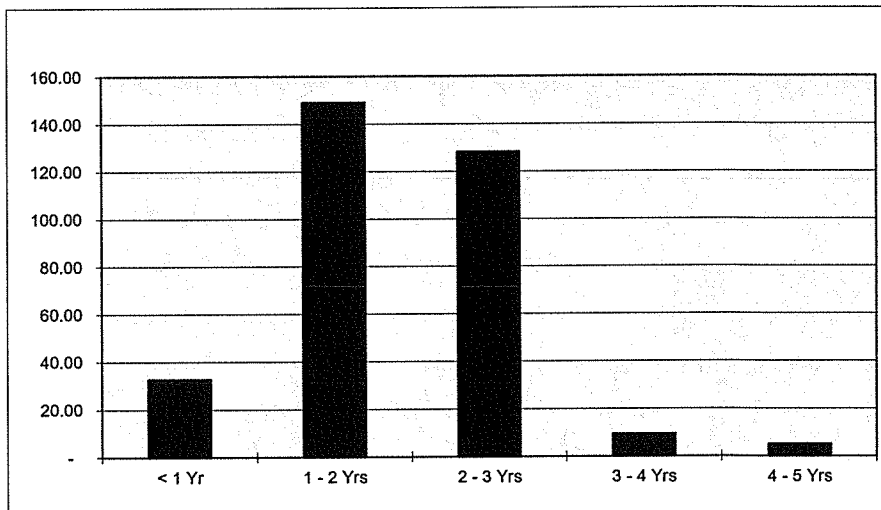
State Street
December 31, 2016

SHORT-TERM PORTFOLIO (\$324.0 M)



	Book Value	Market Value
Treasuries	\$127,992,411	\$127,276,652
Agencies	83,859,750	83,479,505
Medium Term Notes	89,552,092	89,314,356
Mortg. & Asset-Back Sec.	20,784,191	20,750,348
Variable & Floating Rate	1,500,000	1,509,810
Money Market Funds	<u>323,007</u>	<u>323,007</u>
	<u>\$324,011,451</u>	<u>\$322,653,678</u>

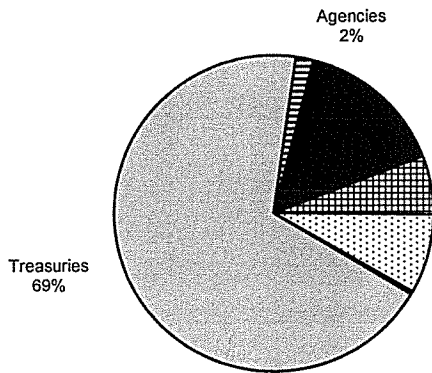
Wtd Avg Life	1.80 Yrs
Duration	1.77 Yrs
Quarter-end Yield	1.31%
TSY Benchmark	1.18%
Gov/Corp Benchmark	1.34%
Quarter Return	-0.37%
TSY Benchmark	-0.43%
Gov/Corp Benchmark	-0.41%
12 Month Return	1.11%
TSY Benchmark	0.89%
Gov/Corp Benchmark	1.07%



Investment Manager Diversification and Maturity Schedules

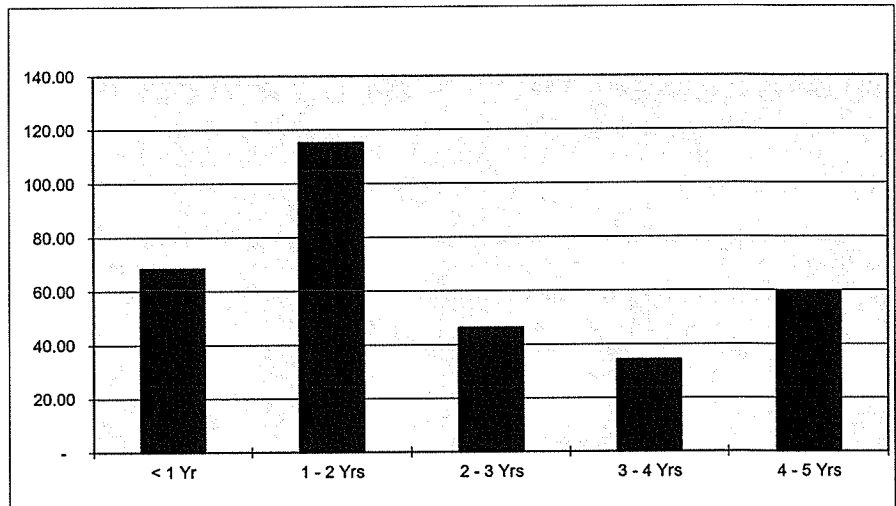
Western Asset Management December 31, 2016

SHORT-TERM PORTFOLIO (\$323.4 M)



	Book Value	Market Value
Treasuries	\$222,020,319	\$221,366,185
Agencies	\$5,746,054	5,936,358
Medium Term Notes	49,114,121	48,910,332
Variable Rate Sec.	19,331,559	19,384,849
Mortg. & Asset-Back Sec.	26,145,572	25,963,303
Money Market Funds	<u>1,064,311</u>	<u>1,064,311</u>
	<u>\$323,421,935</u>	<u>\$322,625,338</u>

Wtd Avg Life	2.11 Yrs
Duration	1.93 Yrs
Quarter-end Yield	1.34%
TSY Benchmark	1.18%
Gov/Corp Benchmark	1.34%
Quarter Return	-0.54%
TSY Benchmark	-0.43%
Gov/Corp Benchmark	-0.41%
12 Month Return	1.02%
TSY Benchmark	0.89%
Gov/Corp Benchmark	1.07%



**Orange County Transportation Authority
Portfolio Listing
As of December 31, 2016**

LIQUID PORTFOLIO

<u>DESCRIPTION</u>	<u>MATURITY DATE</u>	<u>BOOK VALUE</u>	<u>MARKET VALUE</u>	<u>YIELD</u>
<u>CASH EQUIVALENTS</u>				
BNP PARIBAS NY COMMERCIAL PAPER REPURCHASE AGREEMENT	1/5/2017	24,993,333.33	25,000,000.00	0.64%
FEDERATED TREASURY OBLIGATIONS FUND	1/3/2017	39,918,912.39	39,918,912.39	0.10%
FIDELITY TREASURY OBLIGATIONS FUND	N/A	18,988,031.14	18,988,031.14	0.25%
FIRST AMERICAN TREAS OBLIGATIONS	N/A	63,173,944.41	63,173,944.41	0.28%
		6.68	6.68	0.01%
<i>SUB-TOTAL</i>		<u>147,074,227.95</u>	<u>147,080,894.62</u>	
<u>LOCAL AGENCY INVESTMENT FUND (LAIF)</u>	N/A	10,216,771.91	10,216,771.91	N/A
<u>ORANGE COUNTY INVESTMENT POOL (OCIP)</u>	N/A	29,306.00	29,306.00	N/A
LIQUID PORTFOLIO - TOTAL		<u>\$ 157,320,305.86</u>	<u>\$ 157,326,972.53</u>	

SHORT-TERM PORTFOLIO

<u>DESCRIPTION</u>	<u>MATURITY DATE</u>	<u>BOOK VALUE</u>	<u>MARKET VALUE</u>	<u>YIELD</u>
<u>CASH EQUIVALENTS</u>				
BLACKROCK INSTITUTIONAL FUNDS	N/A	\$ 5,081,486.82	5,081,486.82	0.37%
<i>SUB-TOTAL</i>		<u>5,081,486.82</u>	<u>5,081,486.82</u>	
<u>U.S. GOVERNMENT & AGENCY OBLIGATIONS</u>				
FEDERAL HOME LOAN BANKS	5/30/2017	1,946,958.00	1,949,161.50	0.73%
FEDERAL HOME LOAN BANKS	8/28/2017	349,450.50	349,933.50	0.78%
FEDERAL HOME LOAN BANKS	3/19/2018	899,683.20	898,551.00	1.01%
FEDERAL HOME LOAN BANKS	6/8/2018	644,889.60	641,459.20	1.09%
FEDERAL HOME LOAN BANKS	6/29/2018	2,992,770.00	2,989,560.00	1.11%
FEDERAL HOME LOAN BANKS	8/7/2018	3,492,720.00	3,472,175.00	1.13%
FEDERAL HOME LOAN BANKS	9/14/2018	406,290.84	405,444.00	1.19%
FEDERAL HOME LOAN BANKS	10/1/2018	3,077,905.60	3,063,060.00	1.19%
FEDERAL HOME LOAN BANKS	1/16/2019	4,999,800.00	4,998,250.00	1.27%
FEDERAL HOME LOAN BANKS	1/16/2019	6,469,741.20	6,467,735.50	1.27%
FEDERAL HOME LOAN BANKS	8/5/2019	808,444.80	798,538.50	1.43%
FEDERAL HOME LOAN BANKS	9/26/2019	3,097,303.00	3,063,048.00	1.45%
FEDERAL HOME LOAN BANKS	9/26/2019	4,231,315.55	4,184,518.80	1.45%
FEDERAL HOME LOAN BANKS	9/26/2019	764,334.45	755,881.20	1.45%
FEDERAL HOME LOAN BANKS	11/29/2021	1,792,836.00	1,788,408.00	2.01%
FEDERAL HOME LOAN MORTGAGE CORP	3/8/2017	180,997.20	180,144.00	0.57%
FEDERAL HOME LOAN MORTGAGE CORP	2/26/2018	2,890,000.00	2,889,364.20	1.07%
FEDERAL HOME LOAN MORTGAGE CORP	4/9/2018	2,995,290.00	2,988,930.00	1.04%
FEDERAL HOME LOAN MORTGAGE CORP	6/29/2018	3,060,000.00	3,055,165.20	1.11%
FEDERAL HOME LOAN MORTGAGE CORP	9/14/2018	3,060,000.00	3,055,501.80	1.24%
FEDERAL HOME LOAN MORTGAGE CORP	10/12/2018	599,815.01	596,742.00	1.18%
FEDERAL HOME LOAN MORTGAGE CORP	10/12/2018	4,999,700.00	4,972,850.00	1.18%
FEDERAL HOME LOAN MORTGAGE CORP	10/12/2018	3,088,671.30	3,073,221.30	1.18%
FEDERAL HOME LOAN MORTGAGE CORP	4/15/2019	4,998,350.00	4,979,750.00	1.30%
FEDERAL HOME LOAN MORTGAGE CORP	7/19/2019	1,992,540.00	1,973,580.00	1.40%
FEDERAL HOME LOAN MORTGAGE CORP	7/19/2019	9,975,800.00	9,867,900.00	1.40%
FEDERAL HOME LOAN MORTGAGE CORP	7/19/2019	2,112,874.44	2,090,021.22	1.40%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	2/13/2017	1,963,710.29	1,808,730.00	0.92%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	4/27/2017	141,170.40	140,211.40	0.66%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	6/12/2017	554,755.00	510,250.00	0.80%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	6/12/2017	913,792.00	816,400.00	0.80%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	3/28/2018	6,986,000.00	6,985,930.00	1.04%

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FEDERAL NATIONAL MORTGAGE ASSOCIATION	7/20/2018	724,754.95	725,014.50	1.12%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	7/20/2018	6,987,190.00	7,000,140.00	1.12%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	7/27/2018	3,065,395.00	3,051,487.90	1.14%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	10/19/2018	9,983,800.00	9,987,700.00	1.19%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	10/19/2018	3,015,107.60	3,016,285.40	1.19%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	12/14/2018	7,988,080.00	7,983,520.00	1.23%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	2/26/2019	2,883,179.60	2,872,024.20	1.29%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	6/13/2019	2,980,000.00	2,974,099.60	1.33%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	8/2/2019	3,204,607.20	3,165,413.10	1.42%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	8/28/2019	9,984,400.00	9,888,900.00	1.43%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	8/28/2019	3,065,210.80	3,035,892.30	1.43%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	10/9/2019	5,746,054.00	5,936,358.00	1.92%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	10/24/2019	1,992,480.00	1,972,360.00	1.50%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	10/24/2019	7,479,900.00	7,396,350.00	1.50%
FEDERAL NATIONAL MORTGAGE ASSOCIATION	8/17/2021	995,950.00	966,470.00	2.01%
FREDDIE MAC	7/14/2017	500,120.00	500,085.00	0.72%
FREDDIE MAC	7/14/2017	60,021.00	60,010.20	0.72%
FREDDIE MAC	6/13/2018	789,939.70	764,316.75	1.10%
U.S. DEPT OF HOUSING & URBAN DEVELOPMENT	8/1/2018	1,000,000.00	1,000,410.00	1.30%
UNITED STATES TREASURY	4/30/2017	1,470,671.41	1,471,675.80	0.53%
UNITED STATES TREASURY	5/31/2017	594,316.40	544,681.80	0.67%
UNITED STATES TREASURY	5/31/2017	494,191.41	453,901.50	0.67%
UNITED STATES TREASURY	5/31/2017	698,277.34	700,056.00	0.61%
UNITED STATES TREASURY	5/31/2017	893,917.97	900,072.00	0.61%
UNITED STATES TREASURY	5/31/2017	1,191,796.87	1,200,096.00	0.61%
UNITED STATES TREASURY	5/31/2017	1,686,718.75	1,700,136.00	0.61%
UNITED STATES TREASURY	5/31/2017	742,880.86	750,060.00	0.61%
UNITED STATES TREASURY	5/31/2017	994,218.75	1,000,080.00	0.61%
UNITED STATES TREASURY	5/31/2017	742,236.33	750,060.00	0.61%
UNITED STATES TREASURY	6/15/2017	3,056,195.31	3,053,568.50	0.62%
UNITED STATES TREASURY	6/30/2017	1,001,523.44	1,000,510.00	0.65%
UNITED STATES TREASURY	6/30/2017	1,092,867.19	1,100,561.00	0.65%
UNITED STATES TREASURY	6/30/2017	893,531.25	900,459.00	0.65%
UNITED STATES TREASURY	7/31/2017	537,558.59	504,805.00	0.73%
UNITED STATES TREASURY	7/31/2017	594,687.50	555,285.50	0.73%
UNITED STATES TREASURY	7/31/2017	420,179.60	403,844.00	0.73%
UNITED STATES TREASURY	7/31/2017	833,343.75	807,688.00	0.73%
UNITED STATES TREASURY	7/31/2017	520,937.50	504,805.00	0.73%
UNITED STATES TREASURY	7/31/2017	396,578.12	399,592.00	0.67%
UNITED STATES TREASURY	7/31/2017	297,621.10	299,694.00	0.67%
UNITED STATES TREASURY	7/31/2017	397,125.00	399,592.00	0.67%
UNITED STATES TREASURY	7/31/2017	317,225.00	319,673.60	0.67%
UNITED STATES TREASURY	7/31/2017	495,722.65	499,490.00	0.67%
UNITED STATES TREASURY	7/31/2017	983,046.87	998,980.00	0.67%
UNITED STATES TREASURY	7/31/2017	984,101.56	998,980.00	0.67%
UNITED STATES TREASURY	7/31/2017	885,691.41	899,082.00	0.67%
UNITED STATES TREASURY	7/31/2017	7,385,546.88	7,396,818.00	0.70%
UNITED STATES TREASURY	9/15/2017	3,424,238.66	3,435,350.80	0.78%
UNITED STATES TREASURY	9/30/2017	4,003,496.88	4,000,569.00	0.84%
UNITED STATES TREASURY	9/30/2017	718,976.56	705,390.00	0.84%
UNITED STATES TREASURY	9/30/2017	4,423,625.00	4,333,110.00	0.84%
UNITED STATES TREASURY	9/30/2017	1,086,507.81	1,098,449.00	0.81%
UNITED STATES TREASURY	9/30/2017	692,261.72	699,013.00	0.81%
UNITED STATES TREASURY	9/30/2017	600,117.18	599,154.00	0.81%
UNITED STATES TREASURY	9/30/2017	500,488.28	499,295.00	0.81%
UNITED STATES TREASURY	9/30/2017	299,929.68	299,577.00	0.81%
UNITED STATES TREASURY	9/30/2017	395,218.75	399,436.00	0.81%
UNITED STATES TREASURY	9/30/2017	400,234.38	399,436.00	0.81%
UNITED STATES TREASURY	10/31/2017	423,703.12	403,344.00	0.87%
UNITED STATES TREASURY	10/31/2017	636,726.56	605,016.00	0.87%
UNITED STATES TREASURY	10/31/2017	403,067.19	383,176.80	0.87%

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UNITED STATES TREASURY	10/31/2017	307,312.50	302,508.00	0.87%
UNITED STATES TREASURY	10/31/2017	593,687.50	564,681.60	0.87%
UNITED STATES TREASURY	10/31/2017	1,744,147.94	1,744,462.80	0.87%
UNITED STATES TREASURY	10/31/2017	600,820.32	599,460.00	0.86%
UNITED STATES TREASURY	10/31/2017	791,395.31	809,271.00	0.86%
UNITED STATES TREASURY	10/31/2017	513,247.26	509,541.00	0.86%
UNITED STATES TREASURY	10/31/2017	396,515.62	399,640.00	0.86%
UNITED STATES TREASURY	10/31/2017	197,867.19	199,820.00	0.86%
UNITED STATES TREASURY	10/31/2017	795,031.25	799,280.00	0.86%
UNITED STATES TREASURY	10/31/2017	792,031.25	799,280.00	0.86%
UNITED STATES TREASURY	10/31/2017	1,192,546.88	1,198,920.00	0.86%
UNITED STATES TREASURY	11/9/2017	1,812,133.75	1,812,480.50	0.80%
UNITED STATES TREASURY	11/15/2017	12,041,881.25	12,110,484.40	0.87%
UNITED STATES TREASURY	11/15/2017	8,445,847.29	8,470,338.80	0.87%
UNITED STATES TREASURY	11/30/2017	600,117.19	598,596.00	0.88%
UNITED STATES TREASURY	11/30/2017	300,339.84	299,298.00	0.88%
UNITED STATES TREASURY	11/30/2017	590,367.19	598,596.00	0.88%
UNITED STATES TREASURY	11/30/2017	196,859.37	199,532.00	0.88%
UNITED STATES TREASURY	11/30/2017	300,117.19	299,298.00	0.88%
UNITED STATES TREASURY	11/30/2017	198,812.50	199,532.00	0.88%
UNITED STATES TREASURY	11/30/2017	1,087,925.78	1,097,426.00	0.88%
UNITED STATES TREASURY	11/30/2017	1,082,425.78	1,097,426.00	0.88%
UNITED STATES TREASURY	11/30/2017	787,250.00	798,128.00	0.88%
UNITED STATES TREASURY	11/30/2017	17,864,372.22	17,967,856.60	0.88%
UNITED STATES TREASURY	11/30/2017	1,111,604.30	1,110,088.80	0.87%
UNITED STATES TREASURY	11/30/2017	3,004,570.31	3,000,240.00	0.87%
UNITED STATES TREASURY	11/30/2017	5,605,290.77	5,620,449.60	0.87%
UNITED STATES TREASURY	11/30/2017	120,187.50	120,009.60	0.87%
UNITED STATES TREASURY	12/31/2017	791,906.25	798,688.00	0.91%
UNITED STATES TREASURY	12/31/2017	692,070.31	698,852.00	0.91%
UNITED STATES TREASURY	12/31/2017	598,570.32	599,016.00	0.91%
UNITED STATES TREASURY	12/31/2017	299,203.13	299,508.00	0.91%
UNITED STATES TREASURY	12/31/2017	800,375.00	798,688.00	0.91%
UNITED STATES TREASURY	12/31/2017	994,609.37	998,360.00	0.91%
UNITED STATES TREASURY	12/31/2017	621,891.14	620,483.60	0.92%
UNITED STATES TREASURY	12/31/2017	10,048,046.88	10,007,800.00	0.92%
UNITED STATES TREASURY	12/31/2017	1,698,120.87	1,701,326.00	0.92%
UNITED STATES TREASURY	1/15/2018	1,991,406.25	1,999,060.00	0.92%
UNITED STATES TREASURY	1/31/2018	795,187.50	799,408.00	0.94%
UNITED STATES TREASURY	1/31/2018	699,945.31	699,482.00	0.94%
UNITED STATES TREASURY	1/31/2018	550,000.00	549,593.00	0.94%
UNITED STATES TREASURY	1/31/2018	400,781.25	399,704.00	0.94%
UNITED STATES TREASURY	1/31/2018	651,294.92	649,519.00	0.94%
UNITED STATES TREASURY	1/31/2018	11,024,735.18	10,996,747.80	0.95%
UNITED STATES TREASURY	2/15/2018	2,510,546.88	2,500,875.00	0.97%
UNITED STATES TREASURY	2/15/2018	6,270,712.50	6,242,184.00	0.97%
UNITED STATES TREASURY	2/15/2018	1,555,396.55	1,558,545.30	0.97%
UNITED STATES TREASURY	2/15/2018	734,220.31	730,255.50	0.97%
UNITED STATES TREASURY	2/28/2018	1,037,695.31	1,020,040.00	1.02%
UNITED STATES TREASURY	2/28/2018	349,166.02	349,181.00	0.95%
UNITED STATES TREASURY	2/28/2018	4,640,554.69	4,639,119.00	0.95%
UNITED STATES TREASURY	2/28/2018	7,486,781.62	7,472,473.40	0.95%
UNITED STATES TREASURY	2/28/2018	10,148,150.37	10,146,202.20	0.95%
UNITED STATES TREASURY	3/15/2018	3,760,107.41	3,751,762.50	0.96%
UNITED STATES TREASURY	3/31/2018	2,192,121.09	2,149,308.00	0.98%
UNITED STATES TREASURY	3/31/2018	1,398,140.62	1,395,954.00	0.98%
UNITED STATES TREASURY	3/31/2018	498,203.12	498,555.00	0.98%
UNITED STATES TREASURY	3/31/2018	11,009,023.41	10,985,810.00	0.98%
UNITED STATES TREASURY	3/31/2018	7,689,300.00	7,670,092.80	0.98%
UNITED STATES TREASURY	4/15/2018	6,840,748.85	6,848,771.70	0.99%
UNITED STATES TREASURY	4/30/2018	590,156.25	597,072.00	0.99%

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UNITED STATES TREASURY	4/30/2018	794,274.61	806,047.20	0.99%
UNITED STATES TREASURY	4/30/2018	149,121.09	149,268.00	0.99%
UNITED STATES TREASURY	4/30/2018	649,212.89	646,828.00	0.99%
UNITED STATES TREASURY	4/30/2018	294,937.50	298,536.00	0.99%
UNITED STATES TREASURY	4/30/2018	1,063,433.59	1,094,632.00	0.99%
UNITED STATES TREASURY	4/30/2018	389,765.62	398,048.00	0.99%
UNITED STATES TREASURY	4/30/2018	1,082,425.78	1,094,632.00	0.99%
UNITED STATES TREASURY	4/30/2018	1,080,707.03	1,094,632.00	0.99%
UNITED STATES TREASURY	4/30/2018	1,994,765.62	1,990,240.00	0.99%
UNITED STATES TREASURY	4/30/2018	989,179.69	995,120.00	0.99%
UNITED STATES TREASURY	4/30/2018	8,999,648.44	8,970,480.00	1.00%
UNITED STATES TREASURY	4/30/2018	5,000,781.25	4,983,600.00	1.00%
UNITED STATES TREASURY	4/30/2018	9,987,924.13	9,967,200.00	1.00%
UNITED STATES TREASURY	5/31/2018	796,687.50	799,688.00	1.03%
UNITED STATES TREASURY	5/31/2018	4,019,843.75	3,998,440.00	1.03%
UNITED STATES TREASURY	5/31/2018	800,031.25	799,688.00	1.03%
UNITED STATES TREASURY	5/31/2018	297,996.10	299,883.00	1.03%
UNITED STATES TREASURY	5/31/2018	545,810.54	549,785.50	1.03%
UNITED STATES TREASURY	5/31/2018	1,592,250.00	1,599,376.00	1.03%
UNITED STATES TREASURY	5/31/2018	13,019,296.88	12,994,930.00	1.03%
UNITED STATES TREASURY	5/31/2018	15,276,395.88	15,260,184.50	1.01%
UNITED STATES TREASURY	6/15/2018	399,765.63	400,392.00	1.06%
UNITED STATES TREASURY	6/30/2018	518,847.66	509,670.00	1.07%
UNITED STATES TREASURY	7/15/2018	996,960.00	996,800.00	1.08%
UNITED STATES TREASURY	7/15/2018	10,979,804.69	10,964,800.00	1.08%
UNITED STATES TREASURY	7/15/2018	9,946,875.00	9,968,000.00	1.08%
UNITED STATES TREASURY	7/31/2018	711,074.22	703,115.00	1.09%
UNITED STATES TREASURY	7/31/2018	1,411,812.50	1,406,230.00	1.09%
UNITED STATES TREASURY	7/31/2018	911,214.85	904,005.00	1.09%
UNITED STATES TREASURY	7/31/2018	7,983,151.80	7,957,200.00	1.09%
UNITED STATES TREASURY	8/31/2018	1,012,187.50	1,006,250.00	1.12%
UNITED STATES TREASURY	8/31/2018	6,071,484.38	6,037,500.00	1.12%
UNITED STATES TREASURY	9/15/2018	7,033,906.25	6,985,230.00	1.12%
UNITED STATES TREASURY	9/15/2018	3,957,438.68	3,961,623.30	1.12%
UNITED STATES TREASURY	9/15/2018	4,999,414.05	4,989,450.00	1.12%
UNITED STATES TREASURY	9/15/2018	15,810,437.50	15,826,535.40	1.12%
UNITED STATES TREASURY	9/15/2018	5,192,281.28	5,189,028.00	1.12%
UNITED STATES TREASURY	9/15/2018	360,703.12	359,240.40	1.12%
UNITED STATES TREASURY	9/15/2018	1,162,632.01	1,157,552.40	1.12%
UNITED STATES TREASURY	9/30/2018	678,910.94	682,550.00	1.16%
UNITED STATES TREASURY	9/30/2018	1,012,148.44	1,003,750.00	1.16%
UNITED STATES TREASURY	9/30/2018	7,477,441.41	7,449,300.00	1.14%
UNITED STATES TREASURY	9/30/2018	7,492,089.84	7,449,300.00	1.14%
UNITED STATES TREASURY	10/15/2018	995,585.94	995,160.00	1.15%
UNITED STATES TREASURY	10/31/2018	1,097,335.93	1,101,760.00	1.16%
UNITED STATES TREASURY	10/31/2018	1,006,679.69	1,001,600.00	1.16%
UNITED STATES TREASURY	10/31/2018	601,804.69	600,960.00	1.16%
UNITED STATES TREASURY	10/31/2018	1,006,015.62	1,001,600.00	1.16%
UNITED STATES TREASURY	10/31/2018	1,296,394.54	1,302,080.00	1.16%
UNITED STATES TREASURY	10/31/2018	1,486,699.22	1,502,400.00	1.16%
UNITED STATES TREASURY	10/31/2018	806,125.00	801,280.00	1.16%
UNITED STATES TREASURY	10/31/2018	907,945.31	901,440.00	1.16%
UNITED STATES TREASURY	10/31/2018	852,058.59	851,360.00	1.16%
UNITED STATES TREASURY	10/31/2018	676,520.32	681,088.00	1.16%
UNITED STATES TREASURY	10/31/2018	400,250.00	400,640.00	1.16%
UNITED STATES TREASURY	10/31/2018	100,730.46	100,160.00	1.16%
UNITED STATES TREASURY	10/31/2018	11,983,593.75	11,913,720.00	1.15%
UNITED STATES TREASURY	10/31/2018	8,245,714.88	8,260,179.20	1.15%
UNITED STATES TREASURY	11/30/2018	695,132.82	701,015.00	1.17%
UNITED STATES TREASURY	11/30/2018	1,303,808.59	1,301,885.00	1.17%
UNITED STATES TREASURY	11/30/2018	493,847.65	500,725.00	1.17%

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UNITED STATES TREASURY	11/30/2018	401,437.50	400,580.00	1.17%
UNITED STATES TREASURY	11/30/2018	8,285,608.12	8,293,376.00	1.17%
UNITED STATES TREASURY	12/15/2018	7,531,933.59	7,508,175.00	1.19%
UNITED STATES TREASURY	12/15/2018	1,815,101.95	1,791,951.10	1.19%
UNITED STATES TREASURY	12/31/2018	1,115,425.78	1,106,402.00	1.20%
UNITED STATES TREASURY	12/31/2018	692,207.03	704,074.00	1.20%
UNITED STATES TREASURY	12/31/2018	1,210,312.50	1,203,888.00	1.21%
UNITED STATES TREASURY	12/31/2018	1,407,492.19	1,404,536.00	1.21%
UNITED STATES TREASURY	12/31/2018	1,403,937.50	1,404,536.00	1.21%
UNITED STATES TREASURY	12/31/2018	303,867.19	300,972.00	1.21%
UNITED STATES TREASURY	12/31/2018	1,009,453.12	1,003,240.00	1.21%
UNITED STATES TREASURY	12/31/2018	2,830,187.50	2,809,072.00	1.21%
UNITED STATES TREASURY	1/15/2019	11,073,046.88	10,978,990.00	1.22%
UNITED STATES TREASURY	1/31/2019	1,120,796.87	1,105,973.00	1.24%
UNITED STATES TREASURY	1/31/2019	502,988.28	502,715.00	1.24%
UNITED STATES TREASURY	1/31/2019	865,937.50	854,615.50	1.24%
UNITED STATES TREASURY	1/31/2019	408,109.38	402,172.00	1.24%
UNITED STATES TREASURY	1/31/2019	500,683.60	502,715.00	1.24%
UNITED STATES TREASURY	1/31/2019	1,006,328.12	1,005,430.00	1.24%
UNITED STATES TREASURY	1/31/2019	855,578.12	854,615.50	1.24%
UNITED STATES TREASURY	1/31/2019	1,698,937.50	1,701,003.00	1.22%
UNITED STATES TREASURY	1/31/2019	402,906.25	400,236.00	1.22%
UNITED STATES TREASURY	1/31/2019	1,973,750.00	2,001,180.00	1.22%
UNITED STATES TREASURY	1/31/2019	247,226.56	250,147.50	1.22%
UNITED STATES TREASURY	1/31/2019	198,984.37	200,118.00	1.22%
UNITED STATES TREASURY	2/28/2019	1,707,570.32	1,709,299.00	1.24%
UNITED STATES TREASURY	2/28/2019	858,234.38	854,649.50	1.24%
UNITED STATES TREASURY	2/28/2019	1,000,117.18	1,002,810.00	1.24%
UNITED STATES TREASURY	2/28/2019	1,001,992.19	1,002,810.00	1.24%
UNITED STATES TREASURY	2/28/2019	859,960.93	852,388.50	1.24%
UNITED STATES TREASURY	2/28/2019	1,191,328.13	1,203,372.00	1.24%
UNITED STATES TREASURY	2/28/2019	1,102,707.03	1,103,091.00	1.24%
UNITED STATES TREASURY	2/28/2019	708,367.18	701,967.00	1.24%
UNITED STATES TREASURY	2/28/2019	1,417,828.13	1,403,934.00	1.24%
UNITED STATES TREASURY	2/28/2019	1,400,218.75	1,403,934.00	1.24%
UNITED STATES TREASURY	2/28/2019	716,822.65	711,995.10	1.24%
UNITED STATES TREASURY	3/15/2019	7,514,062.50	7,460,175.00	1.24%
UNITED STATES TREASURY	3/15/2019	3,923,135.18	3,889,237.90	1.24%
UNITED STATES TREASURY	3/15/2019	5,514,519.92	5,480,741.90	1.24%
UNITED STATES TREASURY	3/15/2019	7,059,638.67	7,012,564.50	1.24%
UNITED STATES TREASURY	3/15/2019	531,469.92	527,185.70	1.24%
UNITED STATES TREASURY	3/31/2019	1,427,835.94	1,411,102.00	1.27%
UNITED STATES TREASURY	3/31/2019	1,119,464.84	1,108,723.00	1.27%
UNITED STATES TREASURY	4/15/2019	7,965,937.50	7,928,160.00	1.27%
UNITED STATES TREASURY	4/15/2019	5,483,457.03	5,450,610.00	1.27%
UNITED STATES TREASURY	4/30/2019	1,411,101.56	1,410,934.00	1.28%
UNITED STATES TREASURY	4/30/2019	858,433.59	856,638.50	1.28%
UNITED STATES TREASURY	5/15/2019	1,106,574.22	1,089,473.00	1.29%
UNITED STATES TREASURY	5/15/2019	1,000,234.38	990,430.00	1.29%
UNITED STATES TREASURY	5/15/2019	6,231,000.00	6,140,666.00	1.29%
UNITED STATES TREASURY	5/15/2019	994,179.69	990,430.00	1.29%
UNITED STATES TREASURY	5/15/2019	5,481,308.59	5,447,365.00	1.29%
UNITED STATES TREASURY	5/31/2019	1,725,300.79	1,707,837.00	1.31%
UNITED STATES TREASURY	5/31/2019	1,305,941.40	1,305,993.00	1.31%
UNITED STATES TREASURY	5/31/2019	1,422,695.31	1,406,454.00	1.31%
UNITED STATES TREASURY	5/31/2019	853,486.33	853,918.50	1.31%
UNITED STATES TREASURY	5/31/2019	1,113,062.50	1,105,071.00	1.31%
UNITED STATES TREASURY	5/31/2019	2,814,437.50	2,812,908.00	1.31%
UNITED STATES TREASURY	5/31/2019	1,116,500.00	1,105,071.00	1.31%
UNITED STATES TREASURY	5/31/2019	1,410,992.19	1,406,454.00	1.31%
UNITED STATES TREASURY	6/15/2019	9,988,281.25	9,895,300.00	1.31%

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UNITED STATES TREASURY	6/15/2019	137,577.97	135,565.61	1.31%
UNITED STATES TREASURY	6/30/2019	789,437.50	793,752.00	1.32%
UNITED STATES TREASURY	6/30/2019	377,721.10	386,954.10	1.32%
UNITED STATES TREASURY	6/30/2019	1,123,460.94	1,108,206.00	1.32%
UNITED STATES TREASURY	7/15/2019	20,752,895.31	20,537,194.80	1.33%
UNITED STATES TREASURY	7/31/2019	597,037.50	602,924.00	1.33%
UNITED STATES TREASURY	7/31/2019	980,351.56	988,400.00	1.33%
UNITED STATES TREASURY	7/31/2019	918,095.32	909,328.00	1.33%
UNITED STATES TREASURY	7/31/2019	5,108,789.06	5,034,950.00	1.35%
UNITED STATES TREASURY	7/31/2019	912,667.19	896,221.10	1.35%
UNITED STATES TREASURY	8/31/2019	534,166.01	544,824.50	1.36%
UNITED STATES TREASURY	8/31/2019	1,093,941.41	1,089,649.00	1.36%
UNITED STATES TREASURY	9/30/2019	500,957.03	494,785.00	1.39%
UNITED STATES TREASURY	9/30/2019	968,945.31	989,570.00	1.39%
UNITED STATES TREASURY	9/30/2019	1,223,373.05	1,212,223.25	1.39%
UNITED STATES TREASURY	9/30/2019	1,504,687.50	1,484,355.00	1.39%
UNITED STATES TREASURY	9/30/2019	1,082,984.37	1,088,527.00	1.39%
UNITED STATES TREASURY	10/15/2019	7,004,101.56	6,925,100.00	1.39%
UNITED STATES TREASURY	10/15/2019	23,093,979.02	22,941,867.00	1.39%
UNITED STATES TREASURY	11/30/2019	501,386.72	501,035.00	1.43%
UNITED STATES TREASURY	11/30/2019	1,111,988.28	1,102,277.00	1.43%
UNITED STATES TREASURY	11/30/2019	1,605,937.50	1,603,312.00	1.43%
UNITED STATES TREASURY	11/30/2019	1,001,914.06	1,002,070.00	1.43%
UNITED STATES TREASURY	11/30/2019	985,390.62	987,970.00	1.42%
UNITED STATES TREASURY	12/31/2019	1,222,734.38	1,205,904.00	1.46%
UNITED STATES TREASURY	12/31/2019	1,525,937.50	1,505,210.40	1.46%
UNITED STATES TREASURY	12/31/2019	1,706,042.97	1,683,459.00	1.46%
UNITED STATES TREASURY	1/31/2020	1,219,783.98	1,201,118.60	1.49%
UNITED STATES TREASURY	1/31/2020	1,218,744.14	1,201,118.60	1.49%
UNITED STATES TREASURY	1/31/2020	1,016,835.94	992,660.00	1.49%
UNITED STATES TREASURY	1/31/2020	199,826.00	199,242.00	1.50%
UNITED STATES TREASURY	2/29/2020	509,179.69	497,615.00	1.53%
UNITED STATES TREASURY	2/29/2020	508,164.07	497,615.00	1.53%
UNITED STATES TREASURY	2/29/2020	879,855.47	865,850.10	1.53%
UNITED STATES TREASURY	3/31/2020	1,088,914.06	1,094,247.00	1.54%
UNITED STATES TREASURY	4/30/2020	1,689,640.63	1,689,052.00	1.57%
UNITED STATES TREASURY	5/31/2020	907,066.41	897,255.00	1.59%
UNITED STATES TREASURY	5/31/2020	4,720,188.27	4,725,543.00	1.59%
UNITED STATES TREASURY	7/31/2020	2,058,828.13	2,025,860.00	1.63%
UNITED STATES TREASURY	7/31/2020	928,617.19	911,637.00	1.63%
UNITED STATES TREASURY	8/31/2020	1,505,449.22	1,484,415.00	1.67%
UNITED STATES TREASURY	9/30/2020	1,118,605.47	1,087,537.00	1.69%
UNITED STATES TREASURY	10/31/2020	1,534,277.34	1,502,985.00	1.70%
UNITED STATES TREASURY	10/31/2020	5,851,600.80	5,748,588.60	1.71%
UNITED STATES TREASURY	11/30/2020	1,249,875.00	1,212,420.00	1.73%
UNITED STATES TREASURY	11/30/2020	1,141,550.78	1,111,385.00	1.73%
UNITED STATES TREASURY	11/30/2020	997,695.31	995,980.00	1.73%
UNITED STATES TREASURY	1/31/2021	1,222,642.58	1,190,651.00	1.79%
UNITED STATES TREASURY	1/31/2021	1,011,210.94	984,020.00	1.78%
UNITED STATES TREASURY	1/31/2021	978,867.18	984,020.00	1.78%
UNITED STATES TREASURY	1/31/2021	987,851.56	984,020.00	1.78%
UNITED STATES TREASURY	2/28/2021	8,952,766.38	8,815,470.60	1.80%
UNITED STATES TREASURY	3/31/2021	5,558,903.50	5,441,388.70	1.82%
UNITED STATES TREASURY	3/31/2021	8,692,236.35	8,547,962.50	1.82%
UNITED STATES TREASURY	4/30/2021	3,455,856.27	3,374,571.20	1.83%
UNITED STATES TREASURY	4/30/2021	5,173,134.78	5,052,047.00	1.83%
UNITED STATES TREASURY	5/31/2021	340,066.41	333,240.80	1.85%
UNITED STATES TREASURY	8/31/2021	14,309,751.63	14,397,073.20	1.91%
UNITED STATES TREASURY	10/31/2021	1,027,734.38	1,002,890.00	1.94%
SUB-TOTAL		871,513,242.29	867,838,227.33	

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MEDIUM TERM NOTES

3M CO	6/26/2017	537,510.60	539,524.80	1.18%
ABB FINANCE USA INC	5/8/2017	104,903.40	105,141.75	1.24%
AIG GLOBAL FUNDING	12/15/2017	96,909.79	97,095.06	1.55%
AIG GLOBAL FUNDING	10/6/2021	499,075.00	481,340.00	2.74%
ALABAMA POWER CO	10/1/2020	157,474.50	154,993.50	2.44%
ALABAMA POWER CO	10/1/2020	96,586.20	92,996.10	2.44%
ALLSTATE CORPORATION (THE)	5/15/2018	125,163.15	111,777.75	1.97%
ALTERA CORP	11/15/2018	144,172.00	142,417.80	1.56%
ALTERA CORP	11/15/2018	718,039.00	712,089.00	1.56%
ALTERA CORP	11/15/2018	204,566.00	203,454.00	1.56%
AMERICAN EXPRESS CO	8/28/2017	98,224.20	92,685.60	1.59%
AMERICAN EXPRESS CO	8/28/2017	569,215.50	540,666.00	1.59%
AMERICAN EXPRESS CREDIT CORP	3/24/2017	2,683,642.00	2,606,526.00	1.29%
AMERICAN EXPRESS CREDIT CORP	6/5/2017	498,780.00	499,920.00	1.16%
AMERICAN EXPRESS CREDIT CORP	6/5/2017	179,560.80	179,971.20	1.16%
AMERICAN EXPRESS CREDIT CORP	6/5/2017	364,532.80	364,941.60	1.16%
AMERICAN EXPRESS CREDIT CORP	9/22/2017	1,053,586.30	1,056,171.05	1.40%
AMERICAN EXPRESS CREDIT CORP	7/31/2018	194,744.55	195,251.55	1.71%
AMERICAN EXPRESS CREDIT CORP	3/18/2019	75,237.00	75,299.25	1.94%
AMERICAN EXPRESS CREDIT CORP	8/15/2019	109,749.20	110,612.70	2.03%
AMERICAN EXPRESS CREDIT CORP	8/15/2019	80,192.80	80,445.60	2.03%
AMERICAN EXPRESS CREDIT CORP	9/14/2020	77,388.75	75,627.00	2.36%
AMERICAN EXPRESS CREDIT CORP	5/5/2021	1,998,780.00	1,976,160.00	2.54%
AMERICAN HONDA FINANCE CORP	7/14/2017	1,997,180.00	2,001,800.00	1.03%
AMERICAN HONDA FINANCE CORP	12/11/2017	38,144.02	38,033.06	1.46%
AMERICAN HONDA FINANCE CORP	7/13/2018	202,074.00	200,436.00	1.46%
AMERICAN HONDA FINANCE CORP	10/10/2018	203,310.00	201,564.00	1.68%
AMERICAN HONDA FINANCE CORP	7/12/2019	2,997,000.00	2,946,690.00	1.92%
AMERICAN HONDA FINANCE CORP	8/15/2019	99,815.00	100,974.00	1.87%
AMERICAN HONDA FINANCE CORPORATION	10/1/2018	178,647.00	164,941.50	1.82%
AMERICAN HONDA FINANCE CORPORATION	10/1/2018	446,236.00	439,844.00	1.82%
AMERIPRISE FINANCIAL INC	3/15/2020	224,708.00	216,782.00	2.56%
ANHEUSER-BUSCH CO	3/1/2017	68,582.40	60,415.20	1.48%
ANHEUSER-BUSCH INBEV NV	1/15/2019	175,654.45	161,511.15	2.03%
ANHEUSER-BUSCH INBEV WORLDWIDE INC	11/15/2019	201,130.40	192,334.60	2.14%
APPLE INC	5/5/2017	500,040.00	500,350.00	0.85%
APPLE INC	5/12/2017	86,939.97	86,986.08	0.94%
APPLE INC	5/12/2017	659,544.60	659,894.40	0.94%
APPLE INC	2/23/2018	179,922.60	180,133.20	1.23%
APPLE INC	5/3/2018	195,450.00	199,250.00	1.28%
APPLE INC	5/3/2018	178,111.80	179,325.00	1.28%
APPLE INC	5/3/2018	495,845.00	498,125.00	1.28%
APPLE INC	2/22/2019	239,959.20	240,453.60	1.61%
APPLE INC	8/2/2019	1,518,480.00	1,497,291.20	1.69%
APPLE INC	2/7/2020	66,307.56	65,193.48	1.96%
APPLE INC	2/23/2021	68,009.02	66,944.39	2.27%
APPLE INC	8/4/2021	192,731.73	186,596.26	2.32%
ARIZONA PUBLIC SERVICE CO	3/1/2019	102,724.80	90,941.60	2.25%
ARIZONA PUBLIC SERVICE CO	1/15/2020	150,892.50	150,175.50	2.16%
ATLANTIC CITY ELECTRIC CO	11/15/2018	132,908.60	121,772.20	1.91%
ATMOS ENERGY CORP	6/15/2017	115,223.00	102,280.00	1.34%
ATMOS ENERGY CORP	6/15/2017	87,063.20	81,824.00	1.34%
BANK OF AMERICA NA	2/14/2017	3,696,744.00	3,700,222.00	1.20%
BANK OF AMERICA NA	3/26/2018	1,500,810.00	1,501,395.00	1.57%
BANK OF AMERICA NA	3/26/2018	1,298,219.00	1,301,209.00	1.57%
BANK OF AMERICA NA	12/7/2018	3,000,000.00	3,016,080.00	1.77%
BANK OF NEW YORK COMPANY, INC. (THE)	1/15/2020	101,092.50	96,156.90	2.26%
BANK OF NEW YORK COMPANY, INC. (THE)	1/15/2020	141,420.50	138,893.30	2.26%
BANK OF NEW YORK MELLON CORP	5/22/2018	1,439,870.40	1,440,604.80	1.57%
BANK OF NEW YORK MELLON CORP	8/1/2018	913,734.00	907,173.00	1.56%

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BANK OF NEW YORK MELLON CORP	3/4/2019	35,199.85	35,249.55	1.85%
BANK OF NEW YORK MELLON CORP	3/4/2019	50,603.50	50,356.50	1.85%
BANK OF NEW YORK MELLON CORP	3/4/2019	35,451.85	35,249.55	1.85%
BANK OF NEW YORK MELLON CORP	2/24/2020	203,662.00	199,412.00	2.25%
BANK OF NEW YORK MELLON CORP	8/17/2020	154,755.00	151,092.00	2.38%
BANK OF TOKYO MITSUBISHI UFJ LTD	9/8/2017	489,412.00	489,211.10	1.69%
BANK OF TOKYO-MITSUBISHI UFJ LTD	3/5/2018	1,548,775.50	1,545,024.50	1.98%
BAYER US FINANCE LLC	10/8/2019	203,710.00	200,354.00	2.31%
BB&T CORP	3/22/2017	73,052.70	70,097.30	1.18%
BB&T CORP	3/22/2017	142,728.60	140,194.60	1.18%
BB&T CORP	8/15/2017	300,207.00	300,339.00	1.39%
BB&T CORP	8/15/2017	140,932.40	140,158.20	1.39%
BB&T CORP	8/15/2017	518,055.42	519,586.47	1.39%
BB&T CORP	8/15/2017	299,454.00	300,339.00	1.39%
BB&T CORP	1/12/2018	129,509.90	129,785.50	1.61%
BERKSHIRE HATHAWAY FINANCE CORP	3/7/2018	679,734.80	680,666.40	1.37%
BERKSHIRE HATHAWAY FINANCE CORP	5/15/2018	564,000.00	526,220.00	1.53%
BERKSHIRE HATHAWAY FINANCE CORP	3/15/2019	28,977.96	28,974.19	1.74%
BERKSHIRE HATHAWAY FINANCE CORP	3/15/2019	589,551.60	589,474.90	1.74%
BERKSHIRE HATHAWAY FINANCE CORP	8/15/2019	149,854.50	148,179.00	1.78%
BERKSHIRE HATHAWAY INC	1/31/2017	579,971.00	580,301.60	1.27%
BERKSHIRE HATHAWAY INC	2/9/2018	146,222.35	145,292.90	1.37%
BERKSHIRE HATHAWAY INC	2/9/2018	120,091.20	120,242.40	1.37%
BERKSHIRE HATHAWAY INC	8/15/2018	134,983.80	134,322.30	1.46%
BLACKROCK INC	9/15/2017	23,055.74	19,668.04	1.25%
BLACKROCK INC	9/15/2017	6,071.90	5,175.80	1.25%
BLACKROCK INC	12/10/2019	168,627.00	162,907.50	1.98%
BLACKROCK INC	12/10/2019	131,338.05	124,895.75	1.98%
BLACKROCK INC	12/10/2019	56,019.50	54,302.50	1.98%
BLACKROCK INC	12/10/2019	144,736.80	141,186.50	1.98%
BLACKROCK INC	12/10/2019	167,211.00	162,907.50	1.98%
BLACKROCK INC	12/10/2019	54,747.00	54,302.50	1.98%
BMW US CAPITAL LLC	4/11/2019	209,907.60	208,007.10	1.93%
BMW US CAPITAL LLC	9/13/2019	154,806.25	153,178.75	1.90%
BOEING CAPITAL CORP	8/15/2018	249,417.60	245,299.20	1.45%
BOEING CO	5/15/2018	106,835.30	109,505.00	1.28%
BRANCH BANKING AND TRUST CO	10/1/2017	499,240.00	499,525.00	1.48%
BRANCH BANKING AND TRUST CO	10/1/2017	999,380.00	999,050.00	1.48%
BRANCH BANKING AND TRUST CO	10/1/2017	719,553.60	719,316.00	1.48%
BRANCH BANKING AND TRUST CO	5/10/2019	1,683,466.65	1,666,245.95	1.93%
BRANCH BANKING AND TRUST CO	5/10/2019	1,258,853.40	1,245,976.20	1.93%
BRANCH BANKING AND TRUST CO	4/1/2021	308,532.00	304,593.00	2.46%
CARGILL INC	3/1/2017	233,410.90	230,317.40	1.08%
CARGILL INC	11/27/2017	115,382.00	104,078.00	1.46%
CARGILL INC	11/27/2017	103,601.70	93,670.20	1.46%
CATERPILLAR FINANCIAL SERVICES CORP	3/3/2017	249,852.50	249,942.50	1.13%
CATERPILLAR FINANCIAL SERVICES CORP	3/24/2017	91,200.60	90,146.70	1.04%
CATERPILLAR FINANCIAL SERVICES CORP	8/18/2017	999,800.00	1,000,320.00	1.20%
CATERPILLAR FINANCIAL SERVICES CORP	8/18/2017	300,357.00	300,096.00	1.20%
CATERPILLAR FINANCIAL SERVICES CORP	8/18/2017	499,750.00	500,160.00	1.20%
CATERPILLAR FINANCIAL SERVICES CORP	2/23/2018	130,566.80	129,951.90	1.53%
CATERPILLAR FINANCIAL SERVICES CORP	2/23/2018	309,928.70	309,885.30	1.53%
CATERPILLAR FINANCIAL SERVICES CORP	5/18/2019	149,916.00	147,925.50	1.95%
CATERPILLAR FINANCIAL SERVICES CORP	5/18/2019	509,500.20	502,946.70	1.95%
CATERPILLAR FINANCIAL SERVICES CORP	5/18/2019	1,099,384.00	1,084,787.00	1.95%
CATERPILLAR FINANCIAL SERVICES CORP	6/9/2019	206,011.44	204,742.56	1.95%
CATERPILLAR FINANCIAL SERVICES CORPORATION	9/1/2017	59,999.00	51,461.00	1.44%
CATERPILLAR FINANCIAL SERVICES CORPORATION	2/15/2019	109,321.25	105,178.30	1.98%
CATERPILLAR INC	6/26/2017	91,785.60	90,116.10	1.23%
CHARLES SCHWAB CORP	3/10/2018	699,118.00	700,168.00	1.48%
CHARLES SCHWAB CORP	7/25/2018	223,781.80	221,656.60	1.68%

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CHARLES SCHWAB CORP	7/22/2020	156,330.30	154,997.75	2.42%
CHEVRON CORP	11/9/2017	2,000,000.00	1,998,900.00	1.41%
CHEVRON CORP	11/9/2017	970,000.00	969,466.50	1.41%
CHEVRON CORP	11/15/2017	1,260,000.00	1,261,499.40	1.21%
CHEVRON CORP	12/5/2017	150,018.00	149,661.00	1.35%
CHEVRON CORP	12/5/2017	49,928.50	49,887.00	1.35%
CHEVRON CORP	3/2/2018	65,000.00	64,936.30	1.45%
CHEVRON CORP	3/2/2018	140,417.20	139,862.80	1.45%
CHEVRON CORP	3/2/2018	93,769.70	93,907.88	1.45%
CHEVRON CORP	3/2/2018	2,000,000.00	1,998,040.00	1.45%
CHEVRON CORP	3/2/2018	600,000.00	599,412.00	1.45%
CHEVRON CORP	6/24/2018	120,578.40	120,367.20	1.50%
CHEVRON CORP	6/24/2018	20,223.40	20,061.20	1.50%
CHEVRON CORP	6/24/2018	54,750.85	55,168.30	1.50%
CHEVRON CORP	11/16/2018	225,000.00	225,855.00	1.58%
CHEVRON CORP	11/16/2018	450,000.00	451,710.00	1.58%
CHEVRON CORP	3/3/2019	55,220.00	53,428.50	1.72%
CHEVRON CORP	5/16/2019	300,000.00	298,767.00	1.74%
CHEVRON CORP	5/16/2019	1,280,000.00	1,274,739.20	1.74%
CHEVRON CORP	11/15/2019	1,556,873.60	1,600,704.00	1.40%
CHEVRON CORP	11/15/2019	1,241,982.00	1,260,554.40	1.40%
CHEVRON CORP	11/15/2019	216,609.80	220,096.80	1.40%
CHUBB INA HOLDINGS INC	2/15/2017	24,723.82	22,109.12	1.69%
CHUBB INA HOLDINGS INC	3/15/2018	60,709.50	52,513.00	1.58%
CHUBB INA HOLDINGS INC	5/15/2018	75,062.00	68,592.55	1.67%
CHUBB INA HOLDINGS INC	5/15/2018	115,653.00	105,527.00	1.67%
CHUBB INA HOLDINGS INC	5/15/2018	97,289.30	89,697.95	1.67%
CHUBB INA HOLDINGS INC	5/15/2018	114,226.00	105,527.00	1.67%
CHUBB INA HOLDINGS INC	5/15/2018	174,229.50	158,290.50	1.67%
CHUBB INA HOLDINGS INC	5/15/2018	59,137.10	58,039.85	1.67%
CHUBB INA HOLDINGS INC	6/15/2019	145,097.50	136,800.00	1.95%
CHUBB INA HOLDINGS INC	11/3/2020	349,804.00	349,919.50	2.31%
CISCO SYSTEMS INC	3/14/2017	60,349.30	55,243.10	0.99%
CISCO SYSTEMS INC	3/14/2017	113,729.40	108,477.36	0.99%
CISCO SYSTEMS INC	6/15/2018	779,867.40	782,355.60	1.44%
CISCO SYSTEMS INC	2/28/2019	241,929.82	241,448.24	1.71%
CISCO SYSTEMS INC	2/28/2019	409,881.10	409,065.20	1.71%
CISCO SYSTEMS INC	3/1/2019	205,622.00	202,636.00	1.50%
CISCO SYSTEMS INC	3/1/2019	200,782.00	202,636.00	1.50%
CISCO SYSTEMS INC	9/20/2019	3,496,115.00	3,461,850.00	1.81%
CISCO SYSTEMS INC	9/20/2019	669,256.30	662,697.00	1.81%
COCA-COLA CO	10/27/2017	1,664,267.40	1,661,853.15	1.11%
COCA-COLA CO	10/27/2017	199,912.00	199,622.00	1.11%
COCA-COLA CO	3/14/2018	115,456.55	115,391.00	1.36%
COCA-COLA CO	5/30/2019	199,860.00	198,672.00	1.66%
COCA-COLA CO	5/30/2019	1,528,929.00	1,519,840.80	1.66%
COCA-COLA CO	10/27/2020	1,457,430.40	1,447,590.00	2.11%
COMCAST CORP	11/15/2017	159,987.00	156,214.50	1.51%
COMERICA INC	5/23/2019	150,358.50	149,781.00	2.19%
COMERICA INC	5/23/2019	90,507.60	89,868.60	2.19%
COMERICA INC	5/23/2019	59,793.00	59,912.40	2.19%
COMMONWEALTH BANK OF AUSTRALIA	9/18/2017	506,915.00	502,305.00	1.25%
COMMONWEALTH EDISON CO	3/15/2018	129,414.10	120,762.65	1.59%
COMMONWEALTH EDISON CO	1/15/2019	70,711.20	70,252.00	1.96%
COMMONWEALTH EDISON CO	1/15/2019	130,860.60	130,468.00	1.96%
CONSOLIDATED EDISON COMPANY OF NEW YORK IN	4/1/2018	49,707.00	47,358.45	1.61%
CONSUMERS ENERGY CO	9/15/2018	113,008.00	106,516.00	1.76%
CONSUMERS ENERGY CO	3/15/2019	53,084.70	49,076.10	1.91%
CONSUMERS ENERGY CO	3/15/2019	76,363.95	70,887.70	1.91%
COOPERATIEVE RABOBANK UA	1/19/2017	527,390.00	500,455.00	1.62%
COOPERATIEVE RABOBANK UA	1/19/2017	695,038.50	650,591.50	1.62%

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COOPERATIEVE RABOBANK UA	1/19/2017	1,171,049.00	1,101,001.00	1.62%
DAIMLER FINANCE NORTH AMERICA LLC	4/10/2017	152,268.00	150,469.50	1.26%
DAIMLER FINANCE NORTH AMERICA LLC	8/1/2017	149,482.50	150,003.00	1.37%
DAIMLER FINANCE NORTH AMERICA LLC	8/1/2017	996,550.00	1,000,020.00	1.37%
DAIMLER FINANCE NORTH AMERICA LLC	1/11/2018	150,100.50	150,205.50	1.74%
DAIMLER FINANCE NORTH AMERICA LLC	5/18/2018	1,498,080.00	1,497,225.00	1.79%
DAIMLER FINANCE NORTH AMERICA LLC	8/3/2018	151,626.00	150,207.00	1.91%
DAIMLER FINANCE NORTH AMERICA LLC	8/3/2018	149,940.00	150,207.00	1.91%
DAIMLER FINANCE NORTH AMERICA LLC	7/5/2019	299,553.00	295,164.00	2.16%
DANAHER CORP	9/15/2018	151,149.00	150,201.00	1.57%
DANAHER CORP	9/15/2018	739,008.40	740,991.60	1.57%
DANAHER CORP	9/15/2018	758,981.60	761,018.40	1.57%
DTE ELECTRIC CO	6/15/2018	166,586.15	153,179.45	1.67%
DTE ELECTRIC CO	6/15/2018	111,195.00	105,641.00	1.67%
DTE ELECTRIC CO	6/1/2021	110,142.00	105,842.00	2.42%
DUKE ENERGY CAROLINAS LLC	1/15/2018	78,292.90	72,631.30	1.60%
DUKE ENERGY CAROLINAS LLC	6/15/2020	88,351.20	85,518.40	2.22%
DUKE ENERGY CAROLINAS LLC	6/15/2020	142,814.10	138,967.40	2.22%
DUKE ENERGY CAROLINAS LLC	6/15/2021	82,725.75	79,608.00	2.36%
DUKE ENERGY FLORIDA LLC	6/15/2018	87,237.60	84,575.20	1.66%
DUKE ENERGY FLORIDA LLC	6/15/2018	125,594.70	116,290.90	1.66%
ELI LILLY AND CO	3/1/2018	399,648.00	400,096.00	1.23%
EMERSON ELECTRIC CO	4/15/2019	88,555.20	85,562.40	1.88%
EMERSON ELECTRIC CO	10/15/2019	224,096.00	215,768.00	1.96%
ENTERGY LOUISIANA LLC	9/1/2018	282,555.00	268,745.00	1.91%
EXXON MOBIL CORP	3/1/2018	1,275,000.00	1,276,530.00	1.33%
EXXON MOBIL CORP	3/1/2018	360,000.00	360,432.00	1.33%
EXXON MOBIL CORP	3/6/2018	1,360,000.00	1,359,673.60	1.33%
EXXON MOBIL CORP	3/6/2018	2,065,000.00	2,064,504.40	1.33%
EXXON MOBIL CORP	3/1/2019	690,000.00	691,490.40	1.61%
EXXON MOBIL CORP	3/1/2019	340,000.00	340,734.40	1.61%
EXXON MOBIL CORP	3/15/2019	333,283.50	330,541.20	1.74%
FIFTH THIRD BANK	8/20/2018	899,847.00	905,688.00	1.74%
FIFTH THIRD BANK	4/25/2019	401,592.00	403,008.00	2.03%
FIFTH THIRD BANK (OHIO)	3/15/2019	389,910.30	392,632.50	1.97%
FIFTH THIRD BANK (OHIO)	9/27/2019	2,760,410.10	2,731,930.60	2.08%
FIFTH THIRD BANK (OHIO)	9/27/2019	643,929.30	637,285.80	2.08%
FLORIDA POWER & LIGHT CO	11/1/2017	229,360.40	196,669.00	1.31%
FLORIDA POWER & LIGHT CO	11/1/2017	251,570.40	248,424.00	1.31%
GENERAL DYNAMICS CORP	11/15/2017	112,245.75	114,795.30	1.20%
GENERAL DYNAMICS CORP	11/15/2017	59,721.00	59,893.20	1.20%
GENERAL DYNAMICS CORP	11/15/2017	79,261.60	79,857.60	1.20%
GENERAL DYNAMICS CORP	11/15/2017	148,566.00	149,733.00	1.20%
GENERAL ELECTRIC CAPITAL CORP	1/9/2017	1,233,132.00	1,200,420.00	1.48%
GENERAL ELECTRIC CAPITAL CORP	5/15/2017	929,860.50	929,721.00	1.33%
GENERAL ELECTRIC CAPITAL CORP	5/15/2017	439,934.00	439,868.00	1.33%
GENERAL ELECTRIC CO	9/15/2017	35,978.25	34,014.75	1.25%
GENERAL ELECTRIC CO	9/15/2017	577,628.16	527,744.00	1.25%
GENERAL ELECTRIC CO	1/7/2021	191,399.60	184,587.70	2.37%
GENERAL ELECTRIC COMPANY	12/6/2017	427,260.00	414,376.00	1.36%
GENERAL ELECTRIC CORP	2/15/2017	730,951.00	653,165.50	1.47%
GEORGIA POWER CO	6/1/2017	113,686.00	101,814.00	1.34%
GEORGIA POWER CO	6/1/2017	60,218.50	50,907.00	1.34%
GILEAD SCIENCES INC	9/4/2018	60,303.60	60,226.80	1.62%
GILEAD SCIENCES INC	9/4/2018	1,159,872.40	1,164,384.80	1.62%
GILEAD SCIENCES INC	9/1/2020	159,712.00	161,686.40	2.25%
GLAXOSMITHKLINE CAPITAL INC	5/15/2018	130,635.40	121,211.15	1.66%
GOLDMAN SACHS & CO	6/15/2020	340,500.00	332,682.00	2.68%
GOLDMAN SACHS GROUP INC	1/18/2018	91,544.00	83,339.20	1.91%
GOLDMAN SACHS GROUP INC	1/18/2018	136,581.60	125,008.80	1.91%
GOLDMAN SACHS GROUP INC	1/22/2018	714,961.28	708,188.80	1.81%

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GOLDMAN SACHS GROUP INC	1/31/2019	1,531,635.00	1,516,125.00	2.09%
GOLDMAN SACHS GROUP INC	2/15/2019	127,453.20	116,400.90	2.24%
GOLDMAN SACHS GROUP INC	2/15/2019	179,527.50	166,287.00	2.24%
GOLDMAN SACHS GROUP INC	2/15/2019	153,973.30	144,115.40	2.24%
GOLDMAN SACHS GROUP INC	10/23/2019	305,556.00	302,202.00	2.28%
GOLDMAN SACHS GROUP INC	12/13/2019	2,947,787.50	2,946,666.50	2.34%
GOLDMAN SACHS GROUP INC	3/15/2020	238,252.62	232,187.86	2.60%
GOLDMAN SACHS GROUP INC	3/15/2020	223,358.00	216,998.00	2.60%
GOLDMAN SACHS GROUP INC	3/15/2020	244,803.91	239,782.79	2.60%
GOLDMAN SACHS GROUP INC	3/15/2020	167,311.50	162,748.50	2.60%
GOLDMAN SACHS GROUP INC	9/15/2020	57,194.37	57,246.24	2.62%
GOLDMAN SACHS GROUP INC	2/25/2021	133,396.90	130,600.60	2.75%
GOLDMAN SACHS GROUP INC	4/25/2021	200,522.00	198,548.00	2.80%
GUARDIAN LIFE GLOBAL FUNDING	10/27/2021	160,658.85	160,340.40	2.58%
HERSHEY CO	8/21/2018	2,689,300.60	2,702,508.50	1.31%
HOME DEPOT INC	6/15/2019	221,093.40	221,916.20	1.62%
HOME DEPOT INC	6/15/2019	128,987.30	131,132.30	1.62%
HOME DEPOT INC	6/15/2019	100,283.00	100,871.00	1.62%
HONEYWELL INTERNATIONAL INC	10/30/2019	339,731.40	336,855.00	1.74%
HONEYWELL INTERNATIONAL INC	10/30/2019	1,074,150.75	1,065,056.25	1.74%
HONEYWELL INTERNATIONAL INC	3/1/2021	164,493.00	162,207.00	2.20%
HSBC USA INC	3/5/2018	499,535.00	499,720.00	1.75%
HSBC USA INC (NEW)	1/16/2018	228,817.80	229,597.50	1.79%
HSBC USA INC (NEW)	6/23/2019	201,642.00	200,108.00	2.23%
ILLINOIS TOOL WORKS INC	2/25/2017	142,801.23	142,955.67	1.10%
ILLINOIS TOOL WORKS INC	3/1/2019	59,965.20	60,309.60	1.71%
ILLINOIS TOOL WORKS INC	3/1/2019	84,775.60	85,438.60	1.71%
INTEL CORP	5/19/2021	1,327,659.20	1,298,878.00	2.26%
INTEL CORP	10/1/2021	303,710.25	296,163.45	2.42%
INTERNATIONAL BUSINESS MACHINES CORP	5/17/2019	202,942.00	200,086.00	1.78%
JACKSON NATIONAL LIFE GLOBAL FUNDING	6/1/2018	143,212.05	140,292.00	1.89%
JACKSON NATIONAL LIFE GLOBAL FUNDING	10/15/2018	71,962.56	72,149.04	1.76%
JACKSON NATIONAL LIFE GLOBAL FUNDING	10/15/2018	151,656.00	150,310.50	1.76%
JACKSON NATIONAL LIFE GLOBAL FUNDING	10/15/2018	399,544.00	400,828.00	1.76%
JACKSON NATIONAL LIFE GLOBAL FUNDING	4/16/2019	150,181.50	150,615.00	2.12%
JACKSON NATIONAL LIFE GLOBAL FUNDING	12/9/2020	153,591.00	150,501.00	2.51%
JOHN DEERE CAPITAL CORP	3/15/2017	202,634.00	200,198.00	0.92%
JOHN DEERE CAPITAL CORP	12/15/2017	56,986.32	57,144.78	1.28%
JOHN DEERE CAPITAL CORP	12/15/2017	110,532.40	110,279.40	1.28%
JOHN DEERE CAPITAL CORP	1/16/2018	999,500.00	998,780.00	1.47%
JOHN DEERE CAPITAL CORP	7/13/2018	36,985.94	36,987.79	1.62%
JOHN DEERE CAPITAL CORP	7/13/2018	329,874.60	329,891.10	1.62%
JOHN DEERE CAPITAL CORP	8/10/2018	129,872.60	130,244.40	1.63%
JOHN DEERE CAPITAL CORP	1/8/2019	999,940.00	1,004,210.00	1.74%
JOHN DEERE CAPITAL CORP	10/9/2019	1,347,273.00	1,325,943.00	1.91%
JOHN DEERE CAPITAL CORP	3/10/2020	152,674.50	149,553.00	2.15%
JOHN DEERE CAPITAL CORP	1/8/2021	2,197,734.00	2,209,196.00	2.44%
JOHNSON & JOHNSON	12/5/2018	181,539.00	180,990.00	1.36%
JOHNSON & JOHNSON	3/1/2019	180,978.28	179,546.57	1.50%
JPMORGAN CHASE & CO	3/22/2019	1,499,040.00	1,495,260.00	2.00%
JPMORGAN CHASE & CO	4/23/2019	213,573.30	207,620.60	2.17%
JPMORGAN CHASE & CO	4/23/2019	149,613.03	145,334.42	2.17%
JPMORGAN CHASE & CO	4/23/2019	30,377.16	29,503.98	2.17%
JPMORGAN CHASE & CO	3/25/2020	854,191.80	829,644.20	2.44%
JPMORGAN CHASE BANK NA	9/21/2018	894,579.35	891,079.90	1.71%
KANSAS CITY POWER & LIGHT CO	4/1/2019	149,085.30	143,859.30	2.27%
KANSAS CITY POWER & LIGHT CO	4/1/2019	110,838.40	105,127.95	2.27%
KENTUCKY UTILITIES CO	11/1/2020	135,487.30	134,270.50	2.29%
KEYBANK NA	12/15/2019	616,470.00	606,252.00	2.13%
KIMBERLY-CLARK CORP	8/1/2017	109,043.10	92,596.50	1.17%
KIMBERLY-CLARK CORP	2/15/2019	199,988.00	198,856.00	1.67%

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LOWES CO INC	4/15/2020	231,233.10	225,052.80	1.97%
LOWE'S COMPANIES INC	4/15/2019	1,198,704.00	1,185,144.00	1.70%
LOWE'S COMPANIES INC	4/15/2019	679,265.60	671,581.60	1.70%
MANUFACTURERS AND TRADERS TRUST CO	1/30/2017	1,207,452.00	1,200,000.00	1.24%
MANUFACTURERS AND TRADERS TRUST CO	7/25/2017	2,499,050.00	2,501,325.00	1.29%
MANUFACTURERS AND TRADERS TRUST CO	7/25/2017	729,722.60	730,386.90	1.29%
MANUFACTURERS AND TRADERS TRUST CO	3/7/2018	250,897.50	249,665.00	1.56%
MANUFACTURERS AND TRADERS TRUST CO	1/30/2019	254,050.00	251,845.00	1.92%
MANUFACTURERS AND TRADERS TRUST CO	7/25/2019	999,860.00	1,007,960.00	1.92%
MARSH & MCLENNAN COMPANIES INC	9/10/2019	150,562.50	150,843.00	2.13%
MASSMUTUAL GLOBAL FUNDING II	4/9/2019	252,877.50	252,317.50	1.93%
MCDONALDS CORPORATION	3/15/2017	124,088.80	110,925.10	1.23%
MCDONALDS CORPORATION	10/15/2017	62,875.45	56,878.25	1.44%
MCDONALDS CORPORATION	10/15/2017	58,561.50	51,707.50	1.44%
MCDONALDS CORPORATION	10/15/2017	41,471.85	36,195.25	1.44%
MEDTRONIC INC	4/1/2018	120,416.40	119,794.80	1.51%
MEDTRONIC INC	3/15/2020	103,828.00	101,119.00	2.14%
MEDTRONIC INC	3/15/2020	202,964.00	202,238.00	2.14%
METROPOLITAN LIFE GLOBAL FUNDING I	4/10/2017	728,992.60	730,408.80	1.09%
METROPOLITAN LIFE GLOBAL FUNDING I	1/10/2018	246,922.50	250,040.00	1.48%
METROPOLITAN LIFE GLOBAL FUNDING I	4/10/2019	305,529.00	301,656.00	2.05%
METROPOLITAN LIFE GLOBAL FUNDING I	4/10/2019	307,266.00	301,656.00	2.05%
METROPOLITAN LIFE GLOBAL FUNDING I	4/10/2019	204,266.00	201,104.00	2.05%
MICROSOFT CORP	11/3/2018	169,830.00	169,864.00	1.34%
MICROSOFT CORP	11/3/2018	1,728,270.00	1,728,616.00	1.34%
MICROSOFT CORP	11/3/2018	1,438,560.00	1,438,848.00	1.34%
MICROSOFT CORP	6/1/2019	250,401.00	244,402.60	1.55%
MICROSOFT CORP	8/8/2019	2,082,852.45	2,056,956.75	1.63%
MICROSOFT CORP	8/8/2021	496,320.00	484,955.00	2.24%
MORGAN STANLEY	12/28/2017	174,928.50	156,124.50	1.79%
MORGAN STANLEY	1/5/2018	100,554.00	100,149.00	1.73%
MORGAN STANLEY	1/24/2019	2,291,400.00	2,273,647.50	1.98%
MORGAN STANLEY	5/13/2019	475,808.00	445,712.00	2.31%
MORGAN STANLEY	9/23/2019	227,906.00	216,792.00	2.43%
MORGAN STANLEY	6/16/2020	1,206,948.00	1,209,816.00	2.55%
MUFG UNION BANK NA	5/6/2019	301,041.00	300,471.00	2.18%
NATIONAL RURAL UTILITIES COOP FINANCE CORP	1/27/2017	999,410.00	999,980.00	1.12%
NATIONAL RURAL UTILITIES COOP FINANCE CORP	4/10/2017	101,504.45	85,962.20	1.34%
NATIONAL RURAL UTILITIES COOP FINANCE CORP	4/10/2017	56,796.50	50,566.00	1.34%
NATIONAL RURAL UTILITIES COOP FINANCE CORP	4/10/2017	72,342.40	65,735.80	1.34%
NATIONAL RURAL UTILITIES COOP FINANCE CORP	2/1/2018	85,738.40	83,434.40	1.45%
NATIONAL RURAL UTILITIES COOPERATIVE FINANCE	11/15/2019	86,163.65	85,600.10	2.04%
NATIONAL SEMICONDUCTOR CORP	6/15/2017	99,349.60	81,988.00	1.15%
NEVADA POWER CO	8/1/2018	190,207.50	188,175.75	1.67%
NEVADA POWER CO	3/15/2019	176,717.52	163,430.19	1.93%
NEW YORK LIFE GLOBAL FUNDING	11/2/2018	154,440.45	154,556.70	1.71%
NEW YORK LIFE GLOBAL FUNDING	11/2/2018	548,421.50	548,427.00	1.71%
NEW YORK LIFE GLOBAL FUNDING	6/18/2019	130,079.30	130,673.40	1.93%
NEW YORK LIFE GLOBAL FUNDING	10/24/2019	498,055.00	493,300.00	1.99%
NEW YORK LIFE GLOBAL FUNDING	4/13/2021	679,000.40	667,617.20	2.45%
NEW YORK UNIVERSITY	7/1/2018	640,000.00	636,704.00	1.66%
NIAGARA MOHAWK POWER CORP	8/15/2019	187,846.60	181,415.50	2.23%
NIAGARA MOHAWK POWER CORP	8/15/2019	147,260.70	144,065.25	2.23%
NISSAN MOTOR ACCEPTANCE CORP	3/4/2019	312,266.10	311,553.10	2.11%
NORTHERN STATES POWER CO	8/15/2020	111,634.60	110,169.40	2.15%
NORTHERN STATES POWER CO (MINNESOTA)	3/1/2018	136,449.60	125,378.40	1.37%
NORTHERN TRUST COMPANY	8/15/2018	278,245.00	268,485.00	1.86%
NORTHERN TRUST CORP	11/4/2020	214,712.00	208,824.00	2.25%
NSTAR ELECTRIC CO	11/15/2017	112,617.00	103,440.00	1.65%
NSTAR ELECTRIC CO	11/15/2017	115,107.00	103,440.00	1.65%
OCCIDENTAL PETROLEUM CORP	2/15/2018	64,899.90	65,059.15	1.41%

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ORACLE CORP	10/15/2017	996,840.00	1,000,240.00	1.17%
ORACLE CORP	4/15/2018	116,766.00	105,646.00	1.33%
ORACLE CORP	1/15/2019	152,989.50	152,008.50	1.70%
ORACLE CORP	7/8/2019	141,520.00	134,802.50	1.81%
ORACLE CORP	9/15/2021	654,443.13	638,105.07	2.41%
PACCAR FINANCIAL CORP	3/15/2017	101,324.00	100,119.00	1.02%
PACCAR FINANCIAL CORP	11/17/2017	79,964.80	80,145.60	1.19%
PACCAR FINANCIAL CORP	11/17/2017	2,224,021.00	2,229,049.50	1.19%
PACCAR FINANCIAL CORP	11/17/2017	1,199,472.00	1,202,184.00	1.19%
PACCAR FINANCIAL CORP	3/9/2018	177,860.22	176,934.51	1.48%
PACCAR FINANCIAL CORP	5/18/2018	78,895.72	78,913.10	1.48%
PACCAR FINANCIAL CORP	2/25/2019	109,846.00	109,620.50	1.81%
PACCAR FINANCIAL CORP	2/25/2019	938,684.00	936,757.00	1.81%
PACCAR FINANCIAL CORP	5/10/2019	71,957.52	71,146.80	1.81%
PACCAR FINANCIAL CORP	5/10/2019	634,625.35	627,475.25	1.81%
PACCAR FINANCIAL CORP	5/10/2019	799,528.00	790,520.00	1.81%
PACCAR INC	8/14/2018	50,102.50	50,212.50	1.48%
PACCAR INC	8/14/2018	152,082.00	150,637.50	1.48%
PACCAR INC	8/14/2018	799,392.00	803,400.00	1.48%
PACIFIC GAS AND ELECTRIC CO	11/30/2017	103,338.00	93,339.00	1.53%
PACIFICORP	7/15/2018	136,090.80	127,225.20	1.68%
PEPSICO INC	7/17/2017	1,399,552.00	1,399,692.00	1.17%
PEPSICO INC	8/13/2017	496,215.00	500,190.00	1.19%
PEPSICO INC	4/30/2018	249,970.00	249,685.00	1.35%
PEPSICO INC	4/30/2018	2,099,748.00	2,097,354.00	1.35%
PEPSICO INC	1/7/2019	237,400.02	236,779.92	1.62%
PEPSICO INC	2/22/2019	87,974.48	87,692.00	1.67%
PEPSICO INC	2/22/2019	1,999,420.00	1,993,000.00	1.67%
PEPSICO INC	10/4/2019	329,950.50	327,492.00	1.63%
PEPSICO INC	10/14/2020	102,872.00	100,177.00	2.10%
PFIZER INC	1/15/2017	129,792.09	129,998.70	0.92%
PFIZER INC	6/1/2018	3,497,445.00	3,490,830.00	1.39%
PFIZER INC	6/3/2019	1,518,267.20	1,510,743.20	1.71%
PFIZER INC	11/15/2019	499,640.00	499,530.00	1.73%
PHILIP MORRIS INTERNATIONAL INC	8/11/2017	1,196,976.00	1,200,804.00	1.14%
PHILIP MORRIS INTERNATIONAL INC	11/9/2017	1,610,510.30	1,613,465.75	1.36%
PHILIP MORRIS INTERNATIONAL INC	1/15/2019	1,524,585.00	1,500,180.00	1.87%
PNC BANK NA	1/27/2017	469,309.10	470,032.90	1.03%
PNC BANK NA	10/18/2017	1,999,620.00	2,001,020.00	1.43%
PNC BANK NA	7/20/2018	1,649,802.00	1,652,871.00	1.73%
PNC BANK NA	11/5/2018	704,914.00	701,274.00	1.69%
PNC BANK NA	12/7/2018	1,498,770.00	1,497,285.00	1.80%
PNC BANK NA	7/29/2019	1,338,124.00	1,321,776.00	1.99%
PNC BANK, N.A.	9/21/2017	346,098.55	343,013.20	1.54%
PNC BANK, N.A.	9/21/2017	673,238.70	624,591.20	1.54%
PNC FUNDING CORP	6/10/2019	135,483.80	127,591.35	2.08%
PNC FUNDING CORP	2/8/2020	445,592.00	432,784.00	2.37%
PNC FUNDING CORP	8/11/2020	126,810.50	122,458.90	2.49%
PPG INDUSTRIES INC	11/15/2019	120,273.60	120,584.40	2.12%
PPG INDUSTRIES INC	11/15/2019	60,448.80	60,292.20	2.12%
PPG INDUSTRIES INC	11/15/2019	101,520.00	100,487.00	2.12%
PRAXAIR INC	11/7/2017	39,737.20	39,942.00	1.22%
PRAXAIR INC	11/7/2017	109,486.30	109,840.50	1.22%
PRAXAIR INC	11/7/2017	140,847.00	139,797.00	1.22%
PRAXAIR INC	11/7/2018	89,084.70	89,589.60	1.50%
PRAXAIR INC	11/7/2018	58,611.60	59,726.40	1.50%
PRAXAIR INC	11/7/2018	97,590.00	99,544.00	1.50%
PRAXAIR INC	8/15/2019	55,353.50	53,297.00	1.91%
PRAXAIR INC	8/15/2019	164,019.00	159,891.00	1.91%
PRICOA GLOBAL FUNDING I	8/18/2017	300,324.00	300,156.00	1.27%
PRICOA GLOBAL FUNDING I	11/24/2020	531,398.40	520,104.00	2.54%

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PRICOA GLOBAL FUNDING I	11/24/2020	154,051.50	150,030.00	2.54%
PRINCIPAL LIFE GLOBAL FUNDING II	2/24/2017	399,792.00	399,980.00	1.15%
PRINCIPAL LIFE GLOBAL FUNDING II	5/19/2017	199,036.00	199,982.00	1.22%
PRINCIPAL LIFE GLOBAL FUNDING II	9/11/2017	79,962.40	80,053.60	1.40%
PRINCIPAL LIFE GLOBAL FUNDING II	10/15/2018	111,270.50	111,093.40	1.68%
PRINCIPAL LIFE GLOBAL FUNDING II	4/18/2019	33,893.92	33,572.62	2.06%
PROCTER & GAMBLE CO	11/15/2018	370,799.20	372,456.80	1.24%
PROCTER & GAMBLE CO	11/1/2019	798,784.00	807,264.00	1.57%
PROTECTIVE LIFE GLOBAL FUNDING	9/13/2019	298,000.00	293,449.54	2.14%
PUBLIC SERVICE CO OF COLORADO	6/1/2019	111,292.00	107,782.00	1.82%
PUBLIC SERVICE CO OF COLORADO	11/15/2020	212,790.00	206,486.00	2.20%
PUBLIC SERVICE COMPANY OF COLORADO	8/1/2018	57,056.00	53,150.00	1.75%
PUBLIC SERVICE ELECTRIC AND GAS CO	6/1/2019	175,586.25	174,805.75	1.85%
PUBLIC SERVICE ELECTRIC AND GAS CO	8/15/2019	114,530.80	115,713.00	1.75%
PUBLIC SERVICE ELECTRIC AND GAS CO	8/15/2019	35,218.40	35,217.00	1.75%
PUBLIC SERVICE ELECTRIC AND GAS CO	8/15/2019	151,134.00	150,930.00	1.75%
PUBLIC SERVICE ELECTRIC AND GAS CO	8/15/2019	86,203.60	85,527.00	1.75%
QUALCOMM INC	5/18/2018	496,245.00	499,930.00	1.41%
QUALCOMM INC	5/18/2018	913,773.90	914,871.90	1.41%
QUALCOMM INC	5/20/2020	743,220.00	750,052.50	2.25%
RAYTHEON CO	2/15/2020	132,494.40	128,094.00	2.16%
RAYTHEON CO	10/15/2020	170,092.80	165,182.40	2.23%
ROCHE HOLDINGS INC	9/29/2017	201,140.00	200,348.00	1.11%
SCHLUMBERGER HOLDINGS CORP	12/21/2020	313,080.00	306,345.00	2.43%
SIMON PROPERTY GROUP LP	9/15/2017	41,560.00	40,171.60	1.21%
SIMON PROPERTY GROUP LP	9/15/2017	77,601.00	75,321.75	1.21%
SIMON PROPERTY GROUP LP	2/1/2018	50,208.00	49,977.00	1.54%
SIMON PROPERTY GROUP LP	2/1/2018	78,793.60	79,963.20	1.54%
SIMON PROPERTY GROUP LP	2/1/2018	85,119.00	84,960.90	1.54%
SIMON PROPERTY GROUP LP	2/1/2018	160,246.40	159,926.40	1.54%
SOUTHERN CALIFORNIA EDISON CO	5/1/2017	57,981.44	58,007.54	1.08%
SOUTHERN CALIFORNIA EDISON CO	5/1/2017	62,086.80	62,008.06	1.08%
SOUTHERN CALIFORNIA EDISON CO	5/1/2017	249,920.00	250,032.50	1.08%
SOUTHERN CALIFORNIA EDISON CO	5/1/2017	899,712.00	900,117.00	1.08%
SOUTHERN CALIFORNIA EDISON CO	8/15/2018	114,483.00	106,255.00	1.58%
SOUTHERN CALIFORNIA EDISON CO	8/15/2018	50,859.90	47,814.75	1.58%
SOUTHERN CALIFORNIA EDISON CO	6/1/2021	154,280.00	148,170.40	2.40%
SOUTHERN CALIFORNIA GAS CO	6/15/2018	49,845.50	50,037.50	1.50%
SOUTHERN CALIFORNIA GAS CO	6/15/2018	249,992.50	250,187.50	1.50%
STATE STREET CORP	4/30/2017	94,543.20	81,064.00	1.35%
STATE STREET CORP	5/15/2018	139,818.00	139,615.00	1.55%
STATE STREET CORP	5/15/2018	98,574.00	99,725.00	1.55%
STATE STREET CORP	5/19/2021	302,436.00	293,976.00	2.44%
TARGET CORP	6/26/2019	251,967.50	254,030.00	1.64%
TD AMERITRADE HOLDING CORP	12/1/2019	243,194.60	241,687.60	2.10%
TEXAS INSTRUMENTS INC	3/12/2017	25,017.50	24,996.75	0.94%
TEXAS INSTRUMENTS INC	3/12/2017	1,247,525.00	1,249,837.50	0.94%
TEXAS INSTRUMENTS INC	3/12/2017	698,614.00	699,909.00	0.94%
TEXAS INSTRUMENTS INC	5/1/2018	414,933.60	413,070.25	1.35%
TORONTO-DOMINION BANK	3/13/2018	1,359,959.20	1,361,414.40	1.54%
TOYOTA MOTOR CREDIT CORP	5/22/2017	203,278.00	200,450.00	1.17%
TOYOTA MOTOR CREDIT CORP	1/12/2018	100,194.00	100,029.00	1.42%
TOYOTA MOTOR CREDIT CORP	1/12/2018	539,260.20	540,156.60	1.42%
TOYOTA MOTOR CREDIT CORP	10/24/2018	141,297.80	140,828.80	1.67%
TOYOTA MOTOR CREDIT CORP	1/17/2019	100,792.00	100,549.00	1.83%
TOYOTA MOTOR CREDIT CORP	1/17/2019	125,822.80	124,680.76	1.83%
TOYOTA MOTOR CREDIT CORP	1/17/2019	60,504.60	60,329.40	1.83%
TOYOTA MOTOR CREDIT CORP	7/18/2019	81,196.80	80,347.20	1.95%
TOYOTA MOTOR CREDIT CORPORATION	1/10/2018	75,335.25	74,905.50	1.50%
TRAVELERS CO INC	12/15/2017	119,868.00	104,181.00	1.34%
TRAVELERS CO INC	11/1/2020	81,245.25	79,428.00	2.28%

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TRAVELERS CO INC	11/1/2020	98,562.60	95,313.60	2.28%
U.S. BANCORP	5/15/2017	255,618.40	251,358.93	1.16%
U.S. BANCORP	5/15/2017	538,733.60	529,756.47	1.16%
U.S. BANCORP	4/25/2019	661,498.50	655,551.00	1.81%
UBS AG (STAMFORD BRANCH)	8/14/2017	1,395,492.00	1,399,538.00	1.43%
UBS AG (STAMFORD BRANCH)	3/26/2018	639,161.60	640,441.60	1.74%
UNITED PARCEL SERVICE INC	10/1/2017	85,812.52	85,963.02	1.18%
UNITED PARCEL SERVICE INC	10/1/2017	33,922.14	33,985.38	1.18%
UNITED PARCEL SERVICE INC	10/1/2017	100,119.00	99,957.00	1.18%
UNITED TECHNOLOGIES CORP	6/1/2017	41,239.20	40,104.40	1.17%
UNITED TECHNOLOGIES CORP	11/1/2019	4,994,900.00	4,963,150.00	1.77%
UNITED TECHNOLOGIES CORP	11/1/2019	609,377.80	605,504.30	1.77%
UNITEDHEALTH GROUP INC	7/17/2017	1,999,620.00	2,003,240.00	1.15%
UNITEDHEALTH GROUP INC	7/17/2017	379,927.80	380,615.60	1.15%
UNITEDHEALTH GROUP INC	12/15/2017	639,116.80	640,121.60	1.38%
UNITEDHEALTH GROUP INC	2/15/2018	75,608.65	68,153.15	1.63%
UNITEDHEALTH GROUP INC	7/16/2018	439,441.20	441,953.60	1.61%
UNITEDHEALTH GROUP INC	2/15/2019	289,892.70	289,127.10	1.84%
UNITEDHEALTH GROUP INC	2/15/2019	47,564.00	46,858.53	1.84%
UNITEDHEALTH GROUP INC	3/15/2019	216,119.20	219,155.20	1.80%
US BANK NA	9/11/2017	1,998,880.00	2,001,600.00	1.24%
US BANK NA	9/11/2017	1,319,260.80	1,321,056.00	1.24%
US BANK NA	1/26/2018	599,088.00	598,956.00	1.51%
US BANK NA	1/29/2018	2,997,420.00	2,998,020.00	1.51%
US BANK NA	1/29/2018	949,183.00	949,373.00	1.51%
USAA CAPITAL CORP	8/1/2020	1,005,080.00	1,003,060.00	2.36%
VF CORP	11/1/2017	182,224.35	171,072.00	1.50%
VIRGINIA ELECTRIC AND POWER CO	4/30/2018	121,760.10	110,093.55	1.70%
VIRGINIA ELECTRIC AND POWER CO	6/30/2019	110,509.00	107,302.00	1.99%
VIRGINIA ELECTRIC AND POWER CO	6/30/2019	56,267.00	53,651.00	1.99%
VIRGINIA ELECTRIC AND POWER CO	6/30/2019	78,746.50	75,111.40	1.99%
VISA INC	12/14/2017	1,039,448.80	1,039,854.40	1.21%
VISA INC	12/14/2020	2,497,875.00	2,507,775.00	2.12%
WAL MART STORES INC	4/5/2017	381,519.60	333,616.80	1.19%
WAL MART STORES INC	4/21/2017	249,962.50	250,032.50	0.96%
WAL MART STORES INC	2/1/2019	161,755.50	157,560.00	1.66%
WALT DISNEY CO	2/15/2017	803,760.00	800,088.00	1.03%
WALT DISNEY CO	5/30/2017	74,865.00	74,956.50	1.01%
WALT DISNEY CO	5/30/2017	2,395,680.00	2,398,608.00	1.01%
WALT DISNEY CO	9/17/2018	73,937.10	74,136.16	1.39%
WALT DISNEY CO	9/17/2018	2,143,176.75	2,148,946.80	1.39%
WALT DISNEY CO	1/8/2019	82,888.78	83,079.68	1.60%
WALT DISNEY CO	7/12/2019	149,496.00	146,985.00	1.69%
WALT DISNEY CO	7/12/2019	657,782.40	646,734.00	1.69%
WELLS FARGO & CO	5/8/2017	1,776,420.80	1,764,980.80	1.30%
WELLS FARGO & CO	5/8/2017	719,936.00	701,981.00	1.30%
WELLS FARGO & CO	6/2/2017	2,996,220.00	2,999,220.00	1.21%
WELLS FARGO & CO	4/22/2019	1,527,435.00	1,504,860.00	1.98%
WELLS FARGO & CO	1/30/2020	250,367.50	248,820.00	2.31%
WELLS FARGO & CO	1/30/2020	75,618.00	74,646.00	2.31%
WELLS FARGO & CO	1/30/2020	24,942.75	24,882.00	2.31%
WELLS FARGO & CO	1/30/2020	47,905.92	47,773.44	2.31%
WELLS FARGO & CO	1/30/2020	26,938.17	26,872.56	2.31%
WELLS FARGO & CO	1/30/2020	1,607,810.40	1,602,400.80	2.31%
WELLS FARGO & CO	7/22/2020	153,472.50	150,867.00	2.43%
WELLS FARGO & CO	7/22/2020	178,883.25	176,011.50	2.43%
WELLS FARGO & CO	12/7/2020	300,216.00	300,342.00	2.52%
WELLS FARGO & CO	12/7/2020	256,707.50	250,285.00	2.52%
WELLS FARGO & CO	4/1/2021	312,177.60	300,871.20	2.73%
WELLS FARGO BANK NA	1/22/2018	2,999,130.00	2,999,910.00	1.65%
WELLS FARGO BANK NA	1/22/2018	1,149,666.50	1,149,965.50	1.65%

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WELLS FARGO BANK NA	2/1/2018	38,486.35	36,491.00	1.77%
WISCONSIN ELECTRIC POWER CO	6/15/2018	181,333.80	180,435.60	1.52%
WISCONSIN ELECTRIC POWER CO	6/15/2018	105,225.75	105,254.10	1.52%
WISCONSIN POWER AND LIGHT CO	7/15/2019	190,661.80	181,332.20	2.29%
WISCONSIN PUBLIC SERVICE CORP	12/4/2018	266,730.45	264,727.05	1.70%
WISCONSIN PUBLIC SERVICE CORP	12/4/2018	989,079.30	988,980.30	1.70%
WYETH	4/1/2017	113,403.00	101,031.00	1.34%
XTO ENERGY INC	12/15/2018	121,526.00	109,141.00	1.73%
	SUB-TOTAL	270,466,356.24	268,216,004.76	

VARIABLE RATE NOTES

AMERICAN EXPRESS CREDIT CORP	3/18/2019	540,000.00	541,031.40	1.47%
AMERICAN HONDA FINANCE CORP	7/13/2018	2,200,000.00	2,207,348.00	1.24%
BANK OF NEW YORK MELLON CORP	8/17/2020	600,000.00	608,862.00	1.45%
DUKE ENERGY PROGRESS INC	3/6/2017	1,880,000.00	1,880,470.00	1.01%
EXXON MOBIL CORP	2/28/2018	1,654,773.45	1,660,279.50	1.08%
GOLDMAN SACHS GROUP INC	4/30/2018	254,759.00	252,177.50	1.55%
GOLDMAN SACHS GROUP INC	4/30/2018	1,090,000.00	1,099,493.90	1.55%
HSBC USA INC (NEW)	9/24/2018	820,000.00	821,869.60	1.75%
HSBC USA INC (NEW)	11/13/2019	1,360,000.00	1,355,539.20	1.73%
INTERNATIONAL BUSINESS MACHINES CORP	8/18/2017	900,567.00	902,511.00	1.04%
INTERNATIONAL BUSINESS MACHINES CORP	8/18/2017	2,100,000.00	2,105,859.00	1.04%
INTERNATIONAL BUSINESS MACHINES CORP	2/12/2019	170,000.00	170,742.90	1.17%
JPMORGAN CHASE & CO	1/25/2018	1,500,000.00	1,509,810.00	1.30%
LOWE'S COMPANIES INC	9/14/2018	280,000.00	282,158.80	1.15%
MANUFACTURERS AND TRADERS TRUST CO	1/30/2017	642,009.60	640,153.60	0.98%
MANUFACTURERS AND TRADERS TRUST CO	1/30/2017	702,373.00	700,168.00	0.98%
MERCK & CO INC	2/10/2020	1,380,000.00	1,387,176.00	1.21%
MORGAN STANLEY	1/27/2020	1,330,000.00	1,341,770.50	1.85%
NATIONAL CITY BANK	6/7/2017	1,343,844.00	1,350,553.50	1.31%
PACCAR FINANCIAL CORP	12/6/2018	230,000.00	231,472.00	1.27%
TORONTO-DOMINION BANK	11/5/2019	1,360,000.00	1,361,672.80	1.52%
TOYOTA MOTOR CREDIT CORP	7/13/2018	548,526.00	551,611.50	1.27%
TOYOTA MOTOR CREDIT CORP	7/13/2018	107,692.52	108,316.44	1.27%
TOYOTA MOTOR CREDIT CORP	7/13/2018	2,290,000.00	2,296,709.70	1.27%
UBS AG (STAMFORD BRANCH)	6/1/2020	590,000.00	590,442.50	1.83%
WESTPAC BANKING CORP	7/30/2018	830,000.00	834,407.30	1.41%
	SUB-TOTAL	26,704,544.57	26,792,606.64	

STATE OF CALIFORNIA AND LOCAL AGENCIES

CALIFORNIA EARTHQUAKE AUTH REV	7/1/2017	470,000.00	471,344.20	125.20%
CALIFORNIA ST PUB WKS BRD LEASE REV	4/1/2018	536,026.40	531,471.20	121.90%
CALIFORNIA ST PUB WKS BRD LEASE REV	6/1/2018	996,759.00	987,496.50	118.70%
LOS ANGELES CALIF DEPT ARPTS ARPT REV	5/15/2019	600,000.00	598,002.00	189.40%
LOS ANGELES CALIF MUN IMPT CORP LEASE REV	3/1/2018	1,266,732.00	1,254,000.00	111.50%
LOS ANGELES CALIF MUN IMPT CORP LEASE REV	11/1/2018	1,055,000.00	1,072,555.20	142.20%
LOS ANGELES CALIF MUN IMPT CORP LEASE REV	11/1/2019	288,730.40	285,782.00	209.20%
LA CNTY CALIF PUB WKS FING AUTH LEASE REV	12/1/2017	145,000.00	145,358.15	123.60%
LA CNTY CALIF PUB WKS FING AUTH LEASE REV	12/1/2018	350,000.00	350,812.00	191.20%
UNIVERSITY CALIF REVS	5/15/2017	1,500,000.00	1,500,945.00	105.20%
UNIVERSITY CALIF REVS	5/15/2018	1,531,511.75	1,525,152.50	128.80%
UNIVERSITY CALIF REVS	5/15/2019	790,000.00	780,606.90	168.20%
UNIVERSITY CALIF REVS	7/1/2019	506,885.00	501,420.00	168.00%
	SUB-TOTAL	10,036,644.55	10,004,945.65	

MORTGAGE AND ASSET-BACK SECURITIES

AMXCA 142 A	1/15/2020	3,012,421.88	3,001,890.00	1.12%
AMXCA 144 A	6/15/2020	3,005,507.82	3,004,980.00	1.24%
BMWOT 13A A4	4/27/2020	33,671.46	33,659.44	1.06%
BMWOT 13A A4	4/27/2020	1,095,219.42	1,093,931.90	1.06%
BMWOT 16A A3	11/25/2020	2,784,987.47	2,757,929.80	1.64%

**Orange County Transportation Authority
Portfolio Listing
As of December 31, 2016**

CCCIT 13A7 A7	9/10/2020	1,248,193.36	1,254,487.50	0.98%
CCCIT 13A7 A7	9/10/2020	1,451,869.14	1,455,205.50	0.98%
CCCIT 14A2 A2	2/22/2019	1,997,040.00	1,999,920.00	1.05%
CCCIT 14A2 A2	2/22/2019	1,499,739.30	1,499,940.00	1.05%
CCCIT 16A1 A1	11/19/2021	4,999,732.00	4,978,000.00	1.91%
CHAIT 131 A	2/18/2020	3,270,101.56	3,263,008.35	1.36%
CHAIT 147 A	11/15/2019	2,999,648.10	3,002,610.00	1.28%
CHAIT 147 A	11/15/2019	1,507,324.22	1,501,305.00	1.28%
CHAIT 147 A	11/15/2019	2,599,695.02	2,602,262.00	1.28%
CHAIT 152 A	2/18/2020	2,505,848.75	2,507,125.00	1.34%
CHAIT 155 A	4/15/2020	2,199,612.36	2,198,702.00	1.41%
CHAIT 161 A	5/17/2021	3,003,515.64	3,009,360.00	1.05%
DROCK 142 A	3/16/2020	1,800,843.75	1,800,306.00	1.07%
FHMS K004 A1	5/25/2019	1,890,026.85	1,848,715.70	1.37%
FHMS K502 A2	8/25/2017	972,355.39	966,747.83	1.09%
FHMS K702 A2	2/25/2018	2,453,667.24	2,385,954.19	1.59%
FHMS K708 A2	1/25/2019	1,229,024.64	1,212,382.82	1.60%
FHMS K708 A2	1/25/2019	1,319,935.44	1,302,560.06	1.60%
FHMS K709 A2	3/25/2019	959,093.75	947,256.80	1.66%
FHMS K710 A2	5/25/2019	1,923,527.34	1,909,386.00	1.61%
FHMS K714 A2	10/25/2020	2,110,000.00	2,071,260.00	1.94%
FHMS K715 A2	1/25/2021	2,316,187.50	2,265,670.00	2.03%
FHMS KJ02 A1	10/25/2019	258,359.49	259,384.65	1.12%
FHMS KJ02 A2	9/25/2020	797,875.51	804,607.10	1.92%
FHMS KJ03 A1	1/25/2021	1,415,166.34	1,397,514.50	2.09%
FHMS KJ04 A1	10/25/2020	2,054,146.73	2,035,922.20	1.76%
FHMS KP03 A2	7/25/2019	2,524,940.00	2,491,550.00	1.88%
FHMS KP03 A2	7/25/2019	1,247,320.36	1,230,825.70	1.88%
FN 12M9 AQ2	12/25/2017	1,223,144.56	1,198,409.80	1.89%
FN 13M12 FA	10/25/2017	60,659.42	60,706.23	1.16%
FN 14M01 AQ2	11/25/2018	927,127.24	927,560.53	1.81%
FN 14M01 AQ2	11/25/2018	519,284.05	516,568.26	1.81%
FN 14M04A AQ2	1/25/2017	87,107.85	86,170.36	1.11%
FN 14M08A FA	5/25/2018	884,939.65	883,627.82	1.19%
FN 14M08A FA	5/25/2018	1,079,855.49	1,076,703.98	1.19%
FN 14M9A AQ2	4/25/2017	550,861.65	545,242.01	1.31%
FN 15M13A AQ2	9/25/2019	1,414,019.46	1,398,320.00	1.61%
FN AD0910	4/1/2020	1,550,297.27	1,498,349.14	1.71%
GEDFT 142 A	10/20/2019	2,996,367.19	3,000,630.00	1.20%
HAROT 141 A3	11/21/2017	73,528.91	73,517.07	1.01%
HAROT 142 A3	3/19/2018	116,633.59	116,549.63	1.05%
HAROT 142 A3	3/19/2018	119,323.80	119,503.65	1.05%
HAROT 142 A3	3/19/2018	34,842.26	34,911.18	1.05%
HAROT 151 A3	10/15/2018	422,520.91	422,308.15	1.16%
HAROT 151 A3	10/15/2018	1,173,669.18	1,173,078.19	1.16%
HAROT 153 A3	4/18/2019	1,604,000.00	1,599,488.00	1.32%
HAROT 161 A3	12/18/2019	466,933.64	465,921.23	1.39%
HAROT 161 A3	12/18/2019	1,299,815.27	1,296,997.00	1.39%
HAROT 162 A3	4/15/2020	1,519,970.51	1,517,644.00	1.49%
HAROT 163 A3	5/18/2020	2,929,792.03	2,916,311.23	1.49%
HAROT 163 A3	5/18/2020	1,566,782.03	1,558,083.77	1.49%
HDMOT 152 A2A	1/15/2019	224,047.94	224,383.91	1.00%
JDOT 14 A3	4/16/2018	567,020.01	566,909.06	1.09%
JDOT 14 A3	4/16/2018	101,051.61	101,035.79	1.09%
JDOT 14 A3	4/16/2018	428,446.90	428,331.29	1.09%
JDOT 14 A3	4/16/2018	378,161.04	377,939.37	1.09%
JDOT 14B A3	11/15/2018	241,488.63	241,641.63	1.09%
JDOT 14B A3	11/15/2018	401,177.95	401,237.50	1.09%
JDOT 15 A3	6/17/2019	500,781.25	500,125.00	1.28%
JDOT 15B A2	6/15/2018	393,080.92	393,188.06	1.01%
JDOT 15B A2	6/15/2018	646,226.42	646,427.83	1.01%

**Orange County Transportation Authority
Portfolio Listing
As of December 31, 2016**

JDOT 15B A2	6/15/2018	222,114.33	222,140.15	1.01%
JDOT 15B A3	10/15/2019	349,507.81	350,287.00	1.35%
JDOT 15B A3	10/15/2019	537,897.40	538,441.16	1.35%
JDOT 16 A3	4/15/2020	1,464,769.41	1,461,161.70	1.56%
JDOT 16B A3	6/15/2020	323,895.46	322,454.52	1.55%
TAOT 14A A3	12/15/2017	57,322.01	57,359.52	1.06%
TAOT 14A A3	12/15/2017	190,367.49	190,318.89	1.06%
TAOT 14B A3	3/15/2018	125,904.18	126,010.65	1.05%
TAOT 14B A3	3/15/2018	504,285.35	504,042.60	1.05%
TAOT 14C A3	7/16/2018	437,714.92	437,466.86	1.12%
TAOT 14C A3	7/16/2018	311,804.52	312,150.83	1.12%
TAOT 14C A3	7/16/2018	1,367,859.13	1,367,083.93	1.12%
TAOT 15A A3	2/15/2019	963,332.82	961,920.45	1.22%
TAOT 15A A3	2/15/2019	2,377,645.90	2,376,745.11	1.22%
TAOT 15B A2A	11/15/2017	56,053.63	56,090.73	1.06%
TAOT 15B A3	5/15/2019	999,945.90	999,980.00	1.28%
TAOT 15C A4	12/15/2020	220,962.50	220,294.80	1.61%
TAOT 16A A3	3/16/2020	974,944.72	973,059.75	1.40%
TAOT 16B A3	4/15/2020	173,991.11	173,441.46	1.50%
TAOT 16B A4	8/15/2021	200,523.44	198,286.00	1.82%
TAOT 16C A2A	1/15/2019	999,951.50	998,320.00	1.25%
TAOT 16D A3	10/15/2020	1,826,771.26	1,813,370.58	1.59%
USAA AUTO OWNER TRUST	3/15/2019	774,576.17	774,248.25	1.19%
USAOT 151 A3	6/17/2019	2,003,359.38	2,001,380.00	1.08%
USAOT 161 A3	6/15/2020	895,104.88	891,393.15	1.43%
USAOT 161 A3	6/15/2020	1,999,671.00	1,991,940.00	1.43%
USAOT-151-A4	11/16/2020	492,526.56	490,705.60	1.47%
SUB-TOTAL		<u>111,842,359.24</u>	<u>111,272,274.42</u>	

SHORT-TERM PORTFOLIO - TOTAL

\$ 1,295,644,633.71 \$ 1,289,205,545.62

DEBT SERVICE RESERVE FUNDS

<u>DESCRIPTION</u>	<u>MATURITY DATE</u>	<u>BOOK VALUE</u>	<u>REQUIRED AMOUNT</u>	<u>YIELD</u>
<i>91 EXPRESS LANES 2013 BONDS</i>	2030		10,799,437.46	
BANK OF TOKYO COMMERCIAL PAPER	1/5/2017	10,852,982.30		0.57%
FIRST AMERICAN TREAS OBLIGATIONS	N/A	593.89		0.01%
<i>91 EXPRESS LANES 2013 BONDS - OPERATING & MAINTENANCE RESERVES</i>			13,000,000.00	
BANK DEPOSITS	1/3/2017	62,394.56		
OPERATING RESERVE: BANK OF THE WEST CD	1/5/2017	2,998,992.50		0.40%
MAINTENANCE RESERVE: BANK OF THE WEST CD	1/5/2017	9,996,641.67		0.40%

DEBT SERVICE RESERVE FUNDS - TOTAL

\$ 23,911,604.92


	<u>Book Value</u>	<u>Market Value</u>
TOTAL PORTFOLIO	\$ 1,476,876,544.49	\$ 1,470,444,123.07



COMMITTEE TRANSMITTAL

November 28, 2016

To: Members of the Board of Directors

From: Laurena Weinert,  Clerk of the Board

Subject: Final Natural Community Conservation Plan/Habitat Conservation Plan and Associated Environmental Impact Report/Environmental Impact Statement for the Measure M2 Environmental Mitigation Program

Regional Planning and Highways Committee Meeting of November 7, 2016

Present: Directors Bartlett, Donchak, Lalloway, Miller, Nelson, and Ury
Absent: Directors Do and Spitzer

Committee Vote

This item was passed by the Members present.

Committee Recommendations

- A. Certify that the Final Environmental Impact Report has been completed in accordance with the California Environmental Quality Act, that the Board of Directors reviewed and considered the information in the Final Environmental Impact Report, and that it represents the Orange County Transportation Authority's independent analysis and judgment.
- B. Approve the Final Natural Community Conservation Plan/Habitat Conservation Plan.
- C. Authorize the Chief Executive Officer to negotiate and execute the Implementing Agreement between the Orange County Transportation Authority, United States Fish and Wildlife Service, and the California Department of Fish and Wildlife, for the implementation of the Natural Community Conservation Plan/Habitat Conservation Plan.



ORANGE COUNTY TRANSPORTATION AUTHORITY


**Final Natural Community Conservation Plan/Habitat
Conservation Plan and Associated Environmental Impact
Report/Environmental Impact Statement for the Measure
M2 Environmental Mitigation Program**

Staff Report



November 7, 2016

To: Regional Planning and Highways Committee

From: Darrell Johnson, Chief Executive Officer 

Subject: Final Natural Community Conservation Plan/Habitat Conservation Plan and Associated Environmental Impact Report/Environmental Impact Statement for the Measure M2 Environmental Mitigation Program

Overview

Measure M2 includes a program to deliver comprehensive mitigation for the environmental impacts of freeway projects in exchange for streamlined project approvals from the California Department of Fish and Wildlife, and the United States Fish and Wildlife Service. The Final Environmental Impact Report/Environmental Impact Statement, Final Natural Community Conservation Plan/Habitat Conservation Plan, and implementing agreement demonstrate that sufficient conservation is being provided to address the biological mitigation related to the Measure M2 freeway projects. Approval is requested for the Final Environmental Impact Report/Environmental Impact Statement, Final Natural Community Conservation Plan/Habitat Conservation Plan, and Implementing Agreement.

Recommendations

- A. Certify that the Final Environmental Impact Report has been completed in accordance with the California Environmental Quality Act, that the Board of Directors reviewed and considered the information in the Final Environmental Impact Report, and that it represents the Orange County Transportation Authority's independent analysis and judgment.
- B. Approve the Final Natural Community Conservation Plan/Habitat Conservation Plan.
- C. Authorize the Chief Executive Officer to negotiate and execute the Implementing Agreement between the Orange County Transportation Authority, United States Fish and Wildlife Service, and the California Department of Fish and Wildlife, for the implementation of the Natural Community Conservation Plan/Habitat Conservation Plan.

Background

The Orange County Transportation Authority's (OCTA) Environmental Mitigation Program (Mitigation Program) provides for allocation of at least five percent of the total Measure M2 (M2) funds for comprehensive environmental mitigation for impacts resulting from the 13 related freeway improvement projects. The Mitigation Program was approved by Orange County voters under the M2 half-cent sales tax for transportation improvements in November 2006. This mechanism offers early and high-value environmental benefits such as habitat protection, connectivity, and resource preservation in exchange for streamlined and up-front biological resource permits for the freeway projects.

In August 2007, the OCTA Board of Directors (Board) approved a five-year M2 Early Action Plan (EAP), covering the years 2007 to 2012, to advance the implementation of key M2 projects, including the Mitigation Program. The EAP allowed for property acquisitions, habitat restoration, land management, and support of the program. Support of the program included the preparation and implementation of the M2 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), along with an Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The NCCP/HCP is the mechanism by which comprehensive environmental mitigation is accomplished.

In August 2008, OCTA, the California Department of Transportation (Caltrans), the California Department of Fish and Wildlife, and the United States Fish and Wildlife Service (collectively referred to as Wildlife Agencies) collaboratively developed criteria to assist in the evaluation of potential mitigation opportunities. The acquisition, restoration, and management criteria were vetted by the Environmental Oversight Committee and approved by the OCTA Board in fall 2008. The aforementioned criteria considered biological factors (i.e., biological values that off-set impacts of freeway improvement projects and contribute to achieving the biological goals and objectives of the NCCP/HCP) and non-biological factors (i.e., timing, cooperation, management costs, and constraints).

In November 2009, the Board approved master and planning agreements to establish a process, roles, responsibilities, and commitments for the preparation of an NCCP/HCP, along with a Draft EIR/EIS. In mid-2010, the Board approved the initiation of the NCCP/HCP planning process. Pursuant to the M2 Ordinance, the Mitigation Program was implemented under a master agreement between OCTA, Caltrans, and the Wildlife Agencies. The NCCP/HCP covers mitigation needs for the biological permitting processes.

As part of OCTA's Mitigation Program, seven properties (Preserves), totaling approximately 1,300 acres have been acquired, along with the funding of 11 habitat restoration projects, totaling approximately 350 acres. Attachment A depicts the location of the M2 Preserves and restoration projects.

As part of the NCCP/HCP approval process, Preserve-specific resource management plans (RMPs) are required by the Wildlife Agencies. The RMPs address fire protection, safe public access (where it is compatible with the biological goals/objectives), and outline the management and monitoring criteria for each Preserve. The Wildlife Agencies do not require the RMPs to be prepared until after the NCCP/HCP is approved. However, recognizing the importance of public access, RMPs for properties in Trabuco and Silverado Canyon Preserves were released for public review from November 2015 to February 2016. Based on the specific requests for public access, staff engaged stakeholders to participate in focused workshops in relation to public access for the Trabuco and Silverado Canyon RMPs. If the Board approves the NCCP/HCP and associated documents, staff anticipates completion of the RMPs (including MacPherson and Aliso Canyons) in 2017.

Discussion

In January 2014, the Board authorized public release of the Draft NCCP/HCP and associated Draft EIR/EIS. These documents were released for a 90-day public review period from November 2014 through February 2015. Two community meetings were held in November and December 2014, and the documents were available at the OCTA Administrative Offices, local libraries, and via the internet. The analyses in these documents determined that OCTA has largely met the mitigation needs for the M2 freeway projects through the Preserves and through the funding of restoration projects.

OCTA received a total of 48 comment letters on the Draft NCCP/HCP and Draft EIR/EIS during the public review period, which are summarized below. The complete responses to all of the comments received can be found in Chapter 9 of the EIR/EIS (Attachment B).

- **Commentary/Editorial** – comments reflected the support or opposition of the conservation efforts. Some commenters affirmed their individual or group's endorsement of the NCCP/HCP and requested additional clarifications on the document. The documents have been updated to reflect requested clarifications, as appropriate.
- **Technical NCCP/HCP** – some of the comments were related to the analysis methods that were used in the NCCP/HCP and the degree to which best available scientific information was included in the NCCP/HCP.

Responses clarified that the NCCP/HCP was developed in collaboration with the Wildlife Agencies and ultimately subject to the approval of the Wildlife Agencies. These comments resulted in revisions to the NCCP/HCP to include more recent scientific information. These revisions, however, did not result in a change to the overall conservation strategy of the NCCP/HCP.

- Trails/Public Access – the majority of the comments (60 percent) were specifically focused on the topic of trails and public access in the OCTA Preserves and referred to the historical access and recreational uses on some of the OCTA Preserves, specifically those that are located in the Trabuco Canyon area. These comments also referenced regional trail networks and connections that intersect with OCTA's Preserves and requested that OCTA maintain access to these areas. Responses clarified that the Preserves did not have public access under previous private ownership. Responses also clarified that the NCCP/HCP included guidelines and requirements for public access, which is addressed in more specific detail through individual RMPs.

The corresponding Implementing Agreement (IA) is an appendix to the NCCP/HCP. The purpose of this IA is to clarify the provisions of the NCCP/HCP and the processes the participants intend to follow to ensure successful implementation of the NCCP/HCP (Attachment C) in accordance with the state and federal permits and applicable law. The IA and NCCP/HCP identify requirements for future restoration to ensure that the NCCP/HCP meets the conservation needs for all the identified species (arroyo chub and many-stemmed dudleya). The participants in the IA include OCTA and the Wildlife Agencies (Attachment D).

Next Steps

Upon approval of the NCCP/HCP and associated documents by the Board, staff will focus on the completion of the RMPs, executing conservation easements on the Preserves, coordinating with the endowment establishment fund manager, and the following actions:

- Designate appropriate long-term land managers for the Preserves.
- Identify potential entities to assume the title of the Preserves.
- Identify and fund new restoration projects to satisfy additional mitigation requirements as set forth in the NCCP/HCP.
- Implement the process for the M2 freeway projects during the implementation phase to utilize the NCCP/HCP mitigation.

Final Natural Community Conservation Plan/Habitat Conservation Plan and Associated Environmental Impact Report/Environmental Impact Statement for the Measure M2 Environmental Mitigation Program

- Develop annual reports to document the consistency of the M2 freeway projects, M2 Preserve activities, status of the M2 restoration projects, and summary of endowment budgets.

Summary

M2 includes a Mitigation Program that provides funding for programmatic mitigation to off-set impacts of the 13 freeway projects. To expedite the delivery of the freeway projects, this program was initiated in 2007 to implement early project mitigation through property acquisition and habitat restoration. The program will be administered through a NCCP/HCP. Staff is seeking Board approval of the NCCP/HCP, approval of the EIR/EIS, and approval of the IA.

Attachments

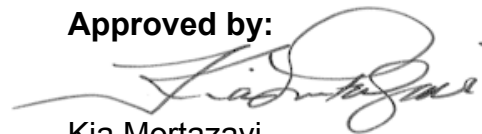
- A. OCTA M2 Preserves and Restoration Projects
- B. EIR/EIS for OCTA M2 – Natural Community Conservation Plan/Habitat Conservation Plan – Administrative Final – October 2016
- C. OCTA M2 – Natural Community Conservation Plan/Habitat Conservation Plan – Administrative Final – October 2016
- D. Implementing Agreement for the Orange County Transportation Authority Natural Community Conservation Plan (NCCP) / Habitat Conservation Plan (HCP)

Prepared by:



Dan Phu
Manager, Environmental Programs
(714) 560-5907

Approved by:



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



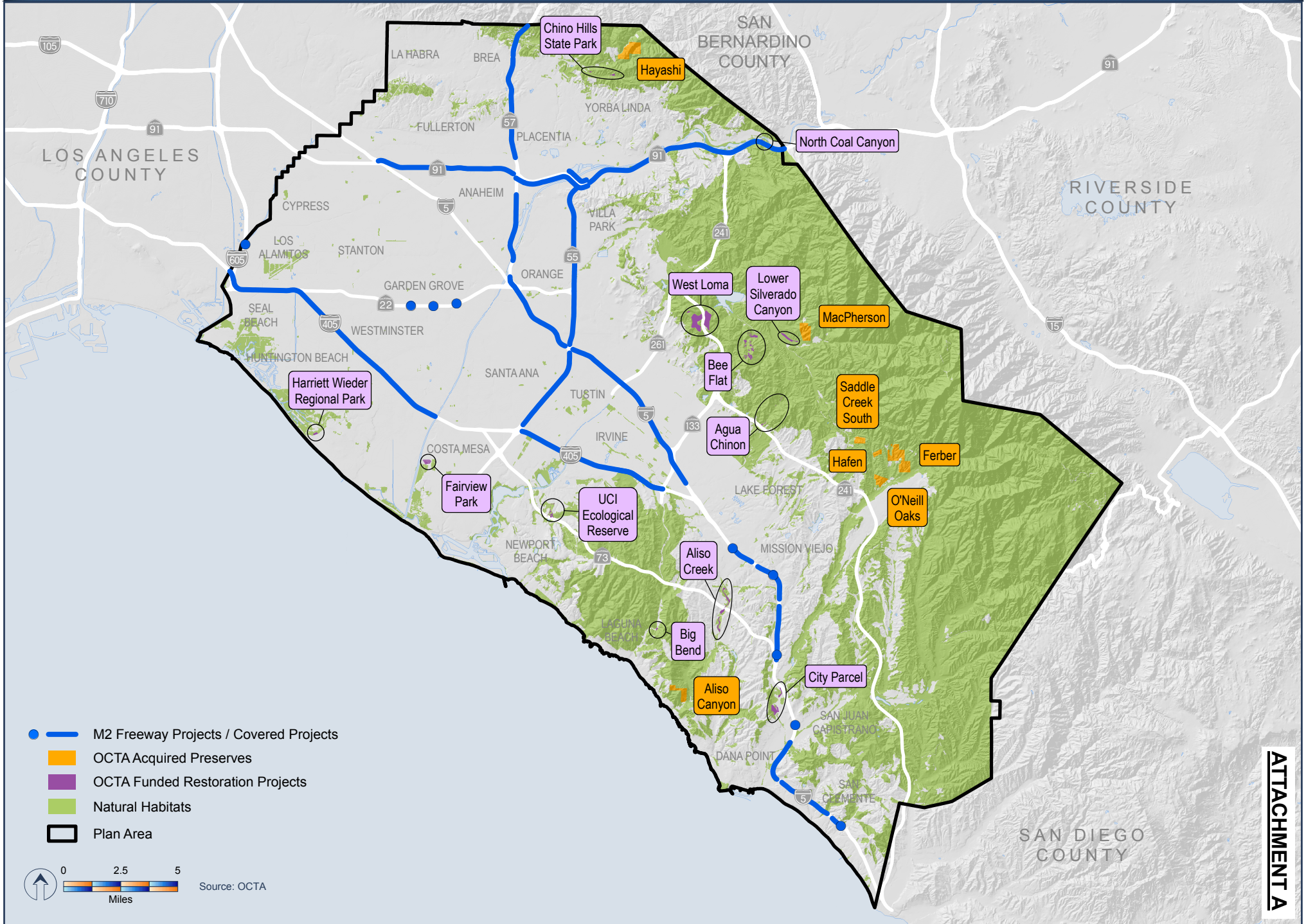
ORANGE COUNTY TRANSPORTATION AUTHORITY

**Final Natural Community Conservation Plan/Habitat
Conservation Plan and Associated Environmental Impact
Report/Environmental Impact Statement for the Measure
M2 Environmental Mitigation Program**

Attachment A



OCTA M2 Preserves and Restoration Projects



- M2 Freeway Projects / Covered Projects
- OCTA Acquired Preserves
- OCTA Funded Restoration Projects
- Natural Habitats
- Plan Area



Source: OCTA

ATTACHMENT A



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Final Natural Community Conservation Plan/Habitat
Conservation Plan and Associated Environmental Impact
Report/Environmental Impact Statement for the Measure
M2 Environmental Mitigation Program**

Attachment B



EIR/EIS (Volume I) for **OCTA M2** **Natural Community Conservation Plan/ Habitat Conservation Plan**

Administrative Final

October 2016

Prepared for
Orange County Transportation Authority
550 S. Main Street
Orange, CA 92863

Prepared by
ICF
525 B Street, Suite 1700
San Diego, CA 92101

U.S. Fish and Wildlife Service
2177 Salk Avenue
Carlsbad, CA 92008



ADMINISTRATIVE FINAL

**M2 NATURAL COMMUNITY CONSERVATION
PLAN/HABITAT CONSERVATION PLAN EIR/EIS**

VOLUME I – FINAL EIR/EIS

PREPARED FOR:

Orange County Transportation Authority
550 S. Main St.
Orange, CA 92863

PREPARED BY:

ICF
525 B Street, Suite 1700
San Diego, CA 92101

October 2016



Executive Summary

This chapter provides a brief overview of the Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan (M2 NCCP/HCP or Proposed Plan); and discusses the Proposed Plan's goals and objectives, alternatives considered, potential environmental consequences, and public issues and areas of controversy. This chapter also summarizes the evaluation of alternatives in terms of the Proposed Plan's goals and objectives and describes the process used to select the environmentally superior alternative under the California Environmental Quality Act (CEQA) and the environmentally preferred alternative under the National Environmental Policy Act (NEPA).

Overview

The Orange County Transportation Authority (OCTA) and U.S. Fish and Wildlife Service (USFWS) have prepared this joint Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) to evaluate the potential impacts associated with the issuance of take permits by the California Department of Fish and Wildlife (CDFW) and USFWS for the M2 NCCP/HCP. The M2 NCCP/HCP has been prepared to fulfill the requirements for issuance of an incidental take permit (ITP) under Section 10 of the federal Endangered Species Act (ESA) and take authorization under Section 2835 of the state Fish and Game Code (California Natural Community Conservation Planning Act—NCCPA). The purpose of the proposed NCCP/HCP is to protect and enhance ecological diversity and function in Orange County, and strengthen and enhance the integrity and connectivity of the existing protected lands in Orange County.

Background of the Proposed Plan

On November 6, 1990, Orange County voters approved Measure M, a 20-year, half-cent local transportation sales tax. All of the major projects promised to and approved by the voters in 1990 are complete. Funds that go to cities and the County of Orange to maintain and improve local streets and roads, along with transit-fare reductions for seniors and persons with disabilities, were components of Measure M, which ended on March 31, 2011. While the promises made in Measure M have been fulfilled, continued transportation investment still is needed as Orange County continues to grow.

In 2006, Orange County voters approved the renewal of Measure M (M2), a transportation sales tax designed to raise money to improve Orange County's transportation system. Among other things, OCTA proposed 13 freeway improvement projects through Measure M2. As part of the M2 program, at least 5%, or roughly \$285 million (based on 2016 forecast), of the freeway program revenues will be allocated to mitigate the environmental impacts of freeway projects, under the OCTA Mitigation and Resource Protection Program (MRPP). The goals of the MRPP are to engage in comprehensive, rather than piecemeal, mitigation to provide higher-value environmental benefits such as habitat protection, wildlife corridors, and resource preservation in exchange for streamlined project approvals for the freeway program as a whole.

The need for the Proposed Plan is based on the potential that the freeway improvement projects proposed by OCTA through the M2 transportation sales tax measure to result in take of Covered Species (defined in Chapter 2, "Proposed Plan and Alternatives"). In addition, the California

Department of Transportation (Caltrans) is the owner/operator of the freeway system and the improvements are subject to California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) jurisdiction within the Plan Area (i.e., the area in which impacts would be evaluated and conservation would occur). Because these actions could result in the take of Covered Species, they require issuance of individual take permits on a project-by-project basis. The Proposed Plan would streamline the permitting process and assure that take of Covered Species is mitigated in a comprehensive manner through a broad strategy of species and habitat conservation.

In late 2009, the OCTA Environmental Oversight Committee (EOC) and Board of Directors approved the Master Agreement and Planning Agreement to establish the process, roles, responsibilities, and commitments for the preparation of the M2 NCCP/HCP. The goal of this effort is to provide an effective framework to protect and enhance natural resources in Orange County, while improving and streamlining the environmental permitting process for impacts of M2-related projects and activities on sensitive, threatened, and endangered species and their habitats.

Accordingly, OCTA, CDFW and USFWS have identified the following purposes/objectives.

- Streamlining the environmental permitting process for impacts on endangered species by authorizing take of listed and other Covered Species impacted, or potentially impacted, by covered transportation projects in Orange County.
- Reducing the cost and increasing the clarity and consistency of federal and state permitting.
- Sharing the costs and benefits of the habitat conservation plan as widely and equitably as possible.
- Improving the coordination and biological effectiveness of individual project mitigation.
- Protecting and enhancing ecological diversity and function in Orange County, and contributing to and enhancing the integrity and connectivity of the existing protected lands in Orange County.

This Final EIR/EIS describes the features of the Proposed Plan and its alternatives, including the No Project/No Action Alternative. As required by CEQA and NEPA, this Final EIR evaluates the potential impacts of the Proposed Plan and all alternatives.

This Final EIR/EIS incorporates by reference the OCTA 2006 Long Range Transportation Plan (LRTP) Program EIR (OCTA 2006), particularly in the analysis of covered freeway improvement projects in Chapter 4, "Environmental Consequences." The LRTP Program EIR was certified in 2006 along with associated CEQA findings, including a Statement of Overriding Considerations for LRTP impacts that would potentially remain significant after mitigation. The Final EIR/EIS prepared for the M2 NCCP/HCP is intended to provide CEQA and NEPA compliance for all Preserve acquisition and management activities described in the Proposed Plan regarding impacts on Covered Species and jurisdictional wetlands and waters. Covered freeway improvement projects that receive take coverage under the NCCP/HCP must also comply with additional review for CEQA (and NEPA when triggered) through separate project-specific environmental analyses. OCTA and Caltrans would be required to prepare the appropriate environmental documents and to comply with any mitigation requirements identified as part of project-specific environmental review, as well as any mitigation measures contained in the general plans for each of the participating jurisdictions.

Alternatives Analyzed in the Final EIR/EIS

Alternative 1: No Project/No Action

Under the No Project/No Action Alternative, the proposed NCCP/HCP, including implementation of conservation measures and creation of a Preserve System, would not be adopted, and permits pursuant to Section 10(a)(1)(B) of ESA and Section 2835 of the NCCPA would not be issued by USFWS and CDFW, respectively.

Under the No Project/No Action Alternative, compliance with ESA and CESA would continue to be addressed project-by-project for each of the M2 freeway projects. Freeway projects with a potential to affect federally listed species would be required to individually comply with ESA through either the preparation of individual habitat conservation plans (HCPs) and Section 10 permit application, or the Section 7 consultation process in cases in which federal authorization (e.g., Section 404 Clean Water Act [CWA] permitting by the U.S. Army Corps of Engineers [USACE]) or funding (e.g., Federal Highway Administration [FHWA] funding for transportation projects) are required. Section 7 compliance would focus on federally listed species and would not address state-listed or non-listed species.

No comprehensive strategies to avoid, minimize, or mitigate effects on sensitive species would be implemented under the No Project/No Action Alternative. No measures that provide for species recovery, as required under NCCPA, would be implemented. With project-by-project conservation and mitigation, listed and non-listed species would not benefit from the landscape-scale conservation actions that would otherwise be implemented through the NCCP/HCP.

Currently, the permitting and mitigation of impacts on special-status species associated with implementation of freeway projects in Orange County is undertaken on a project-by-project basis, which does not provide a mechanism for coordinating regional conservation and can result in potentially less effective biological mitigation.

Alternative 2: Proposed NCCP/HCP (Proposed Plan)

The proposed NCCP/HCP is a regional, comprehensive plan that establishes a framework for complying with state and federal endangered species regulations while accommodating future transportation improvements within the Plan Area. The Proposed Plan is designed to coordinate the process for permitting and mitigating the take of Covered Species associated with implementation of freeway projects in Orange County by implementing a broad strategy for conservation of Covered Species and their habitats.

The Plan proposes 13 listed and non-listed species for coverage. The Proposed Plan identifies a number of Covered Activities (defined in Chapter 2, "Proposed Plan and Alternatives") including the specific M2 freeway improvement projects and conservation activities in the Preserve Areas, that may result in take of federal- and/or state-listed species or species that may become listed during the Permit term. These Covered Activities are considered in assessing the total amount of Covered Species take that would be expected in the Permit Area and in developing the overall NCCP/HCP conservation strategy. The issuance of take permits for the Proposed Plan does not confer or imply authorization of any specific covered freeway improvement projects; all covered freeway improvement projects would be subject to future discretionary approval authority within the individual jurisdictions where the activity or project would occur. The take permits for the Proposed Plan would only authorize conservation and management activities within the NCCP/HCP Preserves.

The primary responsibility for Plan implementation rests with OCTA. However, as described in the Proposed Plan, other groups would have secondary responsibility for coordination, plan compliance, and implementation of various aspects of the Proposed Plan. Implementation of the conservation strategy, monitoring program, Covered Activities approvals, and reporting will require coordinated actions among OCTA, Caltrans, Preserve Managers, Monitoring Biologists, Restoration Project Sponsors, and Wildlife Agencies.

In order to comply with the requirements of the ESA, the California Endangered Species Act (CESA), and the NCCPA, the Proposed Plan addresses a number of required elements, including species and habitat goals and objectives; the evaluation of Covered Activities effects on Covered Species, including indirect and cumulative effects; a conservation strategy; a monitoring and adaptive management program; descriptions of changed circumstances and remedial measures; and identification of funding sources. The key elements of the Proposed Plan are described in Chapter 2.

Non-Covered Species that occur within the Plan Area would continue to be regulated under CESA and ESA. Take of non-covered listed species can be authorized separately from the Proposed Plan under Section 2081 of the Fish and Game Code, or Sections 7 or 10 of the ESA. Impacts on species not covered under the Proposed Plan could also be addressed through the amendment process described in Chapter 8, "Plan Implementation," of the Proposed Plan.

Alternative 3: Federal and State ESA-Listed Species Only NCCP/HCP (Reduced Plan)

Under the Reduced Plan Alternative, only those species that are federally or state-listed as threatened or endangered would be proposed for coverage under the NCCP/HCP. Accordingly, only the following three species would be covered under Alternative 3.

- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Coastal California gnatcatcher (*Polioptila californica californica*)

The amount of land acquisition and Preserve Area assembled would be identical to that of the Proposed Plan. The amount of species-specific habitat restoration required would be less, however, because the conservation strategy measures would be focused only on the three ESA-listed species mentioned above.

Under the Reduced Plan Alternative, no assurances would be provided by USFWS, as part of the ITPs, that the avoidance and mitigation measures provided in the proposed NCCP/HCP would adequately conserve currently non-listed species that may be listed during the term of the NCCP/HCP. Other sensitive species would not be covered, and take would be addressed on a project-by-project basis, similar to the No Project/No Action alternative.

Environmental Consequences

This Final EIR/EIS evaluates the environmental consequences of the Proposed Plan and its alternatives. A summary of the impact analysis for these alternatives is presented at the end of this chapter (Table ES-1) and in Chapter 4, "Environmental Consequences." In addition, CEQA and NEPA require a review of other issues, which are described in Chapter 5, "Other Required CEQA and NEPA Analyses," of this Final EIR/EIS.

Significant and Unavoidable Impacts

As evaluated in Chapter 4, “Environmental Consequences,” there would be no significant unavoidable (i.e., unmitigable) impacts that would result from conservation activities under the Proposed Plan or its alternatives. All potentially significant impacts resulting from Proposed Plan implementation would either be avoided or would be reduced to below a level of significance with the mitigation measures identified in this Final EIR/EIS.

Regarding the underlying freeway improvement project impacts, analysis was incorporated by reference from OCTA’s 2006 LRTP Program EIR. Some freeway improvement impacts were determined to be significant and unavoidable and a Statement of Overriding Considerations was adopted for the LRTP Program EIR. The freeway improvement impact conclusions have been added in this Final EIR/EIS analysis for informational purposes only, and these conclusions are not modified in any way by the impact analysis provided herein for the biological mitigation and conservation activities.

Areas of Controversy/Issues

OCTA released a Notice of Preparation (NOP) for the Draft EIR on December 3, 2010, initiating the scoping period. A Notice of Intent (NOI) to prepare an EIS was noticed in the *Federal Register* on December 1, 2010. Written comments were received by OCTA during the scoping period (December 1, 2010, to January 13, 2011). These comments are included as Appendix B to this document.

A scoping meeting was held on Wednesday, December 15, 2010, from 5 p.m. to 7 p.m. at OCTA offices (550 South Main Street, Orange, CA 92863). There were 11 attendees at the scoping meeting. Also in attendance were staff members representing CDFW and USFWS. Attendees represented a variety of community groups, including, residents, environmental groups, and the Orange County Planning Department.

At the scoping meeting, team members were present to provide information to the public on the details of the Proposed Plan, including: the background of the environmental mitigation program, program benefits to the county, components of an NCCP/HCP, descriptions of Covered Species, location of the Plan Area, and the program’s next steps. The meeting also informed the public about the details of the environmental process and served as an opportunity for the community to provide feedback to help guide the Plan’s development.

The following key issues of public concern regarding the Proposed Plan were identified during the scoping process.

Biological Resources

- Wildlife and endangered species protection must be a priority.
- The January 2011 Department of Interior USFWS Final Critical Habitat for the Arroyo Toad Unit #8 Santa Ana River Basin should be incorporated.
- Continued acquisition and management of lands within the Puente-Chino Hills Wildlife Corridor would further connectivity between this area and Orange County extending to the Santa Ana Mountains.

- Measures should be incorporated into the NCCP/HCP that promote wildlife movement and habitat connectivity within the Puente Chino Hills Wildlife Corridor.
- The Draft EIR/EIS should include a complete assessment of sensitive biological resources and a discussion of direct, indirect, and cumulative impacts on biological resources within and adjacent to the Plan Area.
- Development within wetlands is discouraged.
- Conservation easements should be placed on all acquisition and restoration properties to ensure proper protection.
- The NCCP/HCP should clearly define compatible uses.

Cultural Resources

- Native American Cultural Resources were identified in the Plan Area vicinity as a part of the Native American Heritage Commission (NAHC) Sacred Land File.
- Avoidance of cultural resources in accordance with CEQA should be considered.
- Consultation with Native American tribes regarding the Plan should be conducted in compliance with federal requirements.

Funding

- There is potential lack of funding for execution and maintenance of the Proposed Plan.

Land Use

- Certain areas identified for conservation in the Conservation Assessment completed by Conservation Biology Institute are identified as Planning Areas for future development by Rancho Mission Viejo.

Water Quality

- Runoff from the NCCP/HCP must conform to Regional Water Quality Control Board discharge requirements.

CEQA Process

- Each project proposed associated with the NCCP/HCP must have subsequent environmental documentation, and associated technical studies must adhere to Caltrans protocol.
- The Draft EIR/EIS should cover mitigation for losses of habitat associated with highway projects, long-term management of the Preserve Areas, and funding mechanisms.

Summary of Alternative Impacts

Table ES-1 provides an overall summary and comparison of impacts by resource topic across the alternatives. Detailed discussions of potential resource topic impacts by alternative are provided in Chapter 4, "Environmental Consequences."

Environmentally Superior/Preferred Alternative

The impacts associated with Alternatives 2 and 3 are qualitatively similar, though Alternative 2 would provide for a greater level of conservation, particularly through increased restoration. The overall benefit to species would therefore be greater under Alternative 2, without a measurable difference in impacts on the environment. Therefore, the environmentally superior/preferred alternative is Alternative 2, the Proposed Plan.

Table ES-1. Overall Impacts Summary by Resource Topic for All Alternatives¹

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
Agriculture	0	Covered freeway improvement projects and the biological mitigation and conservation activities would not impact agricultural resources. The possibility exists that parcels of land needed to meet mitigation required for individual covered freeway improvement projects could impact Important Farmland or Williamson Act lands; however, such effects are unlikely and speculative because the sites are not known at this time.	0	There would be no impact on prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use, as the acquired Preserve Areas and areas for the covered freeway improvement projects do not contain land designated as such. Agricultural impacts associated with the biological mitigation and conservation activities under Alternative 2 would not occur.	0	Effects under Alternative 3 would be the same as Alternative 2. Agricultural impacts associated with the biological mitigation and conservation activities under Alternative 3 would not occur.
Air Quality and Greenhouse Gases ²	-	As described in the LRTP Program EIR, covered freeway improvement project construction activities under Alternative 1 would create short-term temporary air emissions. Construction activities associated with transportation facilities of any medium- to large-scale highways or arterials would be expected to individually generate a significant amount of construction activity and therefore exceed the	-	In addition to the impacts from covered freeway improvement projects, Alternative 2 Preserve management activity emissions would temporarily generate criteria pollutant (ROG, NO _x , SO _x , CO, PM10, and PM2.5) and GHG (CO ₂ , CH ₄ , and N ₂ O) emissions, which could result in adverse effects on short-term ambient air quality and climate change. Daily emissions estimates would be well below SCAQMD daily mass regional and localized threshold levels, annual emissions	-	Effects under Alternative 3 would be the same as Alternative 2. Air quality and greenhouse gas impacts associated with the biological mitigation and conservation activities under Alternative 3 would be less than significant.

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
		significance thresholds established in the CEQA Handbook. This would create a potentially significant short-term impact. These impacts would occur in localized areas, depending on the construction site locations. Air quality and greenhouse gas impacts associated with the biological mitigation and conservation activities under Alternative 1 would be less than significant.		estimates would be well below federal de minimis levels, and annual emissions estimates would be well below both SCAQMD draft GHG thresholds (3,000 MT) and CEQ’s reference point (25,000 MT). Air quality and greenhouse gas impacts associated with the biological mitigation and conservation activities under Alternative 2 would be less than significant.		
Biological Resources	-	Covered freeway improvement projects under Alternative 1 would have an overall negative effect on biological resources. While project-by-project mitigation may be effective at targeting and preserving high-value habitat, the creation of smaller mitigation sites would likely result in ineffective species conservation across the landscape. Smaller preserve areas may fail to meet preserve design standards to maximize preserve size, incorporate environmental gradients, minimize edges, and preserve habitat linkages. Furthermore, the absence of a	++	Alternative 2 achieves a higher-value conservation than what would be expected through project-by-project mitigation of the covered freeway improvement projects. Conservation would be completed in a comprehensive manner under the NCCP/HCP that would result in large blocks of preserved and restored habitat in locations important for regional conservation. Biological resource impacts associated with the biological mitigation and conservation activities under Alternative 2 would be less than significant.	+	Alternative 3 achieves a higher-value conservation than what would be expected through project-by-project mitigation of the covered freeway improvement projects (i.e., Alternative 1); however, beneficial effects on Covered and Non-Covered Species would be reduced since the level of species-specific management and restoration efforts would be slightly less with fewer Covered Species. Biological resource impacts associated with the biological mitigation and conservation activities under Alternative 3 would be less than significant.

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
		comprehensive monitoring and adaptive management program would create less certainty in the long-term success of mitigation sites. Biological resource impacts associated with the biological mitigation and conservation activities would be potentially significant and unavoidable under Alternative 1.				
Cultural Resources ²	-	The potential exists under Alternative 1 for earthmoving activities of covered freeway improvement project activities to have impacts on known and unknown archeological, historic, built environment, and paleontological resources. Potential impacts on these resources would remain significant after implementation of mitigation measures. Therefore, cultural resource impacts associated with the biological mitigation and conservation activities would be potentially significant and unavoidable under Alternative 1.	-	Effects under Alternative 2 would be reduced when compared with Alternative 1 because the preserve sites are known, and cultural resource impacts would be mitigated to less than significant or avoided entirely. Therefore, cultural resource impacts associated with the biological mitigation and conservation activities under Alternative 2 would be less than significant after mitigation is incorporated.	-	Effects under Alternative 3 would be the same as Alternative 2. Therefore, cultural resource impacts associated with the biological mitigation and conservation activities under Alternative 3 would be less than significant after mitigation is incorporated.

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
Geology, Soils, and Seismicity ²	-	As documented in the LRTP Program EIR, covered freeway improvement projects under Alternative 1 could result in substantial grading or other earth modifications that could generate air and waterborne erosion and slope failure. Earthwork or major cuts into hillsides could create unstable slope conditions and lead to long-term soil erosion, creating potential landslide and falling rock hazards. Therefore, potential impacts related to long-term erosion and slope failure due to covered freeway improvement projects have the potential to generate significant erosion and slope failure impacts, and the LRTP Program EIR identified this impact as significant and unavoidable. However, geology, soils, and seismicity impacts associated with the biological mitigation and conservation activities under Alternative 1 would be less than significant.	-	In addition to impacts from covered freeway improvement projects which would be the same as under Alternative 1, any minor construction resulting from covered Preserve management activities under Alternative 2, such as the installation of Preserve management offices, maintenance sheds, restrooms, wildlife observation platforms, or educational kiosks, would be built according to appropriate standards, including the current IBC and CBC. Geology, soils, and seismicity impacts associated with the biological mitigation and conservation activities under Alternative 2 would be less than significant.	-	Effects under Alternative 3 would be the same as Alternative 2. Geology, soils, and seismicity impacts associated with the biological mitigation and conservation activities under Alternative 3 would be less than significant.
Hazards and Hazardous Materials	-	Covered freeway improvement projects under Alternative 1 would have potential for accidental release of hazardous	-	Effects under Alternative 2 would be the same as Alternative 1. Hazards and hazardous materials impacts associated with the biological	-	Effects under Alternative 3 would be the same as Alternative 2. Hazards and hazardous materials impacts associated with the biological

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
		materials or the disturbance of contaminated soils. However, impacts would be less than significant impacts after mitigation. Hazards and hazardous materials impacts associated with the biological mitigation and conservation activities under Alternative 1 would be less than significant after mitigation.		mitigation and conservation activities under Alternative 2 would be less than significant after mitigation.		mitigation and conservation activities under Alternative 3 would be less than significant after mitigation.
Hydrology and Water Quality	-	Covered freeway improvement projects under As documented in the LRTP Program EIR, Alternative 1 would result in temporary and permanent impacts on drainage and stormwater quality, including the general categories of increased stormwater runoff from increased impervious surfaces, increased amounts of automotive waste transported into local drainages, increased erosion and siltation in local drainages, degradation of groundwater quality, and exposure to flooding. The LRTP Program EIR determined that this impact during project operation would be significant and unavoidable. However, for the	+	While covered freeway improvement project impacts would be the same as Alternative 1, the implementation of an NCCP/HCP would result in a larger acreage of biological resources mitigation/conservation that would also benefit hydrology and water quality. The acquisition of large blocks of Preserve lands and funding of restoration projects would contribute to the protection and enhancement of natural hydrologic functions and improvement of water quality. Hydrology and water quality impacts from the biological mitigation and conservation activities under Alternative 2 would be less than significant.	+	Effects under Alternative 3 would be the same as Alternative 2. Hydrology and water quality impacts from the biological mitigation and conservation activities under Alternative 3 would be less than significant.

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
		biological mitigation and conservation activities, the incorporation of project design features, along with the use of identified BMPs, would reduce potential hydrology and water quality impacts to less than significant.				
Land Use	-	Under Alternative 1, development within the incorporated portions of the county would be consistent with general plan guidance; however, mitigation for covered freeway improvement impacts would occur on a case-by-case basis and could result in inconsistencies between existing, adjacent, and planned land uses. The LRTP Program EIR identified a significant and unavoidable impact related to land use for the covered freeway improvement projects. However, land use impacts related to the biological mitigation and conservation activities under Alternative 1 would be less than significant.	+	Impacts associated with covered freeway improvement projects would be the same as Alternative 1. Restoration activities would not result in changes in land use from the current nature of the Preserves that would result in environmental impacts. Alternative 2 would have beneficial impact on recreational resources by protecting the Preserve Areas from development and increasing the availability of passive recreational resources on properties that were privately owned. Land use impacts from the biological mitigation and conservation activities under Alternative 2 would be less than significant.	+	Effects under Alternative 3 would be the same as Alternative 2. Land use impacts from the biological mitigation and conservation activities under Alternative 3 would be less than significant.

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
Noise ²	-	The LRTP Program EIR determined that long-term noise impacts from the covered freeway improvement projects would be significant and unavoidable, and construction activities associated with covered freeway improvement projects under Alternative 1 would generate noise from the movement of construction vehicles, and construction activities. Noise impacts associated with the biological mitigation and conservation strategies under Alternative 1 would result in minimal to no operational noise and much less construction activity and its associated noise. Furthermore, construction activities would be carried out in compliance with the California Department of Transportation (Caltrans) Construction Noise Criteria, and mitigation measures would be implemented to reduce impacts to less than significant.	-	In addition to noise associated with covered freeway improvement projects as under Alternative 1, Alternative 2 could result in specific construction-related noise from restoration and conservation management activities (e.g., invasive species removal) within the Preserve System. Conservation activities under the Proposed Plan would not result in long-term noise-sensitive land uses being exposed to noise in excess of an established standard because implementation of the Proposed Plan would not result in permanent noise. Furthermore, all construction activities would be carried out in compliance with Caltrans Construction Noise Criteria, and mitigation measures would be implemented. Therefore, noise impacts from the biological mitigation and conservation activities under Alternative 2 would be less than significant with mitigation incorporated.	-	Effects under Alternative 3 would be the same as Alternative 2. Noise impacts from the biological mitigation and conservation activities under Alternative 3 would be less than significant with mitigation incorporated.

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
Socioeconomics and Environmental Justice	-	The LRTP Program EIR determined that the development of covered freeway improvement projects under Alternative 1 could result in the disturbance and/or loss of land currently used for residential or business purposes. The acquisition and relocation of existing homes and businesses required by certain projects that are part of the LRTP would result in a less than significant impact after mitigation. Socioeconomic impacts associated with the biological mitigation and conservation activities would be less than significant because the conservation of land would not substantially affect, in an adverse manner, the provision of housing, employment, and economic well-being.	-	Covered freeway improvement effects, as well as biological mitigation and conservation activities, on housing, employment, and economic well-being under Alternative 2 would be the same as those described under Alternative 1. Impacts would be less than significant.	-	Effects under Alternative 3 would be the same as Alternative 2. Impacts would be less than significant.
	+	Construction of covered freeway improvement projects would have a beneficial impact on employment and the local economy, which is burdened by the continuing effects of the recession following the financial crisis. Therefore, the	+	In addition to impacts from covered freeway improvement projects as described in Alternative 1, construction activities in Preserve Areas under Alternative 2 would have beneficial impacts on employment and the local economy. No adverse impact would occur.		

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
		Proposed Plan may also have beneficial effects on employment and the local economy for minority and low-income groups through the conservation of biological resources in the community. Impacts would be less than significant.				
Transportation and Circulation	+	Based on the analysis completed in the LRTP Program EIR, short-term traffic impacts associated with covered freeway improvement projects under Alternative 1 could occur during construction activities. Covered freeway improvement projects would have a positive effect on the transportation system in Orange County (OCTA 2006) and would not conflict with applicable congestion management plans, ordinances, or policies. Moreover, implementation of biological mitigation and conservation activities would result in less-than-significant impacts under Alternative 1.	+	In addition to the short-term traffic impacts associated with covered freeway improvement projects under Alternative 1, conservation activities under Alternative 2 could impact congestion levels during restoration activities, but this impact would be less than significant and mitigation would not be required. As with Alternative 1, covered freeway improvement projects would have a positive effect on the transportation system in Orange County (OCTA 2006) and would not conflict with applicable congestion management plans, ordinances, or policies. Implementation of biological mitigation and conservation activities would result in less-than-significant impacts under Alternative 2.	+	Effects under Alternative 3 would be the same as Alternative 2. Implementation of biological mitigation and conservation activities would result in less-than-significant impacts under Alternative 3.

Resource Topic	Alternative 1: No Project/No Action		Alternative 2: Proposed Plan		Alternative 3: Reduced Plan	
	Impact Finding	Summary	Impact Finding	Summary	Impact Finding	Summary
<p>¹ The findings within this table are for the purpose of evaluating the Proposed Plan and based on the information presented in the OCTA LRTP Program EIR (2006).</p> <p>² The OCTA LRTP Program EIR (2006) identified potentially significant unavoidable effects resulting from covered freeway improvement projects in this environmental resource topic.</p> <p>Notes: 0 = no substantial change relative to current conditions - = negative trend relative to current conditions + = positive trend relative to current conditions ++ = substantial positive trend relative to current conditions</p>						



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Final Natural Community Conservation Plan/Habitat
Conservation Plan and Associated Environmental Impact
Report/Environmental Impact Statement for the Measure
M2 Environmental Mitigation Program**

Attachment C



OCTA M2 Natural Community Conservation Plan/ Habitat Conservation Plan

Administrative Final

October 2016

Prepared for
Orange County Transportation Authority
550 S. Main Street
Orange, CA 92863

Prepared by
ICF
525 B Street, Suite 1700
San Diego, CA 92101



ADMINISTRATIVE FINAL

**ORANGE COUNTY TRANSPORTATION
AUTHORITY M2 NATURAL COMMUNITY
CONSERVATION PLAN/HABITAT
CONSERVATION PLAN (NCCP/HCP)**

PREPARED FOR:

Orange County Transportation Authority
550 S. Main St.
Orange, CA 92863

PREPARED BY:

ICF
525 B Street, Suite 1700
San Diego, CA 92101

October 2016



Introduction

In 2006, Orange County voters approved the renewal of Measure M, effectively extending the half cent sales tax to provide funding for transportation projects and programs in the county. As part of the renewed Measure M (or Measure M2), a portion of the M2 freeway program revenues were set aside for the M2 Environmental Mitigation Program (EMP) to provide funding for programmatic mitigation to offset impacts from the freeway projects in the 13 freeway segments covered by Measure M2. The Orange County Transportation Authority (OCTA) has prepared this Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP or Plan) as a mechanism to offset potential project-related effects on threatened and endangered species and their habitats in a comprehensive manner. The Plan achieves higher-value conservation than what would be expected through project-by-project mitigation in exchange for a streamlined project review and permitting process for the Measure M2 freeway program as a whole.

This Plan fulfills the requirements for issuance of permits from the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS), collectively referred to as the Wildlife Agencies, which allows for the take of threatened and endangered species and their habitats. OCTA will be the sole Permittee receiving permits from the Wildlife Agencies with terms of 40 years from the date of issuance. The California Department of Transportation (Caltrans), as the owner and operator of the state highway system, will be included as a Participating Special Entity. Caltrans will usually be the Construction Lead and in those situations OCTA issue a project specific Certificate of Inclusion that will describe the authorized take and required avoidance and minimization measures as set forth in the Plan.

As part of an Early Action Plan (EAP), OCTA was able to bond against future M2 revenues to implement conservation actions (Preserve acquisitions and restoration projects) to provide advanced, comprehensive mitigation for effects on sensitive species and their habitats. The identification and selection of Preserve acquisitions and restoration projects was coordinated by the Environmental Oversight Committee (EOC). The EOC is made up of two OCTA Board members and representatives from Caltrans, the Wildlife Agencies, U.S. Army Corps of Engineers (USACE), environmental groups, and the public. The goal of the EOC was to identify conservation measures that protect and enhance habitats as mitigation for potential impacts associated with the M2 funded freeway improvement projects. To date, OCTA has acquired seven Preserves that include 1,232 acres of protected natural habitat, and has approved funding for 11 habitat restoration projects totaling approximately 357 acres. With remaining funds from the EAP and using additional M2 revenue funds as needed, OCTA is committed to funding additional restoration projects. The Plan establishes selection criteria for these future restoration projects to ensure that they will help to achieve the Plan's biological goals and objectives.

As part of this Plan, a conservation analysis was completed that compares the level of conservation achieved under the Plan with a set of quantifiable targets and broader biological goals and objectives. This will ensure that conservation actions occur within areas that complement regional conservation goals. The conservation analysis demonstrates that the OCTA Preserve acquisitions and restoration projects coupled with the existing conserved lands, and in conjunction with a set of approved avoidance and minimization measures, result in a level of conservation that meets the criteria for CDFW and USFWS to issue permits under the State Natural Community Conservation Planning Act (NCCPA) and federal Endangered Species Act (ESA), respectively.

Key elements of the Plan are summarized below.

Covered Species (Chapter 1, Section 1.2.3)

The Plan will protect and enhance native biological diversity, habitat for native species, natural communities, and local ecosystems throughout the Plan Area¹. This broad scope will conserve a wide range of natural resources, including native species that are common or rare. However, the permits issued by the Wildlife Agencies will address a defined set of Covered Species that are currently listed as threatened or endangered or that may become listed during the permit term, that may be impacted by Covered Activities, and that will benefit from Plan-related conservation and management. This Plan covers 13 listed and non-listed species including:

- Plants (3): intermediate mariposa lily, many-stemmed dudleya, southern tarplant
- Fish (1): arroyo chub
- Reptiles (3): coast horned lizard, orangethroat whiptail, western pond turtle
- Birds (4): cactus wren, coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher
- Mammals (2): bobcat, mountain lion

Covered Activities (Chapter 3)

The primary goal of the Plan is to obtain authorization for take of Covered Species under the NCCPA and ESA for the implementation of covered freeway improvement projects and other management and monitoring activities on Preserves (Covered Activities). Freeway improvement projects covered by this Plan are defined to include all habitat or ground-disturbing impacts resulting from the M2 transportation planning and project implementation process. There are 13 discrete proposed freeway project areas in which freeway segments have been identified for coverage under the Plan. These proposed projects are designed to reduce congestion, increase capacity, and improve traffic flow of Orange County's important transportation infrastructure. The freeway improvement projects are, in all instances, along existing freeways and will include lane additions, interchange improvements, and associated facility upgrades. These freeway improvement projects do **not** include the construction of new freeways.

Covered Activities also include management of the Preserves, which could result in a small amount of take of Covered Species' habitats as a result of ongoing habitat restoration and monitoring by Preserve Managers. In addition, OCTA has made a commitment to allow some public access and passive recreation (e.g., trails for potential hiking, equestrian, and mountain biking use) on the Preserves such that these activities do not conflict and are compatible with the overall goals and objectives of wildlife and habitat protection established by the Plan. Improvements to and, where appropriate, creation of new trails will be covered under the Plan. In addition, public access and passive recreation that are consistent with the Plan will be compatible uses that do not require coverage under the permit because they are not anticipated to result in the take of Covered Species and/or their habitats.

¹ Plan Area includes the entirety of Orange County. It is a broad planning area in which impacts would be evaluated and conservation would occur.

Estimated Level of Take (Chapter 4)

The allowable amount of take associated with the freeway improvement projects was quantified by overlaying planning-level effect footprints (direct and indirect) on natural communities, predicted species habitat, species occurrences, and designated critical habitat. These footprints represent a worst-case scenario, and actual effects are expected to be less through implementation of avoidance and minimization measures. A total of **141.0 acres** of natural habitat is estimated to be directly affected; with grasslands the most heavily affected land cover type. Grasslands are especially common in previously disturbed areas, including areas along existing freeway infrastructure, which are often mowed and maintained by Caltrans. A total of **484.4 acres** of natural habitat occur within the indirect effects footprint (300 feet around the direct effect footprint). The types of indirect effects associated with freeway improvement projects include noise and light pollution, hydrology and water quality effects, introduction and spread of invasive species, degradation of habitat connectivity, risk of fire ignition, and vehicular mortality. Because these freeway projects are designed to improve existing freeway infrastructure, the indirect effects will represent a slight increase in the existing effects that are already occurring as a result of the original construction of these roadways. The additional effects associated with these freeway projects represent a negligible increase for the cumulative effects across the Plan Area. The freeway projects covered by the Plan are defined in the Long Range Transportation Plan Program EIR (OCTA 2006) as growth accommodating and therefore do not represent a growth inducing impact.

Some activities expected to occur as part of the Preserve management and monitoring may adversely affect some Covered Species and natural communities. These effects are expected to be of limited severity and generally temporary. Effects associated with trail or access road management, fire prevention/fuel modification, and management facilities construction may result in permanent impacts. For purposes of this Plan, a threshold of **13 acres** was determined to be the maximum amount of impacts resulting from these types of activities within the total of all Preserves to be acquired. The threshold of 13 acres represents approximately 1% of the overall natural habitat acreage acquired under this Plan (1,232 acres).

Biological Goals, Objectives, and Targets (Chapter 5, Sections 5.2 and 5.3)

To guide the development of the conservation strategy and serve as a benchmark for the Plan's conservation analysis, quantifiable biological targets were developed based on the type and level of take estimated to occur from the Covered Activities. Based on these estimates, the Plan will conserve a minimum target of **550.4 acres** of natural habitat, including specific targets for individual habitat types, as well as additional species-specific biological metrics. The targets represent an estimate of the amount of conservation to offset the direct and indirect effects from Covered Activities. The targets are listed in Table ES-1 at the end of this Executive Summary.

The Plan also contains a broader set of biological goals and objectives at the landscape, natural community, and species level that describe how the conservation actions occur within areas important for regional conservation purposes. Goals are broad and based on the conservation needs of the resources. Biological objectives describe in more detail the conservation or desired conditions to be achieved and have been designed to collectively attain the biological goals. The biological goals and objectives indicate how the additional conservation of large blocks of habitat will benefit the biodiversity, natural communities, and habitat connectivity throughout key portions of the Plan Area, and provide for the conservation and management of Covered Species. The Orange County Conservation Assessment prepared by the Conservation Biology Institute (CBI 2009) for the EOC

has identified priority conservation areas within Orange County and has been used as a tool to guide and evaluate the conservation actions. The biological goals and objectives are presented in Table ES-2 at the end of this Executive Summary.

Conservation Strategy (Chapter 5)

The Plan conservation strategy is designed to fulfill requirements of the California NCCPA and federal ESA, and to streamline compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and other applicable environmental regulations. OCTA is not a general land use agency with the jurisdictional authority to establish a “stand-alone” preserve system for the entire Plan Area, nor does OCTA affect development and conservation decisions subject to jurisdictions (various cities, County of Orange, etc.) having such land use authority. The Plan only authorizes habitat losses attributable to the Covered Activities. The Covered Activities extend across Orange County and across the plan areas for other conservation planning efforts in Orange County. Therefore, the Plan’s overarching conservation strategy is to make an important contribution to the existing network of conserved lands that occur throughout Orange County. The OCTA Plan will achieve this goal by increasing the size and habitat quality of core habitat areas, and by protecting/enhancing the connectivity of these core areas to other protected habitats throughout the Plan Area.

The primary elements of the Plan’s conservation strategy are:

- 1. Preserve Acquisitions (Chapter 5, Section 5.4).** OCTA has acquired seven properties, resulting in the protection of 1,232 acres of natural habitat (note that the total acreage of the seven properties is approximately 1,296 acres, but the amount of protected natural habitat credited to OCTA is less because portions of the properties are developed, include trails/maintenance roads, and the Saddle Creek South property was acquired, in part, with funding from the National Fish and Wildlife Foundation and credits were adjusted accordingly). Each property will be protected with a conservation easement, and sufficient funding will be set aside to ensure that the properties are properly monitored and managed in perpetuity. Public managed access will be provided on some of these properties, if that access is consistent with the Plan’s biological goals and objectives.
- 2. Restoration Projects (Chapter 5, Section 5.5).** OCTA has approved funding for 11 restoration projects to date, totaling approximately 357 acres of restored habitats. The restoration projects occur throughout the Plan Area in core habitat areas and within key habitat linkages and riparian corridors. The restoration projects are on lands currently protected and will enhance habitat for Covered Species. OCTA has committed to funding additional restoration projects with the remaining restoration funds (approximately \$400,000 remaining from the previous round of restoration project selection) and through future restoration project selections. The Plan identifies requirements for future restoration to ensure that the Plan provides conservation for all Covered Species.
- 3. Avoidance and Minimization (Chapter 5, Section 5.6).** The Plan includes measures to avoid and minimize take of Covered Species. These avoidance and minimization measures will be implemented through a process to verify compliance of project design and construction of Covered Activities. Covered Activities will comply through avoidance and minimization of sensitive biological areas, adherence to species-specific protection measures and policies, compliance with procedures for protection of nesting birds, stormwater and water quality best management practices (BMPs), and wildfire protection techniques. Any costs associated with implementing these measures for covered freeway improvement projects, as described in the Plan, will be funded through the individual project budgets and will not rely on funding under

the M2 Environmental Mitigation Program. OCTA will have a Project Manager overseeing the activities undertaken by the Construction Lead (either Caltrans or OCTA). The OCTA Project Manager will be responsible for ensuring all avoidance and minimization measures are completed and documented by the Construction Lead and its contractors following the requirements as set forth by the Plan.

4. **Streambed Program (Chapter 5, Section 5.7).** The Plan includes the Streambed Protection Mitigation Program (Streambed Program) which outlines the process for submittal of project-level Notification(s) of Lake or Streambed Alteration(s) (NLSA) and the issuance of individual Lake or Streambed Alteration Agreements (LSAAs) for the Covered Activities pursuant to California Fish and Game Code sections 1600–1616. The Streambed Program requires the evaluation of specific streambed avoidance and minimization measures prior to compensatory mitigation. The Streambed Program will ensure that adequate mitigation is completed and that this mitigation is based on habitat and type of aquatic resources necessary to address state regulatory obligations. For unavoidable permanent impacts on streambed and associated riparian habitat, OCTA will compensate at the pre-approved mitigation sites identified in Appendix E, “Streambed Program Guidelines,” which are sites within the acquired Preserves and the restoration projects approved for funding, to achieve no-net-loss standards. Additionally, for temporary impacts on streambeds and associated riparian habitat, OCTA will ensure the impact site will be restored to its pre-project condition, when appropriate, to achieve no-net-loss standards. Restoration plans, as approved by CDFW, USFWS, and if warranted the USACE and State Water Resources Control Board, will be implemented at the sites.
5. **Mitigation Approach (Chapter 5, Section 5.8).** The conservation actions taken as part of this Plan provide advanced mitigation only for the Covered Activities. Once the Covered Activities are completed, there will be no remaining credits that can be used by OCTA as mitigation for non-M2 projects. As the Plan is implemented, OCTA will be responsible for tracking impacts on natural resources resulting from Covered Activities to ensure impacts stay below the amount of impacts estimated as part of this Plan.

Conservation Analysis (Chapter 6)

The conservation analysis demonstrates how implementation of the conservation strategy (Preserve acquisitions, restoration projects, and avoidance and minimization measures) will result in either meeting or exceeding the Plan’s biological goals, objectives, and targets. A quantitative summary of how the Plan meets the targets is included as Table ES-1. A summary of the analysis of how the Plan also achieves the broader biological goals and objectives is included in Table ES-2. In some instances, the Plan identifies requirements for the future restoration projects to enhance and expand on the level of conservation needed to meet the Plan’s biological goals and objectives. The specific Covered Species highlighted for additional conservation include arroyo chub and many-stemmed dudleya.

Management and Monitoring (Chapter 7)

The Plan sets forth a Preserve Management and Monitoring Program that establishes practices to ensure the long-term health and viability of species and ecological values within the Preserves. Guidelines are provided as a framework for OCTA and its Preserve Managers to use when developing Preserve-specific resource management plans. General Preserve stewardship issues and actions addressed include species and habitat management, wildlife species management, property management, hydrology and erosion control, land uses within Preserves, land uses adjacent to

Preserves, recreation, enforcement of public access, fire management, and public outreach and education. The Plan also outlines the types of monitoring that will be done on the Preserves and explains how adaptive management will be used to revisit the management objectives and methods and revise them, if needed, to better achieve biological goals and objectives of the Plan.

Furthermore, OCTA will conduct follow up monitoring of restoration projects approved for funding (approximately every 5 to 10 years over the duration of the permit term) to be able to evaluate the success of the restoration projects and apply “lessons-learned” to future restoration activities.

Plan Implementation (Chapter 8)

OCTA is responsible for implementation of the Plan. OCTA will act as the NCCP/HCP Administrator and will be responsible for filling the roles of Preserve Manager and the Monitoring Biologist, either directly with OCTA staff or by delegation to another entity (e.g., to public entities such as Orange County Parks or State Parks, or to a contracted private entity). Other entities/organizations participating in Plan implementation include: (1) the EOC, which will continue to serve as the interagency and public forum for decisions and oversight; (2) the OCTA Board of Directors, which will provide final decision making authority on substantial matters; (3) restoration project sponsors who implement the restoration projects; (4) restoration project land management entities who will provide long-term management of the restoration project locations for biological value; (5) Caltrans, which is primarily responsible for the construction of freeway improvement projects and will be required to follow all applicable avoidance and minimization measures; and (6) the Wildlife Agencies, which will have an active role in the oversight and administration of the Plan. OCTA will prepare annual reports summarizing activities over the previous year and present results at a public meeting(s).

Plan Funding (Chapter 8, Section 8.3)

Both the NCCPA and ESA require that a conservation plan assure that there is adequate funding to implement the plan’s conservation actions. The primary source of funding for the Plan will come from the M2 transportation sales tax designed to raise money to improve Orange County’s transportation system. As part of the M2 sales tax initiative, a minimum of 5% of the revenues from the freeway program will be set aside for M2 EMP revenues to be used for “programmatic mitigation.” OCTA has estimated (based on 2016 projections) that EMP revenues will total approximately \$285 million. The estimated expenditures for the development and implementation of the Plan (including Preserve acquisitions, recordation of conservation easements, Preserve management and monitoring, funding of restoration projects, program management, and interest of early action plan) totals approximately \$144 million. This estimate includes adequate funding to establish a permanent, non-wasting endowment to cover the long-term annual expenses of (1) Preserve management (general maintenance, access control, enforcement, public outreach, etc.), (2) adaptive management, (3) effectiveness biological monitoring, (4) ongoing program management, and (5) responding to changed circumstances. OCTA will ensure that a non-wasting endowment is established, per the review and approval of the Wildlife Agencies. The assumption for this Plan is that OCTA will be responsible for establishing the endowment, with a third party entity or entities managing the endowment in coordination with the Wildlife Agencies and EOC. OCTA will retain an option to manage the endowment itself, or a part, if there is an accompanying financial or administrative benefit for Plan implementation. An initial estimate of the endowment funding requirements has been developed using a real interest rate of 2.5%. The 2.5% real interest rate is an estimate that is consistent with rates used by third party entities that hold endowments for open space preserves. Within the 5 to 7 years of Plan approval, the OCTA Board of Directors, in

coordination with the Wildlife Agencies and the EOC, will make a determination of the appropriate endowment management entity and capitalization rate for the Plan, which will be used to determine the ultimate endowment needed to meet this Plan’s commitments. Once OCTA has established an endowment to fund management and monitoring of Preserves and the endowment has been reviewed and approved by the Wildlife Agencies, the endowment is deemed to be adequate funding to carry out the obligations under the Plan and the Wildlife Agencies shall not require additional funding from OCTA.

Assurances (Chapter 8, Section 8.6)

Provisions of the NCCPA and ESA regulations provide for regulatory assurances to parties covered by approved NCCPs or HCPs. If unforeseen circumstances occur that adversely affect species covered by an NCCP or HCP, the Wildlife Agencies will not require additional land, water, or financial compensation or impose additional restrictions on the use of land, water, or other natural resources as mitigation for Covered Activities without the consent of OCTA.

Table ES-1. Summary of Conservation Analysis for Plan Targets

Biometrics	Total within Plan Area	Freeway Improvement Projects		Preserve Activities	Plan Targets ⁴	Conservation Actions		Conservation Above or Below Target
		Direct Effects ¹	Indirect Effects ²	Direct Effects ³		Preserve Acquisitions	Restoration Projects	
<i>Natural Communities (acres)</i>								
Chaparral	82,965	5.0	41.9	5.9	42.8	562.0	4.0	523.2
Coniferous Forest	1,930	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grasslands ⁵	41,635	108.1	280.9	0.8	358.3	74.2	78.4	-205.7
Riparian	4,457	5.0	57.0	0.2	38.9	18.3	110.4	89.8
Scrub	59,427	10.0	85.2	2.8	68.2	261.9	140.8	334.5
Water	2,696	0.4	0.1	0.0	0.9	0.0	1.0	0.1
Wet Meadows/ Marsh	2,235	2.5	0.0	0.0	5.0	0.0	5.0	0.0
Woodland	13,995	10.0	19.3	3.3	36.3	316.1	17.8	297.6
Totals	209,340	141.0	484.4	13.0	550.4	1,232.5	357.4	1,039.5
<i>Predicted Species Habitat Models (acres)</i>								
<i>Plants</i>								
Intermediate Mariposa Lily	55,623	3.9	28.1	3.3	28.5	315.7	0.0	287.2
Many-stemmed Dudleya	91,237	11.1	83.7	8.2	80.5	776.9	0.0	696.4
Southern Tarplant	5,963	9.2	35.3	0.1	36.2	9.3	31.2	4.3
<i>Fish</i>								
Arroyo Chub	69	0.1	1.9	0.0	1.1	0.1	13.0	12.0

Table ES-1. Summary of Conservation Analysis for Plan Targets (cont.)

Biometrics	Total within Plan Area	Freeway Improvement Projects		Preserve Activities	Plan Targets ⁴	Conservation Actions		Conservation Above or Below Target
		Direct Effects ¹	Indirect Effects ²	Direct Effects ³		Preserve Acquisitions	Restoration Projects	
<i>Reptiles</i>								
Coast Horned Lizard	96,100	63.4	184.2	5.6	230.2	529.8	140.8	440.4
Orangethroat Whiptail	23,469	45.1	110.7	0.5	146.7	52.1	140.8	46.2
Western Pond Turtle—Aquatic	5,963	3.1	16.5	0.1	14.7	9.9	22.1	17.3
Western Pond Turtle—Upland	90,120	45.8	283.8	5.9	245.3	561.2	88.3	404.2
<i>Birds</i>								
Cactus Wren	55,651	9.7	85.2	2.7	67.4	254.7	14.5	201.8
Coastal California Gnatcatcher	65,608	10.3	96.0	4.5	77.5	422.1	140.8	485.4
Least Bell's Vireo	4,466	4.9	55.2	0.1	37.5	8.7	110.4	81.6
Southwestern Willow Flycatcher	4,807	5.1	60.5	0.1	40.6	8.7	110.4	78.5
<i>Mammals</i>								
Bobcat	189,607	45.9	246.0	13.0	240.8	1,232.5	311.7	1,303.4
Mountain Lion	140,725	24.5	118.8	10.7	129.7	1,013.3	130.4	1,014.0
<i>Critical Habitat</i>								
Coastal California Gnatcatcher	18,752	53.9	182.7	6.4	212.0	608.5	5.5	402.0

¹ Estimated direct effects are based on a “planning-level” footprint. Actual effects are expected to be less through the implementation of avoidance and minimization measures. The amount of direct effects for individual habitat types and predicted species habitat models have been adjusted to address the low precision and accuracy of the regional habitat data and allowance for habitat types with small amount of impacts to serve as a reasonable cap to direct effects under the Plan.

² Indirect effects have been estimated using a 300-foot buffer around direct effect areas.

³ Direct effects associated with Preserve implementation activities (new trails, kiosks, maintenance facilities, etc.) have been estimated to be no more than 13 acres of natural habitat (approximately 1% of the Preserves). Because the location of the Preserve activity effects is not known at this time, a conservative estimate has been taken based on the proportion of the biometric within the Preserves. Actual effects on sensitive habitats are expected to be less through the implementation of avoidance and minimization measures.

⁴ Plan targets were calculated using the following formula: (direct effects * 2) + (indirect effects * 0.5).

⁵ Grasslands—All natural community types are substantially above their targets except for grasslands. The negative conservation balance for grasslands is, however, offset based on the following considerations: (a) direct and indirect effects on grasslands will generally occur for small patches of disturbed, predominantly nonnative grasslands along freeway edges that have low biological value; (b) conservation of grassland is occurring within large, intact areas of protected natural habitat that have a high biological value; (c) Preserve acquisitions include large patches of native grasslands; and (d) the Plan results in conservation of other sensitive habitats, including scrub, riparian, and woodlands, that exceed Plan targets.

Table ES-2. Biological Goals, Objectives, and Conservation Actions

Biological Goal or Objective	Conservation Actions ¹
Landscape Level Biological Goals and Objectives	
Landscape Goal 1: Protect, manage, and enhance natural landscapes that result in conservation of areas large enough to support ecological integrity and sustainable populations of Covered Species, and are linked to each other and/or other areas of protected habitat in or adjacent to the Plan Area.	
<u>Landscape Objective 1.1:</u> OCTA will conserve and manage natural landscape within core and linkage areas contiguous with existing protected lands.	Acquire. OCTA has acquired seven Preserves—Aliso Canyon, Ferber Ranch, Hafen, Hayashi, MacPherson, O’Neill Oaks, and Saddle Creek South—totaling 1,232.5 acres of natural habitat. In all instances, the seven Preserves are located within priority conservation areas (as defined by the CBI (CBI 2009) and immediately adjacent to other protected lands. These Preserves add to the protection of large blocks of natural open space in areas important for regional conservation.
<u>Landscape Objective 1.2:</u> OCTA will fund and successfully implement restoration projects within the Plan Area to restore or enhance habitat that supports populations of Covered Species and natural landscapes.	Restore. OCTA has approved for funding 11 restoration projects to date, totaling an estimated 357.4 acres of restored habitats. The restoration projects occur throughout the Plan Area in core habitat areas and within key habitat linkages and riparian corridors. The restoration projects are on lands that are either currently protected or are in the process of being protected through a conservation easement or an equivalent long-term protection mechanism approved by the Wildlife Agencies, and will enhance habitats that support Covered Species, including coastal sage scrub, cactus scrub, riparian, wetlands, and woodland habitats.
Landscape Goal 2: Protect and enhance natural and semi-natural landscapes important to maintain wildlife movement within the Plan Area.	
<u>Landscape Objective 2.1:</u> OCTA will acquire, protect, and manage natural landscapes that help to secure wildlife movement corridors and provide landscape connectivity.	Acquire. OCTA has acquired four Preserves—Ferber Ranch, Hafen, O’Neill Oaks, and Saddle Creek South—totaling 592.0 acres of natural habitat in the Trabuco Canyon area. The MacPherson Preserve (200.0 acres) was also acquired and is within the Silverado Canyon. These Preserves provide a significant addition to the protection of open space in a region of the Plan Area that provides connectivity between O’Neill Park, Cleveland National Forest, the Central-Coastal NCCP/HCP Central reserve system, and Orange County Southern Subregion HCP reserve system. In addition, OCTA has acquired the Hayashi Preserve in the Chino Hills area that provides 291.2 acres of natural habitat in a location that provides connectivity between the Puente Hills to the northwest and Santa Ana Mountains to the south..
<u>Landscape Objective 2.2:</u> OCTA will restore or enhance habitat through restoration projects that improve habitat connectivity and wildlife movement through existing protected lands.	Restore. Of the 11 restoration projects OCTA has approved for funding to date, five (totaling 179.7 acres of restored habitat) are located in areas highly important for habitat connectivity and wildlife movement and/or include specific design features (e.g., improve directional fencing to wildlife crossings) to promote wildlife movement. These restoration projects include North Coal Canyon (located in the Coal Canyon Linkage mapped by the CBI (CBI 2009)), West Loma (directional fencing to reduce roadkill on the 241 toll road), Big Bend (essential connection between Aliso and Wood Canyons Wilderness Park to the Laguna Coast Wilderness Park), Aliso Creek (riparian corridor linking several open space Preserves), and City Parcel (located in the Trabuco and San Juan Creeks Linkage mapped by CBI (CBI 2009)).

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹												
<p><u>Landscape Objective 2.3</u>: OCTA will set forth policies and procedures requiring the planning and execution of covered freeway improvement projects in a manner that maintains and, if feasible, enhances wildlife connectivity through existing structures. OCTA will provide monitoring, when and where appropriate, to demonstrate this objective has been met.</p>	<p>Policy. The Wildlife Crossing Policy (see Section 5.6.2.3) is an avoidance and minimization measure, and requires covered freeway improvement projects be evaluated during pre-project surveys to determine if existing structures function as wildlife movement corridors. OCTA will require that appropriate design features are implemented to ensure that the wildlife crossing continues to function after the freeway construction improvements are completed. OCTA will provide a technical report summarizing design recommendations for review and approval by the Wildlife Agencies prior to final design. This technical report will set forth appropriate monitoring requirements of the wildlife crossing using guidance outlined in the Caltrans <i>Wildlife Crossing Guidance Manual</i>.</p>												
<p>Landscape Goal 3: OCTA will protect, enhance, and/or restore natural landscapes within a range of environmental gradients and contiguous to other protected areas to allow for shifting species distributions in response to catastrophic events (e.g., fire, prolonged drought) or changed circumstances (e.g., climate change).</p>													
<p><u>Landscape Objective 3.1</u>: OCTA will acquire and/or restore natural landscapes within elevation ranges (0–500; 500–1,000; 1,000–1,500; 1,500–2,000 feet). The conservation and restoration of Covered Species habitat in or contiguous with existing Preserve lands will benefit potential shifting species distributions in response to catastrophic events and changed circumstances.</p>	<p>Acquire and Restore. OCTA has acquired Preserves and approved for funding restoration projects within different elevation ranges:</p> <table border="1"> <thead> <tr> <th><u>Elevation Range</u></th> <th><u>Combined Preserve and Restoration Acres</u></th> </tr> </thead> <tbody> <tr> <td>0–500 feet</td> <td>223.0</td> </tr> <tr> <td>500–1,000 feet</td> <td>328.2</td> </tr> <tr> <td>1,000–1,500 feet</td> <td>957.2</td> </tr> <tr> <td>1,500–2,000 feet</td> <td>81.5</td> </tr> </tbody> </table> <p>Areas of the Plan Area at higher elevations (over 2,000 feet) already have a high percent of protected lands (CBI 2009).</p>	<u>Elevation Range</u>	<u>Combined Preserve and Restoration Acres</u>	0–500 feet	223.0	500–1,000 feet	328.2	1,000–1,500 feet	957.2	1,500–2,000 feet	81.5		
<u>Elevation Range</u>	<u>Combined Preserve and Restoration Acres</u>												
0–500 feet	223.0												
500–1,000 feet	328.2												
1,000–1,500 feet	957.2												
1,500–2,000 feet	81.5												
<p>Landscape Goal 4: Protect and enhance habitat in geographically distinct areas across the Plan Area to conserve species by facilitating/promoting genetic exchange.</p>													
<p><u>Landscape Objective 4.1</u>: OCTA will acquire and/or restore natural landscapes within most of the major watersheds (HUC8) and a majority of the core and linkage areas that are contributing to genetic exchange within these areas.</p>	<p>Acquire and Restore. OCTA has acquired Preserves and approved funding for restoration projects within all of the major watersheds:</p> <table border="1"> <thead> <tr> <th><u>Watersheds (HUC8)</u></th> <th><u>Combined Preserve and Restoration Acres</u></th> </tr> </thead> <tbody> <tr> <td>Aliso – San Onofre</td> <td>850.6</td> </tr> <tr> <td>Newport Bay</td> <td>15.7</td> </tr> <tr> <td>San Gabriel</td> <td>313.1</td> </tr> <tr> <td>Santa Ana</td> <td>402.3</td> </tr> <tr> <td>Seal Beach</td> <td>8.2</td> </tr> </tbody> </table> <p>In addition, OCTA has acquired Preserves and/or approved funding for restoration projects in 9 of the 12 core and linkage areas mapped by CBI (CBI 2009).</p>	<u>Watersheds (HUC8)</u>	<u>Combined Preserve and Restoration Acres</u>	Aliso – San Onofre	850.6	Newport Bay	15.7	San Gabriel	313.1	Santa Ana	402.3	Seal Beach	8.2
<u>Watersheds (HUC8)</u>	<u>Combined Preserve and Restoration Acres</u>												
Aliso – San Onofre	850.6												
Newport Bay	15.7												
San Gabriel	313.1												
Santa Ana	402.3												
Seal Beach	8.2												

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
Natural Community Level Biological Goals and Objectives	
Natural Community Goal 1: Protect, manage, and enhance natural communities to promote native biodiversity.	
<p><u>Natural Community Objective 1.1 (Chaparral)</u>: OCTA will acquire and/or restore chaparral habitat to promote conservation of native biodiversity and connectivity that benefit Covered Species of the chaparral natural community.</p>	<p>Acquire and Restore. OCTA has acquired seven Preserves that include a total of 562.0 acres of chaparral habitat. A majority of the Aliso Canyon (84%), Hafen (66%), MacPherson (72%) and O'Neill Oaks (71%) Preserves include chaparral natural communities. In addition, the Agua Chinon/Bee Flat Canyon restoration project includes 4.0 acres of chaparral habitat restoration and/or enhancement. The conservation and restoration of chaparral habitat will benefit coast horned lizard, orangethroat whiptail, bobcat, and mountain lion (limited range).</p>
<p><u>Natural Community Objective 1.2 (Grassland)</u>: OCTA will acquire and/or restore grassland habitat to promote native biodiversity and connectivity that benefit Covered Species of the grassland natural community.</p>	<p>Acquire and Restore. OCTA has acquired the Aliso Canyon, Ferber Ranch, Hayashi, and MacPherson Preserves, which have a combined 74.2 acres of grassland habitat. Native grassland has been mapped on both the Ferber Ranch and Hayashi Preserves with large patches of high quality native grassland habitat (totaling 17.1 acres) occurring on the Ferber Ranch property. OCTA will ensure appropriate management actions to protect and enhance the native grassland patches in both Preserves will be completed in accordance with the requirements incorporated into the Ferber Ranch and Hayashi resource management plans (RMPs). In addition, OCTA has approved funding for four restoration projects that include restoration of grassland habitats totaling 78.4 acres. Together these efforts amount to 152.6 acres of grassland habitat acquired and/or restored.</p>
<p><u>Natural Community Objective 1.3 (Riparian)</u>: OCTA will acquire and/or restore riparian habitat in multiple locations across the Plan Area. These actions will enhance and expand riparian communities in key locations for wildlife movement, provide potentially suitable live-in and dispersal habitat for some of the Covered Species, and promote native biodiversity and connectivity to benefit many of the Covered Species.</p>	<p>Acquire and Restore. OCTA has acquired four Preserves—Ferber Ranch, Hafen, Hayashi, and MacPherson—that have a total of 18.3 acres of riparian habitat. On the Hayashi Preserve, OCTA has undertaken steps to remove grazing within the riparian zone (using fencing) to allow the riparian habitat to passively recover and expand. In addition, 9 of the 11 restoration projects OCTA has approved for funding to date include riparian habitat restoration totaling 110.4 acres. The riparian restoration projects occur within areas important for regional conservation, including large sized restoration projects along Aliso Creek and Lower Silverado Canyon. Conservation of riparian habitat will benefit Covered Species that rely on healthy streambed ecosystems (western pond turtle), riparian nesting birds (least Bell's vireo and southwestern willow flycatcher), and mammals using riparian habitat for movement cover (bobcat, mountain lion).</p>

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
<p><u>Natural Community Objective 1.4 (Scrub)</u>: OCTA will acquire and/or restore scrub habitat. These actions will enhance and expand scrub habitat in key locations for wildlife movement, provide potentially suitable nesting habitat for Covered Species, and promote native biodiversity and connectivity that benefit Covered Species of the scrub natural community.</p>	<p>Acquire and Restore. OCTA has acquired six Preserves—Aliso Canyon, Ferber Ranch, Hafen, MacPherson, O’Neill Oaks, and Saddle Creek South—that have a total of 261.9 acres of scrub habitat. These Preserves support nesting populations of coastal California gnatcatcher and cactus wren and add to the protection of an important block of scrub habitat between the Orange County Southern Subregion HCP and Central-Coastal NCCP/HCP reserve systems. In addition, OCTA has approved for funding two restoration projects—UC Irvine Ecological Reserve and Chino Hills State Park—that include 14.5 acres of cactus scrub habitat in locations known to support cactus wren and seven restoration projects that included coastal sage scrub habitat (126.3 acres) that will enhance and expand habitat for the coastal California gnatcatcher. This amounts to a total of 402.6 acres of scrub habitat that has been acquired and/or will be restored.</p>
<p><u>Natural Community Objective 1.5 (Woodland)</u>: OCTA will acquire and/or restore woodland habitat. These actions will enhance and expand woodland habitat for foraging and cover by Covered Species, and will promote native biodiversity and connectivity that benefit Covered Species of the woodland natural community.</p>	<p>Acquire and Restore. OCTA has acquired six Preserves—Ferber Ranch, Hafen, Hayashi, MacPherson, O’Neill Oaks, and Saddle Creek South— that include a total of 316.1 acres of woodland habitat. A majority of the Hayashi (64%) Preserve includes woodland habitat, including 11.6 acres of coast live oak woodland and 174.4 acres of California walnut woodland. The California walnut woodland is a habitat type considered of special concern by the state and found to be under protected (CBI 2009). In addition, the Agua Chion/Bee Flat Canyon restoration project includes 17.8 acres of woodland habitat restoration and/or enhancement. A wide range of species use woodlands for reproduction, foraging, shelter, and dispersal, including bobcat and mountain lion.</p>
<p>Natural Community Goal 2: Maintain and enhance riparian and wetland function and values to benefit Covered Species and promote native biodiversity.</p>	
<p><u>Natural Community Objective 2.1</u>: OCTA will acquire, restore and/or enhance areas with aquatic resources (per CDFW jurisdiction). These conservation actions will protect riparian and wetlands functions and values by improving the condition and integrity of the physical streambed, aquatic and riparian habitat, and hydrology.</p>	<p>Acquire and Restore. For all of the Preserves that OCTA has acquired and 6 of the 11 restoration projects approved for funding by OCTA, detailed jurisdictional delineations have been completed to identify and map the extent of aquatic resources within the Preserve/project boundaries. A total of 86.0 acres of aquatic resources (per CDFW jurisdiction) occurs within the Preserves, and approximately 101.5 acres of aquatic resources will be restored, enhanced, and/or rehabilitated through the restoration projects. The conservation actions protect riparian and wetland functions and values, and will mitigate any unavoidable impacts on aquatic resources resulting from Covered Activities.</p>
<p><u>Natural Community Objective 2.2</u>: OCTA will set forth policies and procedures to ensure Covered Activities result in no net loss of wetland habitat values and acreage in the Plan Area.</p>	<p>Policy. The Plan sets forth the Streambed Program (Section 5.7 and Appendix E, “Streambed Program Guidelines”) designed to protect, and compensate for unavoidable impacts on streambed areas and riparian/wetland habitats under jurisdiction of CDFW. Table E-2 in Appendix E shows that impacts will be mitigated using mitigation ratios depending on the type and quality of resources affected and timing of mitigation. OCTA will track impacts and mitigation of aquatic resources by habitat type and acreage using a Mitigation Ledger and provide a summary in an annual report.</p>

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
Species Level Biological Goals and Objectives	
Species Goal 1: Provide conservation of intermediate mariposa lily within the Plan Area and minimize and mitigate impacts associated with Covered Activities.	
<u>Species Objective 1.1:</u> OCTA will acquire Preserves with occurrences of intermediate mariposa lily. OCTA will ensure that appropriate management and monitoring actions are incorporated into the RMPs for each Preserve to support sustainable populations of intermediate mariposa lily.	Acquire. OCTA completed baseline biological surveys of the seven Preserves and during these surveys, six of the seven Preserves—Aliso Canyon, Ferber Ranch, Hafen, MacPherson, O’Neill Oaks, and Saddle Creek South—had a total of 93 identified locations, with a minimum population of 597 plants, of intermediate mariposa lily. OCTA will protect and monitor these locations and any future locations found, as part of the Preserve RMPs.
<u>Species Objective 1.2:</u> OCTA will establish policies and procedures that require OCTA to identify, track, mitigate, and report annually any unavoidable impacts on intermediate mariposa lily.	Policy. The Plan includes the Covered Plant Species Policy (see Section 5.6.2.2) which sets forth policies and procedures requiring OCTA to evaluate impacts based on project-specific field surveys of the Covered Activities and to mitigate any unavoidable impacts (at a 3:1 ratio) using credits determined through field surveys of Preserves and actions taken to enhance, restore, and create populations of covered plant species as part of restoration projects approved for funding by OCTA. OCTA will maintain a ledger-type accounting system to track credits and debits and report status as part of the Plan’s annual report.
Species Goal 2: Provide conservation of many-stemmed dudleya within the Plan Area and minimize and mitigate impacts associated with Covered Activities.	
<u>Species Objective 2.1:</u> OCTA will acquire a Preserve and/or implement a restoration project resulting in the protection, enhancement, and/or creation of a major population (i.e., 500 individuals) of many-stemmed dudleya.	Restore. To ensure that the Plan provides conservation and management for many-stemmed dudleya, OCTA will protect, enhance, and/or establish a major population (i.e., 500 individuals) of many-stemmed dudleya. During baseline biological surveys of the Aliso Canyon Preserve, four occurrences with a total of 60 individuals were detected. Ongoing Preserve management may improve habitat suitability (e.g., reduction of invasive species) that results in the expansion of the existing population on Aliso Canyon Preserve and/or establishment/detection of new populations on the other OCTA Preserves. Also, future non-drought conditions may result in the detection of new occurrences at Aliso Canyon. If a minimum of 500 individuals are eventually identified on the Preserves or within the approved restoration projects (see Species Objective 2.2) within the 10 years from Plan adoption, then this objective will be considered complete. If this objective cannot be met within the first 10 years as described, OCTA will select and oversee implementation of a restoration project designed to establish or expand a population of many-stemmed dudleya and will result in an increase of a current population or establishment of a new population such that a minimum of 500 individuals is achieved.
<u>Species Objective 2.2:</u> OCTA will implement restoration projects where there are known occurrences of many-stemmed dudleya in the project vicinity. The restoration actions will to improve and enhance potentially suitable habitat for many-stemmed dudleya.	Restore. OCTA has approved for funding two restoration projects, West Loma and Big Bend; many-stemmed dudleya has been mapped in the vicinity of both projects. This plant is capable of self-fertilization and remains dormant as an underground corm in the dry months (June–November). The restoration actions have the potential to improve habitat conditions for many-stemmed dudleya to establish.

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
<p><u>Species Objective 2.3</u>: OCTA will establish policies and procedures that require OCTA to identify, track, mitigate, and report annually any unavoidable impacts on many-stemmed dudleya.</p>	<p>Policy. The Plan includes the Covered Plant Species Policy (see Section 5.6.2.2) which sets forth policies and procedures requiring OCTA to evaluate impacts based on project-specific field surveys of the Covered Activities and to mitigate any impacts (at a 3:1 ratio) using credits determined through field surveys of Preserves and actions taken to enhance, restore, and create populations of covered plant species as part of restoration projects approved for funding by OCTA. OCTA will maintain a ledger-type accounting system to track credits and debits and report status as part of the Plan’s annual report.</p>
<p>Species Goal 3: Provide conservation of southern tarplant within the Plan Area and minimize and mitigate impacts associated with Covered Activities.</p>	
<p><u>Species Objective 3.1</u>: OCTA will implement a restoration project in an area with known occurrences of southern tarplant. The restoration design plan includes elements to promote the expansion of southern tarplant as part of the restoration efforts.</p>	<p>Restore. OCTA has approved for funding the Harriet Weider Regional Park restoration project that has southern tarplant mapped in the project vicinity. The restoration project sponsor has agreed to include specific measures as part of the restoration project design plan to achieve the establishment of southern tarplant. Southern tarplant seeds have been harvested from mature plants near the restoration site, and they will be included in the restoration seed mix. OCTA will ensure the restoration project sponsor conducts focused surveys for southern tarplant as part of their monitoring efforts to quantify the population established through the restoration process.</p>
<p><u>Species Objective 3.2</u>: OCTA will establish policies and procedures that require OCTA to identify, track, mitigate, and report annually any unavoidable impacts on southern tarplant.</p>	<p>Policy. The Plan includes the Covered Plant Species Policy (see Section 5.6.2.2), which sets forth policies and procedures requiring OCTA to evaluate impacts based on project-specific field surveys of the Covered Activities and to mitigate any impacts (at a 3:1 ratio) using credits determined through field surveys of Preserves and actions taken to enhance, restore, and create populations of covered plant species as part of restoration projects approved for funding by OCTA. OCTA will maintain a ledger-type accounting system to track credits and debits and report status as part of the Plan’s annual report.</p>
<p>Species Goal 4: Provide conservation of arroyo chub within the Plan Area and minimize and mitigate impacts associated with Covered Activities.</p>	
<p><u>Species Objective 4.1</u>: OCTA will restore and enhance riparian habitat in the areas that potentially support arroyo chub and conserve natural habitat in the headwaters of a stream supporting arroyo chub to protect in-stream water quality.</p>	<p>Restore and Acquire. The City Parcel restoration project approved for funding by OCTA results in 13.0 acres of riparian restoration along lower reaches of Trabuco Creek. This restoration effort includes removal of nonnative plant species, removal of debris and trash, and planting of native plant species. These restoration activities will contribute to the improvement of the natural hydrological functions and water quality for this important coastal stream course and will improve Trabuco Creek as habitat for arroyo chub. In addition, OCTA has acquired the Ferber Ranch, Hafen, and O’Neill Oaks Preserves, which are located in headwaters of Trabuco Creek. The protection of 540.7 acres of natural habitat in this location contributes to the protection of water quality, sedimentation, and hydrological processes important for arroyo chub habitat downstream in Trabuco Creek.</p>

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
<p><u>Species Objective 4.2</u>: OCTA will implement a restoration project focused on improving habitat conditions for arroyo chub, such as improving water quality, removing nonnative aquatic species, or modifying check dams to allow passage, to support sustainable populations in occupied areas.</p>	<p>Restore. OCTA will fund a future restoration project that will achieve a direct benefit to an existing population of arroyo chub. This restoration project could include actions to improve water quality in a subwatershed known to have arroyo chub (e.g., in Bell Canyon), removal or modification of check dams to facilitate fish passage (e.g., along San Juan Creek in U.S. Forest Service lands), and/or a focused nonnative fish removal within a select tributary (e.g., fish trapping of source populations of nonnatives in Oso Creek).</p>
<p><u>Species Objective 4.3</u>: OCTA will establish policies and procedures to avoid and minimize impacts on arroyo chub and its habitat.</p>	<p>Policy. The Plan includes the Aquatic Resources and Species Policy that outlines appropriate avoidance and minimization measures for construction activities in aquatic resources, such as rivers, creeks, and riparian areas. The Construction Lead will retain a qualified biologist during any project that could impact potential arroyo chub habitat to determine if arroyo chub might be present and subject to potential injury or mortality from construction activities. When arroyo chub are present, the project biologist will identify appropriate methods to capture, handle, exclude, and/or relocate those individuals. All fish exclusion and salvage activities will adhere to accepted National Oceanic and Atmospheric Administration Fisheries Service and CDFW protocols. Other policies that will provide for the protection of arroyo chub include the Avoidance and Minimization of Sensitive Biological Areas, Wildlife Crossing Policy, Stormwater and Water Quality BMPs, Wildfire Protection Techniques, and Wetland and Riparian Streambed Protection Program.</p>
<p>Species Goal 5: Provide conservation of coast horned lizard within the Plan Area and minimize and mitigate impacts associated with Covered Activities.</p>	
<p><u>Species Objective 5.1</u>: OCTA will acquire Preserves with natural habitat that includes areas with loose, fine soils with high sand fraction, open areas with limited overstory for basking, and other features known to support coast horned lizard and OCTA will ensure that appropriate management monitoring actions are incorporated into the RMPs for each Preserve that includes suitable habitat for coast horned lizard.</p>	<p>Acquire. OCTA has acquired seven Preserves—Aliso Canyon, Ferber Ranch, Hafen, Hayashi, MacPherson, O’Neill Oaks, and Saddle Creek South—totaling 1,232.5 acres of natural habitat. During baseline biological surveys completed for these Preserves in 2012 and 2015, it was noted that each of these Preserves provides quality habitat features for coast horned lizard.</p>
<p>Species Goal 6: Provide conservation of orangethroat whiptail within the Plan Area and minimize and mitigate impacts associated with Covered Activities.</p>	
<p><u>Species Objective 6.1</u>: OCTA will acquire Preserves that have documented occurrences of orangethroat whiptail. OCTA will ensure that appropriate management and monitoring actions are incorporated into the RMPs for each Preserve to protect and maintain habitat to support sustainable populations of orangethroat whiptail.</p>	<p>Acquire. During the baseline biological surveys of the seven acquired Preserves, it was noted that all of these Preserves provide quality habitat features for orangethroat whiptail and occurrences were identified on the Ferber Ranch, O’Neill Oaks and MacPherson Preserves.</p>

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
<p>Species Goal 7: Provide conservation of western pond turtle within the Plan Area and minimize and mitigate impacts associated with Covered Activities.</p>	
<p><u>Species Objective 7.1:</u> OCTA will acquire a Preserve(s) with the potential to expand western pond turtle populations, potentially via translocation. OCTA will enhance the riparian and streambed habitat within the Preserve(s) to create and/or improve permanent and intermittent water sources that could provide habitat for western pond turtle.</p>	<p>Acquire. OCTA has acquired the Hayashi Preserve in the Chino Hills area that has had incidental observations of western pond turtle (observed in 2011) by Chino Hills State Park staff. OCTA has undertaken steps to remove grazing within the Soquel Canyon riparian zone (using fencing) to allow the riparian habitat along this drainage to passively recover and expand. OCTA will include appropriate management actions to protect and/or enhance western pond turtle habitat and locations, such as monitoring and as-needed adaptive management through collaboration with, and agreement between, OCTA and the Wildlife Agencies, as part of the Preserve RMP.</p>
<p><u>Species Objective 7.2:</u> OCTA will implement a restoration project that will directly benefit known populations of western pond turtle by removing nonnative invasive plant species degrading the stream course, expanding ponds and open water, and/or exposing potential basking sites.</p>	<p>Restore. OCTA has approved for funding the Aliso Creek restoration project, which involves 55 acres of riparian and transitional habitat restoration, including the removal of dense stands of arundo that have clogged the stream course and substantially degraded the quality of the stream as habitat for western pond turtle. There are four known occurrences of western pond turtle within the restoration project site. The restoration actions will improve western pond turtle habitat by improving water quality and aquatic habitat (exposing ponds and basking sites), enhancing aestivation habitat and access to aestivation habitat, and improving upland nesting habitat.</p>
<p><u>Species Objective 7.3:</u> OCTA will establish policies and procedures to avoid and minimize impacts on western pond turtle and its habitat.</p>	<p>Policy. The Plan includes the Aquatic Resources and Species Policy that outlines appropriate avoidance and minimization measures for construction activities in aquatic resources, such as rivers, creeks, and riparian areas. Prior to ground-disturbing activities in or near aquatic habitats, OCTA will conduct preconstruction surveys for western pond turtles to determine their presence or absence within the construction footprint. If western pond turtles are found within the construction footprint, the occupied habitat and appropriate buffer, as determined by a qualified biologist, will be avoided to the maximum extent practicable. If avoidance is not possible and the species is determined to be present in work areas, the biologist may capture turtles prior to construction activities and relocate them to nearby suitable habitat a minimum of 300 feet downstream from the work area. Alternatively, if recommended/approved by the Wildlife Agencies, the turtles may be captured and either temporarily held or relocated to an appropriate nearby location. Other policies that will provide for the protection of western pond turtle include the Avoidance and Minimization of Sensitive Biological Areas, Wildlife Crossing Policy, Stormwater and Water Quality BMPs, Wildfire Protection Techniques, and Wetland and Riparian Streambed Protection Program.</p>

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
Species Goal 8: Provide conservation of cactus wren within the Plan Area and minimize and mitigate impacts associated with Covered Activities.	
<u>Species Objective 8.1:</u> OCTA will protect and manage blocks of occupied cactus wren habitat to support sustainable populations and maintain habitat linkages between cactus wren populations within the Plan Area.	Acquire. OCTA has acquired four Preserves—Ferber Ranch, Hafen, O’Neill Oaks, and Saddle Creek South in the Trabuco Canyon area—that support nesting populations of cactus wren and add to the protection of an important block of cactus scrub patches between the Orange County Southern Subregion HCP and the Central-Coastal NCCP/HCP reserve systems. During the 2012 baseline biological surveys of the Preserves, cactus wren occurrences were recorded on these Preserves.
<u>Species Objective 8.2:</u> OCTA will implement restoration project(s) focused on creating cactus scrub habitat to expand habitat in areas of known cactus wren populations.	Restore. OCTA has approved for funding two restoration projects—UC Irvine Ecological Reserve and Chino Hills State Park—that include 14.5 acres of cactus scrub habitat in locations known to support cactus wren.
<u>Species Objective 8.3:</u> OCTA will establish policies and procedures to avoid and minimize impacts on cactus wren habitat, including cactus scrub.	Policy: The Plan includes the policies that will require covered freeway improvement projects to be designed in a manner that avoids and/or minimizes impacts on sensitive biological resources, including cactus scrub. Temporary staging areas, access roads, and other project components that have the flexibility to be sited outside of sensitive areas will be incorporated into the project design. Best management practices will be followed to delineate environmentally sensitive areas and provide for training and monitoring to ensure these areas are protected. If temporary impacts on cactus sage scrub cannot be avoided, these areas will be restored to their previous conditions. Other policies that will provide for the protection of cactus wren include the Nesting Birds Policy and Wildfire Protection Techniques.
Species Goal 9: Provide conservation of coastal California gnatcatcher within the Plan Area and minimize and mitigate impacts associated with Covered Activities.	
<u>Species Objective 9.1:</u> OCTA will protect and manage blocks of occupied gnatcatcher nesting habitat to support sustainable populations and maintain habitat linkages between coastal California gnatcatcher populations within the Plan Area.	Acquire. OCTA has acquired six Preserves—Aliso, Canyon, Ferber Ranch, Hafen, MacPherson, O’Neill Oaks, and Saddle Creek South—that protect coastal sage scrub habitat and/or support nesting populations of coastal California gnatcatchers. These Preserves add to the protection of important blocks of coastal sage scrub between the Orange County Southern Subregion HCP and Central-Coastal NCCP/HCP reserve systems and provide suitable habitat at a low elevation for movement of gnatcatchers. During the baseline biological surveys of the Preserves, occurrences of coastal California gnatcatchers were noted at the Ferber Ranch and O’Neill Oaks Preserves and adjacent to the Aliso Canyon Preserve. Previous sightings have been recorded at the Saddle Creek South Preserve. Coastal California gnatcatchers were not observed at MacPherson, although coastal sage scrub habitat within this Preserve is high quality and is in large enough patches to support pairs. Although the MacPherson Preserve is near the edge of the elevation range of coastal California gnatcatcher, the location of this Preserve could serve as a habitat refugia from fire and/or a stepping stone for regional connectivity.

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
<p><u>Species Objective 9.2:</u> OCTA will restore and/or enhance coastal sage scrub habitat to expand coastal California gnatcatcher habitat.</p>	<p>Restore. OCTA has approved funding for ten restoration projects that include restoration of coastal sage scrub and cactus scrub habitat, totaling 140.8 acres. The Big Bend, City Parcel, Fairview Park, Harriett Weider Regional Park, Lower Silverado Canyon, UC Irvine Ecological Reserve, Chino Hills State Park, and North Coal Canyon restoration projects will restore coastal sage scrub and cactus scrub habitat in locations important for providing for coastal California gnatcatcher movement and dispersal. The coastal sage scrub restoration that is part of the West Loma and Aqua Chinon/Bee Flat Canyon restoration projects will improve coastal California gnatcatcher habitat within the Central-Coastal NCCP/HCP reserve system.</p>
<p><u>Species Objective 9.3:</u> OCTA will establish policies and procedures to avoid and minimize impacts on coastal California gnatcatcher habitat, including coastal sage scrub.</p>	<p>Policy: The Plan includes policies that will require covered freeway improvement projects to be designed in a manner that avoids and/or minimizes impacts on sensitive biological resources, including coastal sage scrub. Temporary staging areas, access roads, and other project components that have the flexibility to be sited outside of sensitive areas will be incorporated into the project design. Best management practices will be followed to delineate environmentally sensitive areas and provide for training and monitoring to ensure these areas are protected. If temporary impacts on coastal sage scrub cannot be avoided, the areas will be restored to their previous conditions. Other policies that will provide for the protection of coastal California gnatcatcher include the Nesting Birds Policy and Wildfire Protection Techniques.</p>
<p>Species Goal 10: Provide conservation of least Bell’s vireo within the Plan Area and minimize and mitigate impacts associated with Covered Activities.</p>	
<p><u>Species Objective 10.1:</u> OCTA will acquire a Preserve with the potential to enhance riparian habitat to expand least Bell’s vireo habitat.</p>	<p>Acquire. OCTA has acquired the Hayashi Preserve in the Chino Hills area, which has an existing riparian corridor along Soquel Canyon that has been historically disturbed by grazing. OCTA has taken steps to remove grazing from the riparian corridor by installing fencing to allow for the passive restoration of riparian habitat. In similar situations in the Chino Hills State Park, shortly after grazing was removed from the riparian zone, the habitat recovered and least Bell’s vireo moved in. There are known least Bell’s vireo occurrences above and below the Hayashi property, and, as the riparian habitat recovers on this Preserve, there is a strong likelihood it will support least Bell’s vireo.</p>
<p><u>Species Objective 10.2:</u> OCTA will restore and/or enhance riparian habitat adjacent to occupied least Bell’s vireo habitat.</p>	<p>Restore. OCTA has approved funding for the Aliso Creek and City Parcel restoration projects, which include restoration of riparian habitat totaling 68.0 acres. Each of these restoration projects has documented occurrences of least Bell’s vireo within the project sites. The Aliso Creek restoration has had seven occurrences and City Parcel has had one occurrence that overlaps with the project sites. The riparian habitat restoration and enhancement will provide an immediate benefit to least Bell’s vireo nesting habitat.</p>

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
<p><u>Species Objective 10.3</u>: OCTA will restore and/or enhance riparian habitat in areas not currently occupied by least Bell’s vireo to encourage future expansion of the species distribution within the Plan Area.</p>	<p>Restore. OCTA has approved funding for five restoration projects that include restoration of riparian habitat (totaling 41.4 acres) in locations with documented occurrences of least Bell’s vireo in the vicinity. These restoration projects are Fairview Park, Lower Silverado Canyon, Chino Hills, West Loma, and Agua Chinon/Bee Flat Canyon. These riparian habitat restoration projects will create least Bell’s vireo habitat and are expected to support least Bell’s vireo in the future.</p>
<p><u>Species Objective 10.4</u>: OCTA will establish policies and procedures to avoid and minimize impacts on least Bell’s vireo habitat, including riparian habitat.</p>	<p>Policy: The Plan includes policies that will require covered freeway improvement projects to be designed in a manner that avoids and/or minimizes impacts on sensitive biological resources, including riparian habitat. Temporary staging areas, access roads, and other project components that have the flexibility to be sited outside of sensitive areas will be incorporated into the project design. Best management practices will be followed to delineate environmentally sensitive areas and provide for training and monitoring to ensure these areas are protected. If temporary impacts on riparian habitat cannot be avoided, the areas will be restored to their previous conditions. Other policies that will provide for the protection of least Bell’s vireo include the Nesting Birds Policy and Wildfire Protection Techniques.</p>
<p>Species Goal 11: Provide conservation of southwestern willow flycatcher habitat within the Plan Area and minimize and mitigate impacts associated with Covered Activities.</p>	
<p><u>Species Objective 11.1</u>: OCTA will restore and/or enhance riparian habitat adjacent to suitable southwestern willow flycatcher habitat.</p>	<p>Restore. OCTA has approved for funding the Aliso Creek restoration project, which includes 55.0 acres of riparian habitat restoration. The Aliso Creek restoration project has had three occurrences of southwestern willow flycatcher within the project site. The riparian habitat restoration and enhancement will provide an immediate benefit to southwestern willow flycatcher habitat.</p>
<p><u>Species Objective 11.2</u>: OCTA will establish policies and procedures to avoid and minimize impacts on southwestern willow flycatcher habitat, including riparian habitat.</p>	<p>Policy: The Plan includes policies that will require covered freeway improvement projects to be designed in a manner that avoids and/or minimizes impacts on sensitive biological resources, including riparian habitat. Temporary staging areas, access roads, and other project components that have the flexibility to be sited outside of sensitive areas will be incorporated into the project design. Best management practices will be followed to delineate environmentally sensitive areas and provide for training and monitoring to ensure these areas are protected. If temporary impacts on riparian habitat cannot be avoided, these areas will be restored to their previous conditions. Other policies that will provide for the protection of southwestern willow flycatcher include the Nesting Birds Policy and Wildfire Protection Techniques.</p>

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
Species Goal 12: Provide conservation of bobcat within the Plan Area and minimize and mitigate impacts associated with Covered Activities.	
<u>Species Objective 12.1:</u> OCTA will protect and manage natural habitat that includes a combination of land cover types important for wildlife movement of mammals such as bobcat.	Acquire. OCTA has acquired seven Preserves in the Trabuco/Silverado Canyons, Aliso and Woods Canyon, and Chino Hills areas that include 1,232.5 acres of predicted suitable habitat for bobcat. These Preserves are located in areas important for regional conservation and provide connectivity to other protected lands. They provide a diverse land cover beneficial for mammal movement. Incidental observations of bobcat have been noted on the Hayashi Preserve, and photo monitoring on the O’Neill Oaks and Ferber Ranch Preserve has detected bobcat as well.
<u>Species Objective 12.2:</u> OCTA will implement a restoration project(s) designed to improve wildlife movement by mammals such as bobcat.	Restore. OCTA has approved for funding the West Loma restoration project, which includes fence realignment around a key wildlife corridor in the vicinity of the 241 toll road. With fencing improvements and the restoration of habitat along the wildlife corridor, the crossing becomes more attractive, reduces road kill, and improves connectivity for bobcat and other species.
<u>Species Objective 12.3:</u> OCTA will restore or enhance habitat through restoration projects that improve habitat connectivity and wildlife movement for bobcat.	Restore. OCTA has approved for funding four restoration projects in areas highly important for habitat connectivity and wildlife movement. These restoration projects include North Coal Canyon (located in the Coal Canyon Linkage mapped by CBI [CBI 2009]), Big Bend (essential connection between Aliso and Wood Canyons Wilderness Park to the Laguna Coast Wilderness Park), Aliso Creek (riparian corridor linking several open space Preserves), and the City Parcel (located in the Trabuco and San Juan Creeks Linkage mapped by CBI [CBI 2009]).
<u>Species Objective 12.4:</u> OCTA will establish policies and procedures to protect and maintain wildlife movement corridors.	Policy: The Plan includes the Wildlife Crossing Policy that requires OCTA to perform preconstruction surveys to evaluate if an existing structure contributes to important wildlife movement. If it is determined that an existing structure does function as an important wildlife crossing, the Construction Lead will implement appropriate design features to ensure that the wildlife crossing maintains or improves functionality after the freeway construction improvements are completed.
Species Goal 13: Provide conservation of mountain lion within the Plan Area and minimize and mitigate impacts associated with Covered Activities.	
<u>Species Objective 13.1:</u> OCTA will protect and manage natural habitat that includes a combination of land cover types important for wildlife movement of large mammals such as mountain lion.	Acquire. OCTA has acquired six Preserves in the Trabuco/Silverado Canyon and Chino Hills areas that include 1,013.3 acres of predicted suitable habitat for mountain lion. These Preserves are located in areas important for regional conservation and provide connectivity to other protected lands. They provide a diverse land cover beneficial for large mammal movement. Recent observations of mountain lion have been noted on the O’Neill Oaks and Ferber Ranch Preserves.
<u>Species Objective 13.2:</u> OCTA will implement a restoration project(s) designed to improve wildlife movement by large mammals such as mountain lion.	Restore. OCTA has approved funding for the West Loma restoration project, which includes fence realignment around a key wildlife corridor in the vicinity of the 241 toll road. With fencing improvements and the restoration of habitat along the wildlife corridor, the crossing becomes more attractive, reduces road kill, and improves connectivity.

Table ES-2. Biological Goals, Objectives, and Conservation Actions (cont.)

Biological Goal or Objective	Conservation Actions ¹
<p><u>Species Objective 13.3</u>: OCTA will restore or enhance habitat through restoration projects that improve habitat connectivity and provide benefits to wildlife movement for mountain lion.</p>	<p>Restore. OCTA has approved funding for the North Coal Canyon restoration project (located in the Coal Canyon Linkage mapped by CBI [CBI 2009]) that is a critical wildlife linkage across Highway 91. This linkage can provide movement opportunities for mountain lions to the Chino Hills State Park. Other restoration projects in the eastern portion of the County (Chino Hills State Park, Lower Silverado Canyon, West Loma, Aqua Chinon/Bee Flat Canyon) includes restoration of riparian or scrub habitat that can provide cover for mountain lion.</p>
<p><u>Species Objective 13.4</u>: OCTA will establish policies and procedures to avoid and minimize impacts to wildlife movement corridors.</p>	<p>Policy: The Plan includes a Wildlife Crossing Policy that requires OCTA to perform preconstruction surveys to evaluate if an existing structure contributes to important wildlife movement. If it is determined that an existing structure does function as an important wildlife crossing, the Construction Lead will implement appropriate design features to ensure that the wildlife crossing maintains or improves functionality after the freeway construction improvements are completed.</p>

¹ Conservation actions involving restoration projects include an estimate of conserved habitats based on conceptual restoration design plans. The final acreage of restored habitat may be refined during final restoration design and during implementation. Attainment of objectives dependent on restoration actions will be achieved once the restoration project meets the restoration design success criteria.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Final Natural Community Conservation Plan/Habitat
Conservation Plan and Associated Environmental Impact
Report/Environmental Impact Statement for the Measure
M2 Environmental Mitigation Program**

Attachment D

IMPLEMENTING AGREEMENT

for the

**ORANGE COUNTY TRANSPORTATION AUTHORITY
NATURAL COMMUNITY CONSERVATION PLAN (NCCP) / HABITAT
CONSERVATION PLAN (HCP)**

by and among

THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

THE UNITED STATES FISH AND WILDLIFE SERVICE,

THE ORANGE COUNTY TRANSPORTATION AUTHORITY,

AND

THE CALIFORNIA DEPARTMENT OF TRANSPORTATION

ADMIN FINAL

2016

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1.0 PARTIES TO THIS AGREEMENT

The Parties to this Implementing Agreement (Agreement) are the Orange County Transportation Authority (OCTA or Permittee), the California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (Service). The Service and CDFW are herein collectively referred to as the Wildlife Agencies.

2.0 RECITALS AND PURPOSES OF THE AGREEMENT

2.1 Recitals

(a) The Service is a federal agency within the United States Department of the Interior charged with responsibility for administering the federal Endangered Species Act (ESA) and providing for the conservation of federally listed species and their habitat. The Service is authorized to issue a Take permit under section 10(a) of ESA for the incidental Take of federally listed animal species provided that the applicant for such a permit submits an HCP that meets permit issuance criteria set forth in section 10 of the ESA.

(b) CDFW is a state agency within the California Natural Resources Agency charged with responsibility for administering the California Endangered Species Act (CESA) and the Natural Community Conservation Planning Act (NCCPA). CDFW is authorized to issue permits under section 2835 of the Fish and Game Code to authorize the Take of any species, whether or not it is listed as an endangered, threatened or candidate species under State law, where the conservation and management of the species is provided for in a Natural Community Conservation Plan (NCCP) approved by CDFW. CDFW enters into this Agreement pursuant to the NCCPA.

(c) The OCTA is the sponsor of the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP or Plan). OCTA has undertaken a collaborative, systematic approach to protecting ecologically significant resources, including candidate, threatened and endangered species and their habitats in the Plan Area, and to ensuring that the Covered Activities comply with applicable federal and state laws.

(d) Caltrans is a department of the California State Transportation Agency established under the provisions of the California Government Code Sections 14000 *et seq.* Caltrans is the owner and operator of the State highway system. It is the lead agency for construction and rehabilitation projects undertaken on the State highway system. Caltrans is expected to act as Construction Lead on behalf of OCTA for certain freeway capital improvement projects. Caltrans will implement freeway improvement projects as a Participating Special Entity and OCTA will issue a Certificate of Inclusion to Caltrans on a project-by-project basis that will describe the authorized take and required avoidance and minimization measures.

(e) The Plan Area set forth in Exhibit A, defined below, and as described in the Plan Section 1.2.2.1, has been determined to provide habitat for the Listed Species and Unlisted Species set forth in Exhibit B;

(f) In 2009, OCTA, Caltrans, the Service, and CDFW entered into a Planning Agreement that identified goals, objectives, guidelines, criteria and procedures for the preparation of a joint NCCP and HCP. For purposes of the NCCPA, the Plan and this Agreement have been prepared according to the Planning Agreement.

(g) OCTA has developed a series of measures, described in Chapter 5 of the Plan, to minimize and mitigate to the maximum extent practicable the effects of Take of Covered Species as a result of the Covered Activities, and to adequately provide for the conservation and management of the Covered Species and their habitat.

(h) OCTA is making substantial commitments of land, natural resources, financial resources, and human resources to provide for the conservation and management of the Covered Species, their habitats and other natural communities to obtain Take authorizations and regulatory assurances from the Wildlife Agencies.

2.2 Purposes

The purpose of this Agreement is to clarify the provisions of the Plan and the processes the Parties intend to follow to ensure successful implementation of the Plan in accordance with the State and Federal Permits and applicable law.

3.0 DEFINITIONS

Terms used in this Agreement and specifically defined in CESA, the NCCPA, the ESA, or in regulations adopted pursuant to those statutes shall have the same meaning when utilized in this Agreement, unless this Agreement expressly provides otherwise.

3.1 Agreement

“Agreement” means this Implementing Agreement, which incorporates the NCCP/HCP and the Permits by reference.

3.2 Annual Report

“Annual Report” means the Annual Report prepared by the Permittee, as provided in Section 9.1.

3.3 Authorized Take

“Authorized Take” means the extent of Take of Covered Species authorized by the Federal and State Permits.

3.4 CDFW

“CDFW” means the California Department of Fish and Wildlife, a department of the California Natural Resources Agency.

3.5 CEQA

“CEQA” means the California Environmental Quality Act (Pub. Resources Code §21000 *et seq.*) and all rules, regulations and guidelines promulgated pursuant to that Act.

3.6 CESA

“CESA” means the California Endangered Species Act (Fish & Game Code, §2050 *et seq.*) and all rules, regulations and guidelines promulgated pursuant to that Act.

3.7 Changed Circumstances

“Changed Circumstances” for purposes of the Federal Permit, means changes in circumstances affecting a species or the geographic area covered by the Plan that can reasonably be anticipated by Permittee and the Service, and that can be planned for in the Plan (50 C.F.R. § 17.3). Changed Circumstances and planned responses to those circumstances are described in Section 8.6.2 of the Plan. Under California law, “Changed Circumstances” are defined to mean reasonably foreseeable circumstances that could affect a Covered Species or the geographic area covered by the NCCP (California Fish and Game Code § 2805 (c)).

3.8 Conservation Easement

“Conservation Easement” means a conservation easement as that term is used in California Civil Code section 815 *et seq.* and is described by California Civil Code section 815.1 as any limitation in a deed, will, or other instrument in the form of an easement, restriction, covenant, or condition, which is or has been executed by or on behalf of the owner of the land subject to such easement and is binding upon successive

owners of such land, the purpose of which is to retain land predominantly in its natural, scenic, historical, agricultural, forested, or open-space condition.

3.8 Conservation Measure

“Conservation Measure” means each action detailed in Chapter 5 of the Plan that is a component of the Conservation Strategy.

3.9 Construction Lead

“Construction Lead” means the agency that will have primary responsibility for implementing construction activities.

3.10 Covered Activities

“Covered Activities” means the freeway capital improvement projects and the conservation activities described in Chapter 3 of the Plan that may result in Take of Covered Species authorized under the Permits.

3.11 Covered Species

“Covered Species” means those species listed in Exhibit B to this agreement, each of which the Plan addresses in a manner intended to meet all of the criteria for issuing a permit under the NCCPA and an incidental take permit under the ESA.

3.12 Effective Date

“Effective Date” means the date following execution of this Agreement by all Parties on which the State Permit and Federal Permit are issued.

3.13 Early Action Plan

“Early Action Plan” means a Plan that the OCTA Board of Directors approved on August 13, 2007 (five-year Measure M2 Early Action Plan) to advance the implementation of several key Measure M2 projects, including providing funding for the Plan, acquisition of Preserves, funding of restoration projects, and related activities.

3.14 ESA

“ESA” means the Federal Endangered Species Act of 1973, as amended (16 U.S.C § 1531 *et seq.*) and all rules, regulations and guidelines promulgated pursuant to that Act.

3.15 Federally Listed Species

“Federally Listed Species” means the Covered Species that are listed as threatened or endangered species under the ESA as of the Effective Date, and the Covered Species that are listed as threatened or endangered pursuant to the ESA during the term of the Plan as of the date of such listing.

3.16 Federal Permit

“Federal Permit” means the federal incidental Take Permit issued by the Service to Permittee pursuant to section 10(a)(1)(B) of the ESA.

3.17 Fully Protected Species

“Fully Protected Species” means any species identified in California Fish and Game Code sections 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles) or 5515 (fish). No Fully Protected Species are Covered Species under this Plan.

3.18 HCP

“HCP” means the habitat conservation plan prepared by Permittee for the Plan Area.

3.19 Listed Species

“Listed Species” means a species (including a subspecies, or a distinct population segment of a species) that is listed as an endangered or threatened species under the ESA or as an endangered, threatened or candidate species under CESA.

3.20 Migratory Bird Treaty Act

“Migratory Bird Treaty Act” means the federal Migratory Bird Treaty Act (16 U.S.C. §703 *et seq.*) and all rules, regulations and guidelines promulgated pursuant to that Act.

3.21 NCCP

“NCCP” means a natural community conservation plan prepared according to the California Natural Community Conservation Planning Act.

3.22 NCCPA

“NCCPA” means the California Natural Community Conservation Planning Act (Fish & Game Code, §2800 *et seq.*), as amended on January 1, 2012, and all rules, regulations and guidelines promulgated pursuant to that Act.

3.23 NCCP Permit or State Permit

"NCCP Permit" or "State Permit" means the Permit issued in accordance with this Agreement by CDFW under section 2835 of the California Fish and Game Code to permit the Take of Covered Species.

3.24 NEPA

“NEPA” means the National Environmental Policy Act (42 U.S.C. § 4321 *et seq.*) and all rules, regulations and guidelines promulgated pursuant to that Act.

3.25 No Surprises Assurances

"No Surprises Assurances" with regard to the Federal Permit means the regulations at 17.3, 17.22(b)(5), and 17.32(b)(5) that govern the ability of the Service to require conservation and mitigation measures beyond those provided in the Plan in the event of an Unforeseen Circumstance where Permittee is properly implementing the terms of the Plan and Federal Permit. With regard to the NCCP Permit, No Surprises assurances means that if there are Unforeseen Circumstances CDFW will not require additional land, water or financial compensation or additional restrictions on the use of land, water, or other natural resources for the life of the NCCP permit without the consent of Permittee, provided Permittee is implementing the Plan, the Permits, and this Agreement, unless CDFW determines that continued implementation of the Plan would jeopardize the continued existence of a Covered Species (California Fish and Game Code § 2820 (f)).

3.26 Non-listed Species

“Non-listed Species” means a species (including a subspecies, or a distinct population segment of a species) that is not listed as endangered or threatened under the ESA or CESA.

3.27 Participating Special Entity

“Participating Special Entity” means Caltrans.

3.28 Party or Parties

“Party” and “Parties” mean the signatories to this Agreement, individually and collectively.

3.29 Permit Area

“Permit Area” means the portion of the Plan Area within which the Permittee is seeking authorization from the Wildlife Agencies for the Take of Covered Species resulting from Covered Activities. The Permit Area includes those lands in the Plan Area that are defined by either of the following parameters: (1) the lands along existing freeways (I-5, I-405, SR-22, SR-55, SR-57, SR-91) on which M2 freeway capital improvement projects will be conducted (Exhibit A); or (2) the boundary of any land protected and managed under the Plan (i.e., Preserves).

3.30 Permits

“Permits” means the Federal HCP Permit and the NCCP Permit.

3.31 Permittee

“Permittee” means OCTA.

3.32 Plan Area

“Plan Area” means the area covered by the NCCP/HCP. The Plan Area is described in Chapter 1 of the NCCP/HCP and depicted in Exhibit A of this Agreement.

3.33 Planning Agreement

“Planning Agreement” means the Planning Agreement regarding the OCTA NCCP/HCP executed in 2009 and amended in 2014 by OCTA, Caltrans, the Service, and CDFW.

3.34 Renewed Measure M or M2

“Renewed Measure M” or “M2” means the Orange County Renewed Measure M Transportation Ordinance and Investment Plan, approved by Orange County voters in November 2006. The Renewed Measure M is an extension of a ½-cent transportation sales tax, beginning in 2011 through 2041, for transportation improvements throughout Orange County.

3.35 Preserve or Preserve Area

“Preserve” or “Preserve Area” means the land dedicated in perpetuity through fee title, conservation easement or equivalent legal protection mechanism to meet the preservation, conservation, enhancement and restoration objectives of the Conservation Strategy of the Plan.

3.36 Rough Proportionality

“Rough Proportionality” means implementation of mitigation and Conservation Measures under the Plan that is roughly proportional in time and extent to the impact on habitat or Covered Species authorized under the Plan and Permits.

3.37 Specially Protected Mammal Species

“Specially Protected Mammal Species” means any species identified in California Fish and Game Code section 4800. One Specially Protected Mammal Species, the mountain lion, is a Covered Species under the Federal HCP Permit.

3.38 Take and Taking

“Take” and “Taking” have the same meaning provided by the ESA and its implementing regulations with regard to activities subject to the ESA, and also have the same meaning provided in section 86 of the California Fish and Game Code with regard to activities subject to CESA and NCCPA. “Take” under the ESA does not apply to plant species, and take of plant species is not prohibited under the ESA; however, the plant species identified in Exhibit B are listed on the Federal Permit as Covered Species in recognition

of the conservation measures provided for them under the Plan and receive “No Surprises” regulatory assurances under the Federal Permit. For the purposes of this Agreement, Take includes impacts to covered plant species. For purposes of State law, take shall have the same meaning provided in Section 86 of the California Fish and Game Code.

3.39 Unforeseen Circumstances

“Unforeseen Circumstances” as defined at 50 C.F.R. § 17.3 means, with regard to the Federal Permit, changes in circumstances affecting a species or geographic area covered by the Plan that could not reasonably have been anticipated by Permittee and the Service at the time of the Plan’s negotiation and development, and that result in a substantial and adverse change in the status of the Covered Species. Under the State Permit “Unforeseen Circumstances” as defined at Fish and Game Code section 2805, subdivision (k), means changes affecting one or more species, habitat, natural community, or the geographic area covered by a conservation plan that could not reasonably have been anticipated at the time of plan development, and that result in a substantial adverse change in the status of one or more Covered Species.

3.40 Unlisted Species

“Unlisted Species” means a species (including a subspecies, or a distinct population segment of a vertebrate species) that is not listed as endangered or threatened under CESA or the ESA.

4.0 CONSERVATION STRATEGY

Chapter 5 of the Plan presents the Conservation Strategy. The Conservation Strategy identifies the take mitigation and minimization requirements for the Covered Activities intended to ensure that these activities are in compliance with the ESA, NCCPA, and CEQA, and other applicable environmental regulations. The Conservation Strategy includes specific and measurable biological goals and objectives that will be met through the acquisition of a Preserve Area that provides for the protection of habitat, natural communities, and species diversity on a landscape level. The Conservation Strategy also includes project-specific conservation measures to avoid, minimize, and mitigate impacts of the Covered Activities on Covered Species and their habitats. The creation and protection of the Preserve Area together with these conservation measures are intended to provide for the conservation of the Covered Species by (1) helping to maintain the ecological integrity of large habitat blocks, ecosystem functions, and biological diversity in the Plan Area; (2) providing linkages between natural communities, including Covered Species habitat, in the Plan Area; (3) providing large habitat blocks that support sustainable populations of Covered Species; (4) incorporating lands that represent a range

of environmental gradients and habitat diversity to provide for shifting species, including Covered Species, distributions due to Changed Circumstances; and (5) providing lands that support the effective movement and interchange of organisms between habitat areas in a manner that maintains the ecological integrity of the Covered Species habitat areas within the Plan Area. Lastly, the Conservation Strategy provides for the establishment of a monitoring and adaptive management program to ensure that management of the Preserve Area can evolve as new data and information become available. The Plan outlines the requirements of the Permittee for implementation of the Conservation Strategy.

4.1 Avoidance and Minimization of Impacts

The conservation strategy includes measures to avoid and minimize Take of Covered Species and to conserve natural communities and Covered Species at the landscape, habitat, and species level. Avoidance and minimization measures include species surveys and specific conditions on Covered Activities, as detailed in Chapter 5 of the Plan. Permittee shall implement, or ensure the implementation of, all applicable avoidance and minimization measures as required by the Plan.

4.2 Land Acquisition and Assembly of Preserve Areas

Permittee may acquire lands for the Preserve Area by fee title or by Conservation Easement. All fee title acquisitions will be held in fee by a Wildlife Agency or be protected by a Conservation Easement in favor of an entity approved in writing by the Wildlife Agencies that ensures that the acquired lands are protected in perpetuity as open space for Covered Species and their habitats. If Permittee acquires Preserve land by Conservation Easement, the terms of the Conservation Easements must be approved in writing by the Wildlife Agencies and identify the Wildlife Agencies as third party beneficiaries with a right of access to the easement areas and the right to enforce the terms of the Conservation Easement. All Conservation Easements shall be recorded in perpetuity pursuant to Civil Code section 815 *et seq.* and shall be subject to the Preserve Area commitments of the Plan.

Although not required by the Plan, this Agreement, or the Permits, OCTA may elect to acquire additional lands for the Preserve Area in the future. If OCTA elects to add additional lands to the Preserve, the identification, selection, and acquisition of the future Preserve(s) will be completed following the Environmental Oversight Committee (EOC) Preserve selection process. The Wildlife Agencies will have the opportunity to review and approve the selection of future Preserves. Any future Preserves and Conservation Easements put in place and recorded on such lands must have the approval of the Wildlife Agencies.

4.3 Land Acquired Through Partnerships with Other Agencies and Organizations

Permittee may enter into agreements and other partnerships involving land acquisitions within the Plan Area with other land management agencies and organizations where those acquisitions meet the goals and objectives of the Plan. However, such acquisitions will be formally credited towards the obligations set forth in the Plan only where the Wildlife Agencies approve the acquisition and concur that the acquisition (a) contributes to meeting the goals and objectives of the Plan, (b) contains a Conservation Easement that meets the requirements of Section 4.2 (unless owned in fee by the Wildlife Agencies), and (c) will be managed in perpetuity pursuant to a Resource Management Plan (RMP).

4.4 Credit for Lands Acquired and Restoration Projects Funded Before Issuance of the Permits

The Plan's Preserve Area includes lands acquired before issuance of the Permits that shall be credited towards the land commitments and obligations of the Plan once Permittee records a Conservation Easement. The lands shall be formally credited towards the Plan as follows:

Preserve Area		
Preserve	Total Acres ¹	Acres of Natural Habitat
Aliso	151.1	146.9
Ferber Ranch	395.7	380.4
Hafen	48.0	47.9
Hayashi	298.8	293.6
MacPherson	203.5	200.0
O'Neill Oaks	116.1	112.4
Saddle Creek South ²	82.8	51.3
Total	1,296.0	1,232.5

¹ These acreages are approximate based on the best currently available survey data. Final acreages are not expected to vary significantly, but may be adjusted slightly in the future when more accurate data is available.

² Saddle Creek South Preserve was purchased, in part, with funding provided by the National Fish and Wildlife Foundation. OCTA receives a percentage of the available credits based on the percentage of the total cost of acquiring and managing the Preserve contributed by OCTA (75.36%).

The Plan provides for credits for restoration projects funded during preparation of the Plan on lands permanently protected through conservation easements, restrictive covenants, deed restrictions, or equivalent title restrictions approved by the Wildlife

Agencies. The Wildlife Agencies, in their sole discretion, may approve habitat restoration projects on United States Forest Service lands focused on improving conditions for arroyo chub to support sustainable populations in occupied areas, provided that the United States Forest Service provides adequate assurances of durability and addresses other relevant Wildlife Agency concerns. Credits under the Plan for the following restoration projects shall be available to Permittee once the Wildlife Agencies have concurred that the project has met the performance criteria established in the Wildlife Agency approved restoration plan, as follows:

- **Agua Chinon/Bee Flat – Irvine Ranch Conservancy.** 90.1 acres of restoration consisting of chaparral, grassland, coastal sage scrub, elderberry scrub, oak woodland, and riparian (mulefat scrub/elderberry shrubland).
- **Big Bend – Laguna Canyon Foundation.** 3.7 acres of restoration consisting of coastal sage scrub and riparian woodland to enhance wildlife connectivity.
- **City Parcel – City of San Juan Capistrano.** 53 acres of restoration consisting of riparian and coastal sage scrub within Trabuco Creek Wildlife Linkage.
- **Fairview Park – City of Costa Mesa.** 23 acres of restoration consisting of wetlands, grasslands, coastal sage scrub, and riparian.
- **UC Irvine Ecological Preserve – Nature Reserve of Orange County.** 8.5 acres of restoration consisting of cactus scrub.
- **Aliso Creek – Laguna Canyon Foundation.** 55 acres of restoration consisting of riparian and transitional habitat.
- **Chino Hills State Park – California Department of Parks and Recreation.** 13.5 acres of riparian restoration and 6.0 acres of cactus scrub restoration.
- **Harriett Weider Regional Park – Bolsa Chica Conservancy.** 8.2 acres of restoration consisting of grassland, coastal sage scrub, and riparian habitat.
- **Lower Silverado Canyon – Irvine Ranch Conservancy.** 28.4 acres of restoration consisting of riparian and coastal sage scrub habitat.
- **North Coal Canyon – California Department of Parks and Recreation.** 5.5 acres of restoration consisting of coastal sage scrub habitat within a key wildlife connectivity linkage area.
- **West Loma – Irvine Ranch Conservancy.** 62.47 acres of restoration consisting of coastal sage scrub and riparian habitat.

Conservation actions involving restoration projects include an estimate of conserved habitats based on conceptual restoration design plans. The final acreage of restored habitat may be refined during final restoration design and during implementation. Satisfaction of mitigation obligations will be achieved once the Wildlife Agencies concur in writing that the restoration project meets the restoration design success criteria.

Permittee has committed to funding additional restoration projects following the EOC restoration project selection process. The Plan identifies requirements for future restoration to ensure that the Plan provides conservation for all Covered Species.

5.0 PRESERVE AREA MANAGEMENT

Permittee shall remain solely responsible for ensuring the management of the Preserve in perpetuity in accordance with Wildlife Agency-approved RMPs, as those plans may be revised over time, and for the timeliness and quality of all requirements of preserve management. Management activities on all Preserve Area lands that are identified as obligations of the Plan are considered Covered Activities. Permittee may contract with another entity for management planning and plan preparation, and subsequently contract with a designated land manager to perform the various implementation tasks. The Preserve manager(s), which must be approved by the Wildlife Agencies, may be a land use agency(ies), non-profit organization(s), for-profit land management company(ies), or other qualified entity(ies). The Preserve manager will carry out the preserve management responsibilities described in Chapter 7 of the Plan.

5.1 Resource Management Plans

Within two (2) years of the dedication of any parcel of land to the Preserve Area, as evidenced by recordation of a Conservation Easement or fee title held by a Wildlife Agency, Permittee shall ensure that an RMP for each parcel is finalized pursuant to Section 7.2 of the Plan after receiving written concurrence from the Wildlife Agencies. During the preparation of RMPs, Permittee shall be responsible for ensuring the land is managed in accordance with the Plan to maintain and improve Covered Species habitat using the best available information and management methods in practice within the Plan Area until the RMP is completed. The RMPs will be reviewed every 5 years and updated as necessary.

5.2 Recreation Uses

The Parties acknowledge that providing low-intensity recreational opportunities on Preserve Area lands may be acceptable, subject to appropriate constraints to protect Covered Species and natural communities. Permittee may integrate recreation planning goals and objectives (Section 7.2.5, “Preserve Management Guidelines”, of the Plan) into the RMPs to the extent consistent with the Plan’s biological goals and objectives and the requirements of this Agreement and the Permits, and subject to the prior written concurrence of the Wildlife Agencies. Permittee recognizes that recreation opportunities, and thus any recreation planning goals and objectives, are secondary to the need to protect biological resources committed for conservation under the Plan. Permittee shall manage all recreational uses allowed under the RMPs to ensure such uses are consistent with the RMP. In the event that recreationists fail to follow rules for access/conduct/site use resulting in habitat damage and/or disturbance to wildlife beyond that contemplated in the Plan, Permittee may need to curtail uses or eliminate public access on a temporary or permanent basis as necessary to achieve compliance with the RMPs.

6.0 COVERED ACTIVITIES

This section describes the Covered Activities within the Permit Area for which the Plan will provide compensation, avoidance, and minimization of impacts for Covered Species. These are the Covered Activities for which take authorization will be obtained. As stated in Section 5.6 of the Plan, avoidance and minimization measures are requirements that will be evaluated and implemented on a project-by-project basis for each Covered Activity. These include measures to avoid sensitive biological resources and species specific minimization measures. The Plan includes coverage for two major categories of Covered Activities:

- Freeway capital improvement projects proposed by OCTA along 13 highway segments as described in Section 6.1 and additional future minor freeway capital improvement projects funded by M2 and described in Section 6.2.
- Preserve Management, Restoration, and Monitoring Activities as described in Section 6.3.

6.1 Freeway Capital Improvement Projects

Freeway capital improvement projects covered by the NCCP/HCP include the thirteen freeway capital improvement projects proposed by Permittee through its M2 transportation planning and project implementation process. These proposed projects are designed to reduce congestion, increase capacity, and improve traffic flow of Orange County's important transportation infrastructure. The freeway improvement projects are, in all instances, along existing freeways and will include lane additions, interchange improvements, and associated facility upgrades. Freeway capital improvement projects do not include the construction of new freeways.

There are 13 discrete proposed freeway segments in which freeway capital improvement projects have been identified for coverage under the Plan, which are described in greater detail below.

1) **Project A: Santa Ana Freeway (Interstate 5) Improvements between Costa Mesa Freeway (State Route 55) and "Orange Crush" Area (State Route 57)**

The objective of Project A is to increase freeway capacity and reduce congestion on the Santa Ana Freeway (I-5). Project A would affect two segments: Segment 1, extending from SR-55 to SR-57, and Segment 2, located at the I-5/SR-55 interchange. These Improvements would add capacity on I-5 between SR-55 and SR-57 and relieve congestion at the I-5/SR-57 interchange, an area known as the "Orange Crush." Construction would take place within the existing right-of-way. Interchange

improvements would occur between the Fourth Street and Newport Boulevard ramps on I-5, between Fourth Street and Edinger Avenue on SR 55 as it crosses SR-55 and SR-57. Project-specific improvements are subject to approved plans developed in coordination with local jurisdictions and affected communities.

2) **Project B: I-5 Improvements from SR-55 to El Toro “Y” Area**

The objective of Project B is to increase freeway capacity and reduce congestion on I-5 between SR-55 and I-405, an area known as the El Toro “Y.” These improvements would consist of construction of new lanes and improvements to existing interchanges. Project B construction would take place within the existing right-of-way. Specific improvements are subject to approved plans developed in cooperation with local jurisdictions and affected communities.

3) **Project C: North and South Portions of I-5 Improvements between El Toro Interchange and Avenida Pico**

The objective of Project C is to increase freeway capacity and reduce freeway congestion on I-5 south of the El Toro “Y”. It is also intended to improve and update key interchanges on I-5 to relieve street congestion around older interchanges and on ramps.

The north portion of Project C (Segment 1) would improve I-5 south of the El Toro “Y” by constructing new lanes from the vicinity of the El Toro interchange in Lake Forest to the vicinity of SR-73 in Mission Viejo. The south portion of Project C (Segment 2) involves improvements similar to those proposed for the north portion between Pacific Coast Highway and Avenida Pico to reduce freeway congestion in San Clemente.

Project C also involves major improvements to local interchanges. Project C, Segment 2 includes the I-5/Avenida Pico interchange. Project C, Segment 1 includes the I-5/Avery Parkway interchange and the I-5/La Paz Road interchange. Project C construction takes place within the existing right-of-way. Specific improvements are subject to approved plans developed in cooperation with local jurisdictions and affected communities.

4) **Project D: I-5 Local Interchange Upgrades**

Project D updates and improves the following key interchanges on I-5:

- I-5/Avenida Pico Interchange—integrated into Project C, Segment 2
- I-5/Ortega Highway Interchange

- I-5/Avery Parkway Interchange—integrated into Project C, Segment 1
- I-5/La Paz Road Interchange—integrated into Project C, Segment 1
- I-5/El Toro Interchange

These interchanges occur in southern Orange County, in the vicinity of Mission Viejo, Laguna Niguel, San Juan Capistrano and San Clemente. Improvements are subject to approved plans developed in cooperation with local jurisdictions and affected communities.

5) Project E: Garden Grove Freeway (SR-22) Access Improvements

Project E improves interchanges along SR-22 at Euclid Street, Brookhurst Street, and Harbor Boulevard in order to reduce freeway and surface street congestion near these interchanges. Specific improvements are subject to approved plans developed in cooperation with local jurisdictions and affected communities.

6) Project F: SR-55 Improvements

The objective of Project F is to increase freeway capacity and reduce congestion through the addition of new lanes to SR-55 between the Garden Grove Freeway (SR-22) and the San Diego Freeway (I-405). The south portion of Project F (Segment 1) is between I-405 and I-5. The north portion of Project F (Segment 2) is between I-5 and SR-22. These improvements include merging lanes between interchanges to smooth traffic flow. Project F would also provide freeway operational improvements for the portion of SR-55 between SR-91 and SR-22.

7) Project G: SR-57 between Orangewood Avenue and Lambert Road Northbound—General-Purpose Lane Improvements

The objective of Project G is to increase freeway capacity and reduce congestion associated with SR-57. This project is composed of several segments.

- Segment 1a: Construction of a northbound lane between Orangewood Avenue and Katella Street.
- Segment 1b: Construction of a northbound lane between Katella Street and Lincoln Avenue.
- Segment 2a: Construction of a northbound lane between Orangethorpe Avenue and Yorba Linda Boulevard.

- Segment 2b: Construction of a northbound lane between Yorba Linda Boulevard and Lambert Road.
- Segment 3: Improvements to the Lambert Interchange
- Segment 4: Construction of a northbound truck climbing lane between Lambert Road and Tonner Canyon Road.

The improvements are designed and coordinated specifically to reduce congestion at the SR-57/SR-91 interchange. All improvements associated with Project G generally would occur within the existing right-of way. Specific improvements are subject to approved plans developed in coordination with local jurisdictions and affected communities.

8) **Project H: Project H: Riverside Freeway (SR-91) from SR-57 to I-5 Westbound—General-Purpose Lane Improvements**

Project H adds capacity in the westbound direction on State Route 91 to smooth traffic flow and relieve congestion in the SR-57/SR-91 interchange. It also provides operational improvements at on- and off-ramps to SR-91 between I-5 and SR-57. These improvements generally occur within the existing right-of-way. Specific improvements are subject to approved plans developed in cooperation with local jurisdictions and affected communities.

9) **Project I: SR-91 Improvements from SR-57 to SR-55 Interchange**

Project I would add freeway capacity to SR-91 between SR-57 and SR-55. Project I (Segment 1) includes improvements to the SR-91/SR-55 and SR-91/SR-57 interchange complexes and nearby local interchanges at Tustin Avenue and Lakeview Avenue.

Project construction generally would occur within the existing right-of-way. Specific improvements are subject to approved plans developed in cooperation with local jurisdictions and affected communities.

10) **Project J: SR-91 Improvements from SR-55 to the Orange County/Riverside County Line**

Project J would improve SR-91 from SR-55 to the Orange County/Riverside County boundary. The project would provide up to four new lanes of capacity between SR-241 and the Riverside County line by adding reversible lanes, building elevated sections, and improving connections to SR-241. These projects would be constructed in conjunction with similar coordinated improvements in Riverside County extending to I-15.

Improvements in Riverside County are paid for from other sources. Specific improvements are subject to approved plans and are developed in cooperation with local jurisdictions and affected communities.

11) Project K: San Diego Freeway (I-405) Widening Project from SR-55 to San Gabriel River Freeway (I-605)

Project K would increase freeway capacity and reduce congestion associated with I-405. The proposed project would add new lanes to the San Diego Freeway between I-605 and SR-55, generally within the existing right-of-way. The project would update interchanges and widen all local overcrossings according to city and regional master plans.

The proposed improvements are coordinated with other planned I-405 improvements, including improvements to the I-405/SR-22/I-605 interchange area to the north and I-405/SR-73 improvements to the south. The improvements adhere to the recommendation of the I-405 major investment study, adopted by the OCTA in October 2005, and are developed in coordination with local jurisdictions and affected communities.

12) Project L: Project L: I-405 Improvements between SR-55 and I-5

Project L would increase freeway capacity and reduce congestion associated with I-405. The proposed project would add new lanes to I-405 from SR-55 to I-5. The project would ease chokepoints at interchanges and add merging lanes near on- and off-ramps such Irvine Center Drive and SR-133, and to improve overall freeway operations in the I-405/I-5 El Toro “Y” area. Project L, Segment 2 includes improvements at the Lake Forest Interchange on the I-5.

Project L is constructed generally within the existing right-of-way. Specific improvements are subject to approved plans developed in cooperation with local jurisdictions and affected communities.

13) Project M: I-605 Freeway Access Improvements

Project M would improve freeway access and arterial connection to I-605 serving the communities of Los Alamitos and Cypress. The project is coordinated with other planned improvements along SR-22 and I-405. Specific improvements are subject to approved plans developed in cooperation with local jurisdictions and affected communities. This improvement connects to interchange improvements at I-405 and SR-22 as well as new freeway lanes between I-405 and I-605. This project is integrated with Project K.

6.2 Future Minor Freeway Capital Improvement Projects

In addition to the thirteen freeway capital improvement projects outlined above, additional future minor freeway capital improvement projects are eligible for coverage under the Plan as Covered Activities provided that the projects meet the guidelines for Covered Activities as described in Chapter 3 of the Plan, meet all HCP and NCCP Permit requirements, including those outlined in Chapter 3 of the Plan, occur within the Permit Area, and do not result in exceedance of the acreage impact caps established for the Plan, additional take of Covered Species, or greater or significantly different impacts to the environment than analyzed in the NEPA/CEQA document for the NCCP/HCP, as determined by the Wildlife Agencies.

6.3 Preserve Management, Restoration, and Monitoring Activities

Preserve Management, Restoration and Monitoring Activities are the long-term habitat management activities associated with Preserves, described in Chapter 3 of the Plan, that may result in Take of Covered Species during the term of the Plan and for which Take coverage is provided under the Take authorizations. These Covered Activities include the following categories:

- Management and recreational facilities;
- Management activities;
- Habitat enhancement, restoration, and creation, including the collection of seed if performed, or directly overseen, by an experienced restoration specialist;
- Species surveys, monitoring, and research; and
- Responses to Changed Circumstances.

Public access and passive recreation that is consistent with the Plan and RMPs will be a compatible use that does not require coverage under the Permit because it is not anticipated to result in Take of Covered Species.

7.0 TAKE AUTHORIZATIONS FOR PERMITTEE

Following execution of this Agreement by all Parties and a determination that all applicable legal requirements have been met, the Service will issue a Federal Permit under Section 10(a)(1)(B) of the ESA to Permittee that authorizes the incidental Take of Covered Species resulting from Covered Activities, and CDFW will issue an NCCP Permit under Section 2835 of the California Fish and Game Code to Permittee that authorizes the Take of Covered Species resulting from Covered Activities. This

Agreement will take effect with regard to the Federal Permit and NCCP Permit, respectively, upon issuance of each Permit.

Authorized Take under the Permits will cover the Permittee, the Participating Special Entity to the extent provided under Section 7.1, and entities and persons who are under the direct control of Permittee for purposes of implementing the Covered Activities under the Permits, including all of its respective officers, directors, employees, agents, subsidiaries, member agencies, and contractors, as applicable, who engage in any Covered Activity and implementation of the Plan.

7.1 Extension of Take Authorizations to the Participating Special Entity

For any Covered Activity for which the Participating Special Entity assumes the role of Construction Lead, the Participating Special Entity shall sign a Certificate of Inclusion under the Federal Permit and a Certificate of Inclusion under the State Permit for that Covered Activity in substantially the same form as Exhibits C and D, respectively. Revisions to the template Certificates of Inclusion must be approved in writing by the Wildlife Agencies. The Permittee shall then issue to the Participating Special Entity the Certificates of Inclusion, which specifically describe the Authorized Take under the Federal and State Permits, respectively, and required avoidance and minimization measures and extend Take authorization under the Permits to the Participating Special Entity. Permittee represents that it has legal control over the Participating Special Entity for the purposes of implementing the terms and conditions of this Agreement, the Plan and the Permits and acknowledges that it is responsible for ensuring compliance by the Participating Special Entity with all applicable terms and conditions of this Agreement, the Plan and the Permits and is liable for any non-compliance by the Participating Special Entity with such terms and conditions. Upon Permittee's issuance of the Certificates of Inclusion to the Participating Special Entity, the Participating Special Entity may Take the Covered Species while carrying out the Covered Activity in the Permit Area in accordance with the terms and conditions of this Agreement, the Plan and the Permits. The Take authorization issued to the Participating Special Entity applies to all of its elected officials, officers, directors, employees, agents, subsidiaries, contractors, and subcontractors. The Participating Special Entity shall comply fully with the applicable terms and conditions of the Agreement, the Plan and the Permits and shall ensure that its elected officials, officers, directors, employees, agents, subsidiaries, contractors, and subcontractors comply with the applicable terms and conditions of the Agreement, Plan, and Permits. The Participating Special Entity shall be liable for any non-compliance with such terms and conditions, including non-compliance by its elected officials, officers, directors, employees, agents, subsidiaries, contractors, and subcontractors. Nothing in this Agreement or the Certificates of Inclusion shall limit CDFW's ability under the NCCPA to enforce the terms and conditions of this Agreement, the Plan and the NCCP Permit against the Permittee or the Participating Special Entity.

7.2 Take Authorizations for Non-Listed Covered Species

7.2.1 ESA Section 10

The Federal Permit will identify all Covered Species. The Federal Permit will take effect for listed Covered Species at the time the Federal Permit is issued and, subject to compliance with the terms of the Federal Permit, will take effect for an unlisted Covered Species upon the listing of such species. Any reference in this Agreement or the Plan to incidental take of Covered Species shall, for the purpose of Covered plant Species refer to loss or impacts to Covered plant Species identified in the Permit.

7.2.2 NCCPA

Under the NCCPA, take of unlisted species may be authorized under a Section 2835 permit. The State Permit authorizes the take of all Covered Species as of the Effective Date, regardless of whether they have been listed under State law.

7.3 Take Authorizations for Migratory Bird Species

The Federal Permit to be issued in reliance on the Plan and this Agreement also constitutes a Special Purpose Permit under 50 Code of Federal Regulations section 21.27 for the take of Covered Species listed under the Migratory Bird Treaty Act (16 U.S.C. § 703 *et seq.* (MBTA)) that are also listed under the ESA as threatened or endangered. The take of any of these birds as the result of a Covered Activity carried out in accordance with the Plan and the Federal Permit will not constitute a violation of the MBTA. The Special Purpose Permit will be valid for three years and will be renewed pursuant to the MBTA provided Permittee is in compliance with the Federal Permit. Each renewal of the Special Purpose Permit shall be for the maximum period of time allowed under 50 C.F.R. § 21.27 or its successor at the time of renewal, provided the Federal Permit remains in effect for such period. The Federal Permit shall also constitute a Special Purpose Permit for each of the unlisted MBTA Covered Species that may become listed under the ESA during the term of the Permit, concurrent with the listing of the species.

7.4 No Take Above Levels Authorized

The amount of Take for each Covered Species, including Take resulting from habitat modification authorized under the Permits, is defined in Chapter 6 of the Plan and in the Permits. Modifications to the Plan through adaptive management or other provisions of the Plan that would result in an increase in the take of Covered Species beyond that analyzed under the original Plan and provided in the Permits are not authorized. Any

such modification must be reviewed and approved as an NCCP/HCP and permit amendment. See Section 15.2 of this Agreement and Section 8.5 of the Plan.

Section 2820(b)(3) of the California Fish and Game Code requires that the Agreement include a provision specifying the actions CDFW shall take if the level of take exceeds that authorized by the Permit. For purposes of the NCCP Permit, if CDFW determines, after conferring with Permittee, that take is occurring above levels authorized by the NCCP Permit, CDFW, at its discretion, may suspend or revoke the State Permit, in whole or in part, pursuant to the procedures in Section 16.2 of this Agreement. CDFW will work with Permittee to obviate the need for Permit revocation or suspension as stated in Section 8.7.2.6 of the Plan.

7.5 No Take Authorization for Fully Protected Species

No Fully Protected Species (as defined under section 3.17) are included in the list of Covered Species, although six Fully Protected Species are expected to occur in the Plan Area. Take of these species is not proposed by Permittee nor authorized under the NCCP Permit, and CDFW acknowledges and agrees that the measures set forth in the Plan for the Covered Activities are intended to avoid causing the Take of any Fully Protected Species.

7.6 No Take Authorization for Specially Protected Mammal Species

One Specially Protected Mammal Species, mountain lion, is included in the list of Covered Species for the Federal HCP Permit. Take of this species is not proposed by Permittee, nor authorized under the NCCP Permit, and CDFW acknowledges and agrees that the measures set forth in the NCCP/HCP for the Covered Activities are intended to avoid causing the Take of this Specially Protected Mammal Species under State law.

8.0 OBLIGATIONS OF THE PARTIES

8.1 Obligations of Permittee

Permittee will fully and faithfully perform all obligations assigned to it under the Plan, this Agreement and the Permits, including overseeing and managing implementation of the Plan and compliance with all take avoidance, minimization, and mitigation measures, all responses to Changed Circumstances, all monitoring and reporting requirements, and funding of the Plan. Permittee shall undertake all necessary actions to enforce the terms of the Plan, this Agreement and the Permits as to itself and all entities and persons under its direct control to which it extends Take authorization, including, upon issuance of a Certificate of Inclusion, the Participating Special Entity. Any non-compliance by

Permittee or an entity or person under its direct control for purposes of the Permits, including the Participating Special Entity, may be deemed by the Service or CDFW as a violation by Permittee of the Federal Permit or State Permit, respectively. In particular, covered freeway capital improvement projects will be implemented by Permittee, in coordination with the Participating Special Entity and contractors, in conformance with the Plan, this Agreement, and the Permits. Preserve Management Covered Activities will be implemented by Permittee and its management entities in conformance with the Plan, this Agreement, and the Permits.

8.1.1 Role of Permittee

Permittee's responsibilities for implementing the Plan include, but are not limited to:

- Overseeing the assembly and management of the Preserve Area as further described in the Plan and summarized in Sections 4 and 5 of this Agreement;
- Funding and overseeing Plan implementation, including all Take minimization, mitigation and other conservation measures applicable to Covered Activities both within and outside of the Preserve Area;
- Ensuring compliance by the Participating Special Entity with the Plan, the Agreement, and the Permits;
- Ensuring mitigation and conservation measures are being implemented roughly proportional in time and extent to the impact of Authorized Take, as provided in Section 16.2.2 of this Agreement;
- Providing technical support and advice to Preserve Managers about what Plan measures apply to Covered Activities and how they should be applied, including, but not limited to, avoidance and minimization measures;
- Promoting coordination among Preserve Managers to ensure that the Plan is implemented consistently and effectively;
- Preparing or ensuring the preparation of RMPs, as further described in Section 5.1 of this Agreement and Section 7.2 of the Plan;
- Monitoring, adaptive management and Changed Circumstances;
- Information management; and
- Preparing the Annual Report.

8.1.2 Coordination between Permittee and other Regional Conservation Plans

The Plan Area adjoins or overlaps with two other regional habitat conservation plans, the County of Orange Central and Coastal Subregion NCCP/HCP, and the Southern Orange County HCP. The Conservation Strategy for the Plan is designed to enhance the overall level of conservation in Orange County by building on existing conserved lands and

providing increased connectivity between existing conserved lands and thus is consistent with overlapping and adjoining plans.

8.2 Obligations of the Participating Special Entity

It is expected that the Participating Special Entity will assume the role of Construction Lead on behalf of the Permittee for a number of freeway capital improvement projects that are Covered Activities. The Participating Special Entity will not assume any obligations for Covered Activities in Preserve Areas. For all Covered Activities for which the Participating Special Entity assumes the role of Construction Lead, the Participating Special Entity will execute Certificates of Inclusion under the Federal and State Permits. The Participating Special Entity will fully and faithfully perform all obligations assigned to it under the Plan, this Agreement, the Certificates of Inclusion, and the Permits, specifically including the implementation of all applicable avoidance and minimization measures.

8.2.1 Role of Participating Special Entity

The responsibilities of the Participating Special Entity for implementing the Plan when it acts as Construction Lead include:

- Ensuring all applicable avoidance and minimization measures are implemented, including; (1) the aquatic resources and species policy; ; (2) covered plant species policy; (3) wildlife crossing policy; (4) nesting birds policy; (5) wildfire protection techniques; (6) stormwater and water quality BMPs; (7) streambed and wetland and riparian habitat avoidance and minimization measures and (8) standard avoidance and minimization measures BMPs;
- Ensuring funding for implementation of applicable avoidance and minimization measures;
- Reporting to the Permittee regarding implementation of the Covered Activity, including avoidance and minimization measures.

The Participating Special Entity has no obligations regarding implementation of the following Plan components:

- Mitigation measures, including measures related to assembly and management of the Preserve Area;
- Preparing RMPs
- Monitoring, Adaptive Management, and Changed Circumstances;
- Preparing the Annual Report.

8.2.2 Remedies and Enforcement by Permittee Against the Participating Special Entity

If the Participating Special Entity fails to comply with applicable terms of this Agreement, the Plan, the Certificates of Inclusion, or the Permits, the Permittee may withdraw the Certificates of Inclusion and terminate any Take Authorization extended to the Participating Special Entity. Nothing in this Agreement shall limit the remedies otherwise available to OCTA in equity and in law to enforce compliance.

8.3 Obligations of the Service

8.3.1 Permit Issuance, Implementation and Monitoring

Following execution of this Agreement by each Party and satisfaction of all other applicable legal requirements, the Service will issue Permittee a Federal Permit authorizing incidental Take by Permittee of each listed animal Covered Species resulting from Covered Activities within the Plan Area. The Permit will be conditioned on compliance with all terms and conditions of the Permit, including the Plan, this Agreement and applicable law. The Service shall cooperate and provide to the extent appropriated funds are available for that purpose, technical assistance to Permittee in implementing the Federal Permit. The Service will use its reasonable efforts to expeditiously review all conservation easements or equivalent legal mechanisms proposed to conserve lands dedicated to the Preserve Area and all RMPs submitted to it for review and approval under the Plan. The Service shall also monitor Permittee's implementation of the Plan, this Agreement and the Federal Permit to ensure compliance.

8.3.2 Consultation with Public Agencies

To the maximum extent allowable, in any consultation on any Covered Activity involving Permittee under Section 7 of the ESA, the Service shall ensure that the biological opinion issued in connection with the proposed action is consistent with the biological opinion issued for issuance of the Section 10 Permit for the Plan, provided that the Covered Activity as proposed in the consultation is consistent, and will be implemented in accordance with the Plan, this Agreement and the Federal Permit. Any reasonable and prudent measures and terms and conditions in the biological opinion on the proposed action shall, to the maximum extent appropriate and allowable under Section 7 and its implementing regulations, be consistent with and not be in excess of those measures required of the Permittee under the Plan, this Agreement and the Federal Permit.

8.3.3 Future Environmental Review Under NEPA

In the event that the Service participates as a lead or cooperating agency under NEPA with respect to the implementation of a Covered Activity, the Service, to the maximum extent consistent with the requirements of NEPA and other applicable federal law, will utilize the NEPA document prepared for the Plan and Federal Permit.

8.4 Obligations of CDFW

8.4.1 CEQA

8.4.1.1 Agencies Responsible for CEQA Analysis

Permittee served as lead CEQA agency and CDFW has served as a responsible agency under CEQA regarding the development of the joint EIR/EIS for the Plan. Prior to or concurrent with the Effective Date, Permittee and CDFW each evaluated the Plan pursuant to CEQA and issued findings addressing whether the implementation of the Plan would cause significant adverse impacts to the environment.

8.4.1.2 Future Environmental Review Under CEQA

Unless otherwise required by CEQA or other applicable law, the Permittee and CDFW shall rely on and use relevant portions of the EIS/EIR and the CEQA findings when conducting future environmental review of Covered Activities. In the event that CDFW participates as a lead, responsible, or trustee agency under CEQA with respect to the implementation of a Covered Activity, CDFW will not require, recommend, or request the imposition of any additional or more stringent minimization or mitigation measures directed at the protection or conservation of Covered Species or their habitats. As a responsible or trustee agency under CEQA, CDFW will further notify the lead CEQA agency that any avoidance, minimization, and mitigation measures otherwise required for any impact to or Take of any Covered Species or habitat resulting from Covered Activities will be satisfied through the implementation of the Plan.

8.4.1.3 Lake and Streambed Alteration Agreements for Covered Activities

CDFW acknowledges and agrees that the Plan, this Agreement, and the NCCP Permit shall be deemed to provide an equivalent level of protection for wildlife, habitat, or other biological resources as the measures that would otherwise be required or recommended to address the impacts of Covered Activities on Covered Species pursuant to Fish & Game Code §§ 1600–1616.

In any future notification provided to CDFW under Section 1602 related to a Covered Activity, CDFW will ensure that any Streambed Alteration Agreement issued in response to the notification is consistent with the Plan (including the Streambed Program in Appendix E), this Agreement, and the NCCP Permit. Unless otherwise required by law or regulation, CDFW will not require through the Streambed Alteration Agreement additional land, water or other natural resources, or financial compensation or additional restrictions on the use of land, water, or other natural resources to address impacts of Covered Activities on Covered Species beyond the measures provided for under the Plan, this Agreement, and the NCCP Permit.

9.0 MONITORING AND ADAPTIVE MANAGEMENT

9.1 Preserve Management and Monitoring

Permittee will implement the Preserve Management and Monitoring Program as described in Section 7.2 of the Plan. The Permittee will conduct three main types of monitoring: compliance monitoring, effectiveness monitoring, and targeted studies. The Permittee will provide the results of all monitoring in its Annual Report. Compliance monitoring, also known as implementation monitoring, will track the status of Plan implementation and verify that the Permittee is meeting the terms and conditions of the Permits. Effectiveness monitoring assesses the biological success of the Plan. Specifically, it evaluates the implementation and success of the conservation strategy described in Chapter 5 of the Plan. Targeted studies will identify the best methodologies for monitoring, provide information about the efficacy of Preserve Area management techniques, and resolve critical uncertainties in order to improve Preserve Area management.

9.2 Permittee-initiated Adaptive Management

Permittee will implement and periodically evaluate the adaptive management provisions described in Section 7.2.7 of the Plan when changes in management practices are necessary to achieve the Plan's biological goals and objectives, or to respond to monitoring results or new scientific information. The overarching purpose of the monitoring and adaptive management program is to inform and refine Plan implementation so that it may achieve the goals and objectives of the Conservation Strategy as defined in Chapter 5 of the Plan. The Permittee will implement adaptive management by using information gathered from the monitoring program to inform and refine the future management of the Preserve Area as defined in Chapter 7 of the Plan. Permittee will be responsible for implementing the adaptive management program and will consider the recommendations of the Wildlife Agencies, science advisors, other land management agencies, and the public, as provided in this Section and as further described in Chapter 7 of the Plan. Permittee will notify and obtain concurrence of the Wildlife Agencies for any proposed adaptive management actions to be taken pursuant to this

section. In addition, any major changes in the adaptive management program will require the approval of the Wildlife Agencies prior to implementation, including, but not limited to, any proposed actions that would be inconsistent with the Plan or detrimental to a Covered Species, introducing new and untested management techniques, discontinuing and replacing ineffective management techniques that are recommended in the Conservation Strategy, or applying management techniques on a much larger or smaller scale than envisioned in the Plan.

9.3 Wildlife Agency-initiated Adaptive Management

If either Wildlife Agency determines that one or more of the adaptive management provisions in the Plan have been triggered and Permittee has not changed its management practices in accordance with Section 7.2.7 of the Plan, then the Service or CDFW will notify Permittee and direct Permittee to make the required changes. Within 30 days of receiving such notice, Permittee will make the required changes and report to the Wildlife Agencies on its actions. Such changes are provided for in the Plan, and hence do not constitute Unforeseen Circumstances or required amendment of the Permits or Plans, except as provided in this section.

9.4 Reductions in Mitigation

Permittee will not implement adaptive management changes that may result in less mitigation than provided for Covered Species under the original terms of the Plan, unless the Wildlife Agencies first provide written approval. Permittee may propose any such adaptive management changes by notice to the Wildlife Agencies, specifying the adaptive management modifications proposed, the basis for them, including supporting data, and the anticipated effects on Covered Species, and other environmental impacts. Within 120 days of receiving such notice, the Wildlife Agencies will either: (1) approve the proposed adaptive management changes, (2) approve them as modified by the Wildlife Agencies, or (3) notify Permittee that the proposed changes constitute Permit amendments that must be reviewed under Section 15.2 of this Agreement.

9.5 No Increase in Take

Permittee is not authorized to implement adaptive management modifications that would result in change in the nature of Take or an increase in the amount or level of Take of Covered Species beyond that analyzed in connection with the original Plan and any amendments thereto. Any such modification must be reviewed as a Permit amendment under Section 15.2 of this Agreement.

10.0 REPORTING

10.1 Annual Report

Permittee will prepare an Annual Report on Plan implementation as further described in Section 8.4 of the Plan. The Annual Report will summarize actions taken to implement the Plan for the period January 1 through December 31. The Annual Report will include the following:

- Description and location of Covered Activities completed, including a summary of avoidance and minimization measures undertaken for each Covered Activity and any on-site restoration that is required to offset temporary impacts.
- Summary of total acres of natural habitat types impacted by Covered Activities and an accounting of the Plan-to-date habitat types impacts in comparison with the impact caps approved by the Plan.
- For covered plant species only, accounting in ledger-type format of credits and debits as described at 5.6.2.2 of the Plan.
- Summary of any impacts exceeding 0.10 acre to natural habitat resulting from Preserve management Covered Activities and an accounting of Plan-to-date natural habitat impacts in comparison with the 11-acre cap approved by the Plan.
- Summary of the status of Preserve management and monitoring activities, effectiveness monitoring, any actions taken through and results of adaptive management and any responses to Changed Circumstances;
- Summary of the status of Permittee-funded restoration projects, including the results of monitoring activities and any remedial actions taken to achieve success criteria.
- Summary of land added to the Preserve System.
- Summary of Plan funding, including endowment budgets. This will include the amount of earnings, amount spent or obligated, and annual inflation adjustments.
- Any revisions and amendments to the Plan, IA or Permits.

Permittee will provide a copy of the Annual Report to all Parties by March 15 of the year following the Reporting Period. The Annual Report shall be presented at an OCTA public workshop or meeting and copies of the Annual Report shall be made available to the public.

10.1.1 Other Reports

Permittee will provide, within 30 days of being requested by the Service or CDFW, any additional information in its possession or control related to implementation of the Plan

for the purpose of assessing whether the terms and conditions of the Federal or State Permit, including the Plan, are being fully implemented.

10.1.2 Certification of Reports

All reports will include the following certification from a responsible official of Permittee who supervised or directed preparation of the report:

I certify under penalty of law, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate and complete.

10.1.3 Monitoring Results

As provided in Section 9.1, the Permittee will provide the results of compliance monitoring, effectiveness monitoring, and targeted studies in the Annual Report. To fulfill the compliance monitoring obligation as stated in Sections 7.1 and 8.4 of the Plan, Permittee will summarize the amount of Take on an annual basis and provide this information in the Annual Report. Permittee will provide a summary for each year and a cumulative summary for all years of total acres of natural habitat types affected by Covered Activities in comparison with the impact cap approved by the Plan. The Parties will use the results of the Permittee's monitoring to ensure that the Plan is being properly implemented and to measure the Permittee's progress toward the successful implementation of the Plan's Conservation Strategy (Chapters 5 and 7).

10.2 Monitoring by the Wildlife Agencies

The Wildlife Agencies may conduct inspections and monitoring of the site of any Covered Activity and of any land within the Preserve system, and may inspect any data or records required by this Agreement, the Plan or the Permits, in accordance with applicable law and regulations in order to monitor compliance with the Permits.

11.0 CHANGED CIRCUMSTANCES

Section 8.6.2 of the Plan identifies changes in the circumstances affecting the Plan's Preserve Areas or Covered Species that reasonably can be anticipated and planned for and describes the responses to such changes that will be carried out by Permittee.

11.1 Response to Changed Circumstances

Permittee will give notice to the Wildlife Agencies within seven days after learning that any of the Changed Circumstances listed in Section 8.6.2 of the Plan has occurred. As soon as practicable thereafter, but no later than 30 days after learning of the Changed Circumstances, Permittee will undertake the response described in Section 8.6.2 of the Plan and will report to the Wildlife Agencies on its actions. Permittee will make such modifications without awaiting notice from the Wildlife Agencies.

11.1.1 Wildlife Agency-initiated Response to Changed Circumstances

If either Wildlife Agency determines that Changed Circumstances have occurred and that Permittee has not responded in accordance with Section 8.6.2 of the Plan, one or both of the Wildlife Agencies will so notify Permittee and will direct Permittee to make the required changes. Within 30 days of receiving such notice, Permittee will make the required changes and report to the Wildlife Agencies on its actions. Such changes are provided for in the Plan, and hence do not constitute Unforeseen Circumstances or require amendment of the Plan or Permits.

12.0 FUNDING

Permittee warrants that it has and will expend such funds as may be necessary to fulfill its obligations under the Plan and Permits. Permittee shall ensure that all required mitigation, conservation, monitoring, reporting, and adaptive management measures are adequately funded during the term of this Agreement, and that management, maintenance, monitoring, reporting, and adaptive management activities on Preserve Area lands are adequately funded in perpetuity. Section 8.3 of the Plan describes the Permittee's funding capacity and the funding process under Renewed Measure M and demonstrates that Permittee will ensure adequate funding to implement the Plan. For the initial years of Plan implementation, during which time the non-wasting endowment is being fully funded over a period of up to fifteen years, OCTA will fully fund Plan implementation, including Preserve management and monitoring, using annual appropriations from the M2 EMP revenue stream.

Permittee will promptly notify the Wildlife Agencies of any material change in the Permittee's financial ability to fulfill its obligations under the Plan and this Agreement. In addition to providing any such notice, Permittee will also include in its Annual Report to the Wildlife Agencies reasonably available financial information to demonstrate the Permittee's ability to fulfill its funding obligations.

12.1 Funding Endowments for Long-Term Management and Monitoring of Preserves

Within six months of issuance of the State Permit, OCTA will ensure that one or more permanent, non-wasting endowments are established, after the review and approval of the Wildlife Agencies, to fund in perpetuity Preserve Management, Restoration, and Monitoring Activities as described in Section 6.3, and for no other purpose. OCTA may hold and manage any of the endowments under Government Code section 65968(b)(1) associated with a Preserve property that it holds, or, with the approval of the Wildlife Agencies, it may select a third party entity or entities qualified to hold and manage any of the endowments pursuant to Government Code Sections 65965 through 65968 .

OCTA may also be qualified to hold and manage any of the endowments under Government Code section 65968(b)(2) based on the arrangements for the endowment detailed below, including, but not limited to, OCTA's qualifications, capitalization rate, return objectives, and the spending rule and disbursement policies. If OCTA chooses to retain responsibility for management of a portion of the Preserve and the associated endowment, it has a track record of managing endowment funds, including those for transit and commuter rail operations, and has a fully functioning treasury with appropriate investment policies and fund management experience. OCTA's management of the endowment will follow the safeguards and audit features applied to the M2 program including, but not limited to the following:

- All spending will be subject to an annual independent audit.
- Spending decisions will be annually reviewed and certified by an independent Taxpayer Oversight Committee.
- The endowment will be subject to public review at least every 10 years and an assessment of progress in delivery, public support, and changed circumstances. Any significant proposed changes to the endowment will be approved by the Taxpayer Oversight Committee (TOC) and OCTA Board. The Wildlife Agencies will be consulted on changes to the endowment prior to its presentation to the TOC and OCTA Board.
- All entities receiving funds will report annually on expenditures and progress in implementing projects.
- At any time, at its discretion, the Taxpayer Oversight Committee may conduct independent reviews or audits of the spending of endowment funds.

OCTA's endowment will be governed by the Uniform Prudent Management of Institutional Funds Act. OCTA's endowment funds are held in separate and distinct funds. Each fund is legally protected from the other funds. OCTA utilizes fund accounting for the recording of these assets. Furthermore, the EOC was established pursuant to the M2 Ordinance No. 3 to make recommendations to the OCTA Board on the allocation of net revenues for the EMP. Changes to the use of M2 funds related to the EMP will also require recommendations by the EOC.

The estimated endowment amount(s) will be based on an effective spending rate of 2.5% of average endowment value over a specified period. The final endowment funding requirements will be based on a Property Analysis Report (PAR) or PAR-like analysis that will be completed by OCTA within seven years of Plan approval. This analysis will itemize and define the long-term obligations at each Preserve using Preserve-specific information developed for the Preserve RMPs. The final endowment funding level will be based upon actual negotiated long-term management contracts for each individual Preserve. OCTA will coordinate with the Wildlife Agencies and obtain the Wildlife Agencies' review and approval of the PAR analysis and determination of the permanent endowment funding requirements.

Permittee will accumulate funding for the endowment(s) using the ongoing revenue generated for the M2 EMP and will fully fund the endowment no later than 15 years following Permit issuance in accordance with Section 8.3.3 of the Plan. An initial estimate of the endowment funding requirements is included in Table 8-2 of the Plan. The capitalization rate for the endowment is 2.5 % and the return objective is the median return that is achieved by comparable non-profit organizations.

After the endowment is fully funded, OCTA shall disburse to the designated land manager(s) from the endowment annual, advance payments that the land manager(s) shall use to pay the costs of Preserve Management, Restoration, and Monitoring Activities as described in Section 6.3 to be performed by the Land Manager throughout the forthcoming calendar year. OCTA will require land manager(s) to submit payment requests between July 1 and September 30, and will disburse endowment payments in December for Preserve Management, Restoration, and Monitoring Activities for the next calendar year.

The Parties agree that the detailed accounting of the estimated costs associated with the various components of the Plan, as set out in Chapter 8 and Tables 8-1 and 8-2, reflects best efforts to determine the level of funding necessary to implement the Plan. The Parties further agree that the process provided under the Plan and summarized under this section 12.1 ensures that the endowment to be established is adequate, and that a schedule for fully funding the endowment has been established as stated in Government Code section 65966(o). Therefore, California Government Code sections 65966(b)-(e) do not apply to the endowment(s) under this Plan.

Where Permittee has funded an endowment to fully satisfy certain conservation obligations under the Plan and the endowment has been reviewed and approved in writing as adequate by the Wildlife Agencies, funding is deemed adequate to carry out such obligations, and the Wildlife Agencies shall not require additional funds or resources from the Permittee.

12.2 Effect of Inadequate Funding

If funding becomes inadequate to implement the Plan, the Wildlife Agencies will assess the impact of the funding deficiency on the scope and validity of the Permits. Except in cases of withdrawal by Permittee or permit revocation by the Wildlife Agencies, the Parties agree to meet and confer to develop a strategy to address the funding shortfall, and to undertake all practicable efforts to maintain the level of conservation and Take authorization afforded by the Permits consistent with protection of the Covered Species and their habitats until the funding situation can be remedied.

If circumstances warrant suspension or revocation of the Federal Permit or State Permit, in whole or in part, the applicable Wildlife Agency(ies) shall use its reasonable efforts to meet and confer with the Permittee within thirty (30) days of such determination to identify potential actions, if any, that may be available to forestall the suspension or revocation of a Permit(s).

13.0 REGULATORY ASSURANCES

13.1 Assurances Under the ESA

Upon issuance of the Federal Permit, Permittee shall receive regulatory assurances pursuant to the No Surprises Rule at 50 C.F.R. sections 17.22(b)(5) and 17.32(b)(5). Pursuant to the No Surprises Rule, as long as Permittee has complied with its obligations under the Plan, this Agreement and the Federal Permit with regard to the Covered Species and Covered Activities, the Service shall not require the Permittee to provide conservation and mitigation measures to respond to Unforeseen Circumstances that involve the commitment of additional land, water or financial compensation or additional restrictions on the use of land, water, or other natural resources otherwise available for economic development or use under the original terms of the Plan and Federal Permit without the consent of Permittee.

13.2 Assurances Under the NCCPA

13.2.1 Permittee

Under the NCCPA, CDFW provides assurances to permittees commensurate with the long-term conservation assurances and associated implementation measures that will be implemented under a plan (Fish & Game Code § 2820(f)). In its determination of the level and duration of the assurances to be afforded a permittee, CDFW takes into account the conditions specific to the plan, including such factors as:

- The level of knowledge of the status of covered species and natural communities;

- The adequacy of analysis of the impact of take on covered species;
- The use of the best available science to make assessments of the impacts of take, reliability of mitigation strategies, and appropriateness of monitoring techniques;
- The appropriateness of the size and duration of the plan with respect to quality and amount of data;
- The sufficiency of mechanisms for long-term funding of all components of the plan and contingencies;
- The degree of coordination and accessibility of centralized data for analysis and evaluation of the effectiveness of the plan;
- The degree to which a thorough range of foreseeable circumstances are considered and provided for under the adaptive management program; and
- The size and duration of the plan.

As long as the Permittee is properly implementing this Agreement, the OCTA NCCP/HCP, and the State Permit, CDFW will not seek to impose on the Permittee, for purposes of compliance with the NCCPA, any avoidance, minimization, mitigation, or conservation measures or requirements regarding the impacts of Covered Activities on Covered Species within the Plan Area beyond those required by this Agreement, the OCTA NCCP/HCP, and the State Permit. The assurances provided to the entities receiving permits under the NCCPA will ensure that if there are Unforeseen Circumstances, no additional financial obligations or restrictions on the use of resources will be required of the Permittees without their consent, unless CDFW determines that the Plan is not being implemented consistent with the substantive terms of this Agreement, the Plan, and the State Permit. Specifically, the NCCPA directs that,

[i]f there are Unforeseen Circumstances, additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources shall not be required without the consent of plan participants for a period of time specified in the implementation agreement, unless CDFW determines that the plan is not being implemented consistent with the substantive terms of the implementation agreement (Fish & Game Code § 2820(f)(2)).

The NCCPA requires that CDFW suspend or revoke a permit, in whole or in part, if the continued take of a Covered Species would jeopardize its continued existence.

13.3 Process to Respond to Unforeseen Circumstances

If the Service believes that an Unforeseen Circumstance exists, it shall provide written notice of its proposed finding of Unforeseen Circumstances to Permittee. The Service shall clearly document the basis for the proposed finding regarding the existence of Unforeseen Circumstances pursuant to the requirements of 50 C.F.R. sections 17.22(b)(5)(iii)(C) and 17.32(b)(5)(iii)(C). Within fifteen (15) days of receiving such

notice, the Permittee and the Service shall meet or confer to consider the facts cited in the notice and potential changes to the Plan. Pursuant to 50 C.F.R. sections 17.22(b)(5)(iii)(C) and 17.32(b)(5)(iii)(C), the Service shall make an Unforeseen Circumstances finding based on the best scientific evidence available, after considering any responses submitted by the Permittee pursuant to this section, and the Service shall have the burden of demonstrating that Unforeseen Circumstances exist.

13.4 Interim Obligations Upon a Finding of Unforeseen Circumstances

If either Wildlife Agency finds that an Unforeseen Circumstance has occurred with regard to a Covered Species and that additional measures may be required for the Covered Species as a result, during the period necessary to determine the nature, scope and location of any additional measures, the Permittee will avoid causing an appreciable reduction in the likelihood of the survival and recovery of the affected species. The Permittee will not be responsible for implementing any additional measures contrary to the regulatory assurances provided under the No Surprises Rule or the NCCPA unless the Permittee consents to do so.

14.0 TERM

14.1 Effective Date

This Agreement shall be effective with regard to the Federal Permit and State Permit, respectively, on the date, following execution of the Agreement by all Parties, on which the Permit is issued.

14.2 Initial Term

This Agreement, the Plan, and the Federal and State Permits, respectively, will remain in effect for an initial term of 40 years from issuance of the original Permits or until termination of the affected Permit, whichever occurs sooner.

14.3 Extension of the Permits

Upon agreement of the Parties and compliance with all applicable laws, the Permits may be renewed in accordance with regulations of the Wildlife Agencies in force on the date of such renewal.

15.0 AMENDMENTS AND PERMIT AMENDMENTS

15.1 Minor Amendments to the Plan

15.1.1 Minor Amendments

The Permittee, may, under certain circumstances, request an amendment to the Plan without amending the Permits, provided such amendments are minor in nature, the effects on the Covered Species involved and the levels of take resulting from the amendment are not greater than those described in the Plan and provided for by the Permits, and the action is otherwise consistent with the Plan, this Agreement, and the Permits and will not result in new or greater environmental effects beyond those analyzed under NEPA and CEQA for the Plan as originally approved. Minor Amendments will not alter the terms of the HCP Permit or NCCPA Permit.

Examples of actions that may require Minor Amendments to the Plan include, but are not limited to:

- Change in location of a covered freeway improvement project provided that the revised project location is within the Permit Area, changes do not exceed the caps for impacts on habitat types, result in an increased level of take for Covered Species, or result in new environmental impacts that were not addressed in the Plan and the Environmental Impact Report/Environmental Impact Statement for the Plan. OCTA will be required to address the project changes and demonstrate that the changes are consistent with these criteria.
- Addition of a covered minor freeway capital improvement project as described in Section 6.2. These potential additional projects must be consistent with the scope of the covered freeway projects, occur within the Permit Area, and cannot exceed the acreage impact caps established for the Plan. These projects also cannot result in additional take of Covered Species, or be significantly different or have greater impacts to the environment than what was analyzed within the Environmental Impact Report/Environmental Impact Statement for the Plan, as determined by the Wildlife Agencies.
- Change to cap of 500 individuals of each covered plant species to no more than 1,000 individuals if OCTA can demonstrate to the Wildlife Agencies that mitigation achieved through the Plan conservation actions or through project-specific biological superior alternative(s) provides a biological benefit that is greater than the anticipated impacts. The relative biological benefit of impacts and conservation/restoration will depend not only on the number of individuals impacted or conserved, but also on factors such as long-term sustainability of the occurrences, importance for maintaining

connectivity and contiguity between other occurrences in the area, and other factors that may make the occurrences in question biologically valuable or unique.

OCTA will submit in writing to the Wildlife Agencies a description of the proposed Minor Amendment in the form of an addendum with the following subject items addressed:

- An explanation why the Minor Amendment is necessary or desirable.
- An explanation of why OCTA believes the effects of the proposal are not significantly different from those described in the original Plan and would not result in greater impacts on the environment, including the Covered Species and their habitats, or levels of take beyond those analyzed in connection with the Plan and the Permits.
- An analysis of the environmental impacts of the proposed change.

OCTA may propose a Minor Amendment to the Plan by providing a written submission to the Wildlife Agencies. The Wildlife Agencies will use their reasonable efforts to respond to proposed Minor Amendments within 60 days of receipt of such submission by either approving or denying the Minor Amendment or by notifying the OCTA that the proposed Minor Amendment must be processed as a Permit Amendment. Proposed Minor Amendments will become effective upon the Wildlife Agencies' written approval. The Wildlife Agencies will not approve Minor Amendments to the Plan if they determine that such Minor Amendments will result in adverse effects on the environment that are new or significantly different from those analyzed in connection with the original Plan or may result in additional take that was not analyzed in connection with the original Plan.

15.1.2 Major Amendments

Major amendments to the Plan will require detailed analyses of the anticipated effects of the proposed action on conserved habitats and Covered Species, on sensitive habitats and species not addressed in the Plan, and on the additional conservation to be provided through the Amendment process. Major amendments will be processed as Permit Amendments in accordance with all applicable federal and state statutory and regulatory requirements, including NEPA and CEQA. The Wildlife Agencies will provide technical assistance to Permittee during the amendment process. All Major Amendments to the Plan approved by the Wildlife Agencies will be memorialized through an addendum to the Plan, a Permit Amendment, and, if necessary, an amendment to this Agreement, and will be documented in the Annual Report.

Major Amendments to the Plan and Permits will be required if a proposed action would include but are not limited to any of the following:

- Proposed increased level of take of a Covered Species. For the three plant species, this level would include any cumulative impact above 1,000 individuals.
- Proposed addition of a Covered Species.
- Proposed addition or substantial modification to Covered Activities associated with Preserve management that could reduce conservation commitments in the Plan.
- Proposed addition of a freeway capital improvement project that does not meet the criteria included in Section 6.2 and would require additional conservation to offset impacts.
- Proposed addition of operation and maintenance of constructed freeway capital improvement projects as a Covered Activity.
- Proposed change in the location of a covered freeway project that is outside of the Permit Area, and would result in impacts that exceed caps to habitat type(s), and/or results in new environmental impacts that were not addressed in the Plan and the Environmental Impact Report/Environmental Impact Statement for the Plan.
- Increased impacts associated with covered freeway capital improvement projects that result in the caps for habitat type(s) to be exceeded. Adjustments to the caps can be made based on an analysis of conservation achieved under the Plan and if there is a determination, with the written concurrence of the Wildlife Agencies, that there are excess credits to warrant the caps on a specific habitat to be increased.
- Increased permanent impacts within Preserves that would result in the cap of 13 acres of impact on natural habitat to be exceeded.
- Proposed addition of a Preserve or other conservation actions that contribute to the conservation credits under the Plan.

15.2 Amendment to this Agreement

In addition to other approval requirements identified in this Section that may apply, this Agreement may only be amended consistent with applicable law and with the consent of each Party.

16.0 ENFORCEMENT OF PERMIT AND DISPUTE RESOLUTION

16.1 General Authorities and Legal Rights under Federal Permit

Nothing contained in this Agreement is intended to, or shall, limit the authority of the United States government to seek civil or criminal penalties or otherwise fulfill its enforcement and other responsibilities under the ESA or other applicable federal law. Nothing contained in this Agreement limits the rights of Permittee under the U.S. Constitution or other applicable federal or state law to seek redress against the Service as otherwise permitted by law.

16.1.1 Permit Suspension

The Service may suspend the Federal Permit, in whole or in part, for cause in accordance with the laws and regulations in force at the time of such suspension. (*See* 50 C.F.R. §§ 13.27-13.29, 17.22(b) and 17.32(b)). However, except where the Service determines emergency action is necessary to avoid irreparable harm to a Covered Species, it will not suspend the Federal Permit without first requesting the Permittee to take appropriate remedial actions, if any such actions are available, and providing the Permittee with written notice of the facts or conduct which may warrant the suspension, and an adequate and reasonable opportunity, including, where appropriate, use of the voluntary dispute resolution process outlined in Section 16.4, to demonstrate why suspension is not warranted.

16.1.2 Reinstatement of Suspended Permit

In the event the Service suspends the Federal Permit, in whole or in part, as soon as practicable, and if possible within ten (10) days after such suspension, the Service shall confer with the Permittee concerning actions, if any, they would allow the suspension to be lifted. After conferring with the Permittee, the Service shall identify reasonable specific actions, if any, necessary to effectively redress the suspension. In making this determination the Service will consider the requirements of the ESA, regulations issued thereunder, the conservation needs of the Covered Species, the terms of the Federal Permit and any comments or recommendations received from the Permittee. As soon as practicable, and if possible within thirty (30) days after the conference, the Service shall send Permittee written notice of any available, reasonable actions necessary to effectively redress the suspension. Upon Permittee's timely and acceptable performance of such actions, the Service will promptly reinstate the Federal Permit. It is the general intent of the Parties that in the event of a total or partial suspension of the Federal Permit, and provided such action is appropriate in light of the circumstances that resulted in the suspension, the Parties will act expeditiously and cooperatively to reinstate the Federal Permit.

16.1.3 Surrender or Revocation of the Federal Permit

Permittee may withdraw from the Federal Permit by surrendering the Federal Permit to the Service in accordance with the regulations of the Service in force on the date of such surrender. (These regulations are currently codified at 50 CFR 17.22(b)(7) and 17.32(b)(7) and by their express terms apply in place of 50 CFR 13.26 to the extent of any conflict). In addition, the Service may revoke the Federal Permit for cause. (These regulations are currently codified at 50 CFR 17.13.28, 17.22(b)(8) and 17.32(b)(8)). Upon surrender or revocation of the Federal Permit, no further Take shall be authorized under the Permit. Notwithstanding surrender of the Federal Permit by Permittee or revocation of the Federal Permit by the Service, Permittee will remain obligated to fulfill any existing and outstanding minimization and mitigation measures required under the Plan, this Agreement, and the Federal Permit for any Take that occurred prior to surrender or revocation. A surrendered Federal Permit shall be deemed cancelled only upon a determination by the Service that such minimization and mitigation measures have been implemented.

16.2 State Permit

16.2.1 Suspension or Revocation of the State Permit

CDFW may suspend or revoke, in whole or in part, the State Permit in the event that it determines that the Permittee has failed to fulfill their obligations under the Plan, this Agreement, or the State Permit as stipulated in Section 7.3 of the Agreement. Unless an immediate suspension is necessary to avoid jeopardy, CDFW shall not suspend or revoke the State Permit without first notifying in writing the Permittee of the basis for its determination and the proposed action to revoke or suspend and meeting and conferring with the Permittee regarding the matter. The Parties shall meet and confer within fifteen (15) days of issuance of such notice to assess the action or inaction that warranted CDFW's determination and to identify any appropriate responsive measures that may be taken. Within forty-five (45) days of receiving notice from CDFW, Permittee shall either satisfy CDFW that they are in compliance with the State Permit or reach an agreement with CDFW to expeditiously obtain compliance.

Following this forty-five (45) day period, CDFW may suspend, but shall not revoke the State Permit until such time as the review process set forth in Section 16.4 of this Agreement has been completed, provided the process has been invoked by the Permittee.

16.2.2 Rough Proportionality

Section 2820 (b)(9) of the Fish and Game Code requires NCCP Permittees to ensure that implementation of mitigation and conservation measures on a plan basis is roughly

proportional in time and extent to the impact on habitat or Covered Species authorized under the Plan. Permittee will ensure rough proportionality after the Permits have been issued by implementing mitigation and conservation measures ahead of impacts from Covered Activities, as described in Chapter 5 of the Plan. As further described in Section 5.8.2 and Tables 5.3, and 5.5 of the Plan, the amount of each land cover type restored, created, and added to the Preserve Area as a proportion of the total requirement for each land cover type will be equal to or greater than the impact on that land cover type as a proportion of the total impact expected by all Covered Activities. The Permittee will fulfill the requirements of this Section and Section 5.8.2 of the Plan so long as it ensures that the pace at which the Preserve is created, and at which required habitat restoration and enhancement occurs throughout the Plan Area in core habitat areas and within key habitat linkages and riparian corridors, does not fall behind the pace at which Covered Activities impact habitat by more than ten percent (10%) of the commitments made in the Plan for each land cover type. The Permittee will include in the Annual Report a summary of all take that has occurred as a result of all Covered Activities (i.e., cumulative take; not just for that particular year) and the amount of mitigation undertaken to show that the Plan is meeting the rough proportionality requirement. If at any time CDFW determines that the requirement for rough proportionality on a Plan basis is not being met, it will provide written notification to Permittee. Permittee will either: (1) regain rough proportionality within forty-five (45) days; or (2) enter into an agreement with CDFW within forty-five (45) days, which will set a course of action to expeditiously regain rough proportionality.

If Permittee does not regain rough proportionality within forty-five (45) days or enter into an agreement with CDFW within forty-five (45) days setting a course of action to regain rough proportionality, CDFW shall suspend or revoke the NCCP Permit, in whole or in part, pursuant to Fish and Game Code section 2820(c).

16.2.3 Approval, Adoption or Amendment of Future Plans or Projects by Permittee

The approval, adoption, or amendment of a future plan or project by Permittee that is inconsistent with the objectives and requirements of the Plan, without the concurrence of the Wildlife Agencies, is grounds for suspension or revocation of the State Permit. If CDFW determines, after conferring with the Permittee, that such a plan or project has been approved, adopted, or amended in a manner that is substantially inconsistent with the objectives or requirements of the Plan, CDFW will provide written notice to the Permittee documenting the nature of the inconsistency.

Within fifteen (15) days of the issuance of such notice, CDFW and the Permittee shall meet and confer to consider the basis for CDFW's determination and to identify steps that may be taken to address any such inconsistency. In the event that the inconsistency is not satisfactorily addressed within forty-five (45) days or within a period mutually agreed to by the CDFW and the Permittee, CDFW, at its discretion, may suspend or revoke the State Permit, in whole or in part.

16.2.4 Reinstatement of Suspended Permit

In the event CDFW suspends the State Permit, as soon as possible but no later than ten (10) days after such suspension, CDFW shall confer with the Permittee concerning how the violation or breach that led to the suspension can be remedied. At the conclusion of any such conference, CDFW shall identify reasonable specific actions necessary to effectively redress the violation or breach. In making this determination, CDFW shall consider the requirements of the NCCPA, the conservation needs of the Covered Species, the terms of the State Permit and this Agreement, and any comments or recommendations received during the meet and confer process. As soon as possible, but not later than thirty (30) days after the conference, CDFW shall send the Permittee written notice of the reasonable actions necessary to effectively redress the violation or breach. Upon performance of such actions, CDFW shall immediately reinstate the State Permit. It is the intent of the Parties that in the event of any suspension of the State Permit, all Parties shall act expeditiously and cooperatively to reinstate the State Permit.

16.2.5 Obligations in the Event of Suspension or Revocation

In the event of revocation, termination, or suspension of the State Permit, Permittee will remain obligated to fulfill any existing and outstanding minimization and mitigation measures and conservation measures required under this Agreement, the Plan, and the NCCP Permit, including measures to ensure rough proportionality under the NCCPA and Section 16.2.2., for any Take that occurs prior to such revocation, termination, or suspension, until CDFW determines that all Take of Covered Species that occurred under the NCCP Permit has been mitigated in accordance with this Agreement, the Plan, and the NCCP Permit.

16.3 Dispute Resolution

The Parties recognize that disputes concerning implementation of, compliance with, or termination of this Agreement, the Plan, and the Permits may arise from time to time. The Parties agree to work together in good faith to resolve such disputes, using the informal dispute resolution procedures set forth in this section, or such other procedures upon which the Parties may later agree. However, if at any time, the Service or CDFW determines that circumstances so warrant, either agency may seek any available administrative or judicial remedy without engaging in or waiting to complete informal dispute resolution.

16.3.1 Dispute Resolution Process

Unless the Parties agree upon another dispute resolution process, or unless the Service or CDFW has initiated administrative or judicial proceedings, the Parties may use the following process to attempt to resolve disputes:

(a) The USFWS or CDFW will notify Permittee of the alleged non-compliance with, or violation of the Permit, including the Plan and this Agreement, the basis for contending that the non-compliance or violation has occurred, and the remedies the affected Wildlife Agency proposes to correct the alleged non-compliance or violation. Where Permittee alleges that one or both Wildlife Agency's supervision of the Permit, including Plan implementation, is inconsistent with the terms of the Permit, Permittee will notify both Wildlife Agencies of its objection, the basis for the objection and the manner in which Permittee believes the Permit should be interpreted and implemented.

(b) The notified parties will have 30 days, or such other time as may be agreed to by the Parties, to respond. During this time any Party may seek clarification of the information provided in the initial notice. The Parties will use their reasonable efforts to provide any information then available to it that may be responsive to such inquiries.

(c) Within 10 days after such response was provided or was due, a representative from each Party will meet and negotiate in good faith toward a solution satisfactory to all Parties, or will establish a specific process and timetable to seek such a solution.

(d) If any issues cannot be resolved through such negotiations, the Parties may consider non-binding mediation and other alternative dispute resolution processes and, if a dispute resolution process is agreed upon, will make good faith efforts to resolve all remaining issues through that process.

17.0 MISCELLANEOUS PROVISIONS

17.1 Incorporation of the Plan

The Plan and each of its provisions are intended to be and by this reference are incorporated herein. Notwithstanding such incorporation, it is acknowledged by the parties that the Plan was drafted by the Permittee and submitted to the Service and CDFW in support of applications for Federal and State Permits. Characterizations, analyses and representations in the Plan, and in particular, characterizations, analyses and representations in the Plan of Federal or State laws, regulations, and policies, represent the views of the Permittee and shall not control the administration of the Permits by the Service and CDFW in accordance with Federal and State laws, regulations, and policies. In the event of any inconsistency between the Plan and this Agreement, the provisions of

this Agreement control. Similarly, in the event of any inconsistency between the Plan or this Agreement and the Federal or State Permits, the Permits control.

17.2 Relationship to CESA, the NCCPA, the ESA, and Other Authorities

The terms of this Agreement shall be governed by and construed in accordance with the federal and state Permits, NCCPA, the ESA, and other applicable federal and State law. In particular, nothing in this Agreement limits or is intended to limit the authority of the Wildlife Agencies to seek penalties or otherwise fulfill their responsibilities under CESA, the NCCPA, or the ESA. Moreover, nothing in this Agreement is intended to limit or diminish the legal obligations and responsibilities of the Service as an agency of the federal government or of CDFW as an agency of the State of California.

17.3 Changes in Environmental Laws

It is acknowledged by the Parties that through acceptance of the Permits, the Permittee commits to perform substantial avoidance, minimization, mitigation, conservation, and management measures as set forth in the Plan, this Agreement and the Permits. If a change in, or an addition to, any federal or state law governing or regulating the impacts of Covered Activities on land, water or biological resources as they relate to Covered Species, including, but not limited to, the ESA, NEPA, NCCPA, CESA, and CEQA, the Wildlife Agencies, to the extent consistent with governing law, shall give due consideration to the measures required under the Plan in applying the new laws and regulations to the Permittee.

17.4 References to Regulations

Any reference in this Agreement, the Plan, or the Permits to any regulation or rule of the Wildlife Agencies will be deemed to be a reference to such regulation or rule in existence at the time an action is taken.

17.5 Applicable Laws

All activities undertaken pursuant to this Agreement, the Plan, or the Permits must be in compliance with all applicable State and federal laws and regulations.

17.6 Governing Law

This Agreement will be governed by and construed in accordance with the laws of the United States and the State of California, as applicable.

17.7 Independent State and Federal Permits

The State and Federal Permits are independent such that revocation of the State Permit or of the Federal Permit does not automatically cause revocation of the other Permit.

17.8 Availability of Funds

Implementation of this Agreement and the Plan by the Service is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this Agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury. The Parties acknowledge that the Service will not be required under this Agreement to expend any federal agency's appropriated funds unless and until an authorized official of the agency affirmatively acts to commit to such expenditures as evidenced in writing.

Implementation of this Agreement and the Plan by CDFW is subject to the availability of appropriated funds. Nothing in this Agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any money from the Treasury of the State of California. The Parties acknowledge and agree that CDFW will not be required under this Agreement to expend any state appropriated funds unless and until an authorized official of that agency affirmatively acts to commit such expenditure as evidenced in writing.

17.9 Duplicate Originals

This Agreement may be executed in any number of duplicate originals. A complete original of this Agreement shall be maintained in the official records of each of the Parties hereto.

17.10 No Third-Party Beneficiaries

Without limiting the applicability of rights granted to the public pursuant to the ESA, CESA, NCCPA or other applicable law, this Agreement shall not create any right or

interest in the public, or any member thereof, as a third-party beneficiary, nor shall it authorize anyone to maintain a suit for personal injuries or damages pursuant to the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third parties shall remain as imposed under existing law.

17.11 Agreement is not an Enforceable Contract as between Service and Permittee

Notwithstanding any language to the contrary in this Agreement, this Agreement is not intended to create and shall not be construed to create an enforceable contract between Permittee and the Service under law with regard to the Permit, and neither the Service nor Permittee shall be liable in damages to each other or to any other third party for any performance or failure to perform any obligation identified in this Agreement. The sole purpose of this Agreement as between the Service and Permittee is to clarify the provisions of the Plan and the processes the Parties intend to follow to ensure successful implementation of the Plan in accordance with the Permit and applicable federal law. Notwithstanding the foregoing, the Service intends to follow the provisions of this Agreement in administering the Permit, and Permittee intends to follow the provisions of this Agreement in implementing the Plan. This Agreement will be incorporated by reference into the Federal Permit.

17.12 Defense

Upon request by OCTA, CDFW will, to the extent authorized by California law, including but not limited to Section 7 of Article 16 of the California Constitution and subject to the responsibilities of the California Attorney General, cooperate with the Permittee in defending lawsuits regarding the Plan, this Agreement or the State Permit, and lawsuits against Permittees arising out of CDFW's approval of the State Permits. Subject to Section 17.8 (Availability of Funds), the Service, upon the request of Permittee, and subject to the responsibilities of the U.S. Department of Justice in the conduct of litigation, will use reasonably available resources to provide appropriate support to Permittee in defending, consistent with the terms of the Plan, this Agreement and the Federal Permit, lawsuits against Permittee, arising out of the Service's approval of the Permit.

17.13 Successors and Transferees

This Agreement and each of its covenants and conditions shall inure to the benefit of the Parties and their respective successors and transferees incident to transfer of the Permits under applicable law. Succession or other transfer of the Permits will be governed by

provisions of the ESA, CESA, and NCCPA pertaining to the right of succession or transfer of Permits.

17.14 Notices

Any notice permitted or required by this Agreement shall be in writing, delivered personally to the persons listed below, or shall be deemed given five (5) days after deposit in the United States mail, certified and postage prepaid, return receipt requested and addressed as follows, or at such other address as any Party may from time to time specify to the other Parties in writing. Notices may be delivered by facsimile or other electronic means, provided that they are also delivered personally or by certified mail. Notices shall be transmitted so that they are received within the specified deadlines.

Assistant Regional Director
Pacific Southwest Region
United States Fish and Wildlife Service
2800 Cottage Way, Room W-2605,
Sacramento, CA 95825
Telephone: (916) 414-6600
Fax: (916) 414-6712

Field Supervisor
Carlsbad Field Office
United States Fish & Wildlife Service
2177 Salk Avenue, Suite 250
Carlsbad, California 92008
Telephone: (760) 431-9440
Fax: (760) 431-5901

Deputy Director, Ecosystem Conservation Division
California Department of Fish and Wildlife
1416 9th Street, 12th Floor
Sacramento, CA 95814
Telephone: (916) 653-6956
Fax: (916) 653-9890

Chief Executive Officer
Orange County Transportation Authority
550 S. Main Street
Orange, CA 92863
Telephone: (714) 560-5343

17.15 Calendar Days

Throughout this Agreement and the Plan, the use of the term “day” or “days” means calendar days, unless otherwise specified.

17.16 Response Times

Except as otherwise set forth herein or as statutorily required by CEQA, NEPA, CESA, ESA, NCCPA or any other laws or regulations, the Parties will use reasonable efforts to respond to written requests from any Party within a forty-five (45) day time period.

18.0 MISCELLANEOUS PROVISIONS BETWEEN PERMITTEE AND CDFW

The following provisions apply as between the Permittee and CDFW.

18.1 Entire Agreement

This Agreement, together with the Plan and the Permits, constitutes the entire agreement among the Parties. It supersedes any and all other agreements, either oral or in writing, among the Parties with respect to the subject matter hereof and contains all of the covenants and agreements among them with respect to said matters, and each Party acknowledges that no representation, inducement, promise or agreement, oral or otherwise, has been made by any other Party or anyone acting on behalf of any other Party that is not embodied herein.

18.2 Severability

In the event one or more of the provisions contained in this Agreement is held to be invalid, illegal or unenforceable by any court of competent jurisdiction, such portion will be deemed severed from this Agreement and the remaining parts of this Agreement will remain in full force and effect as though such invalid, illegal, or unenforceable portion had never been a part of this Agreement.

18.3 No Partnership

Neither this Agreement nor the Plan shall make or be deemed to make any Party to this Agreement the agent for or the partner of any other Party.

18.4 Elected Officials Not to Benefit

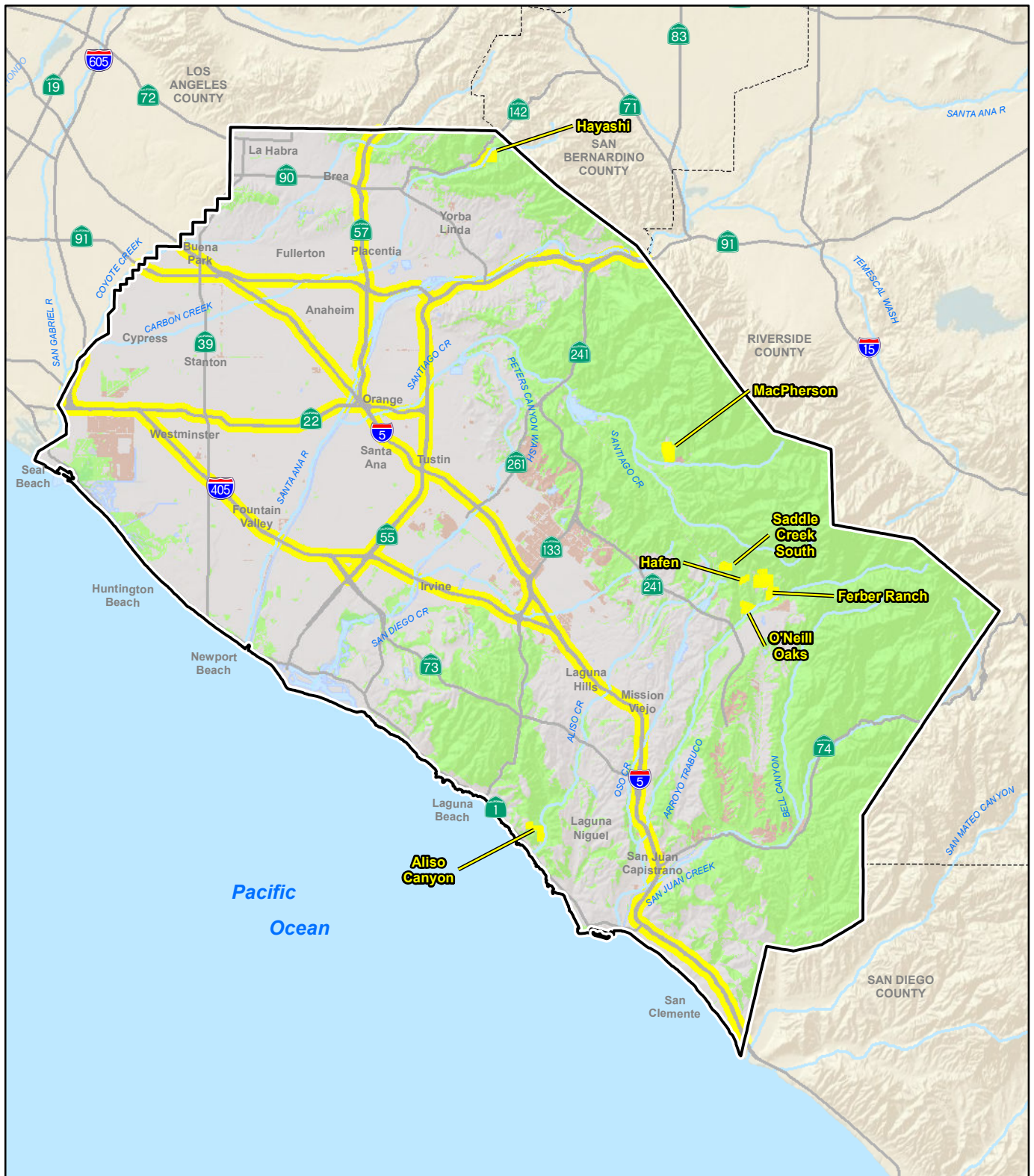
No member of or delegate to the California State Legislature or the United States Congress will be entitled to any share or part of this Agreement, or to any benefit that may arise from it.

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Implementing Agreement to be in effect as of the date that the Wildlife Agencies issue the Permits.






BY _____ Date _____
Deputy Regional Director
Pacific Southwest Region
U.S. Fish and Wildlife Service
Sacramento, California

BY _____ Date _____
Sandra Morey
Deputy Director
Ecosystem Conservation Division
California Department of Fish and Wildlife

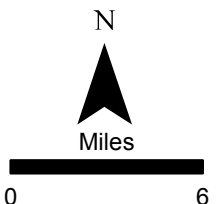
BY _____ Date _____
Darrell Johnson
Chief Executive Officer
Orange County Transportation Authority



Legend

-  Plan Area
-  Permit Area
-  Natural Habitats
-  Agriculture
-  Developed

Vegetation Source: TAIC/ICF 2013



Plan and Permit Area

Exhibit A

Exhibit B

Covered Species for the Plan and their Listing Status

Common Name	Scientific Name	Special-Status ¹
Plants		
Intermediate mariposa lily	<i>Calochortus weedii</i> var. <i>intermedius</i>	CNPS:1B.2
Many-stemmed dudleya	<i>Dudleya multicaulis</i>	CNPS:1B.2
Southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	CNPS:1B.1
Fish		
Arroyo chub	<i>Gila orcutti</i>	CDFW:SSC
Reptiles		
Coast horned lizard	<i>Phrynosoma blainvillii</i>	CDFW:SSC
Orangethroat whiptail	<i>Aspidoscelis hyperythra</i>	CDFW:WL
Western pond turtle	<i>Emys marmorata</i>	CDFW:SSC
Birds		
Cactus wren	<i>Campylorhynchus brunneicapillus</i>	USFWS:BCC; CDFW:SSC
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	FT; CDFW:SSC
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE; SE
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE; SE
Mammals		
Bobcat	<i>Lynx rufus</i>	--
Mountain lion ²	<i>Puma concolor</i>	CDFW:SPM

¹ CNPS: Taxa with a California Rare Plant Rank of 1B are considered rare, threatened, or endangered in California and elsewhere and the majority are endemic to California. A Threat Rank of 0.1 indicates that it is seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat). Threat Rank 0.2 indicates that it is moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat).

² Mountain lion, designated as a CDFW Specially Protected Mammal Species, is included on the list of Covered Species for the federal HCP permit but not under the state NCCP permit.

ABBREVIATIONS: CNPS = California Native Plant Society; CDFW = California Department of Fish and Wildlife; SSC = California Species of Special Concern; SPM = California Specially Protected Mammal; USFWS = U.S. Fish & Wildlife Service; BCC = Birds of Conservation Concern; FT = Federally Threatened; FE = Federally Endangered; SE = State Endangered.

Certificate of Inclusion Under the State Permit

The California Department of Fish and Wildlife (CDFW) has issued a permit to OCTA pursuant the Natural Community Conservation Planning Act, California Fish and Game Code section 2835 (State Permit) authorizing the Take of certain species (Covered Species) in accordance with the terms and conditions of the OCTA Renewed Measure M Habitat Conservation Plan/Natural Community Conservation Plan (Plan) and the associated Implementing Agreement (Agreement). The State Permit is issued for a term of 40 years. Under the State Permit, OCTA is authorized to take the Covered Species incident to certain activities (Covered Activities) as defined in the Plan provided all of the terms and conditions of the Plan, the Agreement, and the State Permit are met. The Plan and the Agreement section 7.1 provide that OCTA may extend Take authorization under the State Permit to the California Department of Transportation (Caltrans) by executing a Certificate of Inclusion with Caltrans. OCTA, as Permittee, remains liable for compliance with the Plan, the Agreement and the State Permit, including those aspects implemented by Caltrans pursuant to this Certificate of Inclusion.

You (Caltrans) are engaged in [*insert freeway capital improvement project or activity name*] (Project), which is one of the Covered Activities covered by the State Permit. By executing this Certificate of Inclusion, you agree: to comply with all applicable terms, conditions, and requirements of the Plan, the Agreement, and the State Permit that are within your responsibilities detailed in the Agreement section 8.2.1, including implementing the avoidance and minimization measures for the Project set forth in detail in Exhibit “A” to this Certificate of Inclusion; to assume liability for any non-compliance with such applicable terms and conditions; to the enforcement of such applicable terms and conditions by Permittee and by CDFW against you; and to allow access to your property by Permittee and CDFW for purposes of monitoring and enforcing your compliance with such applicable terms and conditions. If you fail to abide by the applicable terms and conditions of the Plan, Agreement, and State Permit in carrying out the Project, the Take authorization extended to you through this Certificate of Inclusion will lapse and you may be subject to civil and criminal liability under the California Endangered Species Act.

Your Take authorization under the State Permit will become effective upon execution of this Certificate of Inclusion by you and by OCTA. In the event the Project is assumed by another, you agree to immediately notify OCTA.

Signature (Caltrans)

DRAFT

Title

OCTA Representative: _____

Date: _____

DRAFT

Exhibit A

**Applicable M2 freeway project avoidance and minimization
measures will be included in this exhibit**

Certificate of Inclusion

The United States Fish and Wildlife Service (Service) has issued a take authorization to the Orange County Transportation Authority (OCTA or Permittee) pursuant to Section 10(a)(1)(B) of the Endangered Species Act of 1973, 16 U.S.C. §1539(a)(1)(B) (Permit). The Permit is issued for a term of forty (40) years and authorizes the take of certain species (“Covered Species”) within the area covered by the OCTA Renewed Measure M Habitat Conservation Plan/Natural Community Conservation Plan (Plan). Under the Permit, OCTA is authorized to take the Covered Species incident to certain activities (Covered Activities) as defined in the Plan provided all of the terms and conditions of the Plan, associated Implementing Agreement, and Permit are being met. In accordance with 50 CFR § 13.25(d), the Permittee may extend the incidental take authorization granted to it to certain third parties, provided such third parties are under the Permittee’s direct control for purposes of implementing the requirements of, and complying with the terms and conditions of the Plan, Implementing Agreement and Permit. The Plan and the Implementing Agreement (Agreement) provide that OCTA may extend take coverage under the Permit to the California Department of Transportation (Caltrans) by executing a Certificate of Inclusion.

You (Caltrans) are engaged in [*insert freeway capital improvement project or activity name*], which is one of the Covered Activities covered by the Permit. By executing this Certificate of Inclusion, you commit to implement all of the avoidance and minimization measures set forth in detail in Exhibit “A” to this Certificate of Inclusion. By executing this Certificate of Inclusion, you further acknowledge and consent to the enforcement against you of the terms and conditions and applicable requirements of the Plan, Agreement and Permit and consent to allow access to your property, in accordance with Section of the Agreement, by Permittee, and the U.S. Fish and Wildlife Service for purposes of monitoring your compliance with the Plan, Agreement and Permit. If you fail to abide by the terms and conditions of the Plan, Agreement and Permit in carrying out the Covered Activity, the incidental take authorization granted to you through the Certificate of Inclusion will lapse and you may also be subject to civil and criminal liability under the Endangered Species Act.

Extension to you of incidental take coverage under the Permit will become effective upon execution of this Certificate of Inclusion by you and by OCTA. In the event the Covered Activity is assumed by another, you agree to immediately notify OCTA. Any subsequent operator will not be insulated from liability for incidental take until and unless such subsequent operator and OCTA execute a new Certificate of Inclusion. OCTA, as Permittee, remains liable for compliance with all of the terms and conditions and applicable requirements of the Plan, Agreement and Permit, including those implemented by Caltrans pursuant to this Certificate of Inclusion.

Signature (Caltrans)

Title

OCTA Representative: _____

Date: _____

Exhibit A

**Applicable M2 freeway project avoidance and minimization
measures will be included in this exhibit**



COMMITTEE TRANSMITTAL

February 13, 2017

To: Members of the Board of Directors
From: *Laurena Weinert*
Laurena Weinert, Clerk of the Board
Subject: Measure M2 Environmental Mitigation Program Request to Approve the United States Forest Service Restoration Project and Program Update

Regional Planning and Highways Committee Meeting of February 6, 2017

Present: Directors Delgleize, Do, Donchak, M. Murphy, Nelson, Spitzer, and Steel
Absent: None

Committee Vote

This item was passed by the Members present.

Committee Recommendations

- A. Approve the United States Forest Service Restoration Project, taking into consideration the recommendations of the Environmental Oversight Committee, as discussed herein.
- B. Authorize the Chief Executive Officer to negotiate and execute a grant agreement consistent with the scope and funding amount of \$185,000.



February 6, 2017

To: Regional Planning and Highways Committee

From: Darrell Johnson, Chief Executive Officer 

Subject: Measure M2 Environmental Mitigation Program Request to Approve the United States Forest Service Restoration Project and Program Update

Overview

Measure M2 includes a program to deliver comprehensive mitigation for the environmental impacts of freeway projects in exchange for streamlined project approvals from the state and federal resources agencies. To date, the Environmental Mitigation Program has acquired conservation properties and provided funding for habitat restoration projects. A new restoration project has been identified to help meet the remaining needs of the Orange County Transportation Authority Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan and has been endorsed by the Environmental Oversight Committee. Additionally, a status report on the program, restoration projects, and the endowment fund establishment is presented.

Recommendations

- A. Approve the United States Forest Service Restoration Project, taking into consideration the recommendations of the Environmental Oversight Committee, as discussed herein.

- B. Authorize the Chief Executive Officer to negotiate and execute a grant agreement consistent with the scope and funding amount of \$185,000.

Background

Measure M2 (M2) includes an innovative, comprehensive Environmental Mitigation Program (EMP) to address the biological impacts of M2 freeway projects. This is achieved through the development of a Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), approved by the California Department of Fish and Wildlife, and the United States Fish and Wildlife Service (Wildlife Agencies). These documents demonstrate that the conservation properties (Preserves) and habitat restoration projects have largely met the

mitigation needs for the M2 freeway projects. The draft NCCP/HCP and associated draft environmental impact report/environmental impact statement (EIR/EIS) were made available for public review from November 2014 through February 2015. These documents were finalized and approved by the Orange County Transportation Authority (OCTA) Board of Directors (Board) in November 2016.

As part of the Early Action Plan (EAP), approximately \$55 million was authorized by the Board to fund conservation property acquisitions, habitat restoration projects, and to provide support/development for the NCCP/HCP. This translates to approximately \$42 million, and \$10.5 million for acquisitions and restoration, respectively. To date, two rounds of restoration funding have been approved by the Board, totaling just over \$10 million. Currently, there is approximately \$1.5 million, and \$300,000 remaining for acquisitions and restoration, respectively.

Discussion

To date, the acquisition of seven Preserves, as well as the funding of 11 habitat restoration projects (Attachment A), have largely met the mitigation needs (through the NCCP/HCP) for the M2 freeway projects. However, two outstanding mitigation needs remain. These needs include mitigation for a native fish (arroyo chub), as well as a rare plant (many-stemmed dudleya), as documented in the NCCP/HCP and EIR/EIS. Attachment A also includes an overview of the previously funded M2 restoration projects.

As part of the May 14, 2012 Board action to fund the second round of restoration projects, the Board also authorized staff to issue a call for projects and conduct general outreach to prospective entities that may be able to assist OCTA in fulfilling outstanding restoration needs. Through coordination with prospective entities, the United States Forest Service (USFS) noted that they had been developing a dam removal project within San Juan Creek in Orange County that would provide benefits to the arroyo chub by enhancing aquatic organism passage and the stream habitat. However, the project is not fully funded.

OCTA staff presented the USFS San Juan Creek Restoration Project to the Environmental Oversight Committee (EOC), and the EOC endorsed the project on May 4, 2016. The Wildlife Agencies also concurred with the scope of this project. Since then, the USFS has further defined the needs and budget of the restoration project (Attachment B). The USFS updated the project cost (\$185,000) for the removal of fewer dams, which is less than what was presented at the May EOC meeting and is within the remaining funding available for habitat restoration projects as part of the EAP. This project has the necessary design,

environmental documentation, and permits in place to proceed with implementation which minimizes delays and would immediately assist in fulfilling remaining NCCP/HCP mitigation needs. If this funding is provided, removal of the dams could begin by early 2018, and be completed by mid-2019. In addition, a status report on the EMP can be found in Attachment C.

Next Steps

Since the NCCP/HCP were approved and the EIR/EIS were certified by the Board, the Wildlife Agencies are in the process of issuing the respective state and federal permits. These permits will allow for the take of threatened and endangered species and their habitats as assessed for the M2 freeway projects within the NCCP/HCP. The permits are anticipated to be issued during first quarter 2017.

OCTA will continue to work with the Wildlife Agencies to finalize the Preserves resource management plans (RMPs). Staff will focus on executing conservation easements on the Preserves, coordinating with the endowment fund manager, and the following actions:

- Release the Aliso Canyon and Hayashi RMPs.
- Designate appropriate long-term land managers for the Preserves.
- Identify potential entities to assume the title of the Preserves.
- Identify and fund new restoration projects to satisfy remaining mitigation requirements of NCCP/HCP.
- Implement the process for the M2 freeway projects during the implementation phase to utilize the NCCP/HCP mitigation.
- Develop annual reports to document M2 freeway projects and Preserves activities, restoration projects status, and endowment budget summary.

Staff will continue to manage the Preserves until a long-term manager(s) is established. Additionally, staff will monitor the progress of all restoration projects and provide status updates to the EOC until each project is implemented.

Summary

The M2 includes an EMP that provides funding for programmatic mitigation to off-set impacts of the 13 freeway projects. To expedite the delivery of the freeway projects, this program was initiated in 2007, to implement early project mitigation through property acquisition and habitat restoration. This program is administered through a NCCP/HCCP, which was completed in 2016. Staff requests the Board to approve a new restoration project to help meet the remaining needs of the NCCP/HCP. Additionally, a status report on the program is presented.

Attachments

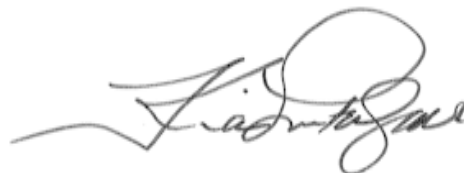
- A. Acquisition Properties and Funded Restoration Projects Summary
- B. United States Forest Service San Juan Creek Restoration Project Summary
- C. Orange County Transportation Authority Measure M2 Environmental Mitigation Program Status Report

Prepared by:



Dan Phu
Manager, Environmental Programs
(714) 560-5907

Approved by:



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

Acquisition Properties and Funded Restoration Projects Summary

	Restoration Project	Sponsor	Proposed Cost	Approx. Acreage*	Geographic Area	General Habitat Types
2010 - Round One	City Parcel	City of San Juan Capistrano	\$1,500,000	53	San Juan Capistrano	Riparian corridor, coastal sage scrub (CSS), oak woodland, and native grassland
	Fairview Park	City of Costa Mesa	\$2,000,000	23	Costa Mesa	wetlands, native grassland, CSS, willow scrub, oak woodland
	Irvine Ranch (Agua Chinon and Bee Flat Canyon)	Irvine Ranch Conservancy	\$1,497,160**	90.1**	Irvine	chaparral, CSS, coast live oak/sycamore, oak woodland, native grassland, and riparian
	UCI Ecological Reserve	Nature Reserve of OC	\$325,000	8.5	Irvine	cactus scrub
	Big Bend	Laguna Canyon Foundation	\$87,500	3.7	Laguna Beach	CSS, riparian woodland
2012 - Round Two	Aliso Creek	Laguna Canyon Foundation	\$1,105,000	55	Laguna Niguel	riparian
	Chino Hills State Park	Chino Hills State Park	\$193,000	21	Yorba Linda	willow riparian, oak-walnut woodland, cactus scrub
	Harriett Weider Regional Park	Bolsa Chica Conservancy	\$475,000	8.2	Huntington Beach	native grassland, CSS, riparian
	Lower Silverado Canyon	Irvine Ranch Conservancy	\$1,414,435**	28.4**	County of Orange	riparian
	North Coal Canyon	California Department of Parks and Recreation	\$247,500	5.5	Yorba Linda	Riversidian Alluvial fan CSS
	West Loma	Irvine Ranch Conservancy	\$1,322,800**	62.47**	County of Orange	scrub, riparian

Note: shaded projects were funded as part of Round 1 and the unshaded projects were part of Round 2.

*Proposed acreage is subject to change and may be adjusted slightly once the restoration work is completed.

**Amounts depicted in the table were revised/amended and approved by the OCTA Board of Directors in June 2016.

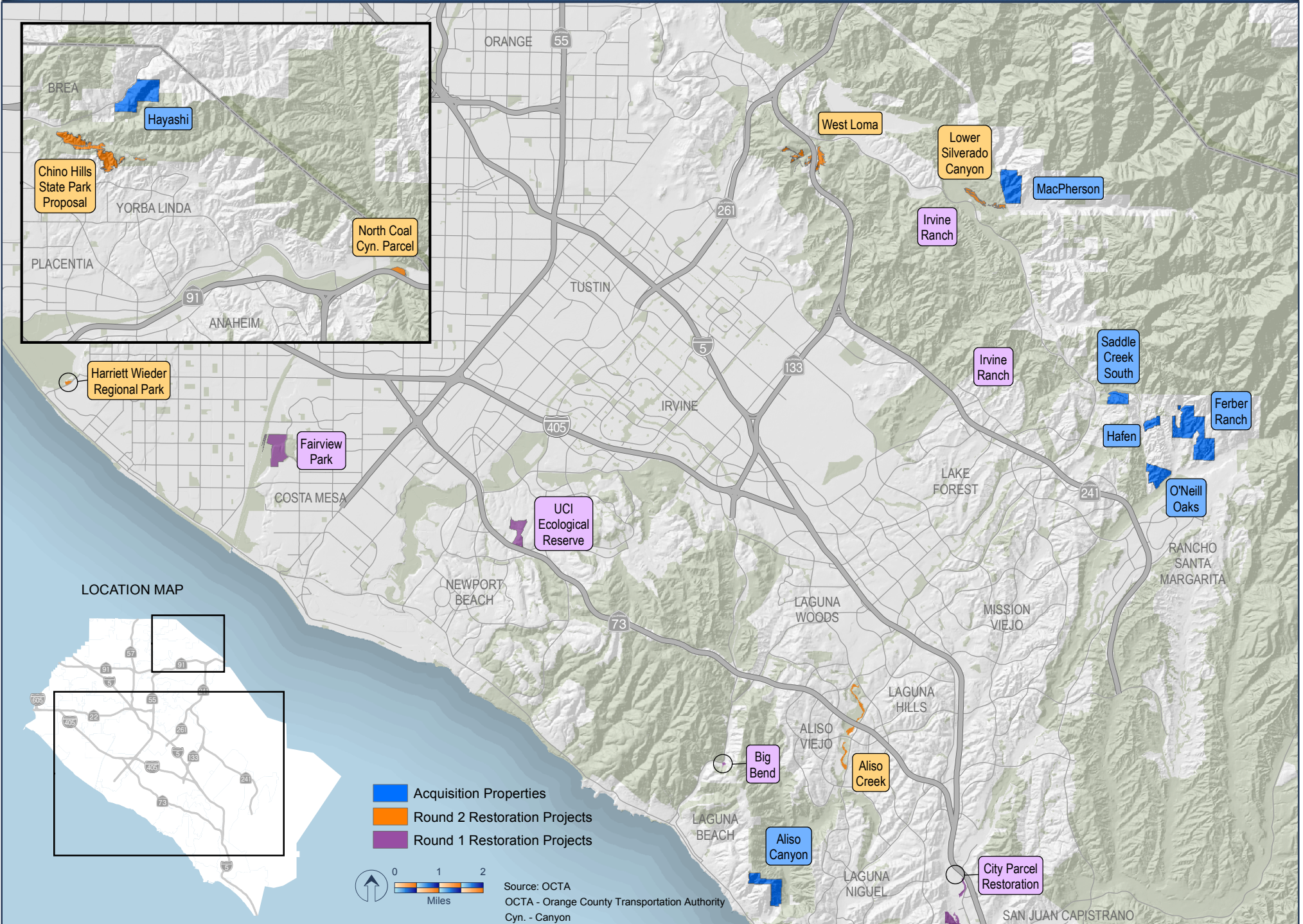
OCTA - Orange County Transportation Authority

EMP - Environmental Mitigation Program

UCI - University of California, Irvine

OC - Orange County

Acquisition Properties and Funded Restoration Projects



United States Forest Service San Juan Creek Restoration Project Summary

Overview: Improving fish passage opportunities through removal of dams is a national initiative that is a priority for numerous federal and state agencies including, but not limited to the United States Forest Service (Forest Service), United States Fish and Wildlife Service, Federal Highway Administration, National Marine Fisheries Service, and the California Department of Fish and Wildlife. Removal of barriers is a key component in restoring stream health and function.

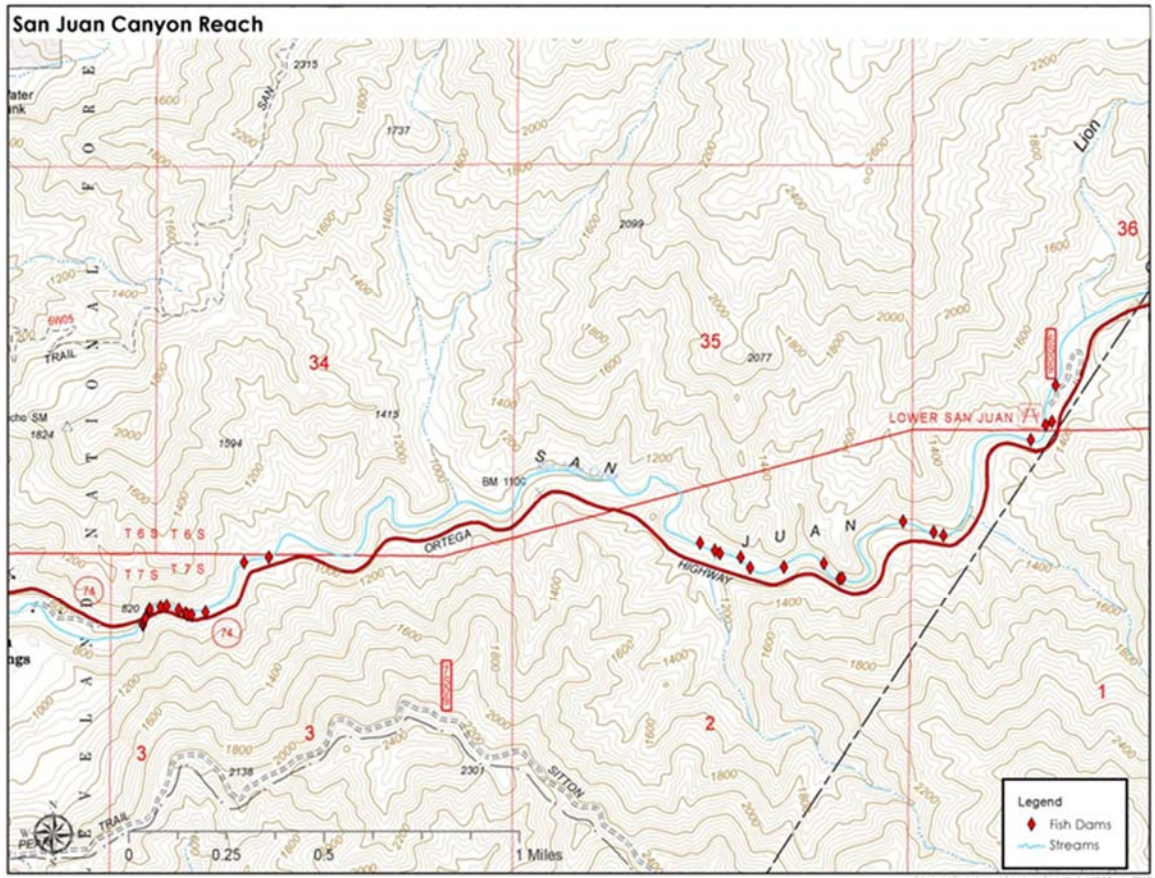
Why: The purpose of the project is to enhance aquatic organism passage and stream habitat in San Juan Creek. Removing manmade dams is essential to supporting resident native aquatic species such as arroyo chub, and providing a suitable habitat for the potential re-establishment of extirpated species, including the Southern California steelhead trout. The existing dams present barriers to native fish and other aquatic organisms, especially during periods of low flow. Dams alter physical stream processes such as bed load and sediment transport, natural surface flows, and channel adjustment. The ability to move up and down stream is essential for aquatic species in order to complete their life cycles and maintain viable populations. Facilitating aquatic organism passage and improving stream habitat would ultimately increase accessible stream habitat for existing and potential populations of native aquatic species.

What will occur: Thirty-one dams are present in San Juan Creek. Four are small remnants that will be left in place. The California Department of Transportation (Caltrans) has agreed to fund the removal of 13 dams. These dams are larger in size and will require traffic control to ensure that the project is completed safely. The County has agreed to fund traffic control for all of the dams that Caltrans is removing. These efforts will leave 14 dams in need of removal. The Forest Service is requesting funding from the Orange County Transportation Authority to remove the remaining 14 dams.

Who will do work: A Forest Service enterprise team and a local conservation crew will be performing the work. Forest Service biologists will monitor the project implementation and will complete monitoring before and after implementation, including three years of monitoring after dam removal. Annual reports will be prepared to discuss the stream recovery after dam removal.

When will work be done: Depending on work schedules, dam removal is anticipated to occur in January and February 2018, and in January and February 2019. Some work may occur outside of this window if fire risk is sufficiently low. All work is scheduled to be completed by June 2019.

Where: San Juan Creek, Orange County, California



Cost Estimate:

Location	Resource	# of weeks	Cost Per Week or Job	Cost
Dams 1-7	Crew Time (12 persons)	3	6,000	\$18,000
Dams 1-7	Equipment Rental	3	2,000	\$6,000
Dams 9, 10, 11, 13, 15, 23, and 25	Crew time and materials	2.5	50,000	\$125,000
Dams 9, 10, 11, 13, 15, 23, and 25	Traffic Control	1	10,000	\$10,000
All dams	Forest Service Biologist – Monitoring/Reporting	8	2,000	\$16,000
Administration of contract and agreements	Forest Service Administrator	4	2,500	\$10,000
			TOTAL:	\$ 185,000

Orange County Transportation Authority Measure M2 Environmental Mitigation Program Status Report

Natural Community Conservation Plan/Habitat Conservation Plan and Associated Environmental Impact Report/Environmental Impact Study Update

In November 2016, the Orange County Transportation Authority (OCTA) Measure M2 (M2) Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and associated environmental impact report/environmental impact study (EIR/EIS) were finalized. Changes to the final NCCP/HCP and EIR/EIS were based on 48 comment letters received on the draft documents released for public review and on the acquisition of the Aliso Canyon and MacPherson Preserves. On November 28, 2016, the Board of Directors (Board) approved the NCCP/HCP, certified the final EIR/EIS, and authorized the Chief Executive Officer (CEO) to negotiate and execute the implementing agreement between OCTA and the resources agencies. Staff is currently assisting the California Department of Fish and Wildlife, and the United States Fish and Wildlife Service (Wildlife Agencies) with the biological state and federal Findings and Biological Opinion. These documents are part of the state and federal agency permitting processes. Once those documents are provided to OCTA, all signatories will sign the implementing agreement.

Concurrently, OCTA is working with the Army Corps of Engineers and the State Water Resources Control Board to streamline the regulatory permitting process. These two agencies are responsible for overseeing the implementation of the Clean Water Act. The previously mentioned four agencies (resource agencies) are the key regulatory organizations tasked with the review of environmental documents for major projects, such as OCTA's M2 Freeway Plan.

Interim Preserve Services Update

OCTA currently holds the title and interim land management responsibility of the conservations properties (Preserves). In April 2016, two separate request for proposals (RFP) were released to obtain consultant services to perform interim biological preserve monitoring and maintenance activities for the Preserves. These services will ensure that the biological integrity of the Preserves is maintained. It is anticipated that the Preserves will be transitioned to another entity whose core function will be to manage conservation lands within the next three to five years. Until that time, OCTA is responsible for the Preserves and must ensure that the biological integrity is upheld.

Orange County Transportation Authority Measure M2 Environmental Mitigation Program Status Report

The following two contracts were approved by the Board on August 1, 2016, and have since been executed by staff. These services will provide the necessary property management and monitoring services for the OCTA Preserves.

- Glenn Lukos Associates, Inc., was approved to provide interim biological monitoring services in the amount of \$375,000 for a five-year term.
- RECON Environmental, Inc., was approved to provide interim land management services in the amount of \$500,000 for a five-year term.

Endowment Manager Selection Update

In October 2014, the Board approved a non-wasting endowment target of approximately \$34.5 million to fund the long-term management of the Preserves. This commitment demonstrates to the Wildlife Agencies that OCTA has the financial capacity to fund the management of the Preserves that are integrated into the NCCP/HCP. In May 2016, the Board approved the release of a RFP to retain investment management firms to assist OCTA with the establishment of the endowment, and to provide the long term management services for the M2 Preserves.

On September 26, 2016, the Board approved the selection of the California Community Foundation as an endowment fund manager for the EMP, and authorized the CEO to negotiate and execute an agreement for a 12-year term. The first endowment deposit is anticipated to be made in early 2017.

Restoration Projects Update

Chino Hills State Park (CHSP) Restoration Project

On May 14, 2012, the Board approved two habitat restoration projects sponsored by the California Department of Parks and Recreation, one of which was the CHSP Restoration Project. This project proposal included restoration to riparian and cactus scrub within CHSP. On October 26, 2016, the Environmental Oversight Committee (EOC) endorsed a change in scope to the originally approved CHSP Restoration Project due to the costs of the riparian restoration component. The revision would eliminate the riparian component and increase the area of the cactus scrub restoration within the original Board-approved amount (\$193,000).

Orange County Transportation Authority Measure M2 Environmental Mitigation Program Status Report

West Loma Restoration Project

On May 14, 2012, the Board approved two habitat restoration projects sponsored by the Irvine Ranch Conservancy, one of which was the West Loma Restoration Project (\$1,322,800). This restoration project proposal consisted of habitat restoration and wildlife movement improvements around the West Loma undercrossing at State Route 241. On November 21, 2016, the EOC endorsed a change in scope to the originally approved West Loma Restoration Project. Due to multiple factors, the original location for the undercrossing improvement was deemed infeasible. The scope change would replace the original wildlife connectivity component with a wildlife connectivity improvement at the State Route 91 Coal Canyon undercrossing. The budget for the project will remain the same.

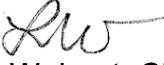
Staff Update
Items



COMMITTEE TRANSMITTAL

November 14, 2016

To: Members of the Board of Directors

From: 
Laurena Weinert, Clerk of the Board

Subject: Measure M2 Delivery Plan - Next 10

Executive Committee Meeting of November 7, 2016

Present: Chair Donchak and Directors Lalloway, Murray, Nelson, Spitzer, and Ury

Absent: Vice Chairman Hennessey

Committee Vote

This item was passed by the Members present.

Director Spitzer was not present to vote on this item.

Committee Recommendations

(Recommendation "C" reflects a change to staff's recommendation)

- A. Adopt the Next 10 Plan.
- B. Continue to prioritize Measure M2 projects for external funding consistent with the Orange County Transportation Authority's adopted programming policies.
- C. Allocate a portion of net excess 91 Express Lanes revenue to the Measure M2 Freeway Program for eligible projects in an amount not to exceed the project costs of State Route 91, Project I, and Project J.
- D. Direct staff to distribute the approved Next 10 Plan to local agencies and key stakeholders.

Committee Discussion

At the November 7, 2016 Executive Committee (Committee) meeting, the Committee supported conducting a market analysis within the next quarter of fiscal year 2016-17.



NOTE:

- Recommendation "C" was amended to include the language "Allocate a portion of . . . "
- Attachment E was revised to delete "\$ (600)" line.
- PowerPoint revisions:
 - Page 7 to delete "\$ (600)" line
 - Slides 8 and 9 were switched (no edits)




ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Delivery Plan - Next 10

Board Transmittal



November 14, 2016

To: Members of the Board of Directors
From:  Laurena Weinert, Clerk of the Board
Subject: Measure M2 Delivery Plan – Next 10

At the November 14, 2016 Board meeting, Director Todd Spitzer requested an amendment to the Recommendation “C” to accelerate the timeline for Project I for the Measure M2 Freeway Program project.

The Board also requested that Recommendation “E” be added for staff to conduct a market analysis within the next quarter of fiscal year 2016-17.

Board Recommendations *(Reflects a change from Committee’s Recommendations.)*

Directors Pulido and Ury were not present to vote on this item.

Directors Katapodis was absent from the meeting.

Note: *Recommendation C was amended and Recommendation E was added.*

- A. Adopt the Next 10 Plan.
- B. Continue to prioritize Measure M2 projects for external funding consistent with the Orange County Transportation Authority’s adopted programming policies.
- C. Allocate a portion of net excess 91 Express Lanes revenue to the Measure M2 Freeway Program for eligible projects in an amount not to exceed the project costs of State Route 91, Project I, and Project J, and accelerate the timeline for Project I.
- D. Direct staff to distribute the approved Next 10 Plan to local agencies and key stakeholders.
- E. Direct staff to conduct a market analysis within the next quarter of fiscal year 2016-17.



ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Delivery Plan - Next 10

Staff Report



November 7, 2016

To: Executive Committee
From: Darrell Johnson, Chief Executive Officer
Subject: Measure M2 Delivery Plan - Next 10

A handwritten signature in blue ink, appearing to read "Darrell Johnson", is located to the right of the "From:" field.

Overview

The M2020 Plan was approved on September 10, 2012, to accelerate the delivery of Measure M2 freeway, streets and roads, transit, and environmental projects through the year 2020. In response to lower actual sales tax revenue, a new forecasting methodology was adopted in March 2016. This prompted the need to revisit the assumptions built into the M2020 Plan. A new program/project delivery framework for the next ten years, called the Next 10 Plan, is presented for the Board of Directors' consideration and approval.

Recommendations

- A. Adopt the Next 10 Plan.
- B. Continue to prioritize Measure M2 projects for external funding consistent with the Orange County Transportation Authority's adopted programming policies.
- C. Allocate net excess 91 Express Lanes revenue to the Measure M2 Freeway Program for eligible projects in an amount not to exceed the project costs of State Route 91, Project I, and Project J.
- D. Direct staff to distribute the approved Next 10 Plan to local agencies and key stakeholders.

Background

Work on expedited delivery of Measure M2 (M2) began in 2007, with emphasis on organizational, procedural, and technical efforts to prepare for early realization of M2 benefits beginning in 2011. Subsequent to early startup efforts, the 2008 Great Recession resulted in a significant reduction in the M2 sales tax revenue forecast. In response, the Orange County Transportation Authority (OCTA) developed the M2020 Plan that established program delivery priorities through 2020.

The prominent feature of the M2020 Plan was a strategy to overcome the significant drop in M2 revenues for the freeway program with external revenues rather than a self-sustaining approach, as originally designed. This strategy, combined with availability of one-time state and federal grants and effective use of bonding, allowed OCTA to capitalize on competitive construction market forces to continue expedited delivery of all M2 Program elements.

Although M2 revenues have been growing, the growth rate has recently been lower than assumed (3.2 percent versus 5.7 percent in fiscal year 2016 alone). As a result, the Board of Directors (Board) approved a new sales tax revenue forecasting methodology to ensure implementation plans were based on more realistic revenue assumptions. The 2016 revenue forecast decreased from \$15.6 billion (2015) to \$14.3 billion. Given this change, the Board asked staff to revisit the M2020 Plan objectives and assess the implications of the revised forecast to chart a new path forward.

Discussion

On September 12, 2016, staff presented on the M2020 Plan progress, as well as the future outlook and potential options for consideration. Staff also shared the funding gap resulting from the reduced sales tax forecast (Attachment A). Since then, final actual sales tax receipts for fiscal year 2015-16 have been received. As a result, the sales tax forecast is further reduced from \$14.3 billion to \$14.2 billion.

The sales tax revenue reduction is exacerbated by the reduction in State Transportation Improvement Program (STIP) funding and delays to previously programmed M2 projects, which in turn increases costs due to escalation. STIP funding has been on the decline for the past ten years, which has limited Orange County's ability to advance infrastructure projects. For example, the 2016 STIP provided no new funding capacity, delayed prior funding commitments for some projects and withdrew funding commitments for other projects.

Given the reduction in sales tax revenue and the limited availability of conventional state and federal funds derived from the gas tax, the projected M2 revenue for the freeway program cannot support delivery as currently defined. At the September 12, 2016 Board meeting, staff provided options to address the funding gap, which included reducing the scope of projects, eliminating a project or projects, postponing a decision to see if additional revenue becomes available in the future, and using locally controlled funding sources to backfill the funding gap.

The Board expressed its concern with not keeping the M2 promise to the voters. Specifically, eliminating projects or reducing project scope as cost reduction options impact the promise and therefore were not deemed as desirable options. The option of waiting for additional local or external revenues to materialize was also considered to be unacceptable because the projects would be impacted by cost escalation, which makes the funding gap wider and risks the ability to deliver on the promise to the voters. The most desirable option centered on OCTA's ability to address the funding gap using a locally controlled funding source. The two potential sources considered were 91 Express Lanes and 405 Express Lanes revenue. The 405 revenues were removed from consideration since the revenues would not be available during the Next 10 Plan time period and the facility is not yet built. The cash flow included in the Next 10 Plan incorporates the use of net 91 Express Lanes excess revenue for eligible freeway projects.

Draft Next 10 Plan

Looking forward, staff has developed proposed deliverables for what is to be accomplished in the next ten years, with the overarching goal of successfully delivering the M2 Program by 2041 as promised. Deliverables to be accomplished between 2017 and 2026 feature:

- Delivering \$3 billion of freeway improvements and providing an additional \$1.2 billion of funding capacity towards M2 projects in the planning phase (Attachment B) resulting in 78 percent delivery of the M2 30-year Plan within the first 15 years.
- Allocating \$1 billion of funding in streets and roads improvements, including \$400 million in competitive funding and \$630 million in flexible funding to local jurisdictions.
- Investing up to \$1.4 billion to enhance access to rail and transit services by: extending Metrolink service to broaden the market, completing rail station improvements to simplify access to rail, constructing and operating the OC Streetcar, assessing future transit connections to ease access to rail transit, promoting mobility choices for seniors and persons with disabilities with lower fares, providing grants and support to local jurisdictions for delivery of community transit projects, and improving the top 100 busiest bus stops in Orange County.
- Ensuring ongoing preservation of open space Preserves as part of the M2 commitment to innovative environmental mitigation and providing \$40 million in water quality grants to prevent up to 25 tons of trash from entering waterways and inlets from transportation facilities.

All ten deliverables are presented in the Next 10 Plan and summarized in Attachment C. The full report with project description, schedules and cost details is included as Attachment D.

Financial Analysis

Staff developed cash flows for each of the M2 Program elements to ensure commitments provided to the voters as part of the M2 approval in November 2006 remain achievable. While a reduction in revenues affects the M2 Program as a whole, in many areas within the M2 Plan, programs can be scaled based on available revenues. The area where this is not possible is in the freeway program due to set scopes for project delivery.

The Next 10 Plan cash flow assumes availability of a viable amount of discretionary federal and/or state funds from 2017 to 2041, and makes specific assumptions about near term grants such as New Starts, Cap-and-Trade, as well as a contribution from the Transportation Infrastructure Finance and Innovation Act (TIFIA) Program.

To ensure delivery of the complete list of freeway projects, the cash flow also assumes the use of net excess 91 Express Lanes revenue within the freeway program for projects on the 91 corridor, as defined by the 91 Express Lanes governing legislation, in an amount not to exceed the project costs of Project I and Project J.

The financial analysis will be refined in an upcoming finance plan that will be brought to the Board in 2017, along with more current information, such as actual funds made available through TIFIA. Bond issuances are also included to help the program delivery goal in the freeway mode. Bond issuances are constrained to minimum debt coverage ratios. The funding plan assumes the minimum amount of 91 net excess revenues necessary to make the plan work, estimated at \$463 million.

Using the 2016 revised revenue forecast and combined expenditures of the M2 Program, Attachment E shows the M2 Program cash balance by year, between now and 2041. The charts reflects a positive ending balance in all years and indicates that the full program (through 2041) is deliverable.

Plan Risks

Delivery of the Next 10 Plan is not without risks. A list of risks related to the M2 Program are identified within the plan, along with actions. Risks are grouped into four main areas:

- Financial –lower-than-projected M2 revenue forecast of \$14.2 billion or a change in external funding assumptions requires additional value engineering or new federal and state revenue.
- Organizational – availability of specialized staff may require OCTA to consider taking responsibility for additional project delivery activities.
- Policy – new state directives create additional hurdles for M2 delivery of the promise to Orange County voters and requires staff to work closely with the California Department of Transportation to ensure M2 commitment.
- Market – competition for resources with neighboring counties could become an issue and conducting a market analysis may be worthwhile.

Outreach Summary

To ensure key stakeholders are aware of the challenges and issues associated with delivery of the M2 Plan of projects, staff has met with several of OCTA's key stakeholders to present the M2 Program challenges, along with options for consideration. Staff received positive feedback on proactively addressing the revenue challenge and bringing additional revenues from the 91 Express Lanes to ensure the promise to the voters is kept. The following stakeholders were communicated with:

- OCTA's Citizen's Advisory Committee
- OCTA's Technical Advisory Committee
- Measure M Taxpayers Oversight Committee
- Automobile Club of Southern California
- Orange County Business Council
- Association of California Cities – Orange County
- Orange County City Managers Association
- Orange County Taxpayers Association

Next Steps

The Next 10 Plan has been developed to advance priority projects and programs on an expedited schedule, in order to capitalize on available funding and resources sooner, and to ensure timely delivery of the M2 Program as promised to Orange County residents. While the Next 10 Plan is deliverable, it will require

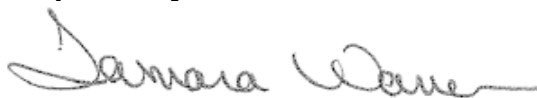
tight monitoring of project scopes and schedules. Opportunities for increased project value engineering will also be sought to ensure delivery remains on target. Staff will provide updates in the M2 Quarterly Reports to the Board. A review of the complete plan will be scheduled to take place in 2018 unless determined to be needed sooner based on changes in the M2 revenue forecast.

Summary

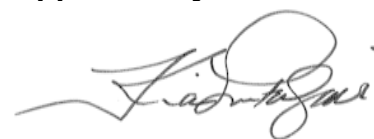
The draft Next 10 Plan for all M2 projects and programs that can be accomplished between now and the year 2026 is presented for Board approval. The present M2020 Plan is underfunded due to lower-than-anticipated M2 revenues. The funding gap is recommended to be filled with a combination of one-time revenues and use of 91 Express Lane revenues. With Board approval, staff will share the Next 10 Plan with the public through the website and letters to key stakeholders. The Next 10 Plan is intended to ensure balanced program delivery and to provide mobility solutions sooner to Orange County residents.

Attachments

- A. Measure M2 Program Cash Balance
- B. Next 10 Delivery Plan – Freeway Project Status
- C. Draft Next 10 Plan Deliverables
- D. Next 10 Delivery Plan – Draft 2017-2026
- E. Measure M2 Program Cash Balance With Excess Revenues

Prepared by:

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Executive Director, Planning
(714) 560-5741



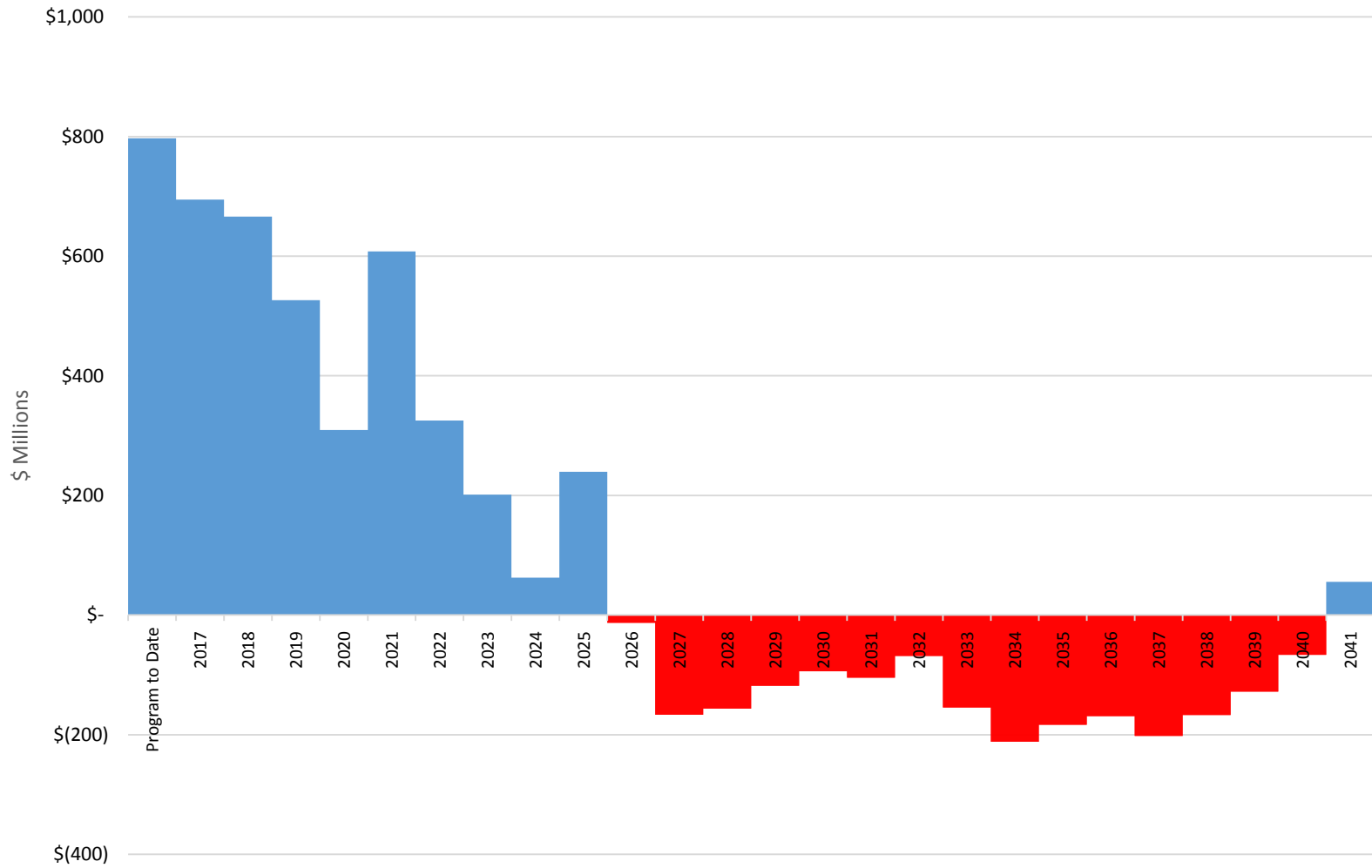
ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Delivery Plan - Next 10

Attachment A

Measure M2 Program Cash Balance

M2 Sales Tax Revenue Forecast of \$14.2 Billion



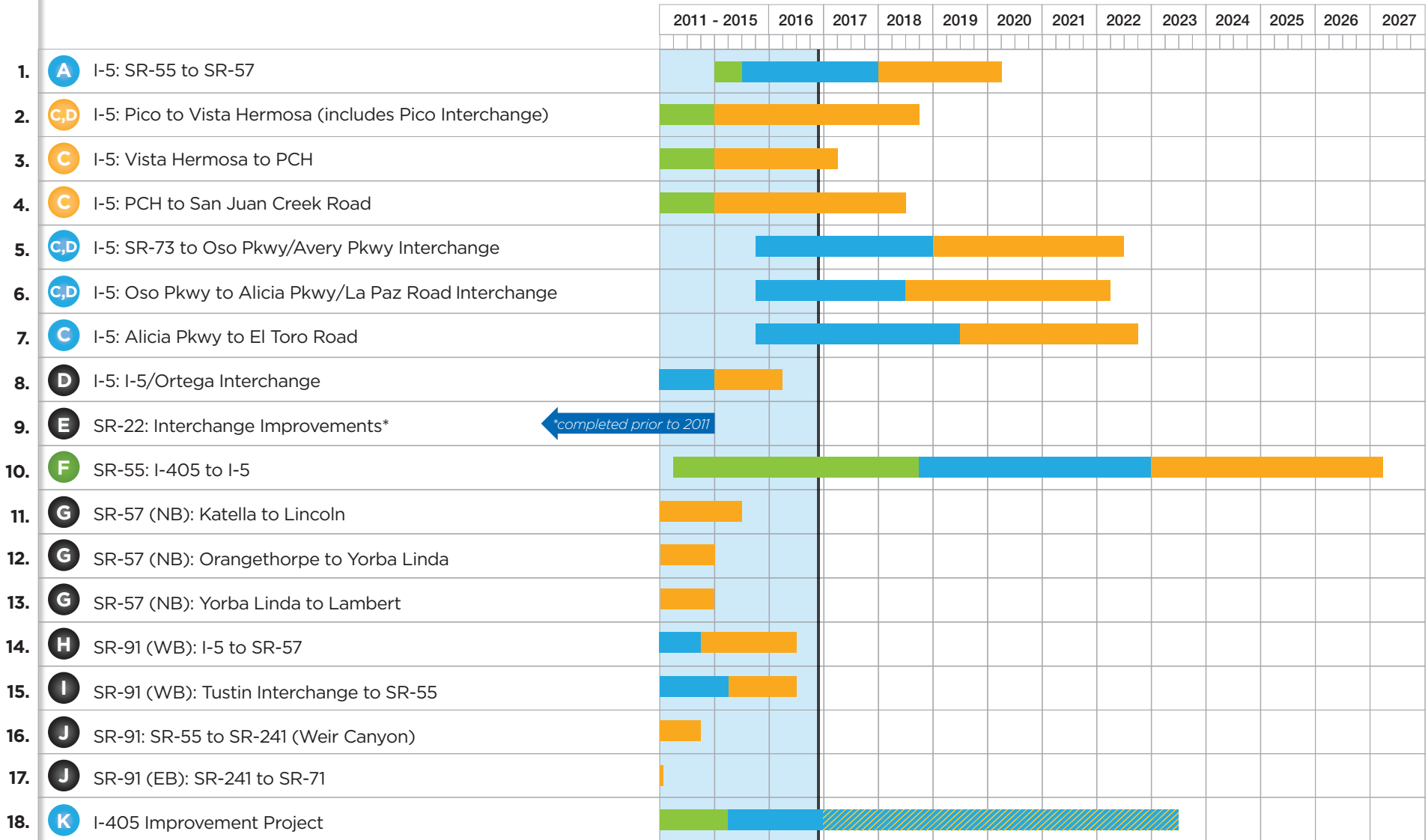


ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Delivery Plan - Next 10

Attachment B

M2 Freeway Projects Through Construction



*completed prior to 2011







































M2 – Measure M2
I-5 – Interstate 5
SR-55 – State Route 55
SR-57 – State Route 57
PCH – Pacific Coast Highway

SR-73 – State Route 73
Pkwy – Parkway
SR-22 – State Route 22
I-405 – Interstate 405
NB – Northbound

SR-91 – State Route 91
WB – Westbound
SR-241 – State Route 241
EB – Eastbound
SR-71 – State Route 71

I-15 – Interstate 15
I-605 – Interstate 605

M2 Freeway Projects Through Environmental Phase

	2011 - 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1. B I-5 Widening (SR-55 to I-405)													
2. D I-5 / El Toro Road Interchange Improvements													
3. F SR-55 Improvements (I-5 to SR-91)													
4. G SR-57 NB Widening (Orangewood Avenue to Katella Avenue)													
5. G SR-57 NB Widening (Lambert Road to County Line)													
6. I SR-91 Widening (SR-57 to SR-55)													
7. J SR-91 Widening (SR-241 to I-15)*													
8. L I-405 Widening (SR-55 to I-5)													
9. M I-605 / Katella Avenue Interchange Improvements													

* Project environmentally cleared in 2012 as part of the Riverside County Transportation Commission's Corridor Improvement Project.



ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Delivery Plan - Next 10

Attachment C



Plan Deliverables

The Next 10 Plan is based on ten deliverables intended to provide guidance on program and project delivery for the next ten years.

Freeways

1. Deliver \$3 billion of freeway improvements promised in M2020.
2. Invest approximately \$1.2 billion more in revenues bringing the completed freeway program improvements to \$4.2 billion.

Streets and Roads

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 \$630 million in flexible funding to local jurisdictions to help maintain aging streets or for use on other transportation needs as appropriate (Project Q).
 - a. Complete the remaining three grade separation projects.

Transit

4. Extend Metrolink service from Orange County into Los Angeles County, contingent upon cooperation and funding participation from route partners; complete six rail station improvements (Project R).
5. Complete design, construction and begin operating the OC Streetcar (Project S) and complete the Harbor Corridor Transit Study and the Orange County Transit Vision to guide development of future transit connections.
6. Provide up to \$120 million in funding to expand mobility choices for seniors and persons with disabilities (Project U).
7. Support local agency efforts to deliver Board-approved community transit projects and provide grant opportunities for local agencies to implement effective local transit services (Project V).
8. Allocate \$9 million in funding to improve the top 100 busiest bus stops in Orange County and support the modernization of the bus system to enhance the customer experience (Project W).

Environmental

9. Ensure the ongoing preservation of purchased open space (Preserves) providing comprehensive mitigation of the environmental impacts of freeway improvements and higher-value environmental benefits in exchange for streamlined project approvals.
10. Work with the Environmental Cleanup Allocation Committee to develop the next tiers of water quality programs with a goal of providing \$40 million of grants to prevent the flow of trash, pollutants and debris into waterways from transportation facilities. In addition, focus on improving water quality on a regional scale that encourages partnerships among the local agencies as part of the Environmental Cleanup Program (Project X).



ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Delivery Plan - Next 10

Attachment D



DRAFT

2017 - 2026

Presented to the Board of Directors on
November 28, 2016

Orange County Transportation Authority Board of Directors (Board) adopted an M2020 Plan on September 10, 2012 to set M2 project and program priorities over an eight year period from 2013 through 2020. Due to lower than forecasted sales tax revenue projections the Board directed staff to review the plan and make recommendations on moving forward. On November 28, 2016, its predecessor, the Next 10 Plan, was presented to the Board to reflect new cash flow, schedule, and project information available. Ten deliverables were included. Overall, original commitments have been carried over from the M2020 Plan with some refinements, which account for cost escalation and external funding constraints as well as new commitments covering the next ten years from 2017 through 2026.

Printed October 25, 2016

**For the latest version of the Next 10 Plan,
including any edits or corrections,
please visit: www.octa.net/next10**

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

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Introduction

NEXT 10



DELIVERY PLAN

Introduction

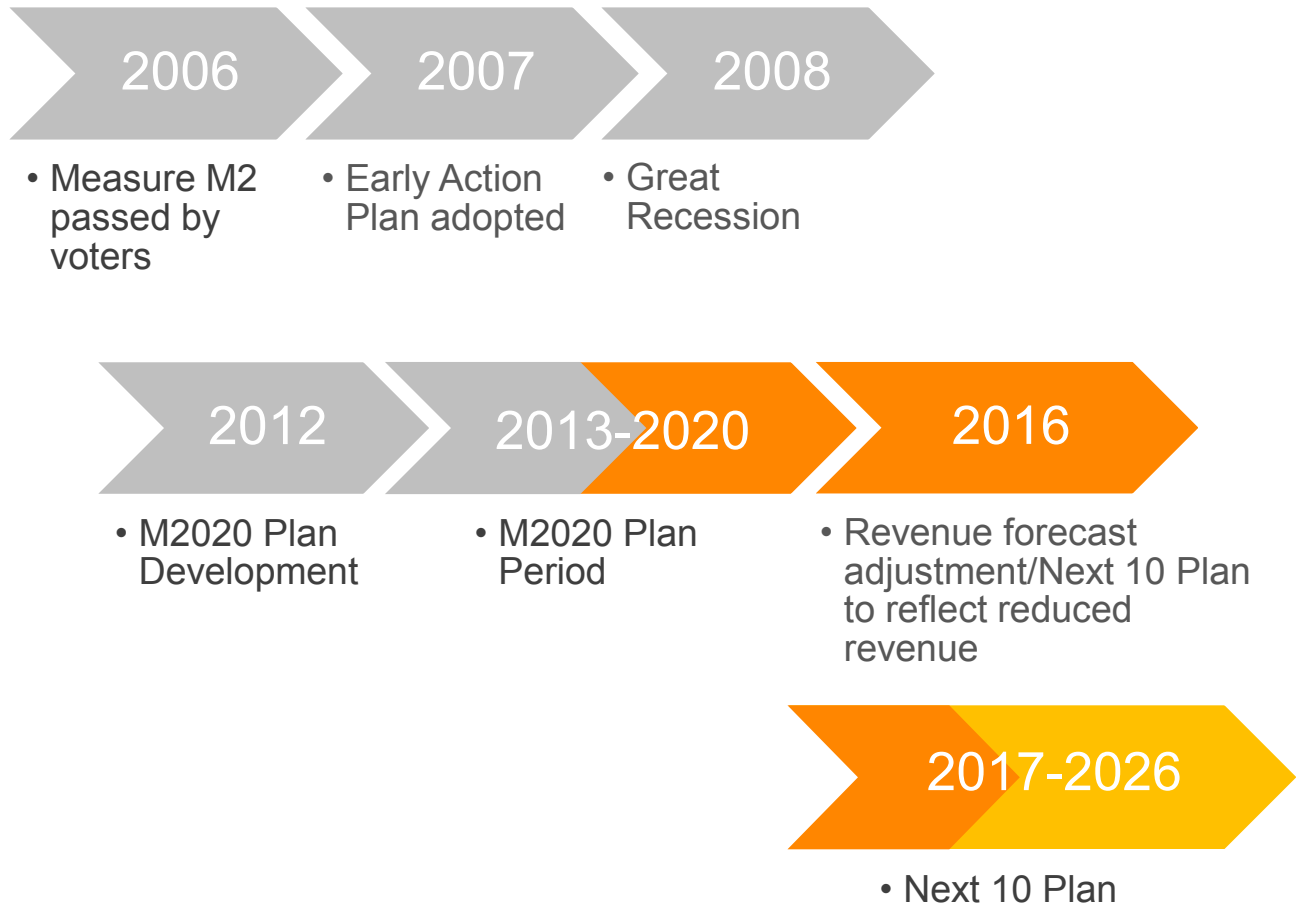
On November 7, 2006, Orange County voters, by a margin of 69.7 percent, approved the renewal of the Measure M one-half cent sales tax for transportation improvements. Voters originally endorsed Measure M in 1990 (M1) with a sunset in 2011. With the approval of Renewed Measure M (M2), the voters agreed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

In 2007, the Board of Directors (Board) approved an Early Action Plan (EAP) to advance the implementation of M2 (subsequently updated in 2010). The EAP was a five-year plan providing guidance to staff through 2012. With the impact of the 2008 Great Recession resulting in a significant reduction in the M2 sales tax revenue forecast, the Board requested in early 2012 that staff review the M2 Plan and the ability to deliver on the promise to the voters. The Board's concern centered on the reduction in projected sales tax revenue from \$24.3 billion in 2005 (when the M2 Plan was developed) to \$15.5 billion. This effort resulted in the M2020 Plan which was approved by the Board on September 10, 2012, to provide guidance on program delivery priorities between 2013 and 2020. Originally, the M2 Plan was developed as a self-sustaining sales tax measure. Given the reduction in forecasted sales tax revenue collections, the M2020 Plan required the incorporation of external funding in order to continue to deliver the M2 Plan as promised. At that time, the Board made M2 projects the priority for external funding.

This M2020 Plan outlined 14 objectives which identified the projects and programs for all modes that were anticipated to be delivered on an expedited schedule by 2020, along with anticipated schedules and major milestones. However, with the effects of slower growth in M2 sales tax revenue proceeds (three consecutive years of lower-than-forecasted sales tax receipts), and the Board's decision to revise the methodology for forecasting revenues to ensure more realistic revenue assumptions, the 2016 revenue forecast including final actuals sales tax receipts for FY 2015-16 was further reduced to \$14.2 billion. Given the reduction in the sales tax revenue forecast, at the half way mark of the M2020 Plan (year four of the eight year plan) the Board asked staff to revisit the M2020 Plan objectives to assess the implications of the revised long-term forecast, to determine what has been accomplished to date and what can be assumed moving forward. With much already accomplished, staff created

a new plan to replace the M2020 Plan which the plan herein is called Next 10 Delivery Plan. The Next 10 Delivery Plan provides guidance to staff on what can be accomplished over the next ten years between 2017 and 2026.

Measure M2 Timeline



Guiding Principles

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

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

Next 10 Deliverables

The Next 10 Plan is based on ten deliverables intended to provide guidance on program and project delivery for the next ten years.

Freeways

1. Deliver \$3 billion of freeway improvements promised in M2020.
2. Invest approximately \$1.2 billion more in revenues bringing the completed freeway program improvements to \$4.2 billion.

Streets and Roads

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 \$630 million in flexible funding to local jurisdictions to help maintain aging streets or for use on other transportation needs as appropriate (Project Q).
 - a. Complete the remaining three grade separation projects.

Transit

4. Expand Metrolink service between Orange County and Los Angeles County, contingent upon cooperation and funding participation from route partners; complete six rail station improvements (Project R).
5. Complete design, construction and begin operating the OC Streetcar (Project S) and complete the Harbor Corridor Transit Study and the Orange County Transit Vision to guide development of future transit connections.
6. Provide up to \$120 million in funding to expand mobility choices for seniors and persons with disabilities.
7. Support local agency efforts to deliver Board-approved community transit projects and provide grant opportunities for local agencies to implement effective local transit services (Project V).
8. Allocate \$9 million in funding to improve the top 100 busiest bus stops in Orange County and support the modernization of the bus system to enhance the customer experience (Project W).

Environmental

9. Ensure the ongoing preservation of purchased open space (Preserves) providing comprehensive mitigation of the environmental impacts of freeway improvements and higher-value environmental benefits in exchange for streamlined project approvals.
10. Work with the Environmental Cleanup Allocation Committee to develop the next tiers of water quality programs with a goal of providing \$40 million of grants to prevent the flow of trash, pollutants and debris into waterways from transportation facilities. In addition, focus on improving water quality on a regional scale that encourages partnerships among the local agencies as part of the Environmental Cleanup Program (Project X).

In all, during the Next 10 time period, more than \$6 billion in transportation improvements promised to the voters in M2 are planned to be completed or underway by 2026.

Oversight and Safeguards

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

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

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

Sustainable Community Strategy

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

The M2 program was publicly reviewed through a Program Environmental Impact Report prior to voters approving the ballot measure in November 2006. Since 2008, the M2 program has been included in the Southern California Association of Governments' Regional Transportation Plans, Sustainable Community Strategies,

and the associated Program Environmental Impact Reports prepared by the Southern California Association of Governments.

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

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

The freeway Environmental Mitigation Program has preserved 1,300 acres of wild lands that will be converted to conservation properties (Preserves) to enhance connectivity and wildlife movement between existing conservation areas such as the Cleveland National Forest, the Chino Hills State Park, the Irvine Ranch Conservancy lands, and to coastal areas. Furthermore, the program also provides critical habitat for endangered or listed species. Additionally, the Environmental Cleanup Program has funded over 140 projects totaling over \$40 million to treat storm water runoff, and help keep waterways and beaches clean in Orange County. The aforementioned transit, local streets, and environmental programs collectively contribute to and enhance the quality of life, as well as provide a sustainable future, and an efficient transportation system that benefits the region.

Brief summaries of the specific programs are listed below.

- ✓ Projects A through N – Freeway improvements and Freeway Service Patrol to provide emission reductions through congestion relief
- ✓ Projects O and P – Signal synchronization and street improvements that provide emission reductions through congestion relief and allow for bike and pedestrian project elements
- ✓ Project Q – Local funding for city-selected transportation projects that provides for preservation of the streets and roads system and includes bike, pedestrian, water quality, and transit enhancements as eligible expenditures
- ✓ Project R – Expanded Metrolink train capacity including improvements to stations and parking to improve transit reliability and convenience and reduce reliance on highways while also supporting potential transit-oriented development
- ✓ Project S – Transit extensions to improve access between Metrolink stations and residential, and employment centers, and provide an alternative to driving

- ✓ Project T – Station improvements to connect to planned future High-Speed Rail services
- ✓ Project U – Sustain mobility choices for seniors and persons with disabilities and provides an alternative to driving
- ✓ Project V – Community-based circulators to complement regional transit services with local communities and provides an alternative to driving
- ✓ Project W – Transit stop improvements to support transfers between major bus lines, and support the implementation of mobile ticketing to ensure ease of fare purchase and convenience for bus passengers
- ✓ Project X – Water quality improvement programs/projects to meet federal Clean Water Act standards for urban runoff, and augment required mitigations
- ✓ Freeway Mitigation Program – Natural resource protection strategy to provide for more comprehensive mitigation of environmental impacts from M2 freeway improvements

Risks

The Next 10 deliverables for projects and programs are not without risks. In order to be successful, OCTA needs to be aware and prepared to manage risks in several areas. A table of the risks, explanations, and suggested management actions are identified on the following page and will be tracked and reported on in the M2 Quarterly Reports presented to the Board, following each fiscal year quarter.

Delivery Risk	Explanation	Proposed Action
Financial		
1.	The long-term impact of the Great Recession resulted in a \$10.1 billion decrease (or 42% reduction) in forecasted sales tax revenues, now totaling \$14.2 billion. If sales tax revenue continues to come in lower than projections, this will further impact delivery.	The original projection in 2005 was \$24.3 billion. With the revised Board-adopted forecast methodology in place to ensure more accurate assumptions, the new lower forecast results in a greater reliance on external funding in order to deliver the M2 Freeway Program.
2.	The Next 10 Freeway Program Cash Flow includes two assumptions related to Project K (I-405) that carry risk.	The cash flow assumes receipt of \$245 million in Transportation Infrastructure Finance and Innovation Act (TIFIA) proceeds and bid pricing in line with the current budget. While current information points to both of these assumptions being good, it will require careful watch.
3.	The inability to scale the Freeway Program to available revenue and still deliver the promise results in added pressure to contain project scopes. Additionally, there are large freeway capital projects moving forward in the Next 10 timeframe with cost escalation risks.	<p>Management of project scopes and schedules is key to the successful delivery of the overall Freeway Program.</p> <p>Given the magnitude of upcoming projects (e.g. Project K), any length of delay with associated cost escalation can be impactful and will need to be managed.</p>
4.	Maintaining Metrolink train service providing an attractive alternative to driving in Orange County.	Operational cost of Metrolink service continues to grow as new regulations are imposed, such as positive train control, track sharing arrangements with Burlington Northern Santa Fe, and new locomotive requirements. These regulations increase cost while providing the same level of service.
5.	Establishment of an endowment fund for long-term management of seven conservation properties (Preserves), as part of the Freeway Environmental Mitigation Program (EMP), may be delayed.	A portion of the annual revenues for the EMP will be dedicated to the endowment deposits. If sales tax revenues continue to decline, it may take longer to establish the endowment and OCTA will need to continue to pay for the interim management of the Preserves.

Organizational			
6.	Availability of specialized staff given the scope of right-of-way (ROW) activities for the various freeway construction activities.	Timely ROW acquisition and utility clearance has proven to be a key factor in reducing risk on construction projects. Early acquisition is challenged by the heavy demand on Caltrans' ROW resources. This is further challenged by a change in meeting frequency by the California Transportation Commission, a necessary step in ROW settlement.	Expert and timely coordination between OCTA and Caltrans is imperative to manage this risk. If resource issues become a problem, OCTA should consider taking full responsibility for ROW activities. Staff is currently conducting a ROW resource analysis and results from that effort will provide direction on next steps.
7.	New operational responsibilities with both the I-405 Express Lanes and OC Streetcar	With the implementation of both the I-405 Express Lanes and the OC Streetcar service, OCTA will be increasing its overall role in operations.	OCTA holds a strong track record in operating the 91 Express Lanes. Additionally, OCTA will look to strengthen staff's operations experience to provide guidance for operating the OC Streetcar.
Policy			
8.	New statewide directives create additional hurdles for the M2 Freeway Program in particular.	<p>With new statewide directives focused on greenhouse gas reductions, it is becoming more difficult to environmentally clear the remaining nine freeway projects that add general purpose lanes.</p> <p>Additionally, within the recently completed Caltrans managed lanes study, inclusion of managed lanes is suggested for M2 project corridors where the promise to the voters is the addition of a general purpose lane. Projects currently in the environmental phase are at possible risk.</p>	<p>OCTA will need to ensure that when freeway improvement projects are being reviewed for environmental clearance that they are viewed as part of a larger suite of transportation improvements.</p> <p>OCTA staff will work closely with Caltrans to emphasize the importance of keeping the promise to the voters.</p>
Market			
9.	Major capital work is underway in the Southern California region that may impact OCTA's ability to secure resources needed for project and program delivery.	LA Metro and SANDAG have new/continuing sales tax measures on the November 2016 ballot. If adopted, these measures will limit the availability of resources in the Southern California region, meaning engineers, right-of-way experts, and materials will be in higher demand. Staffing and resources to implement the Next 10 Plan will need to be evaluated.	The value of a market research analysis will be considered in the event that LA Metro and SANDAG are successful with their measures to help guide OCTA in navigating the bidding environment. Any identified resource needs for Plan implementation will be brought to the Board as part of future budget adoption or in separate Board requests.

Next 10 Plan Funding Assumptions

Funding assumptions are included in the Next 10 Plan. The revenue assumptions of \$14.2 billion are based on the latest M2 revenue forecast methodology approved by the Board on March 28, 2016, and the FY 2015-16 final actuals sales tax receipts. The new revenue forecasting methodology results in a 42 percent reduction from the original 2005 sales tax projection of \$24.3 billion. Additionally, the plan assumes availability of a viable amount of discretionary federal and/or state funds from 2017 to 2041, and makes specific assumptions about near-term grants such as New Starts, Cap-and-Trade, TIFIA financial assumptions, and net excess 91 Express Lanes revenues for eligible projects. Revenues and expenses are merged into a high-level cash flow model. Bond assumptions are also included to address projected negative ending balances by year (compared to a pay-as-you-go scenario) in the freeway program. Bond assumptions are constrained to minimum debt coverage ratios, and the appendix on page 92 of the Next 10 Plan includes a more detailed discussion on assumed revenues, costs, and debt service.

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

The funding assumptions in the freeway mode assume \$8.735 billion in total revenue, with costs for the same period totaling \$8.688 billion. Without the inclusion of net excess 91 Express Lanes revenue and bonding assumptions, a 14-year deficit beginning in 2027 through 2040 exists where expenditures will exceed revenues. To bridge this funding gap and keep projects on schedule, bonding as well as net excess 91 Express Lanes revenue for eligible projects, and an expectation for receipt of external funding to augment the program is required. Although the full program (through 2041) is deliverable, the freeway mode remains tight.

The 2041 plan relies on the total receipt of \$1.156 billion in state and federal revenues. This assumes \$1.006 billion in prior programming commitments (this number is inclusive of \$46 million from Caltrans for the SR-55 Project F), \$245.4 million in TIFIA proceeds, and \$10 million a year beginning in 2022 through 2036 in federal and/or state funds. Additionally, the program assumes \$1.534 billion in bond proceeds, and \$463.4 million in net excess 91 Express Lanes revenue. Even with these assumptions, there will be several points in the program with low year-by-year ending balances. Although these are positive balances, the margin leaves minimal flexibility to respond to economic uncertainties, or project scope changes and schedule delays that may result in project cost increases. The tight variance between the costs and funding plan

will require that project scopes and schedules be carefully managed and closely monitored given the small margin of safety.

The funding assumptions in the streets and roads mode assume \$4.758 billion in total revenue, with costs for the same period totaling \$4.758 billion. The projects within the streets and roads program are scaled to available revenue and are cash flowed on a pay-as-you-go basis. The streets and roads plan relies on the total receipt of \$434.2 million in state and federal revenues primarily for the OC Bridges grade separation projects. More detailed program assumptions for the streets and roads mode can be found in the appendix on page 94.

For the transit mode, \$4.278 billion in total revenue is assumed, with costs for the same period totaling \$4.269 billion. The projects within the transit program are scaled to available revenue with the exception of one, Project U's Fare Stabilization Program. Ordinance No. 3 specifically requires that the Fare Stabilization Program subsidize fares for seniors and persons with disabilities to the extent of maintaining the reduced fare rate effective on July 24, 2006 through 2041. With the recent M2 amendment, which provided additional funding to sustain the Fare Stabilization Program, the cash flow supports this program. The remaining transit mode programs are assumed on a pay-as-you-go basis. Transit assumes the total receipt of \$664.9 million in state and federal revenues. This number is inclusive of \$148.96 million in Federal New Starts and \$25.52 million in State Cap-and-Trade revenues to partially fund the OC Streetcar project. More detailed program assumptions for the transit program can be found in the appendix on page 94.

The Environmental Cleanup Program assumes \$283.9 million in total revenue, with costs for the same period totaling \$283.9 million. The projects within the Environmental Cleanup Program are scaled to available revenue and are cash flowed on a pay-as-you-go basis. More detailed program assumptions for the environmental cleanup program can be found in the appendix on page 95.

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

Funding and Financing

The Board's vision in developing the EAP created a great opportunity for the M2 program. While the economy took a significant downturn due to the 2008 Great Recession, OCTA advanced projects years before revenue became available. Projects were accelerated, making them shelf-ready. This allowed OCTA to capture significant one-time external funding provided through State Proposition 1B funds and American Recovery & Reinvestment Act funds.

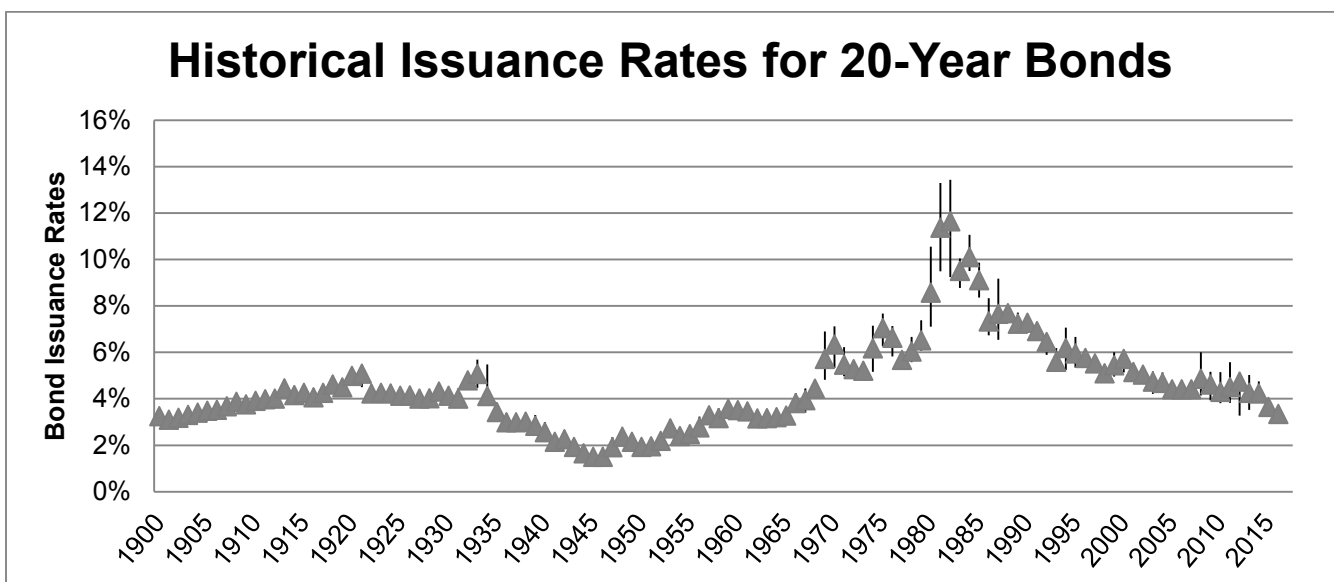
With the revised methodology implemented in March 2016, and the FY 2015-16 final actuals sales tax receipts, the new blended 2016 M2 sales tax revenue is \$14.2 billion.

When the M2020 Plan was adopted in 2012, the plan was based on a revenue forecast of \$15.5 billion. This projected revenue reduction, coupled with a sharp reduction in external revenues available to fund the freeway program, has greatly impacted the revenue assumptions for program delivery.

When it comes to the competitive bidding environment, OCTA has significantly benefited. When the M2020 Plan was adopted in late 2012, staff reported that freeway construction bids were consistently coming in between 10 and 20 percent below engineers' estimates since 2006. This was a marked change from the time period of FY 2001-02 through FY 2005-06 when bids were coming in higher.

Since that time, construction bids are starting to come in closer to the engineers' estimates. This is a result of several factors. First, with the economy picking up, the demand for contractors has increased which results in less competition and higher bids. At the same time, engineers' estimates have caught up and have adjusted to better reflect the current environment. Most recently, FY 2015-16 bids came in approximately 8 percent below engineers' estimates. This is still positive, though not quite the environment that was seen in 2012; however, this is certainly better than early and mid-2000.

Pay-as-you-go project funding is identified in Ordinance No. 3 as the preferred method of financing, while bond financing is an option that is within the purview of the Board. The current cost of debt is at a historic low. In fact, current 20-year bond issuance rates have not been this low since 1966. Staff identified this trend during the development of the M2020 Plan, and this trend continues into the Next 10 Plan. See the graph below showing historical issuance rates of 20-year bonds. OCTA has a strong track record of successfully delivering projects early by utilizing bond financing, as seen in M1, as well as M2, under the EAP and M2020 Plan. The Next 10 Plan anticipates bond financing for the freeway program as a means to deliver the freeway projects.



Staffing and Resources

As noted above in the risks table, LA Metro has a pending new sales tax measure and San Diego (SANDAG) has a pending continuation of their existing sales tax measure on the November 2016 ballot. If adopted, these neighboring county measures will limit the availability of resources in the Southern California region, meaning engineers, right-of-way experts, and materials will be in higher demand. Staffing and resources to implement the Next 10 Plan will also need to be evaluated. Once the results of both LA's and San Diego's efforts are determined, a market research analysis will be considered to help guide OCTA staff in navigating the bidding environment. Any identified resource needs for Next 10 implementation will be brought to the Board as part of a future budget adoption or in a separate Board request.



Freeway Program

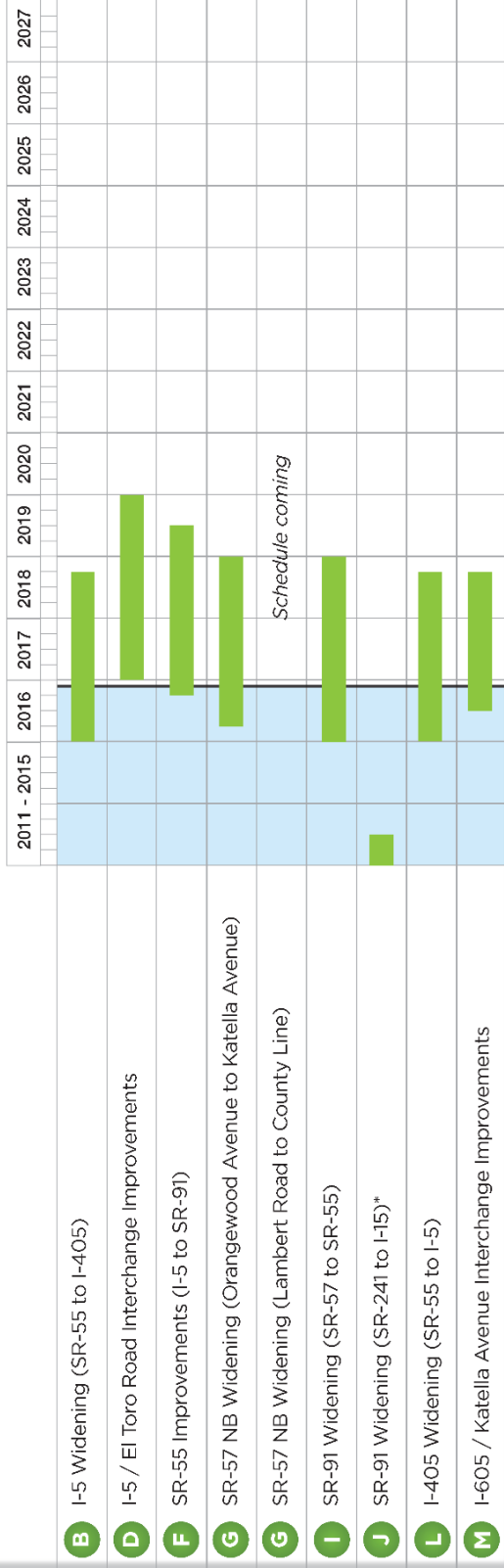
M2 Freeway Projects



- | | |
|---|---|
| <ul style="list-style-type: none"> A I-5 Widening (SR-55 to SR-57) B I-5 Widening (SR-55 to I-405) C, D I-5 Widening (PCH to Avenida Pico) C, D I-5 Widening (El Toro Road to SR-73) D I-5/SR-74 (Ortega Hwy) Interchange Improvements D I-5 at El Toro Road Interchange Improvements E SR-22 Access Improvements F SR-55 Widening (I-405 to I-5) F SR-55 Widening (I-5 to SR-22) G SR-57 Widening (Orangethorpe Ave. to Lambert Road) G SR-57 Widening (Katella Ave. to Lincoln Ave.) G SR-57 NB Widening (Orangewood Avenue to Katella Avenue) G SR-57 NB Widening (Lambert Road to County Line) | <ul style="list-style-type: none"> H SR-91 Widening (I-5 to SR-57) I SR-91 Widening (SR-55 to Tustin Ave.) I SR-91 Widening (SR-57 to SR-55) J SR-91 Widening (SR-55 to SR-71) J SR-91 Widening (SR-241 to I-15)* K I-405 Widening (I-605 to SR-55) L I-405 Widening (SR-55 to I-5) M I-605/Katella Ave. Interchange Improvements |
|---|---|

* Project environmentally cleared as part of the Riverside County Transportation Commission's Corridor Improvement Project.

M2 Freeway Projects Through Environmental Phase



* Project environmentally cleared in 2012 as part of the Riverside County Transportation Commission's Corridor Improvement Project.

Freeway Program



Overview:

The Freeway Program accounts for 43 percent of the M2 Program. Over the life of M2, approximately \$5.7 billion is expected to be generated in sales tax revenues for freeway Projects A-N (not including the five percent of net revenues apportioned to the Environmental Mitigation Program). Improving Orange County freeways is the greatest investment of the M2 Program.

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

- Bring congestion relief.
- Deliver projects using the guiding principles of congestion relief, cost escalation risk, and readiness.
- Continue to make M2 projects the priority for external funding.
- Work with Caltrans to seek cost saving measures on freeway projects through changes in scope and design parameters where possible.
- Tightly manage project scopes and schedule to reduce cost escalation risk.

Next 10 Deliverables:

When originally passed, 13 freeway projects were highlighted in the M2 Transportation Investment Plan. Since then, these projects have been segmented into 27 projects. Of this amount, nine freeway projects have been completed to date. To adhere to the promise of M2, the Next 10 Plan includes the following deliverable goals for the Freeway Program through 2026, as they relate to the remaining 18 projects:

1. Deliver construction of nine freeway project segments; seven along Interstate 5 (I-5), one along Interstate 405 (I-405), and one along State Route 55 (SR-55) (Projects A, C/D, F, and K).
2. Complete the environmental phase for the remaining nine project segments to be shelf ready. This includes one on I-5, I-405, SR-55, and two along State Route 57 and State Route 91, and two interchange projects, one at El Toro Road/I-5 and one at Katella Avenue/Interstate 605 (Projects B, D, F, G, I, J, L, and M).
3. Invest approximately \$1.2 billion in revenues (bringing the completed freeway program total to 78 percent) in revenues to move “shelf ready” projects forward using the guiding principles.

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

Description:

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

Cost:

\$37.1 million (YOE).

Status:

This project is currently in the design phase. Design is scheduled for completion in spring 2017. The project is expected to be open to traffic in early 2020.

Present Day:

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

congestion in the peak period than the adjacent general purpose lanes, underscoring the need to add HOV capacity on this freeway segment.

Benefits:

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

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

External Funding:

The Board has approved funding that supports this project including \$28.95 million in state funds, and \$2.80 million in federal funds.

Risks:

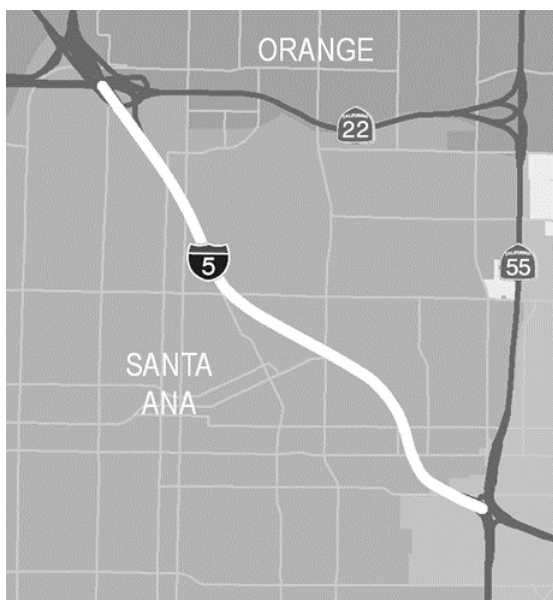
Overall time, scope, costs, and quality risks are low with this project due to construction within the existing ROW and relatively straightforward design issues. However, risks are relatively high on potential delay due to STIP funding shortfall.

Related Projects:

Projects B and F.

Involved Agencies:

OCTA, City of Santa Ana, Caltrans, California Transportation Commission (CTC), Federal Highways



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

Administration (FHWA), and Southern California Regional Rail Authority (SCRRA).

Assumptions:

Cost based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2016)

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

Description:

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

Cost:

\$720.87 million (YOE), including advancement to environmental phase.

Status:

This project is currently in the environmental phase. Continued from the M2020 Plan, the Next 10 Plan includes funding this project through the environmental phase. Environmental clearance is scheduled for late 2018.

Present Day:

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

Benefits:

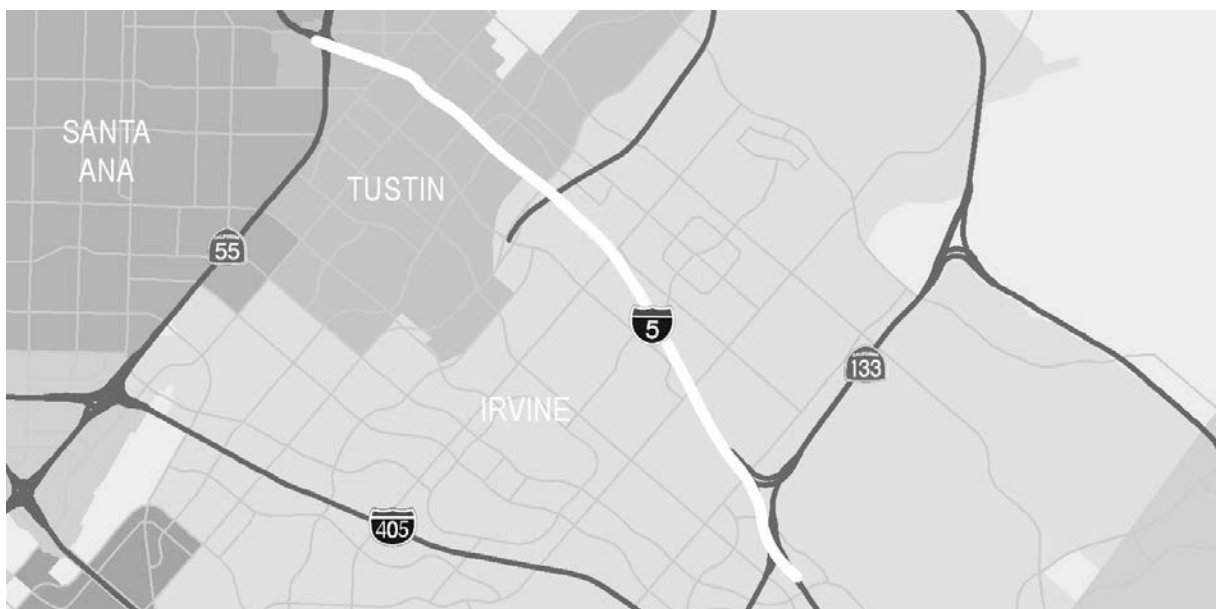
Project improvements would alleviate congestion and reduce delay.

External Funding:

The Board has approved funding that supports this project including \$8 million in federal funds for preliminary engineering. Future phases are also eligible for state and federal funds. Any additional funding is expected to be submitted for Board approval at a later time.

Risks:

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



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

Related Projects:

Projects A and F.

Involved Agencies:

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

Assumptions:

Cost based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2016)

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

Description:

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

Segment 1:

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

Segment 2:

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

Segment 3:

This portion consists of the Alicia Parkway to El Toro Road segment, which will add one general purpose lane in the southbound direction between Alicia Parkway and El Toro Road (approximately 1.7 miles), continue the additional general purpose lane in the northbound direction from Segment 2 through Alicia Parkway, extend the second HOV lane in both directions from El Toro Road to Alicia Parkway, and add auxiliary lanes where needed to increase freeway



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

capacity and reduce congestion in Laguna Hills and Lake Forest areas.

Cost:

Segment 1: \$151.87 million (YOE)

Segment 2: \$196.17 million (YOE)

Segment 3: \$133.55 million (YOE)

Status:

All segments of this project are currently in the design phase. Segment 2 is scheduled to complete design in late 2017. Segments 1 and 3 are scheduled to complete design in 2018. Construction is expected to start in 2017/18 for Segment 2, and in 2018/19 for Segments 1 and 3, with all segments open to traffic in 2022.

Present Day:

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

Benefits:

This project will help alleviate congestion and reduce traffic delays. The second HOV extension for Segment 3 will enable more efficient operation of general purpose lanes and increase capacity for future projected traffic volumes. Adding an additional general purpose lane in Segment 1 and 2 will increase capacity of the freeway to accommodate future projected traffic volumes. The I-5/La Paz Road and I-5/Avery Parkway interchange improvement projects called for in M2 Project D will reduce chokepoints and congestion, as well as accommodate

future traffic demands on the local roads at each interchange.

External Funding:

The Board has approved funding that supports this project including:

Segment 1: \$78.03 million in state funds and \$28.17 in federal funds. Additional funds may be required to support contingency for this segment, which would be eligible for state and federal funds.

Segment 2: \$47.63 million in federal funds.

Segment 3: \$39.13 million in federal funds.

STIP funds supporting Segment 1 were decreased in May 2016 due to a downward trend in the price-based excise tax and the diversion of truck weight fees to the state’s general fund. As a result, the 2016 STIP funding available to start construction for this segment was delayed from Fiscal Year (FY) 2018-19 to FY 2020-21. This may impact overall project costs if Segment 1 is delayed further, and if Segments 2 and 3 are also delayed so the entire project can be delivered in the same time frame. Staff has been directed to find possible alternative funding or methods to keep these segments on their existing schedules.

Risks:

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

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

Related Projects:

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

Involved Agencies:

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

Assumptions:

Costs based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report - State Highway Project (September 2016)

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

Description:

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

Segment 1:

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

lanes in both directions of Avenida Pico.

Segment 2:

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

Segment 3:

This portion consists of the PCH to San Juan Creek Road segment, which will add new continuous-access HOV lanes in each direction between Camino Estrella Overcrossing to San Juan Creek Road Undercrossing. On- and off-ramps at Camino Las Ramblas/



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

PCH will be reconstructed. Additionally, the I-5/PCH northbound connector and I-5/Camino Las Ramblas Undercrossing will also be widened in both directions.

Cost:

Segment 1: \$90.51 million

Segment 2: \$71.03 million

Segment 3: \$71.21 million

Status:

All segments of Project C are currently under construction. Segment 2 is scheduled to be completed in early 2017. Segments 1 and 3 are scheduled to be completed in early 2018. All three segments will be opened to traffic at the same time in early 2018.

Present Day:

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

Benefits:

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

External Funding:

The Board has approved funding that supports these projects including:

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

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

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

Risks:

Overall time, scope, costs, and quality risks are moderate with this project due to a soil issue that was identified in Segment 3, resulting in significantly increased project cost and delayed completion time. There is potential for further issues on this project or adjoining segments should additional soil issues surface.

Related Projects:

Project D.

Involved Agencies:

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

Assumptions:

Costs based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report

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

- Capital Funding Program Report - State Highway Project (September 2016)

D. I-5 (El Toro Interchange)

Description:

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

Cost:

\$113 million (YOE), including advancement of the environmental phase.

Status:

Planning work is complete. The environmental phase is expected to begin in early 2017. Continued from the M2020 Plan, the Next 10 Plan includes funding this project through environmental, with environmental clearance expected by 2020.

Present Day:

This portion of I-5 has high levels of traffic during the weekdays and weekends, as well as holidays, throughout the proposed project limits. The current traffic volume on this

segment of I-5 is about 355,000 vehicles per day and is expected to increase nearly nine percent by 2035, bringing it up to 388,000 vehicles per day.

Benefits:

This project would reduce chokepoints and accommodate forecast traffic demands on the local roads. Modification of the entrance and exit ramps would alleviate congestion at adjacent intersections.

External Funding:

The Board has approved funding that supports this project including \$4.4 million in federal funds for the environmental phase. Future phases are also eligible for state and federal funds. Any additional funding is expected to be submitted for Board approval at a later time.

Risks:

Overall time, scope, costs, and quality risks are high with this project due to



D. I-5 (El Toro Interchange)

community issues and high ROW impacts with most of the alternatives.

Related Projects:
Project C.

Involved Agencies:
OCTA, Cities of Laguna Hills and Lake Forest, Caltrans, and FHWA.

Assumptions:
Cost based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Primavera Project Schedule
- Capital Funding Program Report - State Highway Project (September 2016)

D. I-5 (Ortega Highway Interchange)

Description:

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

Cost:

The cost for this project was \$80.29 million.

Status:

The project was opened to traffic on September 4, 2015, and was officially completed on January 15, 2016.

Present Day:

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

Benefits:

This project alleviated a major chokepoint and reduced congestion by

widening the Ortega Highway Bridge and improving local traffic flow through reconfigured streets and on- and off-ramps.

External Funding:

\$69.70 million in state funds, \$2.5 million in M1 funds from the regional interchange program, and \$5.01 million in other local funds were used for the project.

Risks:

None – project completed

Related Projects:

Project C.

Involved Agencies:

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

Assumptions:

Cost based on October 2016 M2 Program Cash Flow.



D. I-5 (Ortega Highway Interchange)

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report - State Highway Project (September 2016)

E. SR-22 Access Improvements

Description:

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

Cost:

The cost for this project was \$25.8 million.

Status:

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

Present Day:

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

Benefits:

The project reconstructed the freeway overcrossings to allow these streets to be widened through the interchange area. These improvements reduced

congestion and delay at all three interchanges.

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

External Funding:

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

Risks:

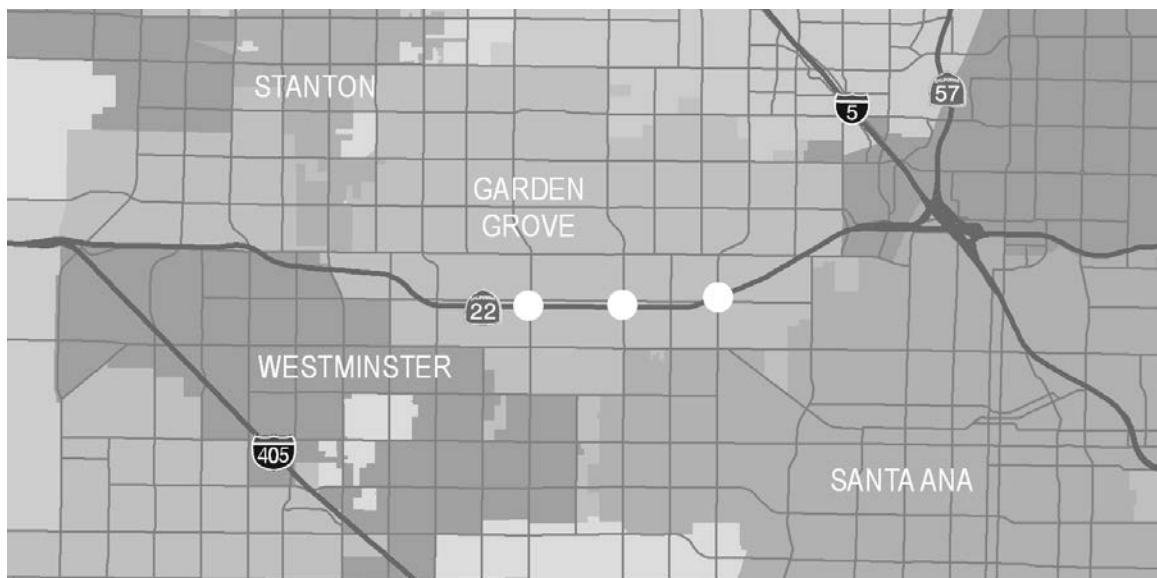
None – project completed

Related Projects:

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

Involved Agencies:

OCTA, City of Garden Grove, and Caltrans.



E. SR-22 Access Improvements

Assumptions:

Cost based on October 2016 M2
Program Cash Flow.

References:

- 2015 Freeway Plan
- OCTA 2010 Long Range
Transportation Plan

F. SR-55 (I-405 to I-5 and I-5 to SR-91)

Description:

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

South Segment:

This portion will add one general purpose lane (approximately six miles) between I-5 and I-405, including merging lanes between interchanges to smooth traffic flow. The South Segment will generally be constructed within the existing ROW. The general purpose lane will be funded with M2, state, and federal funds. Concurrent with these efforts, an additional, second HOV lane will also be constructed between I-5 and I-405. The HOV lane will only be funded with state and federal funds. \$46.8 million is being contributed by the state for construction of the second HOV lane.

North Segment:

This future portion would add new lanes between SR-22 and I-5, including merging lanes between interchanges to smooth traffic flow. Operational improvements between SR-22 and SR-91 would also be incorporated. Continued from the M2020 Plan, the Next 10 Plan includes advancing the North Segment through the environmental phase. The North Segment will generally be constructed within the existing ROW.

Cost:

Segment 1: \$375.93 million (YOE).
Segment 2: \$227.35 (YOE) including advancement of environmental phase.

Status:

The South Segment is currently in the environmental phase. Construction is expected to begin in 2023. The North Segment is expected to begin the environmental phase in late 2016, with the environmental document expected to be complete by 2019.



Present Day:

This freeway carries about 316,000 vehicles on a daily basis. This volume

F. SR-55 (I-405 to I-5 and I-5 to SR-91)

is expected to increase by nearly eight percent by 2035, bringing it up to 340,000 vehicles per day in the future.

Benefits:

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

External Funding:

South Segment: The Board has approved funding that supports the environmental phase of this project including \$12 million in federal funds. As previously mentioned, Caltrans has also committed \$46.8 million in state (SHOPP) funds for this project. This project is eligible for future state and federal funds.

North Segment: The Board has approved \$5 million in federal funds for this project to support the environmental phase. This project is eligible for future state and federal funds.

Risks:

Overall time, scope, costs, and quality risks remain high with this project due to South Segment ROW impacts which rely on design exceptions and increased project cost.

Related Projects:

Projects A and B.

Involved Agencies:

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

Assumptions:

Costs based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report - State Highway Project (September 2016)

G. SR-57 Improvements

Description:

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

Segment 1:

This portion consists of three northbound sections including Katella Avenue to Lincoln Avenue, Orangethorpe to Yorba Linda Avenue, and Yorba Linda Boulevard to Lambert Road in the Cities of Anaheim, Placentia, Fullerton, and Brea. All three segments were completed and opened to traffic in 2014.

Segment 2:

This portion would include the addition of a northbound truck-climbing lane from Lambert Road in the City of Brea to one-half mile north of the Los Angeles County line (approximately Tonner Canyon Road). Continued from the M2020 Plan, the Next 10 Plan includes funding this segment through the environmental phase. Segment 2 is scheduled to begin the environmental phase by 2020.

Segment 3:

This portion would include adding one northbound general purpose lane from approximately Orangewood Avenue in the City of Orange to Katella Avenue in the City of Anaheim. Segment

improvements would maintain the existing auxiliary lane between Orangewood Avenue and Katella Avenue. Continued from the M2020 Plan, the Next 10 Plan includes funding Segment 3 through the environmental phase.

Cost:

Segment 1: \$148.19 million (YOE).

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

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

Status:

Segment 1 is complete. Segments 2 and 3 will be advanced to environmental clearance.

Present Day:

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

Benefits:

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

External Funding:

Segment 1: \$106.30 million in state funds were used for the project.

G. SR-57 Improvements

Segment 2: The Board has approved the use of state funds to support the environmental phase, however due to a downward trend in the price-based excise tax and the diversion of truck weight fees to the State's general fund, OCTA was not able to program the 2016 STIP funds that were planned to this project.

Segment 3: The Board has approved funding that supports the environmental phase of this project including \$2.5 million in federal funds.

Segments 2 and 3 are eligible for future state and federal funds.

Risks:

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

Related Projects:

Project H.

Involved Agencies:

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

Assumptions:

Costs based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Reports
- July 2016 Project Schedule
- Capital Funding Program Report - State Highway Project (September 2016)

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

Description:

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

Cost:

The cost for this project was \$61.26 million.

Status:

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

Present Day:

SR-91 serves as a major commuting route connecting Orange County with Riverside and Los Angeles counties. SR-91 is also one of the most

congested freeways in Southern California. This freeway carries about 290,000 vehicles on a daily basis. This volume is expected to increase by nearly 5 percent by 2035, bringing it up to 304,000 vehicles per day in the future.

Benefits:

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

External Funding:

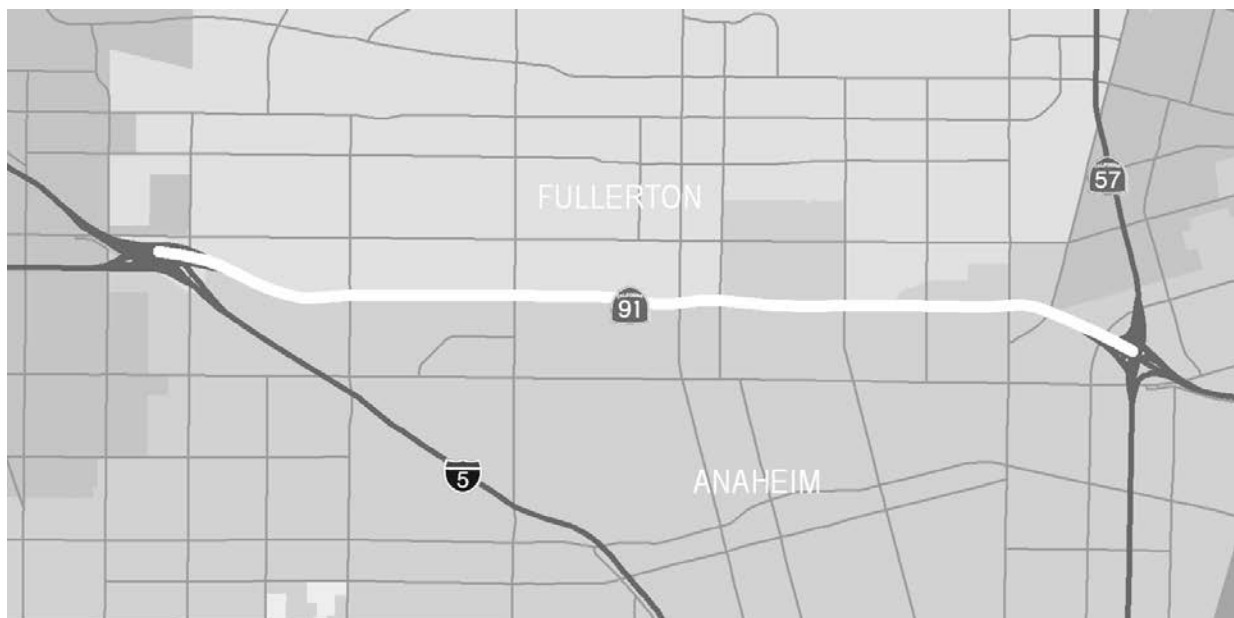
\$27.23 million in state funds were used for the project.

Risks:

None – project completed.

Related Projects:

Project I.



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

Involved Agencies:

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

Assumptions:

Cost based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2016)

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

Description:

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

Segment 1:

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

Segment 2:

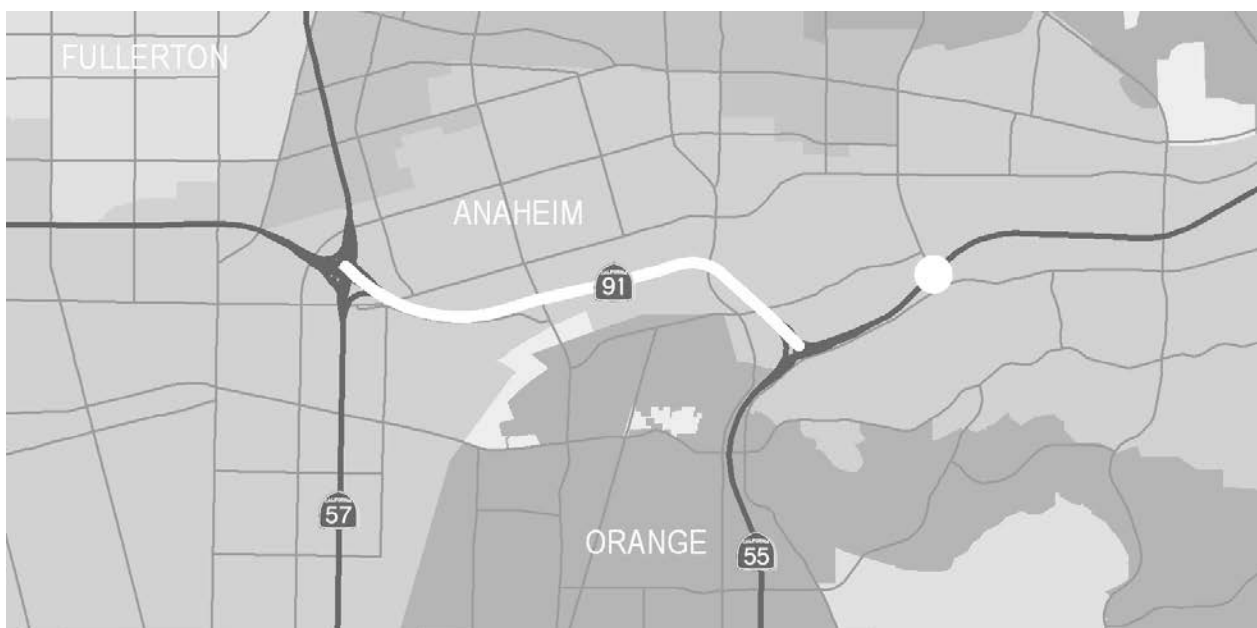
This future segment would include adding an eastbound general purpose

lane on SR-91 between SR-57 and SR-55 and a westbound general purpose lane from Glassell Street to State College Boulevard. Additional features would include improvements to the Glassell, Tustin, and Lakeview interchanges, and freeway-to-freeway connectors from northbound SR-57 to SR-91 and southbound SR-57 to westbound SR-91. Select auxiliary lanes would be added or re-established. Segment 2 would generally be constructed within the existing ROW. Continued from the M2020 Plan, the Next 10 Plan includes advancing this project through the environmental phase.

Cost:

Segment 1: The cost for this segment was \$45.11 million.

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



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

Status:

Segment 1 was opened to traffic and completed in July 2016.

Segment 2 is currently in the environmental phase. Environmental clearance is expected by late 2018.

Present Day:

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

Benefits:

Segment 1 addressed choke-point conditions and reduced operational problems, including weaving and merging maneuvers, which were primarily caused by extensive weaving between the northbound SR-55 to westbound SR-91 connector and the westbound SR-91 off-ramp to Tustin Avenue.

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

External Funding:

Segment 1: \$27.93 million in state funds were used for the project.

Segment 2: The Board has approved funding supporting the environmental phase of this project including \$7 million in federal funds. Segment 2 is eligible for future state and federal funds.

Risks:

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

Related Projects:

Projects H and J.

Involved Agencies:

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

Assumptions:

Costs based October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2016)

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

Description:

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

Segment 1, which has been completed, improved the portion of SR-91 east of SR-241 by adding one eastbound lane from one mile east of SR-241 to SR-71 in Riverside County.

Segment 2, which has also been completed, improved the approximate 6-mile portion of SR-91 between SR-55 and SR-241 by adding one new lane in each direction and improving key interchanges. Additional improvements included the widening and seismic retrofitting for the Imperial Highway Undercrossing and Weir Canyon Road Undercrossing bridges.

Segment 3 would add additional capacity on SR-91 beginning at SR-241 and extending to I-15 in Riverside

County. The Riverside County Transportation Commission (RCTC) is leading the two-phase delivery of this project. Improvements include adding an express lane and one general purpose lane in both directions east of SR-71 (Phase 1), and one general purpose lane in both directions between I-15 and SR-71 (Phase 2). The Orange County improvements (the lane addition between SR-421 to SR-71 portion of Phase 2) are contingent upon RCTC's delivery of the complementary improvements within Riverside County.

Cost:

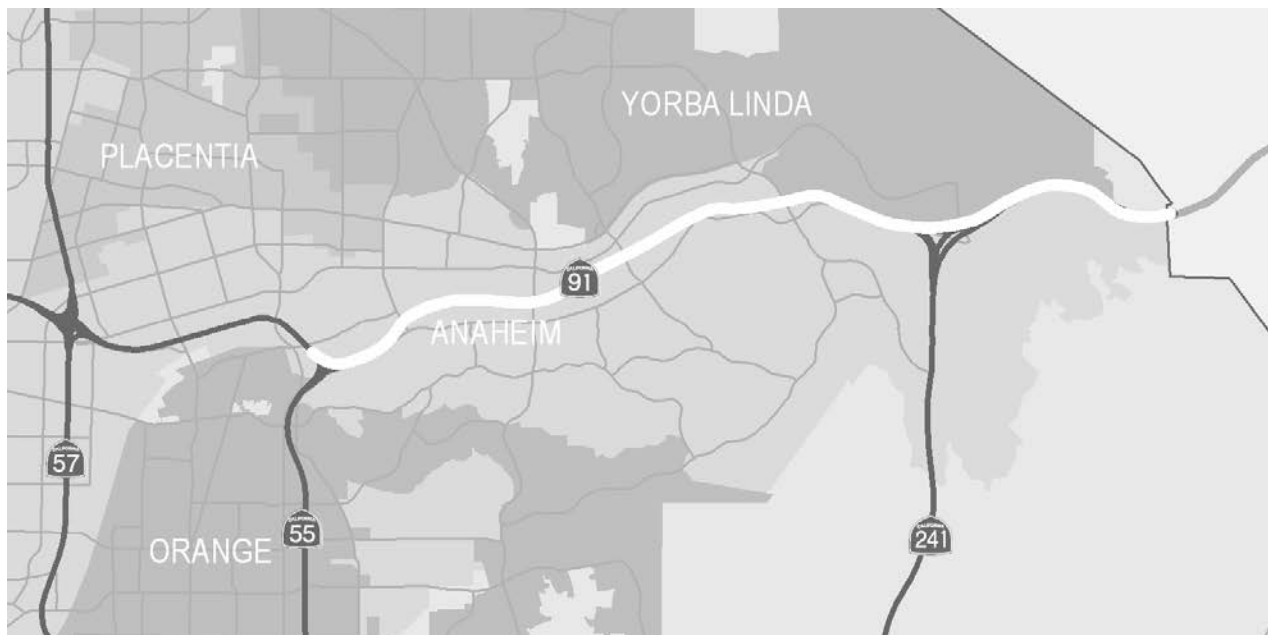
Segment 1: The cost for this segment was \$57.77 million.

Segment 2: The cost for this segment was \$79.56 million.

Segment 3: \$292.53 million (YOE).

Status:

Segment 1 was completed in January 2011, and Segment 2 was completed in December 2012.



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

Segment 3 is contingent on the future widening in Riverside County to match the planned lanes in Orange County. The environmental phase for the Orange County portion of Phase 2 has been completed. Phase 1 of RCTC's project is underway using a design-build contract, scheduled for completion in early 2017. A schedule for delivery of the Phase 2 improvements has not yet been established, and specific improvements will be subject to approved plans developed in cooperation with local jurisdictions and affected communities. Construction for Phase 2 is expected to take place post-2035.

Present Day:

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

Benefits:

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

Segment 2 improvements helped to alleviate congestion and reduce delay.

Segment 3 proposed improvements are expected to reduce congestion and improve safety and operational efficiency by increasing capacity and by reducing the existing chokepoints within the project limits.

External Funding:

\$80.41 million in state funds and \$47.89 million in federal funds were used for Segment 1 and 2.

There are currently no funds programmed for Segment 3, as this project requires coordination with the planned RCTC project.

Risks:

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

Related Projects:

Project I and the Riverside County Corridor Improvement Project.

Involved Agencies:

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

Assumptions:

Costs based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2016)

K. I-405 Widening (SR-55 to SR-605)

Description:

Project K will add new lanes to I-405 between SR-55 and I-605. The project will make the best use of available freeway property by staying generally within the freeway ROW and updating key local interchanges to current standards. The project will add on e general purpose lane in each direction of I-405 from Euclid Street to I-605.

Concurrently with Project K, an additional lane will be added in each direction that would combine with the existing HOV lane to provide dual express lanes in each direction on I-405 from SR-73 to I-605. The general purpose lanes will be funded with M2, state, and federal funds; the express lanes will be funded primarily with toll revenues.

Cost:

M2 Portion: \$1.425 billion (YOE).

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

Status:

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

Present Day:

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

Benefits:

Project K includes the addition of auxiliary and general purpose lanes. These improvements would help reduce congestion and congestion-related accidents. Additional improvements include drainage to



K. I-405 Widening (SR-55 to SR-605)

reduce flooding, and a direct Express Lanes connector at the I-405/SR-73 Interchange.

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

M2 improvements, in combination with express lanes improvements, will provide the most throughput in the corridor. These improvements will add approximately 20 percent more freeway lanes to I-405 in both directions between Euclid Street to the I-605 interchange.

External Funding:

The Board has approved funding supporting this project including \$82 million in a contribution of state funds, an additional \$7.77 million in state funds (pending state approval), and \$45.65 million in federal funds. Efforts are in progress to enter into a \$627 million TIFIA loan which will be secured with toll revenues. If successful, M2 would receive \$245.4 in TIFIA proceeds.

Risks:

Overall time, scope, costs, and quality risks are high with this project due to the relatively high costs and extensive project scope.

Related Projects:

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

Involved Agencies:

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

Assumptions:

Costs based on October 2016 M2 Program Cash Flow. Toll revenues will primarily pay for the 405 Express Lanes, and M2 will pay for the addition of general purpose lanes.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2016)

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

Description:

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

Cost:

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

Status:

The project is currently in the environmental phase. Continued from the M2020 Plan, the Next 10 Plan includes funding this project through environmental. Environmental clearance is expected in 2018.

Present Day:

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

Benefits:

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

External Funding:

The Board has approved funding supporting the environmental phase of this project, including \$8 million in federal funds. This project is eligible for future state and federal funds.

Risks:

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

Related Projects:

Project K.



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

Involved Agencies:

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

Assumptions:

Costs based on October 2016 M2 Program Cash Flow.

References:

- OCTA 2010 Long Range Transportation Plan
- 2015 Freeway Plan
- July 2016 Project Status Report
- Capital Funding Program Report – State Highway Project (September 2016)

M. I-605 Interchange Improvements

Description:

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

Cost:

The cost for this project is estimated to be \$29.60 million (YOE).

Status:

The planning phase for this project is complete and was done in cooperation with the City of Los Alamitos. The environmental phase is scheduled to begin in 2016. Continued from the M2020 Plan, the Next 10 Plan includes

funding this project through the environmental phase, which is expected to be completed in 2018.

Present Day:

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

Benefits:

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

External Funding:

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



M. I-605 Interchange Improvements

Risks:

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

Related Projects:

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

Involved Agencies:

OCTA, City of Los Alamitos, and Caltrans.

Assumptions:

Costs based on October 2016 M2 Program Cash Flow.

References:

- 2011 Measure M2 Freeway Strategic Plan
- 2015 Freeway Plan
- July 2016 Project Schedule
- Capital Funding Program Report - State Highway Project (September 2016)

N. Freeway Service Patrol

Description:

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

Program Funding:

\$43.2 million in M2 revenue between 2017 and 2026.

Status:

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

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

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

Benefits:

To keep Orange County moving, FSP provides a range of free services from a jump start or a gallon of gas, to

changing a flat tire or towing a disabled vehicle off the freeway.

For every dollar invested in this program, approximately \$18 of congestion relief benefit is received. In FY 2014-15, this program eliminated 4 million vehicle hours of delay, saved 6.9 million gallons of gasoline, and reduced pollution emissions equivalent to 10,750 vehicles.

External Funding:

SHA allocation provided by Caltrans – approximately \$2.6 million annually.
SAFE (\$1 per vehicle registration fee) – approximately \$2.8 million annually.

Risks:

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

Related Projects:

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

Involved Agencies:

OCTA, Caltrans, and the California Highway Patrol

Assumptions:

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

References:

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

Environmental Mitigation Program



Overview:

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

A master agreement between OCTA, Caltrans, and state and federal resource agencies was approved in January 2010. This offers higher-value environmental benefits such as habitat protection, connectivity, and resource preservation in exchange for streamlined project approvals for the 13 (segmented into 27) M2 freeway projects.

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

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

Next 10 Deliverables:

In 2009, the Board approved a policy to allocate approximately 80 percent of the revenues to acquisitions and 20 percent to fund restoration projects. This policy will need to be revisited periodically to ensure it continues to meet program needs. The Next 10 Plan recommends four major initiatives through 2026 consistent with the above framework:

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

Environmental Mitigation Program

Description:

In July 2010, OCTA began preparing a conservation plan called the NCCP/HCP, which examines habitat resources within broad geographic areas and identifies conservation and mitigation measures to protect habitat and species. This analysis will be completed in late 2016; however, in accordance with the master agreement “advance credit” provision, funds were allocated prior to completion of the NCCP/HCP.

Concurrent with efforts made towards completing the NCCP/HCP and EIR/EIS, OCTA has been working with the United States Army Corps of Engineers (USACE) and the State Water Resources Control Board (SWRCB) - regulatory agencies - to streamline the regulatory permitting process.

In conjunction with the preparation of the final NCCP/HCP and EIR/EIS, RMPs are being developed to address biological monitoring requirements and management activities, including access provisions for each of the seven acquired properties (Preserves). The resource agencies will need to approve the RMPs, following the completion and approval of the NCCP/HCP. The RMPs for the Trabuco and Silverado Canyons Preserves (five Preserves total) were available for public review between late 2015 and early 2016. The RMPs for the remaining Preserves (Hayashi and Aliso Canyon) will be released at a later date and follow a similar public outreach process.

Cost:

In summer 2007, the Board approved approximately \$55 million as part of the EAP. Accordingly, \$42 million and \$10.5 million were allocated for acquisition and restoration, respectively. An additional \$2.5 million was allocated for development of the NCCP/HCP and other professional services, such as appraisals and conducting biological surveys.

Status:

Since 2011, OCTA has acquired seven Preserves totaling approximately 1,300 acres in Trabuco Canyon, Silverado Canyon, Brea, and Laguna Beach.

Since September 2010, a total of \$10 million has been allocated for 11 projects to restore approximately 350 acres of open space lands throughout Orange County.

Present Day:

Approximately \$2 million remains from the 2007 Board allocation.

The selection of the endowment fund manager was approved by the Board on September 26, 2016, and the first endowment deposit is expected to be made in 2017.

Benefits:

The completed NCCP/HCP and regulatory permitting process are tools by which OCTA obtains biological and regulatory permits/assurances for the 13 (27 segmented) M2 freeway projects. This comprehensive process enables OCTA to streamline future M2 freeway improvement projects.

Environmental Mitigation Program

External Funding:

Examples of external funding available for this program include:

- United State Fish and Wildlife Service (USFWS) contribution toward the acquisition of open space land in the Trabuco Canyon area.
- USFWS Habitat Conservation Planning Assistant Grant to help fund the completion of the NCCP / HCP.
- Restoration project sponsors utilize external funds and resources to implement their projects.

Risks:

Successful implementation of the restoration projects will support OCTA's NCCP/HCP and regulatory permitting process.

Related Projects:

Projects A-M.

Involved Agencies:

California Department of Fish and Wildlife, USFWS, Caltrans, USACE, SWRCB and the environmental community.

Assumptions:

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

References:

- Draft NCCP / HCP and EIR/EIS
- Additional resources can be found online: www.octa.net/environmental



Streets and Roads Program

M2 Streets & Roads Program

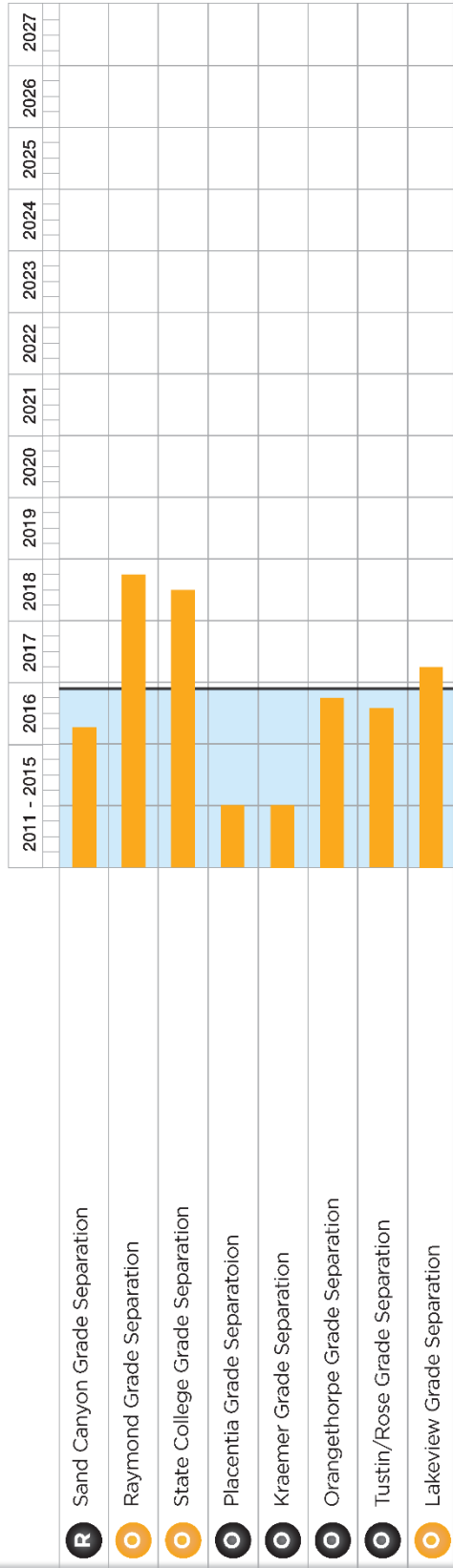


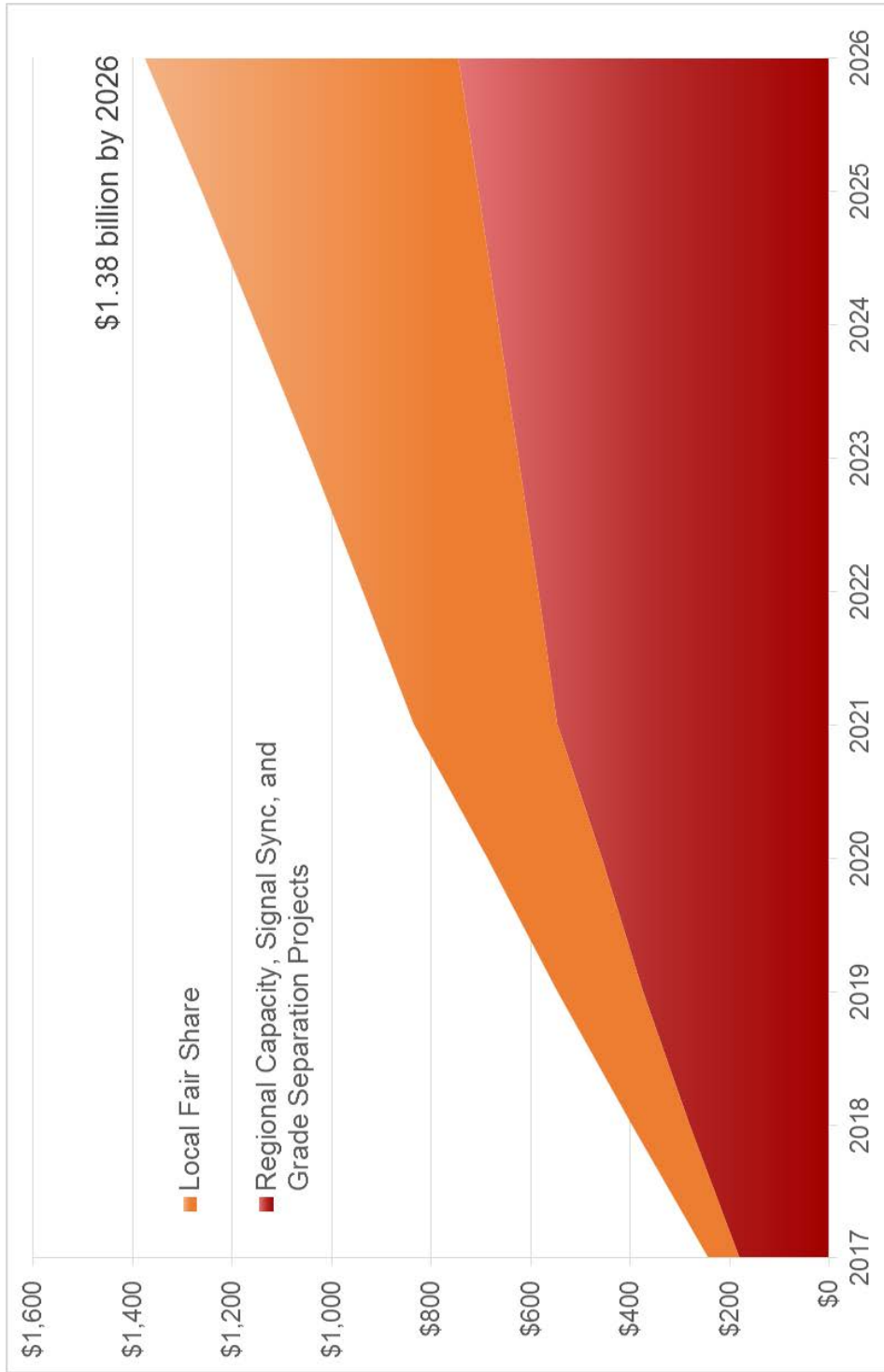
- R** Regional Capacity Program (not mapped)
 - Up to 300 miles of roadway improvements
 - Competitive Program with annual call for projects
 - OC Bridges Grade Separation Projects (●)

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

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

M2 Grade Separation Projects





Streets and Roads Program



Overview:

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

- Target M2 competitive program funds for streets with the worst traffic congestion.
- Maintain the value of investments in streets by synchronizing traffic signals and keeping pavement in good condition.
- Keep traffic moving on Orange County streets by completing key grade separations along the Burlington Northern Santa Fe Railway (BNSF) corridor in north Orange County.
- Consider all modes of travel when planning for added street capacity.

Next 10 Deliverables:

Allocate approximately \$1 billion in funding to improve the countywide network of streets and roads making them safer and more efficient. The Next 10 Plan for streets and roads recommends three major initiatives through 2026, consistent with the above framework:

1. Provide \$400 million in competitive funding to local jurisdictions to expand roadway capacity and synchronize signals (Project O and P).
2. Complete remaining three OC Bridges grade separation projects by late 2018/early 2019.
3. Provide \$630 million in flexible funding to local jurisdictions to help maintain aging streets or for use on other transportation needs as appropriate (Project Q).

O. Regional Capacity Program

Description:

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

Regional Capacity Program

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

OC Bridges

This portion of Project O includes funding for completion of seven over- or underpass grade separations that will eliminate car and train conflicts along the BNSF Railway (Orangethorpe corridor) in northern Orange County. These grade separations increase safety for everyone traveling through the intersections and eliminate the delays caused by trains.

Program Funding:

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

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

OC Bridges: \$346 million between 2017 and 2026. Pending Board approval on November 14, M2 is contributing a total of \$144.52 million.

Status:

To date, OCTA has awarded Project O funds through six competitive RCP calls for projects, amounting to approximately \$231 million. It is anticipated that there will be an additional 10 calls for projects between 2017 and 2026.

To date, four of the seven planned grade separation projects are complete (Placentia, Kraemer, Orangethorpe, and Tustin/Rose). The remaining three are under construction, with one expected to be complete in 2017 (Lakeview), and the other two to be complete in late 2018 (Raymond and State College).

Present Day:

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

Benefits:

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

O. Regional Capacity Program

better traffic flow and a more efficient transportation system.

External Funding:

Local agencies are required to provide a 50 percent minimum local match. Matching funds may be reduced contingent on participation in pavement and signal programs, as well as use of non-M2 funds for local match. While other external state and federal funding is not typically used for RCP projects, there have been seven projects to date which qualified for and received SLPP state funds, amounting to approximately \$22 million. OC Bridges funding includes 78 percent in external state, federal, and local funds.

Risks:

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

Based on updated OC Bridges cost-to-complete information, supplemental funding will be needed to complete the OC Bridges Program.

Related Projects:

Project P and Project Q.

Involved Agencies:

All local agencies (cities and County of Orange).

Assumptions:

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

References:

- Orange County Master Plan of Arterial Highways Guidelines
- Commuter Bikeways Strategic Plan
- Capital Funding Program Report – Local Road Project (June 2016)

P. Regional Traffic Signal Synchronization Program

Description:

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

Program Funding:

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

Status:

Including early efforts, OCTA and local agencies have implemented 38 corridor-based signal synchronization projects since 2008 for a cost of approximately \$24 million (including non-M2 funds). Another 49 projects are planned or underway. From 2017-2026, the entire network of signals is anticipated to have been retimed or optimized at least two times. This equates to more than 4,000 intersections retimed over a 10-year period (2017 to 2026).

Present Day:

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

Benefits:

Optimizing signal timing offers substantial benefits in reducing traffic delays and improving air quality. To date, OCTA has implemented optimized signal

timing on 38 corridors with 1,682 intersections covering 436 miles of roadway. On the average, each project resulted in a 13 percent travel time savings for corridor end-to-end travel, saving commuters time and money for a relatively low investment. Future projects may see comparable benefits when combined with capital improvements to reduce physical bottlenecks where appropriate.

External Funding:

Local agencies are required to provide a 20 percent minimum local match. Matching funds may be in-kind services. There may be future needs for more capital intensive investments as systems age. Projects started prior to the 2011 call for projects were funded with M1, CMAQ, and Prop 1B funds. The 2013 call for projects was partially funded with MSRC grant money. In all, external funding (not including funds provided by local agencies) contributed is approximately \$11.8 million.

Risks:

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

Related Projects:

Project O (RCP) and Project Q.

Involved Agencies:

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

Assumptions:

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

P. Regional Traffic Signal Synchronization Program

References:

- M2 Eligibility Guidelines
- OCTA's Comprehensive Business Plan
- Capital Funding Program Report – Local Road Project (June 2016)

Q. Local Fair Share Program

Description:

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

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

Program Funding:

\$630 million between 2017 and 2026.

Status:

Orange County streets are in generally good condition on average (with a pavement condition index of 77 based on a recent statewide report). As roadway pavement conditions deteriorate, however, the cost for repairs increases exponentially. For example, it costs 12 times less to maintain pavement in good condition compared to pavement that is at the end of its service life.

Present Day:

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

Benefits:

Investments in streets and roads save future costs, keeps traffic moving, and offers expanded travel choices.

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

External Funding:

In addition to \$600 million of M2 funds invested between 2017 and 2026.

Risks:

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

Related Projects:

Project O (RCP) and Project P.

Involved Agencies:

All local agencies (cities and County of Orange).

Assumptions:

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

References:

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



Transit Program

M2 Transit Projects



- R** **Metrolink Service Expansion Program**
 - Metrolink Grade Crossing Improvements (●)
 - High Frequency Metrolink Service
 - existing rail line/station (▬)
 - proposed station (●)

- S** **Transit Extensions to Metrolink**
 - OC Streetcar (—)

- T** **Metrolink Gateways** (▲)

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

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

- W** **Safe Transit Stops** (countywide, not mapped)

Transit Program



Overview:

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

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

Next 10 Deliverables:

The Next 10 Plan for transit recommends nine major initiatives through 2026, consistent with the above framework.

1. Complete six rail station improvements.
2. Maintain existing Metrolink service levels.
3. Expand Metrolink service from Orange County into Los Angeles County, contingent upon cooperation and funding participation from route partners.
4. Complete design, construction and begin operating the OC Streetcar.
5. Complete the Harbor Corridor Transit Study and the Orange County Transit Vision and bring recommendations to the Board on future transit connections for consideration.
6. Provide \$50 million to stabilize OCTA's bus fares for seniors and persons with disabilities, provide \$34 million for senior community transportation programs and \$34 million for senior non-emergency medical transportation services.
7. Support and provide grant opportunities for local agencies to implement effective local transit services.
8. Allocate \$9 million in funding to improve the top 100 busiest bus stops in Orange County.
9. Support the modernization of the OC Bus system to enhance the customer experience.

R. High Frequency Metrolink Service

Description:

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

Program Funding:

\$601 million between 2017 and 2026.

Status:

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

Early station improvements completed during the EAP include parking expansion projects at the Fullerton Transportation Center, Tustin Station, and Laguna Niguel/Mission Viejo Station, and safety repairs to the San Clemente Pier Station platform. Six rail station improvements are currently underway: Laguna Niguel/Mission Viejo Metrolink Station Americans with

Disabilities Act (ADA) ramps, Orange Transportation Center parking Structure, Placentia Metrolink Station, Anaheim Canyon Metrolink Station improvement project, Fullerton Transportation Center elevators, and San Clemente Pier Metrolink/Amtrak Station lighting. All projects are expected to be complete by 2020.

Completed rail corridor improvements include Control Point Stadium, the San Clemente Beach Trail Audible Warning System, and six Project Study Reports (PSRs) for potential grade separations along the LOSSAN corridor, including: Santa Ana Boulevard, Ball Road, Orangethorpe Avenue, Main Street, Grand Avenue, and 17th Street. Rail corridor improvements underway include: the Laguna Niguel to San Juan Capistrano Passing Siding project, San Juan Creek railroad bridge replacement, Control Point 4th Street, Railroad ROW Slope Stabilization Project, and continued implementation of Positive Train Control.

Present Day:

Most capital improvements required for expansion of Metrolink service during mid-day are complete. OCTA and partner agencies are working together with Metrolink and BNSF to implement improvements allowing expansion of service to Los Angeles. OCTA is also working with the Los Angeles-San Diego-San Luis Obispo Rail (LOSSAN) Corridor agencies to enact legislation to support better coordination of services in the corridor for greater integration.

Benefits:

Project R allows for sustained operation and enhanced capacity of

R. High Frequency Metrolink Service

Metrolink trains serving Orange County, providing a viable alternative to single-occupant vehicle travel, thereby reducing congestion on crowded roadways and freeways. During the peak hour, Metrolink carries the equivalent number of passengers that would fill one freeway lane on I-5.

External Funding:

State: STIP, Propositions 1A, 1B, and 116, totaling \$269.3 million.

Federal: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Federal Transit Administration (FTA) Sections 5307, 5309, and 5337, totaling \$327.1 million.

Local Other: Local funding from the cities as well as other entities is programmed for \$61.4 million.

Total Other Funding: \$657.8 million.

M1 also provided \$142.3 million.

Risks:

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

Related Projects:

Project S, Project T, and Project V.

Involved Agencies:

Metrolink, Caltrans, CTC, FTA, Los Angeles County Metropolitan Transportation Authority, BNSF, California Public Utilities Commission, California Office of Emergency Services, and all corridor agencies.

Assumptions:

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

References:

- OCTA Comprehensive Business Plan
- Capital Funding Program Report - Rail Project (September 2016)

S. Transit Extensions to Metrolink

Description:

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

Program Funding:

\$636.7 million between 2017 and 2026 (for fixed guideways and rubber tire).

Status:

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

Rubber Tire: One call for projects has been issued since 2012, providing approximately \$680,700 for three projects in the Cities of Anaheim and Lake Forest.

Present Day:

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

Benefits:

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

External Funding:

Fixed Guideways: External funds for two preliminary studies for the Cities of Anaheim and Santa Ana were funded with \$2.4 million in federal FTA Section 5307 and city local funds. Additional external funding for the OC Streetcar project includes state Cap and Trade Transit and Intercity Rail Capital Program (TIRCP), federal CMAQ, and FTA Sections 5307 and 5309, and anticipated New Starts funding, totaling \$297.91 million.

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

Risks:

As it relates to the OC Streetcar project, the New Starts federal capital funding grant program is a highly competitive and technically rigorous program. There is a consistent shortfall between the number of qualified projects

S. Transit Extensions to Metrolink

seeking New Starts and funding availability. As grantee, OCTA must demonstrate it has the technical, financial, and legal capacity to deliver the project on time and on budget, prior to the FTA allowing the project to move forward into engineering and subsequently into construction. To date, the OC Streetcar project has received high marks, which indicates a strong chance of receiving funds.

Related Projects:

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

Involved Agencies:

Local jurisdictions, CTC, Caltrans, California State Transportation Agency (CalSTA), California Public Utilities Commission (CPUC), and FTA.

Assumptions:

Fixed Guideways: Local agencies will be able to provide their required match and OCTA, as grantee, is applying for New Starts funding for the guideway project.

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

References:

- M2 Eligibility Guidelines
- Federal 5309 Funding Guidelines
- OCTA's Comprehensive Business Plan
- Capital Funding Program Report - Rail Project (September 2016)

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

Description:

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

Program Funding:

The cost for this program was \$233.6 million. Of this amount, \$230.4 million was dedicated to the Anaheim Regional Transportation Intermodal Center (ARTIC) project. M2 contributed \$35.3 million.

Status:

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

On December 14, 2015, the Board of Directors amended the M2 Ordinance No.3 and Transportation Investment Plan to officially close out Project T by considering the completion of ARTIC as fulfilling the intent of Project T, as the only

Orange County station on the planned High Speed Rail route. The remaining balance of M2 funds were then transferred to two projects in need: the Metrolink Service Expansion Program (part of Project R), and the Fare Stabilization Program for Seniors and Persons with Disabilities (part of Project U).

Present Day:

In partnership with transportation agencies, corridor cities, and stakeholders, the California High-Speed Rail Authority (CAHSRA) is building a High-Speed Rail (HSR) system that is planned to extend as far north as Sacramento and as far south as San Diego. The system will be constructed in two phases, with Phase 1 extending from San Francisco to Anaheim. Phase 2 will be constructed as two connecting lines extending north to Sacramento from Merced, and south to San Diego from Los Angeles via the Inland Empire. Phase 1 includes construction of the connection between Los Angeles Union Station and the Anaheim ARTIC station. Expanding service to Phase 1 stations is planned to take place in 2029.

Benefits:

Early completion of Project T allowed for early investment in the Orange County rail system to facilitate the ultimate integration of various high-speed rail systems within the County. This project will also provide convenient and efficient connections to planned or future high-speed systems for residents, workers, and visitors in Orange County.

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

External Funding:

State: STIP totaling \$29.2 million.

Federal: CMAQ, Regional Surface Transportation Program (RSTP), FTA Sections 5309 and 5337, FTA Bus Livability, and Highway Safety Improvement Program, totaling \$76.5 million.

M1 also provided \$87.8 million.

Risks:

None – project completed.

Related Projects:

California High-Speed Rail System

Involved Agencies:

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

Assumptions:

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

References:

- M2 Eligibility Guidelines
- California High-Speed Rail 2016 Business Plan
- Capital Funding Program Report - Rail Project (September 2016)

U. Expand Mobility Choices for Seniors and Persons with Disabilities

Description:

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

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

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

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

Cost:

\$119.2 million on a pay-as-you-go basis between 2017 through 2026.

Status:

Fare Stabilization: In December 2015, the Board approved an amendment to the M2 Ordinance No. 3 and

Transportation Investment Plan that backfilled a funding shortfall identified in this program with remaining Project T funds. At present, projected Fare Stabilization revenues are expected to be solvent through the life of the M2 program.

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

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

Present Day:

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

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

The SNEMT fills a gap in senior transportation services, as trips are often provided to seniors who do not qualify for OCTA ACCESS service, or to seniors whose advanced age or

U. Expand Mobility Choices for Seniors and Persons with Disabilities

disposition make it difficult to use ACCESS service. Contracting with social service agencies to provide SNEMT services allows this program to provide enhanced service elements beyond the requirements of ACCESS, a paratransit service that complements OCTA's fixed route bus service and is provided to comply with ADA.

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

External Funding:

Cities contribute a 20 percent match to their SMP services. A variety of funding sources are used by cities for their SMP match requirement, including general fund, Community Development Block Grants, sponsorships, advertising revenue, and administrative in-kind resources. The County of Orange utilizes primarily TSR funds to meet their maintenance of effort (MOE) requirement.

Risks:

Cities must provide matching funds for SMP.

Related Projects:

County of Orange SNEMT

Involved Agencies:

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

Assumptions:

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

References:

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

V. Community Based Circulators

Description:

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

Program Funding:

\$51.9 million on a pay-as-you-go basis between 2017 through 2026. Of this amount, a minimum of \$9 million will be available for new calls.

Status:

To date, the Board has approved two rounds of funding, totaling over \$36.8 million for 22 projects and 7 planning grants, located in the Cities of Anaheim, Costa Mesa, Dana Point, Fountain Valley, Garden Grove, Huntington Beach, Irvine, La Habra, Lake Forest, Laguna Beach, Laguna Niguel, Mission Viejo, Newport Beach, Placentia, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Tustin, and Westminster.

Present Day:

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

Benefits:

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

External Funding:

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

Risks:

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

Related Projects:

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

Involved Agencies:

OCTA and 19 participating cities

Assumptions:

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

References:

- M2 Eligibility Guidelines
- Project V Guidelines (under development)
- OCTA's Comprehensive Business Plan

W. Safe Transit Stops

Description:

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

Cost:

\$8.8 million on a pay-as-you-go basis between 2017 through 2026.

Status:

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

Project W Guidelines were presented to the Board on March 10, 2014. Based on October 2012 ridership data (daily weekday passenger boardings), OCTA staff identified 15 cities eligible to receive Project W funding for city-initiated bus stop improvements. For the first call for projects, seven cities applied for funding and the Board approved up to \$1.2 million for 51 projects. Upgrades to 13 of the busiest stops in the Cities of Brea, Costa Mesa, Irvine, and Westminster have been completed to date, with improvements underway for an additional 30 stops in the City of Santa Ana. To date, \$370,000 has been contributed towards an OCTA-initiated improvement, such as a mobile

ticketing application that will make it more convenient to purchase bus passes, obtain trip information, and board buses using smart phone devices to display bus passes as proof of payment. The app was recently launched for use on special OC Fair and Express Bus service, and will be expanded to fixed route and college pass users soon. In 2017, the app will be available for seniors and persons with disabilities.

Present Day:

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

Benefits:

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

External Funding:

None. These projects are funded by M2 only.

Risks:

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

OCTA-initiated: Purchased passes are saved to customers' mobile devices to avoid data/service connection issues, however digital passes are not accessible without battery power. While

W. Safe Transit Stops

mobile capabilities are a strong incentive to use OCTA services, customers in need of on-demand services will likely utilize Uber and Lyft real-time pick-up services as opposed to waiting for fixed-route, scheduled bus service.

Related Projects:

Not Applicable.

Involved Agencies:

All local agencies (cities and the County of Orange)

Assumptions:

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

References:

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





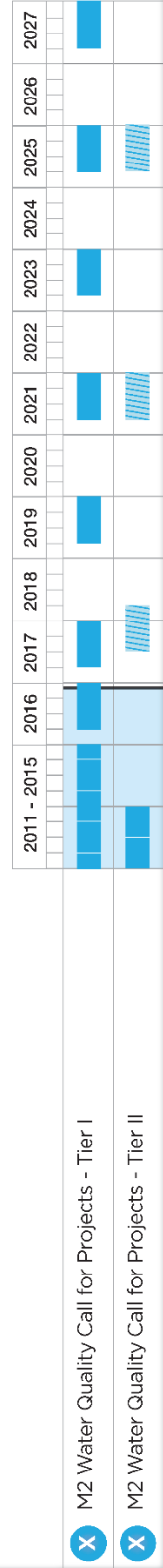
Environmental Cleanup Program



NEXT 10
DELIVERY PLAN

M2 Environmental Cleanup Grants and Call for Projects

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



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

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

Environmental Cleanup Program



Overview:

The Environmental Cleanup Program (Project X) allocates approximately \$284 million toward improving overall water quality in Orange County from transportation-related pollution. Project X was approved by Orange County voters under the M2 half-cent sales tax for transportation improvements in 2006.

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

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

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

Next 10 Deliverables:

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

1. Protect Orange County beaches by removing 25 tons* of trash (during the ten year period) from entering waterways and inlets that ultimately lead to the ocean.
2. Work with the Environmental Cleanup Allocation Committee to develop the next tiers of water quality funding programs with a goal of providing up to \$40 million of grants to prevent the flow of trash, pollutants and debris into waterways from transportation facilities. In addition, focus on improving water quality on a regional scale that encourages partnerships among the local agencies as part of the Environmental Cleanup Program (Project X).

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

X. Environmental Cleanup Program

Description:

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

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

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

Cost:

Up to \$40 million will be available for the Tier 1 and Tier 2 grants funding programs over a ten-year period between 2017 and 2026, on a pay-as-you-go basis.

It is anticipated that there would be more frequency of calls for projects under the Tier 1 program, possibly on a biennial basis. Depending on the availability of

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

Status:

To date, the Board has awarded approximately \$17 million to fund 138 Tier 1 projects in 33 cities and the County of Orange, for the first six calls for projects. The Board has also awarded approximately \$28 million for 22 Tier 2 projects in 12 cities and the County of Orange.

Present Day:

The seventh Tier 1 call for projects is anticipated to be released in spring 2017 for approximately \$2.8 million. The timing and amount of the next Tier 2 calls for projects will be determined based on the availability of cash flow and project readiness.

Benefits:

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

External Funding:

Local agencies are required to provide a 25 percent (Tier 1) and 50 percent (Tier 2) minimum local match. Tier 2 matching funds may be reduced, depending on project readiness and operations and maintenance above the ten-year minimum requirement.

Risks:

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

X. Environmental Cleanup Program

Related Projects:

Not Applicable.

Involved Agencies:

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

Assumptions:

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

References:

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



Appendix

Next 10 Plan Funding Assumptions



To determine the status of the M2 program, staff developed cash flows for the Next 10 Plan for each of the program elements to test whether commitments provided to the voters as part of the M2 approval in November 2006 remain achievable. The Next 10 Plan cash flow will continue to be monitored and will be updated as major conditions change. The revenue assumptions were based on the latest M2 revenue forecast methodology approved by the Board on March 28, 2016. Additionally, the Next 10 Plan assumes availability of a viable amount of discretionary federal and/or state funds from 2017 to 2041, and makes specific assumptions about near term grants such as new starts, cap-and-trade, TIFIA financial assumptions, and net excess 91 Express Lanes revenues for eligible projects. Revenues and expenses were merged into a high-level cash flow model that will be subsequently refined in the upcoming plan of finance. Bond assumptions were also included to address projected negative ending balances by year (compared to a pay-as-you-go scenario) in the freeway program. Bond assumptions were constrained to minimum debt coverage ratios. Details on assumed revenues, costs, and debt service are provided below.

Freeway Program

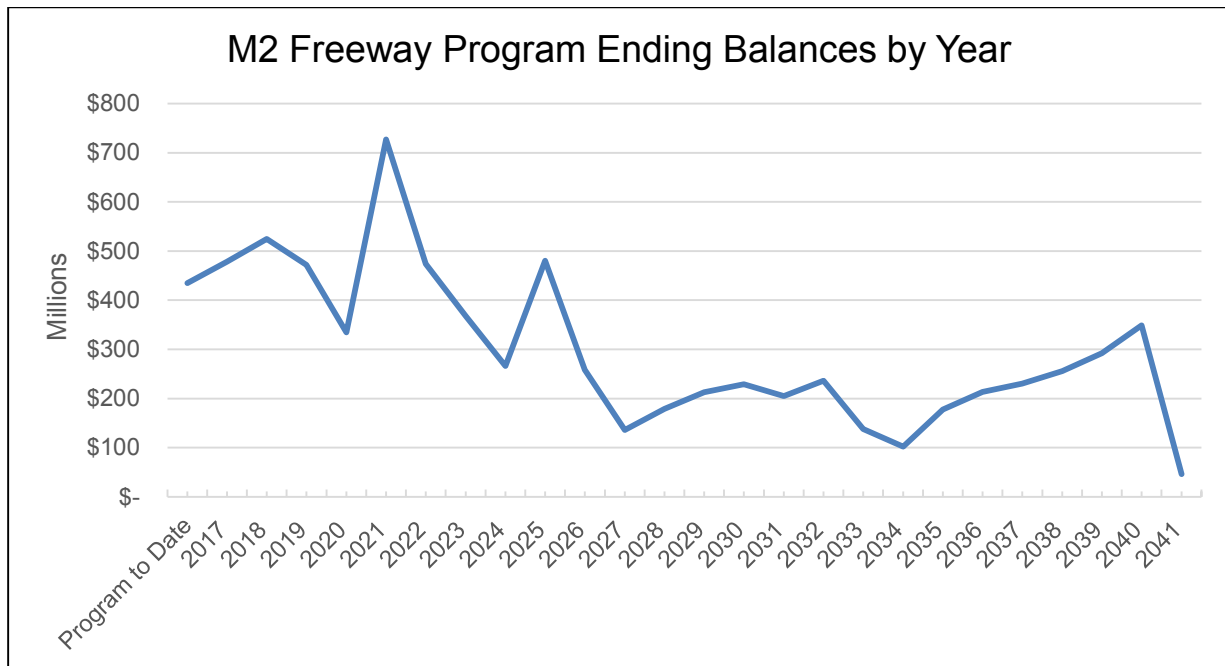
Revenues for the M2 Freeway Program assumed a proportional share (approximately 41 percent) of annual M2 revenue. From inception to 2026, the Freeway Program would receive approximately \$2.069 billion in M2 revenue, \$1.256 billion in bond proceeds (including \$95.3 million in prior bond proceeds), and \$1.054 billion in state/federal grants (\$1003.6 billion of which is already programmed), \$175.1 million in net excess 91 Express Lanes revenue for eligible projects, \$108.3 million in interest, and \$20 million transferred in from M1 for a total of \$4.927 billion in total revenue. Costs for the same period would total \$4.668 billion. The plan assumes two new bond issuances between 2021 and 2026. Bond issues (treated as revenue source for cash flow purposes) would exceed the forecasted freeway program shortfall since debt service payments follow each bond issue. Bonding would be constrained to legal debt coverage ratios, and the Plan of Finance will refine all bond assumptions.

For the Next 10 Plan Freeway Program development, forecasted revenues and costs through 2041 were also tested. This effort was conducted to ensure the complete M2 Freeway Program could be delivered consistent with commitments provided to the voters as part of M2 approval in November 2006. For ready-to-go projects (projects currently in environmental or final design), project schedules and costs were based on data provided by OCTA's Project Controls Department. For projects that have not yet entered the environmental phase, conceptual estimates were prepared based on a scoring of congestion relief, project readiness, and cost escalation risks (associated with project delays) and escalated to YOE dollars (with schedules and costs constrained to ending balances by year). These future projects may be advanced based on revenue availability. The table below summarizes revenues and costs assumed in the M2 Freeway Program through 2041 (in YOE dollars).

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

(Millions of Dollars; Year of Expenditure)

M2 Freeway Project	M2 Projected Revenue <u>A</u>	Programmed Other Revenue <u>B</u>	Estimated Costs (YOE) <u>C</u>	Project Revenues - Costs <u>D = A + B - C</u>
Project A (I-5, SR-55 to SR-57)	519.74	31.75	37.06	514.43
Project B (I-5, SR-55 to "Y")	331.97	8.00	720.87	(380.90)
Project C (I-5, South of "Y")	693.35	362.82	714.34	341.83
Project D (I-5 interchanges)	285.30	83.03	193.29	175.05
Project E (SR-22 access improvements)	132.70	-	-	132.70
Project F (SR-55 improvements)	404.73	63.80	603.28	(134.75)
Project G (SR-57 improvements)	286.08	108.80	363.43	31.45
Project H (SR-91, I-5 to SR-57)	154.82	27.23	61.26	120.78
Project I (SR-91, SR-57 to SR-55)	460.58	39.27	501.30	(1.45)
Project J (SR-91, SR-55 to OC/RC line)	389.47	138.02	429.86	97.63
Project K (I-405, I-605 to SR-55)	1,186.33	135.42	1,425.00	(103.24)
Project L (I-405, SR-55 to I-5)	353.53	8.00	323.60	37.93
Project M (I-605 access improvements)	22.12	-	29.60	(7.48)
Project N (Freeway Service Patrol)	165.87	-	165.86	0.02
Mitigation Program @ 5%	283.51	-	285.19	(1.69)
Freeway Program Economic Uncertainties	-	-	475.00	(475.00)
Subtotal M2 Revenues and Costs	5,670.11	1,006.13	6,328.94	347.31
Projected Bond Interest Costs*			716.67	
Column D: Current Projected Balance	5,670.11	1,006.13	7,045.60	(369.35)
Additional Revenue to Delivery Program				
-- TIFIA Loan		245.40		
-- 91 Excess Revenues**		463.38	463.38	
-- External Revenue (projected, not programmed)		150.00		
-- Transfer of M1 funds		20.00		
Column D: 2041 Projected Balance	5,670.11	1,884.92	7,508.98	46.05



*Total debt service less bond proceeds and investment earnings

**Total utilization of 91 excess revenues is approximately \$463.4 million. This amount is projected to be repaid by 2041, resulting in an ending balance of zero.

These assumptions result in several points in the program with low year-by-year ending balances. Although these are positive balances, the margin leaves minimal flexibility to respond to economic uncertainties, or project scope changes and schedule delays that may result in project cost increases. The tight variance between the costs and funding plan will require that project scopes and schedules be carefully managed and closely monitored given the small margin of safety.

In summary, the analysis shows that despite the economic downturn, the full scope of the M2 program can be delivered as promised with the inclusion of net excess 91 Express Lanes revenue. Although the full program (through 2041) is deliverable, the freeway mode remains tight.

Streets and Roads

The M2 Streets and Roads Program consists of Project O (Regional Capacity Program), Project P (Regional Traffic Signal Synchronization Program), and Project Q (Local Fair Share Program). Combined M2 revenues for these programs assume a proportional share (approximately 30.52 percent) of annual M2 revenue. From inception (2011) to 2026, the Streets and Roads Program would receive approximately \$1.540 billion in M2 revenue, \$104.6 million in prior bond proceeds, and \$434.2 million in state/federal grants (primarily for the OC Bridges Program), for a total of \$2.079 billion in total revenue. Costs for the same period would total approximately \$2.369 billion (including debt service payments against prior bonding). While the overall Streets and Roads Program balance by 2026 runs a total deficit of \$290.8 million, the program is solvent by 2041. There are several years where internal borrowing is necessary to address negative ending balances.

Transit Program

The M2 Transit Program consists of Project R (High Frequency Metrolink Service), Project S (Transit Extensions to Metrolink), Project T (Metrolink Gateways), Project U (Seniors/Disabled Persons Mobility Programs), Project V (Community Based Transit/Circulators), and Project W (Safe Transit Stops). Revenues for the M2 Transit Program assume a proportional share (approximately 23.85 percent) of annual M2 revenue. From inception to 2026, the Transit Program would receive approximately \$1.203 billion in M2 revenue, \$51.7 million in prior bond proceeds, \$593.5 million in external revenue, and \$64.1 million in interest for a total of \$2.044 billion. Expenses for this same time period total \$1.864 billion. With the exception of prior bonds issued for Project T, the Next 10 Plan assumes that annual proportional revenues will be adequate to meet program cash flow requirements. The cash flow includes the assumption of \$148.96 million in Federal New Starts funding, \$53.03 million in Federal CMAQ, and \$25.52 million in State Cap-and-Trade for the OC Streetcar project. The un-programmed balance for Project S allows for capacity of an additional future transit connection project.

Environmental Cleanup Program

The M2 Environmental Cleanup Program consists of Project X (Cleanup Highway and Street Runoff that Pollutes Beaches). Revenues for the M2 Environmental Cleanup Program assume 2 percent of gross annual M2 sales tax revenue. From inception to 2026, the Environmental Cleanup Program would receive approximately \$103.3 million in M2 revenue. Expenses for this same time period total \$95.5 million. Conservation of water quality improvements are on schedule with significant accomplishments at or above the planned objectives goal.



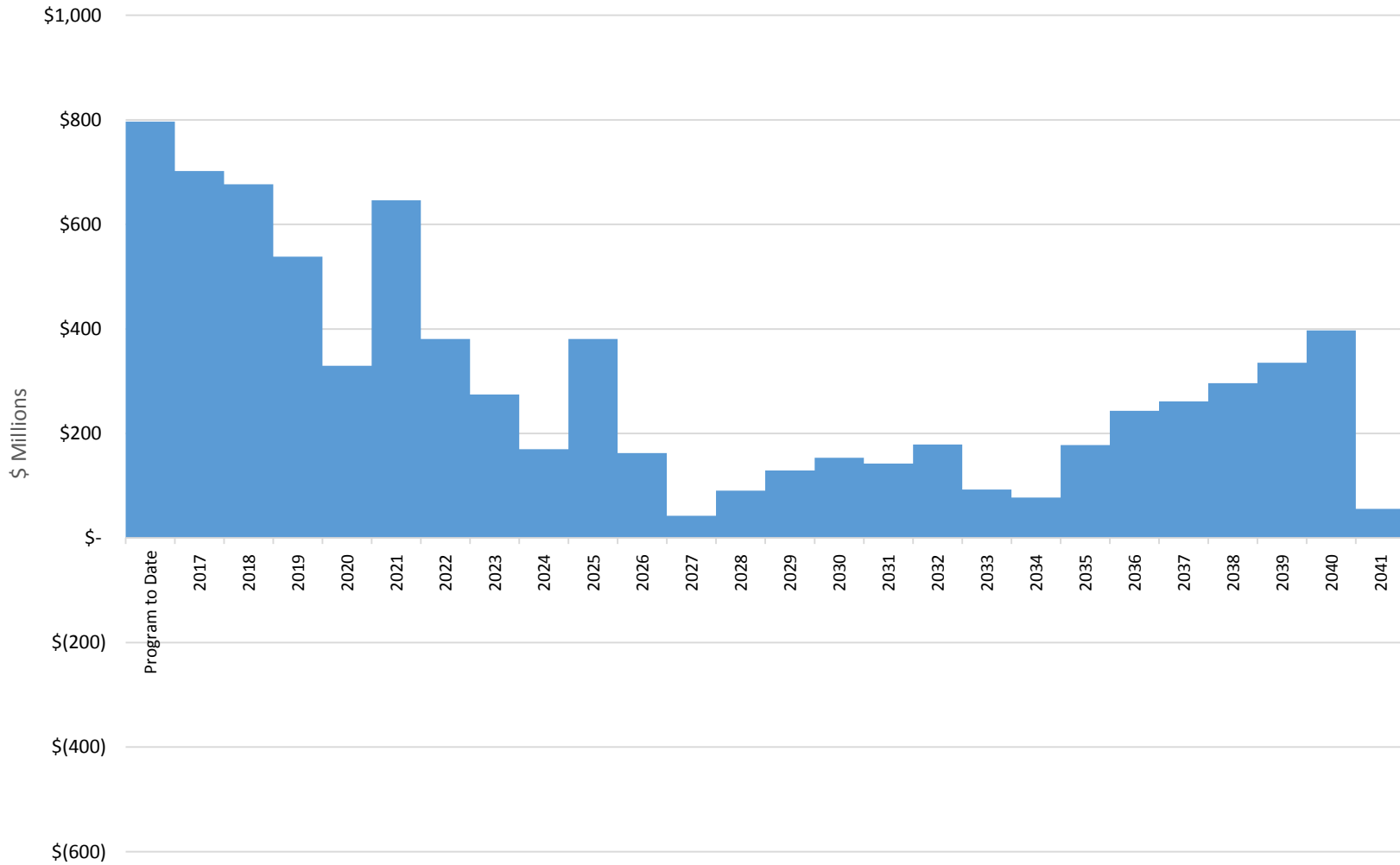
ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Delivery Plan - Next 10

Attachment E

Measure M2 Program Cash Balance With Excess Revenues

Measure M2 Sales Tax Revenue Forecast of \$14.2 Billion





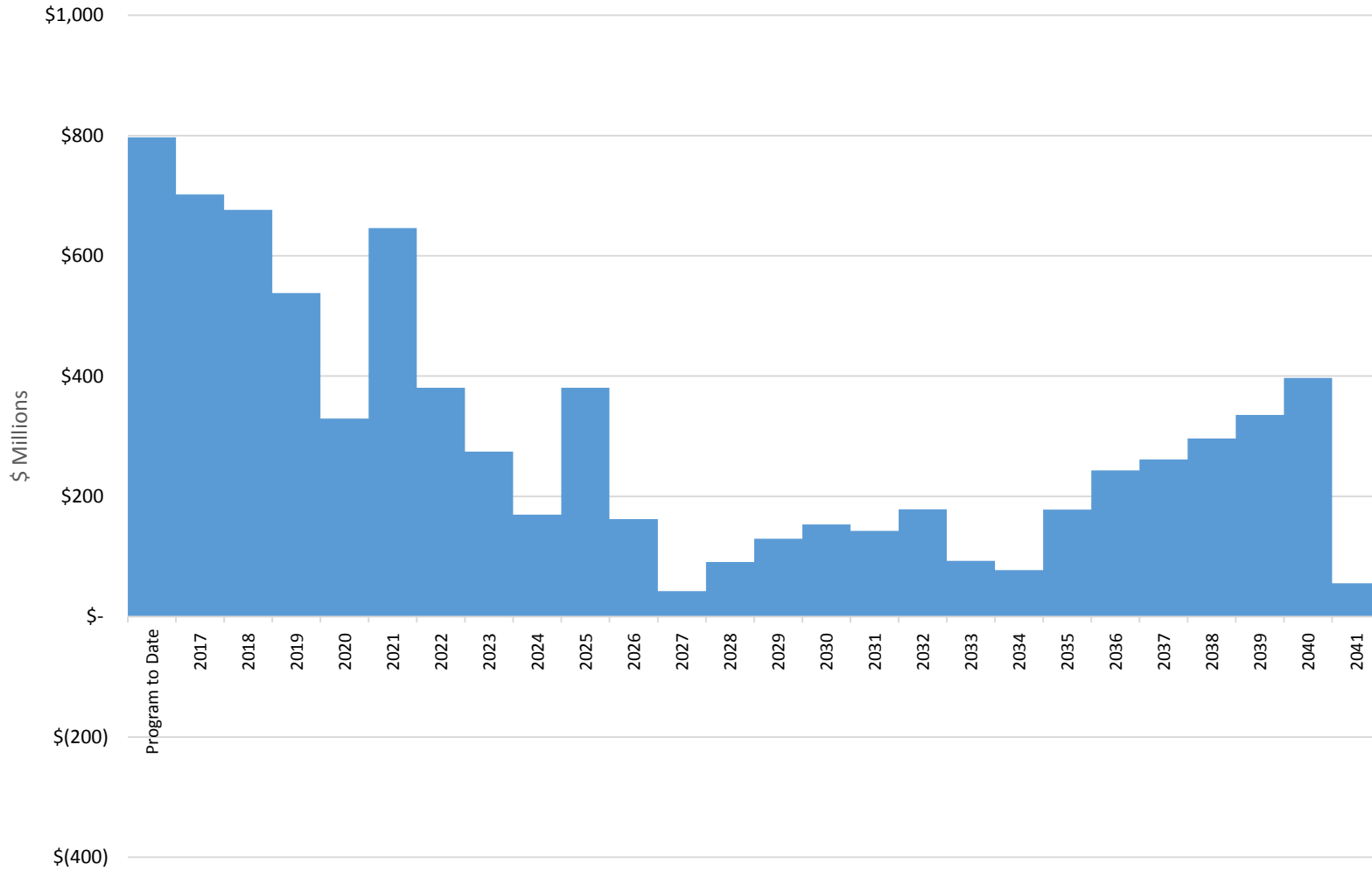
ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Delivery Plan - Next 10

Attachment E - Revised

Measure M2 Program Cash Balance

M2 Sales Tax Revenue Forecast of \$14.2 Billion



*Information
Items*



COMMITTEE TRANSMITTAL

October 24, 2016

To: Members of the Board of Directors
From: Laurena Weinert, Clerk of the Board
Subject: Financial and Compliance Audits of Eight Measure M2 Comprehensive Transportation Funding Program Projects

Finance and Administration Committee Meeting of October 12, 2016

Present: Directors Hennessey, Jones, Katapodis, Miller, Spitzer, and Steel
Absent: Directors Do and Pulido

Committee Vote

This item was passed by the Members present.

Director Hennessey was not present to vote on this item.

Committee Recommendations

- A. Receive and file financial and compliance audits of eight Comprehensive Transportation Funding Programs projects.
- B. Direct staff to recover \$4,500 from the City of Laguna Niguel.
- C. Direct staff to implement recommendation provided in the supplemental memo from Internal Audit related to the ongoing monitoring of local agencies' operations and maintenance expenditures under the Environmental Cleanup Program.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Staff Report



October 12, 2016

To: Finance and Administration Committee

From: Darrell Johnson, Chief Executive Officer

Janet Sutter, Executive Director
Internal Audit Department

Subject: Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Programs Projects

Overview

Audits have been completed of eight projects funded through the Measure M 2 Comprehensive Transportation Funding Programs. The audits were performed by external audit firm B CA Watson Rice LLP. The auditors recommended that management recover \$4,500 from the City of Laguna Niguel to reimburse an overpayment resulting from a calculation error in the city's final cost claim. Also, the auditors recommended that the City of Laguna Niguel enhance controls to ensure the accuracy of final cost claims, retention of appropriate supporting documentation, and proper review and coding of invoices.

The Internal Audit Department issued a supplemental recommendation to management to include procedures for monitoring the progress of local agencies' match expenditures under the Environmental Cleanup Program, which allows cities to meet match obligations through operations and maintenance expenditures up to ten years after project completion. Internal Audit also recommended that management report shortfalls to the Board of Directors in semi-annual review reports.

Recommendations

- A. Receive and file financial and compliance audits of eight Comprehensive Transportation Funding Programs projects.
- B. Direct staff to recover \$4,500 from the City of Laguna Niguel.

- C. Direct staff to implement recommendation provided in the supplemental memo from Internal Audit related to the ongoing monitoring of local agencies' operations and maintenance expenditures under the Environmental Cleanup Program.

Background

Measure M2 (M2) includes a number of competitive grant programs that provide funding for regional streets and roads projects. These programs allocate funds through a competitive process and target projects that improve traffic flow by considering factors such as the degree of congestion relief, cost effectiveness, and project readiness, among other factors. The Comprehensive Transportation Funding Programs (CTFP) serves as the mechanism that the Orange County Transportation Authority (OCTA) uses to administer the transit as well as the local streets and roads funding programs.

The Fiscal Year (FY) 2015-16 Internal Audit Plan included CTFP project audits. The Internal Audit Department (Internal Audit) engaged external audit firm BCA Watson Rice LLP (BCA) to conduct audits of eight projects closed during the period July 1, 2014 through March 31, 2016.

Discussion

Selection of Projects

Internal Audit obtained from the Planning Division a listing of all projects closed from July 1, 2014 through March 31, 2016. From this population, Internal Audit selected eight projects for audit.

Statistics for the population of projects closed and the sample selected for audit are as follows:

Total allocation amounts of projects in population:	\$ 29,718,566
Total allocation amounts of projects selected for audit:	18,879,860
Percentage selected for audit:	64%

The objectives of the audits were to determine whether the projects were completed in accordance with the program guidelines, applications, and agreements, costs charged to the project were eligible, reasonable, and allocable, records and documentation were adequately maintained, jurisdictions complied with competitive contracting requirements, and adequate accounting and cash management procedures were employed.

Auditor Findings and Recommendations

The City of Laguna Niguel (Laguna Niguel) made an error in the calculation of eligible change order costs. Instead of limiting costs to 10 percent of construction costs, or \$201,098, Laguna Niguel identified eligible change order costs of \$210,098. As a result, the claim for CTFP funding was overstated by \$4,500. The auditors recommended that OCTA management recover the \$4,500 in over-paid CTFP funds and management agreed (Attachment A).

The auditors also noted that Laguna Niguel did not have signed contract change orders for three construction change orders. Further, Laguna Niguel paid in excess of authorized amounts on another three construction change orders. However, after excluding these unsupported costs, the adjusted change order cost pool still exceeded the amount claimed by Laguna Niguel. In addition, the auditors identified costs included in the construction management and support cost pool that did not relate to the project. However, after excluding the non-project related costs, the adjusted construction management and support cost pool still exceeded the amount claimed by Laguna Niguel. Since actual costs exceeded the amounts claimed, no reimbursement of funding was necessary. However, the auditors recommended Laguna Niguel enhance controls to ensure the accuracy of final cost claims, retention of appropriate supporting documentation, and proper review and coding of invoices. Laguna Niguel responded that its current accounting procedures and recommendations ensure very tight controls on project dollars spent and tracked.

In addition to the erroneous posting of project costs, the auditors identified 18 journal entries representing corrections to project costs coded in error. The auditors recommended that Laguna Niguel enhance controls to ensure proper coding and review of invoices. Laguna Niguel responded that new procedures were implemented in FY 2014-15 that require departments to properly code invoices and obtain at least two approvals.

Audits of selected projects by the cities of Anaheim, Fullerton, Newport Beach, Tustin, Westminster, and Huntington Beach, and by the County of Orange were also performed. No recommendations were made related to these audits. See Attachments B, C, D, E, F, G, and H.

Supplemental Recommendation

One of the projects audited was awarded under the Environmental Cleanup Program (ECP). As a match, the city pledged project operations and maintenance expenditures over the next 10 years; however, actual

expenditures in the first six months are much lower than the prorated share of the pledge estimate.

The ECP guidelines require local agencies to report their expenditures as part of the semi-annual review process, and OCTA staff tracks reported expenditures on internal spreadsheets. However, procedures for tracking and reporting the local agencies' expenditures and match progress have not been identified in the semi-annual review manual. As a supplemental recommendation at Attachment I, Internal Audit recommends that OCTA management include procedures for monitoring the progress of local agencies' operations and maintenance expenditures in the semi-annual review manual. In addition, Internal Audit recommended that procedures require shortfalls in match obligations to be reported to the Board of Directors through the semi-annual review reports. OCTA management agreed to update the semi-annual review manual accordingly.

Summary

Audits have been completed of eight projects funded through the CTFP. The external auditor, BCA, made recommendations to OCTA and Laguna Niguel and Internal Audit issued a supplemental recommendation to OCTA management.

Attachments

- A. Comprehensive Transportation Funding Programs Financial and Compliance Audit, City of Laguna Niguel, Crown Valley Parkway (Cabot Road to Forbes Road) Widening Project (Construction), Project No. 11-LNIG-ACE-3534
- B. Comprehensive Transportation Funding Programs Financial and Compliance Audit, City of Anaheim, Tustin Avenue and La Palma Avenue Intersection Project (Construction), Project No. 11-ANAH-ICE-3508
- C. Comprehensive Transportation Funding Programs Financial and Compliance Audit, City of Fullerton, Bastanchury Road Corridor Traffic Signal Synchronization Project (Implementation), Project No. 11-FULL-TSP-3549
- D. Comprehensive Transportation Funding Programs Financial and Compliance Audit, City of Newport Beach, Newport Boulevard Widening from Via Lido to 30th Street (Right-of-Way), Project No. 13-NBCH-ACE-3654

- E. Comprehensive Transportation Funding Programs Financial and Compliance Audit, City of Tustin, Tustin Ranch Road Extension Project (Construction), Project No. 12-TUST-ACE-9004
- F. Comprehensive Transportation Funding Programs Financial and Compliance Audit, City of Westminster, Bolsa Chica Road (Duncannon Avenue to Old Bolsa Chica Road) Widening Project (Construction), Project No. 12-WEST-ACE-3602
- G. Comprehensive Transportation Funding Programs Financial and Compliance Audit, City of Huntington Beach, Huntington Beach Catch Basin Retrofit Project (Construction), Project No. 14-HBCH-ECP-3742
- H. Comprehensive Transportation Funding Programs Financial and Compliance Audit, County of Orange, La Pata Avenue between Ortega Highway and Calle Saluda and Del Rio Extension Project (Engineering), Project No. 11-ORCO-ACE-3521
- I. Memo to Kia Mortazavi from Serena Ng dated September 29, 2016, Supplemental Recommendation - Comprehensive Transportation Funding Programs Audits

Prepared by:



Serena Ng
Senior Manager, Internal Audit
714-560-5938

Approved by:



Janet Sutter
Executive Director, Internal Audit
714-560-5591



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment A

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Comprehensive Transportation Funding Programs Financial and Compliance Audit

**City of Laguna Niguel
Crown Valley Parkway (Cabot Road to Forbes Road) Widening Project
(Construction)
Project No. 11-LNIG-ACE-3534**



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**COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS
FINANCIAL AND COMPLIANCE AUDIT**

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INDEPENDENT AUDITORS' REPORT ON FINANCIAL AND COMPLIANCE AUDIT

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have completed a financial and compliance audit of the Crown Valley Parkway (Cabot Road to Forbes Road) Widening Project (Project) of the City of Laguna Niguel (City), Project Number 11-LNIG-ACE-3534 awarded by the Orange County Local Transportation Authority (OCLTA) under the Comprehensive Transportation Funding Programs (CTFP). The objectives of this audit were to determine whether 1) costs charged to the project were eligible, reasonable and allocable, 2) the City complied with competitive contracting requirements, 3) the City's accounting and cash management procedures were adequate to ensure that project funds were used only for costs chargeable to the project and were tracked separately within the accounting system, 4) the project was completed in accordance with the approved application and CTFP agreement, 5) all records and documentation related to the project were adequately maintained, 6) a separate fund was set up by the City to account for Measure M2 transactions and expenditures, and 7) the City's use of interest earnings on CTFP funds was in compliance with the Measure M Ordinance.

We conducted our audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESULTS IN BRIEF

We found that:

- The City overstated Project costs by \$9,000, resulting in an over-payment of CTFP funding of \$4,500.
- The City has a competitive procurement procedure in place for the selection of contractors, and adhered to this procedure for the selection of contractors under the Project.
- The City's accounting and cash management procedures and tracking of project costs at the project management level could be improved.
- The Project was completed in accordance with the CTFP agreement.
- The City established and maintained a separate cost center for the Project.
- The City submitted the Final Report to OCLTA within 180 days of the Project completion date, as required by CTFP guidelines.

BACKGROUND

The OCLTA provided funding to the City totaling \$1,278,907 for construction under Project No. 11-LNIG-ACE-3534 under the Arterial Capacity Enhancements program. The Project was to widen Crown Valley Parkway in the eastbound direction between Cabot Road and Forbes Road to add a fourth through lane and second left turn lanes from eastbound Crown Valley Parkway to northbound Forbes Road and westbound Crown Valley Parkway to southbound Forbes Road. Costs incurred for the Project totaled \$2,557,813 of which \$1,278,907 was funded by the CTFP under Project No. 11-LNIG-ACE-3534 and \$1,278,906 was funded by the City. The Project began in April 2012 and was completed on June 10, 2015. (See Attachment A for detailed results).

PROCEDURES PERFORMED

We performed the following procedures:

1. We reviewed the Project agreement to obtain an understanding of the Project and CTFP requirements.
2. We obtained and reviewed Project contract files to identify contract provisions and verify evidence of competitive bid procedures, reviewed City invoices, payments, and change order documents, and identified the date of contract completion.
3. We identified fund accounting procedures used by the City to account for Measure M2 revenues and expenditures.
4. We reviewed Project financial records to determine that proper accounting and cash management procedures were followed.
5. We obtained a detail listing of the Project's expenditures and judgmentally selected a sample for review. For the sample selected, we determined whether the expenditures were properly supported, approved, recorded, and consistent with the approved budget and in accordance with the contract and/or CTFP requirements.
6. For construction phase work performed by local agency personnel, we reviewed documents to determine if the decision that local agency personnel could perform the work most cost effectively or more timely than a contractor was documented in accordance with CTFP guidelines.
7. For right-of-way acquisition costs, we reviewed supporting documentation for acquisition costs charged to the Project, and we performed a review to ensure that excess parcels acquired with program funds were properly accounted for and any net proceeds from disposal of these parcels were returned to OCLTA in proportion to the amount of Measure M2 funds used in the purchase.
8. We reviewed Project expenditures to determine that the Project was completed in accordance with the CTFP application.

DETAILED RESULTS

Our audit disclosed the following:

Project Costs and City Documentation

The City incurred costs totaling \$2,557,813 for the Project. The Project funding consisted of CTFP funds of \$1,278,907 under Project No. 11-LNIG-ACE-3534 and \$1,278,906 from the City's other funds. Under the current CTFP Guidelines, construction change orders are limited to 10% of construction costs and construction management and support costs are limited to 15% of eligible project costs. Project costs reported by the City included construction costs of \$2,010,984, change order costs of \$210,098, construction management and support costs of \$301,647, project materials costs of \$7,467, and permits and fees costs of \$27,617.

The City made an error in the calculation of eligible change order costs. Instead of limiting costs to 10% of construction costs, or \$201,098, the City identified eligible change order costs of \$210,098. After correcting the error, we calculated an adjusted Project cost pool of \$2,548,813 and an adjusted CTFP funding amount of \$1,274,407. As a result, CTFP funding was over-paid by \$4,500.

In addition, the City did not have signed contract change orders for 3 of 11 construction change orders, totaling \$67,622. Also, payments related to another three change orders exceeded the authorized amounts by \$20,688. The City reported total construction change orders of \$366,926. After excluding \$88,310 of unsupported costs from total change orders, the adjusted change order pool of \$278,616 still exceeds the amount of change orders claimed by the City.

Testing of construction management and support costs identified Project costs of \$17,805 that did not relate to this Project. The City reported total construction management and support costs of \$606,605. After excluding the \$17,805 of non-Project related costs, the adjusted cost pool of \$588,800 still exceeds the amount of construction management and support costs claimed by the City.

Recommendation to OCLTA

We recommend that OCLTA management recover \$4,500 in over-paid CTFP funds.

OCLTA's Management Response

Planning staff will work with Finance staff to issue an invoice to the City for \$4,500 requesting CTFP funds back to OCTA.

Recommendation to the City

We recommend the City enhance controls to ensure the accuracy of final cost claims, retention of appropriate supporting documentation for Project costs, and proper review and coding of invoices.

City's Management Response

The City's current accounting procedures and recommendations ensure very tight controls on project dollars spent and tracked. The current and future project administrators will not show any discrepancies or misfiled information.

Compliance with Competitive Contracting Requirements

We reviewed documentation provided by the City evidencing that competitive contracting requirements were complied with.

Accounting and Cash Management Procedures

In addition to the erroneous posting of \$17,805 in Project costs, as noted above, we noted 18 journal entries representing corrections to erroneous coding of Project costs.

Recommendation

We recommend the City enhance controls to ensure proper coding and review of invoices.

City's Management Response

The City implemented new procedures in FY 14/15 to require departments to properly code invoices and obtain at least two approvals. Therefore, safeguards are in place to ensure full compliance with OCTA guidelines in the future.

Project Completion

The Project was completed on June 10, 2015 and the final report was submitted to OCLTA by the City on July 16, 2015, which is within 180 days after the project completion date.

Separate Project Fund

The City recorded costs of the Project in the City Capital Projects Fund. The City tracked the Project costs by using a separate project cost unit (#5000-12) within the City Capital Projects Fund.

LIMITATIONS AND RESTRICTIONS

This report is intended solely for the information and use of management and Board of Directors of the OCLTA and the City and is not intended to be and should not be used by anyone other than these specified parties.

BCA Watson Rice, LLP

Torrance, California
August 10, 2016

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY
 COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS

SCHEDULE OF AUDIT RESULTS

Cooperative No.: C-1-2771
Agency: City of Laguna Niguel
Project Title: Crown Valley Parkway (Cabot Road to Forbes Road) Widening Project
Project Status: Completed

<u>Project Number</u>	<u>CTFP Funding Provided</u>	<u>Matching¹ Required</u>	<u>Total Funds CTFP + Match</u>	<u>Costs Incurred²</u>	<u>Unused Fund Balance</u>	<u>Questioned Costs</u>
11-LNIG-ACE-3534	\$ 1,278,907	\$ 1,278,906	\$ 2,557,813	\$ 2,548,813	\$ -	\$ 9,000 ³

¹ A matching requirement of 50% of total project costs was required and met by the City.

² The City reported Project costs of \$2,557,813; however, we adjusted the Project costs downward to \$2,548,813 as discussed on Page 3.

³ The City overstated project costs by \$9,000, resulting in questioned costs of \$9,000 and an over-payment of CTFP funding of \$4,500.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment B

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Comprehensive Transportation Funding Programs Financial and Compliance Audit

**City of Anaheim
Tustin Avenue and La Palma Avenue Intersection Project
(Construction)
Project No. 11-ANAH-ICE-3508**



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**COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS
FINANCIAL AND COMPLIANCE AUDIT**

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INDEPENDENT AUDITORS' REPORT ON FINANCIAL AND COMPLIANCE AUDIT

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have completed a financial and compliance audit of the Tustin Avenue and La Palma Intersection Project (Project) of the City of Anaheim (City), Project Number 11-ANAH-ICE-3508 awarded by the Orange County Local Transportation Authority (OCLTA) under the Comprehensive Transportation Funding Programs (CTFP). The objectives of this audit were to determine whether 1) costs charged to the project were eligible, reasonable and allocable, 2) the City complied with competitive contracting requirements, 3) the City's accounting and cash management procedures were adequate to ensure that project funds were used only for costs chargeable to the project and were tracked separately within the accounting system, 4) the project was completed in accordance with the approved application and CTFP agreement, 5) all records and documentation related to the project were adequately maintained, 6) a separate fund was set up by the City to account for Measure M2 transactions and expenditures, and 7) the City's use of interest earnings on CTFP funds was in compliance with the Measure M Ordinance.

We conducted our audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESULTS IN BRIEF

We found that:

- Costs charged to the Project were reasonable, allocable, eligible, and adequately supported.
- The City has a competitive procurement procedure in place for the selection of contractors, and adhered to this procedure for the selection of contractors under the Project.
- The City's accounting and cash management procedures were adequate to ensure that Project funds were used only for costs chargeable to the Project.
- The Project was completed in accordance with the CTFP agreement.
- The City established and maintained a separate cost center for the Project.
- The City submitted the Final Report to OCLTA within 180 days of the Project completion date, as required by CTFP guidelines.

BACKGROUND

The OCLTA funded \$1,689,000 for Construction under Project No. 11-ANAH-ICE-3508 to the City under the Intersection Capacity Enhancements program. The Project was to widen and restripe approximately 2,200 feet along Tustin Avenue from Eagle Drive to the north and State Route 91 (SR-91) to the south, and approximately 1,600 feet along La Palma Avenue, which will relieve congestion along these roadways as well as at the westbound SR-91/Tustin Avenue freeway interchange. Costs incurred for the Project totaled \$10,277,751 of which \$1,689,000 was funded by the CTFP under Project No. 11-ANAH-ICE-3508 and \$8,588,751 was funded by the City. The Project began on April 16, 2013 and was completed on September 8, 2015. (See Attachment A for detailed results).

PROCEDURES PERFORMED

We performed the following procedures:

1. We reviewed the Project agreement to obtain an understanding of the Project and CTFP requirements.
2. We obtained and reviewed Project contract files to identify contract provisions and verify evidence of competitive bid procedures, reviewed City invoices, payments, and change order documents, and identified the date of contract completion.
3. We identified fund accounting procedures used by the City to account for Measure M2 revenues and expenditures.
4. We reviewed Project financial records to determine that proper accounting and cash management procedures were followed.
5. We obtained a detail listing of the Project's expenditures and judgmentally selected a sample for review. For the sample selected, we determined whether the expenditures were properly supported, approved, recorded, and consistent with the approved budget and in accordance with the contract and/or CTFP requirements.
6. For construction phase work performed by local agency personnel, we reviewed documents to determine if the decision that local agency personnel could perform the work most cost effectively or more timely than a contractor was documented in accordance with CTFP guidelines.
7. For right-of-way acquisition costs, we reviewed supporting documentation for acquisition costs charged to the Project, and we performed a review to ensure that excess parcels acquired with program funds were properly accounted for and any net proceeds from disposal of these parcels were returned to OCLTA in proportion to the amount of Measure M2 funds used in the purchase.
8. We reviewed Project expenditures to determine that the Project was completed in accordance with the CTFP application.

DETAILED RESULTS

Our audit disclosed the following:

Project Costs and City Documentation

The City incurred costs totaling \$10,277,751 for the Project. The Project funding consisted of CTFP funds of \$1,689,000 under Project No. 11-ANAH-ICE-3508 and \$8,588,751 from the City's other funds. We found that all costs charged to the Project were reasonable, allocable, and adequately supported.

Compliance with Competitive Contracting Requirements

We reviewed documentation provided by the City evidencing that competitive contracting requirements were complied with.

Accounting and Cash Management Procedures

The City established adequate controls to ensure that project funds were used only for approved Project costs. All costs charged to the Project were reviewed and approved by the Project Manager.

Project Completion

The Project was completed on September 8, 2015 and the final report was submitted to OCLTA by the City on December 11, 2015, which is within 180 days after the Project completion date.

Separate Project Fund

The City recorded costs of the Project in the Special Revenue M2 CTFP Fund (Fund 274). The City tracked the Project costs by using a separate project cost unit (K898) within the Special Revenue M2 CTFP Fund.

LIMITATIONS AND RESTRICTIONS

This report is intended solely for the information and use of management and Board of Directors of the OCLTA and the City and is not intended to be and should not be used by anyone other than these specified parties.

BCA Watson Rice, LLP

Torrance, California
July 29, 2016

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY
 COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS

SCHEDULE OF AUDIT RESULTS

Cooperative No.: C-1-2754
Agency: City of Anaheim
Project Title: Tustin Avenue and La Palma Avenue Intersection Project
Project Status: Completed

<u>Project Number</u>	<u>CTFP Funding Provided</u>	<u>Matching¹ Required</u>	<u>Total Funds CTFP + Match</u>	<u>Costs Incurred</u>	<u>Unused Fund Balance</u>	<u>Questioned Costs</u>
11-ANAH-ICE-3508	\$ 1,689,000	\$ 5,138,876	\$ 6,827,876	\$ 10,277,751	\$ -	\$ -

¹ A matching requirement of 50% of total project costs was required and met by the City.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment C

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Comprehensive Transportation Funding Programs Financial and Compliance Audit

**City of Fullerton
Bastanchury Road Corridor Traffic Signal Synchronization Project
(Implementation)
Project No. 11-FULL-TSP-3549**



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**COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS
FINANCIAL AND COMPLIANCE AUDIT**

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INDEPENDENT AUDITORS' REPORT ON FINANCIAL AND COMPLIANCE AUDIT

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have completed a financial and compliance audit of the Bastanchury Road Corridor Traffic Signal Synchronization Project (Project) of the City of Fullerton (City), Project Number 11-FULL-TSP-3549 awarded by the Orange County Local Transportation Authority (OCLTA) under the Comprehensive Transportation Funding Programs (CTFP). The objectives of this audit were to determine whether 1) costs charged to the project were eligible, reasonable and allocable, 2) the City complied with competitive contracting requirements, 3) the City's accounting and cash management procedures were adequate to ensure that project funds were used only for costs chargeable to the project and were tracked separately within the accounting system, 4) the project was completed in accordance with the approved application and CTFP agreement, 5) all records and documentation related to the project were adequately maintained, 6) a separate fund was set up by the City to account for Measure M2 transactions and expenditures, and 7) the City's use of interest earnings on CTFP funds was in compliance with the Measure M Ordinance.

We conducted our audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESULTS IN BRIEF

We found that:

- Costs charged to the Project were reasonable, allocable, eligible, and adequately supported.
- The City has a competitive procurement procedure in place for the selection of contractors, and adhered to this procedure for the selection of contractors under the Project.
- The City's accounting and cash management procedures were adequate to ensure that Project funds were used only for costs chargeable to the Project.
- The Project was completed in accordance with the CTFP agreement.
- The City established and maintained a separate cost center for the Project.
- The City submitted the Final Report to OCLTA within 180 days of the Project completion date, as required by CTFP guidelines.

BACKGROUND

The OCLTA provided the City funding totaling \$433,236 for construction under Project No. 11-FULL-TSP-3549 under the Regional Traffic Signal Synchronization Program. The Project was to improve and optimize signal synchronization timing along Bastanchury Road from Malvern Avenue to Valley View Avenue, which will improve the signal coordination along this heavily traveled corridor. Costs incurred for the Project totaled \$653,636 of which \$433,236 was funded by the CTFP under Project No. 11-FULL-TSP-3549 and \$220,400 was funded by the City. The Project began on December 6, 2011 and was completed on February 13, 2015. (See Attachment A for detailed results).

PROCEDURES PERFORMED

We performed the following procedures:

1. We reviewed the Project agreement to obtain an understanding of the Project and CTFP requirements.
2. We obtained and reviewed Project contract files to identify contract provisions and verify evidence of competitive bid procedures, reviewed City invoices, payments, and change order documents, and identified the date of contract completion.
3. We identified fund accounting procedures used by the City to account for Measure M2 revenues and expenditures.
4. We reviewed Project financial records to determine that proper accounting and cash management procedures were followed.
5. We obtained a detail listing of the Project's expenditures and judgmentally selected a sample for review. For the sample selected, we determined whether the expenditures were properly supported, approved, recorded, and consistent with the approved budget and in accordance with the contract and/or CTFP requirements.
6. For construction phase work performed by local agency personnel, we reviewed documents to determine if the decision that local agency personnel could perform the work most cost effectively or more timely than a contractor was documented in accordance with CTFP guidelines.
7. For right-of-way acquisition costs, we reviewed supporting documentation for acquisition costs charged to the Project, and we performed a review to ensure that excess parcels acquired with program funds were properly accounted for and any net proceeds from disposal of these parcels were returned to OCLTA in proportion to the amount of Measure M2 funds used in the purchase.
8. We reviewed Project expenditures to determine that the Project was completed in accordance with the CTFP application.

DETAILED RESULTS

Our audit disclosed the following:

Project Costs and City Documentation

The City incurred costs totaling \$653,636 for the Project. The Project funding consisted of CTFP funds of \$433,236 under Project No. 11-FULL-TSP-3549 and \$220,400 from the City's other funds. We found that all costs charged to the Project were reasonable, allocable, and adequately supported.

Compliance with Competitive Contracting Requirements

We reviewed documentation provided by the City evidencing that competitive contracting requirements were complied with.

Accounting and Cash Management Procedures

The City established adequate controls to ensure that project funds were used only for approved Project costs. All costs charged to the Project were reviewed and approved by the City Engineer.

Project Completion

The Project was completed on February 13, 2015 and the original final report was submitted to OCLTA by the City on July 29, 2015, which is within 180 days after the Project completion date. However, OCLTA requested a revised final report at a Semi Annual Review Meeting between OCLTA and City staff on February 29, 2016, and a revised final report was submitted by the City on April 26, 2016.

Separate Project Fund

The City recorded costs of the Project in the Special Revenue Capital Projects Fund (Fund 74). The City tracked the Project costs by using a separate project cost unit (46009) within the Special Revenue Capital Projects Fund.

LIMITATIONS AND RESTRICTIONS

This report is intended solely for the information and use of management and Board of Directors of the OCLTA and the City and is not intended to be and should not be used by anyone other than these specified parties.

BCA Watson Rice, LLP

Torrance, California
August 5, 2016

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY
 COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS

SCHEDULE OF AUDIT RESULTS

Cooperative No.: C-1-2763
Agency: City of Fullerton
Project Title: Bastanchury Road Corridor Traffic Signal Synchronization Project
Project Status: Completed

<u>Project Number</u>	<u>CTFP Funding Provided</u>	<u>Matching¹ Required</u>	<u>Total Funds CTFP + Match</u>	<u>Costs Incurred</u>	<u>Unused Fund Balance</u>	<u>Questioned Costs</u>
11-FULL-TSP-3549	\$ 433,236	\$ 130,727	\$ 563,963	\$ 653,636	\$ -	\$ -

¹ A matching requirement of 20% of total project costs was required and met by the City.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment D

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Comprehensive Transportation Funding Programs Financial and Compliance Audit

**City of Newport Beach
Newport Boulevard Widening from Via Lido to 30th Street
(Right-of-Way)
Project No. 13-NBCH-ACE-3654**



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**COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS
FINANCIAL AND COMPLIANCE AUDIT**

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INDEPENDENT AUDITORS' REPORT ON FINANCIAL AND COMPLIANCE AUDIT

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have completed a financial and compliance audit of the Newport Boulevard Widening from Via Lido to 30th Street Project (Project) of the City of Newport Beach (City), Project Number 13-NBCH-ACE-3654 awarded by the Orange County Local Transportation Authority (OCLTA) under the Comprehensive Transportation Funding Programs (CTFP). The objectives of this audit were to determine whether 1) costs charged to the project were eligible, reasonable and allocable, 2) the City complied with competitive contracting requirements, 3) the City's accounting and cash management procedures were adequate to ensure that project funds were used only for costs chargeable to the project and were tracked separately within the accounting system, 4) the project was completed in accordance with the approved application and CTFP agreement, 5) all records and documentation related to the project were adequately maintained, 6) a separate fund was set up by the City to account for Measure M2 transactions and expenditures, and 7) the City's use of interest earnings on CTFP funds was in compliance with the Measure M Ordinance.

We conducted our audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESULTS IN BRIEF

We found that:

- Costs charged to the Project were reasonable, allocable, eligible, and adequately supported.
- The City has a competitive procurement procedure in place for the selection of contractors, and adhered to this procedure for the selection of contractors under the Project.
- The City's accounting and cash management procedures were adequate to ensure that Project funds were used only for costs chargeable to the Project.
- The Project was completed in accordance with the CTFP agreement.
- The City established and maintained a separate cost center for the Project.
- The City submitted the Final Report to OCLTA within 180 days of the Project completion date, as required by CTFP guidelines.

BACKGROUND

The OCLTA provided funding to the City totaling \$3,048,413 for right-of-way acquisitions under Project No. 13-NBCH-ACE-3654 under the Arterial Capacity Enhancements program. The Project was to widen the roadway to accommodate a third northbound lane between 30th Street and 32nd Street and a third southbound lane between Via Lido and 32nd Street, which required full right-of-way acquisitions from two parcels on the west side of Newport Boulevard at the 32nd Street Intersections. Costs incurred for the Project totaled \$6,349,851 of which \$3,048,413 was funded by the CTFP under Project No. 13-NBCH-ACE-3654 and \$3,301,438 was funded by the City. The Project began in May 2013 and was completed on October 6, 2014. (See Attachment A for detailed results).

PROCEDURES PERFORMED

We performed the following procedures:

1. We reviewed the Project agreement to obtain an understanding of the Project and CTFP requirements.
2. We obtained and reviewed project contract files to identify contract provisions and verify evidence of competitive bid procedures, reviewed City invoices, payments, and change order documents, and identified the date of contract completion.
3. We identified fund accounting procedures used by the City to account for Measure M2 revenues and expenditures.
4. We reviewed Project financial records to determine that proper accounting and cash management procedures were followed.
5. We obtained a detail listing of the Project's expenditures and judgmentally selected a sample for review. For the sample selected, we determined whether the expenditures were properly supported, approved, recorded, and consistent with the approved budget and in accordance with the contract and/or CTFP requirements.
6. For construction phase work performed by local agency personnel, we reviewed documents to determine if the decision that local agency personnel could perform the work most cost effectively or more timely than a contractor was documented in accordance with CTFP guidelines.
7. For right-of-way acquisition costs, we reviewed supporting documentation for acquisition costs charged to the Project, and we performed a review to ensure that excess parcels acquired with program funds were properly accounted for and any net proceeds from disposal of these parcels were returned to OCLTA in proportion to the amount of Measure M2 funds used in the purchase.
8. We reviewed Project expenditures to determine that the Project was completed in accordance with the CTFP application.

DETAILED RESULTS

Our audit disclosed the following:

Project Costs and City Documentation

The City incurred costs totaling \$6,349,851 for the Project. The Project funding consisted of CTFP funds of \$3,048,413 under Project No. 13-NBCH-ACE-3654 and \$3,301,438 from the City's other funds. We found that all costs charged to the Project were reasonable, allocable, and adequately supported.

Compliance with Competitive Contracting Requirements

The Project funds were used primarily for the acquisition of required right-of-way and easements. Thus, compliance with competitive contracting requirements was not applicable for this Project.

Accounting and Cash Management Procedures

The City established adequate controls to ensure that project funds were used only for approved Project costs. All costs charged to the Project were reviewed and approved by the City Engineer.

Project Completion

The Project was completed on October 6, 2014 and the final report was submitted to OCLTA by the City on November 20, 2014, which is within 180 days after the Project completion date.

Separate Project Fund

The City recorded costs of the Project in the Special Revenue Measure M Fund (Fund 284). The City tracked the Project costs by using a separate project cost unit (7284) within the Special Revenue Measure M Fund.

LIMITATIONS AND RESTRICTIONS

This report is intended solely for the information and use of management and Board of Directors of the OCLTA and the City and is not intended to be and should not be used by anyone other than these specified parties.

BCA Watson Rice, LLP

Torrance, California
July 19, 2016

ORANGE COUNTY TRANSPORTATION AUTHORITY
 COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS

SCHEDULE OF AUDIT RESULTS

Cooperative No.: C-1-2776
Agency: City of Newport Beach
Project Title: Newport Boulevard Widening from Via Lido to 30th Street
Project Status: Completed

<u>Project Number</u>	<u>CTFP Funding Provided</u>	<u>Matching¹ Required</u>	<u>Total Funds CTFP + Match</u>	<u>Costs Incurred</u>	<u>Unused Fund Balance</u>	<u>Questioned Costs</u>
13-NBCH-ACE-3654	\$ 3,048,413	\$ 3,174,926	\$ 6,223,339	\$ 6,349,851	\$ -	\$ -

¹ A matching requirement of 50% of total project costs was required and met by the City.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment E

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Comprehensive Transportation Funding Programs Financial and Compliance Audit

**City of Tustin
Tustin Ranch Road Extension Project
(Construction)
Project No. 12-TUST-ACE-9004**



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**COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS
FINANCIAL AND COMPLIANCE AUDIT**

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INDEPENDENT AUDITORS' REPORT ON FINANCIAL AND COMPLIANCE AUDIT

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have completed a financial and compliance audit of the Tustin Ranch Road Extension Project (Project) of the City of Tustin (City), Project Number 12-TUST-ACE-9004 awarded by the Orange County Local Transportation Authority (OCLTA) under the Comprehensive Transportation Funding Programs (CTFP). The objectives of this audit were to determine whether 1) costs charged to the project were eligible, reasonable and allocable, 2) the City complied with competitive contracting requirements, 3) the City's accounting and cash management procedures were adequate to ensure that project funds were used only for costs chargeable to the project and were tracked separately within the accounting system, 4) the project was completed in accordance with the approved application and CTFP agreement, 5) all records and documentation related to the project were adequately maintained, 6) a separate fund was set up by the City to account for Measure M2 transactions and expenditures, and 7) the City's use of interest earnings on CTFP funds was in compliance with the Measure M Ordinance.

We conducted our audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESULTS IN BRIEF

We found that:

- Costs charged to the Project were reasonable, allocable, eligible, and adequately supported.
- The City has a competitive procurement procedure in place for the selection of contractors, and adhered to this procedure for the selection of contractors under the Project.
- The City's accounting and cash management procedures were adequate to ensure that Project funds were used only for costs chargeable to the Project.
- The Project was completed in accordance with the CTFP agreement.
- The City established and maintained a separate cost center for the Project.
- The City submitted the Final Report to OCLTA within 180 days of the Project completion date, as required by CTFP guidelines.

BACKGROUND

The OCLTA provided the City funding totaling \$9,437,070 for construction under Project No. 12-TUST-ACE-9004 under the Arterial Capacity Enhancements (ACE) program and State Local Partnership Program (SLPP). The Project was a construction of a new six-lane major arterial roadway extension of Tustin Ranch Road between Walnut Avenue and Warner Avenue, which will significantly improve the overall traffic circulation for residents and 105,000 employees working in the area including two major employment centers, Tustin Legacy and the Irvine Business Complex. Costs incurred for the Project totaled \$24,312,312 of which \$9,437,070 was funded by ACE and SLPP under Project No. 12-TUST-ACE-9004 and \$14,875,242 was funded by the City. The Project began in June 2012 and was completed on June 3, 2014. (See Attachment A for detailed results).

PROCEDURES PERFORMED

We performed the following procedures:

1. We reviewed the Project agreement to obtain an understanding of the Project and CTFP requirements.
2. We obtained and reviewed Project contract files to identify contract provisions and verify evidence of competitive bid procedures, reviewed City invoices, payments, and change order documents, and identified the date of contract completion.
3. We identified fund accounting procedures used by the City to account for Measure M2 revenues and expenditures.
4. We reviewed Project financial records to determine that proper accounting and cash management procedures were followed.
5. We obtained a detail listing of the Project's expenditures and judgmentally selected a sample for review. For the sample selected, we determined whether the expenditures were properly supported, approved, recorded, and consistent with the approved budget and in accordance with the contract and/or CTFP requirements.
6. For construction phase work performed by local agency personnel, we reviewed documents to determine if the decision that local agency personnel could perform the work most cost effectively or more timely than a contractor was documented in accordance with CTFP guidelines.
7. For right-of-way acquisition costs, we reviewed supporting documentation for acquisition costs charged to the Project, and we performed a review to ensure that excess parcels acquired with program funds were properly accounted for and any net proceeds from disposal of these parcels were returned to OCLTA in proportion to the amount of Measure M2 funds used in the purchase.
8. We reviewed Project expenditures to determine that the Project was completed in accordance with the CTFP application.

DETAILED RESULTS

Our audit disclosed the following:

Project Costs and City Documentation

The City incurred costs totaling \$24,312,312 for the Project. The Project funding consisted of \$4,510,035 in ACE and \$4,927,035 in SLPP funds under Project No. 12-TUST-ACE-9004 and \$14,875,242 from the City's other funds. We found that all costs charged to the Project were reasonable, allocable, and adequately supported.

Compliance with Competitive Contracting Requirements

We reviewed documentation provided by the City evidencing that competitive contracting requirements were complied with.

Accounting and Cash Management Procedures

The City established adequate controls to ensure that Project funds were used only for approved Project costs. All costs charged to the Project were reviewed and approved by the Project Manager.

Project Completion

The Project was completed on June 3, 2014 and the final report was submitted to OCLTA by the City on June 16, 2014, which is within 180 days after the project completion date.

Separate Project Fund

The City recorded costs of the Project in the Special Revenue Measure M2 Fund (Fund 139) and Capital Projects Fund (Fund 200). The City tracked the Project costs by using a separate project cost unit (70100 and 70203) within the Special Revenue Measure M2 and Capital Projects Funds.

LIMITATIONS AND RESTRICTIONS

This report is intended solely for the information and use of management and Board of Directors of the OCLTA and the City and is not intended to be and should not be used by anyone other than these specified parties.

BCA Watson Rice, LLP

Torrance, California
July 22, 2016

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY
 COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS

SCHEDULE OF AUDIT RESULTS

Cooperative No.: C-1-2786
Agency: City of Tustin
Project Title: Tustin Ranch Road Extension Project
Project Status: Completed

<u>Project Number</u>	<u>CTFP Funding Provided</u>	<u>Matching¹ Required</u>	<u>Total Funds CTFP + Match</u>	<u>Costs Incurred</u>	<u>Unused Fund Balance</u>	<u>Questioned Costs</u>
12-TUST-ACE-9004	\$ 9,437,070	\$ 12,156,156	\$ 21,593,226	\$ 24,312,312	\$ -	\$ -

¹ A matching requirement of 50% of total project costs was required and met by the City.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment F

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Comprehensive Transportation Funding Programs Financial and Compliance Audit

**City of Westminster
Bolsa Chica Road (Duncannon Avenue to Old Bolsa Chica Road)
Widening Project
(Construction)
Project No. 12-WEST-ACE-3602**



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**COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS
FINANCIAL AND COMPLIANCE AUDIT**

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INDEPENDENT AUDITORS' REPORT ON FINANCIAL AND COMPLIANCE AUDIT

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have completed a financial and compliance audit of the Bolsa Chica Road (Duncannon Avenue to Old Bolsa Chica Road) Widening Project (Project) of the City of Westminster (City), Project Number 12-WEST-ACE-3602 awarded by the Orange County Local Transportation Authority (OCLTA) under the Comprehensive Transportation Funding Programs (CTFP). The objectives of this audit were to determine whether 1) costs charged to the project were eligible, reasonable and allocable, 2) the City complied with competitive contracting requirements, 3) the City's accounting and cash management procedures were adequate to ensure that project funds were used only for costs chargeable to the project and were tracked separately within the accounting system, 4) the project was completed in accordance with the approved application and CTFP agreement, 5) all records and documentation related to the project were adequately maintained, 6) a separate fund was set up by the City to account for Measure M2 transactions and expenditures, and 7) the City's use of interest earnings on CTFP funds was in compliance with the Measure M Ordinance.

We conducted our audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESULTS IN BRIEF

We found that:

- Costs charged to the Project were reasonable, allocable, eligible, and adequately supported.
- The City has a competitive procurement procedure in place for the selection of contractors, and adhered to this procedure for the selection of contractors under the Project.
- The City's accounting and cash management procedures were adequate to ensure that Project funds were used only for costs chargeable to the Project.
- The Project was completed in accordance with the CTFP agreement.
- The City established and maintained a separate cost center for the Project.
- The City submitted the Final Report to OCLTA within 180 days of the Project completion date, as required by CTFP guidelines.

BACKGROUND

The OCLTA provided funding to the City totaling \$464,700 for construction under Project No. 12-WEST-ACE-3602 under the Arterial Capacity Enhancements program. The Project was to widen Bolsa Chica Road from north of Duncannon Avenue to Old Bolsa Chica Road, which will eliminate lane drop issues and result in enhanced mobility while providing a significant safety improvement for the corridor. Costs incurred for the Project totaled \$621,363 of which \$464,700 was funded by the CTFP under Project No. 12-WEST-ACE-3602 and \$156,663 was funded by the City. The Project began on November 13, 2013 and was completed on December 23, 2014. (See Attachment A for detailed results).

PROCEDURES PERFORMED

We performed the following procedures:

1. We reviewed the Project agreement to obtain an understanding of the project and CTFP requirements.
2. We obtained and reviewed Project contract files to identify contract provisions and verify evidence of competitive bid procedures, reviewed City invoices, payments, and change order documents, and identified the date of contract completion.
3. We identified fund accounting procedures used by the City to account for Measure M2 revenues and expenditures.
4. We reviewed Project financial records to determine that proper accounting and cash management procedures were followed.
5. We obtained a detail listing of the Project's expenditures and judgmentally selected a sample for review. For the sample selected, we determined whether the expenditures were properly supported, approved, recorded, and consistent with the approved budget and in accordance with the contract and/or CTFP requirements.
6. For construction phase work performed by local agency personnel, we reviewed documents to determine if the decision that local agency personnel could perform the work most cost effectively or more timely than contractor was documented in accordance with CTFP guidelines.
7. For right-of-way acquisition costs, we reviewed supporting documentation for acquisition costs charged to the Project, and we performed a review to ensure that excess parcels acquired with program funds were properly accounted for and any net proceeds from disposal of these parcels were returned to OCLTA in proportion to the amount of Measure M2 funds used in the purchase.
8. We reviewed project expenditures to determine that the Project was completed in accordance with the CTFP application.

DETAILED RESULTS

Our audit disclosed the following:

Project Costs and City Documentation

The City incurred costs totaling \$621,363 for the Project. The Project funding consisted of CTFP funds of \$464,700 under Project No. 12-WEST-ACE-3602 and \$156,663 from the City's other funds. We found that all costs charged to the Project were reasonable, allocable, and adequately supported.

Compliance with Competitive Contracting Requirements

We reviewed documentation provided by the City evidencing that competitive contracting requirements were complied with.

Accounting and Cash Management Procedures

The City established adequate controls to ensure that Project funds were used only for approved Project costs. All costs charged to the Project were reviewed and approved by the City Engineer.

Project Completion

The Project was completed on December 23, 2014 and the final report was submitted to OCLTA by the City on January 29, 2015, which is within 180 days after the project completion date.

Separate Project Fund

The City recorded costs of the Project in the Special Revenue CIP and Long Term Project Costs Fund. The City tracked the Project costs by using a separate project cost unit (#132600) within the Special Revenue CIP Long Term Project Costs Fund.

LIMITATIONS AND RESTRICTIONS

This report is intended solely for the information and use of management and Board of Directors of the OCLTA and the City and is not intended to be and should not be used by anyone other than these specified parties.

BCA Watson Rice, LLP

Torrance, California
July 28, 2016

**ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY
COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS**

SCHEDULE OF AUDIT RESULTS

Cooperative No.: C-1-2788
Agency: City of Westminster
Project Title: Bolsa Chica Road (Duncannon Avenue to Old Bolsa Chica Road) Widening Project
Project Status: Completed

<u>Project Number</u>	<u>CTFP Funding Provided</u>	<u>Matching¹ Required</u>	<u>Total Funds CTFP + Match</u>	<u>Costs Incurred</u>	<u>Unused Fund Balance</u>	<u>Questioned Costs</u>
12-WEST-ACE-3602	\$ 464,700	\$ 155,341	\$ 620,041	\$ 621,363	\$ -	\$ -

¹ A matching requirement of 25% of total project costs was required and met by the City.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment G

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Comprehensive Transportation Funding Programs Financial and Compliance Audit

**City of Huntington Beach
Huntington Beach Catch Basin Retrofit Project
(Construction)
Project No. 14-HBCH-ECP-3742**



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**COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS
FINANCIAL AND COMPLIANCE AUDIT**

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INDEPENDENT AUDITORS' REPORT ON FINANCIAL AND COMPLIANCE AUDIT

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have completed a financial and compliance audit of the Huntington Beach Catch Basin Retrofit Project (Project) of the City of Huntington Beach (City), Project Number 14-HBCH-ECP-3742 awarded by the Orange County Local Transportation Authority (OCLTA) under the Comprehensive Transportation Funding Programs (CTFP). The objectives of this audit were to determine whether 1) costs charged to the project were eligible, reasonable and allocable, 2) the City complied with competitive contracting requirements, 3) the City's accounting and cash management procedures were adequate to ensure that project funds were used only for costs chargeable to the project and were tracked separately within the accounting system, 4) the project was completed in accordance with the approved application and CTFP agreement, 5) all records and documentation related to the project were adequately maintained, 6) a separate fund was set up by the City to account for Measure M2 transactions and expenditures, and 7) the City's use of interest earnings on CTFP funds was in compliance with the Measure M Ordinance.

We conducted our audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESULTS IN BRIEF

We found that:

- Costs charged to the Project were reasonable, allocable, eligible, and adequately supported.
- The City piggy-backed on a County of Orange contract, which went through a competitive bidding process.
- The City's accounting and cash management procedures were adequate to ensure that Project funds were used only for costs chargeable to the Project.
- The Project was completed in accordance with the CTFP agreement.
- The City established and maintained a separate cost center for the Project.
- The City submitted the Final Report to OCLTA within 180 days of the Project completion date, as required by CTFP guidelines.

BACKGROUND

The OCLTA provided funding to the City totaling \$182,894 for construction under Project No. 14-HBCH-ECP-3742 under the Environmental Cleanup Program. The Project was to retrofit 110 catch basins with Bio Clean's Round Curb Inlet Filters, which will facilitate the capture and removal of debris in close proximity to the source and prevent it from entering the receiving water. Costs incurred for the Project to date totaled \$184,376 of which \$182,894 was funded by the CTFP under Project No. 14-HBCH-ECP-3742 and \$1,482 was funded by the City. The Project began in January 2014 and was completed on July 3, 2015. (See Attachment A for detailed results).

PROCEDURES PERFORMED

We performed the following procedures:

1. We reviewed the Project agreement to obtain an understanding of the Project and CTFP requirements.
2. We obtained and reviewed Project contract files to identify contract provisions and verify evidence of competitive bid procedures, reviewed City invoices, payments, and change order documents, and identified the date of contract completion.
3. We identified fund accounting procedures used by the City to account for Measure M2 revenues and expenditures.
4. We reviewed Project financial records to determine that proper accounting and cash management procedures were followed.
5. We obtained a detail listing of the Project's expenditures and judgmentally selected a sample for review. For the sample selected, we determined whether the expenditures were properly supported, approved, recorded, and consistent with the approved budget and in accordance with the contract and/or CTFP requirements.
6. For construction phase work performed by local agency personnel, we reviewed documents to determine if the decision that local agency personnel could perform the work most cost effectively or more timely than a contractor was documented in accordance with CTFP guidelines.
7. For right-of-way acquisition costs, we reviewed supporting documentation for acquisition costs charged to the Project, and we performed a review to ensure that excess parcels acquired with program funds were properly accounted for and any net proceeds from disposal of these parcels were returned to OCLTA in proportion to the amount of Measure M2 funds used in the purchase.
8. We reviewed Project expenditures to determine that the Project was completed in accordance with the CTFP application.

DETAILED RESULTS

Our audit disclosed the following:

Project Costs and City Documentation

The City incurred costs totaling \$184,376 to date for the Project. The Project funding consisted of CTFP funds of \$182,894 under Project No. 14-HBCH-ECP-3742 and \$1,482 from the City's other funds. We found that all costs charged to the Project were reasonable, allocable, and adequately supported.

Compliance with Competitive Contracting Requirements

The City piggy-backed on a County of Orange (County) contract with vendor Bio Clean. The City provided evidence of the County's competitive bidding process resulting in the award to Bio Clean. Thus, it was determined that competitive contracting requirements were met by piggy-backing on the County's competitive award to Bio Clean.

Accounting and Cash Management Procedures

The City established adequate controls to ensure that Project funds were used only for approved Project costs. All costs charged to the Project were reviewed and approved by the Project Manager.

Project Completion

The Project was completed on July 3, 2015 and the final report was submitted to OCLTA by the City on December 23, 2015, which is within 180 days after the Project completion date.

Separate Project Fund

The City recorded costs of the Project in the Special Revenue OCTA Grant Fund (Fund 873). The City tracked the Project costs by using a separate project cost unit (90014) within the OCTA Grant Fund.

LIMITATIONS AND RESTRICTIONS

This report is intended solely for the information and use of management and Board of Directors of the OCLTA and the City and is not intended to be and should not be used by anyone other than these specified parties.



Torrance, California
August 9, 2016

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY
 COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS

SCHEDULE OF AUDIT RESULTS

Cooperative No.: C-1-2765
Agency: City of Huntington Beach
Project Title: Huntington Beach Catch Basin Retrofit Project
Project Status: Completed

<u>Project Number</u>	<u>CTFP Funding Provided</u>	<u>Matching¹ Required</u>	<u>Total Funds CTFP + Match</u>	<u>Costs Incurred</u>	<u>Unused Fund Balance</u>	<u>Questioned Costs</u>
14-HBCH-ECP-3742	\$ 182,894	\$ 102,878	\$ 285,772	\$ 184,376	\$ -	\$ -

¹ A matching requirement of 36% of total project costs was required. In accordance with the CTFP guidelines, the City pledged \$102,878 (36%) match of future in-kind services for ongoing operation and maintenance of the project over the next ten years, beginning in January 2015. In-kind services are to be reported to OCTA semi-annually in March and September of each year. As of December 2015, the City contributed \$1,482 of in-kind match for operations and maintenance. Thus, \$101,396 of in-kind match remains outstanding.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment H

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Comprehensive Transportation Funding Programs Financial and Compliance Audit

**County of Orange
La Pata Avenue between Ortega Highway and Calle Saluda and Del Rio
Extension Project
(Engineering)
Project No. 11-ORCO-ACE-3521**



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**COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS
FINANCIAL AND COMPLIANCE AUDIT**

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INDEPENDENT AUDITORS' REPORT ON FINANCIAL AND COMPLIANCE AUDIT

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have completed a financial and compliance audit of the La Pata Avenue between Ortega Highway and Calle Saluda and Del Rio Extension Project (Project) of the County of Orange (County), Project Number 11-ORCO-ACE-3521 awarded by the Orange County Local Transportation Authority (OCLTA) under the Comprehensive Transportation Funding Programs (CTFP). The objectives of this audit were to determine whether 1) costs charged to the project were eligible, reasonable and allocable, 2) the County complied with competitive contracting requirements, 3) the County's accounting and cash management procedures were adequate to ensure that project funds were used only for costs chargeable to the project and were tracked separately within the accounting system, 4) the project was completed in accordance with the approved application and CTFP agreement, 5) all records and documentation related to the project were adequately maintained, 6) a separate fund was set up by the County to account for Measure M2 transactions and expenditures, and 7) the County's use of interest earnings on CTFP funds was in compliance with the Measure M Ordinance.

We conducted our audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESULTS IN BRIEF

We found that:

- Costs charged to the Project were reasonable, allocable, eligible, and adequately supported.
- The County has a competitive procurement procedure in place for the selection of contractors, and adhered to this procedure for the selection of contractors under the Project.
- The County's accounting and cash management procedures were adequate to ensure that Project funds were used only for costs chargeable to the Project.
- The Project was completed in accordance with the CTFP agreement.
- The County established and maintained a separate cost center for the Project.
- The County submitted the Final Report to OCLTA within 180 days of the Project completion date, as required by CTFP guidelines.

BACKGROUND

The OCLTA provided funding to the County totaling \$2,250,000 for engineering under Project No. 11-ORCO-ACE-3521 under the Arterial Capacity Enhancements program. The Project was to widen La Pata Avenue from three to five lanes from approximately 750 feet south of Ortega Highway to the existing road terminus at the County's Prima Deshecha landfill and to construct a new four lane roadway extension between the Prima Deshecha landfill to Calle Saluda. Costs incurred for the Project totaled \$6,449,994 of which \$2,250,000 was funded by the CTFP under Project No. 11-ORCO-ACE-3521 and \$4,199,994 was funded by the County. The Project began in November 2011 and was completed on March 12, 2014. (See Attachment A for detailed results).

PROCEDURES PERFORMED

We performed the following procedures:

1. We reviewed the Project agreement to obtain an understanding of the Project and CTFP requirements.
2. We obtained and reviewed Project contract files to identify contract provisions and verify evidence of competitive bid procedures, reviewed County invoices, payments, and change order documents, and identified the date of contract completion.
3. We identified fund accounting procedures used by the County to account for Measure M2 revenues and expenditures.
4. We reviewed Project financial records to determine that proper accounting and cash management procedures were followed.
5. We obtained a detail listing of the Project's expenditures and judgmentally selected a sample for review. For the sample selected, we determined whether the expenditures were properly supported, approved, recorded, and consistent with the approved budget and in accordance with the contract and/or CTFP requirements.
6. For construction phase work performed by local agency personnel, we reviewed documents to determine if the decision that local agency personnel could perform the work most cost effectively or more timely than a contractor was documented in accordance with CTFP guidelines.
7. For right-of-way acquisition costs, we reviewed supporting documentation for acquisition costs charged to the Project, and we performed a review to ensure that excess parcels acquired with program funds were properly accounted for and any net proceeds from disposal of these parcels were returned to OCLTA in proportion to the amount of Measure M2 funds used in the purchase.
8. We reviewed Project expenditures to determine that the Project was completed in accordance with the CTFP application.

DETAILED RESULTS

Our audit disclosed the following:

Project Costs and County Documentation

The County incurred costs totaling \$6,449,994 for the Project. The Project funding consisted of CTFP funds of \$2,250,000 under Project No. 11-ORCO-ACE-3521 and \$4,199,994 from the County's other funds. We found that all costs charged to the Project were reasonable, allocable, and adequately supported.

Compliance with Competitive Contracting Requirements

We reviewed documentation provided by the County evidencing that competitive contracting requirements were complied with.

Accounting and Cash Management Procedures

The County established adequate controls to ensure that Project funds were used only for approved Project costs. All costs charged to the Project were reviewed and approved by the Project Manager.

Project Completion

The Project was completed on March 12, 2014 and the final report was submitted to OCLTA by the County on April 17, 2014, which is within 180 days after the Project completion date.

Separate Project Fund

The County recorded costs of the Project in the Special Revenue OC Road Fund (Fund 115) under OC Public Works Department No. 080.

LIMITATIONS AND RESTRICTIONS

This report is intended solely for the information and use of management and Board of Directors of the OCLTA and the County and is not intended to be and should not be used by anyone other than these specified parties.



Torrance, California
August 17, 2016

**ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY
COMPREHENSIVE TRANSPORTATION FUNDING PROGRAMS**

SCHEDULE OF AUDIT RESULTS

Cooperative No.: C-1-2758
Agency: County of Orange
Project Title: La Pata Avenue between Ortega Highway and Calle Saluda and Del Rio Extension Project
Project Status: Completed

<u>Project Number</u>	<u>CTFP Funding Provided</u>	<u>Matching¹ Required</u>	<u>Total Funds CTFP + Match</u>	<u>Costs Incurred</u>	<u>Unused Fund Balance</u>	<u>Questioned Costs</u>
11-ORCO-ACE-3521	\$ 2,250,000	\$ 3,224,997	\$ 5,474,997	\$ 6,449,994	\$ -	\$ -

¹ A matching requirement of 50% of total project costs was required and met by the County.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Financial and Compliance Audits of Eight Measure M2
Comprehensive Transportation Funding Program Projects**

Attachment I



INTEROFFICE MEMO

September 29, 2016

To: Kia Mortazavi, Executive Director

From: Serena Ng, Senior Manager
Internal Audit

Subject: **Supplemental Recommendation – Comprehensive
Transportation Funding Programs Audits**

The Internal Audit Department (Internal Audit) of the Orange County Transportation Authority (OCTA) engaged external audit firm B CA Watson Rice LLP to conduct audits of eight Comprehensive Transportation Funding Programs (CTFP) projects closed from July 1, 2014 through March 31, 2016.

One of the projects audited was the Huntington Beach Catch Basin Retrofit Project, No. 14-HBCH-ECP- 3742, under the Environmental Cleanup Program (ECP). Under the agreement, the City of Huntington Beach (City) will provide \$102,878 in matching project operations and maintenance expenditures over the next 10 years. According to the report, in the first six months, the City provided \$1,482 in operations and maintenance support.

The ECP is the only CTFP program that allows for agencies to meet their matching obligation through future operations and maintenance expenditures. The ECP guidelines require the local agencies to report their expenditures on Form 10-17 as part of the semi-annual review process, and OCTA staff tracks reported expenditures on internal spreadsheets. However, internal procedures for tracking and reporting the local agencies' expenditures and match progress have not been identified in the semi-annual review manual.

Recommendation:

Internal Audit recommends management include procedures for monitoring the progress of local agencies' operations and maintenance expenditures in the semi-annual review manual. Procedures should include the addition of a semi-annual review checklist item for receipt, review, and tracking of the Form 10-17's. Procedures should also require that short-falls in match obligations be reported to the Board of Directors in the semi-annual review reports.

Management Response (Planning Division):

Planning staff will update the semi-annual review manual to include checklist items documenting tracking and reporting of Form 10-17. Local agencies have reported any short-falls to date. Should these short-falls develop at the end of the 10-year period, these issues will be included in the semi-annual review.

c: Kurt Brotcke
Sam Kaur
Janet Sutter



COMMITTEE TRANSMITTAL

November 14, 2016

To: Members of the Board of Directors

From: 
Laurena Weinert, Clerk of the Board

Subject: Capital Programs Division - First Quarter Fiscal Year 2016-17
Capital Action Plan Performance Metrics

Executive Committee Meeting of November 7, 2016

Present: Chair Donchak and Directors Lalloway, Murray, Nelson, Spitzer,
and Ury

Absent: Vice Chairman Hennessey

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.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Capital Programs Division - First Quarter Fiscal Year 2016-
17 Capital Action Plan Performance Metrics**

Staff Report



November 7, 2016

To: Executive Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Capital Programs Division - First Quarter Fiscal Year 2016-17
Capital Action Plan Performance Metrics

Overview

The Orange County Transportation Authority's Strategic Plan key strategies and objectives to achieve the goals for Mobility and Stewardship include delivery of all Capital Action Plan projects on time and within budget. The Capital Action Plan is used to create a performance metric to assess capital project delivery progress on highway, grade separation, rail, and facility projects. This report provides an update on the Capital Action Plan delivery and performance metrics.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA) Capital Programs Division is responsible for project development and delivery of highway, grade separation, rail, and facility projects from the beginning of the environmental approval phase through construction completion. Project delivery commitments reflect defined project scope, costs, and schedules. Project delivery commitments shown in the Capital Action Plan (CAP) are key strategies and objectives to achieve the Strategic Plan goals for Mobility and Stewardship.

This report provides an update on the CAP performance metrics, which are the fiscal year (FY) snapshot of the planned CAP project delivery milestones in the budgeted FY. The Capital Programs Division also provides Metrolink commuter rail ridership, revenue, and on-time performance reports and metrics in quarterly rail program updates.

Discussion

The Capital Programs Division objective is to deliver projects on schedule and within the approved project budget. Key projects' cost and schedule commitments are captured in the CAP which is regularly updated with new projects and project status (Attachment A). The CAP is categorized into four key groupings of projects; freeway projects, grade separation projects, rail and station projects, and key facility projects. Simple milestones are used as performance indicators of progress in project delivery. The CAP performance metrics provides a FY snapshot of the milestones targeted for delivery in the budgeted FY, and provide both transparency and measurement of annual capital project delivery performance.

The CAP project cost represents the total cost of the project across all phases of project delivery, including support costs, and right-of-way (ROW) and construction capital costs. The established baseline cost is shown in comparison to either the actual or forecast cost. The baseline costs may be shown as to-be-determined (TBD) if project scoping studies or other project scoping documents have not been approved, and may be updated as project delivery progresses and milestones are achieved. Actual or forecast costs represent the estimated total project cost across all project delivery phases. Measure M2 (M2) projects are identified with the corresponding project letter and the M2 logo. The CAP update is also included in the M2 Quarterly Report.

The CAP summarizes the very complex capital project critical path delivery schedules into eight key milestones.

Begin Environmental	The date work on the environmental clearance, project report, or preliminary engineering phase begins.
Complete Environmental	The date environmental clearance and project approval is achieved.
Begin Design	The date final design work begins, or the date when a design-build contract begins.
Complete Design	The date final design work is 100 percent complete and approved.

Construction Ready	The date contract bid documents are ready for advertisement, including certification of ROW, all agreements executed, and contract constraints cleared.
Advertise for Construction	The date a construction contract is advertised for bids.
Award Contract	The date the construction contract is awarded.
Construction Complete	The date all construction work is completed, and the project is open to public use.

These delivery milestones reflect progression across the project delivery phases shown below.



Project schedules reflect the approved milestone dates in comparison to the forecast or actual milestone dates. Milestone dates may be shown as TBD if project scoping or approval documents have not been finalized and approved, or if the delivery schedule has not been negotiated with the agency or consultant implementing the specific phase of a project. Planned milestone dates can be revised to reflect new dates from approved baseline schedule changes. Actual dates will be updated when milestones are achieved, and forecast dates will be updated to reflect project delivery status.

Key Findings

CAP first quarter FY 2016-17 milestones achieved include:

Freeway and OC Bridges Railroad Grade Separation Projects

- The begin environmental milestone for the Interstate 605/Katella Avenue interchange improvements was achieved.

- Final design was completed for the State Route 91 (SR-91) westbound widening landscape replacement planting project, from State Route 57 (SR-57) to Interstate 5 (I-5).
- The award contract milestone for construction of the West County Connector landscape replacement planting project was achieved.
- Construction of the SR-91 westbound widening from State Route 55 (SR-55) to Tustin Avenue was completed.
- Construction of the I-5/State Route 74 interchange landscape replacement was completed one quarter earlier than planned.

Rail and Station Projects

- The construction ready and advertise construction milestones for the Orange Metrolink Station parking expansion project were achieved.

The following CAP milestones missed the planned delivery through the first quarter of FY 2016-17.

- The Tustin Avenue/Rose Drive railroad grade separation project construction complete milestone was missed. However, all contract work has been completed and final acceptance was provided by the cities on October 25, 2016.
- The Orangethorpe Avenue railroad grade separation project construction complete milestone was missed. However, all contract work has been completed and final acceptance was provided by the cities on October 25, 2016.

Recap of First Quarter FY 2016-17 Performance Metrics

The performance metrics snapshot provided at the beginning of FY 2016-17 reflected 33 planned major project delivery milestones to accomplish, eight of which are planned in the first quarter. The CAP and performance metrics have been updated to reflect both milestones achieved and missed through the first quarter of FY 2016-17 (Attachment B). Six of the eight planned milestones in the first quarter of FY 2016-17, and one planned milestone in the second quarter of the FY have been completed (87.5 percent). The two missed milestones have been completed as of this report date.

Risks and Look Ahead Project Concerns

The I-5 widening project between State Route 73 and El Toro Road is being delivered in three logical construction contract segments based on traffic impact and management, and anticipated construction contract size. All three segments are currently in the final design phase, ROW acquisition tasks are ready to begin, and construction is planned to begin in late 2018. As previously reported to the OCTA Board of Directors (Board), the 2016 State Transportation Improvement Program (STIP) adopted by the California Transportation Commission (CTC) in May 2016 delayed availability of funding for construction of the southern segment, which includes the Avery Parkway interchange, from FY 2018-19 to FY 2020-21. All three segments have interrelated schedules for traffic staging, and any significant delay to one of the segments will impact the construction schedule of the other two segments. Irrespective of the availability of STIP construction funding, staff intent is to maintain the current delivery schedule for all three segments assuming funding for construction of the southerly segment will be made available to advertise for construction bids in mid-2018. However, due to the STIP construction funding delay, the California Department of Transportation (Caltrans) has not concurred with OCTA's intent to begin ROW appraisals. Temporary construction easement costs are based on current appraised values and time extending through the planned construction. Delays in construction schedules may necessitate new appraisals and additional second offers made to property owners to account for delay. Delays to the ROW activities will delay construction and increase costs.

Similarly, STIP funding availability for construction of a second high-occupancy vehicle lane on I-5 between the SR-55 and SR-57 was delayed by the CTC from FY 2017-18 to FY 2018-19. Final design is nearing completion and is planned to be submitted to Caltrans in the spring of 2017 for final contract packaging prior to advertisement, award, and administration of the construction contract. The delay in construction funding is impacting the ability to negotiate and execute the cooperative agreement with Caltrans for final design contract packaging, advertisement, award, and administration of the construction contract, and for OCTA to procure a construction management consultant. Delays to the construction funding will delay construction and increase costs.

The environmental clearance schedule for the SR-55 widening between Interstate 405 and I-5 has been tentatively re-established with the cooperation of Caltrans. The project report and associated environmental documentation are being updated and will be re-released to the public for comment in spring 2017. The CAP has been updated to reflect the new environmental clearance milestone in fall 2017.

Environmental clearance work, anticipated to begin on the SR-57 northbound widening from Lambert Road to Tonner Canyon, has been deferred. As previously reported to the OCTA Board, funding for the environmental clearance effort was not programmed in the 2016 STIP.

The environmental clearance schedule for the SR-91 widening between SR-55 and SR-57 has been delayed approximately seven months. Caltrans required additional scope to be added to the alternatives for environmental study which was not identified in the approved Project Study Report.

As reported to the OCTA Board in August 2016, the OC Bridges Program of railroad grade separation projects will require supplemental funding. Staff will be seeking OCTA Board approval of an amended funding plan to support the estimated cost-to-complete in November 2016.

Bids for construction of the Orange Metrolink Station parking expansion project were received. Bidder information identified certain elements of the design, as provided by the City of Orange (City) designer of record, would not meet Federal Buy-America requirements. In addition, bidders did not meet disadvantaged business enterprise requirements as specified in the contract. The current procurement has been canceled, and staff is working with the City and designer of record to revise the design to be fully Buy-America compliant, and the contract will be re-advertised for construction bids. It is expected this will delay awarding the construction contract by approximately eight weeks, with the contract award recommendation brought to the OCTA Board in January 2017, at the earliest.

Summary

Continued capital project delivery progress has been achieved and reflected in the CAP. The planned FY 2016-17 performance metrics created from forecast project schedules will be used as a general project delivery performance indicator. Staff will continue to manage project costs and schedules across all project phases to meet project delivery commitments and report quarterly.

Attachments

- A. Capital Action Plan, Status Through September 2016
- B. Capital Programs Division, Fiscal Year 2016-17 Performance Metrics Status Through September 2016

Prepared by:

A handwritten signature in blue ink, appearing to read "Jim Beil".

Jim Beil, P.E
Executive Director, Capital Programs
(714) 560-5646



ORANGE COUNTY TRANSPORTATION AUTHORITY

















**Capital Programs Division - First Quarter Fiscal Year 2016-
17 Capital Action Plan Performance Metrics**

Attachment A

Capital Action Plan

Status Through September 2016














Updated: October 26, 2016

Capital Projects	Cost Baseline/Forecast (millions)	Schedule Plan/Forecast							
		Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
Freeway Projects:									
 I-5, Pico to Vista Hermosa	\$113.0	Jun-09	Dec-11	Jun-11	Oct-13	Feb-14	Oct-14	Dec-14	Aug-18
Project C	\$89.6	Jun-09	Oct-11	Jun-11	Oct-13	May-14	Sep-14	Dec-14	Aug-18
 I-5, Vista Hermosa to Pacific Coast Highway	\$75.6	Jun-09	Dec-11	Jun-11	Feb-13	Jun-13	Oct-13	Dec-13	Mar-17
Project C	\$71.0	Jun-09	Oct-11	Jun-11	May-13	Aug-13	Feb-14	Jun-14	Mar-17
 I-5, Pacific Coast Highway to San Juan Creek Road	\$70.7	Jun-09	Dec-11	Jun-11	Jan-13	May-13	Aug-13	Oct-13	Sep-16
Project C Cost/Schedule Risk	\$71.0	Jun-09	Oct-11	Jun-11	Jan-13	Apr-13	Aug-13	Dec-13	Apr-18
 I-5, I-5/Ortega Interchange	\$90.9	Sep-05	Jun-09	Jan-09	Nov-11	Mar-12	Jun-12	Aug-12	Sep-15
Project D	\$80.3	Sep-05	Jun-09	Jan-09	Dec-11	Apr-12	Jun-12	Aug-12	Jan-16
 I-5, I-5/Ortega Interchange (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Project D	N/A	N/A	N/A	Jan-14	Oct-14	Feb-15	Aug-15	Sep-15	Sep-16
 I-5, SR-73 to Oso Parkway	\$151.9	Sep-11	Jun-14	TBD	Jan-18	May-18	Aug-18	Dec-18	Apr-22
Project C & D Cost/Schedule Risk	\$151.9	Oct-11	May-14	Mar-15	Jan-18	Oct-18	Jan-19	May-19	Sep-22
 I-5, Oso Parkway to Alicia Parkway	\$196.2	Sep-11	Jun-14	Nov-14	Jun-17	Dec-17	Feb-18	Jun-18	Mar-22
Project C & D Cost/Schedule Risk	\$196.2	Oct-11	May-14	Nov-14	Jun-17	Apr-18	Jun-18	Oct-18	Jul-22
 I-5, Alicia Parkway to El Toro Road	\$133.6	Sep-11	Jun-14	Mar-15	Jun-18	Dec-18	Jan-19	May-19	Sep-22
Project C Cost/Schedule Risk	\$133.6	Oct-11	May-14	Mar-15	Jun-18	Jan-19	Mar-19	Jun-19	Nov-22
 I-5, I-5/El Toro Road Interchange	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Project D	TBD	Dec-16	Dec-19	TBD	TBD	TBD	TBD	TBD	TBD
 I-5, I-405 to SR-55	TBD	May-14	Aug-18	TBD	TBD	TBD	TBD	TBD	TBD
Project B	TBD	May-14	Aug-18	TBD	TBD	TBD	TBD	TBD	TBD
 I-5, SR-55 to SR-57	\$37.1	Jul-11	Jun-13	Jun-15	Mar-17	Jul-17	Sep-17	Dec-17	Feb-20
Project A Cost/Schedule Risk	\$37.1	Jun-11	Apr-15	Jun-15	May-17	Aug-17	Oct-17	Jan-18	Mar-20
 SR-55, I-405 to I-5	TBD	Feb-11	Nov-13	TBD	TBD	TBD	TBD	TBD	TBD
Project F Cost/Schedule Risk	\$375.9	May-11	Jan-18	Oct-18	Aug-21	Jun-22	Sep-22	Dec-22	Jan-27
 SR-55, I-5 to SR-91	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Project F	TBD	Jan-17	Jun-19	TBD	TBD	TBD	TBD	TBD	TBD
 SR-57 Northbound (NB), Orangewood Avenue to Katella Avenue	TBD	Apr-16	Dec-18	TBD	TBD	TBD	TBD	TBD	TBD
Project G	TBD	Apr-16	Dec-18	TBD	TBD	TBD	TBD	TBD	TBD
 SR-57 (NB), Katella Avenue to Lincoln Avenue	\$78.7	Apr-08	Jul-09	Jul-08	Nov-10	Mar-11	May-11	Aug-11	Sep-14
Project G	\$40.5	Apr-08	Nov-09	Aug-08	Dec-10	Apr-11	Jul-11	Oct-11	Apr-15
 SR-57 (NB), Katella Avenue to Lincoln Avenue (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Project G Cost/Schedule Risk	N/A	N/A	N/A	May-09	Jul-10	Mar-17	Apr-17	Jun-17	Jul-18

Capital Action Plan

Status Through September 2016

















Updated: October 26, 2016

Capital Projects	Cost		Schedule						
	Baseline/Forecast	Plan/Forecast							
	(millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
 SR-57 (NB), Orangethorpe Avenue to Yorba Linda Boulevard Project G	\$80.2	Aug-05	Dec-07	Feb-08	Dec-09	Apr-10	Jun-10	Oct-10	May-14
	\$52.4	Aug-05	Dec-07	Feb-08	Jul-09	Dec-09	May-10	Oct-10	Nov-14
 SR-57 (NB), Yorba Linda Boulevard to Lambert Road Project G	\$79.3	Aug-05	Dec-07	Feb-08	Dec-09	Apr-10	Jun-10	Oct-10	Sep-14
	\$54.8	Aug-05	Dec-07	Feb-08	Jul-09	Mar-10	May-10	Oct-10	May-14
 SR-57 (NB), Orangethorpe Avenue to Lambert Road (Landscape) Project G Cost/Schedule Risk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	Oct-14	Apr-17	Jun-17	Aug-17	Oct-17	Oct-18
 SR-57 (NB), Lambert Road to Tonner Canyon Cost/Schedule Risk	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	Jul-17	Jun-20	TBD	TBD	TBD	TBD	TBD	TBD
 SR-91 Westbound (WB), I-5 to SR-57 Project H	\$78.1	Jul-07	Apr-10	Oct-09	Feb-12	Jul-12	Aug-12	Nov-12	Apr-16
	\$59.2	Jul-07	Jun-10	Mar-10	Apr-12	Aug-12	Oct-12	Jan-13	Jun-16
 SR-91 Westbound (WB), I-5 to SR-57 (Landscape) Project H	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	Nov-14	Aug-16	Nov-16	Dec-16	Mar-17	Apr-18
 SR-91, SR-57 to SR-55 Project I Cost/Schedule Risk	TBD	Jan-15	Oct-18	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	Jan-15	May-19	TBD	TBD	TBD	TBD	TBD	TBD
 SR-91 (WB), Tustin Interchange to SR-55 Project I	\$49.9	Jul-08	Jul-11	Jul-11	Mar-13	Jul-13	Aug-13	Oct-13	Jul-16
	\$43.9	Jul-08	May-11	Jun-11	Feb-13	Apr-13	Jun-13	Oct-13	Jul-16
 SR-91, SR-55 to SR-241 Project J	\$128.4	Jul-07	Jul-09	Jun-09	Jan-11	Apr-11	Jun-11	Sep-11	Dec-12
	\$79.6	Jul-07	Apr-09	Apr-09	Aug-10	Dec-10	Feb-11	May-11	Mar-13
 SR-91, SR-55 to SR-241 (Landscape) Project J	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	May-12	Feb-13	Apr-13	Jul-13	Oct-13	Feb-15
 SR-91 Eastbound, SR-241 to SR-71 Project J	\$104.5	Mar-05	Dec-07	Jul-07	Dec-08	Mar-09	May-09	Jul-09	Nov-10
	\$57.8	Mar-05	Dec-07	Jul-07	Dec-08	May-09	Jun-09	Aug-09	Jan-11
SR-91/SR-241 Express Lanes Connector	TBD	N/A	N/A	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	Nov-13	Oct-17	TBD	TBD	TBD	TBD	TBD	TBD
 I-405, I-5 to SR-55 Project L	TBD	Dec-14	Jul-18	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	Dec-14	Jul-18	TBD	TBD	TBD	TBD	TBD	TBD
 I-405, SR-55 to I-605 (Design-Build) Project K	\$1,900.0	Mar-09	Mar-13	Mar-14	Nov-15	Feb-16	Mar-16	Nov-16	Apr-23
	\$1,900.0	Mar-09	May-15	Mar-14	Nov-15	Feb-16	Mar-16	Nov-16	Apr-23
I-405/SR-22 HOV Connector	\$195.9	N/A	N/A	Sep-07	Sep-09	Mar-10	May-10	Aug-10	Aug-14
	\$120.4	N/A	N/A	Sep-07	Jun-09	Sep-09	Feb-10	Jun-10	Mar-15
I-405/I-605 HOV Connector	\$260.4	N/A	N/A	Sep-07	Sep-09	Mar-10	May-10	Oct-10	Jan-15
	\$172.5	N/A	N/A	Sep-07	Sep-09	Feb-10	May-10	Oct-10	Mar-15
I-405/SR-22/I-605 HOV Connector (Landscape)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	Jun-08	May-09	Feb-16	May-16	Jul-16	Jan-18

Capital Action Plan

Status Through September 2016

Updated: October 26, 2016

Capital Projects	Cost Baseline/Forecast	Schedule Plan/Forecast								
		(millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
 I-605, I-605/Katella Interchange Project M	TBD TBD	Aug-16 Aug-16	Nov-18 Nov-18	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	
Grade Separation Projects:										
 Sand Canyon Avenue Railroad Grade Separation Project R	\$55.6 \$61.7	N/A N/A	Sep-03 Sep-03	Jan-04 Jan-04	Jul-10 Jul-10	Jul-10 Jul-10	Oct-10 Oct-10	Feb-11 Feb-11	May-14 Jan-16	
 Raymond Avenue Railroad Grade Separation Project O	\$77.2 Cost/Schedule Risk \$124.8	Feb-09 Feb-09	Nov-09 Nov-09	Mar-10 Mar-10	Aug-12 Dec-12	Nov-12 Jul-13	Feb-13 Oct-13	May-13 Feb-14	Aug-18 Aug-18	
 State College Boulevard Railroad Grade Separation (Fullerton) Project O	\$73.6 Cost/Schedule Risk \$97.0	Dec-08 Dec-08	Jan-11 Apr-11	Jul-06 Jul-06	Aug-12 Feb-13	Nov-12 May-13	Feb-13 Sep-13	May-13 Feb-14	May-18 May-18	
 Placentia Avenue Railroad Grade Separation Project O	\$78.2 \$64.4	Jan-01 Jan-01	May-01 May-01	Jan-09 Jan-09	Mar-10 Jun-10	May-10 Jan-11	Mar-11 Mar-11	Jun-11 Jul-11	Nov-14 Dec-14	
 Kraemer Boulevard Railroad Grade Separation Project O	\$70.4 \$63.5	Jan-01 Jan-01	Sep-09 Sep-09	Jan-09 Feb-09	Jul-10 Jul-10	Jul-10 Jan-11	Apr-11 Jun-11	Aug-11 Sep-11	Oct-14 Dec-14	
 Orangethorpe Avenue Railroad Grade Separation Project O	\$117.4 \$108.6	Jan-01 Jan-01	Sep-09 Sep-09	Feb-09 Feb-09	Dec-11 Oct-11	Dec-11 Apr-12	Feb-12 Sep-12	May-12 Jan-13	Sep-16 Oct-16	
 Tustin Avenue/Rose Drive Railroad Grade Separation Project O	\$103.0 \$98.3	Jan-01 Jan-01	Sep-09 Sep-09	Feb-09 Feb-09	Dec-11 Jul-11	Mar-12 Jun-12	May-12 Oct-12	Aug-12 Feb-13	May-16 Oct-16	
 Lakeview Avenue Railroad Grade Separation Project O	\$70.2 \$107.4	Jan-01 Jan-01	Sep-09 Sep-09	Feb-09 Feb-09	Oct-11 Jan-13	Oct-12 Apr-13	Feb-13 Sep-13	May-13 Nov-13	Mar-17 Jul-17	
 17th Street Railroad Grade Separation Project R	TBD TBD	Oct-14 Oct-14	Jun-16 Jun-17	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	
Rail and Station Projects:										
 Rail-Highway Grade Crossing Safety Enhancement Project R	\$94.4 \$90.4	Jan-08 Jan-08	Oct-08 Oct-08	Jan-08 Jan-08	Sep-08 Sep-08	Sep-08 Sep-08	Sep-08 Sep-08	Aug-09 Aug-09	Dec-11 Dec-11	
 San Clemente Beach Trail Safety Enhancements Project R	\$6.0 \$5.0	Sep-10 Sep-10	Jul-11 Jul-11	Feb-12 Feb-12	Apr-12 Jun-12	Apr-12 Jun-12	Jul-12 Oct-12	Oct-12 May-13	Jan-14 Mar-14	
 San Juan Capistrano Passing Siding	\$25.3 \$25.3	Aug-11 Aug-11	Jan-13 Mar-14	Mar-15 Mar-15	May-16 Apr-17	May-16 Apr-17	Aug-16 Jul-17	Dec-16 Oct-17	Jan-19 Dec-19	
 OC Streetcar Project S	TBD \$306.4	Aug-09 Aug-09	Mar-12 Mar-15	Feb-16 Feb-16	TBD Jul-17	TBD Sep-17	TBD Nov-17	TBD Mar-18	TBD Apr-20	
 Placentia Metrolink Station and Parking Structure Project R	\$34.8 Cost/Schedule Risk \$34.8	Jan-03 Jan-03	May-07 May-07	Oct-08 Oct-08	Jan-11 Feb-11	TBD Sep-17	TBD Oct-17	TBD Jan-18	TBD Sep-19	
 Anaheim Canyon Station	TBD \$21.0	Jan-16 Jan-16	Dec-16 Jan-17	TBD Oct-17	TBD Nov-18	TBD Nov-18	TBD Feb-19	TBD May-19	TBD Aug-20	

Capital Action Plan

Status Through September 2016

Updated: October 26, 2016

Capital Projects	Cost	Schedule							
	Baseline/Forecast	Plan/Forecast							
	(millions)	Begin Environmental	Complete Environmental	Begin Design	Complete Design	Construction Ready	Advertise Construction	Award Contract	Complete Construction
Orange Station Parking Expansion Cost/Schedule Risk	\$33.2	Dec-09	Dec-12	Nov-10	Apr-13	Jul-16	Jul-16	Nov-16	Jun-18
	\$33.2	Dec-09	May-16	Nov-10	Apr-16	Jul-16	Jul-16	Mar-17	Oct-18
Fullerton Transportation Center - Elevator Upgrades Cost/Schedule Risk	\$3.5	N/A	N/A	Jan-12	Dec-13	Dec-13	Jun-14	Sep-14	Mar-17
	\$4.0	N/A	N/A	Jan-12	Dec-13	Dec-13	Aug-14	Apr-15	Jan-18
Laguna Niguel/Mission Viejo Station ADA Ramps	\$3.5	Jul-13	Jan-14	Jul-13	Aug-14	Aug-14	Sep-14	Jan-15	Apr-17
	\$4.6	Jul-13	Feb-14	Jul-13	Jul-15	Jul-15	Jul-15	Oct-15	Jul-17
Anaheim Regional Transportation Intermodal Center	\$227.4	Apr-09	Feb-11	Jun-09	Feb-12	Feb-12	May-12	Jul-12	Nov-14
Project R & T	\$230.4	Apr-09	Feb-12	Jun-09	May-12	May-12	May-12	Sep-12	Dec-14

Note: Costs associated with landscape projects are included in respective freeway projects.

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

Begin Environmental: The date work on the environmental clearance, project report, or preliminary engineering phase begins.

Complete Environmental: The date environmental clearance and project approval is achieved.

Begin Design: The date final design work begins, or the date when a design-build contract begins.

Complete Design: The date final design work is 100 percent complete and approved.

Construction Ready: The date contract bid documents are ready for advertisement, including certification of right-of-way, all agreements executed, contract constraints are cleared.

Advertise for Construction: The date a construction contract is both funded and advertised for bids.

Award Contract: The date the construction contract is awarded.

Construction Complete: The date all construction work is completed and the project is open to public use.

Acronyms

I-5 - Santa Ana Freeway (Interstate 5)

SR-73 - San Joaquin Freeway (State Route 73)

SR-55 - Costa Mesa Freeway (State Route 55)

SR-57 - Orange Freeway (State Route 57)

SR-91 - Riverside Freeway (State Route 91)

SR-22 - Garden Grove Freeway (State Route 22)

I-405 - San Diego Freeway (Interstate 405)

SR-241 - Foothill/Eastern Transportation Corridor (State Route 241)

I-605 - San Gabriel River Freeway (Interstate 605)

SR-71 - Corona Expressway (State Route 71)

ADA - Americans with Disabilities Act

HOV - High-Occupancy Vehicle



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Capital Programs Division - First Quarter Fiscal Year 2016-
17 Capital Action Plan Performance Metrics**

Attachment B

**Capital Programs Division
Fiscal Year 2016-17 Performance Metrics Status Through September 2016**

Begin Environmental

Project Description	FY 17 Qtr 1		FY 17 Qtr 2		FY 17 Qtr 3		FY 17 Qtr 4		FY 17 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-605, I-605/ Katella Avenue Interchange	X	✔							
I-5, I-5/EI Toro Road Interchange			X						
SR-55, I-5 to SR-91			X						
Total Forecast/Actual	1	1	2	0	0	0	0	0	3

Complete Environmental

Project Description	FY 17 Qtr 1		FY 17 Qtr 2		FY 17 Qtr 3		FY 17 Qtr 4		FY 17 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Anaheim Canyon Metrolink Station			X						
17th Street Railroad Grade Separation							X		
Total Forecast/Actual	0	0	1	0	0	0	1	0	2

Begin Design

Project Description	FY 17 Qtr 1		FY 17 Qtr 2		FY 17 Qtr 3		FY 17 Qtr 4		FY 17 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
No "Begin Design" milestones scheduled for FY 2016-17									
Total Forecast/Actual	0	0	0	0	0	0	0	0	0

Complete Design

Project Description	FY 17 Qtr 1		FY 17 Qtr 2		FY 17 Qtr 3		FY 17 Qtr 4		FY 17 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
SR-91 (Westbound), I-5 to SR-57 Landscape	X	✔							
SR-57 (Northbound), Orangethorpe to Lambert Landscape			X						
I-5, SR-55 to SR-57					X				
I-5, Oso Parkway to Alicia Parkway							X		
I-405 Southbound, SR-133 to University Drive							X		
San Juan Capistrano Passing Siding							X		
Total Forecast/Actual	1	1	1	0	1	0	3	0	6

Construction Ready

Project Description	FY 17 Qtr 1		FY 17 Qtr 2		FY 17 Qtr 3		FY 17 Qtr 4		FY 17 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Orange Metrolink Station Parking Expansion	X	✔							
SR-57 (Northbound), Katella to Lincoln Landscape			X						
SR-57 (Northbound), Orangethorpe to Lambert Landscape			X						
SR-91 (Westbound), I-5 to SR-57 Landscape			X						
I-405 Southbound, SR-133 to University Drive							X		
San Juan Capistrano Passing Siding							X		
Total Forecast/Actual	1	1	3	0	0	0	2	0	6

Capital Programs Division Fiscal Year 2016-17 Performance Metrics Status Through September 2016

Advertise Construction

Project Description	FY 17 Qtr 1		FY 17 Qtr 2		FY 17 Qtr 3		FY 17 Qtr 4		FY 17 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
Orange Metrolink Station Parking Expansion	X	✔							
SR-91 (Westbound), I-5 to SR-57 Landscape			X						
SR-57 (Northbound), Katella to Lincoln Landscape					X				
SR-57 (Northbound), Orangethorpe to Lambert Landscape					X				
Total Forecast/Actual	1	1	1	0	2	0	0	0	4

Award Contract

Project Description	FY 17 Qtr 1		FY 17 Qtr 2		FY 17 Qtr 3		FY 17 Qtr 4		FY 17 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
I-405/SR-22/I-605 HOV Connector Landscape	X	✔							
I-405, SR-55 to I-605 (Design-Build)			X						
Orange Metrolink Station Parking Expansion			X						
SR-91 (Westbound), I-5 to SR-57 Landscape					X				
SR-57 (Northbound), Katella to Lincoln Landscape					X				
SR-57 (Northbound), Orangethorpe to Lambert Landscape					X				
Total Forecast/Actual	1	1	2	0	3	0	0	0	6

Complete Construction

Project Description	FY 17 Qtr 1		FY 17 Qtr 2		FY 17 Qtr 3		FY 17 Qtr 4		FY 17 Fcst
	Fcst	Actual	Fcst	Actual	Fcst	Actual	Fcst	Actual	
SR-91 (Westbound), Tustin Interchange to SR-55	X	✔							
Orangethorpe Avenue Railroad Grade Separation	X								
Tustin Avenue/Rose Drive Railroad Grade Separation	X								
I-5/Ortega Highway Interchange Landscape		✔	X						
I-5, Vista Hermosa to Pacific Coast Highway					X				
Fullerton Transportation Center - Elevator Upgrades					X				
Total Forecast/Actual	3	2	1	0	2	0	0	0	6

Totals	8	7	11	0	8	0	6	0	33
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Begin Environmental: The date work on the environmental clearance, project report, or preliminary engineering phase begins.

Complete Environmental: The date environmental clearance and project approval is achieved.

Begin Design: The date final design work begins or the date when a design-build contract begins.

Complete Design: The date final design work is 100 percent complete and approved.

Construction Ready: The date contract bid documents are ready for advertisement, right-of-way certified, all agreements executed, and contract constraints are cleared.

Advertise for Construction: The date a construction contract is both funded and advertised for bids.

Award Contract: The date the construction contract is awarded.

Construction Complete: The date all construction work is completed and the project is open to public use.

Acronyms


I-5 - Santa Ana Freeway (Interstate 5)
 SR-22 - Garden Grove Freeway (State Route 22)
 SR-55 - Costa Mesa Freeway (State Route 55)
 SR-57 - Orange Freeway (State Route 57)
 SR-91 - Riverside Freeway (State Route 91)
 SR-133 - Laguna Freeway (State Route 133)
 I-605 - San Gabriel River Freeway (Interstate 605)
 I-405 - San Diego Freeway (Interstate 405)
 HOV - high-occupancy vehicle

X = milestone forecast in quarter
 ✔ = milestone accomplished in quarter



COMMITTEE TRANSMITTAL

November 14, 2016

To: Members of the Board of Directors
From:  Laurena Weinert, Clerk of the Board
Subject: Measure M2 Sales Tax Forecast

Finance and Administration Committee Meeting of November 9, 2016

Present: Directors Hennessey, Jones, Katapodis, Miller, Pulido, Spitzer,
and Steel
Absent: Director Do

Committee Vote

This item was passed by the Members present.

Committee Recommendation

Receive and file as an information item.



ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Sales Tax Forecast

Staff Report



November 9, 2016

To: Finance and Administration Committee
From: Darrell Johnson, Chief Executive Officer
Subject: Measure M2 Sales Tax Forecast

Overview

The Orange County Transportation Authority contracts with MuniServices, LLC and three universities to forecast Measure M2 taxable sales. MuniServices, LLC and the three universities have provided updated forecasts, and staff has incorporated the new information into the annual update for the long-range forecast of Measure M2 taxable sales.

Recommendation

Receive and file as an information item.

Background

In 2005, the Orange County Transportation Authority (OCTA) Board of Directors (Board) directed staff to forecast taxable sales in Orange County by averaging forecasted growth rates from three universities; Chapman University, University of California, Los Angeles, and California State University, Fullerton. On March 28, 2016, the Board directed staff to modify the forecasting methodology to utilize forecasted taxable sales growth rates from MuniServices, LLC (MuniServices) for the first five years of the forecast period, and an average of the three universities for the remaining years. In addition, OCTA has received final sales tax receipts for fiscal year (FY) 2016.

Discussion

OCTA has received updated taxable sales forecasts from MuniServices and the three universities. The MuniServices forecast includes five fiscal years from FY 2017 through FY 2021. The average annual taxable sales growth rate over that period based on MuniServices forecast is 3.6 percent. The three university average annual growth rate for the remaining years (FY 2022 through FY 2041) is 4.1 percent. The average annual growth rate over the entire forecast period

is 4 percent. Based on the updated taxable sales forecasts it is anticipated that total taxable sales available to support the Measure M2 (M2) Program will be 14.2 billion over the 30-year period.

The forecasted amount of sales tax of \$14.2 billion represents a \$1.4 billion (9 percent) decrease in forecasted taxable sales when compared to the FY 2015 forecast. The decrease is based on a combination of factors including, implementation of the new sales tax forecasting methodology, less than forecasted sales tax receipts in FY 2016, and reductions in the average long-term growth rates from the three university forecasts. Staff has incorporated the impacts of the decrease in revenue into the M2020 Update and Next 10 Plan, scheduled for Board presentation in November.

Summary

OCTA has received updated taxable sales forecasts from MuniServices and the three universities. Based on the implementation of the new sales tax forecasting methodology, less than forecasted sales tax receipts in FY 2016, and lower long-term average growth rates from the three university forecasts, it is anticipated that total taxable sales available for the M2 Program will be 14.2 billion. This represents a year-over-year decrease of \$1.4 billion (9 percent) in forecasted taxable sales when compared to last year's forecast. Staff has incorporated the impacts of the decrease in revenue into the M2020 Update and Next 10 Plan, scheduled for Board presentation in November.

Attachment

- A. Orange County Transportation Authority M2 Sales Tax Revenue Forecast - 2016

Prepared by:



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

Approved by:



Andrew Oftelie
Executive Director,
Finance and Administration
714-560-5649



ORANGE COUNTY TRANSPORTATION AUTHORITY

Measure M2 Sales Tax Forecast

Attachment A



Orange County Transportation Authority
M2 Sales Tax Revenue Forecast - 2016

Fiscal Year	Chapman Forecast	Growth Rate	UCLA Forecast	Growth Rate	CSUF Forecast	Growth Rate	MuniServices Forecast	Growth Rate	Board Approved Forecast	Blended Growth Rate
2010-11 **	61,756,868	*	61,756,868	*	61,756,868	*	61,756,868	*	61,756,868	*
2011-12	250,892,931	*	250,892,931	*	250,892,931	*	250,892,931	*	250,892,931	*
2012-13	266,384,076	*	266,384,076	*	266,384,076	*	266,384,076	*	266,384,076	*
2013-14	279,599,946	*	279,599,946	*	279,599,946	*	279,599,946	*	279,599,946	*
2014-15	291,615,675	*	291,615,675	*	291,615,675	*	291,615,675	*	291,615,675	*
2015-16	300,944,523	*	300,944,523	*	300,944,523	*	300,944,523	*	300,944,523	*
2016-17	317,427,924	4.53%	324,844,738	4.40%	329,144,718	6.55%	311,778,526	3.60%	311,778,526	3.60%
2017-18	331,281,368	4.36%	340,744,801	4.89%	349,877,516	6.30%	322,067,217	3.30%	322,067,217	3.30%
2018-19	345,379,796	4.26%	353,009,592	3.60%	369,130,659	5.50%	333,017,503	3.40%	333,017,503	3.40%
2019-20	359,732,826	4.16%	365,993,501	3.68%	387,574,204	5.00%	345,339,150	3.70%	345,339,150	3.70%
2020-21	374,104,807	4.00%	380,102,010	3.85%	404,702,114	4.42%	359,152,716	4.00%	359,152,716	4.00%
2021-22	388,682,544	3.90%	395,217,273	3.98%	422,497,715	4.40%	373,842,711	4.09%	373,842,711	4.09%
2022-23	402,732,838	3.61%	411,361,519	4.08%	441,226,180	4.43%	388,961,597	4.04%	388,961,597	4.04%
2023-24	417,114,389	3.57%	428,602,952	4.19%	460,901,675	4.46%	404,807,343	4.07%	404,807,343	4.07%
2024-25	431,855,623	3.53%	447,017,887	4.30%	480,954,475	4.35%	421,244,379	4.06%	421,244,379	4.06%
2025-26	446,917,218	3.49%	462,645,043	3.50%	502,378,243	4.45%	437,304,941	3.81%	437,304,941	3.81%
2026-27	462,252,271	3.43%	481,033,816	3.97%	524,520,793	4.41%	454,525,348	3.94%	454,525,348	3.94%
2027-28	477,972,258	3.40%	504,969,316	4.98%	546,248,479	4.14%	473,492,648	4.17%	473,492,648	4.17%
2028-29	494,160,374	3.39%	530,600,190	5.08%	570,485,766	4.44%	493,852,208	4.30%	493,852,208	4.30%
2029-30	510,838,838	3.38%	558,682,047	5.29%	596,135,457	4.50%	515,521,942	4.39%	515,521,942	4.39%
2030-31	527,992,016	3.36%	589,831,405	5.58%	622,395,027	4.40%	538,442,596	4.45%	538,442,596	4.45%
2031-32	545,627,014	3.34%	617,266,447	4.65%	648,861,744	4.25%	560,417,780	4.08%	560,417,780	4.08%
2032-33	563,792,630	3.33%	645,478,910	4.57%	676,139,591	4.20%	583,028,419	4.03%	583,028,419	4.03%
2033-34	582,513,026	3.32%	674,980,836	4.57%	705,539,974	4.35%	606,814,539	4.08%	606,814,539	4.08%
2034-35	601,790,097	3.31%	705,831,163	4.57%	736,901,431	4.45%	631,744,245	4.11%	631,744,245	4.11%
2035-36	621,617,685	3.29%	738,091,518	4.57%	769,124,200	4.37%	657,515,313	4.08%	657,515,313	4.08%
2036-37	642,010,002	3.28%	771,826,349	4.57%	801,202,663	4.17%	683,863,815	4.01%	683,863,815	4.01%
2037-38	662,621,199	3.21%	807,103,046	4.57%	834,692,558	4.18%	711,129,279	3.99%	711,129,279	3.99%
2038-39	683,414,795	3.14%	843,992,082	4.57%	869,292,880	4.15%	739,228,149	3.95%	739,228,149	3.95%
2039-40	704,756,066	3.12%	882,567,149	4.57%	904,952,155	4.10%	768,293,098	3.93%	768,293,098	3.93%
2040-41 **	544,968,479	3.10%	692,178,982	4.57%	705,451,447	3.94%	598,525,210	3.87%	598,525,210	3.87%
Total	\$ 13,892,750,101	3.55%	\$ 15,405,166,590	4.45%	\$ 16,111,525,684	4.56%	\$ 14,165,104,693	3.60%	\$ 14,165,104,693	3.98%

* Fiscal years 2011 through 2016 represent actual sales tax receipts. Forecasted revenue figures in nominal dollars.

** Fiscal year 2011 includes sales tax receipts for one quarter and fiscal year 2041 represents forecasted sales tax receipts for three quarters.



COMMITTEE TRANSMITTAL

November 14, 2016

To: Members of the Board of Directors
From: Laurena Weinert, Clerk of the Board
Subject: OC Bridges Railroad Grade Separation Program Funding Plan Update

Regional Planning and Highways Committee Meeting of November 7, 2016

Present: Directors Bartlett, Donchak, Lalloway, Miller, Nelson, and Ury
Absent: Directors Do and Spitzer

Committee Vote

This item was passed by the Members present.

Committee Recommendations

- A. Authorize an overall increase to the OC Bridges Railroad Grade Separation Program budget by \$32.732 million, from \$631.231 million to \$663.963 million, which includes the following funding assumptions:
- Increase in Utility Relocation reimbursement of \$3.071 million;
 - Increase in other local funding of \$1.152 million;
 - Reduction of Trade Corridor Improvement Fund of \$18.895 million.
- B. Approve the use of additional funds for the OC Bridges Railroad Grade Separation Program:
- \$6.015 million in additional Measure M2;
 - \$13.125 million in revenue generated from the rental and sale of excess property assets that were acquired for the OC Bridges Railroad Grade Separation Program;
 - \$28.264 million in Federal Surface Transportation Block Grant or Congestion Mitigation and Air Quality Improvement Program funds, contingent on approval from the California Department of Transportation and Federal Highways Administration.



- C. Authorize the Chief Executive Officer to negotiate and execute Amendment No. 6 to Cooperative Agreement No. C-9-0576, between the Orange County Transportation Authority and the City of Fullerton, in the amount of \$23,608,800, for the Raymond Avenue and State College Boulevard railroad grade separation projects. This will increase the maximum obligation of the agreement to a total contract value of \$221,802,000.

- D. Authorize staff to process all necessary amendments to the Federal Transportation Improvement Program, and execute or amend all necessary agreements to facilitate the above actions.



ORANGE COUNTY TRANSPORTATION AUTHORITY


**OC Bridges Railroad Grade Separation Program Funding
Plan Update**

Staff Report



November 7, 2016

To: Regional Planning and Highways Committee

From: Darrell Johnson, Chief Executive Officer 

Subject: OC Bridges Railroad Grade Separation Program Funding Plan Update

Overview

The Orange County Transportation Authority is implementing the OC Bridges Railroad Grade Separation Program, which includes seven railroad grade separation projects along the Orangethorpe Avenue railroad corridor in the cities of Anaheim, Fullerton, and Placentia. The Board of Directors' approval is requested to provide additional funding for overall OC Bridges Railroad Grade Separation Program adjustments.

Recommendations

- A. Authorize an overall increase to the OC Bridges Railroad Grade Separation Program budget by \$32.732 million, from \$631.231 million to \$663.963 million, which includes the following funding assumptions:
- Increase in Utility Relocation reimbursement of \$3.071 million;
 - Increase in other local funding of \$1.152 million;
 - Reduction of Trade Corridor Improvement Fund of \$18.895 million.
- B. Approve the use of additional funds for the OC Bridges Railroad Grade Separation Program:
- \$6.015 million in additional Measure M2;
 - \$13.125 million in revenue generated from the rental and sale of excess property assets that were acquired for the OC Bridges Railroad Grade Separation Program;
 - \$28.264 million in Federal Surface Transportation Block Grant or Congestion Mitigation and Air Quality Improvement Program funds, contingent on approval from the California Department of Transportation and Federal Highways Administration.
- C. Authorize the Chief Executive Officer to negotiate and execute Amendment No. 6 to Cooperative Agreement No. C-9-0576, between the

Orange County Transportation Authority and the City of Fullerton, in the amount of \$23,608,800, for the Raymond Avenue and State College Boulevard railroad grade separation projects. This will increase the maximum obligation of the agreement to a total contract value of \$221,802,000.

- D. Authorize staff to process all necessary amendments to the Federal Transportation Improvement Program, and execute or amend all necessary agreements to facilitate the above actions.

Background

The Orange County Transportation Authority (OCTA), in coordination with the cities of Anaheim, Fullerton, and Placentia, is implementing the OC Bridges Railroad Grade Separation Program (OC Bridges Program). Overcrossings at Orangethorpe Avenue, Tustin Avenue/Rose Drive, and Lakeview Avenue are implemented directly by OCTA. The City of Fullerton (City) is implementing undercrossings at State College Boulevard and Raymond Avenue. Two grade separation projects at Kraemer Boulevard and Placentia Avenue are complete, but require funding adjustments in Measure M2 (M2) funds. A map showing the locations of these projects is included in Attachment A, and Attachment B provides a status update for each project.

On August 8, 2016, the OCTA Board of Directors (Board) reviewed the OC Bridges Program cost-to-complete item, which directed staff to return with funding plan amendments to support the completion of the OC Bridges Railroad grade separation funding plan. The overall cost increase is determined to be \$32.732 million, with project costs increasing from \$631.231 million to \$663.963 million.

A significant portion of the program cost increase is attributed to right-of-way (ROW) cost increases related to several full fee property acquisitions for the Tustin Avenue/Rose Drive, Lakeview Avenue, State College Boulevard, and Raymond Avenue grade separation projects. The OC Bridges Program cost-to-complete August 2016 Board update detailed the previously Board-approved parcel acquisitions and settlements that contributed to the OC Bridges cost increase.

As included in the August 2016 item, there are also increases in the design and/or construction costs for the Tustin Avenue/Rose Drive, Lakeview Avenue, and Raymond Avenue grade separation projects related to construction change orders to address utility conflicts and design changes, as well as the discovery of contaminated material. Additionally, there are decreases in the overall costs

for the Placentia Avenue and Orangethorpe Avenue grade separation projects. The details regarding specific project cost adjustments were provided in the August 8, 2016 Board item.

Existing funding and cost by project is provided in the table below:

OC Bridges Program - Project Funding and Cost Summary			
Project	OCTA Board Approved Funding (\$000s)	Current Cost Estimate (\$000s)	(Surplus)/ Shortfall (\$000s)
Placentia Avenue	69,425	64,443	(4,982)
Kraemer Boulevard	59,062	63,462	4,400
Orangethorpe Avenue	110,495	108,600	(1,895)
Tustin Avenue/Rose Drive	94,271	98,254	3,983
Lakeview Avenue	95,649	107,402	11,753
State College Boulevard	86,004	96,969	10,965
Raymond Avenue	112,190	124,833	12,643
Project Savings held in program *	4,135	0	(4,135)
TOTAL	631,231	663,963	32,732

*Includes \$2.066 million of the project savings held in program is M2 and held for Raymond Avenue grade separation

In August 2016, the staff report highlighted the potential for using revenue generated from the rental and sale of excess property assets that were acquired by the OC Bridges Program to address part of the additional costs. This has been incorporated into the funding plan outlined below.

Discussion

The OC Bridges Program is managed by OCTA as a program of projects and is being delivered with eleven different funding sources, each having specific rules for eligibility for each project phase. The number of funding sources and limitations for capturing construction bid savings make this one of the most complex funding programs that OCTA has ever managed.

Staff performed a comprehensive analysis of the existing programmed revenues for each project to confirm the eligible use within each project. Every fund source was reviewed to confirm that the specific reimbursement ratio for each project considered ineligible items. In some cases, federal and local funds were redistributed between projects to maximize use of the funds. Through this process, it was determined that state policy limits the reimbursement ratio that was assigned to these projects through the State Proposition 1B Trade Corridor Improvement Fund (TCIF) Program. Therefore, OCTA will not be able

to use all of the funds programmed to the projects and will need funding to backfill \$18.895 million in TCIF funds that cannot be utilized for these projects.

Fortunately, the TCIF savings within each project will return to Orange County's share, and, based on the current program guidelines, would be available to OCTA for reprogramming to a future TCIF-eligible project. As savings are realized following project close out, OCTA will return with a recommendation for use of these funds.

In determining which fund source to use, staff referred to the Capital Programming Policies (CPP), which provides Board direction for the use of various formula program funds. The first priority for all state and federal funds is to maximize the use of state and federal funds to meet M2 commitments. Every effort was made to minimize the use of additional M2 funds. Due to the complexity and size of the program, some additional M2 funds will be needed to cover ineligible costs. The funding plan also relies on federal funds, and use of these funds is ultimately contingent on state and federal approvals. Some of this funding is proposed to be used to replace state TCIF funds.

The table below provides a summary of how the OC Bridges Program is currently and proposed to be funded, given the cost and revenue changes mentioned above.

Fund Source	OCTA M2	Surplus Property	Utility Relocation	Other Local	TCIF	Other State	STBG/CMAQ	Other Federal	TOTAL
Past Funding (1/13/14 & 6/13/16)	\$ 136,448	\$ -		\$ 21,955	\$ 172,964	\$ 108,016	\$ 146,114	\$ 41,599	\$ 627,096
Project Savings held in program:	\$ 2,066	\$ -			\$ -	\$ -	\$ 2,069	\$ -	\$ 4,135
Subtotal of Funds Available:	\$ 138,514	\$ -		\$ 21,955	\$ 172,964	\$ 108,016	\$ 148,183	\$ 41,599	\$ 631,231
Proposed Funding Plan includes:	\$ 144,529	\$ 13,125	\$ 3,071	\$ 23,107	\$ 154,069	\$ 108,016	\$ 176,447	\$ 41,599	\$ 663,963
Change in Funding (Increase, (Decrease))	\$ 6,015	\$ 13,125	\$ 3,071	\$ 1,152	\$ (18,895)	\$ -	\$ 28,264	\$ -	\$ 32,732

STBG/CMAQ – Surface Transportation Block Grant/Congestion Mitigation Air Quality

Overall, the OC Bridges Program project cost increased from \$631.231 million to \$663.963 million. This change includes a reduction of \$18.895 million in TCIF funds.

The following additional funding requires Board approval:

- \$6.015 million in M2, Project O funds;
- \$13.125 million in surplus property sales;
- \$28.264 million in federal STBG and CMAQ funds (comprised of \$26.711 million in STBG and \$1.553 million in CMAQ).

The other funding sources included in the table above do not require Board approval since these were previously committed to the OC Bridges Program. These funding sources include:

- \$3.071 million in utility relocation reimbursement; and
- \$1.152 million in other local funds.

Details on the funding source changes are further described below. A detailed summary of estimated costs for each project, by phase, which was provided in the August 2016 item, along with the proposed funding for each project by phase, is included as Attachment C. A Capital Funding Program reflecting the recommended changes is included as Attachment D.

Project O

The M2 Program funds derive from Project O within the M2 Transportation Investment Plan. According to the CPP, these funds must be used consistent with the M2020 Plan, which included Project O funds for the OC Bridges Program grade separation items. Project O funds are typically used for the Comprehensive Transportation Funding Program call for projects (call), which is a competitive program that provides funds to local agencies. Project O specifically provides for improvements to the Master Plan of Arterial Highways.

Surplus Property

The use of funding generated from the sale of surplus property was discussed in the August 2016 Board item. In October 2013, the Board had directed that any funds available through the sale of excess property return to Project O, Regional Capacity Program. However, in light of the current funding need, and based on the August 2016 discussion with the Board, staff is recommending that these funds go back into the OC Bridges Program to offset cost increases. The latest estimate for the revenue that would be available from property proceeds (including rental income) is \$13.125 million. The surplus property revenue may change based on actual sales figures, and staff will return to the Board upon sale of all surplus property.

STBG/CMAQ

The updated funding plan relies on the use of additional federal STBG (formerly Regional Surface Transportation Program) and CMAQ funds, increasing the combined federal funds by \$28.264 million. These federal funds are proposed for the cost increase, but will also need to be used for the reduction in TCIF funds mentioned above. Use of the funds will be contingent on the California Department of Transportation and Federal Highway Administration approval. Use of these funds is consistent with the CPP which directs STBG to be used for M2 freeway projects, grade separations, and local streets and roads.

Similarly, the use of CMAQ is directed to M2 fixed-guideway, M2 high-occupancy vehicle or high-occupancy toll operational improvements, and as match to leverage funding for the OC Bridges grade separation projects. These funds will be programmed in future years as the projects approach close out so they do not impact the current planned use of other federal funds.

Utility Reimbursements

OCTA has received reimbursements of \$3.071 million for utility relocation from utility companies. As mentioned above, this increase in funding does not require Board approval since these funds are contractual reimbursements from utility companies.

Other Local

The other local funds listed in the table above include contributions from BNSF Railway (BNSF), Orange County Unified Transportation Trust (OCUTT), water and sanitation district reimbursements and contributions from the City. The City had previously provided \$1.521 million for the design of the State College Boulevard grade separation which was not accounted for, neither in revenues nor in programmed costs. Additionally, other contributions were lower than anticipated, resulting in an overall adjustment of other local funds of \$1.152 million. The OCUTT funds did not change.

Next Steps

Following Board approval, OCTA will negotiate and amend the agreement with the City to provide additional M2, Project O, local funds, and federal funds to the State College Boulevard grade separation, and M2 and surplus property proceeds to the Raymond Avenue grade separation. The cooperative agreement will reflect an increase of \$23.608 million, with \$12.643 million

for the Raymond Avenue grade separation and \$10.965 million for the State College Boulevard grade separation. A fact sheet identifying the terms for the amendment is provided in Attachment E.

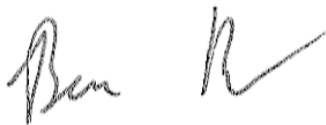
Summary

The current funding plans for the OC Bridges Program are being updated to provide additional funding due to cost increases and a reduction in anticipated TCIF revenue. Overall, the OC Bridges Program cost increased by \$32.732 million, from \$631.231 million to \$663.963 million. Staff is proposing to use a combination of M2, surplus property proceeds, utility relocation reimbursement, STBG, and CM AQ to provide additional funding to meet the estimated funding need. An amendment to the cooperative agreement with the City is also required to support the State College Avenue and Raymond Avenue grade separation projects.

Attachments

- A. OC Bridges Railroad Grade Separation Program Project Map
- B. OC Bridges Railroad Grade Separation Program Status Update
- C. OC Bridges Railroad Grade Separation Program Project Cost and Funding Summary
- D. Capital Funding Program Report
- E. City of Fullerton Cooperative Agreement No. C-9-0576 Fact Sheet

Prepared by:

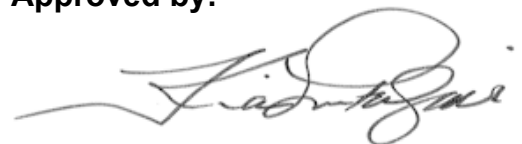


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ORANGE COUNTY TRANSPORTATION AUTHORITY

**OC Bridges Railroad Grade Separation Program Funding
Plan Update**

Attachment A

OC BRIDGES RAILROAD GRADE SEPARATION PROGRAM PROJECT MAP





ORANGE COUNTY TRANSPORTATION AUTHORITY

**OC Bridges Railroad Grade Separation Program Funding
Plan Update**

Attachment B

OC Bridges Railroad Grade Separation Program Status Update

Raymond Avenue

Construction commenced in June 2014 and is approximately 65 percent complete. The railroad bridge structure was completed in July 2016 and BNSF Railway shifted the railroad shoofly tracks on to the bridge structure in late August 2016. Construction is anticipated to be complete in mid-2018.

State College Boulevard

Construction commenced in June 2014 and is approximately 55 percent complete. The railroad bridge structure was completed in July 2016, and BNSF Railway shifted the railroad shoofly tracks on to the bridge structure in late August 2016. Construction is anticipated to be complete in mid-2018.

Placentia Avenue

Placentia Avenue was opened to public traffic in March 2014, and construction was completed in December 2014.

Kraemer Boulevard

Kraemer Boulevard was opened to public traffic in June 2014, and construction was completed in December 2014.

Orangethorpe Avenue

Orangethorpe Avenue was opened to public traffic in June 2016. Construction was completed in September 2016, and the one year construction warranty will be initiated.

Tustin Avenue/Rose Drive

Tustin Avenue/Rose Drive was opened to public traffic in December 2015. Construction was completed in September 2016, and the one year construction warranty will be initiated.

Lakeview Avenue

Construction commenced in July 2014 and is approximately 55 percent complete. The new Lakeview Commercial Loop Road and Lakeview Connector Road were opened to public traffic on May 12, 2016 and July 21, 2016, respectively. The new Lakeview Avenue bridge is anticipated to be completed and opened to public traffic in spring 2017. Current project activities include roadway and bridge work, retaining walls, drainage, electrical, and construction administration. Construction is anticipated to be complete by summer 2017.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**OC Bridges Railroad Grade Separation Program Funding
Plan Update**

Attachment C

**OC Bridges Railroad Grade Separation Program
Summary of Project Funding Detail ¹**

Project Phase	Current Cost Estimate (\$000s)	Board Approved Funding (\$000s)	Surplus/ (Shortfall) (\$000s)
Design (Preliminary & Final Engineering)	44,390	41,469	(2,921)
Right-of-Way (ROW)	216,228	195,161	(21,067)
Construction	358,685	347,019	(11,666)
Project Management and Support ²	44,660	43,447	(1,213)
Contingency	-	4,135	4,135
TOTALS	663,963	631,231	(32,732)

NOTES

1. Project funding detail was included in the August 8, 2016 OC Bridges Railroad Grade Separation Program cost-to-complete update.
2. Project support includes OCTA staff, city support, public outreach and legal services.

Summary of Funding Information

Fund Source	OCTA M2	Surplus Property	Utility Relocation Reimbursement	Other Local	TCRP	PTMISEA	TCIF	TSSSDRA	RSTP / STBG	CMAQ	Federal Demo	TOTAL
Past Funding (1/13/14 & 6/13/16)	\$ 136,448	\$ -	\$ -	\$ 21,955	\$ 7,500	\$ 94,808	\$ 172,964	\$ 5,708	\$ 82,618	\$ 63,496	\$ 41,599	\$ 627,096
Project Savings held in program:	\$ 2,066									\$ 2,069		\$ 4,135
Subtotal of Funds Available:	\$ 138,514	\$ -	\$ -	\$ 21,955	\$ 7,500	\$ 94,808	\$ 172,964	\$ 5,708	\$ 82,618	\$ 65,565	\$ 41,599	\$ 631,231
Proposed Funding	\$ 144,529	\$ 13,125	\$ 3,071	\$ 23,107	\$ 7,500	\$ 94,808	\$ 154,069	\$ 5,708	\$ 109,329	\$ 67,118	\$ 41,599	\$ 663,963
Change in Funding (Increase, (Decrease))	\$ 6,015	\$ 13,125	\$ 3,071	\$ 1,152	\$ -	\$ 0	\$ (18,895)	\$ -	\$ 26,711	\$ 1,553	\$ -	\$ 32,732

Acronyms:

- Board - Board of Directors
- OCTA - Orange County Transportation Authority
- M2 - Measure M2
- TCRP - Traffic Congestion Relief Program
- PTMISEA - Public Transportation Modernization, Improvement, and Service Enhancement
- TCIF - Transportation Corridor Improvement Funds
- TSSSDRA - Transit System Safety, Security, and Disaster Response Account
- RSTP - Regional Surface Transportation Program
- STBG - Surface Transportation Block Grant
- CMAQ - Congestion Mitigation and Air Quality Program
- MWD - Metropolitan Water District
- OCSD - Orange County Sheriff's Department
- OCUTT - Orange County Unified Transportation Trust

**Raymond Avenue Undercrossing Project
(SO208)**

Cost Information

Project Funding Detail*

Project Phase	Current Cost Estimate (\$000s)	Board Approved Funding (\$000s)	Surplus/ (Shortfall) (\$000s)	Comments
Design (Preliminary & Final Engineering)	5,606	4,862	(744)	Increase in design costs due to design changes made after the bidding phase
ROW	36,494	34,901	(1,593)	Increase in ROW costs due to a number of administrative settlements for property acquisitions involving severance damages, loss of business goodwill claims and the need for temporary construction easement time extensions.
Construction	73,877	62,927	(10,950)	The construction management consultant contract amount was originally under estimated and had to be amended several times to address various construction challenges and long contract duration. In addition railroad cost increased, and contaminated material were encountered on the project and resulted in several large Construction Change Orders (CCOs).
Project Management and Support	8,856	9,500	644	The project management and support costs are anticipated to be less and under budget
TOTALS	124,833	112,190	(12,643)	

* Project funding detail was included in the August 8, 2016 OC Bridges Railroad Grade Separation Program cost-to-complete

Current and Proposed Funding

Current Funding 6/13/16 (\$000s)

Fund Source/Phase	OCTA M2	M2 Contingency	Total M2	BNSF Railway	MWD	PTMISEA	TCIF	TSSSDRA	TOTAL
Design	\$ 4,862		\$ 4,862	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,862
ROW	9,729		\$ 9,729			25,172			\$ 34,901
Construction	682	2,066	\$ 2,748		761	47,654	10,107	3,723	\$ 64,993
Project Management and Support	974		\$ 974	700	1,859	4,184	1,783		\$ 9,500
Total*	\$ 16,247	\$ 2,066	\$ 18,313	\$ 700	\$ 2,620	\$ 77,010	\$ 11,890	\$ 3,723	\$ 114,256

* includes additional program contingency of \$2.066 million in M2 held in the program through the June 13, 2016 staff report.

Proposed Funding (\$000s)

Fund Source/Phase	OCTA M2	Non Federal Portion of Surplus Property and Rental Income	BNSF Railway	MWD	PTMISEA	TCIF	TSSSDRA	TOTAL
Design	\$ 5,098		\$ -	\$ -	\$ 508	\$ -	\$ -	\$ 5,606
ROW	11,322				25,172			\$ 36,494
Construction	5,529	5,216		1,800	47,674	9,935	3,723	\$ 73,877
Project Management and Support	4,401		700		3,656	99		\$ 8,856
Proposed Total	\$ 26,350	\$ 5,216	\$ 700	\$ 1,800	\$ 77,010	\$ 10,034	\$ 3,723	\$ 124,833
Current Total	\$ 18,313		\$ 700	\$ 2,620	\$ 77,010	\$ 11,890	\$ 3,723	\$ 114,256
Change	\$ 8,037	\$ 5,216	\$ -	\$ (820)	\$ -	\$ (1,856)	\$ -	\$ 10,577

**State College Boulevard Undercrossing Project
(SO207)**

Cost Information

Project Funding Detail*

Project Phase	Current Cost Estimate (\$000s)	Board Approved Funding (\$000s)	Surplus/ (Shortfall) (\$000s)	Comments
Design (Preliminary & Final Engineering)	5,831	5,612	(219)	Increase in design costs due to additional environmental and engineering services needed to address contaminated soils and construction support.
ROW	32,518	23,868	(8,650)	Increase in ROW costs due to a number of administrative settlements for property acquisitions involving severance damages, loss of business goodwill claims and the need for temporary construction easement time extensions.
Construction	52,066	52,197	131	Construction costs are anticipated to be slightly less and under budget.
Project Management and Support	6,554	4,327	(2,227)	The project management and support costs are over budget due to increased legal costs to address potential litigation matters and administrative settlements.
TOTALS	96,969	86,004	(10,965)	

*Project funding detail was included in the August 8, 2016 OC Bridges Railroad Grade Separation Program cost-to-complete

Current and Proposed Funding

Current Funding 1/13/14 (\$000s)

Fund Source/Phase	OCTA M2	BNSF Railway	City of Fullerton	OCSD	TCIF	TSSSDRA	RSTP	CMAQ	Federal Demo	TOTAL
Design	\$ 1,975	\$ -	\$ 1,925	\$ 1,712	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,612
ROW	2,529		3,012				5,776	1,033	11,518	\$ 23,868
Construction		677			35,890	1,985	6,397	5,476	1,772	\$ 52,197
Project Management and Support		423		1,297				2,607		\$ 4,327
Total	\$ 4,504	\$ 1,100	\$ 4,937	\$ 3,009	\$ 35,890	\$ 1,985	\$ 12,173	\$ 9,116	\$ 13,290	\$ 86,004

Proposed Funding (\$000s)

Fund Source/Phase	OCTA M2	BNSF Railway	City of Fullerton	OCSD	TCIF	TSSSDRA	RSTP	CMAQ	Federal Demo	TOTAL
Design	\$ 3,736	\$ -	\$ 1,925	\$ 170	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,831
ROW	2,529		4,533				11,593	2,345	11,518	\$ 32,518
Construction	1,656	1,100		2,531	31,569		5,447	7,991	1,772	\$ 52,066
Project Management and Support	3,322			759	488	1,985				\$ 6,554
Proposed Total	\$ 11,243	\$ 1,100	\$ 6,458	\$ 3,460	\$ 32,057	\$ 1,985	\$ 17,040	\$ 10,336	\$ 13,290	\$ 96,969
Current Total	\$ 4,504	\$ 1,100	\$ 4,937	\$ 3,009	\$ 35,890	\$ 1,985	\$ 12,173	\$ 9,116	\$ 13,290	\$ 86,004
Change	\$ 6,739	\$ -	\$ 1,521	\$ 451	\$ (3,833)	\$ -	\$ 4,867	\$ 1,220	\$ -	\$ 10,965

**Placentia Avenue Undercrossing Project
(SO203)**

Cost Information

Project Funding Detail*

Project Phase	Current Cost Estimate (\$000s)	Board Approved Funding (\$000s)	Surplus/ (Shortfall) (\$000s)	Comments
Design (Preliminary & Final Engineering)	4,538	4,625	87	Design was completed under budget.
ROW	18,357	20,856	2,499	ROW closeout effort is anticipated to be completed under budget.
Construction	37,515	39,490	1,975	Construction was completed under budget.
Project Management and Support	4,033	4,454	421	Project Management closeout effort is anticipated to be completed under budget.
TOTALS	64,443	69,425	4,982	

* Project funding detail was included in the August 8, 2016 OC Bridges Railroad Grade Separation Program cost-to-complete

Current and Actual Funding

Current Funding 1/13/14 (\$000s)

Fund Source/Phase	OCTA M2	OCUTT	BNSF Railway	TCRP (City)	PTMISEA	TCIF	TOTAL
Design	\$ 4,625	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,625
ROW	13,356	1,460		6,040			\$ 20,856
Construction	10,102		2,043		17,798	9,548	\$ 39,491
Project Management and Support	4,454						\$ 4,454
Total	\$ 32,537	\$ 1,460	\$ 2,043	\$ 6,040	\$ 17,798	\$ 9,548	\$ 69,426

Actual Funding (\$000s) - Project Complete

Fund Source/Phase	OCTA M2	OCUTT	Utility Relocation Revenue	BNSF Railway	TCRP (City)	PTMISEA	TCIF	TOTAL
Design	\$ 4,538	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,538
ROW	10,857	1,460			6,040			\$ 18,357
Construction	7,928		199	2,043		17,798	9,548	\$ 37,516
Project Management and Support	4,033							\$ 4,033
Proposed Total	\$ 27,356	\$ 1,460	\$ 199	\$ 2,043	\$ 6,040	\$ 17,798	\$ 9,548	\$ 64,443
Current Total	\$ 32,537	\$ 1,460	\$ -	\$ 2,043	\$ 6,040	\$ 17,798	\$ 9,548	\$ 69,426
Change	\$ (5,181)	\$ -	\$ 199	\$ -	\$ -	\$ -	\$ -	\$ (4,983)

**Kraemer Boulevard Undercrossing Project
(SO202)**

Cost Information

Project Funding Detail*

Project Phase	Current Cost Estimate (\$000s)	Board Approved Funding (\$000s)	Surplus/ (Shortfall) (\$000s)	Comments
Design (Preliminary & Final Engineering)	6,138	6,168	30	Design was completed within budget.
ROW	7,648	7,418	(230)	ROW closeout administrative effort is anticipated to be slightly over budget.
Construction	46,482	41,776	(4,706)	The full TCIF funds could not be utilized due to the reimbursement rate limitation. Therefore construction is shown over budget due to reprogrammed unused \$5.5 million in TCIF funds for the Interstate 405 Improvement Project.
Project Management and Support	3,194	3,700	506	Project Management closeout effort is anticipated to be completed under budget.
TOTALS	63,462	59,062	(4,400)	

* Project funding detail was included in the August 8, 2016 OC Bridges Railroad Grade Separation Program cost-to-complete

Current and Actual Funding

Current Funding 6/16/16 (\$000s)

Fund Source/Phase	OCTA M2	BNSF Railway	TCRP	TCIF	RSTP	CMAQ	TOTAL
Design	\$ 5,567	\$ -	\$ -	\$ -	\$ 601	\$ -	\$ 6,168
ROW	7,418						\$ 7,418
Construction	3,705	1,401	1,454	15,513		19,703	\$ 41,776
Project Management and Support	1,528	427	6		30	1,709	\$ 3,700
Total	\$ 18,218	\$ 1,828	\$ 1,460	\$ 15,513	\$ 631	\$ 21,412	\$ 59,062

Actual Funding (\$000s) - Project Complete

Fund Source/Phase	OCTA M2	Utility Relocation Reimbursement	BNSF Railway	TCRP	TCIF	RSTP	CMAQ	TOTAL
Design	\$ 5,537	\$ -	\$ -	\$ -	\$ -	\$ 601	\$ -	\$ 6,138
ROW	7,644	4						\$ 7,648
Construction	6,701		1,401	1,454	15,513		21,413	\$ 46,482
Project Management and Support	2,731		427	6		30		\$ 3,194
Proposed Total	\$ 22,613	\$ 4	\$ 1,828	\$ 1,460	\$ 15,513	\$ 631	\$ 21,413	\$ 63,462
Current Total	\$ 18,218		\$ 1,828	\$ 1,460	\$ 15,513	\$ 631	\$ 21,412	\$ 59,062
Change	\$ 4,395	\$ 4	\$ -	\$ -	\$ -	\$ -	\$ 1	\$ 4,400

**Orangethorpe Avenue Undercrossing Project
(SO206)**

Cost Information

Project Funding Detail*

Project Phase	Current Cost Estimate (\$000s)	Board Approved Funding (\$000s)	Surplus/ (Shortfall) (\$000s)	Comments
Design (Preliminary & Final Engineering)	8,301	8,266	(35)	Design costs are anticipated to be slightly over budget.
ROW	30,663	30,350	(313)	Increase in ROW costs due to for temporary construction easement time extensions.
Construction	63,387	65,465	2,078	Construction is anticipated to be completed under budget.
Project Management and Support	6,249	6,414	165	Project Management closeout effort is anticipated to be completed under budget.
TOTALS	108,600	110,495	1,895	

*Project funding detail was included in the August 8, 2016 OC Bridges Grade Separation Program cost-to-complete

Current and Proposed Funding

Current Funding 1/13/14 (\$000s)

Fund Source/Phase	OCTA M2	BNSF Railway	TCIF	RSTP	CMAQ	Federal Demo	TOTAL
Design	\$ 7,665	\$ -	\$ -	\$ 601	\$ -	\$ -	\$ 8,266
ROW	7,050				23,300		\$ 30,350
Construction	2,327	1,351	41,201	2,236		18,350	\$ 65,465
Project Management and Support	4,042		431	1,691		250	\$ 6,414
Total	\$ 21,084	\$ 1,351	\$ 41,632	\$ 4,528	\$ 23,300	\$ 18,600	\$ 110,495

Proposed Funding (\$000s)

Fund Source/Phase	OCTA M2	Utility Relocation Reimbursement	BNSF Railway	TCIF	RSTP/STBG	CMAQ	Federal Demo	TOTAL
Design	\$ 7,700	\$ -	\$ -	\$ -	\$ 601	\$ -	\$ -	\$ 8,301
ROW	1,813	1,346				27,504		\$ 30,663
Construction	5,000		1,351	31,030	10,135		15,871	\$ 63,387
Project Management and Support	30			3,490			2,729	\$ 6,249
Proposed Total	\$ 14,543	\$ 1,346	\$ 1,351	\$ 34,520	\$ 10,736	\$ 27,504	\$ 18,600	\$ 108,600
Current Total	\$ 21,084	\$ -	\$ 1,351	\$ 41,632	\$ 4,528	\$ 23,300	\$ 18,600	\$ 110,495
Change	\$ (6,541)	\$ 1,346	\$ -	\$ (7,112)	\$ 6,208	\$ 4,204	\$ -	\$ (1,895)

**Tustin Avenue / Rose Drive Overcrossing Project
(SO204)**

Cost Information

Project Funding Detail*

Project Phase	Current Cost Estimate (\$000s)	Board Approved Funding (\$000s)	Surplus/ (Shortfall) (\$000s)	Comments
Design (Preliminary & Final Engineering)	6,863	6,389	(474)	Design costs are anticipated to be over budget due permitting fees from various resource agencies and additional construction support services for consultant.
ROW	41,957	35,090	(6,867)	Increase in ROW costs due to a number of administrative settlements for property acquisitions involving severance damages, loss of business goodwill claims and the need for temporary construction easement time extension.
Construction	41,519	46,224	4,705	Construction is anticipated to be completed under budget.
Project Management and Support	7,915	6,568	(1,347)	Increase in legal fees to address potential litigation and administrative settlements.
TOTALS	98,254	94,271	(3,983)	

*Project funding detail was included in the August 8, 2016 OC Bridges Railroad Grade Separation Program cost-to-complete

Current and Proposed Funding

Current Funding 1/13/14 (\$000s)

Fund Source/Phase	OCTA M2	BNSF Railway	TCIF	RSTP	TOTAL
Design	\$ 5,788	\$ -	\$ -	\$ 601	\$ 6,389
ROW	5,498			29,592	\$ 35,090
Construction	895		30,862	14,467	\$ 46,224
Project Management and Support	4,791	1,288		489	\$ 6,568
Total	\$ 16,972	\$ 1,288	\$ 30,862	\$ 45,149	\$ 94,271

Proposed Funding (\$000s)

Fund Source/Phase	OCTA M2	Utility Relocation Reimbursement	BNSF Railway	TCIF	RSTP/STBG	TOTAL
Design	\$ 6,262	\$ -	\$ -	\$ -	\$ 601	\$ 6,863
ROW	7,113	475			34,369	\$ 41,957
Construction	1,000		1,288	22,825	16,406	\$ 41,519
Project Management and Support	3,267			2,648	2,000	\$ 7,915
Proposed Total	\$ 17,642	\$ 475	\$ 1,288	\$ 25,473	\$ 53,376	\$ 98,254
Current Total	\$ 16,972	\$ -	\$ 1,288	\$ 30,862	\$ 45,149	\$ 94,271
Change	\$ 670	\$ 475	\$ -	\$ (5,389)	\$ 8,227	\$ 3,983

**Lakeview Avenue Overcrossing Project
(SO205)**

**Cost Information
Project Funding Detail***

Project Phase	Current Cost Estimate (\$000s)	Board Approved Funding (\$000s)	Surplus/ (Shortfall) (\$000s)	Comments
Design (Preliminary & Final Engineering)	7,113	5,547	(1,566)	Design costs are anticipated to be over budget due to design changes made after the bidding phase and additional construction support services for consultant.
ROW	48,591	42,678	(5,913)	Increase in ROW costs due to a number of administrative settlements for property acquisitions involving severance damages, and loss of business goodwill claims.
Construction	43,839	38,940	(4,899)	The construction costs increased due to many CCOs that were issued to address utility conflicts and design changes made after the bidding phase.
Project Management and Support	7,859	8,484	625	Project Management closeout effort is anticipated to be completed under budget.
TOTALS	107,402	95,649	(11,753)	

*Project funding detail was included in the August 8, 2016 OC Bridges Railroad Grade Separation Program cost-to-complete

Current and Proposed Funding

Current Funding 1/13/14 (\$000s)

Fund Source/Phase	OCTA M2	BNSF Railway	TCIF	RSTP	CMAQ	Federal Demo	TOTAL
Design	\$ 4,916	\$ -	\$ -	\$ 631	\$ -	\$ -	\$ 5,547
ROW	13,688	1,619		19,506	7,865		\$42,678
Construction	2,349		26,882			9,709	\$38,940
Project Management and Support	5,934		747		1,803		\$ 8,484
Total	\$ 26,887	\$ 1,619	\$ 27,629	\$ 20,137	\$ 9,668	\$ 9,709	\$95,649

Proposed Funding (\$000s)

Fund Source/Phase	OCTA M2	Federalized portion of Surplus Property	Utility Relocation Reimbursement	BNSF Railway	TCIF	RSTP / STBG	CMAQ	Federal Demo	TOTAL
Design	\$ 6,482	\$ -	\$ -	\$ -	\$ -	\$ 631	\$ -	\$ -	\$ 7,113
ROW	12,570	5,984	1,047	1,619		19,506	7,865		\$ 48,591
Construction	2,349	1,925			23,713	7,409		8,443	\$ 43,839
Project Management and Support	3,382				3,211			1,266	\$ 7,859
Proposed Total	\$ 24,783	\$ 7,909	\$ 1,047	\$ 1,619	\$ 26,924	\$ 27,546	\$ 7,865	\$ 9,709	\$ 107,402
Current Total	\$ 26,887	\$ -	\$ -	\$ 1,619	\$ 27,629	\$ 20,137	\$ 9,668	\$ 9,709	\$ 95,649
Change	\$ (2,104)	\$ 7,909	\$ 1,047	\$ -	\$ (705)	\$ 7,409	\$ (1,803)	\$ -	\$ 11,753



ORANGE COUNTY TRANSPORTATION AUTHORITY

**OC Bridges Railroad Grade Separation Program Funding
Plan Update**

Attachement D



Capital Funding Program Report

Pending Board of Directors (Board) Approval - November 14, 2016

Local Road Project

Project Title	M Code	Total Funding	State Funds		Federal Funds		Local Funds		
			STIP/Other	State Bonds	RSTP/CMAQ	Other Fed.	M1	M2	Local - Other
Kraemer Boulevard Grade Separatio ¹	O	\$63,462	\$1,460	\$15,513	\$22,044			\$22,613	\$1,832
Lakeview Avenue Grade Separation ²	O	\$107,402		\$26,924	\$35,411	\$9,709		\$24,783	\$10,575
Measure M2 Project O Regional Capacity Program Call for Projects	O	\$222,385		\$22,979				\$199,406	
Orangethorpe Avenue Grade Separation ³	O	\$108,600		\$34,520	\$38,240	\$18,600		\$14,543	\$2,697
Placentia Grade Separation along SS of Orangethorpe ⁴	O	\$64,444	\$6,040	\$27,346				\$27,356	\$3,702
Raymond Avenue Grade Separation ⁵	O	\$124,833		\$90,767				\$26,350	\$7,716
State College Grade Separation ⁶	O	\$96,969		\$34,042	\$27,376	\$13,290		\$11,243	\$11,018
State Route 57/Lambert Road Interchange	O	\$63,787	\$22,100			\$924		\$927	\$39,836
Tustin Ave/Rose Drive Grade Separation ⁷	O	\$98,254		\$25,473	\$53,376			\$17,642	\$1,763
M2 Project P Regional Signal Synchronization Program Call	P	\$67,972						\$67,972	
M2 Project Q Fair Share Program	Q	\$615,296						\$615,296	
Measure M2 Project X Environmental Clean Up	X	\$43,850						\$43,850	
Active Transportation Program - Regional Call		\$31,117	\$92		\$614	\$26,337			\$4,074
ARRA Transportation Enhancements		\$6,833				\$4,049	\$500		\$2,284
Arterial Pavement Management Program		\$44,319			\$44,319				
Atlanta Avenue Widening		\$4,160			\$2,278				\$1,882
Bicycle Corridor Improvement Program ⁸		\$34,741			\$28,425				\$6,316
Bristol Street Widening		\$44,750							\$44,750
Local Agency American Reinvestment and Recovery Act of 2009 Rehab Projects		\$32,369				\$32,369			
M1 Combined Transportation Funding Program (CTFP)		\$34,000					\$34,000		
State-Local Partnership Program (SLPP) Formula Grant Call		\$46,419		\$21,217			\$1,280	\$23,922	
Transportation Enhancement Activities		\$22,172				\$15,628			\$6,544
Del Obispo Widening	M1	\$6,419			\$3,740				\$2,679
Local Road Project Totals		\$1,984,553	\$29,692	\$298,781	\$255,823	\$120,906	\$35,780	\$1,095,903	\$147,668
State Funding Total		\$328,473							
Federal Funding Total		\$376,729							
Local Funding Total		\$1,279,351							
Total Funding (000's)		\$1,984,553							

Local Road Project Completed

Project Title	M Code	Total Funding	State Funds		Federal Funds		Local Funds		
			STIP/Other	State Bonds	RSTP/CMAQ	Other Fed.	M1	M2	Local - Other
Grand Avenue Widening, 1st Street to 4th Street	O	\$12,537			\$6,708				\$5,829
Antonio Parkway Widening		\$32,553			\$15,499				\$17,054
Firestone Boulevard Widening at Artesia Boulevard		\$2,468			\$2,059				\$409
M2 Fair Share State-Local Partnership Grant Program		\$7,032		\$3,516				\$3,516	
I-5 at La Paz Interchange Improvements	M1	\$8,942			\$2,800		\$1,792		\$4,350
Imperial Highway Smart Streets	M1	\$1,900		\$200			\$200		\$1,500

ATTACHMENT D



Capital Funding Program Report

Local Road Project Completed

Project Title	M Code	Total Funding	State Funds		Federal Funds		Local Funds		
			STIP/Other	State Bonds	RSTP/CMAQ	Other Fed.	M1	M2	Local - Other
Traffic Light Synchronization Program (TLSP), County Wide - Proposition 1B	M1	\$8,000		\$4,000			\$4,000		
Local Road Project Totals		\$73,432		\$7,716	\$27,066		\$5,992	\$3,516	\$29,142
State Funding Total		\$7,716							
Federal Funding Total		\$27,066							
Local Funding Total		\$38,650							
Total Funding (000's)		\$73,432							

Board Actions:

1. OC Bridges Update - Kraemer Boulevard: Requesting Board approval for \$4.395 million in M2. Funding adjustments in Utility Relocation and CMAQ are detailed in the Staff Report. Total project funding increases from \$59.062 to \$63.462 million.
2. OC Bridges Update - Lakeview Avenue: Requesting Board approval for \$7.409 million in RSTP/STBG. Funding adjustments in M2, Surplus Property, Utility Relocation, TCIF, and CMAQ are detailed in the Staff Report. Total project funding increases from \$95.649 to \$107.402 million.
3. OC Bridges Update - Orangethorpe Avenue: Requesting Board approval for \$6.208 million in RSTP/STBG and \$4.204 million in CMAQ. Funding adjustments in M2, Utility Relocation, and TCIF are detailed in the Staff Report. Total project funding decreases from \$110.495 to \$108.600 million.
4. OC Bridges Update - Placentia Avenue: Funding adjustments in M2, and Utility Relocation are detailed in the Staff Report. Total project funding decreases from \$69.426 to \$64.443 million.
5. OC Bridges Update - Raymond Avenue: Requesting Board approval for \$8.037 million in M2. Funding adjustments in Surplus Property, Metropolitan Water District Funds, and TCIF are detailed in the Staff Report. Total project funding increases from \$114.256 to \$124.833 million.
6. OC Bridges Update - State College Boulevard: Requesting Board approval for \$6.739 million in M2, \$4.867 million in RSTP/STBG and \$1.220 million in CMAQ. Funding adjustments in City of Fullerton's Contribution, Orange County Sanitation District, TCIF and Federal Demonstration Funds are detailed in the Staff Report. Total project funding increases from \$86.004 to \$96.969 million.
7. OC Bridges Update - Tustin Avenue/Rose Drive: Requesting Board approval for \$0.670 million in M2, and \$8.227 million in RSTP/STBG. Funding adjustments in Utility Relocation, and TCIF are detailed in the Staff Report. Total project funding increases from \$94.983 to \$98.254 million.
8. 2016 BCIP Stand-by List Item- Approve the use of \$0.488 million in CMAQ funds for the City of Irvine's Jeffrey Open Space Trail and Interstate 5 Bicycle and Pedestrian Bridge projects.

Acronyms:

- M Code - Project codes in M2 Program
- STIP - State Transportation Improvement Program
- RSTP/CMAQ - Regional Surface Transportation Program/Congestion Mitigation and Air Quality Program
- STBG - Surface Transportation Block Grant Program
- M1/M2 - Measure M1/Measure M2
- TCIF - Trade Corridor Improvement Fund
- BCIP - Bicycle Corridor Improvement Program



ORANGE COUNTY TRANSPORTATION AUTHORITY

**OC Bridges Railroad Grade Separation Program Funding
Plan Update**

Attachment E

**City of Fullerton
Cooperative Agreement No. C-9-0576 Fact Sheet**

1. October 26, 2009, Cooperative Agreement No. C-9-0576, \$125,822,000, approved by the Board of Directors (Board).
 - To provide environmental, engineering, right-of-way capital and support, construction management, and construction for the Raymond Avenue and State College Boulevard railroad grade separation projects (Projects).
2. July 26, 2010 Amendment No. 1 to Cooperative Agreement No. C-9-0576, \$25,014,000, approved by the Board.
 - To change the overall funding commitment for the Projects, to swap Measure M2 funds with federal funds for the Raymond Avenue railroad grade separation project, to federalize the Raymond Avenue railroad grade separation project, and to revise the project schedule for the Projects.
3. August 13, 2012, Amendment No. 2 to Cooperative Agreement No. C-9-0576, \$1,964,000, approved by the Board.
 - To change the overall funding commitment for the Projects, consistent with the budget approved by the Board on April 9, 2012, and to designate the Orange County Transportation Authority to serve as the project lead for property acquisition at Raymond Avenue and State College Boulevard.
 - Project costs for Raymond Avenue increased by \$968,000, from \$77,188,000 to \$78,156,000, and project costs for State College Boulevard increased by \$996,000, from \$73,648,000 to \$74,644,000.
4. October 11, 2013, Amendment No. 3 to Cooperative Agreement No. C-9-0576, \$25,592,000, approved by the Board.
 - To change the overall funding commitment for the Projects.
 - To include reimbursement items from third-party contributions.
 - Project cost for Raymond Avenue increased by \$19,982,000, from \$78,156,000 to \$98,138,000, and project cost for State College Boulevard increased by \$5,610,000, from \$74,644,000 to \$80,254,000.
5. January 13, 2014, Amendment No. 4 to Cooperative Agreement No. C-9-0576, \$19,802,000, approved by the Board.
 - To change the overall funding commitment for the Projects.
 - Project cost for Raymond Avenue increased by \$14,052,000, from \$98,138,000 to \$112,190,000, and project cost for State College Boulevard increased by \$5,750,000, from \$80,254,000 to \$86,004,000.

6. July 26, 2016, Amendment No. 5 to Cooperative Agreement No. C-9-0576, \$0, approved by the Contracts Administration Materials and Management Department.

- To extend the term of the cooperative agreement by an additional 24 months, from August 1, 2016 to August 1, 2018, to allow for continued work on the Projects until completion.

7. Amendment No. 6 to Cooperative Agreement No. C-9-0576, \$23,608,000, pending Board approval.

- To change the overall funding commitment for the Projects.
- To include additional funding from utility reimbursement.
- Project cost for Raymond Avenue increased by \$12,643,000, from \$112,190,000 to \$124,833,000, and project cost for State College Boulevard increased by \$10,965,000, from \$86,004,000 to \$96,969,000.

Total committed to the City of Fullerton after approval of Amendment No. 6 to Cooperative Agreement No. C-9-0576: \$221,802,000.



COMMITTEE TRANSMITTAL

November 14, 2016

To: Members of the Board of Directors
From: Laurena Weinert, ^{Lu} Clerk of the Board
Subject: Award of Design-Build Contract for the Interstate 405 Improvement Project

Regional Planning and Highways Committee Meeting of November 7, 2016

Present: Directors Bartlett, Donchak, Lalloway, Miller, Nelson, and Ury
Absent: Directors Do and Spitzer

Committee Vote

This item was passed by the Members present.

Committee Recommendations

- A. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-5-3843, between the Orange County Transportation Authority and OC 405 Partners, a joint venture, a responsive and responsible proposer, in the amount of \$1,217,065,000, for the design and construction of the Interstate 405 Improvement Project through a design-build contract.
- B. Authorize the Chief Executive Officer to execute a stipend agreement with Shimmick/Tutor-Perini/Michels, a joint venture, and Skanska/Flatiron, a joint venture, the unsuccessful proposers, upon meeting the requirements specified in the request for proposals.
- C. Approve an amendment to the Orange County Transportation Authority's Fiscal Year 2016-17 Revenue and Expenditure Budget, in the amount of \$1,147,065,000, to accommodate for the design-build costs associated with the Interstate 405 Improvement Project.
- D. Adopt this staff report as the written decision supporting the award of the design-build contract, pursuant to such requirements by Assembly Bill 401 (Chapter 586, Statutes of 2013).



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Award of Design-Build Contract for the Interstate 405
Improvement Project**

Staff Report



November 7, 2016

To: Regional Planning and Highways Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Award of Design-Build Contract for the Interstate 405 Improvement Project

Overview

On March 28, 2016, the Orange County Transportation Authority Board of Directors authorized staff to release a request for proposals to the three qualified design-build teams previously short-listed for the design and construction of the Interstate 405 Improvement Project. Three proposals were received and evaluated. Staff requests Board of Directors' approval to award the design-build contract to the best-value proposer.

Recommendations

- A. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-5-3843, between the Orange County Transportation Authority and OC 405 Partners, a joint venture, a responsive and responsible proposer, in the amount of \$1,217,065,000, for the design and construction of the Interstate 405 Improvement Project through a design-build contract.
- B. Authorize the Chief Executive Officer to execute a stipend agreement with Shimmick/Tutor-Perini/Michels, a joint venture, and Skanska/Flatiron, a joint venture, the unsuccessful proposers, upon meeting the requirements specified in the request for proposals.
- C. Approve an amendment to the Orange County Transportation Authority's Fiscal Year 2016-17 Revenue and Expenditure Budget, in the amount of \$1,147,065,000, to accommodate for the design-build costs associated with the Interstate 405 Improvement Project.
- D. Adopt this staff report as the written decision supporting the award of the design-build contract, pursuant to such requirement by Assembly Bill 401 (Chapter 586, Statutes of 2013).

Discussion

As approved at the October 27, 2014 Orange County Transportation Authority (OCTA) Board of Directors (Board) meeting, the procurement plan for the Interstate 405 (I-405) Improvement Project (Project) is based upon a two-step procurement process resulting in a best-value selection authorized by Assembly Bill (AB) 401 (Chapter 586, Statutes of 2013). AB 401 codified design-build (DB) delivery method in Section 6820 through Section 6829 of the California Public Contract Code and Section 91.2 of the Streets and Highways Code that became effective January 1, 2014, and remains effective until January 1, 2024. The procurement plan for the Project has strictly followed the requirements of AB 401.

OCTA staff, general counsel, and OCTA's program management consultant reviewed these legal statutes and the advantages and disadvantages of the methods by which OCTA can award a DB contract. The team concluded that the two-step procurement process utilizing best-value selection and contract award, as allowed by the Federal Highway Administration (FHWA) and described in detail in AB 401, is the overall best method for the procurement and award of the DB contract. This is similar to the DB procurement method OCTA employed on the State Route 22 widening project, and with the method recently used by the Riverside County Transportation Commission (RCTC) to widen State Route 91.

On April 27, 2015, the Board directed staff to release the revised Request for Qualifications (RFQ) 4-1595 for the design and construction of the Project. The RFQ was revised to reflect the Board's decision to implement the full Project, which entails adding one general purpose lane in each direction from Euclid Street to Interstate 605 (I-605), consistent with Measure M2 (M2) Project K, and adding an additional lane in each direction that would combine with the existing high-occupancy vehicle lane to provide dual express lanes in each direction on I-405 from State Route 73 to I-605.

On November 9, 2015, the Board approved the short-listing of four qualified DB teams and the release of draft Request for Proposals (RFP) 5-3843 to the four short-listed teams for the design and construction of the Project. One team withdrew from the procurement process, leaving three qualified short-listed teams. Based on industry input and further coordination with stakeholders, staff finalized the RFP.

On March 28, 2016, the Board directed staff to release RFP 5-3843 for the design and construction of the Project through a DB contract. The RFP was released to the three remaining qualified and short-listed teams. On the same date, the Board also approved the evaluation criteria, weightings, and best-value selection process for the RFP, as well as the stipend amount.

Project Cost Estimate

As part of the initial finance plan approved by the Board on May 23, 2016, the project cost estimate is \$1.9 billion. One of the major factors in the project cost estimate is the DB costs or bid amount. The previous cost estimate included an engineer’s estimate for the DB costs and a contingency for the DB costs. A portion of the contingency for the DB costs was for potential market variability in the bids received due to increased construction activity and pricing pressures in the construction industry. Although the DB bid amount was slightly higher than the engineer’s estimate, this can be accommodated within the contingency assumed for potential market variability. Therefore, the current project cost estimate remains at \$1.9 billion. The following table is a comparison of the previous project estimate and current project cost estimate using actual DB costs:

Description	Previous Project Cost Estimate	Current Project Cost Estimate
DB Costs	\$1,186,000,000	\$1,217,065,000
Contingency for DB Costs	\$130,000,000	\$98,935,000
Subtotal DB Costs	\$1,316,000,000	\$1,316,000,000
OCTA Costs*	\$484,000,000	\$484,000,000
Contingency for OCTA Costs	\$100,000,000	\$100,000,000
Subtotal OCTA Costs	\$584,000,000	\$584,000,000
Total Project Costs	\$1,900,000,000	\$1,900,000,000

* OCTA Costs include right-of-way, utilities, support, and other costs

Procurement Approach

The selection of a DB team to design and construct the Project has been accomplished through a two-step procurement process. The first step, the RFQ, was used to develop a short-list of the responsive and qualified teams. The second step, the RFP, was issued to the short-listed and qualified teams to submit proposals for OCTA’s evaluation and selection of a best-value DB team for the Project, as authorized by AB 401. Due to the nature and magnitude of the Project, the teaming relationships are joint ventures as opposed to prime-subcontractor relationships. Following is a more detailed discussion of the two steps utilized in this procurement.

Step 1 – RFQ

The first step consisted of issuing the RFQ, requesting statements of qualifications (SOQs), and developing a short-list of qualified DB teams in accordance with AB 401 requirements and OCTA’s procurement policies and procedures.

OCTA received SOQs from four DB teams. The process of evaluating the four SOQs was done in two parts, a compliance review and technical evaluation, as follows:

1. Compliance review of SOQs was conducted using pass/fail criteria in the areas of financial capacity, legal structure, and safety program as described in the RFQ. The submittals were reviewed by a team of legal, procurement, engineering, and safety professionals. All four submittals were responsive to the requirements of the RFQ in this area and passed the compliance review. The four submittals were then advanced to the technical evaluation part of the evaluation process.
2. Technical evaluation of the SOQs that passed the compliance review was conducted using the technical scored categories described in the RFQ, and listed below:
 - Firm Experience
 - Past Performance
 - Proposer Organization and Key Personnel
 - Project Understanding and Approach
 - Quality Management Program

All four SOQs were reviewed by an evaluation committee comprised of high-ranking professionals from OCTA, California Department of Transportation (Caltrans) District 12, RCTC, and two of the corridor cities. The evaluation committee found all four DB teams qualified to carry out the requirements of the Project.

On November 9, 2015, the Board approved the short-listing of the following qualified DB teams:

OC 405 Partners
Orange County Corridor Constructors
Shimmick/Tutor-Perini
Skanska/Flatiron

The short-listing of the qualified DB teams concluded the first step of the two-step, best-value award process. In January 2016, the Orange County Corridor Constructors team informed OCTA of the team's withdrawal from the procurement process, leaving three qualified short-listed DB teams.

Step 2 – RFP

To initiate the second step of the DB procurement process, each of the qualified short-listed DB teams received a copy of the draft RFP following Board approval of the short-list in November 2015. OCTA held two sets of one-on-one meetings with each of the short-listed DB teams to solicit comments and feedback on the draft RFP in order to make informed decisions about risk allocation in the RFP. The input from the DB teams was considered and incorporated, as appropriate, into the final RFP.

On March 28, 2016, the Board directed staff to release the final RFP to the three remaining qualified and short-listed teams. The approved RFP included the form of contract and a stipulation that, by submitting a proposal in response to this RFP, each proposer committed to enter into the contract without negotiations or variations. The Board also approved the evaluation criteria, weightings, and best-value selection process for the RFP.

After release of the RFP, four one-on-one meetings with each of the DB teams were held to help further the teams' understanding of the Project's scope of work and schedule, and elicit input from the teams regarding project risks and cost drivers.

Technical, financial, and price proposals were received from the following short-listed DB teams, in accordance with the deadlines prescribed by the RFP:

OC 405 Partners
Shimmick/Tutor-Perini/Michels
Skanska/Flatiron

The composition of the DB teams is included in Attachment A.

Evaluation of Proposals and Best-Value Determination

The evaluation process created a fair and uniform basis for the evaluation of the proposals submitted by the DB teams.

Each technical proposal was evaluated as to whether the requirements of the RFP were met. As part of this evaluation, a pass/fail responsiveness evaluation was conducted on all of the proposals, including an evaluation of the teams' financial and legal standing. All three teams passed this pass/fail evaluation.

The technical proposals were then reviewed and scored based on the following Board-approved criteria and weights:

-
- Technical Approach 60 percent
 - Project Delivery Approach 30 percent
 - Quality Management Plan 10 percent

All three technical proposals were reviewed by an evaluation committee comprised of high-ranking professionals from OCTA, Caltrans District 12, RCTC, and two of the corridor cities. The evaluation committee was supported by technical review committees, which were comprised of subject matter experts who reviewed the technical proposals for strengths and weaknesses in their areas of expertise. Forty individuals served on the technical review committees, representing OCTA, OCTA's program management consultant, and Caltrans.

Financial and price proposals were received separately from the technical proposals as required by the RFP.

Financial proposals consisted of proposer's financial condition and capabilities, and Disadvantaged Business Enterprise certification and performance plan. The financial proposals were evaluated as to whether the requirements of the RFP were met through the pass/fail evaluation process and all financial proposals passed.

The price proposals consisted of the pricing information and proposal bonds. After the technical proposals were scored, the OCTA Deputy Chief Executive Officer and the OCTA Director of Contracts Administration and Materials Management opened the price proposals to obtain the price submitted by each proposer. The price was then used to arrive at the total proposal score (TPS) for each proposer.

A best-value selection is an award to the proposer whose proposal is determined by OCTA to offer the best value to the public in terms of price and objective technical criteria.

The best-value determination is based on a 100-point scale. The price score (PS) represented a maximum of 70 points of the TPS, and the technical score (TS) represented a maximum of 30 points of the TPS, as approved by the Board on March 28, 2016. The best value is represented by the highest TPS, computed using the following formula:

$$\text{TPS (max 100 points)} = \text{PS (max 70 points)} + \text{TS (max 30 points)}$$

Where the PS and TS are computed as follows:

$$PS = (Price_{Low}/Price) * 70, \text{ where}$$

Price_{Low} = lowest proposal price submitted by any proposer
 Price = proposer's proposal price

$$TS = (Technical/Technical_{High}) * 30, \text{ where}$$

Technical = proposer's technical proposal score
 Technical_{High} = highest technical proposal score submitted by any proposer

Price Score

The following table utilizes the PS equation above to compute each proposer's PS:

Proposer	Proposer's Price	Computed Price Score
OC 405 Partners	\$1,217,065,000	70.00
Shimmick/Tutor-Perini/Michels	\$1,553,792,200	54.83
Skanska/Flatiron	\$1,489,700,000	57.19
Engineer's Estimate = \$1,186,000,000		

OC 405 Partners' price is within 2.6 percent, or \$31,065,000, of the engineer's estimate and is considered by staff to be fair and reasonable. Shimmick/Tutor-Perini/Michels' price is within 31.0 percent, or \$367,792,200, of the engineer's estimate. Skanska/Flatiron's price is within 25.6 percent, or \$303,700,000, of the engineer's estimate. Prices higher than the engineer's estimate are likely attributable to risks allocated to the DB team and a rebound in the construction industry as a whole.

Technical Score

The following table utilizes the TS equation above to compute each proposer's TS:

Proposer	Proposer's Technical Proposal Score	Computed Technical Score
OC 405 Partners	71.41	23.44
Shimmick/Tutor-Perini/Michels	74.97	24.61
Skanska/Flatiron	91.40	30.00

A technical proposal score between 80 and 100 points signifies that the proposal exceeded the stated objectives/requirements in the RFP. A technical proposal

score between 60 and 80 points signifies that the proposal met the stated objective/requirements in the RFP. A technical proposal score below 60 points signifies that the proposal did not meet the stated objectives/requirements in the RFP. The DB teams' technical proposal scores are shown in Attachment B.

All three DB teams submitted technical proposals that met or exceeded the objectives/requirements in the RFP.

Total Proposal Score

As a result of the RFQ step of the procurement, all DB teams were deemed qualified to carry out the requirements of the Project.

The following table utilizes the TPS equation above to compute each proposer's TPS:

Proposer	Computed Price Score	Computed Technical Score	Proposer's Total Proposal Score	Rank
OC 405 Partners	70.00	23.44	93.44	1
Skanska/Flatiron	57.19	30.00	87.19	2
Shimmick/Tutor-Perini/Michels	54.83	24.61	79.44	3

The table shows OC 405 Partners as the best-value proposer. OC 405 Partners' proposal featured several technical strengths such as detailed technical innovation and enhancements, strong understanding of necessary toll systems integrator coordination, and detailed identification of project risks and mitigation measures, including a thorough approach to utility coordination. Additional strengths include a detailed safety plan, a focus on partnering for dispute resolution, a strong understanding to the critical quality management roles and responsibilities of the DB team and project stakeholders, and a comprehensive communication plan for public outreach. OC 405 Partners also proposed the use of real time data to monitor traffic during construction.

FHWA Role

FHWA has defined this Project as a project of corporate interest due to its magnitude and the fact that it is on the interstate system. As such, FHWA approved the RFP prior to its release and has been involved in an oversight role throughout the procurement. Additionally, FHWA has reviewed the proposals and must concur that OCTA's procurement process adheres to federal requirements and the resulting DB contract award.

Stipends

On March 28, 2016, the Board approved a stipend amount of \$2,000,000, payable to each unsuccessful DB team which submitted a qualified proposal. Some of the benefits of this practice are that stipends:

- Allow OCTA to utilize ideas, concepts, and innovations from proposals not selected for award of the DB contract.
- Encourage DB teams to spend the time, money, and resources to propose innovative and comprehensive methods/solutions.
- Help defray costly proposal development.
- Encourage DB teams to remain in the procurement and generate significant interest in the Project to enhance competitive pricing for best value.
- Signal OCTA's intention to carry the Project forward.

The two unsuccessful DB teams are anticipated to sign and submit a stipend agreement within ten days after the date that notice of the award to the successful proposer is posted by OCTA. Execution of the stipend agreement allows for payment of the stipend to the respective DB team after receipt of an invoice from the DB team. In the event the DB team does not sign and submit a stipend agreement within the prescribed ten days or files a protest challenging the procurement process or award, the DB team would forfeit its right to a stipend.

Procurement Summary

Based on the evaluation and scoring of the technical and financial proposals received, and best-value determination, all the teams were found responsible and responsive to the requirements of the RFP, and successful in the technical and financial evaluations. The Evaluation Committee recommends the award of the DB contract to OC 405 Partners, a joint venture, as the team's overall proposal offers the best value to the public in terms of price and objective technical criteria.

Next Steps and Milestones

The next several months are critical to the timely implementation of the Project. The following are the next steps and milestones in the DB procurement process, toll operating agreement, and Transportation Infrastructure Finance and Innovation Act (TIFIA) loan:

Award of Design-Build Contract for the Interstate 405 Improvement Project *Page 10*

Activity/Milestone	Proposed Completion Date
DB Procurement	
Board considers approval of staff-recommended DB team for selection	November 14, 2016
Notice-to-Proceed No. 1 issued to DB team	January 2017
Notice-to-Proceed No. 2 issued to DB team	May 2017
Toll Operating Agreement	
Board considers approval of the toll operating agreement	November 14, 2016
TIFIA Loan	
Build America Bureau (Bureau) staff submits an initial Project Report (PR) to the United States Department of Transportation (USDOT) Credit Council	November 2016
OCTA submits a formal TIFIA loan application	December 2016
Bureau staff submits a final PR to the USDOT Credit Council	January 2017
USDOT Credit Council recommends TIFIA loan to the Secretary of Transportation	January 2017
The Secretary of Transportation approves a TIFIA loan	January 2017
TIFIA loan closes	March 2017

The DB procurement process timeline is shown in Attachment C.

Fiscal Impact

The approved OCTA FY 2016-17 Budget included only \$70 million of the capital construction budget associated with this Project in accounts 0017-9084-FK101-0GM and 0037-9017-A9510-0GM. A budget amendment of \$1.147 billion is required to award the encumbered DB contract for this Project and consists of \$894.7 million for Account 0017-9084-FK101-0GM and \$252.4 million for Account 0037-9017-A9510-0GM.

The Project is funded through a combination of federal, state, and local M2 funds. Several current and future funding sources are available to offset the I-405 DB Project expenditures. TIFIA proceeds of \$70 million were included in the FY 2016-17 budget to cover the amount already budgeted. A revenue

budget amendment of \$1.147 billion will be required to cover the balance of the DB contract. The revenue sources to cover the Project's expenditures consist of \$52.5 million in state funds (Account 0037-6013-A9510-YHP), \$7.8 million in state funds (Account 0017-6020-FK101-X14), \$29.2 million in federal funds (\$22.8 million for Account 0017-6048-FK101-XHD and \$6.4 million for Account 0037-6036-A9510-XEE), and \$308.6 million in the form of a TIFIA loan (\$115.2 million for Account 0017-6036-FK101-YGL and \$193.4 million for Account 0037-6036-A9510-YGL). The remaining balance of \$749 million will be provided through a combination of pay as you go M2 funds and future bond proceeds.

Summary

Staff requests Board of Directors' approval to award the design-build Agreement No. C-5-3843 to OC 405 Partners, a joint venture, as a responsive and responsible proposer, in the amount of \$1,217,065,000, for the design and construction of the Interstate 405 Improvement Project through a design-build contract. Approval is also requested to release the stipends to the unsuccessful bidders, and approve an amendment to the Orange County Transportation Authority Fiscal Year 2016-17 Budget, in the amount of \$1,147,065,000, for the design and construction of the Interstate 405 Improvement Project through a design-build contract.

Attachments

- A. List of Design-Build Team Members, Request for Proposals 5-3843
- B. Technical Proposal Evaluation Criteria Matrix, RFP 5-3843 for the Design and Construction of the Interstate 405 Improvement Project Through a Design-Build Contract
- C. Interstate 405 Improvement Project Design-Build Procurement Timeline
- D. Contract History for the Past Two Years, RFP 5-3843 for the Design and Construction of the Interstate 405 Improvement Project Through a Design-Build Contract

Prepared by:



Jeff Mills, P.E.
Program Manager
(714) 560-5925

Approved by:



Jim Beil, P.E.
Executive Director, Capital Programs
(714) 560-5646



Virginia Abadessa
Director, Contracts Administration and
Materials Management
(714) 560-5623



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Award of Design-Build Contract for the Interstate 405
Improvement Project**

Attachment A

**List of Design-Build Team Members
Request for Proposals 5-3843**

• **OC 405 Partners, a Joint Venture**

Principal Participants

OHL USA, Inc.
Astaldi Construction Corporation

Major Participants

Myers & Sons Construction, LP
All American Asphalt
MCM Construction, Inc.
Pacific Infrastructure 405 Designers (Joint Venture):

- Arup North America, Ltd
- H.W. Lochner, Inc.
- Moffatt & Nichol

Key Subcontractors & Sub consultants

Advanced Civil Technologies (ACT)
Betkon, Inc.
C&L Drilling
Circlepoint
Fugro Consultants, Inc.
Hout Construction Services
ICF Jones & Stokes
Iteris, Inc.
Lynn Capouya Landscape Architects
Rupert Construction Supply
TEC Management Consultants, Inc.
The Solis Group
Tipco Engineering, Inc.
Tri-County Drilling

• **Shimmick-Tutor Perini, a Joint Venture**

Principal Participants

Shimmick Construction Company, Inc.
Tutor Perini Corporation
Michels Corporation

Major Participant

WSP-Parsons Brinckerhoff

Key Subcontractors & Sub consultants

CNS Engineers, Inc.
Communications LAB
Crosstown Electrical & Data, Inc.
David Evans and Associates, Inc.
Earth Mechanics, Inc.
Intueor Consulting, Inc.
NUVIS
PacRim Engineering, Inc.
Southstar Engineering and Consulting, Inc.
TranSystems Corporation

- **Skanska-Flatiron, a Joint Venture**

Principal Participants

Skanska USA Civil West California District, Inc.
Flatiron West, Inc.

Major Participants

AECOM Technical Services, Inc.
CH2M Hill, Inc.

Key Subcontractors & Sub consultants

Biggs Cardoso Associates, Inc.
BKF Engineers
Civil Works Engineers, Inc.
Diaz Yourman & Associates
D'Leon Consulting Engineers
FPL and Associates, Inc.
Gallego Consulting Services, Inc.
IDC Consulting Engineers, Inc.
Irvine Global Consulting, Inc.
Katz & Associates, Inc.
KDC, Inc. dba Dynalectric
KOA Consulting, Inc.
LaBelle Marvin, Inc.
Ninyo & Moore Geotechnical and Science Services
OPTITRANS
RMA Group, Inc.
Tatsumi and Partners, Inc.
TRC Solutions, Inc. (Subsidiary of TRC Companies)
V&A, Inc.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Award of Design-Build Contract for the Interstate 405
Improvement Project**

Attachment B

ATTACHMENT B

Technical Proposal Evaluation Criteria Matrix

**RFP 5-3843 for the Design and Construction of the Interstate 405 Improvement Project
Through a Design-Build Contract**

Joint Venture: OC 405 Partners									
Criterion	Criterion Weight	Evaluator Number							Average for Criterion
		1	2	3	4	5	6	7	
Technical Approach	0.60	70	70	72	72	72	74	70	71.43
Project Delivery Approach	0.30	65	65	74	76	75	70	70	70.71
Quality Management Plan	0.10	75	70	75	76	75	68	75	73.43
Evaluators' Scores		69.00	68.50	72.90	73.60	73.20	72.20	70.50	
Average Overall Score for Proposer		71.41							
Joint Venture: Shimmick/ Tutor-Perini/ Michels									
Criterion	Criterion Weight	Evaluator Number							Average for Criterion
		1	2	3	4	5	6	7	
Technical Approach	0.60	75	81	80	76	72	76	80	77.14
Project Delivery Approach	0.30	60	78	73	74	70	67	75	71.00
Quality Management Plan	0.10	70	87	72	74	70	69	75	73.86
Evaluators' Scores		70.00	80.70	77.10	75.20	71.20	72.60	78.00	
Average Overall Score for Proposer		74.97							
Joint Venture: Skanska/ Flatiron									
Criterion	Criterion Weight	Evaluator Number							Average for Criterion
		1	2	3	4	5	6	7	
Technical Approach	0.60	95	92	92	94	94	85	95	92.43
Project Delivery Approach	0.30	95	86	88	95	92	80	95	90.14
Quality Management Plan	0.10	95	90	86	95	92	80	85	89.00
Evaluators' Scores		95.00	90.00	90.20	94.40	93.20	83.00	94.00	
Average Overall Score for Proposer		91.40							

Adjectival Ratings used during technical evaluation process:

Adjective	Score range	Description
Exceeds objectives/requirements	80 to 100%	The proposer has provided information in its proposal that is considered to significantly exceed stated objectives/requirements in a beneficial way and indicates a consistently outstanding level of quality. Any weaknesses that exist are significantly outweighed by strengths.
Meets objectives/requirements	60 to 80%	The proposer has presented information in its proposal that is considered to meet stated objectives/requirements and offers a generally acceptable level of quality. Strengths and weaknesses are relatively balanced.
Does not meet objectives/requirements	Below 60%	The proposer has presented information in its proposal that, as a whole, is considered to not meet the stated objectives/requirements. Weaknesses outweigh the strengths.

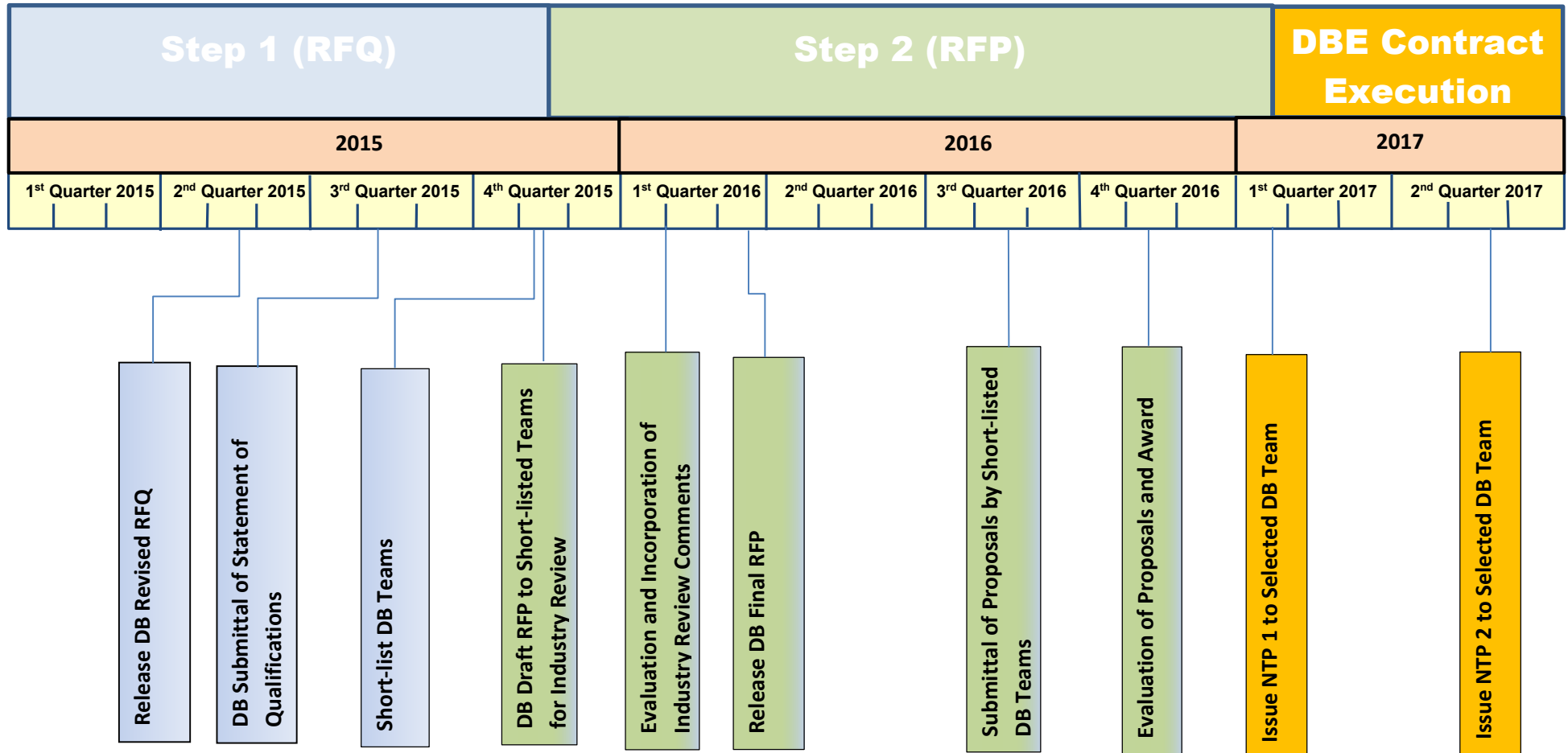


ORANGE COUNTY TRANSPORTATION AUTHORITY

**Award of Design-Build Contract for the Interstate 405
Improvement Project**

Attachment C

Interstate 405 Improvement Project Design-Build Procurement Timeline



DB = Design-Build
 RFQ = Request for Qualifications
 RFP = Request for Proposals
 NTP = Notice to Proceed

November 14, 2016 Board Meeting





ORANGE COUNTY TRANSPORTATION AUTHORITY

**Award of Design-Build Contract for the Interstate 405
Improvement Project**

Attachment D

CONTRACT HISTORY FOR THE PAST TWO YEARS

RFP 5-3843 for the Design and Construction of the Interstate 405 Improvement Project Through a Design-Build Contract

OC 405 Partners, a Joint Venture						
Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
OHL USA, Inc. (Principal Participant)						
Contract Type: Construction	C-2-2034	Construction of the Lakeview Avenue Railroad Grade Separation Project	January 6, 2014	May 23, 2017		\$ 30,903,648.14
<i>Subconsultants:</i>						
<i>Golden State Boring</i>						
<i>Ace Fence</i>						
<i>Integrity Rebar</i>						
<i>LNA Concrete</i>						
<i>Calmex Engineering</i>						
<i>Griffith Company</i>						
<i>CF Con-Fab</i>						
<i>Tipco</i>						
<i>Deltec</i>						
<i>Marina Landscape</i>						
<i>ACL</i>						
<i>Belco</i>						
			Subtotal			\$ 30,903,648
Astaldi Construction Corporation (Principal Participant)						
Contract Type: None						
<i>Subconsultants:</i>						
<i>N/A</i>						

Shimmick/Tutor-Perini/Michels, a Joint Venture

Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Shimmick Construction Company (Principal Participant)						
Contract Type: None						
Subconsultants:						
N/A						
Tutor-Perini Corporation (Principal Participant)						
Contract Type: None						
Subconsultants:						
N/A						
Michels Corporation (Principal Participant)						
Contract Type: None						
Subconsultants:						
N/A						

Skanska/Flatiron, a Joint Venture						
Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Skanska USA Civil West California District, Inc. (Principal Participant)						
Contract Type: None						
Subconsultants:						
N/A						
Flatiron West, Inc. (Principal Participant)						
Contract Type: Construction	C-2-1475	Construction of the Orangethorpe Avenue Railroad Grade Separation Project	April 1, 2013	April 24, 2016		\$ 47,616,049
Subconsultants:						
All American Asphalt						
Golden State Boring & Pipe						
Old Castle Precast						
Flatiron Electric Group, Inc.						
Alcorn Fence Company						
Marina Landscape, Inc.						
Martinez Steel						
Foundation Pile, Inc.						
Innovative Concrete						
					Subtotal	\$ 47,616,049



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Award of Design-Build Contract for the Interstate 405
Improvement Project**

Handout - Board



MEMO

November 6, 2016

To: Members of the Board of Directors

From: Darrell Johnson, Chief Executive Officer 

Subject: **Award of the Design-Build Contract for the Interstate 405 Improvement Project – Request for Proposals (RFP) 5-3843**

Late last night, November 5, 2016, I received correspondence from Skanska-Flatiron regarding the recommendation for the award of the design-build contract for the Interstate 405 Improvement Project (Project) scheduled for the Regional Planning and Highways (RPH) Committee meeting on Monday, November 7, 2016. The letter requests that the Orange County Transportation Authority (OCTA) consider a different course of action than what is being recommended in the staff report. Staff has reviewed the letter sent by Skanska-Flatiron and has found several significant inaccurate statements made by Skanska-Flatiron, along with a disturbing lack of understanding of the RFP requirements. The attached letter sent to Mr. Alex Medlyn, Project Executive for Skanska-Flatiron, details those inaccuracies and OCTA's responses. After consultation with the OCTA Project team, staff maintains that the procurement was conducted in a fair and objective manner and has reaffirmed the recommendation to select the OC 405 Partners as the joint venture team to provide the design/build services for the Project. After the RPH Committee takes action on this item, the OCTA Board of Directors will review and make its final selection on November 14, 2016.

OC 405 Partners is a joint venture comprised of OHL USA, Inc., and Astaldi Construction Corporation. Each of the firms is jointly and severally liable for the obligations under the design/build contract and each of the firms will be providing parent company guaranties of their performance under the contract. As a requirement of the RFP, OC 405 Partners submitted to a proposal bond equal to 5% of their bid amount. If OC 405 Partners fails to execute an agreement with OCTA for the design/build services, OCTA will be able to recover damages through the 5% proposal bond.

If you have any questions regarding this procurement or recommendation, please contact me.

DJ/va

c: Executive Staff



BOARD OF DIRECTORS

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Michelle Steel
Director

Tom Tait
Director

Frank Ury
Director

Gregory T. Winterbottom
Director

Ryan Chamberlain
Ex-Officio Member

CHIEF EXECUTIVE OFFICE

Darrell Johnson
Chief Executive Officer

November 6, 2016

Mr. Alex Medyn
Project Executive
Skanska-Flatiron a Joint Venture
1995 Agua Mansa Road
Riverside, CA 92509

Dear Mr. Medyn:

Thank you for your letter dated November 4, 2016, regarding selection of a design-build (DB) team for the I-405 Improvement Project (Project). We certainly agree with the assertion in your letter that the procurement for the Project was fair and impartial and the process required in the request for qualifications (RFQ) and request for proposals (RFP) steps of the procurement was followed without exception. This procurement resulted in a staff-recommended proposer that reflects the clear best-value to the public.

Unfortunately, your letter was littered with inaccuracies and false statements that we will respond to in this letter to set the record straight. We are very concerned that it is readily apparent, based upon the assertions in your letter, that your team does not understand the cost estimating process used by the Orange County Transportation Authority (OCTA) to develop the engineer's estimate for the DB costs. This cost estimating process was discussed in several of our one-on-one meetings with your team and the RFP (Section 1.3.1 of the Instructions to Proposers) clearly noted the estimated DB costs of this Project. Your reliance on the wrong engineer's estimate in your letter calls into question your knowledge and understanding of the Project and renders the arguments in your letter moot.

Following are responses to some of the inaccuracies included in your letter:

TECHNICAL SCORING

Your statement that the "recommended proposer does not have the local freeway experience or the resources...to fulfill its obligations under the contract" is clearly false. OC 405 Partners, which includes OHL, Astaldi, MCM Construction, Myers & Sons and All American Asphalt, has significant local freeway experience, and the resources to supply the staff necessary to fulfill their contractual obligations.

It is highly inaccurate and irresponsible to describe "the recommended bidder as minimally qualified to do this job". First, all three bidders were deemed

Mr. Alex Medyn
November 6, 2016
Page 2

well-qualified to carry out the requirements of the Project by being short-listed by the OCTA Board of Directors in 2015. Second, OC 405 Partners' score of 71.41 indicates the proposer met the requirements of the RFP, which were extensive. A score between 60 and 80 is reflective of a technical proposal that met the requirements of the RFP. All three DB teams are highly qualified to successfully deliver the Project. Your letter implies that Skanska-Flatiron is the only qualified team to do this job, which OCTA vehemently disagrees with.

PRICE SCORING

OC 405 Partners' price is not considered an outlier as it is in line with the engineer's estimate for DB costs. The engineer's estimate for DB costs is credible and all-inclusive, as described in more detail below.

All three proposers proposed the same schedule duration, which was 2,049 days from Notice to Proceed 2 to substantial completion of construction. As you are aware, it is far too late in the procurement process for any of the three DB teams to make changes to their proposals, and therefore, it is not relevant to state that "we know we can accelerate the overall schedule significantly..." in your letter and is nothing more than an attempt to improperly influence a procurement after the proposals have been submitted and scored.

ENGINEER'S ESTIMATE

The engineer's estimate for DB costs of \$1.186 billion noted in the staff report was based on a four-month effort in early 2016. Between January and April of this year, our program management consultants (Parsons/HNTB) developed the engineer's estimate for DB costs based on the RFP documents. The program management consultants had Parsons Construction bid the project based on the RFP and the traditional method of cost estimating was used as an independent check for the engineer's estimate for DB costs. These efforts culminated in the \$1.186 billion dollar engineer's estimate for DB costs which was then reviewed by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) during a three-day Cost Estimate Review (CER) at the end of April 2016, as required by FHWA for all major projects over \$500 million. The result of the CER was FHWA having a 95 percent confidence level in the engineer's estimate. FHWA requires a 70 percent confidence level, and obviously they were very comfortable to have a 95 percent confidence level in this engineer's estimate. The fact that the engineer's estimate was developed in early 2016 and culminated in

Mr. Alex Medyn
November 6, 2016
Page 3

the FHWA CER was discussed at the one-on-one meetings with you and your team. This is a fact that your letter seems to ignore.

It is baffling to us why you think the engineer's estimate for DB costs is "more than 4 ½ years old" as noted in your letter. As noted above, the engineer's estimate for DB costs was completed in April 2016. The basis for all of your arguments appear baseless due to this false assumption on your part.

The preliminary cost estimate summary attached to your letter appears to be from the Project Report (PR); however, the preliminary cost estimate summary in the PR is signed and dated June 2015 on page 1, and the estimate is noted to be prepared in April 2015 on pages 6, 8 and 9.

It is unclear what source the preliminary cost estimate summary attached to your letter is from. The bottom line is the preliminary cost estimate summary in the Final PR was prepared in April 2015, not 2012 as incorrectly noted in your letter.

The preliminary cost estimate summary from the PR is not the engineer's estimate for DB costs. Again, it is difficult to understand how you continually reference the wrong engineer's estimate in your letter. The preliminary cost estimate summary from the PR is for the Project, which includes more than what is included in the DB contract. A good example is that the preliminary cost estimate summary from the PR attached to your letter includes \$45 million for toll systems integrator work that is not included in the DB contract, as that work will be procured under a separate contract. Again, this seems to show a concerning lack of understanding of the procurement process for the Project.

Additionally, between April 2015 and when the engineer's estimate for the DB costs was prepared in April 2016, OCTA and Caltrans continued to refine the Project design as reflected in the RFP. Many of these design refinements were to include more cost-effective design solutions. For example, local street bridges to be replaced as part of the Project were shortened to minimize how much the local streets were raised in order to minimize right-of-way, which resulted in considerable cost savings.

The engineer's estimate for DB costs noted in the staff report included continuously reinforced concrete pavement (CRCP). According to the most recent Caltrans Cost Data, which is developed from bids on Caltrans projects, CRCP costs approximately 10 percent more than jointed plane concrete pavement (JRCP), not "twice the cost" noted in the letter. Your letter falsely states that OCTA had JPCP

Mr. Alex Medyn
November 6, 2016
Page 4

in the engineer's estimate. The engineer's estimate for DB costs was based on the RFP documents, which includes CRCP.

CONCLUSION

As noted, this was a fair and impartial procurement that resulted in a staff-recommended proposer that reflects the clear best value to the public. While we appreciate your continued interest in the Project, we are disappointed you used the wrong engineer's estimate, false assumptions and incorrect information in making the arguments in your letter. Due to the reasons outlined in this letter, a 30-day delay is completely unnecessary and would only result in delaying these critical improvements to the I-405 corridor for the taxpayers and travelling public of Orange County. If you have any questions, please feel free to contact me at (714) 560-5343.

Sincerely,



Darrell Johnson
Chief Executive Officer

DJ:jm

c: OCTA Board of Directors
Executive Staff



Skanska-Flatiron a Joint Venture
1995 Agua Mansa Road
Riverside, CA 92509
Phone: 951.368.5360

November 4, 2016

Darrell Johnson, Chief Executive Officer
Orange County Transportation Authority
Contracts Administration and Materials Management
550 South Main Street
Orange, CA 92863-1584

SUBJECT: Selection of 405 Design-Build Team

Dear Mr. Johnson,

On behalf of Skanska-Flatiron, a joint venture team (Skanska-Flatiron), we ask that you consider a course of action different than the staff recommendation for the 405 design-build project.

First, we want to be clear in that we are not protesting the staff recommendation, nor will we protest if the Board votes to accept the staff recommendation. Second, we want to articulate that we believe the scoring of proposals was done fairly and per the rules provided in the procurement document. We commend staff for being impartial and following the described process.

We write this letter from a much bigger perspective. We write this letter from the perspective of what is best for the OCTA, the corridor cities, the commuters of the 405 within the project limits, the taxpayers and all residents of Orange County.

TECHNICAL SCORING

A project of this size going through the heart of Orange County does not have the luxury of being delayed or disrupted. Based on the Skanska-Flatiron high scoring technical proposal of 91.4, staff has confirmed that our team has thoroughly planned out this project, and we stand ready to build this project without delay or disruption. Skanska-Flatiron has compiled the most experienced team of local freeway builders and designers to fill the sizable staff requirements that will be needed to manage all aspects of this highly publicized project. The recommended proposer does not have the local freeway experience or the resources in order to supply the 140 person staff that will be necessary to fulfill its obligations under the contract, while keeping the other stakeholders satisfied with the results during and after construction.

We are aware that staff recommendation of a bidder with a technical score of 71.41 means that the recommended bidder is minimally qualified to do this job. However, while a 20-point differential on a technical score is substantive on its face, we believe this technical differential directly impacts the accuracy of pricing estimates.

PRICE SCORING

We understand that the interests of taxpayers are protected through competitive bidding. In this case, the recommended bidder submitted a price of \$1,217,065,000. Skanska Flatiron submitted a price of \$1,489,700,000. We understand that the differential of \$272,635,000 is material. In fact, it is so material that we believe that there is a flaw in the bid of the recommended proposer. The flaw exists for two primary reasons.

First, Shimmick's bid of \$1,553,792,200 and Skanska Flatiron's bid of \$1,489,700,000 confirms the recommended bidder's price of \$1,217,065,000 is an outlier, an aberration or simply not accurate.

Second, the \$1,217,065,000 bid is not even equivalent to our detailed construction costs, without mark up or contingency. In fact, we believe that the costs associated with this project require all responsible bids to be in excess of \$1,400,000,000. We further believe our costs approach is validated by the third ranked proposer at \$1,553,792,200.

Our price reflects our detailed knowledge, schedule and superior technical approach to complete the project on time, with a high degree of confidence. In addition, we know we can accelerate the overall schedule significantly with Caltrans and corridor cities as constructive partners in the design review and permitting process. We have provided a "worst case" scenario schedule, so that we "under promise and over deliver." The bottom line is that our pricing bid is generated to be precise. This precision can only come from a team that has a superior technical skill. Conversely, a team with an inferior technical score may lack the resources to be accurate in its pricing.

We are aware of the argument that a design build project places the responsibility on the winning bidder to deliver to project for the bid price. Yet, if a contractor starts a project under water by an excess of \$200 million dollars, how can the eventual outcome of the project avoid litigation, claims, delays and disruption? These are standard tactics of low bidders who bid projects substantially below the actual costs of other bidders. Alternatively, a large discrepancy between a low bid and the other bids may signify a possible bid error. After all, if \$272,635,000 in found money is too good to be true it just may not be true. At a minimum, the OCTA should meet with the recommended proposer and require that they confirm and verify their bid, and confirm that their bid has not missed any components.

ENGINEER'S ESTIMATE – MISSING \$200,000,000

Another significant concern is the age of the engineer's estimate, coupled with the failure to adjust that estimate with known variables. The engineer's report estimated the project to be \$1,229,503,000. (See attached OCTA Project Cost Estimate Summary.) However, that report is substantially out of context because the engineer's estimate was prepared and checked on April 4, 2012 and April 5, 2012, respectively. This report is more than 4 1/2 years old. Project costs generally increase by 2-3% per year. Thus, if we use the \$1,229,503,000 engineer's estimate and conservatively add a non-compounded 2% per year cost increase, you end up

with an increase of approximately \$110,655,000 in costs. Add that amount to the original engineer's estimate of \$1,229,503,000 and you get a revised estimate of \$1,340,158,000.

However, the additional costs do not end at \$1,340,158,000 because there were 10 addenda added to this proposal. None of those addenda are calculated into the engineer's estimate and we estimate that they could approach an additional increase of \$50,000,000.

Finally, the OCTA had regular JPCP concrete in the engineer's estimate but the RFP included CRCP (continuously reinforced concrete pavement), which is twice the cost and would add \$25,000,000 to that item.

Thus, if you start with the April 4, 2012 engineer's estimate of \$1,229,503,000, add in \$110,655,000 in escalator costs, plus \$50,000,000 from 10 addenda, plus \$25,000,000 for increase concrete costs, you end up with an approximate estimate of \$1,415,158,000 in project costs.

As a side note, in the November 7, 2016 staff recommendation the report stated that the engineer's estimate was \$1,186,000,000. The actual engineer's estimate in the attached report was \$1,229,503,000. This differential is \$43,503,000. While we are unsure where the \$1,186,000,000 came from or when it was generated, if it is a recent estimate, it seems rather implausible that the costs of this project would decline over a 4 1/2 year period while adding 10 addenda and changing to CRCP for the concrete. If it is a 4 1/2 year old estimate, it would be \$43,503,000 less than the April 4, 2012 estimate and the total costs would be closer to \$1,371,655,000 with the aforementioned items, which is still substantially higher than the bid of the recommended proposer.

Skanska-Flatiron informed OCTA staff during our one-on-one meetings, that our preliminary "greensheet" estimates were showing an approximate value of \$1.4 Billion to \$1.5 Billion. OCTA should consider the low price submitted by the recommended bidder as an outlier, not being consistent with the true value of the work, and a true risk to OCTA. Skanska-Flatiron has included the resources needed to confidently deliver the project without the need to chase deficits.

Thus, while the engineer's estimate is a useful tool, that estimate must be updated to real time so that it is a relevant comparison to the bids. The bottom line is that we believe accepting the recommended proposer's price will be setting the team and OCTA up for failure.

We are concerned OCTA may be setting themselves up for the same fate as LA Metro deal with on their "Carmagedon" 405 design build project with excess overruns. This \$850,000,000 project produced an outcome of an 18-month delay, and led to the submittal of over \$500,000,000 in disputes. The winner bidder did not figure out all of the complexities involved in the management of traffic, and difficulties in getting the issues resolved with the third parties. The project ended up causing massive disruption to the neighborhoods, significant negative media coverage, and of course painful and costly claims resolution that are going on to this day.

CONCLUSION

The combined technical and pricing score for the recommended bidder is 93.44 compared to Skanska-Flatiron's score of 87.19. This differential of 6.25 points is not insignificant. However, we believe this differential is driven by a pricing bid that cannot cover the basic costs of the project and render it an irresponsible bid.

Our request of the Regional Planning and Highways Committee is for the membership of the committee to take 30 days to evaluate the issues raised in this letter. A project of this size and of this significance deserves a closer examination of these issues. We believe that a careful and thorough examination will result in a recommendation of the highest scoring team with the most responsible price – Skanska-Flatiron.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Alex Medyn', followed by a long horizontal flourish.

Alex Medyn
Project Executive
Skanska Flatiron a Joint Venture

cc: Chair Of OCTA, Honorable Lori Donchak
Chair of Regional Planning and Highways Committee, Honorable Frank Ury
Vice-Chair of Regional Planning and Highways Committee, Honorable Lisa Bartlett
Honorable Andrew Do
Honorable Jeffrey Lalloway
Honorable Gary Miller
Honorable Shawn Nelson
Honorable Todd Spitzer

PROJECT REPORT
PRELIMINARY COST ESTIMATE SUMMARY

District-County-Route	12, 07-ORA, LA-22,73, 405, 605
	R0.5/R0.7, R0.7/R3.8, R27.2/R27.8,
PM	9.3/24.2, 0.0/1.2, 3.5/R1.6, R0.0/R1.2
EA	0H1000
Program Code	20.10.400.100

PROJECT DESCRIPTION: Improvements on I-405 in Orange County

Limits I-405 from 0.2 mile south of Bristol Street to 1.4 miles north of I-605 and portions of SR-22, SR-73, and I-605

Proposed Improvement (Scope) Construct one general-purpose lane widening from Euclid Street to I-605 and one Express Lane (Tolled) between SR-73 and SR-22 East to be managed jointly with existing HOV lane as a tolled Express Lane Facility with 2 lanes in each direction from SR-73 to I-605, as well as interchange improvements from SR-73 to I-605.

Alternative 3 (Preferred Alternative): Express Lanes (Tolled) and Add One GP Lane in Each Direction

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$	958,034,000.00
TOTAL STRUCTURE ITEMS	\$	271,469,000.00
SUBTOTAL CONSTRUCTION COSTS	\$	1,229,503,000.00
TOTAL RIGHT OF WAY ITEMS	\$	67,805,000.00
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$	1,297,308,000.00
ENGINEERING, CONSTRUCTION MANAGEMENT & PROJECT ADMINISTRATION (20% of subtotal construction costs)	\$	245,901,000.00
TOTAL PROJECT COSTS	\$	1,543,209,000.00

Reviewed by: Matthew Cugini Date _____
 Chief, Design Branch C (Signature)

Approved by: Nooshin Yoosefi Date _____
 Project Manager (Signature)

District-County-Route 12, 07-ORA, LA-22,73, 405, 605

R0.5/R0.7, R0.7/R3.8, R27.2/R27.8,

PM 9.3/24.2, 0.0/1.2, 3.5/R1.6, R0.0/R1.2

EA OH1000

Program Code 20.10.400.100

<u>Section 4: Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	437,000	SQFT	\$ 70.00	\$ 30,590,000.00	
MSE Walls	67,000	SQFT	\$ 60.00	\$ 4,020,000.00	
Architectural Treatment	67,000	SQFT	\$ 12.00	\$ 804,000.00	
Corridor Aesthetics	1	LS	\$ \$10,000,000.00	\$ 10,000,000.00	
Lightweight Fill (Cellular Conc)	15,000	CY	\$ 50.00	\$ 750,000.00	
Noise Barriers	514,000	SQFT	\$ 25.00	\$ 12,850,000.00	
Property Block Walls	6,825	SQFT	\$ 15.00	\$ 102,375.00	
Concrete Barrier	143,300	LF	\$ 110.00	\$ 15,763,000.00	
Concrete Barrier (Type 736)	16,500	LF	\$ 130.00	\$ 2,145,000.00	
Concrete Barrier (Retaining)	42,000	LF	\$ 180.00	\$ 7,560,000.00	
Metal Beam Guard Railing	24,000	LF	\$ 40.00	\$ 960,000.00	
Beg Treatment (MBGR)	140	EA	\$ 1,000.00	\$ 140,000.00	
End Treatment (MBGR)	140	EA	\$ 3,000.00	\$ 420,000.00	
Crash Cushion	9	EA	\$ 70,000.00	\$ 630,000.00	
Place HMA Dike	124,000	LF	\$ 5.00	\$ 620,000.00	
Chain Link Fence	43,000	LF	\$ 30.00	\$ 1,290,000.00	
Curb & Gutter	4,100	CY	\$ 500.00	\$ 2,050,000.00	
Concrete Sidewalk	4,000	CY	\$ 500.00	\$ 2,000,000.00	
Curb Ramp	630	CY	\$ 2,000.00	\$ 1,260,000.00	
Stamped Concrete (Island)	1,100	CY	\$ 500.00	\$ 550,000.00	
Concrete Driveway	640	CY	\$ 500.00	\$ 320,000.00	
Remove Concrete Pavement	64,000	SQYD	\$ 5.00	\$ 320,000.00	
Remove Concrete (Channel)	6,300	CY	\$ 160.00	\$ 1,008,000.00	
Remove Conc Curb/Gutter/SW	7,900	CY	\$ 10.00	\$ 79,000.00	
Remove Sound/Retaining Wall	808,000	SQFT	\$ 4.00	\$ 3,232,000.00	
Remove Concrete Barrier	68,000	LF	\$ 15.00	\$ 1,020,000.00	
Remove MBGR	34,000	LF	\$ 10.00	\$ 340,000.00	
Remove Chain Link Fence	26,000	LF	\$ 5.00	\$ 130,000.00	
Remove Traffic Stripe	1,080,000	LF	\$ 1.00	\$ 1,080,000.00	
Prepare SWPPP	1	LS	\$ 30,000.00	\$ 30,000.00	
Construction Site BMPs	1	LS	\$ 5,848,000.00	\$ 5,555,600.00	
Treatment BMPs	1	LS	\$ 4,590,500.00	\$ 4,360,975.00	
Hazardous Waste Investigation and/or Mitigation Work	1	LS	\$ 3,110,000.00	\$ 3,110,000.00	
Environmental Compliance	1	LS	\$ 1,088,000.00	\$ 1,088,000.00	
Resident Engineer Office Space	1	LS	\$ 4,500,000.00	\$ 4,500,000.00	
Time-Related Overhead	1	LS	\$ 20,000,000.00	\$ 20,000,000.00	

Subtotal Specialty Items \$ 140,678,000.00

District-County-Route 12, 07-ORA, LA-22,73, 405, 605

R0.5/R0.7, R0.7/R3.8, R27.2/R27.8,

PM 9.3/24.2, 0.0/1.2, 3.5/R1.6, R0.0/R1.2

EA 0H1000

Program Code 20.10.400.100

<u>Section 5: Traffic Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Lighting & Sign					
Illumination	1	LS	\$ 16,530,000.00	\$ 16,530,000.00	
Traffic Delineation Items	1	LS	\$ 4,670,000.00	\$ 4,670,000.00	
Traffic Signals	1	LS	\$ 9,300,000.00	\$ 9,300,000.00	
Overhead Sign Structures	1	LS	\$ 29,469,000.00	\$ 29,469,000.00	
Roadside Signs	1	LS	\$ 271,000.00	\$ 271,000.00	
Traffic Control Systems	1	LS	\$ 10,000,000.00	\$ 10,000,000.00	
TMP	1	LS	\$ 13,038,000.00	\$ 13,038,000.00	
CMS	1	LS	\$ 2,700,000.00	\$ 2,700,000.00	
CCTV	1	LS	\$ 3,700,000.00	\$ 3,700,000.00	
FO Communication System	1	LS	\$ 16,200,000.00	\$ 16,200,000.00	
TMS/VDS	1	LS	\$ 2,925,000.00	\$ 2,925,000.00	
ITS Central System Upgrade	1	LS	\$ 2,300,000.00	\$ 2,300,000.00	
Ramp Metering	1	LS	\$ 1,015,000.00	\$ 1,015,000.00	
Construction Staging	1	LS	\$ 40,000,000.00	\$ 40,000,000.00	
Temp Lighting/Sign Illumination	1	LS	\$ 6,915,000.00	\$ 6,915,000.00	
Temp Traffic Signals	1	LS	\$ 7,440,000.00	\$ 7,440,000.00	
Temp CMS	1	LS	\$ 500,000.00	\$ 500,000.00	
Temp CCTV	1	LS	\$ 2,100,000.00	\$ 2,100,000.00	
Temp FO Comm System	1	LS	\$ 5,000,000.00	\$ 5,000,000.00	
Temp TSM/VDS	1	LS	\$ 2,925,000.00	\$ 2,925,000.00	
Temp Ramp Metering	1	LS	\$ 870,000.00	\$ 870,000.00	
Electronic Toll Collection System & Enforcement	1	LS	\$ 30,000,000.00	\$ 30,000,000.00	

Subtotal Traffic Items \$ 207,868,000.00

Notes:

1. TMS/VDS = Traffic Monitoring Station/Vehicle Detection System
2. Temp Traffic Signal estimate includes modification of existing signals and additional of new temporary poles/signal heads for use during
3. Temp Ramp Metering estimate includes modifications or relocations of existing ramp meters to maintain operability during different stages of construction.
4. For electronic toll collection, assume 6 gantries in each direction, total of 12. Cost includes gantries, readers, high speed photo camera, pavement loops, fiber optics systems, TOC equipment and software - see Toll Ops Plan for locations.

District-County-Route 12, 07-ORA, LA-22,73, 405, 605
R0.5/R0.7, R0.7/R3.8, R27.2/R27.8,
PM 9.3/24.2, 0.0/1.2, 3.5/R1.6, R0.0/R1.2
EA 0H1000
Program Code 20.10,400.100

<u>Section 6: Planting and Irrigation</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Replacement Planting	<u>1</u>	<u>LS</u>	<u>\$ 5,500,000.00</u>	<u>\$ 5,500,000.00</u>	
Irrigation Modification	<u>1</u>	<u>LS</u>	<u>\$ 3,700,000.00</u>	<u>\$ 3,700,000.00</u>	

Subtotal Planting and Irrigation Items \$ 9,200,000.00

<u>Section 7: Roadside Management and Safety Section</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Vegetation Control Treatments	<u>12,000</u>	<u>SQYD</u>	<u>\$ 50.00</u>	<u>\$ 600,000.00</u>	
Gore Area Pavement	<u>24,000</u>	<u>SQYD</u>	<u>\$ 80.00</u>	<u>\$ 1,920,000.00</u>	
Pavement beyond the gore area					
Miscellaneous Paving					
Erosion Control					
Slope Protection					
Side Slopes/Embankment Slopes					
Maintenance Vehicle Pull outs					
Off-freeway Access (gates, stairways, etc.)	<u>237</u>	<u>EA</u>	<u>\$ 3,000.00</u>	<u>\$ 711,000.00</u>	
Roadside Facilities (Vista Points, Transit, Park and Ride, etc.)					
Relocating roadside facilities/features					

Subtotal Roadside Management and Safety Section \$ 3,231,000.00

TOTAL SECTIONS: 1 thru 7 \$ 622,100,000.00

District-County-Route 12, 07-ORA, LA-22,73, 405, 605
R0.5/R0.7, R0.7/R3.8, R27.2/R27.8,
 PM 9.3/24.2, 0.0/1.2, 3.5/R1.6, R0.0/R1.2
 EA 0H1000
 Program Code 20.10.400.100

Section 8: Minor Items

\$ 622,100,000.00 x 10% = \$ 62,210,000.00
 (Subtotal Sections 1 thru 7)

TOTAL MINOR ITEMS \$ 62,210,000.00

Section 9: Roadway Mobilization

\$ 684,310,000.00 x 10% = \$ 68,431,000.00
 (Subtotal Sections 1 thru 8)

TOTAL ROADWAY MOBILIZATION \$ 68,431,000.00

Section 10: Roadway Additions

Supplemental Work

\$ 684,310,000.00 x 10% = \$ 68,431,000.00
 (Subtotal Sections 1 thru 8)

Contingencies

\$ 684,310,000.00 x 20% = \$ 136,862,000.00
 (Subtotal Sections 1 thru 8)

TOTAL ROADWAY ADDITIONS \$ 205,293,000.00

TOTAL ROADWAY ITEMS \$ 958,034,000.00
 (Subtotal Sections 1 thru 10)

Estimate Prepared By Vickie Kraman
 (Print Name)

Phone# (949) 333-4505 Date 4/4/2012

Estimate Checked By Patti Tiberi
 (Print Name)

Phone# (949) 333-4541 Date 4/5/2012

District-County-Route 12, 07-ORA, LA-22,73, 405, 605
R0.5/R0.7, R0.7/R3.8, R27.2/R27.8, 9.3/24.2,
 PM 0.0/1.2, 3.5/R1.6, R0.0/R1.2
 EA 0H1000
 Program Code 20.10.400.100

II. STRUCTURES ITEMS

Str	Structure Name	Type of Work*	Str Type	Width (out to out) LF	Span Lengths LF	Total Area SQFT	Ftg Type (pile/spread)	Cost** per SQFT	Total Cost per Structure
1	405-73 HOV Direct Conn	(N)	CIP/PS	58.90	1,337.00	87,250	Pile	\$ 292	\$ 25,477,000
2	FAIRVIEW Rd OC	(R)	CIP/PS	152.00	317.50	48,260	Pile	\$ 238	\$ 11,500,000
3	HARBOR Blvd UC	(W)	CIP/PS	15.75	193.72	3,051	Pile	\$ 344	\$ 1,050,000
4	HARBOR Blvd UC - SB LOOP ON-RAMP	(N)	CIP/PS	26.96	344.50	9,288	Pile	\$ 212	\$ 1,970,000
5	HYLAND STORM DRAIN	(E)	RCB					See Section 3: Drainage	
6	GREENVILLE-BANNING Chnl Culv	(E)	Triple RCB	39.50	154.00	6,822	N/A	\$ 161	\$ 1,100,000
7	SERVICE Rd UC	(E)	RCB	18.00	87.69	1,578	N/A	\$ 223	\$ 743,000
8	SANTA ANA RIVER Br	(W)	CIP/PS	58.75 & Var	440.42	26,748	Pile	\$ 233	\$ 6,232,000
9	EUCLID St ON-RAMP Over SANTA ANA RIVER	(N)	CIP/PS	32.27 & Var	364.00	12,953	Pile	\$ 225	\$ 2,920,000
10	EUCLID ST ON-RAMP Over OCSD Dwy	(N)	CIP/PS	38.90	133.50	5,305	Pile	\$ 324	\$ 1,720,000
11	FOUNTAIN VALLEY Chnl	(E)	RCB					See Section 3: Drainage	
12	WARD St OC	(R)	CIP/PS	80.00	346.00	27,680	Pile	\$ 217	\$ 6,000,000
13	TALBERT Ave OC	(R)	CIP/PS	114.00	477.25	54,407	Pile	\$ 265	\$ 14,400,000
14	BROOKHURST St OC	(R)	CIP/PS	136.00 & Var	500.00	69,362	Pile	\$ 250	\$ 17,320,000
15	SLATER Ave OC	(R)	CIP/PS	88.00	411.00	36,168	Pile	\$ 238	\$ 8,600,000
16	BUSHARD St OC	(R)	CIP/PS	80.00	414.00	33,120	Pile	\$ 231	\$ 7,650,000
17	WARNER Ave OC	(R)	CIP/PS	136.00	476.00	66,747	Pile	\$ 265	\$ 17,710,000
18	WARNER Ave ON-RAMP OC	(N)	CIP/PS	26.89 & Var	200.00	5,917	Pile	\$ 210	\$ -
19	OCEAN VIEW Chnl	(E)	RCB					See Section 3: Drainage	
20	MAGNOLIA St SB LOOP ON-RAMP OC	(N)	CIP/PS	26.96	344.50	9,288	Pile	\$ 212	\$ -
21	MAGNOLIA St OC	(R)	CIP/PS	112.00	500.00	56,000	Pile	\$ 236	\$ 13,200,000
22	HEIL Ave Ped OC	(R)	CIP/PS	10.00	1,310.92	13,109	Pile	\$ 294	\$ 3,860,000
23	HEIL Ave STORM DRAIN	(E)	RCB					See Section 3: Drainage	
24	EAST GARDEN GROVE-WINTERSBURG Chnl NB	(N)	CIP/PS	28.00	105.00	2,940	Pile	\$ 238	\$ 700,000
25	EAST GARDEN GROVE-WINTERSBURG Chnl SB	(N)	CIP/PS	28.00	105.00	2,940	Pile	\$ 425	\$ 1,250,000
26	NEWLAND St OC	(R)	CIP/PS	88.00	388.67	34,203	Pile	\$ 296	\$ 10,104,000
27	EDINGER Ave OC	(R)	CIP/PS	78.42 & Var	496.00	42,190	Pile	\$ 256	\$ 10,800,000
28	S39-S405 Conn Sep (SB Loop)	(N)	CIP/PS	39.75 & Var	222.67	9,074	Pile	\$ 215	\$ 1,950,000
29	N39-N405 Conn Sep (NB Loop)	(N)	CIP/PS	38.90	221.75	8,626	Pile	\$ 214	\$ 1,850,000
30	405/39 Sep Tieback Walls No. 2200 & 2300	(N)	Wall	10.75	629.75	6,770	N/A	\$ 287	\$ 1,940,000
31	McfADDEN Ave OC	(R)	CIP/PS	76.00 & Var	408.00	31,713	Pile	\$ 284	\$ 9,000,000

District-County-Route 12, 07-ORA, LA-22,73, 405, 605
R0.5/R0.7, R0.7/R3.8, R27.2/R27.8, 9.3/24.2,
 PM 0.0/1.2, 3.5/R1.6, R0.0/R1.2
 EA OH1000
 Program Code 20.10.400.100

II. STRUCTURES ITEMS

Str	Structure Name	Type of Work*	Str Type	Width (out to out) LF	Span Lengths LF	Total Area SQFT	Ftg Type (pile/spread)	Cost** per SQFT	Total Cost per Structure
32	BOLSA OH	(W)	CIP/PS	73.60 & Var	177.50	13,135	Pile	\$ 294	\$ 3,865,000
33	BOLSA Ave OC	(R)	CIP/PS	132.42	423.83	56,641	Pile	\$ 313	\$ 17,722,000
34	GOLDENWEST St OC	(R)	CIP/PS	132.00 & Var	468.00	64,760	Pile	\$ 261	\$ 16,910,000
35	NAVY OH	(W)	CIP/PS	66.29	172.27	11,420	Pile	\$ 315	\$ 3,600,000
36	EDWARDS St OC	(R)	CIP/PS	76.00	389.00	29,564	Pile	\$ 257	\$ 7,590,000
37	WESTMINSTER Blvd OC	(R)	CIP/PS	128.00 & Var	468.00	63,488	Pile	\$ 280	\$ 17,780,000
38	SPRINGDALE St OC	(R)	CIP/PS	84.00 & Var	458.00	40,856	Pile	\$ 257	\$ 10,486,000
39	MILAN STORM DRAIN	(E)	RCB					See Section 3: Drainage	
40	BOLSA CHICA Rd OC	(R)	CIP/PS	139.50 & Var	322.00	46,000	Pile	\$ 233	\$ 10,720,000
41	MONTECITO STORM Chnl	(I)	RCB					See Section 3: Drainage	
42	BIXBY Chnl BYPASS	(N)	Triple RCB 10'x6'	32.50	400.00	13,000	N/A	\$ 250	\$ 3,250,000
43	Structure Rehabilitation	(I)						\$	\$ 500,000

* (N) New, (R) Replace, (W) Widen, (E) Extend, (I) Improve
 ** Including 10% mobilization and 25% contingency.

SUBTOTAL STRUCTURES ITEMS \$ 271,469,000.00
 (Sum of Total Cost for Structures)

Railroad Related Costs: _____ \$ _____
 _____ \$ _____
 _____ \$ _____

SUBTOTAL RAILROAD ITEMS \$ _____

TOTAL STRUCTURES ITEMS \$ 271,469,000.00
 (Sum of Structures Items plus Railroad Items)

COMMENTS:

Estimate Prepared By Mohsen Mohseni Phone # (949) 333-4515 Date 4/4/2012
 (Print Name)

District-County-Route 12, 07-ORA, LA-22,73, 405, 605
R0.5/R0.7, R0.7/R3.8, R27.2/R27.8,
 PM 9.3/24.2, 0.0/1.2, 3.5/R1.6, R0.0/R1.2
 EA OH1000
 Program Code 20.10.400.100

III. RIGHT OF WAY ITEMS

ESCALATED VALUE

A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ <u>37,333,630.00</u>
B. Utility Relocation (State share)	\$ <u>29,423,000.00</u>
C. Relocation Assistance	\$ <u>-</u>
D. Clearance/Demolition	\$ <u>-</u>
E. Title and Escrow Fees	\$ <u>1,047,943.00</u>

TOTAL RIGHT OF WAY ITEMS \$ 67,804,573.00
 (Escalated Value)

Anticipated Date of Right of Way Certification Dec 2016
 (Date to which Values are Escalated)

F. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work * \$ _____

* This dollar amount is to be included in the Roadway and/or Structures Items of Work, as appropriate. Do not include in Right of Way Items.

COMMENTS:

Estimate Prepared By Josh Cospers Phone# (951) 683-2353 Date 11/11/2014
 (Print Name)



COMMITTEE TRANSMITTAL

December 12, 2016

To: Members of the Board of Directors
From: Laurena Weinert, Clerk of the Board
Subject: Project V Community-Based Transit Circulators Program Ridership Report

Transit Committee Meeting of December 8, 2016

Present: Directors Do, Jones, Murray, Pulido, Shaw, Steel, Tait, and Winterbottom
Absent: None

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.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Project V Community-Based Transit Circulators Program
Ridership Report**

Staff Report



December 8, 2016

To: Transit Committee

From: Darrell Johnson, Chief Executive Officer

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

Subject: Project V Community-Based Transit Circulators Program Ridership Report

Overview

Measure M2 establishes a competitive program through Project V to fund local transit services that complement regional transit. In June 2013, the Orange County Transportation Authority Board of Directors approved five projects for a total \$9.8 million in Project V funds. A ridership report on these Project V services is provided.

Recommendation

Receive and file as an information item.

Background

The Community-Based Transit Circulators Program (Project V) is a competitive element under Measure M2 that provides funding to develop and implement local transit services, such as community-based circulators, shuttles, trolleys, or demand-responsive services that complement regional bus and rail services, and better suit local needs in areas not adequately served by regional transit. This is a competitive program that provides funding for transit capital and operating assistance. Daily services or seasonal/special event shuttles are eligible to compete for funding.

The Orange County Transportation Authority (OCTA) Board of Directors (Board) approved five projects for \$9.8 million in Project V funds in June 2013. The Board also approved \$26.7 million for 17 projects in June 2016. Consistent with the approved Project V Guidelines, all Project V-funded services must achieve a performance standard of six passenger boardings per revenue vehicle hour (RVH) within the first 12 months of operations, and must achieve the ten passenger boardings per RVH within the first 24 months of operations, and

every year thereafter. In August 2015, the OCTA Board directed staff to provide ridership reports to the OCTA Transit Committee for active Project V services. This report includes ridership for the five projects approved in June 2013. The projects approved in June 2016 will be included in the next report as the services approach the productivity deadlines of 12 and 24 months.

Discussion

The cities of Dana Point, Huntington Beach, Laguna Beach, La Habra, and Lake Forest received Project V funds in 2013 and started operations. Attachment A provides description and ridership information for these services from June 2015 through June 2016. Most of the services are exceeding the performance target of ten boardings per RVH. The City of La Habra's (City) Route 103B is currently achieving nine boardings per RVH. Staff will continue to work with the City to implement strategies that can improve ridership and reduce unproductive RVH. These strategies may include additional marketing efforts and/or changes to the route and schedule that will improve productivity.

Summary

A status report on Project V services approved in June 2013 is provided for information purposes. Most of the services are meeting their productivity targets. Information on projects initiated in October 2016 will be provided in future reports.

Attachment

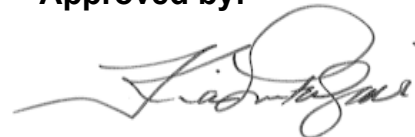
- A. Project V Services Ridership Report

Prepared by:



Sam Kaur
Manager, Measure M Local Programs
(714) 560-5673

Approved by:



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



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Project V Community-Based Transit Circulators Program
Ridership Report**

Attachment A

Project V Services Ridership Report

Dana Point: Project V provided over \$2.4 million over seven years for the capital and operational cost to provide summer trolley and seasonal shuttle services. Dana Point provides a minimum match of 11 percent for capital improvements that will cover the leasing cost of the vehicles. For the service, Dana Point provides a ten percent match in the first year of service, 20 percent in the second year, and 28.68 percent for the remaining years (fiscal years 2016/17-2021). The maximum that the Orange County Transportation Authority (OCTA) pays is \$8 per passenger for the service. Dana Point started operating Project V services in summer 2015, and is currently averaging 18 boardings per revenue vehicle hour (RVH).

Huntington Beach Service: Project V provided \$93,287 for the Huntington Beach Holiday and Event Shuttle over seven years. Huntington Beach is paying 30 percent in match, and the service cost is estimated to be \$12,000 per year. Services consist of operating five shuttles on the 4th of July between 8:00 am and 11:00 pm, and five shuttles during the U.S. Open Event from 8:00 am to 11:00 pm. This service started in July 2015, and average ridership for this service is approximately 18 boardings per RVH.

La Habra Service: OCTA provided \$447,300 in Project V funds for the purchase of two buses and related bus stops amenities, including shelters, benches, sidewalks, and curb and gutter ramps. OCTA also provided \$2.2 million in Project V funds to cover operation costs over seven years. In August 2015, the OCTA Board of Directors (Board) reduced La Habra's Project V funding by \$929,820 due to the cancellation of one of the routes. La Habra provides at least ten percent match for the operating cost, the maximum that Project V covers is no more than \$8 per passenger.

La Habra Express Service started on August 4, 2014, and currently provides weekday service on Route 103B. Route 103B runs from 5:50 am to 6:20 pm in La Habra, with additional stops at St. Jude Medical Center and Fullerton Transportation Center. Route 103B is operating at an average of nine passengers per RVH. The service is almost reaching the goal of ten boardings per hour. Staff will continue to work with La Habra to implement strategies that can improve ridership and reduce unproductive RVHs. The strategies may include additional marketing efforts, and/or changes to the route, schedule, and operating hours that can increase ridership.

Laguna Beach: Project V will provide \$472,000 for the vehicle purchase and will provide a total of \$3.1 million to cover operational cost over seven years. Laguna Beach started services in 2015. The project provides seasonal service for 24 weekends through the year, and can increase up to 42 weekends based on the demand. This service is operating on Fridays from 4:00 pm to 11:00 pm, Saturdays from 9:00 am to 11:00 pm, and on Sundays from 11:00 am to 8:00 pm, with six trolleys on a fixed-route. Laguna Beach's match for this project is ten percent for the purchase of trolleys, 42 percent for the first year of service, and then 20 percent for the remaining time period.

Project V Services Ridership Report

Similar to other services, the maximum that Project V covers is no more than \$8 per passenger. The demand for this service is very high and ridership is averaging approximately 35 boardings per RVH.

Lake Forest: Project V provides \$74,844 over seven years to support vanpool services for Oakley. Service costs are approximately \$12,000 per year, and Lake Forest is providing a ten percent match. Current service runs three ten-passenger shuttles to Oakley. The average ridership for this service is approximately ten boardings per RVH.



COMMITTEE TRANSMITTAL

December 12, 2016

To: Members of the Board of Directors
From: Laurena Weinert, ^{RLW} Clerk of the Board
Subject: Comprehensive Transportation Funding Programs Semi-Annual Review – September 2016

Regional Planning and Highways Committee Meeting of December 5, 2016

Present: Directors Bartlett, Do, Donchak, Miller, Nelson, Spitzer, and Ury
Absent: Director Lalloway

Committee Vote

This item was passed by the Members present.

Director Bartlett was not present to vote on this item.

Committee Recommendation

Approve adjustments to the Comprehensive Transportation Funding Program projects and Local Fair Share funds.



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Comprehensive Transportation Funding Programs Semi-
Annual Review – September 2016**

Staff Report



December 5, 2016

To: Regional Planning and Highways Committee
From: Darrell Johnson, Chief Executive Officer *Jennette Ruzja for*
Subject: Comprehensive Transportation Funding Programs Semi-Annual Review – September 2016

Overview

The Orange County Transportation Authority recently completed the semi-annual review of projects funded through the Comprehensive Transportation Funding Programs. This process reviews the status of Measure M2 grant-funded projects, and provides an opportunity for local agencies to update project information and request project modifications. Recommended project adjustments are presented for review and approval.

Recommendation

Approve adjustments to the Comprehensive Transportation Funding Program projects and Local Fair Share funds.

Background

The Comprehensive Transportation Funding Programs (CTFP) is the method the Orange County Transportation Authority (OCTA) uses to administer funding for street, road, signal, transit, and water quality projects. The CTFP contains a variety of funding programs and sources, including Measure M2 (M2) revenues and State-Local Partnership Program funds. The CTFP provides local agencies with a comprehensive set of guidelines for administration and delivery of various transportation funding grants. Consistent with the CTFP Guidelines, OCTA staff meets in March and September of each year with representatives from local agencies to review the status of projects and proposed changes. This process is commonly referred to as the semi-annual review (SAR). The goals of the SAR are to review the project status, determine the continued viability of projects, address local agency concerns, confirm the availability of local match funds, and to ensure timely closeout of all projects funded under the CTFP.

Discussion

The September 2016 SAR adjustments are itemized in Attachment A and described in Attachment B. The adjustments include two cancellations, one timely-use of funds extension request for local fair share funds, four timely-use of funds extension requests for C TFP projects, two transfer of funds requests between project phases, and three scope change requests.

Since the start of M2, OCTA has awarded \$369.6 million in competitive funds for the following programs:

- M2 Regional Capacity Program (Project O)
- Traffic Signal Synchronization Program (Project P)
- Environmental Cleanup Program (Project X)
- Community-Based Transit Circulators (Project V)
- Safe Transit Stops (Project W)

Below is a summary of the CTFP allocations using M2 funds, comparing the latest status as of prior SAR with the proposed changes in the September 2016 SAR.

M2 CTFP Summary				
Project Status	March 2016		September 2016	
	Project Phases	Allocations	Project Phases	Allocations ¹ (after adjustments)
Planned ²	119	\$69.1	138	\$116.4
Started ³	152	\$140.8	163	\$151.8
Pending ⁴	59	\$42.1	84	\$40.0
Completed ⁵	125	\$38.1	157	\$61.4
Total Allocations	455	\$290.1	542	\$369.6

1. Allocations in millions, pending Board of Directors approval of the September 2016 SAR.
 2. Planned - indicates that funds have not been obligated and/or are pending contract award.
 3. Started - indicates that the project is underway and funds are obligated.
 4. Pending - indicates that the project work is completed and the final report submittal/approval is pending.
 5. Completed - indicates that the project work is complete, final report approved, and final payment has been made.

In addition to over \$40 million of new CTFP awards in April 2016, this SAR captures over \$2,456,657 in project cost savings and \$635,955 in project cancellations. Local agencies started 11 project phases, delivered the scope of work for 25 project phases, and closed out 32 project phases between March 2016 and September 2016.

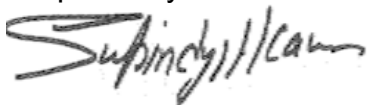
Summary

OCTA has recently reviewed the status of grant-funded streets and roads projects funded through the CTFP. Staff recommends approval of the project adjustments requested by local agencies, including two cancellations, one timely-use of funds extension request for local fair share funds, four timely-use of funds extension requests for CTFP projects, two transfers, and three scope changes. The next SAR is currently scheduled for March 2017.

Attachments

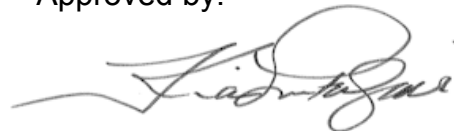
- A. Comprehensive Transportation Funding Programs (CTFP) – September 2016 Semi-Annual Review Adjustment Requests
- B. Comprehensive Transportation Funding Programs – September 2016 Semi-Annual Review Adjustment Request Descriptions

Prepared by:



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Section Manager, Measure M2 Local
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Approved by:



Kia Mortazavi
Executive Director, Planning
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ORANGE COUNTY TRANSPORTATION AUTHORITY

**Comprehensive Transportation Funding Programs Semi-
Annual Review – September 2016**

Attachment A

Comprehensive Transportation Funding Programs (CTFP)
September 2016 Semi-Annual Review Adjustment Requests

Cancellation Request(s)							
Agency	Project Number	Project	Project Title	Phase	Current FY	Current Allocation	Proposed Allocation
Huntington Beach	14-HBCH-ECP-3732	X	Adams Avenue and Bushard Street Bioswale	CON	FY 2014-15	\$ 635,955	\$ -
Lake Forest	N/A	S	Panasonic (Irvine Station to Panasonic)	O&M	FY 2015-16	\$ 69,638	\$ -
Cancellations (2) - Total Phase Allocations						\$ 705,593	

FY - Fiscal year

Project X - Environmental Cleanup Program

CON - Construction

N/A - Not applicable

Project S - Transit Extensions to Metrolink

O&M - Operations & Maintenance

Comprehensive Transportation Funding Programs (CTFP)
September 2016 Semi-Annual Review Adjustment Requests

Timely-Use of Funds Extension Request(s) - CTFP								
Agency	Project Number	Project	Project Title	Phase	Current FY	Current Allocation	Proposed Time Extension (in Months)	Proposed Expenditure Deadline
Anaheim	13-ANAH-TSP-3660	P	Harbor Boulevard Signal Synchronization	O&M	FY 14/15	\$ 91,520	24	Feb-19
Buena Park	14-BPRK-TSP-3703	P	Artesia Boulevard Signal Synchronization (Valley View Avenue to Dale Street)	O&M	FY 15/16	\$ 38,016	24	Jun-20
County of Orange	11-ORCO-ACE-3519	O	Cow Camp Road (Antonio Parkway to I Street, Segment 1)	CON	FY 12/13	\$ 4,160,000	6	Dec-16
Seal Beach	13-SBCH-TSP-3673	P	Seal Beach Boulevard	O&M	FY 14/15	\$ 86,400	24	Apr-19
CTFP Timely-Use of Funds Extensions (4) - Total Phase Allocations						\$ 4,375,936		

FY - Fiscal year

Project P - Regional Traffic Signal Synchronization Program

O&M - Operations and maintenance

Project O - Regional Capacity Program

CON - Construction

Comprehensive Transportation Funding Programs (CTFP)
September 2016 Semi-Annual Review Adjustment Requests

Timely-Use of Funds Extension Request(s) - LFS							
Agency	Project Number	Project	Project Title	Phase	Current FY	Proposed Allocation Extension	Proposed Time Extension
Fountain Valley	N/A	Q	Several City Projects	N/A	FY 2013-14	\$ 611,793	24 Months
LFS-Timely Use of Funds Extension (1) - Total Phase Allocations						\$ 611,793	

LFS - Local Fair Share

FY - Fiscal year

N/A - Not applicable

Project Q - LFS Program

Comprehensive Transportation Funding Programs (CTFP)
September 2016 Semi-Annual Review Adjustment Requests

Scope Change Request(s)						
Agency	Project Number	Project	Project Title	Phase	Current FY	Current Allocation
OCTA	13-OCTA-TSP-3666	P	Kraemer Boulevard Signal Synchronization	PI	FY 2013-14	\$ 2,275,120
OCTA	15-OCTA-TSP-3783	P	Chapman Avenue Corridor	PI	FY 2015-16	\$ 2,188,844
OCTA	15-OCTA-TSP-3786	P	Westminster Avenue and 17th Street Corridor	PI	FY 2015-16	\$ 2,704,902
Scope Changes (3) - Total Phase Allocations						\$ 7,168,866

FY - Fiscal year

OCTA - Orange County Transportation Authority

Project P - Regional Traffic Signal Synchronization

PI - Primary implementation

Comprehensive Transportation Funding Programs (CTFP)
September 2016 Semi-Annual Review Adjustment Requests

Transfer Request(s)								
Agency	Project No.	Project	Project Title	Phase	Current FY	Current Allocation	Transfer Amount	Proposed Allocation
Anaheim	11-ANAH-ACE-3503	O	Brookhurst Street Widening (Interstate 5 to State Route 91)	ENG	FY 2011-12	\$ 1,050,000	\$ (68,093)	\$ 981,907
Anaheim	13-ANAH-ACE-3650	O	Brookhurst Street Widening (Interstate 5 to State Route 91)	ROW	FY 2013-14	\$ 10,495,539	\$ 68,093	\$ 10,563,632
Buena Park	13-BPRK-FST-3651	O	State Route 91/Beach Boulevard Westbound Ramp Widening	ROW	FY 2014-15	\$ 97,241	\$ (91,326)	\$ 5,915
Buena Park	13-BPRK-FST-3651	O	State Route 91/Beach Boulevard Westbound Ramp Widening	CON	FY 2015-16	\$ 1,377,129	\$ 91,326	\$ 1,468,455
Transfer Requests (2) - Total Phase Allocations						\$ 13,019,909	\$ -	\$ 13,019,909

FY - Fiscal year

Project O - Regional Capacity Program

ENG - Engineering

ROW - Right-of-way

CON - Construction



ORANGE COUNTY TRANSPORTATION AUTHORITY

**Comprehensive Transportation Funding Programs Semi-
Annual Review – September 2016**

Attachment B

Comprehensive Transportation Funding Programs
September 2016 Semi-Annual Review Adjustment Request Descriptions

Cancellations

The City of Huntington Beach (Huntington Beach) was awarded \$635,955 for the Adams Avenue and Bushard Street Bioswale Project. Huntington Beach is requesting to cancel the project since Huntington Beach received a higher cost estimate and is unable to construct the project with the available funds.

The City of Lake Forest is requesting to cancel the Project S Panasonic Avionic Project due to timely implementation issues.

Local Fair Share (LFS) Timely-Use of Funds Extensions

The City of Fountain Valley (Fountain Valley) has received \$920,299 of LFS funds in fiscal year 2013-14, and is requesting a one-time 24-month timely-use of funds extension of \$611,793 at this time. These funds were disbursed in four separate installments: \$160,466 of the unspent balance was disbursed on January 17, 2014, and must be expended by January 17, 2019; \$148,717 was disbursed on March 11, 2014, and must be expended by March 11, 2019; \$141,748 was disbursed on May 15, 2014, and must be expended by May 15, 2019; and \$160,882 was disbursed on June 30, 2014, and must be expended by June 30, 2019. The extension will provide Fountain Valley the ability to expend the funds on specific projects beyond the initial expenditures deadline.

Timely-Use of Funds Extensions

Once obligated, the Comprehensive Transportation Funding Programs (CTFP) funds expire 36 months from the contract award date. Per precept 20 in the 2016 CTFP Guidelines, local agencies may request extensions up to 24 months through the semi-annual review (SAR). During this SAR cycle, four agencies submitted timely-use of funds extension requests for CTFP projects.

The City of Anaheim (Anaheim) is requesting a 24-month timely use of funds extension for the operations and maintenance phase of the Harbor Boulevard Signal Synchronization Project (13-ANAH-TAP-3660) from February 2017 to February 2019. There was a delay in the media wall integration, which resulted in a delay of the operations and maintenance phase. The extension will provide sufficient time to complete operations and maintenance, issue payments to the consultant, and complete project closeout.

The City of Buena Park (Buena Park) is requesting a 24-month timely-use of funds extension for the operations and maintenance phase of the Artesia Boulevard Signal Synchronization Project (14-BPR K-TSP-3703) from June 2018 to June 2020.

Comprehensive Transportation Funding Programs September 2016 Semi-Annual Review Adjustment Request Descriptions

There was a delay in the installation of a service point, which resulted in a delay of the operations and maintenance phase. The extension will provide sufficient time to complete the operations and maintenance, issue payments to the consultant, and complete project closeout.

The County of Orange (County) is requesting a six-month timely-use of funds extension for the construction of the Cow Camp Road Segment 1 Project (11-ORCO-ACE-3519) from June 2016 to December 2016. The additional time will help the County resolve outstanding payments to the contractor and complete project closeout.

The City of Seal Beach is requesting a 24-month timely-use of funds extension for the operations and maintenance of the Seal Beach Boulevard Project (13-SBCH-TSP-3673) from April 2017 to April 2019. There was a delay in acquiring the room for the relocation of the traffic management center, which resulted in a delay of the operations and maintenance phase. The extension will provide sufficient time to complete operations and maintenance, and complete project closeout.

Transfers

Anaheim is requesting to transfer cost savings of \$68,093 from the engineering phase 11-ANAH-ACE-3503 to the right-of-way phase 11-ANAH-ACE-3650 of the Brookhurst Street Widening (Interstate 5 to State Route 91 [SR-91]) Project.

Buena Park is requesting to transfer cost savings of \$91,326 from the right-of-way phase 13-BPRK-FST-3651 to the construction phase of the 13-BPRK-FST-3651 SR-91/Beach Boulevard Ramp Widening Project.

Scope Changes

During this SAR, the Orange County Transportation Authority (OCTA) is requesting three scope changes.

OCTA, as an administrative lead agency for the County of Orange and the cities of Orange and Garden Grove, is requesting a scope change to the primary implementation phase of the Chapman Avenue Corridor (15-OCTA-TSP-3783) Project. The scope changes include the installation of two fiber optic cross connect enclosures and Advanced Transportation Management. It will allow for the California Department of Transportation (Caltrans) improvements identified as part of the Chapman Avenue project released to the City of Orange for procurement and implementation. In addition, new field master controllers, local controllers, and related equipment will need to be installed at certain intersections by Caltrans since the existing controllers are no longer compatible.

Comprehensive Transportation Funding Programs September 2016 Semi-Annual Review Adjustment Request Descriptions

No additional funding is requested as part of the scope change since the cost savings from removing the original Ethernet switches will offset the cost of the new equipment. These changes enhance the overall benefit of the project with no impacts to budget and project schedule.

OCTA, as an administrative lead agency for the cities of Anaheim, Brea, Placentia, and Santa Ana, is requesting scope changes to the primary implementation phase of the Kraemer Boulevard/Glassell Street/Grand Avenue project (13-OCTA-TSP-3666). The scope changes include improvements at Caltrans intersections. The request is a result of City of Orange (City) reaching an agreement to coordinate with Caltrans on this project. City is requesting to include two traffic signal controllers and fees for Caltrans review time to this project. City will be fully responsible for all financial obligations of providing the items to Caltrans that will significantly improve signal synchronization along the corridor. No additional funding is requested as part of the scope change.

OCTA, as an administrative lead agency for the County of Orange and the cities of Garden Grove, Santa Ana, Seal Beach, Tustin, and Westminster, is requesting scope changes to the primary implementation phase of the Westminster Avenue and 17th Street (15-OCTA-TSP-3786). The scope changes include reallocation of the equipment from one location to another on the same project corridor. After conducting an inventory and assessment of intelligent transportation system equipment, the assessment determined that equipment originally designated for Westminster Avenue and the Milan Street intersection will now be better served at the intersection of Westminster Avenue and Monroe Street. Since the equipment was already included in the project, no additional funds or time to procure the equipment will be necessary.



COMMITTEE TRANSMITTAL

December 12, 2016

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 July 2016 Through September 2016

Executive Committee Meeting of December 5, 2016

Present: Chair Donchak, Vice Chairman Hennessey, and Directors Murray, Nelson, Spitzer, and Ury
Absent: Director Lalloway

Committee Vote

This item was passed by the Members present.

Director Nelson was not present to vote on this item.

Committee Recommendation

Receive and file as an information item.



ORANGE COUNTY TRANSPORTATION AUTHORITY


**Measure M2 Quarterly Progress Report for the Period of
July 2016 Through September 2016**

Staff Report



December 5, 2016

To: Executive Committee

From: Darrell Johnson, Chief Executive Officer  *Darrell Johnson for*

Subject: Measure M2 Quarterly Progress Report for the Period of July 2016 through September 2016

Overview

Staff has prepared a Measure M2 quarterly progress report for the period of July 2016 through September 2016, 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 all 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). All M2 progress reports are posted online for public review.

Discussion

This quarterly report reflects current activities and progress across all M2 programs for the period of July 1, 2016 through September 30, 2016 (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 included in the Capital Action Plan, Local Fair Share Program, and Senior Mobility Program payments made to cities this quarter, as well as total distributions from M2 inception through September 2016.

Additionally, Attachment A includes a summary of the Program Management Office activities that have taken place during the quarter. One particular area of significance is highlighted below.

M2020 Plan Review and Next 10 Delivery Plan Development

On September 12, 2016, staff presented the M2020 Plan review findings to the Board. Findings indicated major progress accomplished to date, while only at the four-year mark of an eight-year plan. However, findings also posed significant challenges to delivery of the program as a result of lower-than-anticipated M2 sales tax revenues, a reduction in State Transportation Improvement Program funding, and delays to previously programmed M2 projects. Using sales tax forecast information and actual receipts received in September, staff revised cash flows for each M2 Program to determine what could be delivered between now and 2026, given current funding constraints and assumptions. After the quarter, staff returned to the Board on November 14, 2016, to present a new framework for delivery, in the form of the Next 10 Plan, which focuses on ten deliverables to be accomplished over the next ten years. The Board approved the Plan, which officially supersedes the M2020 Plan.

As part of the Next 10 Plan approval, the Board directed staff to conduct a market analysis to analyze current resource demands and provide information on the impact on OCTA's delivery of M2 projects. The Board also directed staff to accelerate the timeline of the State Route 91 (SR-91) (Project I) between State Route 55 (SR-55) and State Route 57, as appropriate.

Progress Update

The following highlights M2 program accomplishments that occurred during the first quarter:

- The SR-91 Improvement Project between SR-55 and the Tustin Avenue interchange was officially completed on July 15, 2015 (Project I).
- On July 25, 2016, a Regional Transportation Signal Synchronization Program (RTSSP) update was presented to the Board sharing significant positive results. The report provided summary information on the 38 completed projects (equivalent to 1,682 signalized intersections and 436 miles of streets), highlighted travel time reductions of 13 percent, a reduction in the number of stops at red lights of 31 percent, speed improvement of 15 percent, and a greenhouse gas reduction of 573.1 million pounds over the three-year project cycle (Project P).
- On July 25, 2016, the Board approved consultant selection for construction management services for the OC Streetcar Project (Project S).
- On August 8, 2016, the Board approved an amendment to the SR-55 Improvement Project between Interstate 405 and Interstate 5 that incorporates a modified Alternative 3 into the draft environmental document and project report. The modified alternative includes the addition of one high-occupancy vehicle (HOV) lane in each direction and exceptions to design standards to minimize additional right-of-way impacts and cost increases by staying within the same footprint. Additionally, the California Department of Transportation (Caltrans) has provided \$46.8 million towards the cost of this project. (Project F).
- The Board approved the release of an invitation for bids for the Orange Metrolink Parking Structure on July 25, 2016. On September 12, 2016, consultant selection for construction management services was approved by the Board. On September 20, 2016, construction bids were received; however, the procurement was cancelled upon findings that the elevator component of the contract was not compliant with federal Buy America requirements. The contract will be re-advertised within the next quarter.
- On August 8, 2016, the Board approved the release of request for quotes to purchase 11, 32-foot compressed natural gas-powered cutaway buses for Community-Based Circulators (Project V).
- Two separate consultants were selected on August 8, 2016, to provide interim land management services and interim biological preserve monitoring for OCTA's acquired conservation lands for a five-year term. (Part of projects A-M).

- Along with revised Comprehensive Transportation Funding Program Guidelines, the Board authorized staff to issue the 2017 call for projects (call) on August 8, 2016, making approximately \$32 million available for Regional Capacity Program (RCP) projects, and \$8 million for RTSSP projects. Guideline revisions include a tiered funding approach for RCP projects, clarified project readiness issues, allowed use of alternative level of service calculation methodologies, and other minor refinements (Project O and Project P).
- On August 8, 2016, the Board received the M2 Performance Assessment Report for fiscal year (FY) 2012-13 through FY 2014-15, along with a summary of the findings and responses/action plan. Overall, the assessment commended OCTA's commitment to the effective and efficient management and delivery of the M2 Program. In general, the assessment report found that OCTA has made significant progress in the implementation of the M2 Program on all plan elements over the last three years. Nine minor recommendations were provided, and the Board directed staff to implement an action plan in response and report back via M2 Quarterly Reports.
- The environmental phase for the Interstate 605/Katella Avenue interchange project began on August 16, 2016.
- On August 22, 2016, the Board approved the OC Streetcar stop design criteria and directed staff to develop stops based on the approved criteria. Staff will return to the Board to seek feedback on conceptual designs (Project S).
- On August 22, 2016, the Board approved the release of a request for proposals for construction management services for the Placentia Metrolink Station project (Project R).
- The Board approved Environmental Cleanup Program allocations on September 12, 2016, of up to approximately \$2.77 million, for 16 projects selected through the 2016 call (Project X).
- On September 20, 2016, the Board approved the selection of an endowment funding manager for the Environmental Mitigation Program endowment, which will pay for the long-term management of M2 conservation properties (projects A-M).

The following recent activities and/or accomplishments have taken place after the close of the fourth quarter:

- On October 10, 2016, the Board approved advancing the start date of the City of Westminster's Little Saigon Shuttle Service to October 2016 (Project V).
- On October 24, 2016, the Board approved an amendment to the cooperative agreement for the Central Harbor Boulevard Transit Corridor Study, to include additional scope, budget, and schedule related to studying transit connections from Harbor Boulevard to the Anaheim Regional Transportation Intermodal Center, as recommended by the Board in lieu of the cancelled Anaheim Rapid Connection Project (Project S).
- On October 24, 2016, the Board approved conceptual designs for the OC Streetcar stops, and directed staff to conduct additional public outreach (Project S).

A critical factor in delivering M2 freeway projects is to ensure project scope, schedules, and budgets remain on target. Project scope increases, schedule delays, and resulting cost increases can quickly affect project delivery and have a cascading effect on other activities. In light of the recent reduction in the sales tax revenue forecast, this factor is even more significant. 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.

Caltrans and OCTA continue to work together to move projects forward. Looking ahead, Caltrans' strategic policy direction, which has shifted away from system capacity enhancements, such as general purpose lane additions, and now includes a focus on construction and enhancement of managed lane systems, including HOV lanes, is a particular challenge. This policy shift and associated risks will continue to be of concern over how non-M2-focused priorities may delay or impact the remaining M2 freeway projects. OCTA continues to advise Caltrans that these new state policies need to take voter commitments into consideration and be implemented as additive projects to M2 improvements where appropriate.

Another continued challenge that the program is facing is related to the reduction in Orange County's share of State Transportation Improvement Program (STIP) funding of \$42.2 million and delays to previously programmed M2 projects. The impacts related to the STIP reduction include a one-year delay on Project A – a \$39 million project, and a two-year delay on Project C – a \$466 million project, which, if not addressed, will result in cost increases for both projects due to escalation. The longer term impacts of this change are being addressed through the Next 10 Plan. Near term implications persist, and staff will seek the Board's direction next quarter on how to address this funding delay issue.

Summary

As required by M2 Ordinance No. 3, a quarterly report covering activities from July 2016 through September 2016 is provided to update progress in implementing the M2 Transportation Investment 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 presented on the OCTA website. Hard copies are available by mail upon request.

Attachment

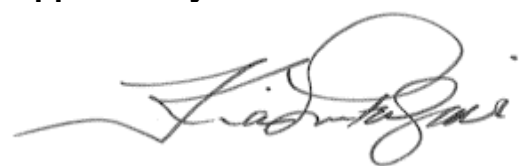
- A. Measure M2 Progress Report – First Quarter of Fiscal Year 2016-17 – July 1, 2016 through September 30, 2016

Prepared by:



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Approved by:



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ORANGE COUNTY TRANSPORTATION AUTHORITY

**Measure M2 Quarterly Progress Report for the Period of
July 2016 Through September 2016**

Attachment A



FIRST QUARTER HIGHLIGHTS:

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

Measure M2

Progress Report

First Quarter of Fiscal Year 2016-17
July 1, 2016 through September 30, 2016





SUMMARY

As required by the Measure M2 (M2) Ordinance No. 3, a quarterly report covering activities from **July 1, 2016 through September 30, 2016** is provided to update progress in implementing the M2 Transportation Investment Plan.

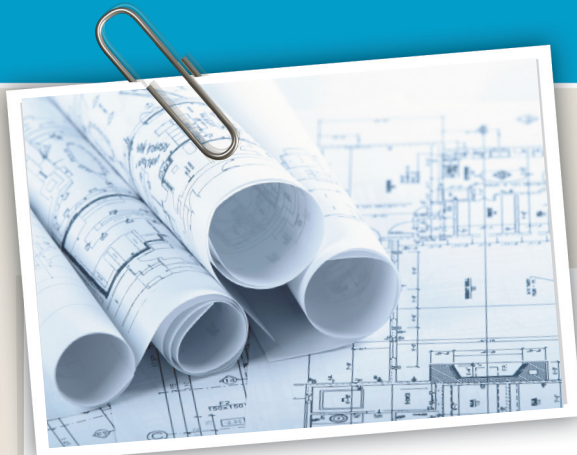
To be cost effective and to facilitate accessibility and transparency of information available to stakeholders and the public, the M2 progress report is presented on the Orange County Transportation Authority (OCTA) website. Hard copies are mailed upon request.



Measure M2

Progress Report

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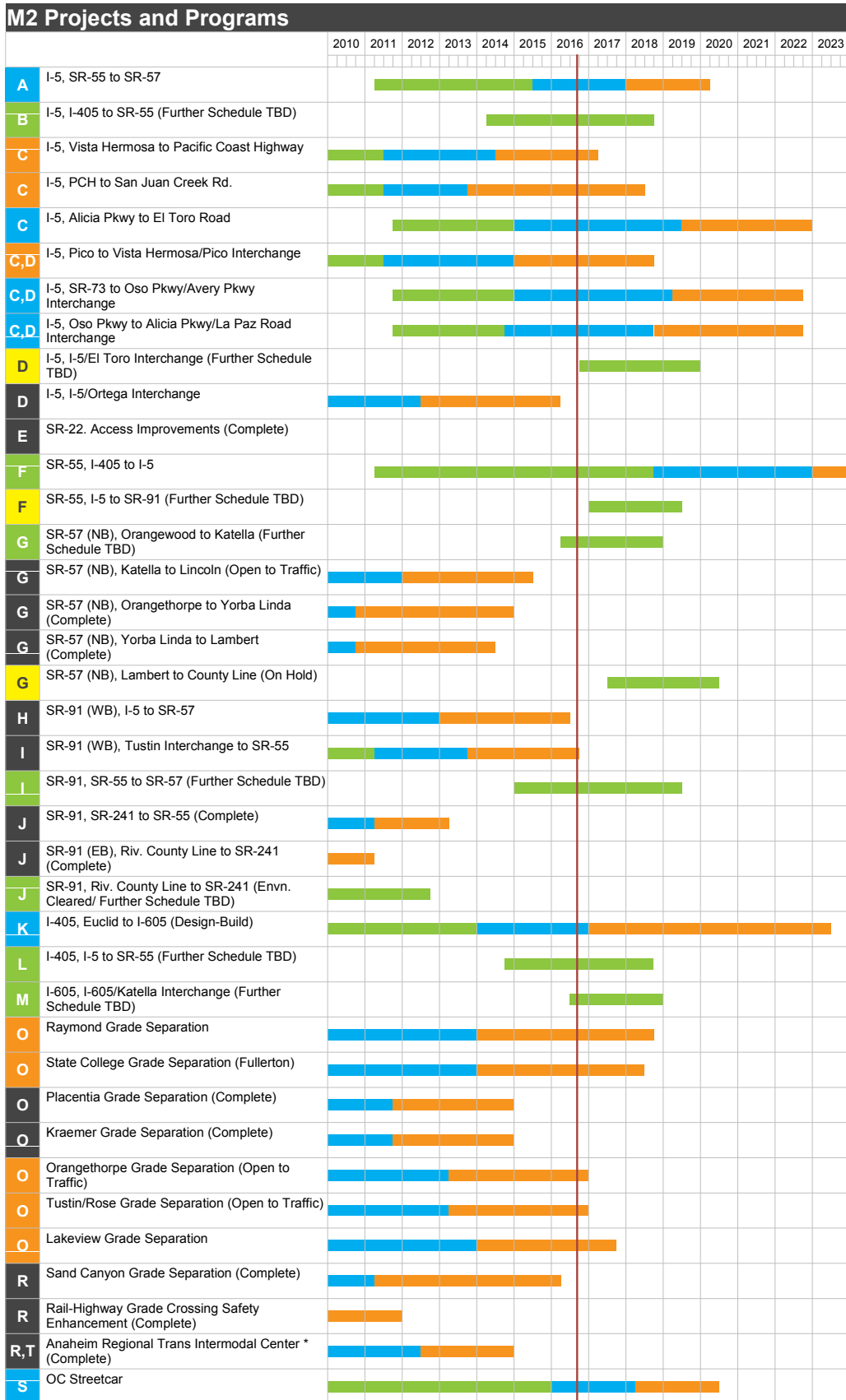
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Project Schedules

M2 PROJECT SCHEDULES

Conceptual
 Environmental
 Design, Advertise & Award
 Construction
 Completed



*Projects managed by local agencies.

Project K is a Design-Build project, with some overlap in activities during phases. Phase work can be concurrent.

Shown schedules are subject to change.

Measure M2

Progress Report

M2 DELIVERY RISK UPDATE



Key:

- One to Watch
- At Risk

M2 Delivery Risk Update

This section discusses the risks and challenges related to overall Measure M2 and M2020 Plan delivery that the Measure M Program Management Office is watching – complete with associated explanations and proposed actions. Pending Board adoption of the Next 10 Plan next quarter, this section will be updated to reflect revised risks.

	Delivery Risk	Explanation	Proposed Action
1	Delay in project phases affecting overall costs and ability to deliver projects. Caltrans and OCTA maintain varying perspectives with regard to freeway program delivery.	A critical factor in delivering M2 is keeping project costs and schedules on target. Caltrans and OCTA must remain coordinated, despite varying goals. OCTA is the funding agency, whose M2 mandate is to deliver projects promised to the voters while limiting impacts to the community. Caltrans' strategy is to address ultimate need for long-term solutions whenever possible. The challenge is how to balance these strategies.	OCTA and Caltrans will work together to find common ground and allow for project delivery, which is critical to the success of both agencies. Projects experiencing delays will continue to be highlighted in these quarterly reports as well as divisional metric reports as appropriate. If a project is nearing a critical delay, a separate and specific project staff report will be presented to the Board to ensure awareness.
2	Availability of specialized staff given the scope of right-of-way (ROW) activities for the various freeway construction activities.	Timely ROW acquisition and utility clearance has proven to be a key factor in reducing risk on construction projects. Expert and timely coordination between OCTA and Caltrans is imperative to manage this risk.	The heavy demand on Caltrans' ROW resources will be a challenge for early acquisition. This is further challenged by a change in meeting frequency by the California Transportation Commission, a necessary step in ROW settlement. OCTA and Caltrans will need to work closely to address the risk associated with Caltrans' limited ROW resources. If resource issues continue to be a problem, OCTA should consider taking responsibility for ROW activities.
3	Availability of management and technical capabilities to deliver/operate future rail guideway projects.	The OCTA Board has selected a project management consultant for the upcoming engineering and construction phases of the OC Streetcar project, who will assist with the development of plans related to project delivery, management and operations.	OCTA's Project Management Plan demonstrates OCTA has the technical and management capacity to construct and operate the OC Streetcar. Since submission of the Plan to FTA, the project has received a "medium-high" overall rating. OCTA submitted a letter formally requesting entry into engineering in September 2016, and anticipates receiving approval later this year.
4	Changes in priorities over the life of the program.	The Plan of Finance adopted by the Board in 2012 included M2020 Plan Priorities and Commitments with 12 core principles to guide the Board in the event of a needed change.	Staff regularly monitors Plan performance and delivery constraints, and will highlight particular concerns as appropriate.
5	Decline in forecasted M2 revenues creates a need to rely on external funding to deliver the M2 Program.	For the last 3 years, the 3-University Forecast has reflected a higher forecast than actual sales tax revenue receipts. As a result, the Board adopted a new sales tax forecast methodology which incorporates a blended rate from Muni Services and the three Universities. The outcome is a reduced and more conservative sales tax forecast.	Staff is preparing a new framework for M2 program delivery, focusing on 10 deliverables that can be accomplished between now and 2026. This framework incorporates funding constraints and assumptions for local and external funding opportunities identified in the M2020 Plan review and 2016 forecast that went to the Board on September 12, 2016.

Measure M2

Progress Report
M2020 UPDATE



M2020 Plan Update

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

On September 10, 2012, the OCTA Board of Directors (Board) approved the M2020 Plan, an eight-year plan that outlines projects and programs for all modes of transportation to be delivered on an expedited schedule between 2012 and the year 2020. The plan was developed to position OCTA on a course to go beyond the early implementation projects if additional external funds could be accessed. See sections below for a summary of staff's progress to date in meeting the eight-year objectives.

This quarter, in response to the steady decline of external funding available and lower-than-forecasted M2 sales tax revenue receipts, staff began updating the M2020 Plan by developing a new delivery framework focused on the next 10 years, called the Next 10 Plan. The purpose of the Next 10 Plan is to match M2 project delivery schedules with updated funding assumptions between now and 2026, ensuring that overall delivery of the M2 Program can be achieved as promised by 2041.

Progress Update

On September 12, 2016, staff presented a progress update on the M2020 Plan to the Board. A review of the plan was prompted by the adoption of the new sales tax forecasting methodology in March 2016, which resulted in a total assumed sales tax revenue of \$14.2 billion for the M2 Program. While nearly 70 percent of the M2020 Plan has been completed half-way through the plan's time period, review findings identified the freeway program as financially undeliverable, based on funding available for current project cost assumptions. A summary of the progress made to date regarding the M2020 Plan's 14 objectives is outlined in the objectives section below.

Next quarter, staff will present a draft Next 10 Plan to the Board for adoption, which will address the funding gap identified in the freeway program and provide revised M2020 objectives (in the form of 10 deliverables) for the Next 10 Plan, based on updated M2 Program cash flows and external funding assumptions. If adopted, the M2020 Update section of M2 Quarterly Reports will be replaced with Next 10 Plan updates.

M2020 Plan Objectives

1. Deliver 14 M2 freeway projects.

Seven of the 14 projects are complete: SR-91 between SR-241 and SR-55 (Project J), SR-57 between Yorba Linda Boulevard and Lambert Road (Project G), SR-57 between Orangethorpe Avenue and Yorba Linda Boulevard (Project G), SR-57 between Katella Avenue and Lincoln Avenue (Project G), Ortega Highway I-5 interchange project (Project D), SR-91 between I-5 to SR-57 (Project H), and SR 91 between the Tustin Avenue/SR-55 Interchange (Project I). Additionally, three segments of I-5 are currently under construction: between Avenida Pico to Avenida Vista Hermosa, Avenida Vista Hermosa to Pacific Coast Highway, and Pacific Coast Highway to San Juan Creek Road (Project C). One

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project on I-405 between SR-55 and I-605 (Project K) is in the design-build phase. Another two projects are in design, with one of the 14 projects in the environmental phase. All but one of the 14 projects (SR-55 between I-5 and I-405) is scheduled to be completed or in construction by year 2020. For more details, see previous page (Project Schedules) and the project updates contained in the following pages.

2. Complete environmental phase for 9 remaining M2 freeway projects.

One of the nine projects is environmentally cleared – SR-91 between SR-241 and SR-15 (Project J) – which was cleared as part of RCTC’s Corridor Improvement Program. Six projects are currently in the environmental phase, with another two projects slated to begin the environmental phase in 2016/17. All projects are scheduled to begin the environmental phase, as shown on the previous page (Project Schedules), and are on track to be environmentally cleared by 2020. For more details, see the project updates contained in the following pages.

3. Invest \$1.2 billion for Streets and Roads projects (Projects O, P, and Q).

To date, OCTA has invested \$1.18 billion in the Regional Capacity Program (Project O), Regional Traffic Signal Synchronization Program (Project P), and Local Fair Share Program (Project Q). Approximately \$300 million in Project O and Project P funds have been awarded to local agencies and OCTA has paid out over \$84 million (or approximately 28 percent) of the awarded funding for local streets and roads improvements. The Board has committed to provide more than \$631 million in state, federal, and M2 funds for the OC Bridges program’s grade separation projects. Since inception, approximately \$244 million of Local Fair Share funds (Project Q) has been distributed to local agencies.

4. Synchronize 2,000 traffic signals across Orange County (Project P).

To date, OCTA and local agencies have synchronized more than 1,600 intersections along more than 430 miles of streets. The signal program will meet the target of synchronizing at least 2,000 signalized intersections across Orange County early (prior to 2020) by 2017.

5. Expand Metrolink peak capacity and improve rail stations and operating facilities (Project R).

Although well underway before the M2020 Plan was adopted, part of Project R (Metrolink Grade Crossing Improvements) was completed in conjunction with the Metrolink Service Expansion Plan (MSEP). This enhanced 52 Orange County rail-highway grade crossings with safety improvements, whereby the cities of Anaheim, Dana Point, Irvine, Orange, Santa Ana, San Clemente, San Juan Capistrano, and Tustin have established quiet zones at respective crossings. Additionally, within this program, funding is provided for rail line and station improvements to accommodate for increased service. Rail station parking lot expansions, such as improvements at Laguna Niguel/ Mission Viejo, Tustin, Fullerton, and Orange stations; better access to platforms, such as elevators, ramps, and/or safety improvements at Fullerton, Irvine, Tustin, and Laguna Niguel/Mission Viejo; rehabilitation and renovation projects such as the San Juan Creek Bridge replacement and San Clemente pier lighting installation; video surveillance, fencing, and a passing siding project between Laguna Niguel and San Juan Capistrano have been made or are underway. For more details, see the project updates contained in the following pages.

6. Expand Metrolink service into Los Angeles (Project R).

The Riverside County Transportation Commission (RCTC), Los Angeles County Metropolitan Transportation Authority (Metro) and OCTA continue to work together to secure approval of a Memorandum of Understanding (MOU)

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with Burlington Northern Santa Fe (BNSF) Railway, which is necessary to operate train service on BNSF-owned tracks. Metrolink has taken the lead in the discussions with the BNSF Railway to evaluate the current shared use and indemnification/liability agreements that govern the use of each agency's respective railroad rights of way. Special counsel has been brought in to assist in these discussions. From a ridership perspective, data through September 2016 continues to show sustained ridership on MSEP as a result of the April 2015 schedule changes that improve intracounty train utilization. These changes include the new 91 Line connection at Fullerton which allows for a later southbound peak evening departure from Los Angeles to Orange County.

7. Provide up to \$575 million to implement fixed-guideway projects (Project S).

One fixed guideway project has been selected by the Board to move forward through construction, the OC Streetcar. To date, the Board has approved up to \$303.78 million for the project, including preliminary studies, environmental, project development and construction.

8. Deliver improvements that position Orange County for connections to planned high-speed rail project (Project T).

The City of Anaheim led the construction effort to build the Anaheim Regional Transportation Intermodal Center (ARTIC), which was opened to rail and bus service on December 6, 2014. A ribbon cutting ceremony was held on December 8, 2014, with a grand opening celebration on December 13, 2014. The City of Anaheim also issued a Notice of Substantially Complete at that time. This facility replaced the former Anaheim Station that was located on the opposite side of the freeway.

9. Provide up to \$75 million of funding to expand mobility choices for seniors and persons with disabilities (Project U).

To date, approximately \$42 million in Project U funding has been provided under M2 for the Senior Mobility Program (SMP), the Senior Non-emergency Medical Transportation Program (SNEMT), and the Fare Stabilization Program.

10. Provide up to \$50 million of funding for community-based transit services (Project V).

On June 24, 2013, the OCTA Board of Directors approved \$9.8 million to fund five projects received as part of the first Call for Projects. On June 13, 2016, the Board approved \$26.7 million for 17 Capital and Operations grants and \$323,780 for 7 planning grants, as part of the second call for projects. In total, the Board has approved approximately \$36.86 million to fund community-based transit service projects to date.

11. Acquire and preserve 1,000 acres of open space, establish long-term land management, and restore approximately 180 acres of habitat in exchange for expediting the permit process for 13 of the M2 freeway projects (Projects A-M).

The Freeway Mitigation Program is proceeding as planned, with seven properties (Preserves) acquired (1,300 acres), and 11 restoration projects approved for funding by the Board, totaling approximately 350 acres. These Preserves and restoration projects are folded into the OCTA Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which contributes mitigation to streamline the permitting process for M2 freeway projects. As part of the NCCP/HCP process, an endowment is re-quired to be established to pay for the long-term management of

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the Preserves. In September 2016, the Board approved staff's recommendation to retain the California Community Foundation to establish this endowment.

12. Complete resource management plans to determine appropriate public access on acquired properties.

Separate Preserve-specific Resource Management Plans (RMPs) for the five Preserves within Trabuco and Silverado Canyons were available for public review between late 2015 and early 2016. These RMPs will determine the appropriate management needs (consistent with the NCCP/HCP) for each of the Preserves. If the Board approves the NCCP/HCP and associated documents, staff anticipates to complete the RMPs (including the more recently acquired MacPherson and Aliso Canyon Preserves) in 2017. Docent-led public access events will continue to be held. A list of scheduled 2016 wilderness Preserve hiking and equestrian riding tours is available on the M2 website at www.PreservingOurLegacy.org.

13. Implement water quality improvements of up to \$20 million to prevent flow of roadside trash into waterways (Project X).

To date, there have been six rounds of funding under the Tier 1 grants program. A total of 138 projects in the amount of nearly \$17 million have been awarded by the OCTA Board since 2011. Funding for the sixth Tier 1 Call for Projects was approved by the Board on September 12, 2016. The seventh Tier 1 call for projects is anticipated to be released in early 2017.

14. Provide up to \$38 million to fund up to three major regional water quality improvement projects as part of the Environmental Cleanup Program (Project X).

There have been two rounds of funding under the Tier 2 grants program. A total of 22 projects totaling almost \$28 million have been awarded by the OCTA Board since 2013. Approximately \$10 million remains for a third Call for Projects, which is anticipated to occur in mid-2017.



Interstate 5 (I-5) Projects

Project A

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

Contact: Rose Casey, Highways
(714) 560-5729

Status: Design Phase Underway

Summary: This project will increase HOV capacity by adding a second HOV lane in both directions along I-5 between SR-55 and SR-57 in Santa Ana. This quarter, the Project Design Team (PDT) incorporated additional I-5 HOV signs north of the project area and continued to work on Engineering Plans, Specifications & Estimates (PS&E). Final design plans were delayed 2 months to incorporate the additional signs and will be submitted next quarter. The design phase is still expected to be complete by mid-2017. Funding for the construction phase of this project was impacted by the STIP reductions, and staff is evaluating alternative funding in hopes to keep this project on schedule.

Project B

I-5 (SR-55 to the El Toro "Y" Area)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Environmental Phase Underway

Summary: This project will add one general purpose lane in each direction of the I-5 corridor and improve the interchanges in the area between SR-55 and SR-133 (near the El Toro "Y" and I-405) in Tustin and Irvine. The environmental study will consider the addition of one general purpose lane on I-5 between just north of I-405 to SR-55. Additional features of Project B include improvements to various interchange ramps. Auxiliary lanes could be added in some areas and re-established in other areas within the project limits. During the quarter, the consultant continued working on technical studies and obtained approval on Traffic Forecast Volumes after a one-year delay; due to decision-making process discussions with Caltrans. With the concurrence on traffic methodology, the project schedule has been re-baselined and the final Environmental Document is expected to be complete in August of 2018.



Project C & Part of Project D

I-5 (SR-73 to Oso Parkway/ Avery Parkway Interchange)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Design Phase Underway

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 proposed improvements include the addition of a general purpose lane in each direction and reconstruction of the Avery Parkway Interchange (part of Project D). During the quarter, comments were received from Caltrans for the 65 percent PS&E submittal and work continued on the 95 percent PS&E submittal. The ROW maps are being prepared and will be submitted to Caltrans next quarter, on October 19, 2016. Staff continued to work with Caltrans regarding ROW support services. Design work is anticipated to be complete in 2018. Due to extended ROW coordination, this project is marked “yellow” in the Capital Action Plan, signifying a delay of one to three months beyond the original schedule.

I-5 (Oso Parkway to Alicia Parkway/ La Paz Road Interchange)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Design Phase Underway

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 general purpose lane in each direction and reconstruction of the La Paz Road Interchange. The design phase is currently underway. Major activities this quarter included providing responses to all comments received from the 65 percent submittal and meetings with functional units to concur on the responses, continued coordination on the aesthetics concept plan, off-site sound walls, service contract coordination with Southern California Rail Road Association (SCRRA) and Metrolink, and coordination with Caltrans on ROW and utilities. The 95 percent submittal is scheduled for early December 2016, with design anticipated to be complete in mid-2017. Due to extended ROW coordination, this project is marked “yellow” in the Capital Action Plan, signifying a delay of one to three months beyond the original schedule.

I-5 (Alicia Parkway to El Toro Road)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Design Phase Underway

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, including the extension of the second HOV lane from Alicia Parkway to El Toro Road. Major activities this quarter included submittal of the 65 percent PS&E package, continued coordination on the aesthetics concept plan, and the continued development of a plan to address potential impacts to Avenida De La Carlota and Southern California Edison power lines therein. Also held meetings with other utility agencies to determine the need, extent and schedules for third party relocations/protection. Also coordinated

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Project C & Part of Project D continued from previous page...

with OC Parks regarding the realignment of Aliso Creek and related impacts to the project. Due to extended ROW coordination, this project is marked “yellow” in the Capital Action Plan, signifying a delay of one to three months beyond the original schedule.

I-5 (Avenida Pico to Avenida Vista Hermosa)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Construction Underway - **55% Complete**

Summary: This segment adds a carpool lane in each direction on I-5 between Avenida Pico and Avenida Vista Hermosa in San Clemente, and also includes major improvements to the Avenida Pico Interchange (part of Project D), which will also provide bicycle lanes in both directions of Avenida Pico. Construction began in February 2015. During the quarter, the westerly half of Avenida Pico Undercrossing bridge was completed and southbound traffic was routed onto the new bridge. Retaining walls on the new southbound mainline are complete, construction of Avenida Pico retaining wall is in progress, and construction of the roadway section is ongoing. Construction is now 55 percent complete and is anticipated to be 100 percent complete in August 2018.

I-5 (Avenida Vista Hermosa to PCH)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Construction Underway - **81% Complete**

Summary: This segment adds a carpool lane in each direction of I-5 between Avenida Vista Hermosa and Pacific Coast Highway (PCH) in San Clemente, and also includes reconstructing on and off ramps at Avenida Vista Hermosa and Camino de Estrella. Construction began in September 2014. During the quarter, slope-paving work and approach slabs construction for the Avenida Vaquero bridge widening were completed. Hot Mix Asphalt (HMA) paving work in southbound and northbound directions will continue into next quarter. Construction of the last retaining wall is complete. Crews also continued work on construction of sound walls with soundsorb on both sides of the freeway, which will be completed in the near future. Construction is 81 percent complete and is scheduled to be 100 percent complete in early 2017.

I-5 (PCH to San Juan Creek Road)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Construction Underway - **81% Complete**

Summary: This segment will add a carpool lane in each direction of the I-5 between PCH and San Juan Creek Road in the cities of San Clemente, Dana Point, and San Juan Capistrano. Project improvements also include reconstructing on and off ramps at PCH/Camino Las Ramblas. Construction began in March 2014. During the quarter, critical path work continued on Retaining Wall 349 with the new soldier pile wall and the cast-in-place wall which includes the bar reinforcing steel and form placement. Construction of the roadway section, including PCH/Camino Las Ramblas on-ramp work, the PCH connector bridge work, and Hot Mix Asphalt (HMA) paving is ongoing. A soil issue identified



Project C & Part of Project D continued from previous page...

in fall 2015 that was brought to the Board will delay project completion time. As a result, this project is marked “red” in the Capital Action Plan, signifying a delay of more than three months, with a revised completion date extending at least 19 months past original schedule (September 2016). Construction work is 81 percent complete (with structure work being 83 percent complete), with anticipated project completion in June 2018.

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 part of Project C.

Contact: Rose Casey, Highways
(714) 560-5729

I-5 El Toro Road Interchange **Status:** PSR/PDS Document Complete

Summary: Caltrans approved the Project Study Report/ Project Development Support (PSR-PDS) on February 20, 2015, and the document is considered final and complete. The PSR-PDS includes alternatives that consider modifications to the existing interchange to provide a new access ramp to El Toro Road and one alternate access point adjacent to the interchange. The project can now advance to the Environmental Phase for further detailed engineering and project development efforts, which is anticipated to begin in late 2016. The Cooperative Agreement for the Environmental Phase between OCTA and Caltrans will be brought to the Board for approval on October 10, 2016.

Contact: Rose Casey, Highways
(714) 560-5729

I-5/ Ortega Highway Interchange

Status: PROJECT COMPLETE



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.



State Route 22 (SR-22) Project

Project E

SR-22 Access Improvements

Status: PROJECT COMPLETE



Contact: Rose Casey, Highways
(714) 560-5729

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

Project F

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

Status: Environmental Phase

Contact: Rose Casey, Highways
(714) 560-5729

Summary: This project will widen SR-55 in the cities of Irvine, Santa Ana, and Tustin. The project was put on hold in March until an agreement on the preferred alternative selection is made between Caltrans and OCTA. The public comment period ended on January 22, 2016. Caltrans has proposed a Modified Alternative 3 and staff presented the recommendation to the Board in July. The Board directed staff to incorporate the modified alternative with an anticipated 12 to 18 month estimate to complete the Environmental Phase. Southern California Association of Governments concurred with a recommendation to utilize qualitative air quality analysis, mitigating some of the schedule delay. Next quarter, technical studies will be updated to incorporate the modified alternative. The project is marked “red” in the Capital Action Plan, signifying a delay of more than three months. This project has been delayed by more than six years from its original schedule, due to differences in project determination between OCTA and Caltrans.

SR-55 (I-5 to SR-91)

Status: Procurement for the Environmental Phase Underway

Contact: Rose Casey, Highways
(714) 560-5729

Summary: The PSR/PDS was signed by Caltrans on January 12, 2015, completing the project initiation document phase. Once implemented, this project will add capacity between I-5 and SR 22, and provide operational improvements between SR-22 and SR-91 in the cities of Orange, Santa Ana, Tustin, and Anaheim. All of the project alternatives in the draft PSR/PDS document include the addition of one general purpose lane in each direction between SR-22



Project F continued from previous page...

and Fourth Street and operational improvements between Lincoln Avenue and SR-91. Other improvements being considered consist mostly of operational improvements at ramps and merge locations between SR-22 and SR-91, as well as a potential interchange project at First Street and the I-5 connector ramp. During the quarter, a consultant was selected to complete the Project Report and Environmental Document. The Environmental Phase is anticipated to begin in late 2016 and be complete in 2019.

State Route 57 (SR-57) Projects

Project G

SR-57 NB (Lambert Road to Tonner Canyon Road)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Conceptual Phase Complete

Summary: Caltrans previously completed a PSR/PDS document for the Lambert Road to Tonner Canyon Road segment, which will add a truck-climbing lane from Lambert Road to Tonner Canyon Road in the city of Brea. The segment will be cleared environmentally by 2020. Future work will be planned so that it coincides with related work by the Los Angeles Metropolitan Transportation Authority (Metro) across the county line. Funding for environmental phase for this project was proposed to be included in the 2016 STIP but was removed due to funding constraints. Staff will evaluate alternative funding sources.

SR-57 NB (Yorba Linda Boulevard to Lambert Road)

Contact: Rose Casey, Highways
(714) 560-5729

Status: PROJECT COMPLETE



Summary: Completed on May 2, 2014, this project increased capacity and improved 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 Fullerton and Lambert Road in 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.

SR-57 NB (Orangethorpe Avenue to Yorba Linda Boulevard)

Contact: Rose Casey, Highways
(714) 560-5729

Status: PROJECT COMPLETE



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 Placentia to Yorba Linda Boulevard in

Continues on the next page...



Project G continued from previous page...

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.

SR-57 NB (Katella Avenue to Lincoln Avenue)

Contact: Rose Casey, Highways
(714) 560-5729

Status: PROJECT COMPLETE



Summary: This project increased capacity and improved operations on northbound SR-57 between Katella Avenue and Lincoln Avenue 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.

SR-57 NB (Orangewood Avenue to Katella Avenue)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Environmental Phase Underway

Summary: This project will add capacity in the northbound direction of SR-57 from Orangewood Avenue to Katella Avenue in the cities of Anaheim and Orange. Improvements under study include adding a northbound general purpose lane to join the northbound general purpose lane which was opened to traffic in 2014 between Katella Avenue and Lincoln Avenue. During the quarter, the team continued to take necessary steps to incorporate the design variation identified in the consultant proposal for the Katella Avenue off ramp. Next quarter, the traffic analysis and other technical studies will begin. The Environmental Phase is anticipated to be complete in late-2018.

State Route 91 (SR-91) Projects

Project H

SR-91 WB (SR-57 to I-5)

Contact: Rose Casey, Highways
(714) 560-5729

Status: PROJECT COMPLETE



Summary: This project increased capacity in the westbound direction of SR-91 by adding an additional 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. This quarter, closeout activities took place including developing the preliminary final construction estimate. Construction is 100 percent complete, as of June 23, 2016. Consultant-supplied construction management services ended on September 29, 2016. The general purpose lane was opened to traffic on March 7, 2016.



Project I

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

Status: PROJECT COMPLETE



Contact: Rose Casey, Highways
(714) 560-5729

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. The project was intended to relieve weaving congestion in the area and included reconstruction of the westbound side of the Santa Ana River Bridge to accommodate the additional lane. This quarter, punch list work was completed. The bypass lane was open to traffic on May 14, 2016. Construction is 100 percent complete. Contract Acceptance is expected by the end of October 2016.

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

Status: Environmental Phase Underway

Contact: Rose Casey, Highways
(714) 560-5729

Summary: This project will improve traffic flow and operations along SR-91 within the cities of Fullerton and Anaheim. The study will look at the addition of one general purpose lane eastbound between SR-57 and SR-55, and one general purpose lane westbound from Glassell Street 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. This quarter, the consultant continued working on technical documents. M2 and Federal funds would pay for the mainline freeway improvements and future funding would need to be identified for connector portions of the project. Due to Caltrans requiring extra work for the unfunded study, this project has been delayed by more than one year from its original schedule. The project has been re-baselined and the environmental phase is expected to be complete in late 2018.

Project J

SR-91 Eastbound (SR-241 to SR-71)

Status: PROJECT COMPLETE



Contact: Rose Casey, Highways
(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. Because this project was shovel-ready, OCTA was able to obtain American Recovery and Reinvestment Act (ARRA) funding for this M2 project, saving M2 revenues for future projects.

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Project J continued from previous page...

SR-91 (SR-241 to SR-55)

Status: PROJECT COMPLETE



Contact: Rose Casey, Highways
(714) 560-5729

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.

SR-91 (SR-241 to I-15)

Status: RCTC's Design-Build Construction Underway

Contact: Rose Casey, Highways
(714) 560-5729

Summary: The purpose of this project is to extend the 91 Express Lanes eastward from its current terminus in Anaheim to I-15 in Riverside County. This project will also add one general purpose lane in each direction of SR-91, from SR-71 to I-15, and construct various interchange and operational improvements. On December 11, 2013, the Riverside County Transportation Commission's (RCTC) contractors broke ground on this \$1.3 billion freeway improvement project. While the portion of this project between SR-241 and the Orange County/Riverside County line is part of OCTA's M2 Project J, the matching segment between the county line and SR-71 is part of RCTC's Measure A. With RCTC's focus on extending the 91 Express Lanes and adding a general purpose lane east of SR 71, construction of the final additional general purpose lane between SR-241 and SR-71 will take place post-2035. (RCTC is responsible for the lane between Green River and SR-71 while OCTA will be responsible for the lane west of Green River to SR-241.) To maintain synchronization, these general purpose lanes improvements, which span both counties, will be scheduled to ensure coordinated delivery of both portions of the project, and will provide a continuous segment that stretches from SR-241 to SR-71. This action is consistent with the 2014 SR-91 Implementation Plan.



Interstate 405 (I-405) Projects

Project K

I-405 (SR-55 to I-605)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Design-Build Procurement Underway

Summary: OCTA and Caltrans have finalized the environmental studies to widen I-405 through the cities of Costa Mesa, Fountain Valley, Garden Grove, Huntington Beach, Los Alamitos, Seal Beach, and Westminster. These improvements will add mainline capacity and improve the local interchanges along the corridor from SR-73 to I-605.

On July 25, 2014, despite OCTA's Board recommendation to select Alternative 1 (the Measure M, single general purpose lane alternative) Caltrans informed OCTA that Alternative 3 (general purpose lane and second HOV lane to be combined with existing HOV lane providing dual tolled express lane facility) would be the project preferred alternative. To ensure local control over how the express lane facility would be operated, the Board decided that OCTA would lead this project with the clear understanding that Measure M would only fund the general purpose lane portion of the project and that the second HOV lane/Express lane facility would be funded separately.

On May 23, 2016, the Board approved the 405 Express Lanes initial toll policy and preliminary finance plan. The policy meets the Board's objective of allowing two-person carpools to use the express lanes for free for at least three years during most of the day. It strikes the right balance between offering drivers a guaranteed free-flowing commute, moving the most number of cars and people.

The initial toll policy was developed after analyzing multiple scenarios utilizing an investment grade traffic and revenue study completed by Stantec, considered the industry leader, and analyzing project operations, maintenance and financing costs. These scenarios were weighted against the Board's adopted 405 Express Lanes policy goals. Tolls vary by hour, day of the week, direction of travel and distance traveled (with three intermediate access points).

On September 26, 2016, staff provided the Board with a presentation on the 405 Express Lanes operating services procurement approach.

During the quarter, work continued on procurement of the DB contract, ROW acquisition, utility coordination, environmental re-validation and permitting. Other activities include FHWA Major Project Deliverables, OCTA/Caltrans operating toll agreement, traffic and revenue study, and TIFIA loan pursuit.

Additional project risks include potential legal actions by opponents of the project, potential escalation of costs associated with further delay and compression of time available for ROW acquisition.



Project L

I-405 (SR-55 to the I-5)

Contact: Rose Casey, Highways
(714) 560-5729

Status: Environmental Phase Underway

Summary: This project will add one general purpose lane in each direction of the I-405 corridor and improve the interchanges in the area between I-5 and SR-55 in Irvine. Additional features of Project L include improvements to various interchanges, auxiliary lanes and ramps. During the quarter, the consultant continued working on technical studies and obtained approval on Traffic Forecast Volumes after a lengthy decision-making process discussion on traffic methodology with Caltrans, which resulted in a one-year delay. With the concurrence on traffic methodology, the project schedule has been re-baselined and the final Environmental Document is expected to be complete in July 2018.

Interstate 605 (I-605) Project

Project M

I-605/Katella Interchange Improvements

Contact: Rose Casey, Highways
(714) 560-5729

Status: Environmental Phase

Summary: This project will improve freeway access and arterial connection to I-605 at Katella Avenue in the City of Los Alamitos and the County of Orange. Improvements under this project may include enhancements at the on-ramps and off-ramps in addition to operational improvements on Katella Avenue at the I-605 Interchange. The PSR/PDS was signed on May 11, 2015 by Caltrans Executive Management. Three alternatives were approved within the document, including modification of interchange ramps and lane configurations on Katella Avenue from Coyote Creek Channel to Civic Center Drive. With the PSR/PDS approved, the project is ready to advance to the Environmental Phase for further detailed engineering and project development efforts. During the quarter, the Environmental Phase of the project was initiated to prepare the Project Report and Environmental Document.



Freeway Service Patrol

Project N

Freeway Service Patrol

Contact: Sue Zuhlke, Motorist Services
(714) 560-5574

Status: Service Ongoing

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 midday service provided assistance to 1,790 motorists, weekend service provided assistance to 757 motorists, and construction service provided assistance to 405 motorists. Since inception, M2 and construction-funded FSP has provided a total of 50,780 assists to motorists on the Orange County freeway system.



Project O continued from previous page...

Project O

Regional Capacity Program

Contact: Sam Kaur, Planning
(714) 560-5673

Status: 2017 Call for Projects in Development

Summary: This program, in combination with required local matching funds, provides funding for improvements on Orange County's Master Plan of Arterial Highways. On August 8, 2016, the Board approved the release of the 2017 Call for Projects. This seventh Call for Projects will make approximately \$32 million available to fund additional road improvements throughout the County. Applications are due by October 21, 2016. OCTA will review local agency applications for funding and provide final recommendations to the OCTA Board by June 2017. Since 2011, 122 projects totaling more than \$231 million have been awarded by the Board to date.

OC Bridges Railroad Program

This program will build seven grade separations (either under or over passes) where high volume streets are impacted by freight trains along the BNSF Railroad in North County. A status for each of the seven projects is included below. As of the end of this quarter, five grade separation projects are under construction, two are complete (Kraemer and Placentia), and two others are scheduled to be complete by the end of this year.

Kraemer Boulevard Grade Separation

Contact: Rose Casey, Highways
(714) 560-5729

Status: PROJECT COMPLETE



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. Construction is complete and construction close-out activities were performed this quarter. Project acceptance by the City of Anaheim and the City of Placentia, respectively, occurred in December 2014 and OCTA has turned over the maintenance responsibilities to the cities and commenced the one year warranty.

Lakeview Avenue Grade Separation

Contact: Rose Casey, Highways
(714) 560-5729

Status: Construction Underway - 60% Complete

Summary: The project located at Lakeview Avenue railroad crossing will grade separate 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.

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Project O continued from previous page...

Project activities this quarter continued to include street drainage facility work, retaining walls, retaining wall panels and barrier slabs, underground electrical conduits, lighting, signals, pile driving and forming abutments for Lakewood Avenue and Atwood Channel Bridges, precast girder fabrication, and center bent crash wall. Lakeview Avenue (north of Orangethorpe Avenue) was closed to traffic on February 25, 2015, and is expected to reopen with the connector road in late July 2016. Lakeview Avenue (south of Orangethorpe Avenue) was closed to through traffic on March 13, 2015, and is expected to reopen in spring 2017. Local access to all businesses will continue to be maintained. Construction progress is approximately 60 percent complete and is expected to be 100 percent complete by summer 2017. Due to utility conflicts and design changes, completion has been delayed four months. As a result, this project is marked “red” in the Capital Action Plan, signifying a delay of more than three months beyond the original schedule.

Orangethorpe Avenue Grade Separation

Contact: Rose Casey, Highways
(714) 560-5729

Status: Pending Construction Acceptance - **Construction 100% Complete**

Summary: The project located at Orangethorpe Avenue railroad crossing will grade separate the local street from railroad tracks in the cities of Placentia and Anaheim by building a bridge for vehicular traffic over the railroad tracks. OCTA is overseeing construction, which continued during the quarter. Construction activities this quarter included minor road work and 72” water line installation along Orangethorpe Avenue. At Miller Street, construction activities include retaining walls, barrier slabs and barrier railings. Orangethorpe Avenue, from Miller Street to Chapman Avenue, was closed to traffic on August 11, 2014, and was reopened on June 23, 2016. Chapman Avenue was closed on January 5, 2015, and was opened to traffic on March 24, 2016. Miller Street was reopened on September 2, 2016. Construction is 100 percent complete and pending construction acceptance from the cities of Anaheim and Placentia. 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.

Placentia Avenue Grade Separation

Contact: Rose Casey, Highways
(714) 560-5729

Status: **PROJECT COMPLETE**



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 to traffic. Construction is complete and construction close-out activities were performed this quarter. Project acceptance by the City of Anaheim and the City of Placentia, respectively, occurred in December 2014, and OCTA has turned over the maintenance responsibilities to the cities and commenced the one year warranty.

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Progress Report

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Project O continued from previous page...

Raymond Avenue Grade Separation

Contact: Rose Casey, Highways
(714) 560-5729

Status: Construction Underway - **70% Complete**

Summary: The project located at Raymond Avenue railroad crossing will grade separate 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. Activities this quarter continued to include pile driving for retaining wall and Valencia Drive bridge foundation, placement of shoring for the retaining walls and pump station, and mass excavation. Raymond Avenue bridge work included placement of ballast and rail. The BNSF track-laying machine placed shoofly tracks (temporary bypass tracks) on June 10, 2015, and shoofly tracks were activated on October 9, 2015. Shoofly tracks were in use until mid- August 2016, when BNSF placed final tracks on the new railroad bridge and removed shoofly tracks. Construction progress is approximately 70 percent complete and is expected to be 100 percent complete in mid- 2018.

State College Boulevard Grade Separation

Contact: Rose Casey, Highways
(714) 560-5729

Status: Construction Underway - **60% Complete**

Summary: The project located at State College Boulevard railroad crossing will grade separate 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 the construction and OCTA is providing construction oversight, public outreach, railroad coordination and right-of-way support. Construction activities this quarter continued to include retaining wall drilling and soldier beams, pump station, mass excavation, electrical, and storm drain. Bridge work included placement of ballast, rail and drainage. The BNSF track-laying machine placed the shoofly tracks on June 9, 2015, and shoofly tracks were activated on October 9, 2015. Shoofly tracks were in use until mid-August 2016, when BNSF placed final tracks on the new railroad bridge and removed shoofly tracks. The intersection of State College Boulevard and East Valencia Drive was closed on January 9, 2015, for approximately two and a half years to allow for the construction of the new bridge at the railroad tracks. Construction progress is approximately 60 percent complete and is expected to be 100 percent complete in mid- 2018.

Tustin Avenue/ Rose Drive Grade Separation

Contact: Rose Casey, Highways
(714) 560-5729

Status: Pending Construction Acceptance - **Construction 100% Complete**

Summary: The project located at Tustin Avenue/Rose Drive railroad crossing will grade separate the local street from railroad tracks in the cities of Placentia and Anaheim by building a bridge for vehicular traffic over the railroad crossing. OCTA is overseeing construction for this project. On December 7, 2015, the new Tustin Avenue/Rose Drive roadway was opened to traffic. Construction activities this quarter included picket fences, sidewalk, street lighting, bridge slope paving, landscaping, and irrigation. Construction is 100 percent complete and pending construction acceptance from the cities of Anaheim and Placentia. On May 17, 2016, a joint-grand opening event was held



Project O continued from previous page...

to commemorate the opening to traffic for the Orangethorpe and Tustin/Rose Grade Separation projects. Due to ongoing punch list items, completion has been delayed four months. As a result, the project is marked “red” in the Capital Action Plan.

Project P

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

Regional Traffic Signal Synchronization Program (RTSSP)

Status: Ongoing (See current RTSSP projects’ statuses illustrated on the map on the next page)

Summary: This program provides funding and assistance to implement multi-agency signal synchronization. The target of the program is to regularly coordinate signals for 2,000 intersections along 750 miles of roadway as the basis for synchronized operation across Orange County. The program will enhance the efficiency of the street grid and reduce travel delay.

On April 11, 2016, the Board approved \$12.43 million for the RTSSP 2016 Call for Projects to fund seven local agency projects.

To date, OCTA and local agencies have synchronized more than 1,600 intersections along more than 430 miles of streets (or 38 projects). There have been six rounds of funding to date, providing a total of 79 projects with more than \$69.56 million in funding awarded by the Board since 2011. Post-Board approval, 3 projects have been cancelled, reducing the amount of projects being implemented to 76 projects.

Project Q

Local Fair Share Program

Contact: Vicki Austin, Finance
(714) 560-5692

Status: Ongoing

Summary: This program provides flexible funding to help cities and the County of Orange keep up with the rising cost of repairing the aging street system. This program is 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. To date, approximately \$244 million in Local Fair Share payments have been provided to local agencies as of the end of this quarter.

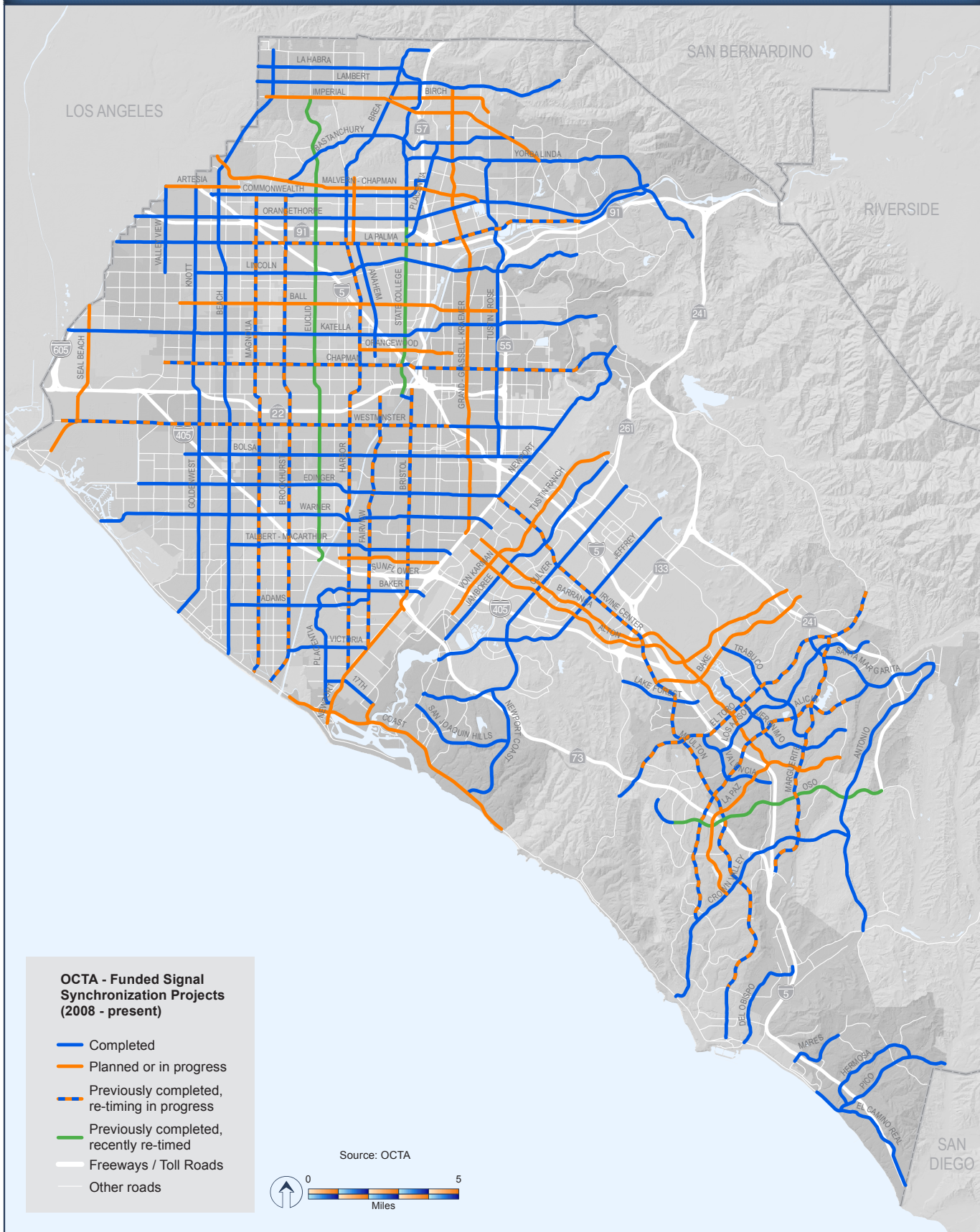
See pages 44-45 for funding allocation by local agency.

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OCTA - Funded Signal Synchronization Projects (2008 - present)





Project R

High Frequency Metrolink Service

Project R will increase rail services within the county and provide additional Metrolink service north of Fullerton to Los Angeles. The program will provide 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.

Metrolink Grade Crossing Improvements

Status: PROJECT COMPLETE



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

Summary: Enhancement of the designated 52 Orange County at-grade rail-highway crossings was completed as part of the Metrolink Service Expansion Program (MSEP) in October 2012. 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.

Metrolink Service Expansion Program

Status: Service Ongoing

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

Summary: Following the completion of the Metrolink Service Expansion Program (MSEP) improvements in 2012, OCTA deployed a total of ten new Metrolink intra-county trains operating between Fullerton and Laguna Niguel/ Mission Viejo, primarily during midday and evening hours. Efforts to increase ridership through a redeployment of the trains, without significantly impacting operating costs have been underway since 2014. In April 2015, several schedule changes added a connection between the 91 Line and the intra-county service at Fullerton to allow a later southbound peak evening departure from Los Angeles to Orange County. Staff will continue to monitor ridership on these trains, but data through September 2016 shows sustained ridership as a result of these schedule changes.

Part of OCTA’s re-deployment plan involves providing new trips from Orange County to Los Angeles. Staff continues to work with BNSF, RCTC, and Metro to address track-sharing issues, operating constraints and funding that will impact the options for redeployment. Metrolink has taken the lead in the discussions with the BNSF Railway to evaluate the current shared use and indemnification/liability agreements that govern the use of each agencies respective railroad rights of way. These discussions are on-going and special counsel has been brought in to assist. Operation of additional Metrolink trains to Los Angeles is contingent on addressing indemnification and liability agreements and the completion of a triple track project on the BNSF Railway between Fullerton and Los Angeles, currently anticipated in spring 2017.

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Project R continued from previous page...

Rail Corridor & Station Improvements

Additionally under the Metrolink Service Expansion Program, 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 Capital Action Plan pages at the back of this report.

Anaheim Canyon Metrolink Station

Preliminary engineering plans are 30 percent complete and are being reviewed by OCTA, Metrolink and the City of Anaheim. Technical studies have been completed for the environmental phase and a cultural resources study is expected to be complete in late October. It is anticipated that the CEQA environmental clearance will be presented to the OCTA Board in January for acceptance and the NEPA clearance would follow shortly. This project will include construction of a second main track and platform, lengthening the existing platform, improved pedestrian circulation, and add benches and shade structures. This phase of the project is expected to be complete in December 2016.

Fullerton Transportation Center Improvements

Completed early on, a new 5-level parking structure, accommodating approximately 821 public parking spaces, was constructed to provide additional transit parking at the Fullerton Transportation Center for both intercity rail service and commuter rail passengers. This project was completed on June 19, 2012. After completion, an elevator upgrade project was proposed with leftover savings. This second project will modify the existing pedestrian bridge and its landings as well as other surrounding infrastructures to add two new traction elevators, resulting in one new and one existing elevator on each side of the railroad tracks for a total of four elevators. The City of Fullerton is the lead on this project. Notice to Proceed was issued in January 2016, however, work on the platform area has not begun. Renovations to the restrooms have been completed, but the contractor has experienced delays in starting on the elevator work due to subcontractor issues. It is now anticipated that work will begin in January 2017. Construction is expected to take one year.

Laguna Niguel/Mission Viejo Station - 12% Complete

The Laguna Niguel/Mission Viejo station accessibility improvements project is currently in the construction phase. Improvements include new Americans with Disabilities Act (ADA)-compliant access ramps on either side of the pedestrian undercrossing and a unisex ADA-compliant restroom. Initial demolition work has begun. The contractor is still working through various required submittals including the baseline schedule, and other time critical items. Because these items have taken longer than expected, staff is anticipating the project will be completed 1-3 months beyond the original schedule. As a result, this project is marked “yellow” in the Capital Action Plan. The project is expected to be complete in July 2017.

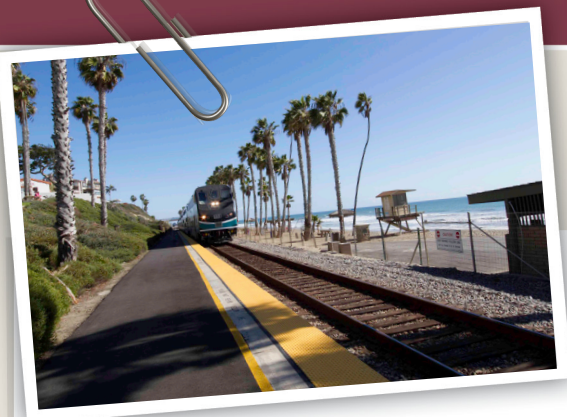
Orange Parking Structure

OCTA is the lead for the construction phase of this project. The City of Orange is the lead for the design phase. During the quarter, the invitation for bids was released in July. In September, the Board approved the selection of a construction management firm and a bid opening was held on September 20, 2016; however, the plans were

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Project R continued from previous page...

deemed non-compliant with federal Buy America provisions and the procurement was cancelled. The project will be re-bid in November, and a signed contract is expected in May 2017. Construction is expected to begin in spring/summer of 2017. The completed project will be a 611-space, 5-level shared use parking structure that will be located on Lemon Street between Chapman Avenue and Maple Street in Orange. This project is marked “red” in the Capital Action Plan, signifying a delay of more than three months. As a result of design challenges, this project has been delayed by three years from its original schedule.

Placentia Station

Plans for the proposed Placentia Metrolink Station Project were near completion but the City of Placentia requested to modify the plans 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 that revised the scope of the project and budget. There will now be a parking structure as part of the project and the City will contribute towards the cost. OCTA will revised the agreement with the engineer of record and the plans will be revised. During the quarter, a request for proposals for construction management services was released in August 2016. A contract for these services is expected to be in place in February 2017, so a constructability review can be done. The project is anticipated to begin construction in early 2018 and is anticipated to be complete in fall 2019.

San Clemente Pier Station Lighting - 10% Complete

Currently in the construction phase, this project will add lighting to the existing platform of the San Clemente Pier Station. OCTA is the lead for design and installation. Preliminary conceptual plans were approved by the City of San Clemente in July 2015. During the design phase, the project was temporarily delayed while the City evaluated the continued operation of the station. Following the determining to keep the station open, OCTA advertised an Invitation for Bid in March 2016 and OCTA awarded the construction contract in June 2016. Notice to Proceed was given on August 10, 2016, and construction is anticipated to be complete in March 2017.

San Juan Capistrano/Laguna Niguel Passing Siding Project

Currently in the design phase, this project 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. During the quarter, the project team continued working to prepare the 90 percent design plans and continued working with various jurisdictions including the California Public Utilities Commission to analyze the at grade crossing modifications. Custom proposed modifications to the project scope will have cost and schedule impacts. Environmental surveys for birds continue to provide the necessary information to support the permit applications. Completion of the design phase is expected in April 2017, with construction beginning in late 2017. Project completion is expected in late 2019. The project team continues to reduce the overall schedule impact wherever possible. This project is marked “red” in the Capital Action Plan, signifying a delay of more than three months. This project has been delayed by six months from its original schedule.



Project R continued from previous page...

Tustin Parking Structure - 100% Complete

Also completed early on, this 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.

Additional rail corridor improvements include: completion of the San Clemente Beach Trail Audible Warning System (AWS) project, which provides additional safety improvements and AWS devices at seven pedestrian grade crossings along the beach trail (AWS activation occurred on June 24, 2016); completed PSR's or environmental clearance for six potential grade separation projects along the LOSSAN corridor (State College Avenue, Ball Road, 17th Street, Santa Ana Boulevard, Grand Avenue, and Orangethorpe Avenue); replacement of the San Juan Creek railroad bridge in the City of San Juan Capistrano, which will also accommodate a future bike trail on the south end along the creek (design is 30 percent complete); the Control Point project at Fourth Street in the City of Santa Ana, which will provide rail operational efficiencies; 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; video surveillance, and continued implementation of Positive Train Control.

Sand Canyon Grade Separation

Status: PROJECT COMPLETE



Contact: Rose Casey, Highways
(714) 560-5729

Summary: The project located at Sand Canyon Avenue railroad crossing is now grade separated and open to traffic. The project grade 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 completed and construction completion acceptance by the City of Irvine was obtained on January 15, 2016. The project is in the one-year warranty period and no repairs have been identified to date.

Project S

Transit Extensions to Metrolink

Project S includes a competitive program which allows cities to apply for funding to connect passengers to their final destinations using transit in order to broaden the reach of Metrolink to other Orange County cities, communities and activity centers. There are currently two areas of this program, a fixed guideway program (street car) and a rubber tire transit program.

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Project S continued from previous page...

OC Streetcar Project

Status: Design Work Underway with Preparation for Entry into Engineering

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

Summary: OCTA is serving as the lead agency for the OC Streetcar project. FTA formally advanced the project into the Project Development phase of the federal New Starts program in May 2015. FTA has shown strong support for this project, including ascribing an overall medium-high rating to it in their Annual New Starts Report, which was released in February 2016. The full Notice to Proceed was issued in February 2016, and a consultant team was selected to prepare design plans (PS&E) for the project.

During the quarter, design work continued with 60 percent design plans scheduled for completion in December 2016. Staff continued preparation for entering the next phase of the New Starts process – the Engineering phase. The project scope, cost and schedule updates were submitted to FTA in July 2016, with the readiness documents and templates for rating of the project against New Starts criteria submitted in early September. At FTA’s direction, OCTA sent a letter to FTA in late September requesting entry into the New Starts Engineering phase. Approval into Engineering is anticipated later this year.

On July 25, 2016, the Board approved a three percent cost increase for the OC Streetcar project, increasing the total project cost estimate to \$297.91 million. On August 22, 2016, the Board approved an updated funding plan for the project, which reflects the recent award of \$25.52 million in state Transit and Intercity Rail Capital Program funds and adjustments to federal and M2 funds (including the redirection of \$9.17 million in federal FTA 5307 funds from the former Anaheim Rapid Connection project). Also during this meeting, the Board approved design criteria for streetcar stops and directed staff to develop conceptual OC Streetcar stop designs, based upon the approved criteria. Staff is scheduled to return to the Board next quarter to obtain approval on conceptual stop designs.

Opportunities to acquire streetcar vehicles via “piggybacking” (securing an assignment on another agency’s vehicle contract) continued to be evaluated, with a request for quotations released to two vehicle manufacturers in late July. Additionally, ROW appraisals for the Maintenance and Storage Facility were finalized, with FTA concurrence on the residential appraisal received in August, and the commercial appraisals sent to FTA for review in September.

Bus and Station Van Extension Projects

Status: Service Ongoing for Oakley Vanpool and Anaheim Canyon Metrolink Bus Connection

Contact: Sam Kaur, Planning
(714) 560-5673

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 date, the Board has approved one round of funding for bus and van extension projects, totaling over \$730,000. Four projects located within the cities of Anaheim and Lake Forest were approved for funding by the Board on July 23, 2012. Two projects have implemented service, one has been revised with a scope change, and the other has been cancelled. The vanpool connection from



Project S continued from previous page...

the Irvine Metrolink Station to the Oakley employment center in the City of Lake Forest began in December 2012, and the Anaheim Canyon Metrolink Station Bus Connection began service in February 2013. Following detailed discussions with OCTA staff, the Board approved a scope change submitted by the City on behalf of Panasonic Avionics in December 2015, which utilizes the City's established shuttle program to provide trips between the Irvine Metrolink Station and the Panasonic employment center as an alternative to providing vanpool services. Service associated with Invensys Incorporated in the City of Lake Forest was cancelled at the request of the participant, and the funds have been returned to the program for use in future calls for projects.

Project T

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

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

Status: PROJECT COMPLETE



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 Station that was located on the opposite side of the freeway in the Angel Stadium parking lot.

Project U

Project U expands mobility choices for seniors and persons with disabilities, including the Senior Mobility Program (SMP), the Senior Non-emergency Medical Transportation Program (SNEMT), and the Fare Stabilization Program. Since inception, a total of approximately \$44 million in Project U funding has been provided under M2.

Senior Mobility Program (SMP)

Contact: Curt Burlingame, Transit
(714) 560-5921

Status: Ongoing

Summary: This program provides one percent of M2 net revenues to continue and expand local community transportation service for seniors under the SMP. Including this quarter and since inception of the program, more than 1,451,000 boardings have been provided for seniors traveling to medical appointments, nutrition programs shopping destinations, and senior and community center activities. This quarter, more than \$927,200 in SMP funding



Project U continued from previous page...

was paid out to the 31 participating cities during the month of July and September*.

**Payments are made every other month (January, March, May, July, September, and November). The amount totaled for one fiscal year quarter either covers one or two payments, depending on the months that fall within that quarter.*

Senior Non-emergency Medical Transportation Program (SNEMT)

Contact: Curt Burlingame, Transit
(714) 560-5921

Status: Ongoing

Summary: This program provides one percent of M2 net revenues to supplement existing countywide senior non-emergency medical transportation services. Including this quarter and since inception of the program, more than 485,200 SNEMT boardings have been provided. This quarter, more than \$979,400 in SNEMT Program funding was paid to the County of Orange. This amount reflects monies paid out during the month of July and September*.

**Payments are made every other month (January, March, May, July, September, and November). The amount totaled for one fiscal year quarter either covers one or two payments, depending on the months that fall within that quarter.*

Fare Stabilization Program

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

Status: Ongoing

Summary: Between years 2011-2015, one percent of net M2 revenues was dedicated to stabilize 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 \$904,139 in revenue was allocated this quarter to support the Fare Stabilization Program. The amount of funding utilized each quarter varies based on ridership. Throughout the quarter, approximately 3,453,584 program-related boardings were recorded on fixed route and ACCESS services. Since inception of the program, more than 72,641,000* program-related boardings have been provided.

Project V

Contact: Sam Kaur, Planning
(714) 560-5673

Community Based Transit / Circulators

Status: Service Ongoing for 2012 Call for Projects, Developing Agreements for 2016 Call for Projects

Summary: This project establishes a competitive program 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

Measure M2

Progress Report

TRANSIT



Project V continued from previous page...

needs in areas not adequately served by regional transit. On June 24, 2013, the Board approved the first round of funding for \$9.8 million to fund five funding proposals from the cities of Dana Point, Huntington Beach, La Habra, Laguna Beach, and Lake Forest. Funding was approved to implement vanpool services from local employment centers to transportation hubs, special event and seasonal services that operate during heavy traffic periods, and local community circulators that carry passengers between various shopping, medical, and transportation-related centers. Prior to the second call for projects, Project V Guidelines were revised in 2015, per Board direction, to encourage more local agency participation. On June 13, 2016 the Board approved \$26.7 million in Project V funds for 17 Capital and Operations grants and \$323,780 for seven planning grants. OCTA staff is currently developing agreements with the agencies to implement these projects.

Project W

Contact: Sam Kaur, Planning
(714) 560-5673

Safe Transit Stops

Status: City-Initiated Improvements Underway or Complete; Mobile Ticketing in Use

Summary: This project provides funding for passenger amenities at the 100 busiest transit stops across the County, determined by average daily weekday passenger boardings. Stop improvements will be designed to ease transfers between bus lines and provide passenger amenities such as improved shelters and lighting. On July 14, 2014, the Board determined that 80 percent of available Project W funding (\$4.47 million) would be designated for supporting city-initiated projects, and the remaining 20 percent (\$1.12 million) would be directed towards the development and implementation of regional, customer-facing technologies that benefit the 100 busiest stops. On that date, the Board approved up to \$1,205,666 for city-initiated improvements and \$370,000 for OCTA-initiated improvements in fiscal year 2014-15.

According to October 2012 ridership data, 15 cities (containing at least one of the 100 busiest stops) are eligible for Safe Transit Stops funding. Seven cities applied for funds, and 51 projects were approved for funding per the July 2014 Board approval. Letter agreements with local agencies to allow the use of funds are complete. The City of Anaheim was not able to initiate the improvements for their projects and will reapply for funds through the next call for projects. The remaining 43 projects have been moving forward. The Cities of Irvine, Westminster, Costa Mesa, Orange, and Brea have completed their projects. The City of Santa Ana awarded their contract in April 2016 and will report completion of the projects to OCTA in the future.

For OCTA-initiated improvements, the \$370,000 investment has been contributed towards a mobile ticketing application (app) that will make it more convenient for bus customers to purchase bus passes, obtain trip information, and board buses using smart phone devices to display bus passes as proof of payment. The smart phone app was launched on June 15, 2016, for OC Fair and Express Bus users and received positive reviews. It is planned to be expanded to include regular fixed route and college pass purchases next quarter, and then to include reduced fare purchases (for Seniors and Persons with Disabilities) early next year.



Project X

Environmental Cleanup

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

Status: Ongoing

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 Environmental Cleanup Allocation Committee (ECAC) is charged with making recommendations to the Board on the allocation of funds for the Environmental Cleanup Program (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 six rounds of funding under the Tier 1 grants program. A total of 138 projects, amounting to nearly \$17 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 OCTA Board since 2013. To date, 33 of the 34 Orange County cities plus the County of Orange have received funding under this program. The seventh Tier 1 call for projects is anticipated to be released in early 2017, providing approximately \$2.8 million.

With approximately \$10 million in Tier 2 funding remaining, staff continues to work with the ECAC to recommend the appropriate timing of a third Tier 2 Call for Projects which is anticipated in 2017.



Part of Projects A-M

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

Freeway Mitigation Program

Status: Consultant Selected for Endowment Establishment; Final Conservation Plan and EIR/EIS and Preserve-Specific RMPs Under Development

Summary: The Freeway Mitigation Program provides higher-value environmental benefits such as habitat protection, wildlife corridors, and resource preservation in exchange for streamlined project approvals and greater certainty in the delivery of Projects A-M. The program is proceeding as planned, with seven properties (Preserves) acquired (1,300 acres), and 11 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. To date, the Board has authorized \$42 million 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.

The program's Final Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) and Final Environmental Impact Report and Environmental Impact Statement (EIR/EIS) will be brought to the Board for approval next quarter in November 2016. As part of the NCCP/HCP process, an endowment is required to be established to pay for the long-term management of the Preserves. In September 2016, the Board approved Staff's recommendation to retain the California Community Foundation to establish this endowment. It is estimated that it will take up to fifteen years to fully fund the endowment.

Separate Preserve-specific RMPs for five Preserves within Trabuco and Silverado Canyons are currently being finalized and will determine the appropriate management needs (consistent with the NCCP/HCP), which will include an assessment of recreational uses, for each of the Preserves. Post Board-approval of the NCCP/HCP and EIR/EIS, RMPs will be completed (including the more recently acquired MacPherson and Aliso Canyon Preserves) in 2017. Public access events will continue to be held on the Ferber Preserve as well as the O'Neill Oaks and Aliso Canyon Preserves. A list of scheduled 2016 wilderness Preserve hiking and equestrian riding tours is available on the M2 website at www.PreservingOurLegacy.org.

As part of the safeguards in place for the M2 Program, a 12-member Environmental Oversight Committee (EOC) makes funding allocation recommendations to assist OCTA in acquiring land and restoring habitats in exchange for streamlined project approvals for the M2 freeway improvement projects (A-M).

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

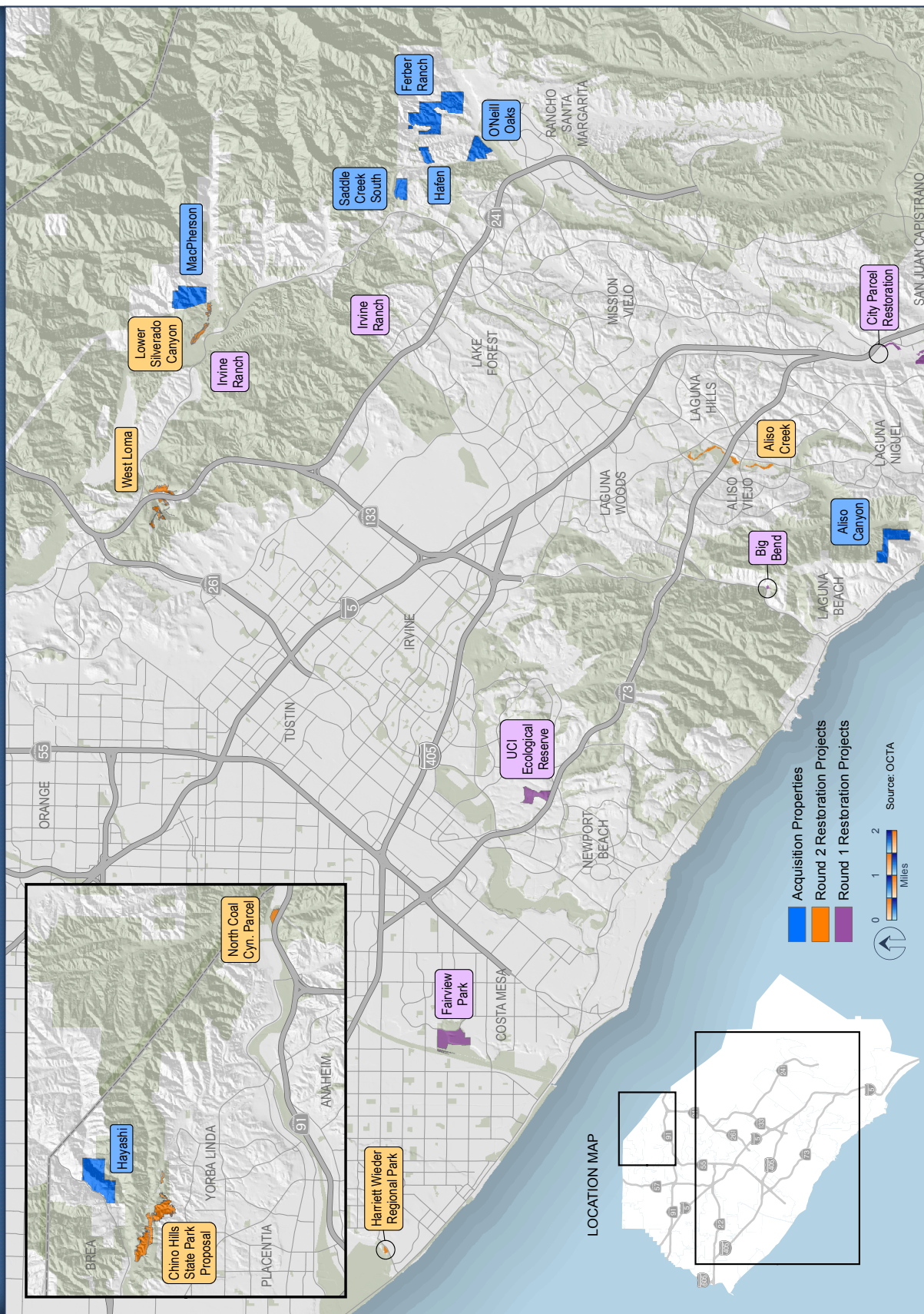
Measure M2

Progress Report

ENVIRONMENTAL



Acquisition Properties and Funded Restoration Projects





Program Management Office

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

The Measure M (M1 and M2) Program Management Office (PMO) provides interdivisional coordination for all M-related projects and programs. To ensure agency-wide compliance, the PMO also holds a bi-monthly committee meeting made up of executive directors and key staff from each of the divisions, which meets to review significant issues and activities within the Measure M programs. This quarter, the focus of the PMO has been on several major items, including the following.

M2020 Plan Update and Next 10 Plan

The PMO regularly reviews and reports on the progress of the M2020 Plan and its 14 objectives. Upon adoption of a new sales tax forecasting methodology in March 2016, the Board directed staff to review the M2020 Plan against current sales tax forecasts to determine deliverability of the M2 program. On September 12, 2016, staff presented a review of the M2020 Plan including progress made to date, and discussed the potential pursuit of a new delivery plan framework for the next ten years. Intended to be the M2020 Plan's successor, proposed deliverables for the Next 10 Plan were also presented. Also during the quarter, staff received the final sales tax true-up for FY 2015-16 and updated all M2 program cash flows based on the revised \$14.2 billion M2 sales tax revenue forecast. An update on these cash flows and their impact on the M2020 Plan as well as the Next 10 is being prepared and will be presented to the Board next quarter. A quarterly update on OCTA's progress on delivering the 14 objectives identified in the M2020 Plan, along with an overview of challenges is included in the Executive Summary of this report (pages 2-5), and the accompanying staff report.

Next 10 Delivery Plan Development

On September 12, 2016, the PMO presented M2020 Plan review findings against new sales tax forecast information. Findings revealed that due to reduced state and federal funding and lower-than-anticipated sales tax revenues, the freeway program identified in the M2020 plan is underfunded, and therefore not deliverable based on current assumptions. Finance staff is developing cash flows for M2 projects and programs to determine what can be accomplished between 2017 and 2026, based on financial constraints. Next quarter, the PMO will return to the Board with a new framework for delivering the M2 program, by focusing on ten deliverables for the next ten years.

2012-2015 M2 Performance Assessment Update

Measure M2's Ordinance No. 3 requires that a M2 performance assessment be conducted every three years. To date there have been two prior performance assessments and the most recent assessment reviewed the time period of July 1, 2012 through June 30, 2015. The final report and findings were received in May 2016. The results of the Performance Assessment including findings were brought to the Taxpayer Oversight Committee (TOC) on June 14, 2016 for information, and were presented to the Board on August 8, 2016 for approval. Overall, the FY 2012-13 through FY 2014-15 assessment commends OCTA's commitment to the effective and efficient management and delivery of the M2 Program. While there were no significant findings, recommendations for improvements were made. A total of 9 recommendations were identified. Staff has outlined responses and an action plan, and will report back on the implementation progress to the Board in the Measure M2 quarterly reports. Staff anticipates all recommendations for improvement to be fulfilled by the end of next year.

Measure M2

Progress Report

PROGRAM MGMT



PMO Continued from previous page...

M2 Awareness and Signage

M2 Signage Guidelines are being developed in response to Performance Assessment findings regarding M2 awareness and public perception. These uniform guidelines will document signage procedures to follow for each of the M2 programs (Freeway, Streets & Roads, Transit, and Environmental projects) and will be designed to create a common brand across all modes. During the quarter, the PMO met with a team of consultants and staff members to come up with draft design concepts. Next quarter, the PMO will meet with key staff and stakeholders to refine the design concepts and select final templates. The final version of the signage guidelines is anticipated to be complete in early 2017.

M2 Administrative Cost Safeguards

Both M1 and M2 include one percent caps on administrative expenses for salaries and benefits of OCTA administrative staff, but the M2 language sets the cap on an annual basis, whereas the M1 cap was set as an annual average over the life of the measure. 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-Measure M 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 projected to be 42 percent) as a result of economic conditions, the funds available to support administrative salaries and benefits have also declined from the original expectations. 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 above mentioned 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. Following recommendations received through the February 2013 M2 Performance Assessment Final Report, staff adjusted the approach to apply the allocation of state planning funds to areas that are subject to the one percent administration cap and adjusted OCTA's cost allocation plan to ensure that administrative charges are more precisely captured. Over the last few years, OCTA has experienced underruns in the one percent administration cap and has made payments to OCUTT to reduce the outstanding balance. As of September 2016, the outstanding balance was \$2.8 million.

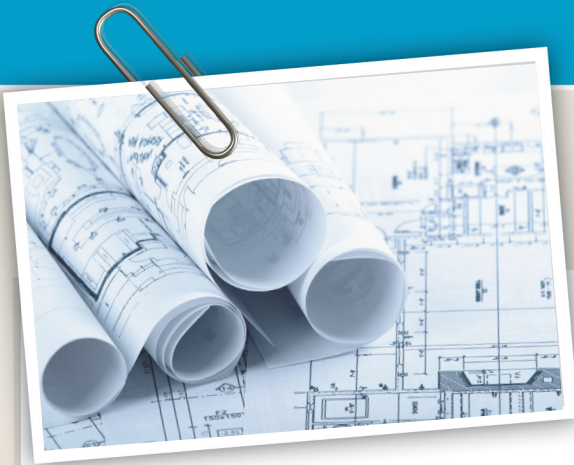
Staff continues to meet quarterly to review all labor costs to ensure proper cost allocation to both M1 and M2. During the quarter, staff met on July 13, 2016, to review the labor reports to ensure costs attributed to the one percent cap were

Continues on the next page...

Measure M2

Progress Report

PROGRAM MGMT



PMO continued from previous page...

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 19, 2016, to conduct this quarterly review.

Taxpayer Oversight Committee

The M2 Ordinance requires a Taxpayer Oversight Committee (TOC) to oversee the implementation of the M2 plan. With the exception of the elected Auditor/Controller of Orange County who in Ordinance No. 3 is identified as the chair of the TOC, all other members are not elected or appointed officials. Members are recruited and screened for expertise and experience 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 Measure M funds and ensuring that all revenue collected from Measure M is spent on voter-approved transportation projects. The responsibilities of the 11-member Measure M TOC are to:

- Ensure all transportation revenue collected from Measure M 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 Measure M before receipt of any tax monies for local projects
- Hold annual public meetings regarding the expenditure and status of funds generated by Measure M
- Review independent audits of issues regarding the plan and performance of the Orange County local Transportation Authority regarding the expenditure of Measure M sales tax monies
- Annually certify whether Measure M funds have been spent in compliance with the plan.

The TOC met on August 9, 2016 to elect a new Co-Chair and hear updates on the OC Streetcar Project, Signal Synchronization Program, and SR-55 Improvement Project. OCTA staff also provided the committee with information on the Measure M Look Ahead, Anaheim Rapid Connection (ARC) and Finance Directors Workshop.

Two subcommittees have been formed to 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 Measure M Audit, as well as any other items related to Measure M audits.



M2 Financing

Contact: Sean Murdock, Finance
(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 Measure 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 Measure M2 taxable sales. On March 28, 2016, as part of the FY 2016-17 budget development process, the Board approved a new sales tax forecast methodology. The new methodology includes a more conservative approach by utilizing a five-year forecast from MuniServices, Inc. Historically, MuniServices, Inc. has been more conservative than the three universities over the first five years of M2 revenue collection 2011-2016).

Revenue forecast information is updated quarterly based on the actual revenues received for the previous quarter. As required by law, OCTA pays the State Board of Equalization 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..

Current Forecast

Based on long term forecasts received in July 2016, OCTA staff forecasts total nominal sales tax collections over the life of M2 to be approximately \$14.2 billion. Original projections in 2005 estimated total nominal M2 sales tax collections at \$24.3 billion. Based on the current estimated forecast of \$14.2 billion, sales tax revenue will run approximately \$10.1 billion (42 percent) less than the original 2005 projection. The revenue forecast for the life of the M2 Program will vary as actual sales tax revenue data is incorporated.

Final sales tax receipts through the fourth quarter of fiscal year 2015-16 (June 30, 2016) were received at the end of the first quarter (September 2016), and reflected a growth in sales tax revenue of 3.17 percent over the same period of the prior fiscal year. The growth, while positive, is less than the budgeted sales tax growth rate of 5.68 percent for fiscal year 2015 16. Using the recently approved Board forecast methodology, the FY 2016-17 budget assumes a sales tax growth rate of 4.4 percent for FY 2016-17. Staff will continue to closely monitor sales tax receipts.

Measure M2

Progress Report

REVENUE & EXPENDITURES



Schedule 1

Measure M2
Schedule of Revenues, Expenditures and Changes in Fund Balance
as of September 30, 2016
(Unaudited)

<i>(\$ in thousands)</i>	Quarter Ended Sept 30, 2016	Year to Date Sept 30, 2016 (A)	Period from Inception to Sept 30, 2016 (B)
Revenues:			
Sales taxes	\$ 77,836	\$ 77,836	\$ 1,528,145
Other agencies' share of Measure M2 costs:			
Project related	15,483	15,483	491,678
Non-project related	16	16	455
Interest:			
Operating:			
Project related	-	-	2
Non-project related	1,631	1,631	18,713
Bond proceeds	3,243	3,243	39,240
Debt service	5	5	81
Commercial paper	-	-	393
Right-of-way leases	59	59	873
Miscellaneous:			
Project related	-	-	270
Non-project related	-	-	100
Total revenues	98,273	98,273	2,079,950
Expenditures:			
Supplies and services:			
State Board of Equalization (SBOE) fees	894	894	16,782
Professional services:			
Project related	2,449	2,449	275,298
Non-project related	201	201	15,244
Administration costs:			
Project related	2,132	2,132	46,672
Non-project related :			
Salaries and Benefits	591	591	18,031
Other	1,170	1,170	27,808
Other:			
Project related	19	19	1,697
Non-project related	4	4	3,804
Payments to local agencies:			
Project related	19,155	19,155	627,051
Capital outlay:			
Project related	6,943	6,943	553,436
Non-project related	-	-	31
Debt service:			
Principal payments on long-term debt	-	-	27,085
Interest on long-term debt and commercial paper	10,665	10,665	126,202
Total expenditures	44,223	44,223	1,739,141
Excess (deficiency) of revenues over (under) expenditures	54,050	54,050	340,809
Other financing sources (uses):			
Transfers out:			
Project related	(702)	(702)	(23,361)
Transfers in:			
Project related	493	493	76,037
Non-project related	(493)	(493)	5,444
Bond proceeds	-	-	358,593
Total other financing sources (uses)	(702)	(702)	416,713
Excess (deficiency) of revenues over (under) expenditures and other sources (uses)	\$ 53,348	\$ 53,348	\$ 757,522



Schedule 2

Measure M2
Schedule of Calculations of Net Revenues and Net Bond Revenues (Debt Service)
as of September 30, 2016
(Unaudited)

<i>(\$ in thousands)</i>	Quarter Ended Sept 30, 2016 (actual)	Year to Date Sept 30, 2016 (actual)	Period from Inception through Sept 30, 2016 (actual)	Period from October 1, 2016 through March 31, 2041 (forecast)	Total
	(C.1)	(D.1)	(E.1)	(F.1)	(F.1)
Revenues:					
Sales taxes	\$ 77,836	\$ 77,836	\$ 1,528,145	\$ 12,635,966	\$ 14,164,111
Operating interest	1,631	1,631	18,713	204,950	223,663
Subtotal	<u>79,467</u>	<u>79,467</u>	<u>1,546,858</u>	<u>12,840,916</u>	<u>14,387,774</u>
Other agencies share of M2 costs	16	16	455	-	455
Miscellaneous	-	-	100	-	100
Total revenues	<u>79,483</u>	<u>79,483</u>	<u>1,547,413</u>	<u>12,840,916</u>	<u>14,388,329</u>
Administrative expenditures:					
SBOE fees	894	894	16,782	189,616	206,398
Professional services	201	201	11,468	86,587	98,055
Administration costs :					
Salaries and Benefits	591	591	18,031	126,339	144,370
Other	1,170	1,170	27,808	217,771	245,579
Other	4	4	3,804	21,788	25,592
Capital outlay	-	-	31	-	31
Environmental cleanup	3,590	3,590	21,740	252,679	274,419
Total expenditures	<u>6,450</u>	<u>6,450</u>	<u>99,664</u>	<u>894,781</u>	<u>994,445</u>
Net revenues	<u>\$ 73,033</u>	<u>\$ 73,033</u>	<u>\$ 1,447,749</u>	<u>\$ 11,946,135</u>	<u>\$ 13,393,884</u>
<hr/>					
Bond revenues:					
Proceeds from issuance of bonds	\$ -	\$ -	\$ 358,593	\$ 2,000,000	\$ 2,358,593
Interest revenue from bond proceeds	3,243	3,243	39,240	21,010	60,250
Interest revenue from debt service funds	5	5	81	54	135
Interest revenue from commercial paper	-	-	393	-	393
Total bond revenues	<u>3,248</u>	<u>3,248</u>	<u>398,307</u>	<u>2,021,064</u>	<u>2,419,371</u>
Financing expenditures and uses:					
Professional services	-	-	3,776	17,020	20,796
Bond debt principal	-	-	27,085	2,240,761	2,267,846
Bond debt and other interest expense	10,665	10,665	126,202	1,492,021	1,618,223
Total financing expenditures and uses	<u>10,665</u>	<u>10,665</u>	<u>157,063</u>	<u>3,749,802</u>	<u>3,906,865</u>
Net bond revenues (debt service)	<u>\$ (7,417)</u>	<u>\$ (7,417)</u>	<u>\$ 241,244</u>	<u>\$ (1,728,738)</u>	<u>\$ (1,487,494)</u>

Measure M2

Progress Report

REVENUE & EXPENDITURES



Measure M2
Schedule of Revenues and Expenditures Summary
as of September 30, 2016
(Unaudited)

Schedule 3

Project	Description	Net Revenues through Sept 30, 2016	Total Net Revenues
	(G)	(H)	(I)
<i>(\$ in thousands)</i>			
Freeways (43% of Net Revenues)			
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 57,062	\$ 527,921
B	I-5 Santa Ana/SR-55 to El Toro	36,448	337,196
C	I-5 San Diego/South of El Toro	76,125	704,270
D	I-5 Santa Ana/San Diego Interchange Upgrades	31,324	289,795
E	SR-22 Garden Grove Freeway Access Improvements	14,569	134,788
F	SR-55 Costa Mesa Freeway Improvements	44,436	411,105
G	SR-57 Orange Freeway Improvements	31,409	290,582
H	SR-91 Improvements from I-5 to SR-57	16,998	157,253
I	SR-91 Improvements from SR-57 to SR-55	50,568	467,828
J	SR-91 Improvements from SR-55 to County Line	42,761	395,604
K	I-405 Improvements between I-605 to SR-55	130,250	1,205,009
L	I-405 Improvements between SR-55 to I-5	38,815	359,099
M	I-605 Freeway Access Improvements	2,428	22,465
N	All Freeway Service Patrol	18,212	168,486
	Freeway Mitigation	31,127	287,969
	Subtotal Projects	622,532	5,759,370
	Net (Bond Revenue)/Debt Service	-	-
	Total Freeways	\$ 622,532	\$ 5,759,370
	%		
Street and Roads Projects (32% of Net Revenues)			
O	Regional Capacity Program	\$ 144,777	\$ 1,339,405
P	Regional Traffic Signal Synchronization Program	57,908	535,739
Q	Local Fair Share Program	260,595	2,410,899
	Subtotal Projects	463,280	4,286,043
	Net (Bond Revenue)/Debt Service	-	-
	Total Street and Roads Projects	\$ 463,280	\$ 4,286,043
	%		

Measure M2

Progress Report

REVENUE & EXPENDITURES



Measure M2
Schedule of Revenues and Expenditures Summary
as of September 30, 2016
(Unaudited)

Schedule 3

Expenditures through Sept 30, 2016 (J)	Reimbursements through Sept 30, 2016 (K)	Net M2 Cost (L)
\$ 4,475	\$ 937	\$ 3,538
4,629	2,191	2,438
88,449	30,799	57,650
1,773	527	1,246
4	-	4
7,664	23	7,641
45,044	10,281	34,763
32,414	608	31,806
16,747	1,620	15,127
6,933	5,294	1,639
55,026	3,267	51,759
5,686	3,234	2,452
702	16	686
219	-	219
<u>46,177</u>	<u>1,688</u>	<u>44,489</u>
315,942	60,485	255,457
<u>33,041</u>	<u>-</u>	<u>33,041</u>
<u>\$ 348,983</u>	<u>\$ 60,485</u>	<u>\$ 288,498</u>
		28.1%
\$ 603,994	\$ 343,762	\$ 260,232
24,294	4,693	19,601
<u>245,416</u>	<u>77</u>	<u>245,339</u>
873,704	348,532	525,172
<u>36,699</u>	<u>-</u>	<u>36,699</u>
<u>\$ 910,403</u>	<u>\$ 348,532</u>	<u>\$ 561,871</u>
		54.7%

Continues on following page...

Measure M2

Progress Report

REVENUE & EXPENDITURES



Measure M2
Schedule of Revenues and Expenditures Summary
as of June 30, 2016
(Unaudited)

Schedule 3

Project	Description	Net Revenues through Sept 30, 2016 (G) (\$ in thousands)	Total Net Revenues (I)
Transit Projects (25% of Net Revenues)			
R	High Frequency Metrolink Service	\$ 131,803	\$ 1,335,841
S	Transit Extensions to Metrolink	127,803	1,182,370
T	Metrolink Gateways	25,755	68,459
U	Expand Mobility Choices for Seniors and Persons with Disabilities	44,434	464,435
V	Community Based Transit/Circulators	28,947	267,807
W	Safe Transit Stops	3,195	29,559
	Subtotal Projects	361,937	3,348,471
	Net (Bond Revenue)/Debt Service	-	-
	Total Transit Projects	\$ 361,937	\$ 3,348,471
	%		
	Measure M2 Program	\$ 1,447,749	\$ 13,393,884

Project	Description	Revenues through Sept 30, 2016 (G) (\$ in thousands)	Total Revenues (I.1)
Environmental Cleanup (2% of Revenues)			
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 30,937	\$ 287,755
	Total Environmental Cleanup	\$ 30,937	\$ 287,755
	%		

Taxpayer Safeguards and Audits			
	Collect Sales Taxes (1.5% of Sales Taxes)	\$ 22,922	\$ 212,462
	%		
	Oversight and Annual Audits (1% of Revenues)	\$ 15,469	\$ 143,878
	%		



Measure M2
Schedule of Revenues and Expenditures Summary
as of June 30, 2016
(Unaudited)

Schedule 3

Expenditures through Sept 30, 2016 (J)	Reimbursements through Sept 30, 2016 (K)	Net M2 Cost (L)
\$ 162,154	\$ 93,941	\$ 68,213
11,789	2,663	9,126
98,212	62,707	35,505
41,614	88	41,526
2,298	126	2,172
62	26	36
<u>316,129</u>	<u>159,551</u>	<u>156,578</u>
<u>20,524</u>	<u>-</u>	<u>20,524</u>
<u>\$ 336,653</u>	<u>\$ 159,551</u>	<u>\$ 177,102</u>
		17.2%
<u>\$ 1,596,039</u>	<u>\$ 568,568</u>	<u>\$ 1,027,471</u>

Expenditures through Sept 30, 2016 (J)	Reimbursements through Sept 30, 2016 (K)	Net M2 Cost (L)
\$ 21,740	\$ 292	\$ 21,448
<u>\$ 21,740</u>	<u>\$ 292</u>	<u>\$ 21,448</u>
		1.4%

\$ 16,782	\$ -	\$ 16,782
<u>\$ 18,031</u>	<u>\$ 2,562</u>	<u>\$ 15,469</u>
		1.0%

Measure M2

Progress Report LOCAL FAIR SHARE



M2 FUNDS

ENTITY	1st Quarter FY 2016/17	FUNDS TO DATE
ALISO VIEJO	\$219,406.31	\$3,049,275.55
ANAHEIM	\$1,909,817.90	\$26,339,006.73
BREA	\$317,123.91	\$4,430,988.52
BUENA PARK	\$459,845.47	\$7,150,524.80
COSTA MESA	\$830,421.69	\$11,093,880.82
CYPRESS	\$289,671.80	\$4,140,021.15
DANA POINT	\$178,049.70	\$2,526,783.62
FOUNTAIN VALLEY	\$341,628.68	\$4,835,828.32
FULLERTON	\$719,441.09	\$10,042,967.26
GARDEN GROVE	\$810,924.99	\$11,500,113.20
HUNTINGTON BEACH	\$1,070,492.57	\$14,995,257.92
IRVINE	\$1,518,458.91	\$20,187,625.59
LAGUNA BEACH	\$141,351.84	\$1,959,020.41
LAGUNA HILLS	\$186,363.25	\$2,636,636.38
LAGUNA NIGUEL	\$373,788.55	\$5,184,961.86
LAGUNA WOODS	\$69,578.08	\$996,004.48
LA HABRA	\$291,183.44	\$4,097,266.63
LAKE FOREST	\$436,194.43	\$6,026,497.30

Measure M2

Progress Report
LOCAL FAIR SHARE



M2 FUNDS

ENTITY	1st Quarter FY 2016/17	FUNDS TO DATE
LA PALMA	\$86,152.67	\$1,354,431.05
LOS ALAMITOS	\$71,638.50	\$999,294.91
MISSION VIEJO	\$524,287.34	\$7,246,862.93
NEWPORT BEACH	\$615,200.10	\$8,471,343.01
ORANGE	\$920,399.72	\$12,656,424.88
PLACENTIA	\$262,188.91	\$3,657,391.16
RANCHO SANTA MARGARITA	\$233,317.06	\$3,278,515.18
SAN CLEMENTE	\$306,800.07	\$4,281,575.48
SAN JUAN CAPISTRANO	\$209,985.00	\$2,940,130.54
SANTA ANA	\$1,535,070.63	\$21,358,771.88
SEAL BEACH	\$136,105.23	\$1,989,578.62
STANTON	\$164,160.28	\$2,327,680.86
TUSTIN	\$502,481.61	\$6,830,496.33
VILLA PARK	\$28,938.17	\$402,310.00
WESTMINSTER	\$469,801.07	\$6,585,583.70
YORBA LINDA	\$333,703.88	\$4,620,928.35
COUNTY UNINCORPORATED	\$1,065,870.44	\$14,070,702.80
TOTAL M2 FUNDS	\$17,629,843.29	\$244,264,682.22

Measure M2

Progress 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

Capital Projects*	Cost Budget/ Forecast (in millions)	Schedule Plan/Forecast			
		Begin Environmental	Complete Environmental	Complete Design	Complete Construction
FREEWAY PROJECTS					
I-5, Pico to Vista Hermosa	\$113.0	Jun-09	Dec-11	Oct-13	Aug-18
Project C	\$89.6	Jun-09	Oct-11	Oct-13	Aug-18
I-5, Vista Hermosa to Pacific Coast Highway	\$75.6	Jun-09	Dec-11	Feb-13	Mar-17
Project C	\$71.0	Jun-09	Oct-11	May-13	Mar-17
I-5, PCH to San Juan Creek Rd.	\$70.7	Jun-09	Dec-11	Jan-13	Sep-16
Project C	\$71.0	Jun-09	Oct-11	Jan-13	Apr-18
I-5, I-5/Ortega Interchange	\$90.9	Sep-05	Jun-09	Nov-11	Sep-15
Project D	\$80.3	Sep-05	Jun-09	Dec-11	Jan-16
I-5, I-5/Ortega Interchange (Landscape)	N/A	N/A	N/A	N/A	N/A
Project D	N/A	N/A	N/A	Oct-14	Sep-16
I-5, SR-73 to Oso Parkway	\$151.9	Sep-11	Jun-14	Jan-18	Apr-22
Project C & D	\$151.9	Oct-11	May-14	Jan-18	Sep-22
I-5, Oso Parkway to Alicia Parkway	\$196.2	Sep-11	Jun-14	Jun-17	Mar-22
Project C & D	\$196.2	Oct-11	May-14	Jun-17	Jul-22
I-5, Alicia Parkway to El Toro Road	\$133.6	Sep-11	Jun-14	Jun-18	Sep-22
Project C	\$133.6	Oct-11	May-14	Jun-18	Nov-22
I-5, I-5/El Toro Road Interchange	TBD	TBD	TBD	TBD	TBD
Project D	TBD	Dec-16	Dec-19	TBD	TBD
I-5, I-405 to SR-55	TBD	May-14	Aug-18	TBD	TBD
Project B	TBD	May-14	Aug-18	TBD	TBD
I-5, SR-55 to SR-57	\$37.1	Jul-11	Jun-13	Mar-17	Feb-20
Project A	\$37.1	Jun-11	Apr-15	May-17	Mar-20

*For detailed project information, please refer to the individual project section within this report.

Measure M2

Progress Report

CAPITAL ACTION PLAN



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Capital Projects*	Cost Budget/ Forecast (in millions)	Schedule Plan/Forecast			
		Begin Environmental	Complete Environmental	Complete Design	Complete Construction
SR-55, I-405 to I-5	TBD	Feb-11	Nov-13	TBD	TBD
Project F	\$375.9	May-11	Jan-18	Aug-21	Jan-27
SR-55, I-5 to SR-91	TBD	TBD	TBD	TBD	TBD
Project F	TBD	Jan-17	Jun-19	TBD	TBD
SR-57 (NB), Orangewood to Katella	TBD	Apr-16	Dec-18	TBD	TBD
Project G	TBD	Apr-16	Dec-18	TBD	TBD
SR-57 (NB), Katella to Lincoln	\$78.7	Apr-08	Jul-09	Nov-10	Sep-14
Project G	\$40.5	Apr-08	Nov-09	Dec-10	Apr-15
SR-57 (NB), Katella to Lincoln (Landscape)	N/A	N/A	N/A	N/A	N/A
Project G	N/A	N/A	N/A	Jul-10	Jul-18
SR-57 (NB), Orangethorpe to Yorba Linda	\$80.2	Aug-05	Dec-07	Dec-09	May-14
Project G	\$52.4	Aug-05	Dec-07	Jul-09	Nov-14
SR-57 (NB), Yorba Linda to Lambert	\$79.3	Aug-05	Dec-07	Dec-09	Sep-14
Project G	\$54.8	Aug-05	Dec-07	Jul-09	May-14
SR-57 (NB), Orangethorpe to Lambert (Landscape)	N/A	N/A	N/A	N/A	N/A
Project G	N/A	N/A	N/A	Apr-17	Oct-18
SR-57 (NB), Lambert to Tonner Canyon (On Hold)	TBD	TBD	TBD	TBD	TBD
Project G	TBD	Jul-17	Jun-20	TBD	TBD
SR-91 Westbound (WB), I-5 to SR-57	\$78.1	Jul-07	Apr-10	Feb-12	Apr-16
Project H	\$59.2	Jul-07	Jun-10	Apr-12	Jun-16
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	N/A	Aug-16	Apr-18

*For detailed project information, please refer to the individual project section within this report.

Measure M2

Progress Report

CAPITAL ACTION PLAN



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Capital Projects*	Cost Budget/ Forecast (in millions)	Schedule Plan/Forecast			
		Begin Environmental	Complete Environmental	Complete Design	Complete Construction
SR-91, SR-57 to SR-55	TBD	Jan-15	Oct-18	TBD	TBD
Project I	TBD	Jan-15	May-19	TBD	TBD
SR-91 (WB), Tustin Interchange to SR-55	\$49.9	Jul-08	Jul-11	Mar-13	Jul-16
Project I	\$43.9	Jul-08	May-11	Feb-13	Jul-16
SR-91, SR-55 to SR-241	\$128.4	Jul-07	Jul-09	Jan-11	Dec-12
Project J	\$79.6	Jul-07	Apr-09	Aug-10	Mar-13
SR-91, SR-55 to SR-241 (Landscape)	N/A	N/A	N/A	N/A	N/A
Project J	N/A	N/A	N/A	Feb-13	Feb-15
SR-91 Eastbound, SR-241 to SR-71	\$104.5	Mar-05	Dec-07	Dec-08	Nov-10
Project J	\$57.8	Mar-05	Dec-07	Dec-08	Jan-11
I-405, I-5 to SR-55	TBD	Dec-14	Jul-18	TBD	TBD
Project L	TBD	Dec-14	Jul-18	TBD	TBD
I-405, SR-55 to I-605 (Design-Build)	\$1,900.0	Mar-09	Mar-13	Nov-15	Apr-23
Project K	\$1,900.0	Mar-09	May-15	Nov-15	Apr-23
I-605, I-605/Katella Interchange (Draft)	TBD	TBD	TBD	TBD	TBD
Project M	TBD	Aug-16	Jul-18	TBD	TBD
GRADE SEPARATION PROJECTS					
Sand Canyon Avenue Railroad Grade Separation	\$55.6	N/A	Sep-03	Jul-10	May-14
Project R	\$61.7	N/A	Sep-03	Jul-10	Jan-16
Raymond Avenue Railroad Grade Separation	\$77.2	Feb-09	Nov-09	Aug-12	Aug-18
Project O	\$124.8	Feb-09	Nov-09	Dec-12	Aug-18
State College Blvd. Grade Separation (Fullerton)	\$73.6	Dec-08	Jan-11	Aug-12	May-18
Project O	\$97.0	Dec-08	Apr-11	Feb-13	May-18

Measure M2

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Capital Projects*	Cost Budget/ Forecast (in millions)	Schedule Plan/Forecast			
		Begin Environmental	Complete Environmental	Complete Design	Complete Construction
Placentia Ave. Grade Separation	\$78.2	Jan-01	May-01	Mar-10	Nov-14
Project O	\$64.4	Jan-01	May-01	Jun-10	Dec-14
Kraemer Blvd. Grade Separation	\$70.4	Jan-01	Sep-09	Jul-10	Oct-14
Project O	\$63.5	Jan-01	Sep-09	Jul-10	Dec-14
Orangethorpe Blvd. Grade Separation	\$117.4	Jan-01	Sep-09	Dec-11	Sep-16
Project O	\$108.6	Jan-01	Sep-09	Oct-11	Oct-16
Tustin Ave./Rose Dr. Grade Separation	\$103.0	Jan-01	Sep-09	Dec-11	May-16
Project O	\$98.3	Jan-01	Sep-09	Jul-11	Oct-16
Lakeview Ave. Grade Separation	\$70.2	Jan-01	Sep-09	Oct-11	Mar-17
Project O	\$107.4	Jan-01	Sep-09	Jan-13	Jul-17
17th St. Grade Separation	TBD	Oct-14	Jun-16	TBD	TBD
Project R	TBD	Oct-14	Jun-17	TBD	TBD
RAIL AND STATION PROJECTS					
Rail-Highway Grade Crossing Safety Enhancement	\$94.4	Jan-08	Oct-08	Sep-08	Dec-11
Project R	\$90.4	Jan-08	Oct-08	Sep-08	Dec-11
San Clemente Beach Trail Safety Enhancements	\$6.0	Sep-10	Jul-11	Apr-12	Jan-14
Project R	\$5.0	Sep-10	Jul-11	Jun-12	Mar-14
San Juan Capistrano Passing Siding	\$25.3	Aug-11	Jan-13	May-16	Jan-19
	\$25.3	Aug-11	Mar-14	Apr-17	Dec-19
OC Streetcar	TBD	Aug-09	Mar-12	TBD	TBD
Project S	\$306.4	Aug-09	Mar-15	Jul-17	Apr-20
Placentia Metrolink Station and Parking Structure	\$34.8	Jan-03	May-07	Jan-11	TBD
Project R	\$34.8	Jan-03	May-07	Feb-11	Sep-19

*For detailed project information, please refer to the individual project section within this report.

Measure M2

Progress Report

CAPITAL ACTION PLAN



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Capital Projects*	Cost Budget/ Forecast (in millions)	Schedule Plan/Forecast			
		Begin Environmental	Complete Environmental	Complete Design	Complete Construction
Anaheim Canyon Station	TBD	Jan-16	Dec-16	TBD	TBD
	\$21.0	Jan-16	Jan-17	Nov-18	Aug-20
Orange Station Parking Expansion	\$33.2	Dec-09	Dec-12	Apr-13	Jun-18
	\$33.2	Dec-09	May-16	Apr-16	Oct-18
Fullerton Transportation Center - Elevator Upgrades	\$3.5	N/A	N/A	Dec-13	Mar-17
	\$4.0	N/A	N/A	Dec-13	Jan-18
Laguna Niguel/Mission Viejo Station ADA Ramps	\$3.5	Jul-13	Jan-14	Aug-14	Apr-17
	\$4.6	Jul-13	Feb-14	Jul-15	Jul-17
Anaheim Regional Transportation Intermodal Center	\$227.4	Apr-09	Feb-11	Feb-12	Nov-14
Project R & T	\$230.4	Apr-09	Feb-12	May-12	Dec-14

*For detailed project information, please refer to the individual project section within this report.

LOS ANGELES

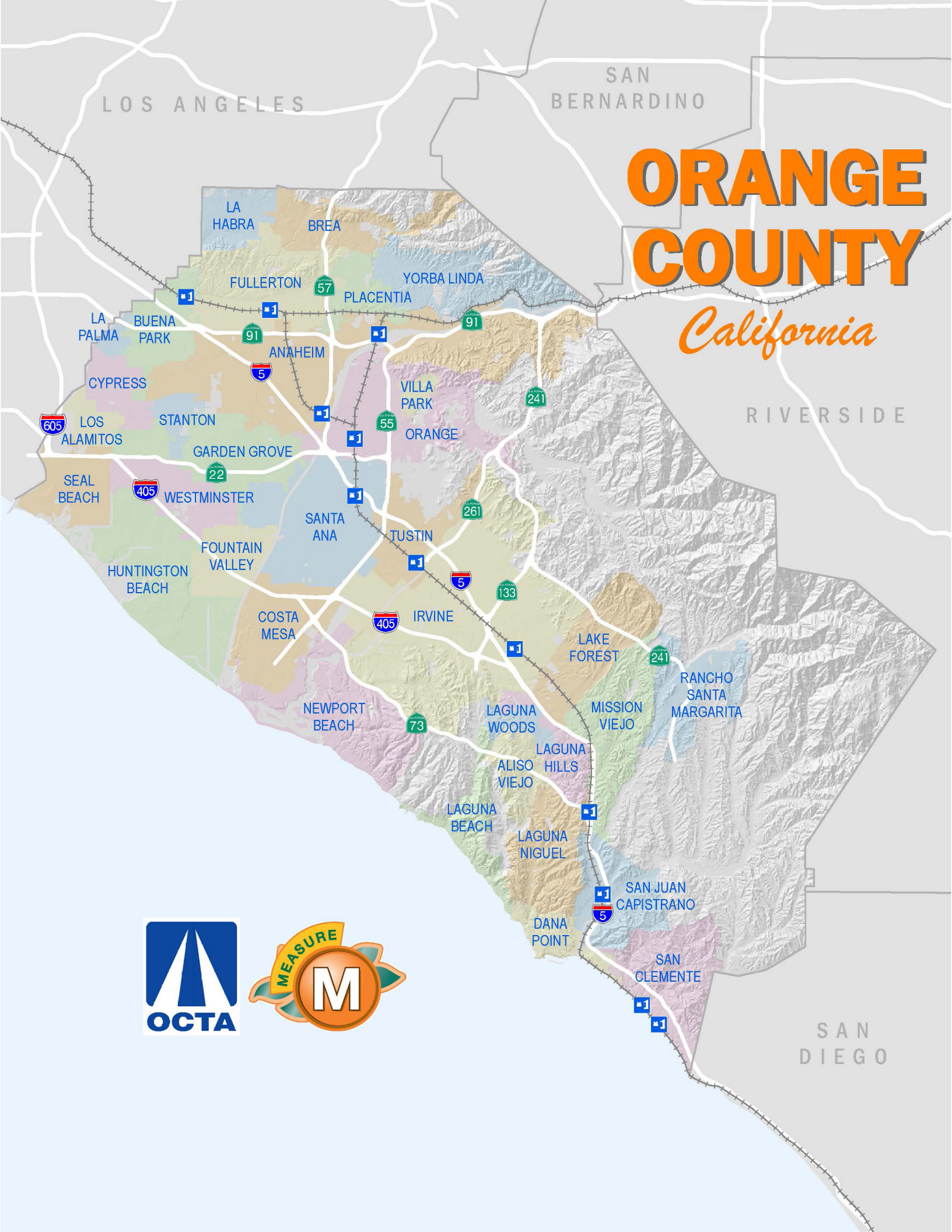
SAN BERNARDINO

ORANGE COUNTY

California

RIVERSIDE

SAN DIEGO





COMMITTEE TRANSMITTAL

January 23, 2017

To: Members of the Board of Directors

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

Subject: Rail Programs and Facilities Engineering Quarterly Report

Transit Committee Meeting of January 12, 2017

Present: Directors Do, Jones, Murray, Pulido, Shaw, Steel, and Winterbottom

Absent: Director Tait

Committee Vote

This item was passed by the Members present.

Director Pulido was not present to vote on this item.


Committee Recommendation

Receive and file as an information item.



January 12, 2017

To: Transit Committee

From: Darrell Johnson, Chief Executive Officer 

Subject: Rail Programs and Facilities Engineering Quarterly Report

Overview

The Rail Programs and Facilities Engineering departments are responsible for the Orange County Transportation Authority's rail capital project development, rail operations, and transit facilities engineering projects. This report provides an update on rail and facilities engineering programs through the first quarter (July, August, and September) of fiscal year 2016-17.

Recommendation

Receive and file as an information item.

Background

The Rail Programs and Facilities Engineering departments (Departments) are responsible for implementing the Orange County Transportation Authority's (OCTA) railroad capital projects, including station parking enhancements and expansions, new station development, expanded rail services, OC Streetcar, and transit facilities engineering. Additionally, the Departments are responsible for improved and expanded operations of Orange County's rail system by providing rail service that supports and matches the growth and development patterns of Orange County and the region.

Discussion

This report provides an update on the Departments' programs and projects, including Rail Capital, Transit Extensions to Metrolink, Rail Operations, and Transit Facilities Engineering.

Rail Capital

Rail capital projects include a wide range of projects necessary to sustain existing passenger rail service and support future increases in service. This includes new station development, station parking expansions and enhancements, grade separations and grade crossing enhancements, and various other track and infrastructure projects.

Station Improvement Projects

The Laguna Niguel/Mission Viejo Metrolink Station improvements project provides Americans with Disabilities Act-(ADA) compliant access ramps that will replace the existing elevator. The existing elevator has been out of service since late 2014 and requires bus service to transport ADA passengers from one side of the station to the other. As part of the project, the existing elevator room will be converted to a restroom, dedicated space for vending machines, and storage. The project scope also includes additional benches, shade structures, and required relocation of Moulton Niguel Water District's 33-inch sewer line, which is in conflict with the project. Construction began in February 2016. The contractor has finished relocation of the sewer line and is continuing with shoring and excavation on the west side of the project. Construction is anticipated to be completed in June 2017.

The Orange Transportation Center parking structure project represents a long-standing effort between the City of Orange and OCTA to increase the parking capacity to accommodate future growth in Metrolink ridership. Plans, specifications, and estimates (PS&E) for a 611-space parking structure were completed by the City of Orange in June 2016. OCTA is the lead on the construction phase of the project and issued an invitation for bids (IFB) in July 2016. Bids were received in September 2016, but the apparent low bidder indicated it could not meet federal Buy America requirements based on certain portions of the plans and specifications. It was determined the plans and specifications would need to be revised, and the procurement was cancelled. The plans were revised and re-released for bid in November 2016. The revised bid opening will be in January 2017, and construction is scheduled to begin in April/May 2017, and be completed in October 2018.

The proposed Placentia Metrolink Station will be located on BNSF Railway (BNSF) and City of Placentia-owned right-of-way (ROW). The station will include rail passenger platforms, parking, and passenger amenities. OCTA is the lead for design and construction of the project. Previously completed PS&E are being revised to include a parking structure in lieu of surface parking. A construction and maintenance agreement with BNSF for the construction of the rail portion of the

project will need to be in place before the IFB for construction can be released. The PS&E is anticipated to be complete and the IFB released in October 2017, with an anticipated construction completion date of September 2019.

The Anaheim Canyon Metrolink Station Improvement project includes the addition of a second station track, rail passenger platform, extending the existing platform to accommodate longer train consists, ticket vending machines, benches, canopies, and signage. OCTA is the lead agency on all phases of project development, including construction. Preliminary engineering and environmental phase of the project is expected to be completed in January 2017, and a request for proposals will be released for final PS&E. Construction is expected to begin in June 2019, and be completed in August 2020.

The City of Fullerton is the lead agency on a project to add an elevator tower to each side of the existing railroad pedestrian bridge at the Fullerton Transportation Center. The City of Fullerton began the construction in January 2016. Renovations to the restrooms have been completed, but the contractor has experienced delays in starting on the elevator work due to subcontractor issues. The elevator work is scheduled to begin in January 2017, and is expected to be completed in January 2018.

OCTA is designing and constructing a lighting project at the San Clemente Pier Metrolink/Amtrak Station. The project will add lighting to the existing platform, which currently has no lighting. OCTA awarded the construction contract in June 2016, and it is expected to be completed in March 2017.

Rail Corridor Improvements

Rail corridor improvements consist of capital and rehabilitation projects that improve the safety, operations, or reliability of the rail infrastructure. OCTA owns over 45 miles of operating railroad.

There are currently six grade separation projects along the Los Angeles – San Diego – San Luis Obispo (LOSSAN) rail corridor that have completed project study reports or environmental clearance and are not currently advancing due to lack of funds.

The 17th Street Grade Separation project is progressing through the environmental clearance phase. Draft 30 percent design was submitted for stakeholders' review, and comments are currently being addressed. The California Department of Transportation reviewed the Historical Property Survey Report and determined that one of the properties impacted by the project will need further consultations with the Office of Historic Preservation and State Historic Preservation. This required

additional work to prepare the Finding of Effects documentation approval. There is a schedule impact of approximately ten months to complete the federal determination of the project environmental action. The City of Santa Ana, upon review of these studies, will provide the state determination of the project environmental action. The environmental phase is anticipated to be completed in spring 2017.

The Laguna Niguel to San Juan Capistrano passing siding project will add approximately 1.8 miles of new passing siding railroad track adjacent to the existing mainline track. The project will enhance operational efficiency of passenger services within the LOSSAN rail corridor. Proposed modifications to the existing Rancho Capistrano private crossing, associated with the addition of passing track, were discussed with the California Public Utilities Commission (CPUC). Alternatives to address concerns raised by CPUC have been developed which will modify eastbound vehicular traffic movement on Rancho Capistrano to free right-turn only. CPUC requested that a full application for approval be submitted for the proposed modification. The project design schedule has been impacted by six months extending to April 2017, and overall project cost impacts are currently estimated at \$5.6 million above the original project budget of \$25.3 million, which was based on a preliminary design in 2013. The project cost increase was due to necessary changes to the specified retaining wall type, height, and length due to site constraints, removal of Control Point (CP) Avery, replacement of an existing 1940 wooden trestle bridge, and other adjustments to project support costs and construction cost escalations. Advance power pole relocation activities by San Diego Gas & Electric (SDG&E) were completed in November 2016, with the exception of one pole awaiting communication tenants to relocate its facilities from SDG&E pole.

The San Juan Creek railroad bridge in the City of San Juan Capistrano was built in 1917. The existing 300-foot long bridge carries a single mainline track for passenger and freight rail traffic over San Juan Creek and is in need of replacement. The replacement bridge will be constructed adjacent to the existing bridge to minimize disruption of rail traffic. Additionally, the new bridge will accommodate a future bike trail on the south end along the creek. The Southern California Regional Rail Authority (SCRRA) is the project lead, and OCTA is the ROW lead. SCRRA is currently advancing the design to 60 percent completion. The preparation of the environmental studies, along with the engineering studies, continues. The project received the California Environmental Quality Act (CEQA) clearance in June 2016, will obtain federal environmental clearance by early 2017, and design completion by summer 2017. ROW activities to obtain the necessary property rights to construct the bridge have begun and are anticipated to take 18 months. The project is targeted to be construction-ready by the third quarter 2018.

The CP Fourth project is located in the City of Santa Ana between Fourth Street and Chestnut Avenue, between mile posts 175.45 and 175.80. The project includes installation of a turnout to a Union Pacific Railroad spur track, along with related civil, signal, and communication modifications and improvements. The project will provide rail operational efficiencies. On June 13, 2016, the OCTA Board of Directors (Board) approved a cooperative agreement with SCRRA to define the roles and responsibilities, and the funding requirements of the project. SCRRA has begun design and procurement of signal and track materials. The project is expected to be completed by December 2017.

The railroad ROW Slope Stabilization project includes eight locations within OCTA-owned rail ROW that have been identified for improvements to prevent future erosion and slope instability. OCTA's consultant has provided a 30 percent design submittal. Finalization of the design approach for some locations is being coordinated with SCRRA.

Transit Extensions to Metrolink: OC Streetcar

The Transit Extensions to Metrolink Program is intended to broaden the reach of Orange County's backbone passenger rail system to key employment, population, and activity centers. 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.

In July 2016, the OCTA Board approved the revised OC Streetcar project funding plan to increase the overall project funding from \$288.74 million to \$297.91 million. The cost estimate was updated to address all major project elements following the completion of 30 percent design, including construction estimates, professional services, ROW, vehicles, and contingency. Consistent with state CEQA requirements, an addendum was prepared to the previously approved environmental document as a result of minor design modifications that were made to the project. Additionally, the Board approved submittal of the annual New Starts application with a request to increase the federal New Starts funding share from \$144.37 million to \$148.96 million.

In March 2016, the Board approved the selection of PGH Wong Engineering, Inc., as the firm to provide construction management services for the OC Streetcar project. During the reporting period, negotiations were conducted with the selected firm, and the contract execution is anticipated for December 2016.

The outreach efforts kicked off for the OC Streetcar stop design effort with the Board approving a set of criteria for the conceptual stop design. During the months of July and August 2016, numerous outreach meetings were held with

stakeholders and the community to solicit feedback about community priorities for both the function and aesthetic design of the stops.

In August 2016, a revised funding plan for the OC Streetcar project was approved by the Board to reflect the project receiving \$25.52 million in State Transit and Intercity Rail Capital Program funds, a redirection of Federal Transit Administration (FTA) Section 5307 funds, and additional Measure M2 Project S funds to the OC Streetcar project.

For vehicle procurement, a request for quotations (RFQ) was released in July 2016 to two vehicle manufacturers - CAF USA, Inc. (CAF), the City of Cincinnati vehicle contractor, and Siemens Industry, Inc. (Siemens), the Tri-Met vehicle contractor. The RFQ requested pricing on the required vehicle modifications, commitment on the production schedule, as well as revisions to some commercial terms from the base contracts. In August 2016, staff met with both manufacturers to provide additional information on the project, the vehicle criteria, and discuss the terms of the RFQ and the desired vehicle delivery schedule. A quotation was received from one vehicle contractor, CAF, in September 2016. The second contractor, Siemens, did not submit a quotation.

During the reporting period, OCTA worked closely with FTA to complete the plans and documents required for approval to enter into the next phase of the New Starts delivery process – Engineering. The project achieved a significant milestone in September 2016 with the submission of both the Engineering readiness documents, as well as the annual New Starts evaluation and ratings application. Work on preparation of the 60 percent design was initiated, with the target completion date for the level of design scheduled for December 2016. The effort is involving close coordination with the cities of Santa Ana and Garden Grove.

Rail Operations

As one of five member agencies that comprise Metrolink, OCTA participates in the design and operation of Metrolink service in Orange County. Rail Operations staff serve as the liaison with Metrolink and are involved in route and service planning, funding, and implementation. In addition to coordination of daily Metrolink operations, the team coordinates the StationLink service, special trains, promotional activities, and outreach.

- In time for football season and the Rams' return to Los Angeles (LA), Metrolink began special train service on four Metrolink lines, the Orange County, San Bernardino, Antelope Valley, and 91/Perris Valley lines, to LA Union Station for Sunday home games. The \$10 weekend day

pass is valid for a round trip and includes transfers to Metro Rail to bring fans to the LA Coliseum.

- The Metrolink Perris Valley extension to the 91 Line (Riverside to LA via Fullerton) began revenue service in June 2016 with four new stations. To help boost ridership, Metrolink implemented a six-month fare promotion in December 2016 to offer a 25 percent discount to passengers that use one of the new stations as an origin or destination.
- Metrolink completed the process of repairing a piece of equipment on all Hyundai Rotem cab cars and returned leased BNSF locomotives in October 2016.
- In September 2016, Metrolink staff was tasked by member agencies to conduct an assessment of its budget allocation formulas. The assessment intends to perform comprehensive analysis of the current formulas and practices for allocating Metrolink costs and revenues to its members. Alternatives will be proposed to be utilized in the fiscal year (FY) 2018-19 budget and will address equity and transparency, and be subject to periodic review.

The total FY 2016-17 first quarter ridership (weekday and weekend) for the three Metrolink lines serving Orange County was 1.1 million, a decrease of 2.3 percent compared to the same period of FY 2015-16. Yet, ridership increased by nearly two percent when compared to the previous quarter, as shown in Attachment A. Rail Operations staff also represent OCTA's interests in the LOSSAN Joint Powers Authority, including the ongoing coordination and service integration efforts on the LOSSAN rail corridor.

Transit Facilities Engineering

Transit Facilities Engineering is responsible for the development and implementation of capital rehabilitation, facility modifications, and new capital projects for all OCTA transit facilities, including the five bus bases and seven park-and-ride lots. Design is underway on four projects this period, including removal of LNG Technologies underground storage tanks at the Anaheim and Garden Grove bus bases, minor rehabilitation of the bus dock platform at Fullerton Park and Ride, facility modifications for hydrogen buses at the Santa Ana Bus Base, and video surveillance system replacement at the Santa Ana and Garden Grove bus bases. In addition, a procurement is underway for the Transit Security Operations Center preliminary engineering and environmental clearance.

There are two projects in the construction bid phase, the bridge repair at Laguna Beach Transportation Center, and replacement of heating and ventilation units at the Garden Grove Bus Base maintenance shop. The procurement for on-call materials testing and inspection at OCTA transit facilities concluded this period.

Five projects are currently under construction, including replacement of heating and evaporative cooling units at the Irvine Construction Circle Bus Base maintenance shop, vehicle inspection station equipment canopy at the Garden Grove Bus Base, bus wash water run-off mitigation modifications at all bus bases, fall protection at maintenance bays and skylights at all bus bases, and pavement repairs at the Garden Grove Bus Base and Fullerton Park-and-Ride.

Summary

The Departments are responsible for OCTA's rail project development, rail capital improvement programs, rail operations, and transit facilities engineering projects. For the period covering the first quarter of FY 2016-17, significant progress in delivery of capital projects and rail services were achieved.

Attachment

A. Metrolink Ridership

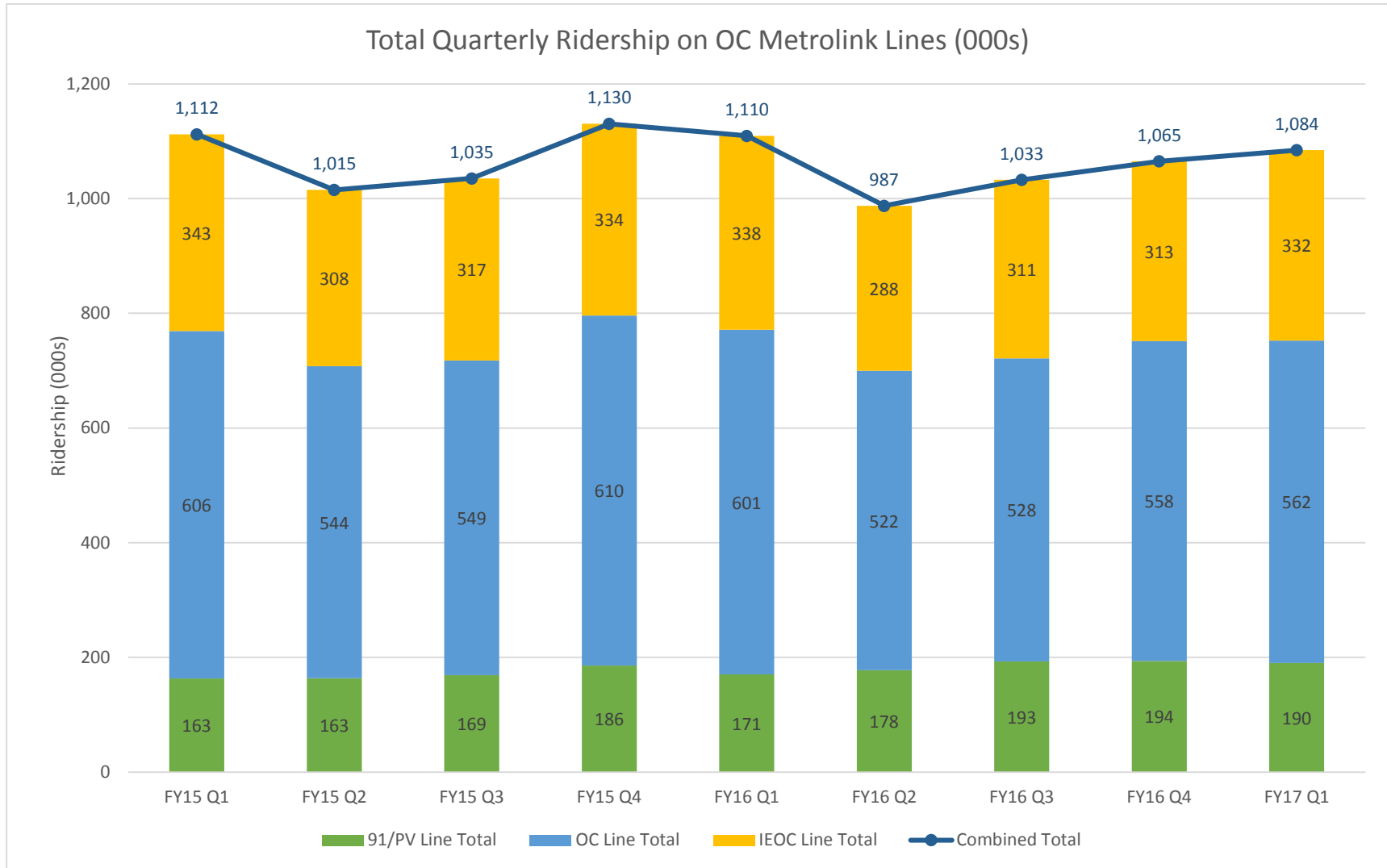
Prepared by:

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Approved by:

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METROLINK RIDERSHIP





COMMITTEE TRANSMITTAL

January 23, 2017

To: Members of the Board of Directors

From: Laurena Weinert,  Clerk of the Board

Subject: Fiscal Year 2015-16 Annual Financial and Agreed-Upon Procedures Reports

Finance and Administration Committee Meeting of January 11, 2017

Present: Directors Do, Hennessey, Jones, Pulido, Spitzer, and Steel

Absent: None

Committee Vote

This item was passed by the Members present.

Director Pulido was not present to vote on this item.

Committee Recommendation

Receive and file the fiscal year 2015-16 annual financial and agreed-upon procedures reports as an information item.

ORANGE COUNTY TRANSPORTATION AUTHORITY

Independent Accountants' Report on
Applying Agreed-Upon Procedures Related To
The Article XIII-B Appropriations Limit Calculation

For the Fiscal Year Ended June 30, 2016



**INDEPENDENT ACCOUNTANTS' REPORT
ON APPLYING AGREED-UPON PROCEDURES RELATED TO
THE ARTICLE XIII-B APPROPRIATIONS LIMIT CALCULATION**

Board of Directors
Orange County Transportation Authority
Orange, California

We have performed the procedures enumerated below to the Appropriations Limit calculation of the Orange County Transportation Authority (OCTA) for the fiscal year ended June 30, 2016. These procedures, which were agreed to by OCTA, were performed solely to assist OCTA in meeting the requirements of Section 1.5 of Article XIII-B of the California Constitution. OCTA's management is responsible for the Appropriations Limit calculation. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures performed and our findings were as follows:

1. We obtained the completed worksheets setting forth the calculations necessary to establish OCTA's appropriations limit and compared the 2015-16 limit and annual adjustment factors included in those worksheets to the limit and annual adjustment factors that were adopted by resolution of OCTA's Board of Directors. We also compared the population and inflation options included in the aforementioned worksheets to those that were selected by a recorded vote of OCTA's Board of Directors.

Finding: No exceptions were noted as a result of our procedures.

2. We added last year's limit to the annual adjustment amount, and compared the resulting amount to the 2015-16 appropriations limit.

Finding: No exceptions were noted as a result of our procedures.

3. We compared the current year information to the worksheets described in No. 1 above and to information provided by the California State Department of Finance.

Finding: No exceptions were noted as a result of our procedures.

4. We agreed the prior year appropriations limit to the prior year appropriations limit adopted by OCTA's Board of Directors.

Finding: No exceptions were noted as a result of our procedures.

We were not engaged to and did not perform an examination, the objective of which would be the expression of an opinion on the Appropriations Limit calculation. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. No procedures have been performed with respect to the determination of the appropriation limit for the base year, as defined by Article XIII-B of the California Constitution.

This report is intended solely for the information and use of OCTA's Board of Directors and management of OCTA and is not intended to be and should not be used by anyone other than those specified parties.



Laguna Hills, California

October 31, 2016

**ORANGE COUNTY LOCAL TRANSPORTATION
AUTHORITY**

Independent Accountants' Report on
Applying Agreed-Upon Procedures Related To
The Article XIII-B Appropriations Limit Calculation

For the Fiscal Year Ended June 30, 2016



**INDEPENDENT ACCOUNTANTS' REPORT
ON APPLYING AGREED-UPON PROCEDURES RELATED TO
THE ARTICLE XIII-B APPROPRIATIONS LIMIT CALCULATION**

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have performed the procedures enumerated below to the Appropriations Limit calculation of the Orange County Local Transportation Authority (OCLTA) for the fiscal year ended June 30, 2016. These procedures, which were agreed to by OCLTA, were performed solely to assist OCLTA in meeting the requirements of Section 1.5 of Article XIII-B of the California Constitution. OCLTA's management is responsible for the Appropriations Limit calculation. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures performed and our findings were as follows:

1. We obtained the completed worksheets setting forth the calculations necessary to establish OCLTA's appropriations limit and compared the 2015-16 limit and annual adjustment factors included in those worksheets to the limit and annual adjustment factors that were adopted by resolution of OCLTA's Board of Directors. We also compared the population and inflation options included in the aforementioned worksheets to those that were selected by a recorded vote of OCLTA's Board of Directors.

Finding: No exceptions were noted as a result of our procedures.

2. We added last year's limit to the annual adjustment amount, and compared the resulting amount to the 2015-16 appropriations limit.

Finding: No exceptions were noted as a result of our procedures.

3. We compared the current year information to the worksheets described in No. 1 above and to information provided by the California State Department of Finance.

Finding: No exceptions were noted as a result of our procedures.

4. We agreed the prior year appropriations limit to the prior year appropriations limit adopted by OCLTA's Board of Directors.

Finding: No exceptions were noted as a result of our procedures.

We were not engaged to and did not perform an examination, the objective of which would be the expression of an opinion on the Appropriations Limit calculation. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. No procedures have been performed with respect to the determination of the appropriation limit for the base year, as defined by Article XIII-B of the California Constitution.

This report is intended solely for the information and use of OCLTA's Board of Directors and management of OCLTA and is not intended to be and should not be used by anyone other than those specified parties.



Laguna Hills, California
October 31, 2016

ORANGE COUNTY TRANSPORTATION AUTHORITY

Agreed-Upon Procedures Performed
With Respect to the National Transit Database Report

For the Period
July 1, 2015 through June 30, 2016



**INDEPENDENT ACCOUNTANTS' REPORT ON
APPLYING AGREED-UPON PROCEDURES**

Board of Directors
Orange County Transportation Authority
Orange, California

The Federal Transit Administration (FTA) has established the following standards with regard to the data reported to it in the Federal Funding Allocation Statistics Form FFA-10 (FFA-10) for the Orange County Transportation Authority (OCTA) annual National Transit Database (NTD) report:

1. A system is in place and maintained for recording data in accordance with NTD definitions. The correct data are being measured and no systematic errors exist.
2. A system is in place to record data on a continuing basis and the data gathering is an ongoing effort.
3. Source documents are available to support the reported data and are maintained for FTA review and audit for a minimum of three years following FTA's receipt of the NTD report. The data are fully documented and securely stored.
4. A system of internal controls is in place to ensure the data collection process is accurate and that the recording system and reported comments are not altered. Documents are reviewed and signed by a supervisor, as required.
5. The data collection methods are those suggested by FTA or meet FTA requirements.
6. The deadhead miles, computed as the difference between the reported total actual vehicle miles data and the reported total actual vehicle revenue miles data, appear to be accurate.
7. Data are consistent with prior reporting periods and other facts known about OCTA's operations.

We have applied the procedures described in Attachment 1 of this report, which were agreed to by OCTA and the FTA and specified in the declarations section of the *2016 Policy Manual*, solely to assist you in evaluating whether OCTA complied with the standards described above and that the information included in the NTD report FFA-10 form for the year ended June 30, 2016, is presented in conformity with the requirements of the *Uniform System of Accounts and Records and Reporting System; Final Rule*, as specified in 49 CFR part 630, *Federal Register*, January 15, 1993 and as presented in the *2016 Policy Manual*. OCTA's management is responsible for OCTA's compliance with those standards and the accuracy of the FFA-10 form.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described in Attachment 1 either for the purpose for which this report has been requested or for any other purpose.

The procedures and findings described in Attachment 1 of this report, which are referenced in order to correspond to the *2016 Policy Manual* procedures, were applied separately to each of the information systems used to develop the reported vehicle revenue miles (VRM), passenger miles (PM), fixed guideway directional route miles (FG DRM), High Intensity Bus Lanes directional route miles (HIB DRM), and operating expenses of OCTA for the year ended June 30, 2016, and for each of the following modes: (1) Motor Bus - directly operated (MBDO), (2) Commuter Bus – directly operated (CBDO), (3) Motor Bus - purchased transportation (MBPT), (4) Commuter Bus – purchased transportation (CBPT), (5) Demand Response - purchased transportation (DRPT), (6) Demand Response – Taxi – purchased transportation (DTPT) and (7) Vanpool Service - purchased transportation (VPPT).

We were not engaged to, and did not, conduct an audit, the objective of which would be the expression of an opinion on compliance with the procedures noted in Exhibit 65 of the NTD *2016 Policy Manual* or on the FFA-10. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of OCTA management, OCTA Board of Directors and the FTA and is not intended to be and should not be used by anyone other than these specified parties.



Laguna Hills, California

October 31, 2016

Excerpt from the FTA 2016 Policy Manual Exhibit 65 - Federal Funding Allocation Data Review Suggested Procedures:

FTA has specified and agreed to a set of procedures for the independent auditor to perform to satisfy the requirements of the Federal Funding Allocation data review. Several of the procedures below require the auditor to select a random sample of documents or data. The procedures do not specify the selected number (i.e., the percentage of the total documents/data). The auditor should use professional judgment to determine the percentage that will enable the auditor to make the required assurances.

The source documents and other records (such as data summaries) may be in the form of digital data files. The auditor should ensure that these files are securely stored and that a contingency plan is in place to ensure that the transit agency retains source documents for a minimum of three years.

- a. The procedures to be applied to each applicable mode and type of service (TOS) (directly-operated (DO) and purchased transportation (PT)) are: Obtain and read a copy of written system procedures for reporting and maintaining data in accordance with NTD requirements and definitions set forth in 49 CFR Part 630, Federal Register, dated January 15, 1993, and as presented in the 2016 Policy Manual. If there are no procedures available, discuss the procedures with the personnel assigned responsibility for supervising the NTD data preparation and maintenance.

Results - We obtained and read a copy of OCTA's Passenger Counting and Reporting (PCR) procedures. Based on our inquiry, we noted that OCTA maintains procedures that satisfy the NTD requirements and definitions set forth in 49 CFR Part 630, Federal Register, January 15, 1993 and as presented in the 2016 Policy Manual.

- b. Discuss the procedures (written or informal) with the personnel assigned responsibility for supervising the preparation and maintenance of NTD data to determine:

- The extent to which the transit agency followed the procedures on a continuous basis, and
- Whether these transit personnel believe such procedures result in accumulation and reporting of data consistent with NTD definitions and requirements set forth in 49 CFR Part 630, Federal Register, dated January 15, 1993, and as presented in the 2016 Policy Manual.

Results - We inquired regarding OCTA's procedures for the MBDO, MBPT, VPPT, DRPT, DTPT, CBDO and CBPT services noting that the asserted procedures were consistently applied. In addition, based on our inquiry with the Business Unit Analyst – Transit Division and the Section Manager – Vanpool Program, management asserted that the procedures resulted in the accumulation and reporting of data consistent with the NTD definitions and requirements set forth in 49 CFR Part 630, Federal Register, January 15, 1993 and as presented in the 2016 Policy Manual.

- c. Ask these same personnel about the retention policy that the transit agency follows as to source documents supporting NTD data reported on the Federal Funding Allocation Statistics form.

Results - We inquired with the Business Unit Analyst – Transit Division and the Section Manager – Vanpool Program, regarding OCTA's retention policy for source documents supporting NTD data reported on the Federal Funding Allocation Statistics form. Per inquiry, the current practice is to retain electronic data for seven years.

- d. Based on a description of the transit agency's procedures from items (A) and (B) above, identify all the source documents that the transit agency must retain for a minimum of three years. For each type of source document, select three months out of the year and determine whether the document exists for each of these periods.

Results - We inspected the following source documents for each type of service, selected three months out of the year and determined that the documents existed for each of these periods:

<i>Type of Service</i>	<i>Source Document</i>	<i>Months Tested</i>
<i>MBDO</i>	<ul style="list-style-type: none"> • <i>MBDO Statistics Reports (queried from Data Warehouse)</i> • <i>Random Sampling Database</i> • <i>Trip Sheets</i> • <i>NTD Data Worksheets</i> • <i>HASTUS Summaries by Route</i> 	<ul style="list-style-type: none"> • <i>August 2015, December 2015 and March 2016.</i> • <i>Three years of data were noted to be archived on OCTA's network.</i>
<i>CBDO</i>	<ul style="list-style-type: none"> • <i>CBDO Statistics Reports (queried from Data Warehouse)</i> • <i>Random Sampling Database</i> • <i>Trip Sheets</i> • <i>NTD Data Worksheets</i> • <i>HASTUS Summaries by Route</i> 	<ul style="list-style-type: none"> • <i>August 2015, December 2015 and March 2016.</i> • <i>Three years of data were noted to be archived on OCTA's network.</i>
<i>MBPT</i>	<ul style="list-style-type: none"> • <i>MBPT Statistics Reports (queried from Data Warehouse)</i> • <i>Random Sampling Database</i> • <i>Trip Sheets</i> • <i>NTD Data Worksheets</i> • <i>HASTUS Summaries by Route</i> 	<ul style="list-style-type: none"> • <i>August 2015, December 2015 and March 2016.</i> • <i>Three years of data were noted to be archived on OCTA's network.</i>
<i>CBPT</i>	<ul style="list-style-type: none"> • <i>CBPT Statistics Reports (queried from Data Warehouse)</i> • <i>Random Sampling Database</i> • <i>Trip Sheets</i> • <i>NTD Data Worksheets</i> • <i>HASTUS Summaries by Route</i> 	<ul style="list-style-type: none"> • <i>August 2015, December 2015 and March 2016.</i> • <i>Three years of data were noted to be archived on OCTA's network.</i>
<i>DRPT</i>	<ul style="list-style-type: none"> • <i>Contractor Provided NTD Program Data reports</i> • <i>Driver Manifests</i> • <i>Passenger and Mileage Summaries from Trapeze database</i> 	<ul style="list-style-type: none"> • <i>August 2015, December 2015 and March 2016.</i> • <i>Three years of data were noted to be archived on OCTA's network.</i>
<i>DTPT</i>	<ul style="list-style-type: none"> • <i>Contractor Provided NTD Program Data reports</i> • <i>Passenger and Mileage Summaries from Trapeze database</i> 	<ul style="list-style-type: none"> • <i>August 2015, December 2015 and March 2016.</i> • <i>Three years of data were noted to be archived on OCTA's network.</i>
<i>VPPT</i>	<ul style="list-style-type: none"> • <i>Detail and Summary Reports from Data Warehouse</i> • <i>Rider Log-in Website</i> 	<ul style="list-style-type: none"> • <i>August 2015, December 2015 and March 2016.</i> • <i>Three years of data were noted to be archived on OCTA's network.</i>

- e. Discuss the system of internal controls. Inquire whether separate individuals (independent of the individuals preparing source documents and posting data summaries) review the source documents and data summaries for completeness, accuracy, and reasonableness and how often these individuals perform such reviews.

Results - We inquired regarding the system of internal controls noting that each respective mode/type of service is being reviewed by personnel independent of the preparation process. The review is performed monthly for all modes with a second review performed quarterly for the MBDO, MBPT, CBDO, CBPT, DRPT and DTPT modes and monthly for the VPPT mode.

- f. Select a random sample of the source documents and determine whether supervisors' signatures are present as required by the system of internal controls. If supervisors' signatures are not required, inquire how personnel document supervisors' reviews.

Results - We selected a random sample of 40 Random Check Trip Sheets for the MBDO and MBPT services, 10 Random Check Trip Sheets for the CBDO and CBPT services, and 40 random sample Drivers Manifests for the DRPT service and noted supervisory signatures documenting reviews of the data presented without exception. For DTPT and VPPT, we noted supervisory signatures on the source documents which were in electronic format without exception.

- g. Obtain the worksheets used to prepare the final data that the transit agency transcribes onto the Federal Funding Allocation Statistics form. Compare the periodic data included on the worksheets to the periodic summaries prepared by the transit agency. Test the arithmetical accuracy of the summaries.

Results - We obtained the worksheets utilized by OCTA to transcribe statistics to the Federal Funding Allocation Statistics form and compared the data to summaries without exception. We tested the arithmetical accuracy of the summaries without exception.

- h. Discuss the procedure for accumulating and recording passenger miles traveled (PMT) data in accordance with NTD requirements with transit agency staff. Inquire whether the procedure is one of the methods specifically approved in the 2016 Policy Manual.

Results – Sampling was conducted for the MBDO, MBPT, CBDO and CBPT modes. We reviewed the sampling methodologies and noted that the sampling methodology used met the requirements of the 2016 Policy Manual.

The remaining 3 modes of services do not involve sampling. These modes use a 100% count of actual PM and compilations of actual Revenue Miles which is in accordance with the 2016 Policy Manual.

- i. Discuss with transit agency staff (the auditor may wish to list the titles of the persons interviewed) the transit agency's eligibility to conduct statistical sampling for PMT data every third year. Determine whether the transit agency meets NTD criteria that allow transit agencies to conduct statistical samples for accumulating PMT data every third year rather than annually. Specifically:

- According to the 2010 Census, the public transit agency serves an UZA with a population less than 500,000.
- The public transit agency directly operates fewer than 100 revenue vehicles in all modes in annual maximum revenue service (VOMS) (in any size UZA).
- Service purchased from a seller is included in the transit agency's NTD report.
- For transit agencies that meet one of the above criteria, review the NTD documentation for the most recent mandatory sampling year (2014) and determine that statistical sampling was conducted and meets the 95 percent confidence and ± 10 percent precision requirements.
- Determine how the transit agency estimated annual PMT for the current report year.

Results – OCTA did not meet the criteria above. Therefore the procedure identified above is not applicable.

- j. Obtain a description of the sampling procedure for estimation of PMT data used by the transit agency. Obtain a copy of the transit agency's working papers or methodology used to select the actual sample of runs for recording PMT data. If the transit agency used average trip length, determine that the universe of runs was the sampling frame. Determine that the methodology used to select specific runs from the universe resulted in a random selection of runs. If the transit agency missed a selected sample run, determine that a replacement sample run was random. Determine that the transit agency followed the stated sampling procedure.

Results – For the MBDO, MBPT, CBDO and CBPT modes we obtained a copy of OCTA's methodology used in the statistical sampling to estimate Average Passenger Miles (PM) and determined that the methodology used by OCTA resulted in a random selection of runs and that the stated sampling procedure was followed in accordance with the National Transit Database Sampling Manual.

- k. Select a random sample of the source documents for accumulating PMT data and determine that the data are complete (all required data are recorded) and that the computations are accurate. Select a random sample of the accumulation periods and re-compute the accumulations for each of the selected periods. List the accumulation periods that were tested. Test the arithmetical accuracy of the summary.

Results - For MBDO we randomly selected 40 surveyed routes from August 2015, December 2015 and March 2016. We verified the mathematical accuracy of the survey count sheets and that the data was properly input to the accumulation worksheet designed to perform the Average PM calculation. No exceptions were noted.

For MBPT we randomly selected 40 surveyed routes from August 2015, December 2015 and March 2016. We verified the mathematical accuracy of the survey count sheets and that the data was properly input to the accumulation worksheet designed to perform the Average PM calculation. No exceptions were noted.

For CBDO we randomly selected 10 surveyed routes from August 2015, December 2015 and March 2016. We verified the mathematical accuracy of the survey count sheets and that the data was properly input to the accumulation worksheet designed to perform the Average PM calculation. No exceptions were noted.

For CBPT we randomly selected 10 surveyed routes from August 2015, December 2015 and March 2016. We verified the mathematical accuracy of the survey count sheets and that the data was properly input to the accumulation worksheet designed to perform the Average PM calculation. No exceptions were noted.

For DRPT and DTPT modes, we tested contractors providing more than 90% of the services. For these contractors we selected 40 routes performed during August 2015, December 2015 and March 2016 and compared the PM reported against the signed driver manifests without exception.

For VPPT, we compared ridership being entered on the Vanpool internet database for August 2015, December 2015 and March 2016 against amounts uploaded to the Data Warehouse without exception. We also tested the revenue miles reported for 40 Vanpool trips and verified the accuracy of calculations used to determine PM without exception.

- l. Discuss the procedures for systematic exclusion of charter, school bus, and other ineligible vehicle miles from the calculation of actual vehicle revenue miles with transit agency staff and determine that they follow the stated procedures. Select a random sample of the source documents used to record charter and school bus mileage and test the arithmetical accuracy of the computations.

Results - The procedure identified above is not applicable. Per inquiry with OCTA's management, OCTA did not provide charter or school bus services.

- m. For actual vehicle revenue mile (VRM) data, document the collection and recording methodology and determine that deadhead miles are systematically excluded from the computation. This is accomplished as follows:
 - If actual VRMs are calculated from schedules, document the procedures used to subtract missed trips. Select a random sample of the days that service is operated, and re-compute the daily total of missed trips and missed VRMs. Test the arithmetical accuracy of the summary.

Results – For the MBDO, CBDO, MBPT and CBPT modes, OCTA calculated missed hours of service rather than missed trips. This resulted in a Total Actual Revenue Vehicle Hours (RVH) by mode as a percentage of Monthly Total Scheduled VRM calculation, which is computed by dividing the number of service hours actually operated by the number of service hours scheduled. This percentage is applied to scheduled VRMs to determine the number of VRMs actually operated and the number of missed VRMs. We selected a sample of four routes, recalculated the VRMs and compared them to amounts used in the total VRM without exception. We recalculated the percentage of actual revenue hours over the scheduled revenue hours used to determine the missed VRM, without exception.

- If actual VRMs are calculated from hubodometers, document the procedures used to calculate and subtract deadhead mileage. Select a random sample of the hubodometer readings and determine that the stated procedures for hubodometer deadhead mileage adjustments are applied as prescribed. Test the arithmetical accuracy of the summary of intermediate accumulations.

Results - This procedure is not applicable.

- If actual VRMs are calculated from vehicle logs, select random samples of the vehicle logs and determine that the deadhead mileage has been correctly computed in accordance with FTA definitions.

Results - For the DRPT mode, Revenue Miles are calculated based on the odometer readings from the first pickup to the last drop off. Deadhead miles are excluded from the Revenue Miles calculations. We randomly selected 30 trips to test and noted without exception that the deadhead miles are not included in the Revenue Miles calculations.

For the DTPT mode, the Revenue Miles are calculated by the contractors based on pick up and drop off data entered into the scheduling software. The Revenue Miles data is uploaded to the OCTA database and compared to the scheduling data for quality assurance. There are no deadhead miles since these are non-dedicated taxi trips and accordingly Revenue Miles for each trip are recorded.

For the VPPT mode deadhead miles are automatically excluded because only commute miles are entered into the calculation of Revenue Miles and the results are reviewed by the Section Manager – Vanpool Program.

- n. For rail modes, review the recording and accumulation sheets for actual VRMs and determine that locomotive miles are not included in the computation.

Results - The procedure identified above is not applicable as OCTA does not provide rail service.

- o. If fixed guideway or High Intensity Busway directional route miles (FG or HIB DRM) are reported, interview the person responsible for maintaining and reporting NTD data whether the operations meet FTA definition of fixed guideway (FG) or High Intensity Busway (HIB) in that the service is:
- Rail, trolleybus (TB), ferryboat (FB), or aerial tramway (TR); or
 - Bus (MB, CB, or RB) service operating over exclusive or controlled access rights-of-way (ROW); and
 - i. Access is restricted;
 - ii. Legitimate need for restricted access is demonstrated by peak period level of service or worse on a parallel adjacent highway;
 - iii. Restricted access is enforced for freeways; priority lanes used by other high occupancy vehicles (HOV) (i.e., vanpools (VP), carpools) must demonstrate safe operation; and
 - iv. High Occupancy/Toll (HO/T) lanes meet FHWA requirements for traffic flow and use of toll revenues. The transit agency has provided the NTD a copy of the State's certification to the U.S. Secretary of Transportation stating that it has established a program for monitoring, assessing, and reporting on the operation of the HOV facility with HO/T lanes.

Results – We interviewed the Business Unit Analyst – Transit Division and determined that OCTA's Motor Bus services operate over HIB lanes that appear consistent with the FTA's definition of High Intensity Bus lanes.

- p. Discuss the measurement of FG and HIB DRM with the person reporting NTD data and determine that the he or she computed mileage in accordance with FTA definitions of FG/HIB and DRM. Inquire of any service changes during the year that resulted in an increase or decrease in DRMs. If a service change resulted in a change in overall DRMs, re-compute the average monthly DRMs, and reconcile the total to the FG/HIB DRM reported on the Federal Funding Allocation Statistics form.

Results – We determined that the mileage was computed in accordance with the FTA definitions of FG/HIB DRM. Per inquiry we determined that there was an increase in DRMs for the CBPT mode. We recomputed the average monthly DRM for all reported segments and reconciled the total to the HIB DRM without exception.

- q. Inquire if any temporary interruptions in transit service occurred during the report year. If these interruptions were due to maintenance or rehabilitation improvements to a FG segment(s), the following apply:

- Report DRMs for the segment(s) for the entire report year if the interruption is less than 12 months in duration. Report the months of operation on the FG/HIB segments form as 12. The transit agency should document the interruption.
- If the improvements cause a service interruption on the FG/HIB DRMs lasting more than 12 months, the transit agency should contact its NTD validation analyst to discuss. FTA will make a determination on how to report the DRMs.

Results – Per inquiry with the Business Unit Analyst – Transit Division there were no temporary interruptions in transit service during the report year.

- r. Measure FG/HIB DRM from maps or by retracing route.

Results - We recalculated the length of all High Intensity Bus directional routes for both MBDO, MBPT, CBDO and CBPT modes of service using publicly available maps without exception.

- s. Discuss whether other public transit agencies operate service over the same FG/HIB as the transit agency. If yes, determine that the transit agency coordinated with the other transit agency (or agencies) such that the DRMs for the segment of FG/HIB are reported only once to the NTD on the Federal Funding Allocation form. Each transit agency should report the actual VRM, PMT, and OE for the service operated over the same FG/HIB.

Results - We interviewed the Business Unit Analyst – Transit Division and noted that OCTA does share some High Intensity Lanes. However, the shared High Intensity Lanes were noted as claimed by the proper agency per the NTD annual reporting manual, and not by OCTA.

- t. Review the FG/HIB segments form. Discuss the Agency Revenue Service Start Date for any segments added in the 2016 report year with the persons reporting NTD data. This is the commencement date of revenue service for each FG/HIB segment. Determine that the date reported is the date that the agency began revenue service. This may be later than the Original Date of Revenue Service if the transit agency is not the original operator. If a segment was added for the 2016 report year, the Agency Revenue Service Date must occur within the transit agency's 2016 fiscal year. Segments are grouped by like characteristics. Note that for apportionment purposes, under the State of Good Repair (§5337) and Bus and Bus Facilities (§5339) programs, the 7-year age requirement for fixed guideway/High Intensity Busway segments is based on the report year when the segment is first reported by any NTD transit agency. This pertains to segments reported for the first time in the current report year. Even if a transit agency can document an Agency Revenue Service Start Date prior to the current NTD report year, FTA will only consider segments continuously reported to the NTD.

Results - We obtained the HIB segments form noting the High Intensity segments and dates. It was noted that OCTA added new segments to the CBPT mode during the year. Per inquiry with the Business Unit Analyst – Transit Division, the segments added to the form during the year were based on the inception of revenue service. No exceptions noted.

- u. Compare operating expenses with audited financial data after reconciling items are removed.

Results - Operating expenses were compared to the trial balances subject to audit without exception.

- v. If the transit agency purchases transportation services, interview the personnel reporting the NTD data on the amount of PT-generated fare revenues. The PT fare revenues should equal the amount reported on the Contractual Relationship form.

Results - We identified the PT fare revenues reported on the Contractual Relationship form and reconciled the amounts to the general ledger without exception.

- w. If the transit agency's report contains data for PT services and assurances of the data for those services are not included, obtain a copy of the IAS-FFA regarding data for the PT service. Attach a copy of the statement to the report. Note as an exception if the transit agency does not have an Independent Auditor Statement for the PT data.

Results – The data for purchased transportation and all assurances of the data for those services are included in the reporting by OCTA and therefore no IAS for the purchased transportation services is required.

- x. If the transit agency purchases transportation services, obtain a copy of the PT contract and determine that the contract specifies the public transportation services to be provided; the monetary consideration obligated by the transit agency or governmental unit contracting for the service; the period covered by the contract (and that this period overlaps the entire, or a portion of, the period covered by the transit agency's NTD report); and is signed by representatives of both parties to the contract. Interview the person responsible for retention of the executed contract, and determine that copies of the contracts are retained for three years.

Results - We inspected the MBPT, CBPT, DRPT, DTPT and VPPT service contracts and determined that they contained the items noted above without exception. We inquired with the Business Unit Analyst – Transit Division and the Section Manager – Vanpool Program, regarding OCTA's retention policy for executed contracts for purchased transportation programs. Per inquiry, the current practice is to retain contracts for seven years.

- y. If the transit agency provides service in more than one UZA, or between an UZA and a non-UZA, inquire of the procedures for allocation of statistics between UZAs and non- UZAs. Obtain and review the FG segment worksheets, route maps, and urbanized area boundaries used for allocating the statistics, and determine that the stated procedure is followed and that the computations are correct.

Results - OCTA provides services in more than one UZA but does not provide services to non urbanized areas. Allocations to urbanized areas are based on trip pattern analysis. The number of yearly trips per pattern is multiplied by the number of miles determined for each UZA. Eight allocations were tested for the MBDO, MBPT, CBDO and CBPT services without exception.

- z. Compare the data reported on the Federal Funding Allocation Statistics Form to data from the prior report year and calculate the percentage change from the prior year to the current year. For actual VRM, PMT or OE data that have increased or decreased by more than 10 percent, or FG DRM data that have increased or decreased. Interview transit agency management regarding the specifics of operations that led to the increases or decreases in the data relative to the prior reporting period.

Results – The following fluctuations were noted on the FFA-10 Form:

- A 16.7% decrease in Passenger Miles for MBDO
- A 19.0% increase in Revenue Miles for MBPT
- A 16.0% increase in Passenger Miles for MBPT
- A 24.4% increase in Operating Expenses for MBPT
- A 26.4% decrease in Operating Expenses for CBDO
- A 20.0% decrease in Operating Expenses for CBPT
- A 10.0% increase in Operating Expenses for DRPT
- A 13.1% increase in Revenue Miles for DTPT
- A 12.8% increase in Passenger Miles for DTPT

- A 27.2% increase in Operating Expenses for DTPT
- A 12.5% increase in Operating Expenses for VPPT

A 16.7% decrease in the Passenger Miles for MBDO was noted. Per inquiry with the Section Manager – Transit Program Controls, this is the result of the governing board’s decision to transition bus services to a contractor.

A 19.0% increase in Revenue Miles, a 16.0% increase in Passenger Miles and a 24.4% increase in Operating Expenses for MBPT were noted. These are also the result of the governing board’s decision to move bus services from being directly operated by OCTA to a contractor.

A 26.4% decrease in Operating Expenses for CBDO was noted. Per inquiry with the Section Manager – Transit Program Controls, this is the result of the governing board’s decision to transition commuter bus services to a contractor.

A 20.0% decrease in Operating Expenses for CBPT was noted. Per inquiry with the Section Manager – Transit Program Controls, this is the result from both a change in service provider reducing variable costs and the exclusion of OCTA’s subsidy for the operation of the Riverside Transit Agency from the CBPT operating expenses.

A 10.0% increase in Operating Expenses for DRPT was noted. Per inquiry with the Section Manager – Transit Program Controls, this is the result of a change in the cost allocation method and an increase in liability insurance costs.

A 13.1% increase in Revenue Miles, a 12.8% increase in Passenger Miles and a 27.2% increase in Operating Expenses for DTPT were noted. Per inquiry with the Section Manager – Transit Program Controls, this is the result of an increase in ridership due to the popularity of the service.

A 12.5% increase in Operating Expenses for VPPT was noted. Per inquiry with the Section Manager – Vanpool Program, this is the result of an increase in participation in the Vanpool program.

- aa. The auditor should document the specific procedures followed, documents reviewed, and tests performed in the work papers. The work papers should be available for FTA review for a minimum of three years following the NTD report year. The auditor may perform additional procedures, which are agreed to by the auditor and the transit agency, if desired. The auditor should clearly identify the additional procedures performed in a separate attachment to the statement as procedures that were agreed to by the transit agency and the auditor but not by FTA.

Results – We have documented the procedures followed based on the FTA 2016 Policy Manual Exhibit 65 - Federal Funding Allocation Data Review - Suggested Procedures, and noted the documents reviewed and tests performed in our workpapers. Additional procedures were not performed.



January 11, 2017

To: Finance and Administration Committee

From: Darrell Johnson, Chief Executive Officer 
Janet Sutter, Executive Director 
Internal Audit Department

Subject: Fiscal Year 2015-16 Annual Financial and Agreed-Upon Procedures Reports

Overview

The Orange County Transportation Authority is required to obtain an independent auditor's opinion on various financial statements. Vavrinek, Trine, Day & Company, LLP, an independent accounting firm, has completed its annual audits of the Orange County Transportation Authority and related entities for the fiscal year 2015-16. Additionally, reports have been issued on the results of agreed-upon procedures applied to determine compliance with certain state, federal, and local requirements. All reports are included herewith.

Recommendation

Receive and file the fiscal year 2015-16 annual financial and agreed-upon procedures reports as an information item.

Background

Pursuant to Section 28770 of the Public Utilities Code, the Orange County Transportation Authority (OCTA) prepares an annual set of financial statements presenting OCTA's results of operations and financial position at fiscal year-end. The financial statements are included in OCTA's Comprehensive Annual Financial Report (CAFR), which was presented to the Board of Directors on November 23, 2016. In connection with the preparation of the CAFR, Vavrinek, Trine, Day & Company, LLP (VTD) also provides opinions on other financial reports of OCTA.

The audits were performed under current accounting and auditing standards, including generally accepted auditing standards, the standards set forth for

financial audits in the Government Accountability Office's *Government Auditing Standards*, the provisions of the federal Single Audit Act of 1984 (as amended) and the United States Office of Management and Budget Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*, as well as the following additional requirements, where applicable:

- *State of California Transportation Development Act*, including the requirements of the *Southern California Association of Governments' Transportation Development Act Conformance Auditing Guide*;
- *Renewed Measure M Transportation Investment Plan*;
- *Special District and Transit District Reporting Requirements*, as specified by the California State Controller; and
- *Section 1.5 of Article XIII B of the California Constitution*, with procedures specified by the League of California Cities in *Article XIII B Appropriations Limitation Uniform Guidelines*

Discussion

VTD has completed its annual financial audits and has issued independent auditor opinions for the fiscal year ended June 30, 2016. In addition, results of certain agreed-upon procedures reviews are presented. Reports are included as Attachments A through J.

There were no recommendations resulting from the procedures performed.

Summary

VTD has audited OCTA's CAFR for the fiscal year ended June 30, 2016, and has issued an unmodified opinion thereon. VTD has also issued unmodified opinions on various other financial statements, which are attached hereto. No findings or recommendations were included in these reports.

Attachments

- A. Orange County Transportation Authority Single Audit Report on Federal Awards Year Ended June 30, 2016
- B. Orange County Local Transportation Authority (A Component Unit of the Orange County Transportation Authority) Annual Financial and Compliance Report Year Ended June 30, 2016
- C. Orange County Transportation Authority Local Transportation Fund Financial Statements Year Ended June 30, 2016
- D. Orange County Transportation Authority State Transit Assistance Fund Financial Statements Year Ended June 30, 2016
- E. Orange County Transportation Authority Independent Auditors' Report on Proposition 1B and Transportation Development Act Year Ended June 30, 2016
- F. Orange County Local Transportation Authority Report on Agreed-Upon Procedures Applied to Measure M2 Status Report Year Ended June 30, 2016
- G. Orange County Transportation Authority Independent Accountants' Report on Agreed-Upon Procedures Performed with Respect to the Treasury Department Year Ended June 30, 2016
- H. Orange County Transportation Authority Independent Accountants' Report on Applying Agreed-Upon Procedures Related to the Article XIII-B Appropriations Limit Calculation For the Fiscal Year Ended June 30, 2016
- I. Orange County Local Transportation Authority Independent Accountants' Report on Applying Agreed-Upon Procedures Related to the Article XIII-B Appropriations Limit Calculation For the Fiscal Year Ended June 30, 2016
- J. Orange County Transportation Authority Agreed-Upon Procedures Performed With Respect to the National Transit Database Report For the Period July 1, 2015 through June 30, 2016

Prepared by:



Janet Sutter
Executive Director, Internal Audit
714-560-5591

**ORANGE COUNTY
TRANSPORTATION AUTHORITY**

Single Audit Report on
Federal Awards

Year Ended June 30, 2016

ORANGE COUNTY TRANSPORTATION AUTHORITY

Single Audit Report on Federal Awards

Year Ended June 30, 2016

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**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING
STANDARDS, THE TRANSPORTATION DEVELOPMENT ACT, CALIFORNIA
GOVERNMENT CODE §8879.50, AND STATE SENATE BILL 88 (2007)**

Board of Directors
Orange County Transportation Authority
Orange, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise OCTA's basic financial statements, and have issued our report thereon dated October 31, 2016. Our report included an emphasis-of-matter regarding OCTA's adoption of Government Accounting Standards Board (GASB) Statement No. 72 – *Fair Value Measurement and Application*, and GASB Statement No. 82 – *Pension Issues, an amendment of GASB Statements No. 67, No. 68, and No. 73*, effective July 1, 2015.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered OCTA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of OCTA's internal control. Accordingly, we do not express an opinion on the effectiveness of OCTA's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether OCTA's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, including the applicable provisions of Section 6667 of Title 21 of the California Code of Regulations, California Government Code §8879.50 and California State Senate Bill 88 (2007), et seq., noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*, Section 6667 of Title 21 of the California Code of Regulations, California Government Code §8879.50 and California State Senate Bill 88 (2007), et seq.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Laguna Hills, California
October 31, 2016



**INDEPENDENT AUDITORS' REPORT ON COMPLIANCE FOR EACH MAJOR PROGRAM;
REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON THE SCHEDULE OF
EXPENDITURES OF FEDERAL AWARDS REQUIRED BY THE UNIFORM GUIDANCE**

Board of Directors
Orange County Transportation Authority
Orange, California

Report on Compliance for Each Major Federal Program

We have audited the Orange County Transportation Authority's (OCTA) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of OCTA's major federal programs for the year ended June 30, 2016. OCTA's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for each of OCTA's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about OCTA's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of OCTA's compliance.

Opinion on Each Major Federal Program

In our opinion, OCTA complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2016.

Report on Internal Control over Compliance

Management of OCTA is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered OCTA's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of OCTA's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of OCTA, as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise OCTA's basic financial statements. We issued our report thereon dated October 31, 2016, which contained unmodified opinions on those financial statements. Our report included an emphasis-of-matter regarding OCTA's adoption of Government Accounting Standards Board (GASB) Statement No. 72 – *Fair Value Measurement and Application*, and GASB Statement No. 82 – *Pension Issues, an amendment of GASB Statements No. 67, No. 68, and No. 73*, effective July 1, 2015. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the basic financial statements as a whole.



Laguna Hills, California
December 19, 2016

ORANGE COUNTY TRANSPORTATION AUTHORITY

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2016**

Federal Grantor/Pass-Through Grantor/ Program or Cluster Title	Federal CFDA Number	Grant/ Pass-Through Identification Number	Federal Expenditures	Passed Through to Subrecipients
<u>U.S. Department of Transportation</u>				
Direct grants:				
Federal Transit Cluster:				
Federal Transit - Capital Investments Grants	20.500	CA-03-0754	\$ 16,099	\$ -
Federal Transit - Capital Investments Grants	20.500	CA-04-0078	1,069	1,069
Federal Transit - Capital Investments Grants	20.500	CA-04-0181	8,655	-
Federal Transit - Capital Investments Grants	20.500	CA-04-0122	34,623	25,778
Federal Transit - Capital Investments Grants	20.500	CA-04-0251	123,484	-
Federal Transit - Capital Investments Grants	20.500	CA-05-0269	537,793	-
Federal Transit - Capital Investments Grants	20.500	CA-55-0003	624,899	663,018
Total Federal Transit Capital Investments Grants			<u>1,346,622</u>	<u>689,865</u>
Federal Transit - Formula Grants	20.507	CA-90-Y860	3,506,628	689,022
Federal Transit - Formula Grants	20.507	CA-90-Y942	2,093,815	246,822
Federal Transit - Formula Grants	20.507	CA-90-Z027	2,000,486	16,069
Federal Transit - Formula Grants	20.507	CA-90-Z174	1,163,929	-
Federal Transit - Formula Grants	20.507	CA-95-X131	256,613	-
Federal Transit - Formula Grants	20.507	CA-95-X180	352,356	330,154
Federal Transit - Formula Grants	20.507	CA-95-X188	15,736,588	-
Federal Transit - Formula Grants	20.507	CA-95-X195	310,919	-
Federal Transit - Formula Grants	20.507	CA-95-X210	2,341,833	-
Federal Transit - Formula Grants	20.507	CA-95-X213	1,397,521	-
Federal Transit - Formula Grants	20.507	CA-95-X254	510,074	-
Federal Transit - Formula Grants	20.507	CA-95-X262	1,750,497	-
Federal Transit - Formula Grants	20.507	CA-95-X286	1,816,063	1,475,063
Federal Transit - Formula Grants	20.507	CA-2016-032-00	43,548,590	1,849,431
Federal Transit - Formula Grants	20.507	CA-2016-116-00	11,591,859	-
Federal Transit - Formula Grants	20.507	N/A	4,427	-
Total Federal Transit Capital Formula Grants			<u>88,382,198</u>	<u>4,606,561</u>
Bus and Bus Facilities Formula Program	20.526	CA-34-0019	(1,602,821)	-
Bus and Bus Facilities Formula Program	20.526	CA-2016-031-00	5,965,487	-
Total Bus and Facilities Formula Program			<u>4,362,666</u>	<u>-</u>
Total Federal Transit Cluster			<u>94,091,486</u>	<u>5,296,426</u>
Transit Services Programs Cluster:				
Job Access Reverse Commute Program	20.516	CA-37-X113	1,188,730	525,674
New Freedom Program	20.521	CA-57-X038	335,229	312,325
Total Transit Services Programs Cluster			<u>1,523,959</u>	<u>837,999</u>

Continued on the next page

See Note to Schedule of Expenditures of Federal Awards.

ORANGE COUNTY TRANSPORTATION AUTHORITY

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2016 (continued)**

Federal Grantor/Pass-Through Grantor/ Program or Cluster Title	Federal CFDA Number	Grant/ Pass-Through Identification Number	Federal Expenditures	Passed Through to Subrecipients
<u>U.S. Department of Transportation (continued)</u>				
Passed Through California Department of Transportation:				
Highway Planning and Construction Cluster:				
Highway Planning and Construction:				
Tustin Rose RSTP	20.205	STPL-6071-(061)	\$ 4,078,795	\$ -
Sand Canyon Grade Separation RSTP	20.205	STPL-6071-(059)	134,623	-
I-5 from North I-405 to SR55	20.205	STPLN-6071-(093)	634,529	-
SR-91, SR-57 to SR-55	20.205	STPLN-6071-(096)	641,233	-
I-5 Widening from Oso Creek to Alicia Pkwy, Seg. 2	20.205	STPLN-6071-(102) RSTP	4,911,599	-
I-5 Widening from SR-76 to Oso Pkwy, Seg. 1	20.205	STPLN-6071-(103) RSTP	3,583,482	-
I-5 Widening from Alicia Pkwy to El Toro Rd., Seg. 3	20.205	STPLN-6071-(104) RSTP	2,896,336	-
I-405, I-5 to SR-55	20.205	STPLN-6071-(105) RSTP	2,127,886	-
SR 22 from I-405 to SR 55	20.205	CMLN-6071(035)	2,245	-
Beach Blvd @ I-405 Interchange	20.205	CMLN-6071(041)	74,921	-
I-405 only	20.205	CMLN-6071(043)	2,663,573	-
Kraemer Grade Sep	20.205	CMLN-6071(051)	(1,220,876)	-
Orangethorpe Grade Sep	20.205	CMLN-6071(060)	6,291,527	-
Lakeview Grade Sep	20.205	CMLN-6071(066)	3,253,656	-
I-5 from Ave Pico to South of Vista Hermosa	20.205	CMLN-6071(071)	1,808,372	-
I-5 from Vista Hermosa to PCH	20.205	CMLN-6071(072)	264,641	-
I-5 from PCH to San Juan Creek Road	20.205	CMLN-6071(073)	189,501	-
I-5 from SR 55 to SR 57	20.205	CMLN-6071(108)	1,171,505	-
I-5 from Orange/San Diego County line to Avenida Pico	20.205	CMLN-6071(112)	17,690	-
Total Highway Planning and Construction Cluster			<u>33,525,238</u>	<u>-</u>
PCH Corridor Study	20.Unknown	SLPP-6071(079)	(38,049)	-
Total U.S. Department of Transportation			<u>129,102,634</u>	<u>6,134,425</u>
<u>U.S. Department of Homeland Security</u>				
Direct grants:				
Office of Security Operations:				
National Explosives Detection Canine Team Program	97.072	N/A	166,274	-
Rail and Transit Security Grant Program (TSGP):				
Security & Emergency Mgmt Training (2014 TSGP)	97.075	N/A	461,411	-
Total U.S. Department of Homeland Security			<u>627,685</u>	<u>-</u>
Total Expenditures of Federal Awards			<u>\$ 129,730,319</u>	<u>\$ 6,134,425</u>

See Note to Schedule of Expenditures of Federal Awards.

ORANGE COUNTY TRANSPORTATION AUTHORITY

**NOTE TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2016**

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES APPLICABLE TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

A. Scope of Presentation

The accompanying schedule presents only the expenditures incurred by OCTA that are reimbursable under federal programs of federal financial assistance. For the purposes of this schedule, federal financial assistance includes both federal financial assistance received directly from a federal agency, as well as federal funds received indirectly by OCTA from a non-federal agency or other organization. Only the portion of program expenditures reimbursable with such federal funds is reported in the accompanying schedule. The information in this schedule is presented in accordance with the requirements of Title 2 U.S. code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Program expenditures in excess of the maximum federal reimbursement authorized or the portion of the program expenditures that were funded with state, local or other non-federal funds are excluded from the accompanying schedule. Negative amounts shown on the schedule represent adjustments or credits made in the normal course of business to amounts reported as expenditures in prior years.

B. Basis of Accounting

Funds received under the various grant programs have been recorded within the general fund, special revenue, capital projects and enterprise funds of OCTA. OCTA utilizes the modified accrual method of accounting for governmental funds. The accrual basis of accounting is used for the enterprise funds. The accompanying Schedule of Expenditures of Federal Awards has been prepared accordingly.

C. Relationship to Federal Reports

Amounts reported in the accompanying Schedule of Expenditures to Federal Awards agree with the amounts reported in the related federal financial reports. However, certain timing differences may exist in the recognition of revenues and expenses/expenditures between the Schedule of Expenditures of Federal Awards and the federal financial reports.

D. Indirect Cost Rate

OCTA has elected not to use the 10-percent de minimis indirect cost rate as allowed under the Uniform Guidance.

ORANGE COUNTY TRANSPORTATION AUTHORITY

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED JUNE 30, 2016**

I. SUMMARY OF AUDITORS' RESULTS

FINANCIAL STATEMENTS

Type of auditors' report issued on whether the financial statements audited were prepared in accordance with GAAP:	<u>Unmodified</u>
Internal control over financial reporting:	
Material weakness(es) identified?	<u>No</u>
Significant deficiency(ies) identified?	<u>None reported</u>
Noncompliance material to financial statements noted?	<u>No</u>

FEDERAL AWARDS

Internal control over major federal programs:	
Material weakness(es) identified?	<u>No</u>
Significant deficiency(ies) identified?	<u>None reported</u>
Type of auditors' report issued on compliance for major federal programs:	<u>Unmodified</u>
Any audit findings disclosed that are required to be reported in accordance with 2 CFR Section 200.516(a)?	<u>No</u>
Identification of major federal programs:	

<u>CFDA Number(s)</u>	<u>Name of Federal Program or Cluster</u>
<u>20.500, 20.507 and 20.526</u>	<u>Federal Transit Cluster</u>

Dollar threshold used to distinguish between Type A and Type B programs:	<u>\$ 3,000,000</u>
Auditee qualified as low-risk auditee?	<u>Yes</u>

ORANGE COUNTY TRANSPORTATION AUTHORITY

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED JUNE 30, 2016**

II. FINANCIAL STATEMENT FINDINGS

None reported.

ORANGE COUNTY TRANSPORTATION AUTHORITY

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED JUNE 30, 2016**

III. FEDERAL AWARDS FINDINGS AND QUESTIONED COSTS

None reported.

ORANGE COUNTY TRANSPORTATION AUTHORITY

**SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS
FOR THE YEAR ENDED JUNE 30, 2016**

None reported.

Orange County Local Transportation Authority
(A Component Unit of the Orange
County Transportation Authority)

ANNUAL FINANCIAL AND
COMPLIANCE REPORT

Year Ended June 30, 2016

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Audited Financial Statements

Year Ended June 30, 2016

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INDEPENDENT AUDITORS' REPORT

Board of Directors
Orange County Local Transportation Authority
Orange, California

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities and each major fund of the Orange County Local Transportation Authority (OCLTA), a component unit of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise OCLTA's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and each major fund of OCLTA, as of June 30, 2016, and the respective changes in financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As described in Note 10 to the financial statements, OCLTA adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, effective July 1, 2015. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3-9 and the budgetary comparison information on pages 32-33, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise OCLTA's basic financial statements. The debt service budgetary comparison schedule on page 34 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the debt service budgetary comparison schedule is fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 31, 2016, on our consideration of OCLTA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering OCLTA's internal control over financial reporting and compliance.



Laguna Hills, California

October 31, 2016

Orange County Local Transportation Authority
Management's Discussion and Analysis
(unaudited)
For the Fiscal Year Ended June 30, 2016

As management of the Orange County Local Transportation Authority (OCLTA), we offer readers of the OCLTA's financial statements this narrative overview and analysis of the OCLTA's Measure M financial activities for the fiscal year ended June 30, 2016. We encourage readers to consider the information on financial performance presented in conjunction with the financial statements that begin on page 10. All amounts, unless otherwise indicated, are expressed in thousands of dollars.

Financial Highlights

- Total net position of the OCLTA was \$542,433 and consisted of restricted net position of \$11,994 and unrestricted net position of \$530,439.
- Net position increased \$124,853 during fiscal year 2015-16. This increase was primarily due to an increase in sales tax revenue in excess of program costs.
- OCLTA's governmental funds reported combined ending fund balances of \$834,005 an increase of \$105,501 from the prior year. The increase is primarily due to an increase in sales tax revenue in excess of expenditures.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the OCLTA's basic financial statements, which are comprised of three components including government-wide financial statements, fund financial statements and notes to the financial statements. This report also contains required supplementary information in addition to the basic financial statements. Because the OCLTA is a governmental activity of the Orange County Transportation Authority (OCTA), governmental funds are used to account for its Measure M program activities. The basic financial statements include only the activities of the OCLTA.

Government-wide Financial Statements

The government-wide financial statements are designed to provide readers with a broad overview of the OCLTA's finances using the accrual basis of accounting, in a manner similar to a private-sector business.

The statement of net position presents information on all of the OCLTA's assets and liabilities, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the OCLTA is improving or deteriorating.

The statement of activities presents information showing how the OCLTA's net position changed during the fiscal year. All changes in net position are reported as soon as the

Orange County Local Transportation Authority Management's Discussion and Analysis

underlying event giving rise to the change occurs, regardless of the timing of related cash flows.

The government-wide financial statements can be found on pages 10-11 of this report.

Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. Fund accounting is used to ensure and demonstrate compliance with Measure M finance-related legal requirements. The OCLTA uses governmental funds.

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements; however, governmental funds financial statements focus on near-term inflows and outflows of spendable resources and on balances of spendable resources available at the end of the fiscal year. Such information may be useful in evaluating the OCLTA's near-term financing requirements.

Since the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. As a result, readers may better understand the long-term impact of the OCLTA's near-term financing decisions. Both the governmental funds balance sheet and related statement of revenues, expenditures and changes in fund balances provide a reconciliation to facilitate this comparison between governmental funds and governmental activities.

The OCLTA maintains two individual governmental funds which are considered to be major funds. Information is presented separately in the governmental funds balance sheet and in the related statement of revenues, expenditures and changes in fund balances for the OCLTA's major governmental funds.

The governmental funds financial statements can be found on pages 12-15 of this report.

Notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. The notes to the financial statements can be found on pages 16-31 of this report.

The OCLTA adopts an annual budget for its two funds. A budgetary comparison schedule has been provided for the LTA special revenue fund as required supplementary information on page 32 and the LTA debt service fund as other supplementary information on page 34 to demonstrate compliance with the annual appropriated budget.

**Orange County Local Transportation Authority
Management's Discussion and Analysis**

Government-wide Financial Analysis

As noted previously, net position may serve over time as a useful indicator of the OCLTA's financial position. At June 30, 2016, the OCLTA's assets exceeded liabilities and deferred inflows by \$542,433, a \$124,853 increase from June 30, 2015. Our analysis below focuses on the net position (Table 1) and changes in net position (Table 2) of the OCLTA's governmental activities.

Current and other assets increased by \$104,866 or 12% from June 30, 2015. The substantial increase in cash is primarily due to the increase in sales tax revenue and a reduction in the grade separation program expenditures during the year.

Total liabilities decreased \$20,632 from June 30, 2015 primarily due to the decrease of unearned revenue for the grade separation projects.

Unrestricted net position represents the portion of net position that is available for general use as specified in the M2 program. Unrestricted net position from governmental activities changed from \$404,929 at June 30, 2015 to \$530,439 at June 30, 2016. This increase was primarily due to sales tax revenue over expenses.

Table 1
Orange County Local Transportation Authority
Net Position

	Governmental Activities	
	2016	2015
Current and other assets	\$ 969,387	\$ 864,521
Capital assets, net	-	645
Total assets	969,387	865,166
Current liabilities	99,060	111,879
Long-term liabilities	327,894	335,707
Total liabilities	426,954	447,586
Net position:		
Net investment in capital assets	-	645
Restricted	11,994	12,006
Unrestricted	530,439	404,929
Total net position	\$ 542,433	\$ 417,580

Governmental activities increased the OCLTA's net position by \$124,853. Sales taxes, which ultimately financed a significant portion of the OCLTA's net costs, increased by \$9,381, or 3%, from the prior year as a result of continued improvement in the economy.

**Orange County Local Transportation Authority
Management's Discussion and Analysis**

OCLTA expenses shown on the statement of activities consist of:

	<u>Governmental Activities</u>	
	<u>2016</u>	<u>2015</u>
Supplies and services	\$ 56,604	\$ 47,618
Contributions to other local agencies	105,824	122,625
Infrastructure	89,240	109,824
Depreciation expense	32	39
Interest expense	20,927	21,223
Transfer to other OCTA funds	16,664	28,054
Total expenses	<u>\$289,291</u>	<u>\$329,383</u>

Total expenses decreased \$40,092, or 12% from the prior year primarily due to the completion of many of the grade separation projects.

Table 2
Orange County Local Transportation Authority
Changes in Net Position

	<u>Governmental Activities</u>	
	<u>2016</u>	<u>2015</u>
Revenues:		
Program revenues:		
Charges for services	\$ 204	\$ 911
Operating grants and contributions	110,846	111,145
General revenues:		
Sales taxes	300,937	291,556
Unrestricted investment earnings	17,528	11,535
Other miscellaneous revenue	299	-
Total revenues	<u>429,814</u>	<u>415,147</u>
Expenses:		
Measure M program	289,291	329,383
Indirect expense allocation	15,670	16,991
Total expenses	<u>304,961</u>	<u>346,374</u>
Increase in net position	124,853	68,773
Net position - beginning	417,580	348,807
Net position - end of year	<u>\$ 542,433</u>	<u>\$ 417,580</u>

**Orange County Local Transportation Authority
Management's Discussion and Analysis**

Financial Analysis of the OCLTA's Funds

As of June 30, 2016, the OCLTA's governmental funds reported combined ending fund balances of \$834,005, an increase of \$105,501 compared to fiscal year 2014-15. The majority of fund balances, 98%, are assigned for transportation programs related to Measure M projects. Fund balance of \$11,994 is restricted for debt service on M2 sales tax revenue bonds issued to accelerate funding for M2 projects. The remaining fund balance of \$9,214 is considered nonspendable as the funds have been deposited with the State for condemnation deposits and an advance payment to the City of Fullerton for the Raymond Grade Separation project.

OCLTA's major governmental funds include the following significant changes:

The LTA fund increased by \$105,513, primarily due to a decrease of expenditures related to the completion of some of the grade separation projects in the previous fiscal year, along with a slight increase in sales tax revenue in excess of expenditures.

Capital Asset and Debt Administration

Capital Assets

As of June 30, 2016, the OCLTA had \$0 net of accumulated depreciation invested in capital assets including improvements and machinery.

A summary of the OCLTA's capital assets, net of depreciation, follows:

	Governmental Activities	
	2016	2015
Improvements	\$ -	\$ 1,086
Machinery	32	32
Total capital assets	32	1,118
Less accumulated depreciation	(32)	(473)
Total capital assets, net	\$ -	\$ 645

More detailed information about the OCLTA's capital assets is presented in note 6 to the financial statements.

OCTA has outstanding capital expenditure commitments, the most significant of which are: \$47,388 for the I-5 freeway widening project, \$14,144 for the I-5 HOV freeway project, and \$13,632 for the Lakeview grade separation project.

Debt Administration

As of June 30, 2016, the OCLTA had \$325,485 in sales tax revenue bonds compared to \$332,695 as of the prior fiscal year.

Orange County Local Transportation Authority Management's Discussion and Analysis

The OCLTA maintains an "AA+" rating from Standard & Poor's Corporation (S&P), an "AA+" rating from Fitch Ratings (Fitch) and an "Aa2" rating from Moody's Investors Services (Moody's) for its M2 Sales Tax Revenue Bonds.

Additional information on the OCLTA's long-term debt can be found in note 7 to the financial statements, respectively.

Economic and Other Factors

The OCLTA includes the Measure M program half cent sales tax which has delivered on promises made to the residents of Orange County in 1990, with over \$4 billion invested in improvements to freeways, streets and roads and transit services. M1 ended March 2011, and collection of sales tax under M2 began in April 2011. M2 was overwhelmingly approved by the voters of Orange County in 2006 because of the tangible results that were realized through M1. The passage of M2 has allowed for the continuation of transportation improvements for 30 more years. In an effort to expedite transportation projects, the OCTA Board (Board) approved the M2 Early Action Plan (EAP) in 2007, paving the way for financing projects in 2007 through 2012. In July 2010 the Board approved the comprehensive Capital Action Plan (CAP). The CAP expanded the scope of the EAP to include other priority OCTA capital projects.

All major elements of the Board directed EAP and CAP are nearing completion. In September 2012, the Board adopted a new plan, M2020, outlining the projects and programs for all modes that can be accomplished between now and the year 2020.

M2020 commits to meeting a total of 14 objectives in the eight-year period. In all, more than \$5 billion in transportation improvements promised to the voters in M2 will be completed or under construction by 2020. In addition, the groundwork will be laid for another \$1.4 billion in freeway improvements by environmentally clearing all remaining projects to be shelf ready in the event additional federal, state, or local funding becomes available.

M2020 includes freeway improvements projects, streets and roads improvement projects, transit capital projects, freeway environmental mitigation efforts, and environmental cleanup. These and other critical capital projects will be captured in a more comprehensive capital program document that will continue to ensure coordinated project delivery and decision making with respect to resource management, funding, and procedures.

The OCLTA adopted its fiscal year 2016-17 annual budget on June 13, 2016. Approximately \$544 million in Measure M2 funds are budgeted to improve transportation within Orange County. These funds will provide improvements to freeways and streets and roads throughout Orange County, as well as fund rail and bus transit programs. These funds include \$230 million to make improvements primarily along Interstate 405, Interstate 5, State Route 91, State Route 55, and State Route 57. Approximately \$183 million is budgeted to improve streets and roads, including \$53 million to fund the Local Fair Share Program, \$53 million for the Regional Capacity Program, and \$50 million for the OC Bridges Project. In addition, the M2 transit budget includes \$61 million to continue the OC Streetcar project.

**Orange County Local Transportation Authority
Management's Discussion and Analysis**

Contacting the OCLTA's Management

This financial report is designed to provide a general overview of the OCLTA's finances for all those with an interest in the OCLTA's finances and to demonstrate OCLTA accountability for the money it receives. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Finance and Administration Division of the Orange County Transportation Authority, 550 South Main Street, P.O. Box 14184, Orange, California 92863-1584.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Statement of Net Position
June 30, 2016

<i>(amounts expressed in thousands)</i>	Governmental Activities
Assets	
Cash and investments	\$ 832,066
Receivables:	
Interest	1,526
Operating grants	14,823
Other	2,060
Due from other governments	109,698
Condemnation deposits	714
Other assets	8,500
Total Assets	969,387
Liabilities	
Accounts payable	32,578
Accrued interest payable	7,965
Due to other OCTA funds	4,866
Due to other governments	21,432
Unearned revenue	29,011
Other liabilities	20
Advance from other OCTA funds	3,188
Noncurrent liabilities:	
Due within one year	7,475
Due in more than one year	320,419
Total Liabilities	426,954
Net Position	
Restricted for:	
Debt service	11,994
Unrestricted	530,439
Total Net Position	\$ 542,433

See accompanying notes to the financial statements.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Statement of Activities
Year Ended June 30, 2016

<i>(amounts expressed in thousands)</i>	Expenses	Indirect Expense Allocation	Program Revenues		Net (Expense) Revenue and Changes in Net Position
			Charges for Services	Operating Grants and Contributions	Governmental Activities
Program governmental activities:					
Measure M program	\$ 289,291	\$ 15,670	\$ 204	\$ 110,846	\$ (193,911)
Total governmental activities	<u>289,291</u>	<u>15,670</u>	<u>204</u>	<u>110,846</u>	<u>(193,911)</u>
General revenues:					
Sales taxes					300,937
Unrestricted investment earnings					17,528
Other miscellaneous revenue					299
Total general revenues					<u>318,764</u>
Change in net position					124,853
Net position - beginning					<u>417,580</u>
Net position - ending					<u>\$ 542,433</u>

See accompanying notes to the financial statements.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Balance Sheet - Governmental Funds
June 30, 2016

<i>(amounts expressed in thousands)</i>	LTA	LTA Debt Service	Total OCLTA
Assets			
Cash and investments	\$ 820,074	\$ 11,992	\$ 832,066
Receivables:			
Interest	1,524	2	1,526
Operating grants	14,823	-	14,823
Other	2,060	-	2,060
Due from other governments	107,098	-	107,098
Condemnation deposits	714	-	714
Other assets	8,500	-	8,500
Total Assets	\$ 954,793	\$ 11,994	\$ 966,787
Liabilities			
Accounts payable	\$ 32,578	\$ -	\$ 32,578
Due to other OCTA funds	4,866	-	4,866
Due to other governments	21,432	-	21,432
Unearned revenue	29,011	-	29,011
Other liabilities	20	-	20
Advance from OCTA	3,188	-	3,188
Total Liabilities	91,095	-	91,095
Deferred Inflows of Resources			
Unavailable revenue - grant reimbursements	41,687	-	41,687
Total Deferred Inflows of Resources	41,687	-	41,687
Fund Balances			
Nonspendable:			
Condemnation deposits	714	-	714
Other assets	8,500	-	8,500
Restricted for:			
Debt service	-	11,994	11,994
Assigned to:			
Transportation programs	812,797	-	812,797
Total Fund Balances	822,011	11,994	834,005
Total Liabilities, Deferred Inflows of Resources and Fund Balances	\$ 954,793	\$ 11,994	\$ 966,787

See accompanying notes to the financial statements.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

**Reconciliation of the Balance Sheet of Governmental Funds
to the Statement of Net Position
June 30, 2016**

(amounts expressed in thousands)

Amounts reported for governmental activities in the Statement of Net Position (page 10) are different because:

Total fund balances (page 12)	\$ 834,005
Interest receivable on the Build America Bonds is not reported in the funds.	2,600
Earned but unavailable revenue is not available to liquidate current liabilities and, therefore, is reported as a deferred inflow of resources in the funds.	41,687
Interest payable on bonds outstanding is not due and payable in the current period and, therefore, is not reported in the funds.	(7,965)
Long-term liabilities, including bonds payable, are not due and payable in the current period and, therefore, are not reported in the funds.	<u>(327,894)</u>
Net position of governmental activities (page 10)	<u><u>\$ 542,433</u></u>

See accompanying notes to the financial statements.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Statement of Revenues, Expenditures and Changes in Fund Balances
Governmental Funds
Year Ended June 30, 2016

<i>(amounts expressed in thousands)</i>	LTA	LTA Debt Service	Total OCLTA
Revenues			
Sales taxes	\$ 300,937	\$ -	\$ 300,937
Contributions from other agencies	93,316	-	93,316
Interest	11,023	6,501	17,524
Miscellaneous	504	-	504
Total Revenues	405,780	6,501	412,281
Expenditures			
Current:			
General government:			
Supplies and services	72,274	-	72,274
Transportation:			
Contributions to other local agencies	105,824	-	105,824
Capital outlay	89,240	-	89,240
Debt service:			
Principal payments on long-term debt	-	7,210	7,210
Interest	30	21,584	21,614
Total Expenditures	267,368	28,794	296,162
Excess (deficiency) of revenues over (under) expenditures	138,412	(22,293)	116,119
Other financing sources (uses)			
Transfers in	6,513	28,794	35,307
Transfers out	(28,794)	(6,513)	(35,307)
Transfers to OCTA	(10,618)	-	(10,618)
Total other financing sources (uses)	(32,899)	22,281	(10,618)
Net change in fund balances	105,513	(12)	105,501
Fund balances - beginning	716,498	12,006	728,504
Fund balances - ending	\$ 822,011	\$ 11,994	\$ 834,005

See accompanying notes to the financial statements.

**Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)**

**Reconciliation of the Statement of Revenues, Expenditures and Changes in
Fund Balances of Governmental Funds to the Statement of Activities
Year Ended June 30, 2016**

(amounts expressed in thousands)

Amounts reported for governmental activities in the Statement of Activities (page 11) are different because:

Net change in fund balances - total governmental funds (page 14)	\$	105,501
Governmental funds report capital outlays as expenditures. However, in the statement of activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation and amortization expense. This is the amount by which capital outlays exceeded depreciation in the current period.		(32)
Transfer assets held for resale to the OCTA General Fund		(6,046)
Revenues in the statement of activities that do not provide current financial resources are not reported as revenue in the funds.		17,534
The issuance of long-term debt (e.g., bonds) provides current financial resources to governmental funds, while the repayment of principal of long-term debt consumes current financial resources of governmental funds. Neither transaction, however, has any effect on net position. Also, governmental funds report the effect of premiums, discounts, and similar items when debt is first issued, whereas these amounts are deferred and amortized in the statement of activities. This amount is the net effect of these differences in the treatment of long-term debt and related items.		7,896
		<hr/>
Change in net position of governmental activities (page 11)	\$	<u>124,853</u>

See accompanying notes to the financial statements.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Notes to The Financial Statements

Year Ended June 30, 2016

(in thousands)

1. Summary of Significant Accounting Policies

Reporting Entity

In November 1990, Orange County voters approved the Revised Traffic Improvement and Growth Management Ordinance, known as Measure M. This implemented a one-half of one percent retail transaction and use tax to fund a specific program of transportation improvements in Orange County. The Orange County Local Transportation Authority (OCLTA) is responsible for administering the proceeds of the Measure M sales tax program. The original Measure M Program (M1) commenced on April 1, 1991 for a period of 20 years.

On November 7, 2006, Orange County voters approved the renewal of Measure M for a period of 30 more years from April 1, 2011 to March 31, 2041. Renewed Measure M (M2) allocates funds to freeway, street and road, transit, and environmental improvements.

On June 20, 1991, under the authority of Senate Bill 838, the Orange County Transportation Authority (OCTA) was formed as a special district by merging several agencies and funds, including the OCLTA, a component unit of the OCTA. Accordingly, the OCLTA's financial activities are included with the financial activities of the OCTA for financial reporting purposes.

The OCTA governing board (Board) consists of 17 voting members and one non-voting member and also serves as the OCLTA governing board. Measure M requires that an 11 member Taxpayer's Oversight Committee (TOC) monitor the use of Measure M funds and ensures that all revenues collected from Measure M is spent on voter-approved transportation projects.

These financial statements include only the activities of the OCLTA, a component unit of the OCTA. These financial statements are not intended to present the activities of the OCTA.

Basis of Presentation

The OCLTA's basic financial statements consist of government-wide statements, including a statement of net position and a statement of activities, and fund financial statements that provide a more detailed level of financial information.

Government-wide Statements: The statement of net position and the statement of activities report information on all of the OCLTA. The effect of significant interfund activity has been removed from these statements. The OCLTA provides only governmental activities which are supported principally by sales taxes.

Orange County Local Transportation Authority
Notes to The Financial Statements

Year Ended June 30, 2016
(in thousands)

The statement of activities demonstrates the degree to which the OCLTA Measure M program expenses are offset by program revenues. Program expenses include direct expenses, which are clearly identifiable with Measure M, and allocated indirect expenses. Interest expense related to the sales tax revenue bonds and commercial paper is reported as a direct expense of the Measure M program. The borrowings are considered essential to the creation or continuing existence of the Measure M program. For the year ended June 30, 2016, interest expense of \$20,927 was included in Measure M program costs. Program revenues include: 1) charges to customers or applicants who purchase, use, or directly benefit from services or privileges provided by Measure M; and 2) grants and contributions that are restricted to meeting the operational or capital requirements of the Measure M program. Taxes and other items are not reported as program revenues and instead are reported as general revenues.

Fund Financial Statements: The fund financial statements provide information about the OCLTA's governmental funds. The OCLTA considers all of its Measure M funds as major governmental funds. They are comprised of the following:

- *Local Transportation Authority (LTA) Fund* - This fund is the general operating fund for the OCLTA and accounts for revenues received and expenditures made for the implementation of the Orange County Traffic Improvement and Growth Management Plan. Financing is provided by a one-half percent sales and use tax assessed for 20 years pursuant to Measure M, which became effective April 1, 1991, and was renewed for an additional 30 years from April 1, 2011 to March 31, 2041. The Measure M ordinance requires that sales tax revenues only be expended on projects included in the ordinance. A decision to use the revenues for any other purpose must be put to the voters in another election.
- *LTA Debt Service Fund* - This fund accounts for the resources accumulated and payments made for principal and interest on long-term debt of the OCLTA.

Measurement Focus and Basis of Accounting

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the OCLTA considers revenues to be available if they are collected within 90 days of the end of the fiscal period. Expenditures generally are recorded when a liability is incurred; however, principal and interest expenditures on long-term debt of governmental funds are recorded only when payment is due.

Year Ended June 30, 2016
(in thousands)

Those revenues susceptible to accrual are sales taxes collected and held by the state at year-end on behalf of the OCLTA, intergovernmental revenues and interest revenue. In applying the susceptible-to-accrual concept to intergovernmental revenues, there are essentially two types of revenues. In one, monies must be expended on the specific purpose or project before any amounts will be paid to the OCLTA; therefore, revenues are recognized based upon the expenditures incurred. In the other, monies are virtually unrestricted and are usually revocable only for failure to comply with prescribed requirements. These resources are reflected as revenues at the time of receipt, or earlier if the susceptible-to-accrual criteria are met.

Cash and Investments

The OCLTA maintains cash and investments in a pool with other OCTA cash and investments and in accordance with the Investment Policy (Policy) originally adopted by the Board on May 8, 1995, and most recently amended June 13, 2016. The Policy complies with, or is more restrictive than, the California Government Code (Code). Separate investment manager accounts are maintained for the proceeds of bond issues, with the earnings for each bond issue accounted for separately. Pooled cash and investment earnings are allocated based on average daily dollar account balances.

OCTA holds investments that are measured at fair value on a recurring basis. OCTA categorizes the fair value measurements of its investments based on the hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are inputs-other than quoted prices included in Level 1 - that are observable including quoted prices for similar assets in active markets and quoted prices for identical or similar assets in markets that are not active; Level 3 inputs are unobservable inputs. OCTA's leveled investments are measured using Level 2 inputs.

Investments in U.S. government and U.S. agency securities, medium term notes, repurchase agreements, variable and floating rate securities, mortgage and asset-backed securities, and corporate notes are carried at fair value based on quoted market prices, except for money market investments and participating interest-earning investment contracts with a remaining maturity of one year or less at purchase date, which are carried at amortized cost which approximates fair value. The Orange County Investment Pool (OCIP) is carried at fair value based on the value of each participating dollar as provided by the OCIP. The state-managed Local Agency Investment Fund (LAIF) is carried at fair value based on the value of each participating dollar as provided by LAIF.

The Policy requires that assets in the portfolio consist of the following investments, with maximum permissible concentrations based on book value, and may be more restrictive than applicable state statutes for the following investment types: OCTA notes and bonds, U.S. treasuries, federal instrumentality securities, federal agencies, State of California and local agency obligations, banker's acceptance, commercial paper, negotiable certificates of deposit, repurchase agreements, medium-term maturity corporate securities, money market funds,

Orange County Local Transportation Authority
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other mutual funds, mortgage or asset-backed securities, LAIF, OCIP, variable and floating rate securities and bank deposits. Investment agreements are also allowed for bond issues.

Interfund Transactions

During the course of operations, numerous transactions occur between individual funds involving goods provided or services rendered and transfers of revenues from funds authorized to receive the revenue to funds authorized to expend it. Outstanding interfund balances are reported as due to/from other funds. Any residual balances outstanding between the Measure M program governmental activities and other OCTA funds are reported in the government-wide financial statements as due to/from other OCTA funds.

OCTA allocates indirect costs related to administrative services from certain funds to benefiting funds. For fiscal year 2015-16, \$15,670 of administrative services were charged to the OCLTA and are reported as general government expenditures in the governmental funds.

Capital Assets

Capital assets including land, right-of-way improvements, and machinery and equipment, are reported in the government-wide financial statements. Capital assets are defined by the OCLTA as assets with an initial, individual cost of more than \$5 and a useful life exceeding one year. Assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at acquisition value at the acquisition date. Prior to fiscal year 2015-16, donated capital assets were recorded at estimated fair value at the date of donation. The costs of normal maintenance and repairs that do not add to the value of an asset or materially extend an asset's life are not capitalized.

Freeway construction and certain purchases of right-of-way property, for which title vests with the California Department of Transportation (Caltrans), are included in capital outlay. Infrastructure consisting primarily of freeway construction and right-of-way acquisition is not recorded as a capital asset in those instances where the OCLTA does not intend to maintain or operate the property when complete.

Right-of-way improvements and machinery and equipment are depreciated using the straight line method over the following estimated useful lives:

<u>Asset Type</u>	<u>Useful Life</u>
Right-of-way improvements	10-30 years
Machinery and equipment	3-10 years

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Deferred outflows/inflows of resources

In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element; deferred outflows of resources, represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expense/expenditure) until then.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period and will not be recognized as an inflow of resources (revenue) until that time. OCLTA has one type of deferred inflow, unavailable revenue which occurs only under a modified accrual basis of accounting. Accordingly, the item is reported only in the governmental funds balance sheet. The governmental funds report unavailable revenues for grant reimbursements. The amounts are deferred and recognized as an inflow of resources in the period that the amounts become available.

Long-Term Debt

In the government-wide financial statements, long-term debt is reported as a liability in the statement of net position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the straight-line method, which approximates the effective interest method. Bonds payable are reported net of the applicable bond premium or discount.

In the fund financial statements, governmental funds recognize bond premiums and discounts in the current period. The face amount of debt is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources, while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures.

Contributions to Other Agencies

Contributions to other agencies primarily represent sales tax revenues received by the OCLTA and disbursed to cities for competitive projects, the local fair share program, and the senior mobility program, and to other agencies for projects which are in accordance with the Measure M ordinance.

Net Position

In the government-wide financial statements, net position represents the difference between assets, liabilities and deferred outflows/inflows and is classified into three categories:

- *Net investment in capital assets* - This balance reflects the net position of the OCLTA that is invested in capital assets. This net position is generally not accessible for other purposes.

Orange County Local Transportation Authority
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(in thousands)

- *Restricted net position* - This balance represents net position that is not accessible for general use because use is subject to restrictions enforceable by third parties. The government-wide statement of net position reports net position restricted by external parties for debt service.
- *Unrestricted net position* - This balance represents the net position that is available for general use as specified in the Measure M program.

Fund Balances

The governmental fund financial statements present fund balances based on classifications that comprise a hierarchy that is based primarily on the extent to which the OCLTA is bound to honor constraints on the specific purposes for which amounts can be spent.

The classifications used in the governmental fund financial statements are as follows:

- *Nonspendable* - amounts that cannot be spent either because they are not in spendable form or because they are legally or contractually required to be maintained intact.
- *Restricted* - amounts that can be spent only for specific purposes because of constitutional provisions or enabling legislation or because of constraints that are externally imposed by creditors, grantors, contributors, or the laws or regulations of other governments.
- *Assigned* - amounts that do not meet the criteria to be classified as restricted or committed but that are intended to be used for specific purposes. This classification also includes residual amounts assigned for specific projects. The Board establishes and modifies assignments of fund balance through the adoption of the budget and subsequent budget amendments. The Board retains the authority to assign fund balance.

When both restricted and unrestricted resources are available for use, it is the OCLTA's policy to use restricted resources first and then unrestricted resources as they are needed. When using unrestricted fund balance amounts, the OCLTA applies the default established by GASB 54, whereby the committed amounts would be reduced first followed by the assigned amounts.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures during the reporting period. As such, actual results could differ from those estimates.

Orange County Local Transportation Authority
Notes to The Financial Statements

Year Ended June 30, 2016
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2. Reconciliation of Government-wide and Fund Financial Statements

Explanation of Certain Differences Between the Governmental Funds Balance Sheet and the Government-wide Statement of Net Position

The governmental funds balance sheet includes a reconciliation between fund balances - total governmental funds and net position - governmental activities as reported in the government-wide statement of net position.

One element of that reconciliation explains that "Long-term liabilities, including bonds payable, are not due and payable in the current period and, therefore, are not reported in the funds." The details of this \$(327,894) difference are as follows:

Bonds payable	\$ (325,485)
Plus unamortized bond issuance premium (to be amortized to interest expense)	<u>(2,409)</u>
Net adjustment to decrease fund balances - total governmental funds to arrive at net position - governmental activities	<u><u>\$ (327,894)</u></u>

Explanation of Certain Differences Between the Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balances and the Government-wide Statement of Activities

The governmental funds statement of revenues, expenditures and changes in fund balances includes a reconciliation between net changes in fund balances - total governmental funds and change in net position - governmental activities as reported in the government-wide statement of activities.

One element of that reconciliation states that "The issuance of long-term debt (e.g., bonds) provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position. Also, governmental funds report the effect of premiums, discounts, and similar items when debt is first issued, whereas these amounts are deferred and amortized in the statement of activities." The details of this \$7,896 difference are as follows:

Bonds payable	\$ 7,210
Change in accrued interest	83
Amortization of premium	<u>603</u>
Net adjustment to increase net change in fund balances - total governmental funds to arrive at change in net position - governmental activities	<u><u>\$ 7,896</u></u>

Orange County Local Transportation Authority
Notes to The Financial Statements

Year Ended June 30, 2016
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3. Cash and Investments

Cash and investments are comprised of the following at June 30, 2016:

Investments:		
With OCTA Commingled Investment Pool	\$	774,989
With Trustee		<u>57,077</u>
Total cash and investments	\$	<u><u>832,066</u></u>

Total deposits and investments are reported in the financial statements as:

Cash and Investments	\$	<u>832,066</u>
Total Cash and Investments	\$	<u><u>832,066</u></u>

As of June 30, 2016, OCLTA had the following investments:

Investment	Fair Value	Principal	Interest Rate Range	Yield	Maturity Range	Weighted Average Maturity (Years)
OCTA Commingled Investment Pool	\$774,989	\$771,748	Discount .001%-8.75%	.010% - 2.674%	7/1/16- 6/30/21	1.99
Money Market Funds *	<u>57,077</u>	<u>57,077</u>	Variable	.220%- .250%	7/1/16	1 Day
Total Investments	<u><u>\$832,066</u></u>	<u><u>\$828,825</u></u>				
Portfolio Weighted Average Maturity						1.90

* Money Market Funds are measured at amortized cost which approximates fair value.

The Interest Rate Range for the OCTA Commingled Investment Pool represents the interest rate ranges of the investments within the pool.

As of June 30, 2016, OCLTA had \$774,989 invested in the OCTA's commingled investment Pool (CIP). Refer to the OCTA Comprehensive Annual Financial Report (CAFR) for details on valuation techniques and fair value hierarchy, interest rate risk, variable rate notes and custodial credit risk. Deposits and withdrawals in OCTA's CIP are made on the basis of \$1.00 (absolute dollars) and not fair value. Accordingly, the OCLTA's investment in OCTA's CIP at June 30, 2016 is uncategorized, not defined as Level 1, Level 2, or Level 3 input.

Orange County Local Transportation Authority
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Credit Risk

The Policy sets minimum acceptable credit ratings for investments from any of the three NRSROs: S&P, Moody’s, and Fitch. For an issuer of short-term debt, the rating must be no less than A-1 (S&P), P-1 (Moody’s), or F-1 (Fitch), while an issuer of long-term debt shall be rated no less than an “A” by two of the three rating services. The OCTA Commingled Investment Pool is not rated.

The following is a summary of the credit quality distribution and concentration of credit risk by investment type as a percentage of each pool’s fair value at June 30, 2016. (NR means Not Rated, US means obligation of the United States (U.S.) government or obligations explicitly guaranteed by the U. S. government):

Investments	S&P	Moody’s	Fitch	% of Portfolio
OCTA Commingled Investment Pool	NR	NR	NR	93.14%
Held by Trustee:				
Money Market Funds	AAAm	Aaa	AAA	6.86%
Total				100.00%

4. Due From/To Other Governments

Amounts due from other governments as of June 30, 2016 in the fund statements are \$107,098 and are comprised of \$54,368 of sales taxes and \$52,730 of project reimbursements. An additional \$2,600 is included in the government-wide statements representing the interest receivable on Build America Bonds (see note 7).

Amounts due to other governments as of June 30, 2016 are \$21,432 and are comprised of \$20,551 for transportation projects and \$881 for other miscellaneous transactions.

5. Related Party Transactions and Interfund Transfers

Related party transactions:

As of June 30, 2016, OCLTA owes \$4,866 to other OCTA funds as follows:

	Amount	Explanation
General Fund	\$ 514	Placentia Rail Station, ARTIC
OCUTT	49	Local Fair Share funds withheld from City of Placentia
Capital Project Fund	4,303	OC Streetcar project
Total	\$ 4,866	

Orange County Local Transportation Authority
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During fiscal year 2015-16, transfers of \$10,618 from OCLTA to OCTA were made to fund the OC Streetcar project, and for the M2 fare stabilization and senior mobility programs.

OCTA advanced monies to OCLTA to cover expenditures such as election costs, administrative costs, and accrued interest. Interest accrues monthly at an interest rate representing OCTA's rate of return on short-term investments, adjusted each July (0.77% for fiscal year 2015-16). As of June 30, 2016, OCLTA owes OCTA \$3,188.

OCLTA transferred Assets Held for Resale, related to the freeway program, to the General Fund in conjunction with the closing of the M1 program.

Interfund Transfers:

During fiscal year 2015-16, the LTA Fund transferred \$28,794 to the LTA Debt Service Fund for debt service payments. Additionally, the LTA Debt Service Fund transferred \$6,513 in excess interest earnings to the LTA Fund.

6. Capital Assets

Capital assets activity for the OCLTA governmental activities for the year ended June 30, 2016 was as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, being depreciated:				
Right-of-way improvements	\$ 1,086	\$ -	\$ 1,086	\$ -
Machinery and equipment	32	-	-	32
Total capital assets, being depreciated	1,118	-	1,086	32
Less accumulated depreciation for:				
Right-of-way improvements	(443)	(30)	(473)	-
Machinery and equipment	(30)	(2)	-	(32)
Total accumulated depreciation	(473)	(32)	(473)	(32)
Total Measure M capital assets, being depreciated, net	645	(32)	613	-
Total Measure M capital assets, net	\$ 645	\$ (32)	\$ 613	\$ -

Depreciation expense charged to the Measure M program was \$32.

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7. Long-Term Debt

Sales Tax Revenue Bonds

On December 9, 2010, OCLTA issued \$293,540 in Measure M2 Sales Tax Revenue Bonds, 2010 Series A (Taxable Build America Bonds) and \$59,030 in 2010 Series B (Tax-Exempt Bonds), to finance and refinance the costs of certain transportation projects located in Orange County, to restructure the Tax Exempt Commercial Paper (TECP) Program, and to fund capitalized interest and costs of issuance related to the 2010 Series Bonds. A reserve fund is not required in connection with the 2010 Series Bonds per the bond indenture. The transaction closed on December 23, 2010. A total of \$75,000 was used to refund outstanding TECP. The Measure M sales tax is the source of revenue for repaying this debt.

A summary of the bonds outstanding is as follows:

	2010 Series A (Taxable Build America Bonds)	2010 Series B (Tax-Exempt Bonds)
Issuance date	12/9/10	12/9/10
Original issue amount	\$ 293,540	\$ 59,030
Original issue premium	-	6,023
Net bond proceeds	<u>\$ 293,540</u>	<u>\$ 65,053</u>
Issuance costs	\$ 1,905	\$ 274
Interest rates	5.56% - 6.91%	3.00% - 5.00%
Maturity range	2021-2041	2014-2020
Final maturity	2041	2020
Bonds outstanding	\$ 293,540	\$ 31,945
Plus unamortized premium	-	2,409
Total	<u>\$ 293,540</u>	<u>\$ 34,354</u>

Annual debt service requirements on the sales tax revenue bonds as of June 30, 2016, are as follows:

Year Ending June 30,	Principal	Interest
2017	\$ 7,475	\$ 21,317
2018	7,775	21,018
2019	8,165	20,629
2020	8,530	20,263
2021	8,915	19,879
2022-2026	49,960	91,104
2027-2031	61,800	72,890
2032-2036	76,975	49,539
2037-2041	95,890	20,454
Total	<u>\$ 325,485</u>	<u>\$ 337,093</u>

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Changes in Long-Term Liabilities

Long-term liabilities activity for the year ended June 30, 2016, was as follows:

	Beginning Balance	Additions	Reductions	Ending Balance	Due within one year
Measure M program activities:					
Sales tax revenue bonds	\$ 332,695	\$ -	\$ 7,210	\$ 325,485	\$ 7,475
Unamortized premium	3,012	-	603	2,409	-
Total Measure M program activities long-term liabilities	\$ 335,707	\$ -	\$ 7,813	\$ 327,894	\$ 7,475

Pledged Revenue

OCLTA has debt issuances outstanding that are repaid and secured by the pledging of certain revenues. The amount and terms of the debt commitments are indicated in the bonds outstanding table found on pages 26. The purposes for which the proceeds of the debt issuances were utilized are disclosed in the debt description located on pages 26.

For the year ended June 30, 2016, debt service payments as a percentage of the pledged gross revenue net of the local fair share program and other expenses as required by the debt agreement, are indicated in the following table:

Description of Pledged Revenue	Annual Amount of Net Pledged Revenue	Annual Debt Service Payments	Pledged Revenue Coverage
Measure M2 Net Sales Tax Revenue	\$ 237,151	\$ 22,324*	10.62

*OCLTA received \$6,469 in Build America Bonds subsidy to offset annual debt service payments for Measure M2 Sales Tax Revenue Bonds.

8. Commitments and Contingencies

Purchase Commitments

The OCLTA has various long-term outstanding contracts that extend over several years and rely on future years' revenues. Total commitments at June 30, 2016, were \$537,043, the majority of which relate to the expansion of Orange County's freeway and road systems, grade separation projects, and the engineering of a rapid connection fixed guideway transit system.

Year Ended June 30, 2016
(in thousands)

Federal Grants

The OCLTA receives federal grants for transportation projects and other reimbursable activities which are subject to audit by the grantor agency. Although the outcome of any such audits cannot be predicted, it is management's opinion that these audits would not have a material effect on the OCLTA's financial position or changes in financial position.

9. Excess of Expenditures over Appropriations

In the LTA Debt Service Fund, expenditures exceeded appropriations for transfers out for \$6,513. During the year, an analysis was done on amounts required to be maintained in the custodian account. It was determined that there was an excess of funds in the account. That amount was transferred to the LTA Fund. An analysis will be scheduled annually during the budget development process and a corresponding budget transfer will be included as part of the budget, if necessary.

10. Effect of New Pronouncements

GASB Statement No. 72

In February 2015, GASB issued Statement No. 72, Fair Value Measurement and Application. This Statement addresses accounting and financial reporting issues related to fair value measurements. The definition of fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It is considered to be the exit price. This Statement provides guidance for determining a fair value measurement for financial reporting purposes. This Statement also provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements. This Statement is effective for OCLTA's fiscal year ending June 30, 2016. See notes 1 and 3.

GASB Statement No. 73

In June 2015, GASB issued Statement No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68. The objective of this Statement is to improve the usefulness of information about pensions included in the general purpose external financial reports of state and local governments for making decisions and assessing accountability. This Statement establishes requirements for defined benefit pensions that are not within the scope of Statement No. 68, *Accounting and Financial Reporting for Pensions*, as well as for the assets accumulated for purposes of providing those pensions. In addition, it establishes requirements for defined contribution pensions that are not within the scope of Statement 68. It also amends certain provisions of Statement No. 67, *Financial Reporting for Pension Plans*, and Statement 68 for pension plans and pensions that are within their respective scopes. This Statement is effective in two phases for periods beginning after

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June 15, 2015 and June 15, 2016. However, OCTA decided to early implement the provisions effective next fiscal year. This statement does not apply to OCLTA.

GASB Statement No. 74

In June 2015, GASB issued Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. The objective of this Statement is to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. This Statement replaces Statements No. 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*. It also includes requirements for defined contribution OPEB plans that replace the requirements for those OPEB plans in Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, as amended, Statement 43, and Statement No. 50, *Pension Disclosures*. This statement is effective for OCLTA's fiscal year ending June 30, 2017. Management has not determined the effect of this statement.

GASB Statement No. 75

In June 2015, GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. This Statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, for OPEB. Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, establishes new accounting and financial reporting requirements for OPEB plans. This statement is effective for OCLTA's fiscal year ending June 30, 2018. Management has not determined the effect of this statement.

GASB Statement No. 76

In June 2015, GASB issued Statement No. 76, The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments. The objective of this Statement is to identify—in the context of the current governmental financial reporting environment—the hierarchy of generally accepted accounting principles (GAAP). The “GAAP hierarchy” consists of the sources of accounting principles used to prepare financial statements of state and local governmental entities in conformity with GAAP and the framework for selecting those principles. This Statement reduces the GAAP hierarchy to two categories of authoritative GAAP and addresses the use of authoritative and nonauthoritative literature in

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(in thousands)

the event that the accounting treatment for a transaction or other event is not specified within a source of authoritative GAAP. This Statement supersedes Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. This statement is effective for OCLTA's fiscal year ending June 30, 2016. OCLTA has determined that this Statement does not have a material impact on the financial statements.

GASB Statement No. 77

In August 2015, GASB issued Statement No. 77, Tax Abatement Disclosures. The objective of this Statement is to provide financial statement users with essential information about the nature and magnitude of the reduction in tax revenues through tax abatement programs in order to better assess (a) whether current-year revenues were sufficient to pay for current-year services, (b) compliance with finance-related legal or contractual requirements, (c) where a government's financial resources come from and how it uses them, and (d) financial position and economic condition and how they have changed over time. This statement is effective for OCLTA's fiscal year ending June 30, 2017. Management has not determined the effect of this statement.

GASB Statement No. 78

In December 2015, GASB issued Statement No. 78, Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans. The objective of this Statement is to address a practice issue regarding the scope and applicability of Statement No. 68, *Accounting and Financial Reporting for Pensions*. The Statement amends the scope and applicability of GASB Statement No. 68 to exclude certain types of cost-sharing multiple-employer plans. The requirements of this Statement are effective for reporting periods beginning after December 15, 2015. This statement is effective for OCLTA's fiscal year ending June 30, 2017. However, OCTA decided to early implement the provisions effective next fiscal year. This statement does not apply to OCLTA.

GASB Statement No. 79

In December 2015, GASB issued Statement No. 79, Certain External Investment Pools and Pool Participants. This Statement addresses accounting and financial reporting for certain external investment pools and pool participants. It establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes. If an external investment pool meets the criteria in this Statement and measures all of its investments at amortized cost, the pool's participants also should measure their investments in that external investment pool at amortized cost for financial reporting purposes. This statement is effective for OCLTA's fiscal year ending June 30, 2016. OCLTA has determined that this Statement does not have a material impact on the financial statements.

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(in thousands)

GASB Statement No. 80

In January 2016, GASB issued Statement No. 80, Blending Requirements for Certain Component Units – An Amendment of GASB Statement No. 14. This Statement improves financial reporting by clarifying the financial statement presentation requirements for certain component units. This Statement amends the blending requirements for the financial statement presentation of component units of all state and local governments. The additional criterion requires blending of a component unit incorporated as a not-for-profit corporation in which the primary government is the sole corporate member. This Statement is effective for OCLTA's fiscal year ending June 30, 2017. Management has not determined the effect of this statement.

GASB Statement No. 81

In March 2016, GASB issued Statement No. 81, Irrevocable Split-Interest Agreements. The objective of this Statement is to improve accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. This Statement is effective for OCLTA's fiscal year ending June 30, 2018. Management has not determined the effect of this statement.

GASB Statement No. 82

In March 2016, GASB issued Statement No. 82, Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73. The objective of this Statement is to address certain issues related to Statements No. 67, *Financial Reporting for Pension Plans*, No. 68, *Accounting and Financial Reporting for Pensions*, and No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. The issues addressed by this Statement are related to the presentation of payroll-related measures in required supplementary information. In addition, this Statement addresses the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The Statement is effective for the reporting period beginning after June 15, 2016. However, OCTA decided to early implement this Statement. This statement does not apply to OCLTA.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Required Supplementary Information
Budgetary Comparison Schedule - LTA Fund (Budgetary Basis)
Year Ended June 30, 2016
(in thousands)

<i>(amounts expressed in thousands)</i>	Budgeted Amounts		Actual Amounts	Variance with Final Budget
	Original	Final		
Revenues:				
Sales taxes	\$ 310,127	\$ 310,127	\$ 300,937	\$ (9,190)
Contributions from other agencies	70,173	75,773	130,614	54,841
Interest	3,430	3,430	11,023	7,593
Miscellaneous	102	102	504	402
Total revenues	383,832	389,432	443,078	53,646
Expenditures:				
Current:				
General government	171,669	173,174	118,722	54,452
Transportation:				
Contributions to other local agencies	154,279	159,475	105,829	53,646
Capital outlay	170,749	170,749	106,494	64,255
Debt service:				
Interest on long-term debt and commercial paper	-	-	30	(30)
Total expenditures	496,697	503,398	331,075	172,323
Excess (deficiency) of revenues over (under) expenditures	(112,865)	(113,966)	112,003	225,969
Other financing sources (uses):				
Transfers in	-	-	6,513	6,513
Transfers from OCTA	13,153	13,153	-	(13,153)
Transfers out	(22,300)	(22,302)	(28,794)	(6,492)
Transfers to OCTA	(46,597)	(46,595)	(10,618)	35,977
Total other financing uses	(55,744)	(55,744)	(32,899)	22,845
Net change in fund balance	\$ (168,609)	\$ (169,710)	\$ 79,104	\$ 248,814
Reconciliation to GAAP:				
Net change in fund balance (budgetary basis)			\$ 79,104	
Less: Estimated revenues for encumbrances outstanding at June 30			37,298	
Add: Current year encumbrances outstanding at June 30			63,707	
Net change in fund balance (GAAP basis)			\$ 105,513	

See accompanying notes to the required supplementary information.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Notes to Required Supplementary Information

Year Ended June 30, 2016

(in thousands)

1. Budgetary Data

The OCLTA establishes accounting control through formal adoption of an annual operating budget for the LTA and the debt service governmental funds. The budget is prepared in conformity with accounting principles generally accepted in the United States (GAAP) except for multi-year contracts, for which the entire amount of the contract is budgeted and encumbered in the year of execution. The adopted budget can be amended by the Board to increase both appropriations and estimated revenues as unforeseen circumstances come to management's attention. Budgeted expenditure amounts represent original appropriations adjusted for supplemental appropriations during the year. Division heads are authorized to approve appropriation transfers within major objects subject to approval by the Finance and Administration Division. Major objects are defined as Salaries and Benefits, Supplies and Services and Capital Outlay. Appropriation transfers between major objects require approval of the Board. Accordingly, the legal level of budgetary control, that is the level that expenditures cannot exceed appropriations, for budgeted funds, is at the major object level for the budgeted governmental funds. A Fourth Quarter Budget Status Report, June 2016 is available from the OCTA Finance and Administration Division. With the exception of accounts which have been encumbered, appropriations lapse at year end.

There were no excess of expenditures over appropriations for fiscal year 2015-16.

Orange County Local Transportation Authority
(A Component Unit of the Orange County Transportation Authority)

Other Supplementary Information
Budgetary Comparison Schedule - LTA Debt Service Fund (Budgetary Basis)
Year Ended June 30, 2016

<i>(amounts expressed in thousands)</i>	Budgeted Amounts		Actual Amounts	Variance with Final Budget
	Original	Final		
Revenues:				
Interest	\$ 6,494	\$ 6,494	\$ 6,501	\$ 7
Total revenues	6,494	6,494	6,501	7
Expenditures:				
Debt service:				
Principal payments on long-term debt	7,210	7,210	7,210	-
Interest on long-term debt	21,584	21,584	21,584	-
Total expenditures	28,794	28,794	28,794	-
Deficiency of revenues				
under expenditures	(22,300)	(22,300)	(22,293)	7
Other financing sources:				
Transfers in	22,300	22,300	28,794	6,494
Transfers out	-	-	(6,513)	(6,513)
Total other financing sources	22,300	22,300	22,281	(19)
Net change in fund balance	\$ -	\$ -	\$ (12)	\$ (12)



INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Directors
Orange County Local Transportation Authority
Orange, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities and each major fund of the Orange County Local Transportation Authority (OCLTA), a component unit of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise OCLTA's basic financial statements, and have issued our report thereon dated October 31, 2016. Our report included an emphasis of matter regarding OCLTA's adoption of Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, effective July 1, 2015.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered OCLTA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of OCLTA's internal control. Accordingly, we do not express an opinion on the effectiveness of OCLTA's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether OCLTA's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Laguna Hills, California
October 31, 2016

**ORANGE COUNTY
TRANSPORTATION AUTHORITY**

**Local Transportation Fund
Financial Statements**

Year Ended June 30, 2016

ORANGE COUNTY TRANSPORTATION AUTHORITY

**LOCAL TRANSPORTATION FUND
FINANCIAL STATEMENTS**

JUNE 30, 2016

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INDEPENDENT AUDITORS' REPORT

Board of Directors
Orange County Transportation Authority
Orange, California

Report on the Financial Statements

We have audited the accompanying financial statements of the Local Transportation Fund (LTF), a special revenue fund of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and the related notes to the financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the LTF, as of June 30, 2016, and the changes in financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the LTF and do not purport to, and do not, present fairly the financial position of OCTA as of June 30, 2016, and the changes in its financial position thereof for the year then ended, in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

As described in Note 2 to the financial statements, the LTF adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, effective July 1, 2015. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that budgetary comparison information on pages 9-10 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Management has omitted the management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion on the basic financial statements is not affected by this missing information.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise LTF's financial statements. The Schedule of Disbursements (Schedule) is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 31, 2016, on our consideration of OCTA's internal control over financial reporting, as it relates to the LTF, and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering OCTA's internal control over financial reporting and compliance, as it relates to the LTF.



Laguna Hills, California

October 31, 2016

**ORANGE COUNTY TRANSPORTATION AUTHORITY
LOCAL TRANSPORTATION FUND**

**BALANCE SHEET
JUNE 30, 2016**

ASSETS

Cash and Investments	\$ 14,398,863
Interest Receivable	3,560
Due from Other Governments (Note 3)	<u>28,240,932</u>
Total Assets	<u><u>\$ 42,643,355</u></u>

LIABILITIES AND FUND BALANCE

LIABILITIES

Due to Other Governments (Note 4)	\$ 650,261
Due to Other Funds (Note 5)	<u>14,162,835</u>
Total Liabilities	<u><u>14,813,096</u></u>

FUND BALANCE

Restricted:	
Transportation Programs	<u>27,830,259</u>
Total Liabilities and Fund Balance	<u><u>\$ 42,643,355</u></u>

See accompanying notes to financial statements.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
LOCAL TRANSPORTATION FUND**

**STATEMENT OF REVENUES, EXPENDITURES AND CHANGE IN FUND BALANCE
FOR THE YEAR ENDED JUNE 30, 2016**

REVENUE

Local Transportation Sales Tax Allocations	\$ 156,974,445
Investment Income	48,656
Miscellaneous	8,979
Total Revenues	<u>157,032,080</u>

EXPENDITURES

Current:	
Supplies and Services	2,128,022
Contributions to Other Agencies	2,285,055
Total Expenditures	<u>4,413,077</u>

Excess of Revenues Over Expenditures 152,619,003

OTHER FINANCING USES:

Transfers to Other OCTA Funds (Note 6) (152,834,891)

Net Change in Fund Balance (215,888)

Fund Balance, Beginning of Year	28,046,147
Fund Balance, End of Year	<u>\$ 27,830,259</u>

See accompanying notes to financial statements.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
LOCAL TRANSPORTATION FUND**

**NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2016**

NOTE 1 – REPORTING ENTITY

The Local Transportation Fund (LTF) is a special revenue fund of the Orange County Transportation Authority (OCTA). The LTF financial statements do not purport to, and do not, present fairly, the financial position of OCTA, as of June 30, 2016, and the changes in financial position for the year then ended in conformity with accounting principles generally accepted in the United States of America. This fund is used to account for revenues received and expenditures made for certain transit projects within Orange County.

The LTF was created by the Transportation Development Act (TDA) for specific transportation purposes. Revenues to the LTF are derived from a ¼ cent state sales and use tax. The ¼ cent is returned by the State Board of Equalization (SBOE) to each county according to the amount of tax collected in that county.

The Orange County Transit District (OCTD) of OCTA is a transit operator and OCTA is the regional Transportation Planning Agency (TPA) for the County of Orange, California (County). Annually, the TPA determines each area's apportionment of LTF revenues. Generally, County LTF revenues are apportioned by population. Where there is a transit operator, separate apportionments are made to areas within and outside the district. Once funds are apportioned, they are only available for allocation to claimants in that area. Payments from the LTF are made by the County Auditor-Controller in accordance with allocation instructions issued by OCTA.

Article 3 of the TDA stipulates that, based on the County's population of more than 500,000, OCTA is eligible to receive LTF revenues solely for claims for the following, which are allocated in specific priority order: administration, planning and programming; Section 99234 of Article 3, which are claims for pedestrian and bicycle facilities; Article 4, which are for general transit operations and services; and Article 4.5, which are claims for community transit services.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the LTF are in conformity with generally accepted accounting principles applicable to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing accounting and financial reporting principles for governmental units.

Fund Accounting

The LTF activities and transactions are recorded and accounted for in a special revenue fund of OCTA. Special revenue funds are used to account for the proceeds of specific revenue sources that are usually required by law or administrative regulation to be accounted for in separate funds. The LTF accounts for revenues received and expenditures made for certain transit projects within Orange County. Financing is generated from a ¼ cent state sales and use tax pursuant to the TDA. Expenditures of these monies must be made in accordance with TDA provisions. A fund is defined as an independent fiscal and accounting entity wherein operations of each fund are accounted for in a separate set of self-balancing accounts that record resources, related liabilities, and equity segregated for the purpose of carrying out specific activities or attaining certain objectives in accordance with special regulations, restrictions, or limitations.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
LOCAL TRANSPORTATION FUND**

**NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2016**

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (CONTINUED)

Basis of Accounting

The LTF financial statements have been prepared on the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are accrued when they become both measurable and available. Measurable means that amounts can be estimated or otherwise determined. Available means collectible within the current period, or soon enough thereafter, to be used to pay liabilities of the current period. Revenues are considered available if they are collected within 90 days of year end. Expenditures are recorded when the liability is incurred. Liabilities are considered current when they are expected to be liquidated with available financial resources.

Cash and Investments

The LTF maintains its deposits in the Orange County Investment Pool (OCIP), as required by State statute. Oversight of the OCIP is performed by the Orange County Treasury Oversight Committee. The LTF categorizes the fair value measurements of its investments based on the hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. As of June 30, 2016, the LTF held no individual investments. All funds are invested in OCIP.

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The LTF's assessment of the significance of particular inputs to these fair value measurements require judgment and considers factors specific to each asset or liability.

Deposits and withdrawals are made on the basis of \$1 and not fair value. Accordingly, the LTF's investment in the OCIP at June 30, 2016 of \$14,398,863 is uncategorized, not defined as a Level 1, Level 2, or Level 3 input.

Investment income earned by the pooled cash and investments in the OCIP is allocated based on average cash and investment balance.

For information on cash and investment disclosures relating to LTF's deposits in the OCIP, please see OCTA's Comprehensive Annual Financial Report.

Use of Estimates

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
LOCAL TRANSPORTATION FUND**

**NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2016**

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (CONTINUED)

Fund Balance

The LTF classifies fund balance based primarily on the extent to which a government is bound to observe constraints imposed upon the use of the resources reported in governmental funds.

Fund balance for the year ended June 30, 2016 consists of the following:

Restricted – Resources that are constrained to specific purposes by an external provider (e.g. grantors, contributors, governmental laws and regulations) or by constitutional provisions or enabling legislation. For the LTF, amounts are restricted pursuant to the Transportation Development Act.

When funds of different classifications are available for the same purpose, the spending priority is to spend restricted resources before unrestricted resources, and within the unrestricted category, committed followed by assigned fund balance.

NOTE 3 – DUE FROM OTHER GOVERNMENTS

Due from other governments of \$28,240,932 represents a TDA receivable due from the State of California.

NOTE 4 – DUE TO OTHER GOVERNMENTS

Due to other governments of \$650,261 represents amounts due to other agencies for use in transit projects.

NOTE 5 - DUE TO OTHER FUNDS

Due to other funds for the year ended June 30, 2016 consisted of the following:

OCTD for transit operations	\$ 13,249,196
OCTA for planning and administration	<u>913,639</u>
Total	<u><u>\$ 14,162,835</u></u>

NOTE 6 – TRANSFERS

Transfers to other OCTA funds during the fiscal year ended June 30, 2016 consisted of the following:

OCTD for transit operations	\$ 149,044,454
OCTA for planning and administration	<u>3,790,437</u>
Total	<u><u>\$ 152,834,891</u></u>

**ORANGE COUNTY TRANSPORTATION AUTHORITY
LOCAL TRANSPORTATION FUND (BUDGETARY BASIS)**

**SCHEDULE OF REVENUES, EXPENDITURES AND CHANGE IN FUND BALANCE –
BUDGET AND ACTUAL
FOR THE YEAR ENDED JUNE 30, 2016**

	<u>Budgeted Amounts</u>		<u>Actual Amounts</u>	<u>Variance with Final Budget</u>
	<u>Original</u>	<u>Final</u>		
Revenues				
Local Transportation Sales Tax Allocations	\$ 165,253,448	\$ 156,538,943	\$ 156,974,445	\$ 435,502
Investment Income	24,866	24,866	48,656	23,790
Miscellaneous	-	-	8,979	8,979
Total Revenues	<u>165,278,314</u>	<u>156,563,809</u>	<u>157,032,080</u>	<u>468,271</u>
Expenditures				
Current:				
Supplies and Services	1,798,010	1,798,010	2,128,022	(330,012)
Contributions to Other Local Agencies	2,354,743	2,354,743	2,285,055	69,688
Total Expenditures	<u>4,152,753</u>	<u>4,152,753</u>	<u>4,413,077</u>	<u>(260,324)</u>
Excess of Revenues over Expenditures	<u>161,125,561</u>	<u>152,411,056</u>	<u>152,619,003</u>	<u>207,947</u>
Other Financing Uses				
Transfers to Other OCTA Funds (Note 6)	(161,125,561)	(161,125,561)	(152,834,891)	8,290,670
Total Other Financing Uses	<u>(161,125,561)</u>	<u>(161,125,561)</u>	<u>(152,834,891)</u>	<u>8,290,670</u>
Net Change in Fund Balance	-	(8,714,505)	(215,888)	8,498,617
Fund Balance, Beginning of Year	<u>28,046,147</u>	<u>28,046,147</u>	<u>28,046,147</u>	-
Fund Balance, End of Year	<u>\$ 28,046,147</u>	<u>\$ 19,331,642</u>	<u>\$ 27,830,259</u>	<u>\$ 8,498,617</u>

**ORANGE COUNTY TRANSPORTATION AUTHORITY
LOCAL TRANSPORTATION FUND**

**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION
JUNE 30, 2016**

NOTE 1 – BUDGETARY DATA

The LTF maintains accounting control through formal adoption of an annual operating budget. The operating budget is prepared in conformity with accounting principles generally accepted in the United States, except for multi-year contracts, for which the entire amount of the contract is budgeted and encumbered in the year of execution. The adopted budget may be amended by the OCTA Board of Directors (Board) to increase appropriations and estimated revenues as unforeseen circumstances come to management's attention. Budgeted expenditure amounts represent original appropriations, adjusted for supplemental appropriations, during the year. OCTA division heads are authorized to approve appropriation transfers within major objects subject to approval by the Finance and Administration Division. Major objects are defined as: Salaries and Benefits, Supplies and Services, and Capital Outlay. Supplies and Services include Contributions to Other Local Agencies, Debt Service and Transfers. Appropriation transfers between major objects require approval of the Board. Accordingly, the legal level of budgetary control, that is the level that expenditures cannot exceed appropriations, is at the major object level. With the exception of amounts that have been encumbered, appropriations lapse at year end.

There were no excess of expenditures over appropriations for fiscal year 2015-16.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
LOCAL TRANSPORTATION FUND**

**SCHEDULE OF DISBURSEMENTS
FOR THE YEAR ENDED JUNE 30, 2016**

Claimant	Article 3 Administration	Article 3 Planning	Article 4 Operating and Capital	Article 4.5 Paratransit Operating and Capital	Total
City of Laguna Beach	\$ -	\$ -	\$ 1,115,304	\$ -	\$ 1,115,304
County of Orange	6,439	-	-	-	6,439
Orange County Transit District	-	-	141,173,975	7,870,479	149,044,454
Orange County Transportation Authority	135,882	3,654,555	-	-	3,790,437
Southern California Association of Governments	-	1,163,312	-	-	1,163,312
Total disbursements	<u>\$ 142,321</u>	<u>\$ 4,817,867</u>	<u>\$ 142,289,279</u>	<u>\$ 7,870,479</u>	<u>\$ 155,119,946</u>



**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Board of Directors
Orange County Transportation Authority
Orange, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Local Transportation Fund (LTF), a special revenue fund of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and the related notes to the financial statements, and have issued our report thereon dated October 31, 2016. Our report included an emphasis-of-matter that the LTF financial statements do not purport to, and do not, present fairly the financial position of OCTA, and the LTF adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, effective July 1, 2015. Also, our report notes that the financial statements do not include management's discussion and analysis.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered OCTA's internal control over financial reporting (internal control), as it relates to the LTF, to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of OCTA's internal control. Accordingly, we do not express an opinion on the effectiveness of OCTA's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit consider attention by those charged with governance.

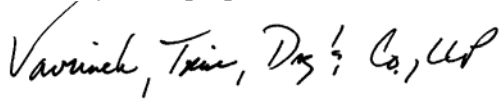
Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the LTF's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, including §6661 and §6662 of Part 21 of the California Code of Regulations, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*, including §6661 and §6662 of Part 21 of the California Code of Regulations.

Purpose of Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of OCTA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering OCTA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Laguna Hills, California
October 31, 2016

**ORANGE COUNTY
TRANSPORTATION AUTHORITY**

**State Transit Assistance Fund
Financial Statements**

Year Ended June 30, 2016

ORANGE COUNTY TRANSPORTATION AUTHORITY

**STATE TRANSIT ASSISTANCE FUND
FINANCIAL STATEMENTS**

JUNE 30, 2016

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INDEPENDENT AUDITORS' REPORT

Board of Directors
Orange County Transportation Authority
Orange, California

Report on the Financial Statements

We have audited the accompanying financial statements of the State Transit Assistance Fund (STAF), a special revenue fund of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and the related notes to the financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the STAF, as of June 30, 2016, and the changes in financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the STAF and do not purport to, and do not, present fairly the financial position of OCTA as of June 30, 2016, and the changes in its financial position thereof for the year then ended, in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

As described in Note 2 to the financial statements, the STAF adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, effective July 1, 2015. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that budgetary comparison information on pages 8-9 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Management has omitted the management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion on the basic financial statements is not affected by this missing information.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 31, 2016, on our consideration of OCTA's internal control over financial reporting, as it relates to the STAF, and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering OCTA's internal control over financial reporting and compliance, as it relates to the STAF.



Laguna Hills, California
October 31, 2016

**ORANGE COUNTY TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE FUND**

**BALANCE SHEET
JUNE 30, 2016**

ASSETS

Cash and Investments	\$ 18,811
Interest Receivable	13
Due from Other Governments (Note 3)	<u>10,538,121</u>
Total Assets	<u><u>\$ 10,556,945</u></u>

DEFERRED INFLOWS OF RESOURCES AND FUND BALANCE

DEFERRED INFLOWS OF RESOURCES

Unavailable Revenue - Sales Tax	<u>\$ 10,538,121</u>
Total Liabilities	<u>10,538,121</u>

FUND BALANCE

Restricted:	
Total Fund Balance	<u>18,824</u>
Total Deferred Inflows of Resources and Fund Balance	<u><u>\$ 10,556,945</u></u>

See accompanying notes to financial statements.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE FUND**

**STATEMENT OF REVENUES, EXPENDITURES AND CHANGE IN FUND BALANCE
FOR THE YEAR ENDED JUNE 30, 2016**

REVENUE

State Transit Assistance Sales Tax Allocations	\$ 7,918,730
Interest and Investment Income	5,206
Miscellaneous	5,306
Total Revenues	<u>7,929,242</u>

EXPENDITURES

Current:

Supplies and Services	<u>517</u>
Total Expenditures	<u>517</u>

Excess of Revenues over Expenditures 7,928,725

OTHER FINANCING USES:

Transfers to Other OCTA Funds (Note 4)	<u>(7,925,629)</u>
--	--------------------

Net Change in Fund Balance 3,096

Fund Balance, Beginning of Year	<u>15,728</u>
Fund Balance, End of Year	<u>\$ 18,824</u>

See accompanying notes to financial statements.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE FUND**

**NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2016**

NOTE 1 – REPORTING ENTITY

The State Transit Assistance Fund (STAF) is a special revenue fund of the Orange County Transportation Authority (OCTA). The STAF financial statements do not purport to, and do not, present fairly, the financial position of OCTA, as of June 30, 2016, and the changes in financial position for the year then ended in conformity with accounting principles generally accepted in the United States of America. This fund is used to account for funds transferred to the Orange County Transit District (OCTD) for operations and fare assistance for seniors and disabled persons.

The STAF provides a second source of Transportation Development Act (TDA) funding for transportation planning and mass transportation purposes as specified by the State of California Legislature. Funds for the program are derived from sales taxes on gasoline and use taxes on diesel fuel.

The STAF funds are allocated through an appropriation to the State Controller by the Legislature for allocation by formula to each Transportation Planning Agency (TPA). The OCTA serves as the regional TPA for the County of Orange, California (County). The formula allocates 50 percent of the funds according to population and the remaining 50 percent according to operator revenues from the prior fiscal year. The allocations are based on the operator's share of revenues compared to all of the other operators in the State. The STAF allocations are deposited in the OCTA's STAF, which is maintained by the Auditor-Controller of the County. The allocation to OCTA's STAF must be made in a resolution adopted by OCTA's governing board. Payments from the STAF are made by the County Auditor-Controller in accordance with the allocation instructions in the allocation resolution.

The STAF funds may not be allocated to fund administration or streets and roads projects. Operators receiving the STAF funds must meet qualifying criteria based on the subsidy per revenue vehicle hour received in the previous year, taking into consideration the change in the Consumer Price Index within the operator's region.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the STAF are in conformity with generally accepted accounting principles applicable to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing accounting and financial reporting principles for governmental units.

Fund Accounting

The STAF activities and transactions are recorded and accounted for in a special revenue fund of the OCTA. This fund is used to account for funds transferred to OCTD transit for operations and fare assistance for senior and disabled persons. Funding is provided by sales taxes on gasoline and use taxes on diesel fuel. Expenditure of these funds is governed by the provisions of the TDA. A fund is defined as an independent fiscal and accounting entity wherein operations of each fund are accounted for in a separate set of self-balancing accounts that record resources, related liabilities, and equity segregated for the purpose of carrying out specific activities or attaining certain objectives in accordance with special regulations, restrictions, or limitations.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE FUND**

**NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2016**

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Basis of Accounting

The STAF financial statements have been prepared on the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are accrued when they become both measurable and available. Measurable means that amounts can be estimated or otherwise determined. Available means collectible within the current period, or soon enough thereafter, to be used to pay liabilities of the current period. Revenues are considered available if they are collected within 90 days of year end. Expenditures are recorded when the liability is incurred. Liabilities are considered current when they are expected to be liquidated with available financial resources.

Cash and Investments

The STAF maintains its deposits in the Orange County Investment Pool (OCIP), as required by State statute. Oversight of the OCIP is performed by the Orange County Treasury Oversight Committee. The STAF categorizes the fair value measurements of its investments based on the hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. As of June 30, 2016, the STAF held no individual investments. All funds are invested in OCIP.

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The STAF's assessment of the significance of particular inputs to these fair value measurements require judgment and considers factors specific to each asset or liability.

Deposits and withdrawals are made on the basis of \$1 and not fair value. Accordingly, the STAF's investment in the OCIP at June 30, 2016 of \$18,811 is uncategorized, not defined as a Level 1, Level 2, or Level 3 input.

Investment income earned by the pooled cash and investments in the OCIP is allocated based on average cash and investment balance.

For information on cash and investment disclosures relating to STAF's deposits in the OCIP, please see OCTA's Comprehensive Annual Financial Report.

Use of Estimates

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE FUND**

**NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2016**

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fund Balance

The STAF classifies fund balance based primarily on the extent to which a government is bound to observe constraints imposed upon the use of the resources reported in governmental funds.

Fund balance for the year ended June 30, 2016 consists of the following:

Restricted – Resources that are constrained to specific purposes by an external provider (e.g. grantors, contributors, governmental laws and regulations) or by constitutional provisions or enabling legislation. For the STAF, amounts are restricted pursuant to the Transportation Development Act.

When funds of different classifications are available for the same purpose, the spending priority is to spend restricted resources before unrestricted resources, and within the unrestricted category, committed followed by assigned fund balance.

NOTE 3 – DUE FROM OTHER GOVERNMENTS

Due from other governments of \$10,538,121 represents a TDA receivable due from the State of California.

NOTE 4 – TRANSFERS TO OTHER OCTA FUNDS

Transfers to OCTD of \$7,925,629 for the year ended June 30, 2016 were for the purpose of funding transit operations.

**ORANGE COUNTY TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE FUND (BUDGETARY BASIS)**

**SCHEDULE OF REVENUES, EXPENDITURES AND CHANGE IN FUND BALANCE –
BUDGET AND ACTUAL
FOR THE YEAR ENDED JUNE 30, 2016**

	<u>Budgeted Amounts</u>		<u>Actual Amounts</u>	<u>Variance with Final Budget</u>
	<u>Original</u>	<u>Final</u>		
Revenues				
State Transit Assistance Sales Tax Allocations	\$ 20,887,347	\$ 15,837,460	\$ 7,918,730	\$ (7,918,730)
Interest and Investment Income	-	-	5,206	5,206
Miscellaneous	-	-	5,306	5,306
Total Revenues	<u>20,887,347</u>	<u>15,837,460</u>	<u>7,929,242</u>	<u>(7,908,218)</u>
Expenditures				
Supplies and Services	-	-	517	(517)
Total Expenditures	<u>-</u>	<u>-</u>	<u>517</u>	<u>(517)</u>
Excess of Revenues over Expenditures	<u>20,887,347</u>	<u>15,837,460</u>	<u>7,928,725</u>	<u>(7,908,735)</u>
Other Financing Uses				
Transfers to Other OCTA Funds (Note 4)	(20,887,347)	(20,887,347)	(7,925,629)	12,961,718
Total Other Financing Uses	<u>(20,887,347)</u>	<u>(20,887,347)</u>	<u>(7,925,629)</u>	<u>12,961,718</u>
Net Change in Fund Balance	-	(5,049,887)	3,096	5,052,983
Fund Balance, Beginning of Year	15,728	15,728	15,728	-
Fund Balance, End of Year	<u>\$ 15,728</u>	<u>\$ (5,034,159)</u>	<u>\$ 18,824</u>	<u>\$ 5,052,983</u>

**ORANGE COUNTY TRANSPORTATION AUTHORITY
STATE TRANSIT ASSISTANCE FUND**

**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION
JUNE 30, 2016**

NOTE 1 – BUDGETARY DATA

The STAF maintains accounting control through formal adoption of an annual operating budget. The operating budget is prepared in conformity with accounting principles generally accepted in the United States, except for multi-year contracts, for which the entire amount of the contract is budgeted and encumbered in the year of execution. The adopted budget may be amended by the OCTA Board of Directors (Board) to increase appropriations and estimated revenues as unforeseen circumstances come to management's attention. Budgeted expenditure amounts represent original appropriations, adjusted for supplemental appropriations, during the year. OCTA division heads are authorized to approve appropriation transfers within major objects subject to approval by the Finance and Administration Division. Major objects are defined as: Salaries and Benefits, Supplies and Services, and Capital Outlay. Supplies and Services include Contributions to Other Local Agencies, Debt Service and Transfers. Appropriation transfers between major objects require approval of the Board. Accordingly, the legal level of budgetary control, that is the level that expenditures cannot exceed appropriations, is at the major object level. With the exception of amounts that have been encumbered, appropriations lapse at year end.

There were no excess of expenditures over appropriations for fiscal year 2015-16.



**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED
IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

Board of Directors
Orange County Transportation Authority
Orange, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the State Transit Assistance Fund (STAF), a special revenue fund of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and the related notes to the financial statements, and have issued our report thereon dated October 31, 2016. Our report included an emphasis-of-matter that the STAF financial statements do not purport to, and do not, present fairly the financial position of OCTA, and the STAF adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, effective July 1, 2015. Also, our report notes that the financial statements do not include management's discussion and analysis.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered OCTA's internal control over financial reporting (internal control), as it relates to the STAF, to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of OCTA's internal control. Accordingly, we do not express an opinion on the effectiveness of OCTA's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

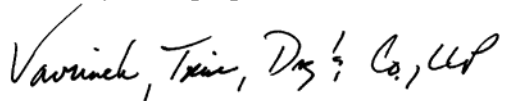
Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the STAF's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, including §6750 and §6751 of Part 21 of the California Code of Regulations, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*, including §6750 and §6751 of Part 21 of the California Code of Regulations.

Purpose of Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of OCTA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering OCTA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Laguna Hills, California

October 31, 2016

**ORANGE COUNTY
TRANSPORTATION AUTHORITY**

**INDEPENDENT AUDITORS' REPORT ON
PROPOSITION 1B
AND
TRANSPORTATION DEVELOPMENT ACT**

Year Ended June 30, 2016

ORANGE COUNTY TRANSPORTATION AUTHORITY

**PROPOSITION 1B
AND
TRANSPORTATION DEVELOPMENT ACT**

JUNE 30, 2016

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**INDEPENDENT AUDITORS' REPORT ON PROPOSITION 1B SCHEDULE OF
UNSPENT FUNDS AND CASH DISBURSEMENTS**

Board of Directors
Orange County Transportation Authority
Orange, California

We have audited the financial statement of the governmental activities, the business-type activities, each major fund, and the aggregate remaining information of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and have issued our report thereon dated October 31, 2016, which contained unmodified opinions on those financial statements. Our report included an emphasis-of-matter regarding OCTA's adoption of Governmental Accounting Standards Board (GASB) Statement No. 72 – *Fair Value Measurement and Application*, and GASB Statement No. 82 – *Pension Issues, an amendment of GASB Statements No. 67, No. 68, and No. 73*, effective July 1, 2015.

Our audit was performed for the purpose of forming opinions on the financial statements that collectively comprise OCTA's basic financial statements. The Proposition 1B Schedule of Unspent Funds and Cash Disbursements (Schedule) is presented for purposes of additional analysis, to satisfy the requirements of Section 6667 of Title 21 of the California Code of Regulations, the California *Government Code* §8879.50 and the California State Senate Bill 88 (2007), et seq. and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule is fairly stated in all material respects in relation to the basic financial statements as a whole.

Laguna Hills, California
October 31, 2016

**ORANGE COUNTY TRANSPORTATION AUTHORITY
PROPOSITION 1B**

**SCHEDULE OF UNSPENT FUNDS AND CASH DISBURSEMENTS
YEAR ENDED JUNE 30, 2016**

	<u>PTMISEA (1)</u>	<u>TSSSDRA (2)</u>	<u>Total</u>
Unspent Prop 1B funds as of June 30, 2015	\$ 41,195,977	\$ 3,919,616	\$ 45,115,593
Prop 1B funds received during the fiscal year ended June 30, 2016	-	-	-
Interest revenue earned on unspent Prop 1B funds during fiscal year ended June 30, 2016	241,437	23,498	264,935
Prop 1B disbursements spent during the fiscal year ended June 30, 2016	<u>(16,230,171)</u>	<u>(352,307)</u>	<u>(16,582,478)</u>
Unspent Prop 1B funds as of June 30, 2016	<u>\$ 25,207,243</u>	<u>\$ 3,590,807</u>	<u>\$ 28,798,050</u>

(1) Public Transportation, Modernization, Improvement, and Service Enhancement Account

(2) Transit System Safety, Security & Disaster Recovery Account



**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING
STANDARDS, THE TRANSPORTATION DEVELOPMENT ACT, CALIFORNIA
GOVERNMENT CODE §8879.50, AND STATE SENATE BILL 88 (2007)**

Board of Directors
Orange County Transportation Authority
Orange, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the Orange County Transportation Authority (OCTA), as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise OCTA's basic financial statements, and have issued our report thereon dated October 31, 2016. Our report included an emphasis-of-matter regarding OCTA's adoption of Governmental Accounting Standards Board (GASB) Statement No. 72 – *Fair Value Measurement and Application*, and GASB Statement No. 82 – *Pension Issues, an amendment of GASB Statements No. 67, No. 68, and No. 73*, effective July 1, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered OCTA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of OCTA's internal control. Accordingly, we do not express an opinion on the effectiveness of OCTA's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether OCTA's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, including the applicable provisions of Section 6667 of Title 21 of the California Code of Regulations, California Government Code §8879.50 and California State Senate Bill 88 (2007), et seq., noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*, the Transportation Development Act Section 6667 of Title 21 of the California Code of Regulations, California Government Code §8879.50 and the California State Senate Bill 88 (2007), et seq.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Laguna Hills, California

October 31, 2016

**ORANGE COUNTY LOCAL
TRANSPORTATION AUTHORITY**

**Report on Agreed-Upon Procedures
Applied to Measure M2 Status Report**

Year Ended June 30, 2016

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

**Report on Agreed-Upon Procedures
Applied to Measure M2 Status Report**

Year Ended June 30, 2016

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**INDEPENDENT ACCOUNTANTS' REPORT
ON APPLYING AGREED-UPON PROCEDURES TO THE
MEASURE M2 STATUS REPORT**

Board of Directors
Orange County Local Transportation Authority
And the Taxpayers Oversight Committee of the
Orange County Local Transportation Authority

We have performed the procedures enumerated below, which were agreed to by the Taxpayers Oversight Committee (Committee) of the Orange County Local Transportation Authority (OCLTA), solely to assist you with your review of the Measure M2 Status Report, and to ascertain that the amounts have been derived from the audited financial statements or other published documents, Board of Director approved documents or internal documents, for the year ended June 30, 2016. The Measure M2 Status Report consists of the following three schedules (Schedules): Schedule of Revenues, Expenditures and Changes in Fund Balance (Schedule 1); Schedule of Calculations of Net Revenues and Net Bond Revenues (Debt Service) (Schedule 2); and Schedule of Revenues and Expenditures Summary (Schedule 3). Management of OCLTA is responsible for Measure M2 Status Report. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in the report. Consequently, we make no representation regarding the sufficiency of the procedures described below, either for the purpose for which this report has been requested, or for any other purpose.

The following summary of procedures related to the Measure M2 Status Report is separated into three sections: Section A describes our procedures applied to Schedule 1; Section B describes our procedures applied to Schedule 2; and Section C describes our procedures applied to Schedule 3. All amounts are reported in thousands.

- A. We obtained Schedule 1 and performed the following procedures:
 - 1. Compared year to date June 30, 2016 amounts (Column A) to the audited trial balances of the OCLTA special revenue fund 17 and the OCLTA debt service fund 72 and additional detailed information from the underlying accounting records.
 - 2. Compared period from inception through June 30, 2016 amounts (Column B) by adding the prior year's period from inception through June 30, 2015 amounts with year to date June 30, 2016 amounts (Column A).
 - 3. Re-computed totals and subtotals.

B. We obtained Schedule 2 and performed the following procedures:

1. Compared year ended June 30, 2016 (Columns C.1 and C.2) to Schedule 1, Column A. For professional services, non-project related amounts, we compared the sum of this caption allocated to revenues and to bond revenues at June 30, 2016 (C.1 and C.2) to Schedule 1, Column A. For environmental cleanup, we agreed this amount to the project job ledger.
2. Compared period from inception through June 30, 2016 amounts (Columns D.1 and D.2) to Schedule 1, Column B. For professional services, non-project related amounts, we compared the total of the amounts allocated to revenues and to bond revenues at June 30, 2016 (D.1 and D.2) to Schedule 1, Column B. For environmental cleanup, we agreed this amount to the project job ledger.
3. Compared forecast amounts (Column E.1 and E.2) to Measure M2 Forecast Model Schedule.
4. Re-computed totals and subtotals.

C. We obtained Schedule 3 and performed the following procedures:

1. Compared net revenues through June 30, 2016 (Column H) and total net revenues (Column I) amounts to Schedule 2, Column D.1 and Column F.1, net revenues (Totals), respectively.
2. Recalculated net revenues through June 30, 2016 (Column H) and total net revenues (Column I) amounts, by mode and project description, based on the Measure M2 Transportation Investment Plan (Investment Plan).
3. Reconciled expenditures through June 30, 2016 (Column J) to Schedule 1, Column B. Agreed environmental cleanup to Schedule 2, Column D.1. Agreed oversight and annual audits to the summary of Measure M2 administrative costs through June 30, 2016. Agreed Column J, by project description to the project job ledger by fiscal year.
4. Selected a sample of expenditures from Column J and compared them to invoices and supporting documentation to determine whether the sampled expenditures were properly accrued and classified.
5. Agreed reimbursements through June 30, 2016 (Column K) to Schedule 1, Column B. Agreed oversight and annual audits line item to summary of Measure M2 administrative costs through June 30, 2016.
6. Agreed Column K to the supporting revenue summary by project and fiscal year. Selected a sample of reimbursements from Column K and agreed them to supporting invoices and remittance advices to determine whether the sampled reimbursements were properly calculated.
7. Recalculated the net M2 cost (Column L) by subtracting Column K from Column J.
8. Recalculated revenues through June 30, 2016 (Column H.1) and the total revenues (Column I.1) for environmental cleanup (2% of revenues) and oversight and annual audits (1% of revenues) by multiplying sales taxes and operating interest per Schedule 2, Column D.1 and Column F.1 by 2% and 1%, respectively.
9. Recalculated revenues through June 30, 2016 (Column H.1) and total revenues (Column I.1) for collect sales taxes (1.5% of sales taxes) by multiplying sales taxes per Schedule 2, Column D.1 and Column F.1 by 1.5%.
10. Re-computed total and subtotals.

Results: All of the above procedures were performed without exception.

We were not engaged to, and did not, conduct an audit, the objective of which would be the expression of an opinion on the Measure M2 Status Report. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. The Notes to the Measure M2 Status Report (Notes) have been provided by the OCLTA to describe the purpose, format, and content of the schedules. We were not engaged to and did not perform any procedures on the Notes.

This report is intended solely for the information and use of OCTLA's management, the Board of Directors, and the Taxpayers Oversight Committee and is not intended to be and should not be used by anyone other than these specified parties.



Laguna Hills, California
December 19, 2016

Measure M2
Schedule of Revenues, Expenditures and Changes in Fund Balance
as of June 30, 2016
(Unaudited)

(\$ in thousands)	Year to Date June 30, 2016 (A)	Period from Inception to June 30, 2016 (B)
Revenues:		
Sales taxes	\$ 300,937	\$ 1,450,309
Other agencies' share of Measure M2 costs:		
Project related	93,242	476,195
Non-project related	74	439
Interest:		
Operating:		
Project related	-	2
Non-project related	9,039	17,082
Bond proceeds	6,443	35,997
Debt service	32	76
Commercial paper	-	393
Right-of-way leases	110	814
Miscellaneous:		
Project related	72	270
Non-project related	93	100
Total revenues	<u>410,042</u>	<u>1,981,677</u>
Expenditures:		
Supplies and services:		
State Board of Equalization (SBOE) fees	3,571	15,888
Professional services:		
Project related	50,216	272,849
Non-project related	2,115	15,043
Administration costs:		
Project related	8,527	44,540
Non-project related:		
Salaries and Benefits	2,365	17,440
Other	4,679	26,638
Other:		
Project related	275	1,678
Non-project related	118	3,800
Payments to local agencies:		
Project related	105,378	607,896
Capital outlay:		
Project related	89,240	546,493
Non-project related	-	31
Debt service:		
Principal payments on long-term debt	7,210	27,085
Interest on long-term debt and commercial paper	21,613	115,537
Total expenditures	<u>295,307</u>	<u>1,694,918</u>
Excess of revenues over expenditures	<u>114,735</u>	<u>286,759</u>
Other financing sources (uses):		
Transfers out:		
Project related	(10,618)	(22,659)
Transfers in:		
Project related	23,740	75,544
Non-project related	(23,740)	5,937
Bond proceeds	-	358,593
Total other financing sources (uses)	<u>(10,618)</u>	<u>417,415</u>
Excess of revenues over expenditures and other financing sources (uses)	<u>\$ 104,117</u>	<u>\$ 704,174</u>

See Notes to Measure M2 Status Report (Unaudited)

Measure M2
Schedule of Calculations of Net Revenues and Net Bond Revenues (Debt Service)
as of June 30, 2016
(Unaudited)

<i>(\$ in thousands)</i>	Year to Date June 30, 2016 (actual) <i>(C.1)</i>	Period from Inception through June 30, 2016 (actual) <i>(D.1)</i>	Period from July 1, 2016 through March 31, 2041 (forecast) <i>(E.1)</i>	Total <i>(F.1)</i>
Revenues:				
Sales taxes	\$ 300,937	\$ 1,450,309	\$ 13,359,584	\$ 14,809,893
Operating interest	9,039	17,082	224,117	241,199
Subtotal	<u>309,976</u>	<u>1,467,391</u>	<u>13,583,701</u>	<u>15,051,092</u>
Other agencies share of M2 costs	74	439	-	439
Miscellaneous	93	100	-	100
Total revenues	<u>310,143</u>	<u>1,467,930</u>	<u>13,583,701</u>	<u>15,051,631</u>
Administrative expenditures:				
SBOE fees	3,571	15,888	200,474	216,362
Professional services	2,115	11,267	91,546	102,813
Administration costs:				
Salaries and Benefits	2,365	17,440	133,574	151,014
Other	4,679	26,638	234,882	261,520
Other	118	3,800	23,036	26,836
Capital outlay	-	31	-	31
Environmental cleanup	9,588	18,150	267,192	285,342
Total expenditures	<u>22,436</u>	<u>93,214</u>	<u>950,704</u>	<u>1,043,918</u>
Net revenues	<u>\$ 287,707</u>	<u>\$ 1,374,716</u>	<u>\$ 12,632,997</u>	<u>\$ 14,007,713</u>
<hr/>				
Bond revenues:				
Proceeds from issuance of bonds	\$ -	\$ 358,593	\$ 2,000,000	\$ 2,358,593
Interest revenue from bond proceeds	6,443	35,997	25,760	61,757
Interest revenue from debt service funds	32	76	54	130
Interest revenue from commercial paper	-	393	-	393
Total bond revenues	<u>6,475</u>	<u>395,059</u>	<u>2,025,814</u>	<u>2,420,873</u>
Financing expenditures and uses:				
Professional services	-	3,776	17,020	20,796
Bond debt principal	7,210	27,085	2,242,636	2,269,721
Bond debt and other interest expense	21,613	115,537	1,507,609	1,623,146
Total financing expenditures and uses	<u>28,823</u>	<u>146,398</u>	<u>3,767,265</u>	<u>3,913,663</u>
Net bond revenues (debt service)	<u>\$ (22,348)</u>	<u>\$ 248,661</u>	<u>\$ (1,741,451)</u>	<u>\$ (1,492,790)</u>

See Notes to Measure M2 Status Report (Unaudited)

Measure M2
Schedule of Revenues and Expenditures Summary
as of June 30, 2016
(Unaudited)

Project	Description	Net Revenues through June 30, 2016	Total Net Revenues	Expenditures through June 30, 2016	Reimbursements through June 30, 2016	Net M2 Cost
(G)	(H)	(I)	(J)	(K)	(L)	
<i>(\$ in thousands)</i>						
Freeways (43% of Net Revenues)						
A	I-5 Santa Ana Freeway Interchange Improvements	\$ 54,183	\$ 552,116	\$ 4,434	\$ 937	\$ 3,497
B	I-5 Santa Ana/SR-55 to El Toro	34,609	352,649	4,537	2,191	2,346
C	I-5 San Diego/South of El Toro	72,285	736,546	84,771	30,751	54,020
D	I-5 Santa Ana/San Diego Interchange Upgrades	29,744	303,076	1,759	527	1,232
E	SR-22 Garden Grove Freeway Access Improvements	13,834	140,966	4	-	4
F	SR-55 Costa Mesa Freeway Improvements	42,195	429,945	7,591	23	7,568
G	SR-57 Orange Freeway Improvements	29,825	303,899	44,983	10,281	34,702
H	SR-91 Improvements from I-5 to SR-57	16,140	164,460	32,146	608	31,538
I	SR-91 Improvements from SR-57 to SR-55	48,017	489,269	16,629	1,620	15,009
J	SR-91 Improvements from SR-55 to County Line	40,604	413,734	6,928	5,294	1,634
K	I-405 Improvements between I-605 to SR-55	123,679	1,260,233	54,110	3,267	50,843
L	I-405 Improvements between SR-55 to I-5	36,857	375,556	5,508	3,234	2,274
M	I-605 Freeway Access Improvements	2,306	23,494	682	16	666
N	All Freeway Service Patrol	17,293	176,207	196	-	196
	Freeway Mitigation	29,556	301,166	45,968	1,688	44,280
	Subtotal Projects	591,127	6,023,316	310,246	60,437	249,809
	Net (Bond Revenue)/Debt Service	-	-	30,326	-	30,326
	Total Freeways	\$ 591,127	\$ 6,023,316	\$ 340,572	\$ 60,437	\$ 280,135
	%					27.8%
Street and Roads Projects (32% of Net Revenues)						
O	Regional Capacity Program	\$ 137,473	\$ 1,400,789	\$ 593,652	\$ 332,426	\$ 261,226
P	Regional Traffic Signal Synchronization Program	54,987	560,291	23,651	3,580	20,071
Q	Local Fair Share Program	247,449	2,521,388	237,070	77	236,993
	Subtotal Projects	439,909	4,482,468	854,373	336,083	518,290
	Net (Bond Revenue)/Debt Service	-	-	33,683	-	33,683
	Total Street and Roads Projects	\$ 439,909	\$ 4,482,468	\$ 888,056	\$ 336,083	\$ 551,973
	%					54.7%
Transit Projects (25% of Net Revenues)						
R	High Frequency Metrolink Service	\$ 124,519	\$ 1,397,062	\$ 161,432	\$ 92,749	\$ 68,683
S	Transit Extensions to Metrolink	121,356	1,236,557	11,559	2,074	9,485
T	Metrolink Gateways	25,382	71,597	98,211	60,956	37,255
U	Expand Mobility Choices for Seniors and Persons with Disabilities	41,902	485,719	40,010	88	39,922
V	Community Based Transit/Circulators	27,487	280,080	2,072	120	1,952
W	Safe Transit Stops	3,034	30,914	62	26	36
	Subtotal Projects	343,680	3,501,929	313,346	156,013	157,333
	Net (Bond Revenue)/Debt Service	-	-	18,838	-	18,838
	Total Transit Projects	\$ 343,680	\$ 3,501,929	\$ 332,184	\$ 156,013	\$ 176,171
	%					17.5%
	Measure M2 Program	\$ 1,374,716	\$ 14,007,713	\$ 1,560,812	\$ 552,533	\$ 1,008,279

See Notes to Measure M2 Status Report (Unaudited)

Measure M2
Schedule of Revenues and Expenditures Summary
as of June 30, 2016
(Unaudited)

Project	Description	Revenues through June 30, 2016	Total Revenues	Expenditures through June 30, 2016	Reimbursements through June 30, 2016	Net M2 Cost
(G)	(H.1)	(I.1)	(J)	(K)	(L)	
	<i>(\$ in thousands)</i>					
	Environmental Cleanup (2% of Revenues)					
X	Clean Up Highway and Street Runoff that Pollutes Beaches	\$ 29,348	\$ 301,022	\$ 18,150	\$ 292	\$ 17,858
	Net (Bond Revenue)/Debt Service	-	-	-	-	-
	Total Environmental Cleanup	\$ 29,348	\$ 301,022	\$ 18,150	\$ 292	\$ 17,858
	%					1.2%
	Taxpayer Safeguards and Audits					
	Collect Sales Taxes (1.5% of Sales Taxes)	\$ 21,755	\$ 222,148	\$ 15,888	\$ -	\$ 15,888
	%					1.1%
	Oversight and Annual Audits (1% of Revenues)	\$ 14,674	\$ 150,511	\$ 17,440	\$ 2,766	\$ 14,674
	%					1.0%

See Notes to Measure M2 Status Report (Unaudited)

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Notes to Measure M2 Status Report (Unaudited)

Year Ended June 30, 2016

Measure M2 Summary

In November 1990, Orange County voters approved the Revised Traffic Improvement and Growth Management Ordinance, known as Measure M (M1). This implemented a one-half of one percent retail transaction and use tax to fund a specific program of transportation improvements in Orange County. On November 7, 2006 (inception), Orange County voters approved the renewal of Measure M, known as Renewed Measure M (M2) for a period of 30 more years from April 1, 2011 to March 31, 2041. In August 2007, the Orange County Local Transportation Authority Board of Directors approved the M2 Early Action Plan to advance the completion of projects prior to the start of sales tax collection in April 2011. A Plan of Finance was adopted in November 2007 identifying a tax-exempt commercial paper program as the preferred method of funding Early Action Plan projects.

The Orange County Local Transportation Authority (OCLTA) is responsible for administering the proceeds of the M1 sales tax program, which commenced on April 1, 1991 for a period of 20 years, and the M2 sales tax program, which commenced on April 1, 2011 for a period of 30 years. This report includes only the activities of M2 and is not intended to present the activities of M1. Under M2, funds are required to be distributed to freeways, streets and roads projects, transit projects and environmental cleanup.

Demonstrating accountability for the receipt and expenditure of M2 funds is accomplished through the issuance of annual reports on M2 activities. The reports for M2 activities through June 30, 2016 are included as Schedules 1-3. The following is a summary of the purpose, format and content of each schedule. All amounts, unless otherwise indicated, are expressed in thousands of dollars.

Schedule 1—Schedule of Revenues, Expenditures and Changes in Fund Balance

This schedule presents a summary of revenues, expenditures and changes in fund balance of the combined M2 special revenue and debt service funds. Such financial information is derived from the trial balance with additional detailed information from the underlying accounting records. The schedule is presented for the latest fiscal year and for the period from inception through the latest fiscal year.

Year to Date June 30, 2016 (Column A)

This column presents the revenues, expenditures, and other financing sources (uses) of the combined M2 special revenue and debt service funds for the fiscal year ended June 30, 2016. Amounts for individual revenue sources, expenditures by major object, and other financing sources (uses) are derived from the trial balance, while detailed amounts for certain revenue sources and expenditures by major object are obtained from the general ledger.

The net change in fund balance of \$104,117 agrees with the combined change in fund balances of \$104,129 in the M2 special revenue fund and \$(12) in the M2 debt service fund in the trial balance for the year ended June 30, 2016.

Non-project related revenues, expenditures, and other financing sources (uses) are included in the net revenues and net bond revenues (debt service) calculations in Schedule 2.

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Notes to Measure M2 Status Report (Unaudited)

Year Ended June 30, 2016

Period from Inception through June 30, 2016 (Column B)

This column presents the revenues, expenditures, and other financing sources (uses) of the combined M2 special revenue and debt service funds for the period from inception through June 30, 2016. Amounts for individual revenue sources, expenditures by major object, and other financing sources (uses) are summarized from the trial balance, while detailed amounts for certain revenue sources and expenditures by major object are obtained and summarized from the general ledger.

The net fund balance of \$704,174 agrees with the combined ending fund balances of \$692,180 in the M2 special revenue fund and \$11,994 in the M2 debt service fund, as presented in the trial balance for the year ended June 30, 2016.

Non-project related revenues, expenditures, and other financing sources (uses) are included in the net revenues and net bond revenues (debt service) calculations in Schedule 2. Project related revenues and other financing sources are presented as "Reimbursements" (Column K) in Schedule 3. Project related expenditures and other financing uses are included as "Expenditures" (Column J) in Schedule 3.

Schedule 2—Schedule of Calculations of Net Revenues and Net Bond Revenues (Debt Service)

This schedule presents calculations of net revenues and of net bond revenues (debt service), which are allocated in Schedule 3 to transportation projects specified in the Orange County Transportation Investment Plan (Investment Plan). Actual revenues, expenditures, and other financing sources (uses) in this schedule were obtained from non-project related amounts on Schedule 1. Environmental cleanup expenditures were obtained from the project job ledger. Forecast amounts were obtained from the Orange County Transportation Authority Forecast Model. The schedule is presented for the latest fiscal year, for the period from inception through the latest fiscal year, for subsequent years going forward, and for the combined total of actual and forecast amounts for the period from inception going forward.

Calculation of Net Revenues

Year Ended June 30, 2016 (actual) (Column C.1)

This column presents net revenues, consisting of total revenues less total administrative expenditures, capital outlay, and environmental cleanup, for year ended June 30, 2016. Revenues, administrative expenditures, and capital outlay for the year ended June 30, 2016 were obtained from Column A in Schedule 1. Environmental cleanup expenditures were obtained from project amounts accumulated in the project job ledger. Revenues, administrative expenditures, and capital outlay utilized in the calculation of net revenues are non-project and non-financing related. Revenues consist of sales taxes, operating interest, and other agencies' share of M2 costs. Administrative expenditures include State Board of Equalization (SBOE) fees, professional services, administration costs, and other expenditures. Non-project related professional services are distributed between administrative expenditures and financing expenditures and uses based on the job ledger code.

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Notes to Measure M2 Status Report (Unaudited)

Year Ended June 30, 2016

Period from Inception through June 30, 2016 (actual) (Column D.1)

This column presents net revenues, consisting of total cumulative revenues less total cumulative administrative expenditures, capital outlay, and environmental clean up, for the period from inception through June 30, 2016. Revenues, administrative expenditures, and capital outlay for the period from inception through June 30, 2016 were obtained from Column B in Schedule 1. Environmental clean up expenditures were obtained from project amounts accumulated in the project job ledger. Total net revenues for the period from inception through June 30, 2016 are presented in Schedule 3 as "Net Revenues through June 30, 2016" (Column H). Revenues, administrative expenditures, and capital outlay utilized in the calculation of net revenues are non-project and non-financing related. Revenues consist of sales taxes, operating interest, other agencies' share of M2 costs, and miscellaneous revenue. Administrative expenditures include SBOE fees, professional services, administration costs, and other expenditures. Non-project related professional services are distributed between administrative expenditures and financing expenditures and uses based on the job ledger code.

Period from July 1, 2016 through March 31, 2041 (forecast) (Column E.1)

This column presents net revenues, consisting of total projected revenues less total projected administrative expenditures and environmental cleanup expenditures, for subsequent years from July 1, 2016 through March 31, 2041. Revenues and administrative expenditures for subsequent years from July 1, 2016 through March 31, 2041 were obtained from the Orange County Transportation Authority Forecast Model, which is updated quarterly. Revenues and administrative expenditures utilized in the calculation of net revenues for subsequent years from July 1, 2016 through March 31, 2041 are non-project and non-financing related. Revenues consist of projected sales taxes and operating interest. Administrative expenditures consist of projected SBOE fees, professional services, administration costs, and other expenditures.

Total (Column F.1)

This column presents total net revenues, calculated as the sum of columns D.1 and E.1. Total net revenues are presented in Schedule 3 as "Total Net Revenues" (Column I).

Calculation of Net Bond Revenues (Debt Service)

Year Ended June 30, 2016 (actual) (Column C.2)

This column presents net bond revenues (debt service), consisting of total bond revenues less total financing expenditures and uses, for year ended June 30, 2016. Bond revenues and financing expenditures and uses for the year ended June 30, 2016 were obtained from Column A in Schedule 1. Bond revenues and financing expenditures and uses utilized in the calculation of net bond revenues (debt service) are non-project and non-operating related. Bond revenues consist of interest revenue from bond proceeds and debt service funds. Financing expenditures and uses consist of professional services and bond debt and other interest expense. Non-project related professional services are distributed between administrative expenditures and financing expenditures and uses based on the job ledger code.

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Notes to Measure M2 Status Report (Unaudited)

Year Ended June 30, 2016

Period from Inception through June 30, 2016 (actual) (Column D.2)

This column presents net bond revenues (debt service), consisting of total cumulative bond revenues less total cumulative financing expenditures and uses, for the period from inception through June 30, 2016. Bond revenues and financing expenditures and uses for the period from inception through June 30, 2016 were obtained from Column B in Schedule 1. Bond revenues and financing expenditures and uses utilized in the calculation of net bond revenues (debt service) are non-project and non-operating related. Bond revenues consist of proceeds from issuance of bonds and interest revenue from bond proceeds, debt service funds, and commercial paper. Financing expenditures and uses consist of professional services and bond debt and other interest expense. Non-project related professional services are distributed between administrative expenditures and financing expenditures and uses based on the job ledger code.

Period from July 1, 2016 through March 31, 2041 (forecast) (Column E.2)

This column presents bond revenues (debt service), consisting of total projected bond revenues less total projected financing expenditures and uses, for subsequent years from July 1, 2016 through March 31, 2041. Bond revenues and financing expenditures and uses for subsequent years from July 1, 2016 through March 31, 2041 were obtained from the Orange County Transportation Authority Forecast Model. Bond revenues and financing expenditures and uses utilized in the calculation of net bond revenues (debt service) are non-project and non-operating related. Bond revenues consist of proceeds from issuance of bonds and interest revenue from bond proceeds and debt service funds. Financing expenditures and uses consist of bond debt principal and bond debt and other interest expense.

Total (Column F.2)

This column presents total net bond revenues (debt service), calculated as the sum of columns D.2 and E.2.

Schedule 3—Schedule of Revenues and Expenditures Summary

This schedule presents a summary of actual and projected revenues and expenditures, by mode and project description, as specified in the Investment Plan. Total M2 program amounts agree with amounts on Schedules 1 and 2. Amounts by mode and project description are based on proportionate calculations or are obtained from other documents.

Project Description (Column G)

This column presents project descriptions by mode in accordance with the Investment Plan.

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Notes to Measure M2 Status Report (Unaudited)

Year Ended June 30, 2016

Net Revenues through June 30, 2016 (Column H)

This column presents total M2 program net revenues for the period from inception through June 30, 2016, which agrees with net revenues in Column D.1 in Schedule 2. Such net revenues are allocated to each of the three modes based on the allocation percentages specified in M2. The net revenues for each mode are allocated to each project based on the proportionate share of each project's estimated cost to the total estimated cost per mode as presented in the Investment Plan.

Total Net Revenues (Column I)

This column presents total actual and projected net revenues (total net revenues) during the life of M2, which agree with total net revenues in Column F. 1 in Schedule 2. Such total net revenues are allocated to each of the three modes based on the allocations specified in M2. The net revenues for each mode are allocated to each project based on the proportionate share of each project's estimated cost to the total estimated cost per mode as presented in the Investment Plan.

Expenditures through June 30, 2016 (Column J)

This column presents total expenditures plus net (bond revenue)/debt service. Total expenditures, excluding oversight and annual audit expenditures, agree with the sum of project related expenditures, SBOE fees and transfers out from Column B in Schedule 1. Oversight and annual audit expenditures agree with the administrative costs for salaries and benefits derived from the annual cost allocation plan. Total net (bond revenue)/debt service expenditures through June 30, 2016 agrees with the interest revenue, professional services expenditures, bond debt and other interest expense from Column D.2 in Schedule 2. Project related expenditures are comprised of professional services, administration costs, other expenditures, payments to local agencies, capital outlay and transfers out. Such expenditures are distributed to the projects based on project amounts accumulated in the project job ledger.

Reimbursements through June 30, 2016 (Column K)

This column presents total reimbursements for the period from inception through June 30, 2016, which agrees with the sum of project related revenues from Column B in Schedule 1. Project related revenues consist of other agencies' share of Measure M2 costs, right-of-way leases, transfers in and miscellaneous revenue. Such revenues are distributed to the related projects based on project amounts accumulated in the project job ledger. Reimbursements for oversight and annual audits agree with the principal balance of the amount advanced from the Orange County Unified Transportation Trust (OCUTT) to cover administrative costs for salaries and benefits exceeding more than one percent of revenues.

ORANGE COUNTY LOCAL TRANSPORTATION AUTHORITY

Notes to Measure M2 Status Report (Unaudited)

Year Ended June 30, 2016

Net M2 Cost (Column N)

Net M2 cost is a calculation of Column J minus Column K. For each mode, a percentage is calculated as the net project cost per mode divided by the total M2 Program net project cost. Such percentage can be compared to the required percentage included in M2 as an indication of the progress to date for each mode.

Revenues through June 30, 2016 (Column H.1)

The total environmental cleanup revenue for the period from inception through June 30, 2016, represents two percent (2%) of revenues (sales taxes and operating interest) in Column D.1 in Schedule 2. The total oversight and annual audits revenues for the period from inception through June 30, 2016, represent one percent (1%) of the revenues (sales taxes and operating interest) in Column D.1 in Schedule 2. The total collect sales taxes revenue for the period from inception through June 30, 2016, represents one and one-half percent (1.5%) of the sales tax revenues in Column D.1 in Schedule 2.

Total Revenues (Column I.1)

The total environmental cleanup actual and projected revenues during the life of M2 represent 2% of revenues (sales taxes and operating interest) found in Column F.1 in Schedule 2. The total collect sales taxes actual and projected revenues during the 30-year life of M2 represent 1.5% of sales tax revenues found in Column F.1 in Schedule 2. The total oversight and annual audits actual and projected revenues during the 30-year life of M2 represent 1% of revenues (sales taxes and operating interest) found in Column F.1 in Schedule 2.

**ORANGE COUNTY
TRANSPORTATION AUTHORITY**

**Independent Accountants' Report on
Agreed-Upon Procedures Performed
with Respect to the Treasury Department**

Year Ended June 30, 2016



**INDEPENDENT ACCOUNTANTS' REPORT
ON APPLYING AGREED-UPON PROCEDURES PERFORMED
WITH RESPECT TO THE TREASURY DEPARTMENT**

Board of Directors
Orange County Transportation Authority
Orange, California

We have performed the procedures enumerated below, which were agreed to by the Orange County Transportation Authority (OCTA) solely to assist you with respect to your evaluation of selected internal controls within the Treasury Department for the year ended June 30, 2016. OCTA's management is responsible for the internal controls within the Treasury Department. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of OCTA. Consequently, we make no representation regarding the sufficiency of the procedures described below, either for the purpose for which this report has been requested, or for any other purpose.

The procedures performed and the results of those procedures were as follows:

1. Conduct inquiries of personnel involved in the Treasury Department operations, obtain the Debt and Investment Management Manual and observe the procedures performed to determine whether the procedures provide for:
 - a. Transactions that are clearly documented and readily available for examination;
 - b. Transactions that are promptly recorded and properly classified;
 - c. Transactions that are authorized and executed only by persons acting within the scope of their authority;
 - d. Segregation of key duties and responsibilities in authorizing, processing, recording and reviewing;
 - e. Supervision to ensure that internal control objectives are achieved;
 - f. Limiting access to resources and records to authorized individuals and ensuring accountability for custody of resources; and
 - g. Periodic reconciliation of investments between the custodian statements and the general ledger.

Result: We conducted inquiries of Finance and Administration Division personnel, reviewed the Debt and Investment Manual, and observed the procedures performed. No exceptions were noted.

2. Review the Investment Policy to determine that it is in compliance with California Government Code Section 53601.

Result: No exceptions were noted.

3. Observe system related controls to determine they are in place to appropriately limit access to cash and investment information.

Result: No exceptions were noted.

4. Determine that the Investment Policy was provided to external investment managers on an annual basis. In addition, determine whether each investment manager certified receipt of the Investment Policy with a statement agreeing to abide by its terms.

Result: No exceptions were noted.

5. Sample three monthly OCTA Investment and Debt Programs Reports presented to the Finance and Administration Committee to determine they are provided in accordance with the Debt and Investment Management Manual (Section 2, Part C, Treasury/Public Finance Department, and Investment Reporting).

Result: No exceptions were noted.

6. Select a sample of four authorization letters to investment managers, brokers, banks and custodians to determine that they were jointly authorized in writing by the Treasurer and another individual authorized by the Debt and Investment Management Manual. In addition, review the letters for existence of the following attributes:

- a. OCTA staff authorized to make investments;
- b. Custody instructions; and
- c. Instructions for money and security transfers.

Result: No exceptions were noted.

7. Select a sample of sixty investment purchases during the fiscal year ended June 30, 2016 to determine that:

- a. The investments were in compliance with the Investment Policy;
- b. The Treasury Department's policies and procedures with respect to investment purchases were followed;
- c. The investments were properly recorded; and
- d. Any investment earnings on matured investments were calculated and recorded correctly.

Result: No exceptions were noted.

8. Sample ten weekly holdings reports for each external investment manager during the fiscal year ended June 30, 2016 and determine that they were monitored by Treasury Department personnel and were in compliance with the Investment Policy. Specifically:

- a. Obtain the holdings report for each external manager for each week selected;
- b. Verify that the Treasury Department's review was documented on the holdings report;
- c. Review the holdings report to determine whether the external investment manager complied with Investment Policy limits and diversification guidelines; and
- d. Determine that any instances of noncompliance are identified and corrected by the Treasury Department and that probationary and reporting procedures were followed.

Result: No exceptions were noted for the ten weekly holdings reports tested for each external investment manager during the fiscal year ended June 30, 2016.

9. Select a sample of three monthly bank reconciliations during the fiscal year ended June 30, 2016 and perform the following:
 - a. Trace general ledger balances and bank balances to supporting documentation;
 - b. Determine whether the reconciliations were completed within thirty days of month end;
 - c. Determine that any discrepancies were reported and resolved;
 - d. Determine that reconciliations and resolution of discrepancies were reviewed and approved by an official who was not responsible for recording receipts and disbursements; and
 - e. Determine that bank statements were mailed directly to the Accounting Department.

Result: No exceptions were noted.

10. Select a sample of three monthly investment account reconciliations and review the supporting documentation to determine that:
 - a. Reconciliations were completed in a timely and thorough manner by someone who was not responsible for recording receipts and disbursements;
 - b. Discrepancies were identified and resolved;
 - c. Reconciliations and the resolution of discrepancies were reviewed by an official who was not responsible for recording investment transactions; and
 - d. Investment statements were mailed directly to the Accounting Department.

Result: No exceptions were noted.

11. Review and inspect the Treasury Department's cash forecasting documentation to determine the Department performed or prepared the following:
 - a. A day-to-day cash forecast for the current week;
 - b. Reviewed forecasts with the Funds Management Team;
 - c. Monitored actual cash flow activity versus forecast;
 - d. Maintained regular communication with external investment managers regarding OCTA cash forecast and operational needs.

Result: No exceptions were noted.

12. Review and inspect the policies and procedures for reviewing corporate security ratings to determine that the procedures are adequate and provide timely identification and reporting of downgrades and credit watch placements.

Result: We noted per inquiry with the Deputy Treasurer that corporate security ratings are reviewed on a weekly basis for downgrades and credit watch placements. Furthermore, the results of the review are communicated to the Finance and Administration Committee on a monthly basis through the Treasury/Public Finance Department's Report on OCTA Investment and Debt Programs. No exceptions were noted.


13. Review minutes of both the Board of Directors and the Finance and Administration Committee, inquire with Treasury Department personnel, and review other supporting documentation to determine that the following required oversight activities took place:
- a. The Finance and Administration Committee reviewed investments on a monthly basis;
 - b. The Board of Directors reviewed investments on a quarterly basis;
 - c. The Board of Directors reviewed and approved the Investment Policy and amendments made during the fiscal year ended June 30, 2016;
 - d. The Internal Audit Department performs semi-annual reviews to determine if OCTA was in compliance with its debt, investment, and accounting policies and procedures and
 - e. The funds management team met on a weekly basis.

Result: We reviewed the Finance and Administration Committee meeting minutes, Board of Directors meeting minutes, semi-annual reviews performed by the Internal Audit Department, and informational packet for the funds management team meeting noting that the above noted oversight activities took place.

14. Inquire whether there have been any changes in Treasury policies and procedures, organization or function, as a result of any prior year audit findings as a result of the Treasury Department Agreed Upon Procedures.

Result: Based upon our inquiry no changes in Treasury policies and procedures, organization or function, were noted as a result of prior year findings as a result of the Treasury Department Agreed Upon Procedures. It was noted that as a result of the Internal Audit Department's semi-annual review over OCTA's investment compliance, controls, and reporting for July 1, 2015 through December 31, 2015, the Debt and Investment Management Manual was revised to incorporate Internal Audit's recommendation. The revised Debt and Investment Management Manual had an effective date of June 1, 2016.

We were not engaged to, and did not, conduct an audit, the objective of which would be the expression of an opinion on OCTA's Treasury Department or investments, related internal control, compliance with government code, or elements, accounts or items specified above. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. This report is intended solely for the information and use of the Board of Directors and management of OCTA and is not intended to be, and should not be, used by anyone other than those specified parties.



Laguna Hills, California
October 31, 2016